NEW YORK STATE | Office of General Services

KATHY HOCHUL
Governor
JEANETTE M. MOY
Commissioner

DIVISION OF FINANCIAL ADMINISTRATION

ADDENDUM #1

INVITATION FOR BID # 2952

SUSPENDED SCAFFOLDS OPERATION AND MAINTENANCE SERVICES

FOR STATE OFFICE BUILDINGS IN ALBANY, NY

Date: March 25, 2025

Revised Bid Due Date: Tuesday, April 22, 2025 @ 2 PM

To Prospective Bidders: This addendum is being issued to add and provide details for an optional site visit to be held, an updated Key Events timeline (IFB Section 1.3), and a revised Bid Due Date.

Revisions

R1. Optional Site Visit

Bidders intending to submit a bid are encouraged to attend an Optional Site Visit which shall include each facility stated in IFB Section 2.2 – Building Equipment to Be Serviced. The Optional Site Visit will be held on Thursday, April 3, 2025, and begin at 10:00AM EST. Bidders must report to Room 130 of the Concourse level of the Governor Nelson A. Rockefeller Empire State Plaza in Albany, New York, and will then be escorted to the relevant facilities. This is the only date and time available for this site visit. Alternate dates for additional site visit will not be available. Attendees will be required to sign in and provide basic company contact information. It is imperative that the provided information be legible and accurate.

In accordance with State Finance Law §139-j (3) (a) (3), this Optional Site Visit is covered by a permissible subject matter exception. A vendor is authorized to speak with representatives other than Designated Contact(s) for the sole purpose of the optional site visit (to arrange attendance, during the conduct of the visit and to pose questions regarding the site).

The Optional Site Visit will provide an opportunity for Bidders to see firsthand the State facilities and existing equipment. Questions during the Optional Site Visit will be permitted. It is suggested that the Bidder note the question and ask at the end of the tour.

Verbal answers are not official answers. All questions asked after the tour must be submitted via email to the Designated Contact(s) for this solicitation no later than the date and time indicated in IFB Section 1.3 - Key Events. Official answers to all questions will be distributed in the form of an addendum posted to the OGS Bid Calendar. All attendees will be provided a link via email to obtain any and all addenda related to this solicitation. Only answers provided by addendum are considered official.

R2. Revised IFB Section 1.3 Key Events

The Table below outlines the schedule for important action dates.

OGS Issues Invitation for Bid (IFB) #2952	March 17, 2025
Optional Site Visit	**April 3, 2025, at 10:00AM EST**
Deadline for Submission of Bidder Questions	**April 8**, ~~March 25,~~ 2025
OGS Issues Responses to Written Questions (estimated)	**April 11**, ~~April 2,~~ 2025
Bid Due Date	**April 22**, ~~April 15,~~ 2025, at 2:00pm EST
Contract Start Date	Upon OSC Approval

All other terms and conditions remain unchanged.

If submitting a proposal, this Addendum #1 for IFB #2952 must contain an original signature, be dated, attached to, and made a part of your proposal.

Company Name_____

Address (include City, State, Zip)_____

Bidders Name (please print)_____

Title_____

Signature_____

Date_____

Invitation for Bid # 2952

Solicited by

New York State Office of General Services

for

Suspended Scaffolds Operation and Maintenance Services for State Office Buildings in Albany, NY

Issue Date: March 17, 2025

Primary Contact:

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Contract Management Specialist 1
Phone: 518-474-9603
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Alternate Contact:

Amber Risch
Contract Management Specialist 2
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1. Introduction

1.1 Overview

The New York State Office of General Services (OGS), Division of Real Estate (DRE), is seeking a vendor to operate and maintain exterior building suspended scaffolds, located in the Albany, New York area, in compliance with all applicable Federal, State, and local laws, rules, and regulations. The vendor will ensure services are provided satisfactorily and in a manner that will minimize interference with the normal use of the building and its tenants.

1.2 Designated Contact

In compliance with the Procurement Lobbying Law, Heather Williams, Contract Management Specialist I, NYS Office of General Services, Division of Financial Administration has been designated as the Primary Contact for this procurement and may be reached by email or phone for all inquiries regarding this Solicitation.

Heather Williams, Contract Management Specialist 1
NYS Office of General Services
Financial Administration / Agency Procurement Office
32nd Floor, Corning Tower Bldg., Empire State Plaza
Albany, New York 12242
Phone: 518-474-9603
Email: Heather.Williams@ogs.ny.gov

In the event the designated contact is not available, the alternate designated contacts are:

Amber Risch, Contract Management Specialist 2
NYS Office of General Services
Financial Administration / Agency Procurement Office
32nd Floor, Corning Tower Bldg., Empire State Plaza
Albany, New York 12242
Phone: 518-474-1176
Email: Amber.Risch2@ogs.ny.gov

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Financial Administration / Agency Procurement Office
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Albany, New York 12242
Phone: 518-486-5743
Email: Beth.Maus@ogs.ny.gov

For inquires related specifically to Minority and Women-Owned Business Enterprises (MWBE) provisions of this procurement Solicitation, the designated contact is:

Joshua Quiles, Compliance Specialist 2
NYS Office of General Services
Office of Business Diversity / MWBE / SDVOB

29th Floor, Corning Tower Bldg., Empire State Plaza
Albany, NY 12242
Phone: 518-408-0432
Email: OGS.sm.MWBE@ogs.ny.gov

For inquires related specifically to Service-Disabled Veteran Owned Businesses (SDVOB) provisions of this procurement Solicitation, contact:

NYS Office of General Services
Division of Service-Disabled Veterans' Business Development
32nd Floor, Corning Tower Bldg., Empire State Plaza
Albany, New York 12242
Phone: 518-474-2015
Email: veteransdevelopment@ogs.ny.gov

For inquiries related specifically to insurance requirements of this procurement Solicitation, contact:

NYS Office of General Services
Bureau of Risk and Insurance Management
32nd Floor, Corning Tower Bldg., Empire State Plaza
Albany, New York 12242
Phone: 518-473-0310
Email: ogs.sm.insrev@ogs.ny.gov

1.3 Key Events

The Table below outlines the schedule for important action dates.

OGS Issues Invitation for Bid (IFB) #2952	March 17, 2025
Deadline for Submission of Bidder Questions	March 25, 2025
OGS Issues Responses to Written Questions (estimated)	April 2, 2025
Bid Due Date	April 15, 2025, at 2:00pm EST
Contract Start Date	Upon OSC Approval

1.4 Minimum Bidder Qualifications

Bidders are advised that the State's intent is to ensure that only responsive, responsible, qualified, and reliable Contractors enter into a contract to perform the work as defined in this document.

The State considers the following qualifications to be a pre-requisite in order to be considered a qualified Bidder for purposes of this Solicitation. Bidders not meeting the qualifications below will be disqualified. Bidders may not use a Subcontractor's or any other entity's qualifications to meet requirements.

The following minimum requirement **must** be met by each Bidder:

A. Bidder has actively been engaged for at least the past three years in the operation, maintenance, testing, service, repair, and replacement of materials and equipment on scaffolds of similar manufacture and capacity as those covered by this contract.

Or

B. The Bidder's senior management personnel has been actively engaged cumulatively for the Bidder and/or another firm in which they also served as senior personnel for at least the past three years in the operation, maintenance, testing, service, repair, and replacement of materials and equipment on scaffolds of similar manufacture and capacity as those covered by this contract. Provided, however, in the case of the latter situation, the Bidder must have been in business for at least six months.

The State of New York retains the right to request any additional information pertaining to the Contractor's ability, qualifications, and procedures used to accomplish all work under this contract, as it deems necessary to ensure safe and satisfactory work.

1.5 Glossary of Terms

"**All-inclusive**" shall mean all training, labor, material, travel, overhead and profit, etc. needed to perform the specified services.

"**Bidder**" or **"Offeror"** shall mean any person, partnership, firm, corporation, or other authorized entity submitting a bid to the State pursuant to this Solicitation.

"**Commissione**r" shall mean the Commissioner of the New York State Office of General Services or duly authorized representative.

"**Contractor**" shall mean a successful bidder awarded a contract pursuant to this Solicitation.

"Facility Manager and/or their designee" is the OGS employee responsible for the day-to-day operation and safety of the buildings and grounds on which the work is being performed.

"**Invitation for Bid**", "**IFB**", or **"Solicitation"** shall mean this document.

"**Issuing Office**" shall mean the New York State Office of General Services, Division of Financial Administration.

"OSC" shall mean the Office of the New York State Comptroller.

"OGS" shall mean the New York State Office of General Services.

"Service call-backs" as used herein shall mean service requested by the State in addition to regular monthly maintenance service.

The "**State**" shall mean The People of the State of New York, which shall also mean the New York State Office of General Services.

"Subcontractor" shall mean an approved third-party Contractor hired by the Contractor to perform services pursuant to this Solicitation.

2. Scope of Work

2.1 General Scope

The Contractor shall provide inspection, maintenance, repair, testing, training, and operational service on power-driven exterior suspended scaffolds and appurtenant equipment, used for exterior window cleaning and light building maintenance. All services are to be performed monthly throughout the duration of the contract.

2.2 Building Equipment to Be Serviced

Building		Scaffold	
Name and Location	**Height**	**No. of Rigs**	**Manufacturer**
ESP Agency Building 1 Albany, NY	310'- 3" 20 Stories	1	Manning & Lewis Engineering Co.
ESP Agency Building 2 Albany, NY	310'- 3" 20 Stories	1	Manning & Lewis Engineering Co.
ESP Agency Building 3 Albany, NY	310'- 3" 20 Stories	1	Manning & Lewis Engineering Co.
ESP Agency Building 4 Albany, NY	310'- 3" 20 Stories	1	Manning & Lewis Engineering Co.
ESP Corning Tower (Upper Roof) Albany, NY	588'-11" 48 Stories	1	Atech BCN SL
ESP Corning Tower (Lower Roof) Albany, NY	526'- 0" 42 Stories	2	Atech BCN SL
625 Broadway Albany, NY	231'- 0" 14 Stories	1	Tractel, tracmod

Refer to the following attachments for more detail:

A. Attachment 3 – Corning Tower Operations Manual
B. Attachment 4 – Agency Building Rig Documents
C. Attachment 5 – 625 Broadway Maintenance Operations

2.3 Service Requirements

A. The Contractor shall provide all labor, materials, equipment, transportation, licenses, permits, travel, and all other ancillary costs (administrative, insurance, reporting, overhead, profit, employee training, parking, etc.) necessary for the performance of these

services. Details of service not explicitly stated in these specifications, but necessarily attendant thereto, are deemed understood by the Contractor as included herein.

B. The Contractor's, or their subcontractor's, operating facility shall be equipped with a machine and motor repair shop capable of rewinding field coils, brake coils, and armatures for use in scaffolds similar to those included in this IFB.

C. The Contractor shall obtain and maintain all valid permits and licenses required to complete the services herein, at all times during the contract term. Contractor shall comply with Facility Manager and facility requirements for work permits.

   i. A weekly permit is required for all work.

   ii. Daily permits are required for work that generates sparks, open flame or excessive heat, etc.

   iii. Before performing any cutting, grinding, or torching work, obtain a copy of the OGS Hot Work Policy Guidelines, and Hot Work Permit Form from the Facility Manager.

   iv. After reviewing the regulations, submit completed permit form to the Facility Manager.

   v. Obtain Hot Work Permit a minimum of 48 hours in advance prior to start of hot work. Allow 24 to 48 hours to receive approval of each Hot Work Permit.

   vi. Each Hot Work Permit is job specific and is limited to the location, date and time specified on the permit form. Post each permit at the work site.

D. The Contractor shall comply with all provisions, applicable codes and maintenance standards as may be amended to the work required by this Solicitation, the New York State Department of Labor (DOL) original Approval Resolution, or as such approval may have been subsequently modified by DOL including, but not limited to the following:

   i. Appendix 101A – Standard Conditions for Operation and Maintenance of Suspended Scaffolds Used for Window Cleaning and Light Maintenance. A copy of Appendix 101A can be found at: https://dol.ny.gov/system/files/documents/2021/03/advisory_standard_101_published.pdf

   ii. SAC-1 – Standard Conditions for Operation and Maintenance of Suspended Scaffolds Used for Window Cleaning and Light Maintenance. This document was appended and made a part of each of the following DOL (OSHA Part 1926) approvals:

      a. DOL Approval No. 8024 for ESP Agency Building 4

      b. DOL Approval No. 10075 for ESP Agency Building 3

      c. DOL Approval No. 10074 for ESP Agency Building 2

      d. DOL Approval No. 10073 for ESP Agency Building 1

      e. DOL Approval No. 10455 for ESP Corning Tower Upper Roof

      f. DOL Approval No. 10503 for ESP Corning Tower Lower Roof

      g. DOL Approval No. 6793 for ESP Corning Tower Lower Roof

      h. DOL Approval No 10705 for 625 Broadway, Albany

iii. AISC Steel Construction Manual, 14th edition.

iv. American Welding Society (AWS) Structural Welding Code, 15th edition; and

v. National Electric Code or NYS Electrical Code, 2014.

E. The Contractor, its employees, and approved subcontractors shall meet all required safety codes, rules and regulations set forth by federal, State, and municipal governments, including those for use of temporary scaffolding systems.

i. OSHA 1910.66 Powered Platforms for Building Maintenance

ii. OSHA 1910.27 Scaffolds and Rope Descent System

iii. NYS Industrial Code Rule 21, Section 21.3 Protection of Persons Employed at Window Cleaning, Structural Requirements, Equipment and Procedures

iv. Advisory Standards 101, NYS Department of Labor, (Effective 1/01/2010) Construction, Operation and Maintenance of Suspended Scaffolds used for Window Cleaning and Light Maintenance,

v. ASME A120.1-2021– Safety Requirements for Powered Platforms and Traveling Ladders and Gantries for Building Maintenance.

Wherever there is any variance or disagreement between Federal OSHA 1910.66 and other codes or standards, the more stringent requirement shall apply.

F. The Contractor shall have qualified staff available for service at all times during the term of the contract, 24 hours per day, 7 days per week, 365 days per year.

G. All Contract personnel shall report to the Facility Manager upon arrival and departure.

H. Prior to daily use, inspection for visible defects of the secondary brake, secondary brake governor and actuation device is required.

I. A thorough inspection of the wire rope for visible defects and gross damage shall be made every 30 days, at a minimum during a use cycle and inactive ropes shall have a thorough inspection prior to being put into service.

J. The Contractor shall check the operating condition of the communications system(s) and report any defect in operation, in a report to the Facility Manager, the same day that the defect is identified. However, the proper maintenance and servicing of the communications system shall not be the responsibility of the Contractor.

K. All necessary cleaning, adjustment and repair revealed during inspection shall be performed at the time of the inspection or as soon as feasible. The Contractor shall furnish and submit to the Facility Manager a completed Attachment 6 – DOSH-115 Maintenance Form within five days of the inspection, which details the inspection and repairs if required or as noted in Attachment 2 – NYS DOL Approvals.

L. The wire ropes shall be replaced as described in Attachment 2 – NYS DOL Approvals. Should wire ropes fail prematurely, the Contractor shall replace the failed ropes, after approval from the Facility Manager. The cost of replacement of prematurely failed ropes shall be considered an Additional Service unless OGS determines, in its sole discretion, that the failure was due to the negligence or misconduct by the Contractor, its officers, employees and/or its subcontractor's and its officers and employees.

M. The Contractor shall provide all replacement parts. All replacement parts shall be new as specified by the original manufacturer or new aftermarket parts that are acceptable to the

original manufacturer as equivalent or better. No parts shall be replaced, or repairs undertaken, for which an additional charge is applicable as specified in Section 2.13 – Additional Services, without prior consultation with and pre-approval by the Facility Manager.

N. For alterations, repairs or to make additional safety tests other than those specified by codes, rules, or regulations, or to install new attachments or devices to the equipment or to alter the same as may be recommended or directed by the Facility Manager, insurance companies or by federal, State, municipal or other authorities, the Contractor shall be compensated pursuant to Section 2.13 – Additional Services

O. The premises shall be kept neat and clean by the Contractor at all times.

P. Callback Service:

   i. No charge will be made for Service call-backs, providing such call-backs are due to normal use and wear. Service call-backs due to abuse or mishandling not caused by the Contractor, its representatives, or subcontractors, shall be compensated at the Time and Materials rates bid in accordance with Section 2.13 – Additional Services. The State shall promptly call to the Contractor's attention any defect in equipment or its operation coming to its attention. Service call-backs shall normally be performed during normal working hours between 7:00 AM - 5:00 PM Monday through Friday.

Q. The Contractor shall maintain the roof carriage, scaffold equipment, and all appurtenant equipment in good working condition.

R. The Contractor shall immediately notify the Facility Manager upon discovery of equipment defects or problems that require the removal of affected equipment from service.

S. The Contractor shall garage or secure scaffolding prior to leaving the site.

T. Logs of the daily tests and inspections shall be provided to the Facility Manager prior to using the equipment. The log format shall be pre-approved by the Facility Manager.

U. The Contractor shall instruct its personnel that any time work is to be performed under the contract, they shall coordinate all activities with the Facility Manager to ensure the equipment is available and access to the facility can be granted.

V. Connection to Electrical Equipment or Systems:

   i. The Contractor shall not tie into electrical equipment or systems until the Facility Manager has reviewed and approved submitted written detailed procedures.

   ii. After procedures have been approved, the Contractor shall coordinate supervision with the Facility Manager at least three business days prior to the work.

W. Scaffolding, Hoist, Barriers and Enclosures:

   i. The Contractor shall provide barriers during performance of the services to:

      a. Prevent unauthorized entry to work areas.

      b. Allow for State's occupancy of the site.

      c. Protect existing facilities and adjacent properties from damage.

      d. Protect vehicular and pedestrian traffic.

      e. OGS shall supply barricades for ESP.

ii. Restore, by the end of each workday, existing in place safety/security items such as doors, screens, alarm systems components, that required removal, replacement, or adjustment to perform the Work, unless otherwise authorized in writing by the Facility Manager.

2.4 Quality Assurance

A. Contractor's Duty to Inform the Facility Manager:

The Contractor will promptly notify the Facility Manager of damages to the State's property, or the property of others, all injuries incurred by persons including the Contractor's employees in any manner relating, either directly or indirectly, to the work performed under the contract.

B. Elevators:

i. The Contractor will be afforded a designated common use of elevator(s), in accordance with all rules and regulations established hereafter and/or by the Facility Manager. The Contractor shall provide padding or other protection for the car.

ii. The Contractor shall coordinate the time and duration of elevator use with the Facility Manager.

iii. During periods of exclusive use, the Contractor shall prevent unauthorized persons from using elevators.

iv. If misuse or negligence is caused by the Contractor or approved subcontractors, the Contractor shall coordinate with the Facility Manager to pay elevator service fees for repairs.

C. Interruption of Utilities:

The Facility Manager reserves the right to stop any heating, gas, steam, power, water, cleaning or other similar or dissimilar services and to interrupt the use of any building facilities at such times as may be necessary and for as long as may reasonably be required by reason of accidents, strikes, civil disturbances, acts of God, or the making of repairs, alterations or improvements or inability to secure a proper supply of fuel, gas, water, electricity, labor or supplies, or by reason of any other similar or dissimilar cause beyond the reasonable control of the State.

D. Storage:

Upon request, the Facility Manager shall designate on-site storage space for the Contractor's use. Use shall be limited to the storage of its equipment and materials relating to the work performed under the contract.

E. Contractor Close-Out Inspection:

60 days prior to the expiration of the resulting contract, the Contractor and Facility Manager will make a complete examination of the contract scaffolds. The Facility Manager, with the assistance of DOL, will prepare an Existing Deficiency Report listing all

deficiencies noted during the examination. The Contractor shall correct all deficiencies, as required by contract, prior to the expiration of the contract at no additional cost to the State.

2.5 Tests and Inspections

A. A maintenance inspection and, where necessary, a test shall be made of the equipment installation prior to the start of work and, where the work cycle is more than 30 days, such inspection and/or test shall be made at least every 30 days during the work cycle. This inspection and test shall follow the procedures recommended by the manufacturer and shall be made by a qualified person.

B. No hoist or part of an installation shall be subject to a load in excess of 125 percent of its rated load. Overloads shall be set to trip at 125 percent of the rated capacity of the platform.

C. Governors and secondary brakes shall be thoroughly inspected and tested at intervals specified by the manufacturer but not to exceed every 12 months. The results of the inspection and test shall confirm that the initiating device for the secondary braking system operates at the proper overspeed, and the brake is functioning properly.

   i. If adequate tests cannot be performed in the field, the initiating device may be removed from the equipment and sent to a qualified facility equipped to make such tests.

   ii. If any hoisting machine or initiating device for the secondary brake system is removed from the equipment for testing, all reinstalled and directly related components shall be re-inspected prior to returning the equipment installation to service.

D. Suspension wire ropes shall be maintained and used in accordance with the procedures recommended by the wire rope manufacturer. A thorough inspection of the wire rope for visible defects and gross damage shall be made every 30 days, at a minimum during a use cycle and inactive ropes shall have a thorough inspection prior to being put into service.

   i. Suspension wire ropes shall be replaced as described in Attachment 2 – NYS DOL Approvals regardless of use, condition, or absence of visible defects.

   ii. Suspension wire ropes are to be removed and replaced immediately following Facility Manager approval if any of the following conditions or combination of conditions exists:

      a. Broken wires exceeding two wires in one strand in three lays or four randomly distributed broken wires in three rope lays;

      b. Distortion of rope structure such as would result from crushing or kinking or bird-caging;

      c. Evidence of heat damage;

      d. Evidence of rope deterioration from corrosion;

      e. A broken wire within 18 inches of the end attachments;

      f. Noticeable rusting and/or pitting;

      g. Evidence of core failure (a lengthening of rope lay, protrusion of the rope core and a reduction in rope diameter suggests core failure);

h. More than one valley breaks (broken wire);

i. Reduction of the original wire rope diameter by more than the following amounts:

1. 1/64-inch for 5/16-inch diameter rope
2. 1/32-inch for 3/8-inch to and including 1/2-inch diameter ropes
3. 3/64-inch for 9/16-inch to and including 3/4-inch diameter ropes

E. Inspect any overspeed rope grab to ensure that the wire rope is free to slide through and that the device functions properly at overspeed conditions.

F. All parts of the equipment, including related support structures, shall be inspected by a qualified person during each monthly inspection and, where necessary, tested to determine that they are in safe operating condition.

i. Ensure no cracks in welds or surface rusting.

ii. Ensure no rust or deformations in components, fasteners, pins, clips, etc., and that all rivets, bolts, and screws are securely in place; and

iii. Look for excessive wear in bearing surfaces, wheels, rollers, and rotational devices.

G. Perform monthly electrical tests to ensure all limit switches, motor controls, and safeties are functioning properly. All covers and enclosures are to be watertight, and all terminals securely fastened. Inspect electrical system and cords for wear, damaged insulation and defective plugs or receptacles.

H. Safety Inspections and Tests:

i. DOL issued directive dated December 22, 2009, states that in order for owners to maintain active approval of their window washing system installation, they must timely file the required materials with the DOL Engineering Services Unit (ESU). Equipment certification is required at least once every five years, or sooner if conditions warrant. The system installation shall be inspected by a NYS Licensed Professional Engineer, with window washing equipment experience, who shall certify in writing to ESU:

a. All components of the system are safe and functioning as originally designed.

b. All components of the system are free from defects or excessive wear which would require replacement.

c. According to all available records, maintenance of equipment is in accordance with manufacturer's recommendation and Appendix 101A of New York State Department of Labor Advisory Standard 101; and

d. Structural components continue to be capable of supporting all loading required by design.

ii. Daily tests and inspections shall be conducted by experienced staff, in the presence of a NYS Licensed Professional Engineer and DOL Inspector, if required. The Contractor shall notify DOL in advance of performing tests and inspections. The Contractor shall furnish test and inspection condition reports and certification

after each test and inspection as listed in Section 2.11 – Administrative and Reporting Requirements to the Facility Manager. After tests and inspections have been performed, all load weighing devices, etc. shall be checked and adjusted as required to meet manufacturer's recommendations. Scaffolds shall not be placed in service until all tests and inspections, checks and adjustments are completed, and the Facility Manager has been notified that the scaffold is in proper working condition.

iii. If a scaffold fails during tests and inspections, the Contractor shall continue with all other scheduled scaffolds so as not to delay the overall tests and inspections process.

2.6 Maintenance

A. All parts of the equipment, including related building support structures, shall be maintained in proper working order. The equipment shall be taken out of service when any part is not in proper working order and the Facility Manager is notified.

B. Controls, power conductors, relays, and all other parts shall be kept clean.

C. All rust or corrosion shall be removed by wire brushing or power tool cleaning and the affected areas primed, and spot painted whenever general equipment tests and inspections are performed.

D. Lubrication instructions and schedules, as recommended by the equipment manufacturer, for all components and equipment, including the suspension wire ropes shall be followed.

E. The Contractor shall perform the following services – which are hereby incorporated into the base bid rate, unless otherwise specified by the terms and provisions herein – once every month or within 30 days of the prior service, unless delayed by inclement weather, but in no event, less than 12 times per year:

i. Clean and lubricate all mechanisms, as required.

ii. Check gear box lubricant.

iii. Inspect braking mechanisms for wear, check for proper functioning and adjust, as required.

iv. Inspect suspension cables for wear, damage, and corrosion.

v. Check and adjust all safety limit switch settings, as required.

vi. Replace any defective fuses, as required.

vii. Replace defective or absent cotter pins, spring pins and keepers, as required.

viii. Verify proper functioning of all mechanisms.

ix. Inspect all wiring for damage or deterioration and tighten any loose connections, as required.

x. Check function of electrical controls.

xi. Inspect roof anchorages, rail systems or tie-downs.

xii. Inspect and lubricate stage building face bumper rollers and engagement devices, as required.

2.7 Materials/Parts

A. Materials:

The Contractor will use only new materials manufactured for the use intended in performing the service or other obligations under this agreement. Materials must comply with all applicable codes and must be supplied with OSHA data sheets, if applicable.

B. Parts:

i. The Contractor shall provide new replacement parts as specified by the original manufacturer or new after-market parts deemed equal or better by the original manufacturer and/or relevant industry standards.

ii. In any instance where replacement parts specified by the original equipment manufacturer or after-market part of equal or better quality is no longer available, an "equal or better" item may be designed, fabricated, and installed with prior acceptance by the State. For the State to approve such design, fabrication and installation, the Contractor shall engage the services of a NYS Licensed Professional Engineer with specific experience in exterior building scaffold rigs and such individual/firm shall be approved by the appropriate division of DOL. The engineer will design or review the design of another, approving its intended use by signing and affixing his/her professional engineering seal.

iii. Bidders are required to include in their Attachment 1 - Bid Proposal Form, pricing for a material and/or parts percentage markup over cost for materials needed for Additional Services and purchased by the Contractor.

2.8 Maintenance Control Program (MCP)

The State shall notify the Contractor of any known problems or defects with the equipment upon award. The State will provide all current certifications, drawings, logs, and documents to the awarded Contractor.

Within 14 days after award of a Contract, the Contractor shall submit to the Facility Manager an MCP for review and approval. The MCP shall be prepared in accordance with the requirements of the manufacturer's specifications, DOL requirements, and the Contract resulting from this Solicitation, and shall include monthly reporting to the Facility Manager. The MCP shall cover a period of 12 months and be updated and resubmitted annually on the anniversary date of the awarded Contract.

The MCP shall include, but not be limited to, the following:

A. All required work in such a format that the Facility Manager and/or non-scaffolding expert can understand the required tasks and be able to monitor whether or not the required tasks are being performed at the required intervals and to the required specifications.

B. All tests and inspections.

C. Documentation of maintenance activities.

2.9 Overtime

During the term of the contract, the Facility Manager may authorize the Contractor to use overtime for additional services and standby labor only. This overtime will be granted only in those

instances where the Facility Manager has determined that such action is in the overall best interest of the State. When this authority is granted, the Contractor shall pay its employees at a minimum the overtime-hourly rate required by the New York State prevailing wage rate schedules. OGS will reimburse the Contractor at the additional services rate bid or standby labor rate bid, plus the difference between the regular hourly rate and the overtime hourly rate as indicated in the prevailing wage rate schedule.

2.10 Acceptance

Work will be accepted by the State and paid for only after the performance standards identified herein have been completed and accepted by the Facility Manager.

Upon completion of work and before acceptance, a joint inspection may be conducted at the sole discretion of OGS by the Contractor and Facility Manager. The Facility Manager will determine, prior to acceptance, whether any areas require additional work or need to be redone at the Contractor's expense.

2.11 Administrative and Reporting Requirements

The Contractor will be responsible for the completion of a variety of administrative and reporting requirements.

A. The format and medium (hard copy and/or electronic) of required reporting and supporting documentation must be approved by the Facility Manager in advance of the first submittal.

B. The Contractor shall maintain accurate and complete records and accounts of the services rendered to each scaffold system. This information shall be consolidated into a monthly report and categorized as routine preventative maintenance or callback service. The report shall be submitted to the Facility Manager within ten calendar days following the month of service. The report shall indicate the scaffold number, date work was performed, type of work, brief description of the work performed, time in and out, man-hours worked, and material used. The Contractor is also responsible to complete a maintenance record as required in State Labor Code 23. This report shall also compare scheduled work versus actual work completed.

C. For each callback service, the Facility Manager shall be provided with a copy of the service ticket, on the Contractor's printed form. The printed form shall include the date of service, time in and out, number of hours worked, the name of the employee in charge of the work, the name and signature of the employee who performed the service, a brief description of the work performed including the equipment identification and replacement parts installed. The ticket should indicate if the service was due to normal wear and tear or if it qualified as an Additional Service per Section 2.13 – Additional Services.

D. During the term of any contract resulting from this IFB, the Contractor shall maintain a designated officer or employee as its representative for contact with the State and for all communication and transactions relating to any contract resulting from this IFB.

E. The Contractor shall meet with the Facility Manager prior to the start of any work, providing a 12-month schedule of services for review and approval at that time.

F. Unless otherwise directed, there shall be periodic job meetings for the following purposes:

    i. Review job progress, quality of work, and approval and delivery of materials.

ii. Identify and resolve problems, which impede planned progress.

iii. Coordinate the efforts of all concerned so that the contract progresses on schedule to on-time completion.

iv. Maintain a sound working relationship between the Contractor and the Facility Manager, and a mutual understanding of the contract; and

v. Maintain sound working procedures.

vi. The following are specific meetings that are required annually and are considered to be a full day on site, unless otherwise specified, for the purpose of the meeting and site review:

a. Spring Preseason Review and Planning

b. Spring Contractor Training – two full days of training

c. Contract meetings - April, May, June, July, August, September, October

d. Fall Postseason Review and Planning

e. Prior to DOL Inspections

f. DOL or Certification Inspections

G. Tests and Inspections:

The Facility Manager shall be provided with a certification record of each inspection and test provided by the Contractor. The certification shall include the date of inspection or test, the name of the employee in charge of the test and inspection, the name and signature of who performed the service, a brief description of the work performed, including the equipment identification, and replacement parts installed.
The personnel performing the tests, inspections and maintenance shall make all required entries in the State of New York Department of Labor's, DOSH-115.The Contractor shall provide such Maintenance Schedule and Log Sheet to the Facility Manager whenever a test, inspection or maintenance is performed.

2.12 Emergency Services

The Contractor or subcontractor shall be available to provide emergency services 24 hours a day, seven days per week, 365 days per year during the term of the contract.

The Contractor shall provide a designated emergency contact person and phone number to the Facility Manager.

The on-site response time to an emergency call shall not exceed two and a half hours of receiving such call.

The Contractor must provide means and procedures for the safe emergency recovery of persons working from the suspended scaffolds in the event of power failure, equipment failure, or disability of the occupants. The on-site response time to an emergency call for the Contractor or Subcontractor shall be prompt. OGS estimates a total of 40 hours of Emergency Recovery Services over the life of the contract. Compensation for emergency recovery services shall not exceed eight hours per instance. Travel time shall not be billed for this service. If the Emergency

Recovery Services are due to a repeat recovery based on an equipment failure due to the Contractor's fault, then OGS will not pay for the on-site response.

2.13 Additional Services

Additional services (any work other than the base scope services) shall only be performed when approved in writing by the OGS Facility Manager. The Additional Services quote must include an itemized list of materials, parts, equipment, labor hours, labor rates, mark-ups, and a description of the work. The quote must not contradict the terms of the contract and must match the bid rates for additional services. Subcontractor work shall be reimbursed at actual cost with the mark-up thereon being limited to fifteen percent of the actual cost to the Contractor. Additional Services must be invoiced separately and include the quote and an approved Attachment 7 – Authorization and Receipt of Additional Services under Contract. A copy of the Authorization and Receipt of Additional Services under Contract is attached as Attachment 7.

2.14 Staffing Requirements

OGS expects that all services will be performed diligently and effectively with appropriate supervision. Subcontractors must have the appropriate experience and certifications to perform the relevant work. Further, it is expected that:

A. The Contractor's staff must be trained in accordance with applicable OSHA Standards.

B. The Contractor's staff shall conduct themselves in a professional manner at all times.

C. The Contractor's staff shall comply with all rules and requirements of this Solicitation, including prohibiting the use of drugs and alcohol prior to or during any work performed under this contract.

D. All personnel provided shall have adequate experience for the function being performed. If OGS determines that the personnel provided do not have adequate experience, then OGS has the right to request, and the Contractor shall provide, satisfactory substitute personnel.

E. The Contractor shall train and certify all users of the equipment. A copy of an equipment user's certification shall be provided to the Facility Manager prior to use.

F. Professional Engineer:

    i. The Contractor must provide the services of a Professional Engineer, as described herein, that meets the qualifications as described below. The Contractor shall operate the rigs and provide necessary assistance to the engineer, as needed or requested by DOL to perform the noted inspections and provide necessary certifications:

        a. Shall be licensed and registered to practice engineering in the State of New York,

        b. Shall have a thorough knowledge and understanding of the requirements of code rule 21, Advisory Standard 101 and Advisory Standard 111,

        c. Shall have an engineering background in either civil, structural, or mechanical engineering,

d. Shall verify to the Facility Manager that the engineer has a minimum of four full years or equivalent part-time experience in any of the following: design, design review, installation, maintenance, or field inspection of window washing equipment for approval in New York State, and

e. Shall be available to meet with the New York State DOL engineer to review inspections and findings.

G. Contractor's Staff:

i. The Contractor will provide a schedule to the Facility Manager which shall include all activities and the associated staffing assigned to those activities for the life of the contract.

ii. The Contractor will designate a supervisor representative authorized to act for Contractor in all matters pertaining to the premises. Such supervisory representative will visit the premises frequently to ensure that all services are performed satisfactorily. Such supervisory representative will also consult with the Facility Manager from time to time to ensure compliance with the terms and provisions of the contract.

2.15 Standby Labor Services

Upon Facility Manager or equipment user request, the Contractor or Subcontractor shall provide standby staff for the operation of scaffolding while in use by other Contractors. No repairs or inspections normally performed under monthly maintenance may be performed by standby staff. No in-transit hours shall be billable.

2.16 Security Procedures

Some locations may have security policies that shall be followed. The Contractor will work with the Facility Manager to obtain necessary clearances. The Contractor may be required to provide information such as, but not limited to, the company name, the employee's name (as it appears on the ID), valid driver license number, vehicle make, model and license plate, etc. to the Facility Manager's office.

The Contractor shall comply with the Facility's Visitor Identification Policy. A copy of the current policy will be distributed at the initial job meeting. There is approximately a two-week lead time for OGS security ID badges. OGS ID badges will be strictly required and must be prominently displayed at all times by all employees performing work on State premises. OGS will provide the ID badges to the Contractor at a cost of $13.00 per employee. If a replacement badge is needed for one which is lost there is a replacement cost of $20.00. These badges are obtained from the Department of Motor Vehicles system for all employees with a driver license or non-driver ID. Employees who do not have either a New York State Driver's license or non-driver ID will be required to obtain one in order to process the ID. Note – There is a process for obtaining ID Badges, which will be discussed at the initial job meeting upon award.

Access to the Plaza Level for deliveries or Contractor vehicles shall require security clearance submitted in writing to the Facility Manager 48 hours in advance of any delivery. Once on site of the Plaza Level deck, clearance through the security gate may take up to 30 minutes for early morning or late afternoon deliveries.

2.17 OSHA (Occupational Safety & Health Administration) Training Requirements

Prior to service commencement, the Facility Manager shall inform the Contractor of known hazard(s) or chemical(s) the Contractor may encounter during the performance of obligations herein. This notification shall include site-specific practices necessary for the safe conduct of work, in compliance with applicable standards, rules, regulations, and OGS procedures.

The Contractor shall provide safety orientation training for each employee. Orientation shall include, but not be limited to, the following subject areas: OSHA 10, hazard communication, personal protective equipment, safety hazards, injury reporting protocols, and emergency evacuation procedures. The Contractor is required to provide the Facility Manager with sufficient proof of training, for each employee, prior to the individual's performance of services at the Facility.

It is the Contractor's responsibility to provide the Facility Manager with all employee updates and/or renewals necessary to satisfy the general contract obligations. Failure to provide documentation may result in the rejection of employee(s) until satisfactory documentation is provided.

The Contractor must coordinate with the Facility Manager to be informed of the site's Emergency Action Plan. The Contractor's Staffing Plan provided pursuant to §4.1, shall designate an emergency contact for use in the event of an environmental health and safety emergency. Once the contract is awarded, any change to the emergency contact during the duration of this agreement, including name or contact information, must be communicated to the Facility Manager, immediately.

In circumstances where specific OSHA or NYS Department of Labor regulated work is required, the Contractor shall have all pertinent and up-to-date certifications, beyond the "awareness" level, as required by regulations for the specific work to be performed. On-site employees will be trained to do the work, supervised by employees with higher knowledge/training, as required by regulation.

2.18 Prevailing Wage Rate Advisory Notice

This contract is subject to the prevailing wage requirements for public works. The NYS Department of Labor has determined that the prevailing wage title applicable to this contract is for Construction (Building, Heavy & Highway, Sewer, Water, Tunnel). DOL Article 8 - Prevailing Rate Case Number PRC# 2025000827 has been assigned to the project.

For additional information and requirements regarding Article 8 Prevailing Wage Rates, please see:

https://apps.labor.ny.gov/wpp/showFindProject.do?method=showIt

2.19 Contractors Compensatory Liability

In the event that the contractor fails to complete any of the specified services within the timeframe required, OGS reserves the right to have such work completed either by another contractor or with in-house staff. In any such event, the contractor shall be liable to reimburse OGS for all costs incurred to complete the work. OGS further reserves the right to collect such reimbursement from any outstanding payments due to the contractor.

2.20 Background Checks

The Contractor must perform a background check, and make a suitability determination, on each employee before said employee may perform On-Site contract services at the Facility.

NOTE: The cost to the Contractor for performing requirements of this section should be considered when calculating bid prices. The Contractor will not be entitled to charge separately, or seek reimbursement, for costs to comply with this requirement. Background checks pursuant to this agreement shall be performed at no additional cost to the State. For purposes of this clause, the following definitions apply:

Term	Definition
Suitability	Identifiable character traits and past conduct that are reasonably sufficient to indicate whether a given individual is likely to be able to perform the requirements of a contract at OGS On-Site locations without undue risk to the interests of the State.
Suitability Determination	A determination that there are reasonable grounds to believe that an individual will likely be able to perform the contract requirements On-Site without undue risk to the interests of the State.

The Contractor shall maintain a continuous list of background checks and suitability determinations noted above and shall provide this list to the Facility Manager prior to the commencement of services. The list shall be updated and resubmitted to the Facility Manager as changes occur including any On-Site incidents.

Background Check Guidelines

The Contractor is responsible for completing background checks and making suitability determinations on its employees prior to the employees beginning On-Site work. Compliance with the requirement for performing a background check and making a suitability determination shall not be construed as providing an employee clearance to secured areas.

At a minimum, the background check and suitability determination must include an evaluation of the information resources identified below.

Background Check: Information Resources
▪ Verification that the individual is not named on a national watched person database, including the Specially Designated Nationals and Blocked Persons list published by the U.S. Treasury Department. ▪ Criminal History checks to be performed either by using a national database that contains criminal histories and supplement this search by checks of NYS Office of Court Administration (“NYSOCA”) and comparable searches of states where the person has lived, worked, or attended school during the past 5 years; OR by obtaining the record of convictions from NYSOCA directly and from their equivalents from other states where the person might have lived, worked, or attended school during the last 5 years. ▪ DMV driving records. ▪ Social Security Number trace.

- Verification of U.S. citizenship or legal resident status.
- Residential history. This should be requested on the employment application to compare against data from the DMV, or other records searches, for verification.

In making a suitability determination, the contractor shall consider, at a minimum, the following factors and evaluate them against the work to be performed, the performance location, and the degree of risk to the State.

Background Check: Indicators of Unsuitability

- Loyalty or terrorism issues.
- Patterns of conduct (e.g., alcohol/drug abuse, financial irresponsibility/major liabilities, dishonesty, unemployability for negligence or misconduct, criminal conduct).
- Dishonorable military discharge.
- Felony and misdemeanor offenses.
- Employment-related misconduct, including dishonesty, criminal, or violent behavior.

The Contractor shall evaluate any adverse information about an individual by considering the following factors before making a suitability determination.

Background Check: Factors Affecting Determination

- The nature, extent, and seriousness of the conduct.
- The circumstances surrounding the conduct.
- The frequency and recency of the conduct.
- The individual's age and maturity at the time of the conduct.
- The presence or absence of rehabilitation and other pertinent behavior changes.
- The potential for pressure, coercion, exploitation, or duress.
- The likelihood of continuation of the conduct.
- How, and if, the conduct bears upon potential job responsibilities.
- The employee's employment history before and after the conduct.

Each suitability determination should be documented in a narrative. If negative items are mitigated by subsequent passage of time or completion of any relevant programs that are rehabilitative in nature, this rationale should be included in the narrative. A negative suitability determination must be supported by a finding that the adverse information has a direct bearing on the individual's ability to perform services, under the terms of this contract, or that it is deemed sufficiently serious to bar the employee from a State site.

Employee Removal

At any point, should the Contractor become aware that an employee working On-Site poses an unacceptable risk to the State, the Contractor shall immediately remove that employee from the

site, notify the Facility Manager that such a removal has taken place, and replace them with a qualified substitute immediately.

Notification

Prior to commencement of On-Site contract performance, the Contractor shall notify the Facility Manager that the background checks and suitability determinations required herein have been completed for all individuals.

2.21 Warranties

Contractor warrants that the services acquired under this Contract will be provided in a professional and workmanlike manner in accordance with industry standards.

All materials and workmanship provided under this contract shall be warranted for a minimum of one year. Where Contractor, Product manufacturer or service provider generally offers additional or more advantageous warranties, such additional or more advantageous warranty shall apply. All warranties contained in this Contract shall survive the termination of this Contract.

2.22 Confidentiality

Contractor agrees to keep confidential and not to disclose to third parties any information provided by the OGS or learned by the Contractor during the performance of the Contract unless Contractor has received the prior written consent of the OGS to make such disclosure. This provision shall survive the expiration and termination of this Contract. The Contractor warrants that all of its operations are compliant with all federal, state and local laws, rules and regulations pertain to the privacy and/or security of personal and confidential information.

3. Bid Submission

3.1 IFB Questions and Clarifications

There will be an opportunity for submission of questions and/or requests for clarification. Questions and/or clarifications must be submitted via email to the Designated Contact:

Heather Williams, Contract Management Specialist 1
NYS Office of General Services
Financial Administration – Agency Procurement Office
32nd Floor, Corning Tower Bldg., Empire State Plaza
Albany, NY 12242
Phone: 518-474-9603
Email: Heather.Williams@ogs.ny.gov

All questions must cite the particular page, section, and paragraph number, where applicable. Please submit questions as early as possible following receipt of the IFB. The final deadline for submission of any questions/clarifications regarding this IFB is listed in Section 1.3 – Key Events. Questions received after the deadline may not be answered. OGS will post an addendum at https://ogs.ny.gov/procurement/bid-opportunities with all questions and responses on or about the date listed in Section 1.3 – Key Events. Any additional addenda will be posted to the same location.

3.2 Bid Format and Content

In order for the State to evaluate bids fairly and completely, Bidders are strongly encouraged to follow the format set forth herein and should provide all of the information requested. All items requested in this Submission section should be provided and addressed as clearly as possible. Failure to conform to the stated requirements may necessitate rejection of the bid.

Bidders may be requested to provide clarification based on the State's evaluation procedure. Any clarification will be considered a formal part of the Bidder's original bid. If further clarification is needed during the evaluation period, OGS will contact the Bidder.

Note: OGS reserves the right to request any additional information deemed necessary to ensure that the Bidder is able to fulfill the requirements of the contract.

A. Cover Letter: The cover letter should confirm that the Bidder understands all the terms and conditions contained in this IFB and will comply with all the provisions of this IFB. Further, that should the contract be awarded to your company, you would be prepared to begin services on the date indicated in Section 1.3 – Key Events. The cover letter should also include the full contact information of the bidder's representative that OGS shall contact regarding the bid. A Bidder representative authorized to make contractual obligations must sign the cover letter.

B. Proof of Minimum Qualifications: Bidders must submit sufficient information to prove their ability to meet the minimum qualifications as set forth in Section 1.4.

C. Experience & Operational Plan: Bidders shall describe their capabilities to provide the services required in this IFB by providing the following:

    i. A description of Bidder's and any subcontractors' experience with operation, maintenance, testing, inspection, service, repair, and replacement of materials and equipment on exterior suspended scaffolds.

ii. Staffing plan, including the identification of any subcontractors to be utilized for this contract. Refer to Section 5.7 – Subcontractors.

D. Pricing: Bidders shall submit a completed Attachment 1 – Bid Proposal Form. Each item must be complete with no lines omitted. Bidder shall not provide alternative pricing or deviate from Attachment 1 – Bid Proposal Form. Alternative pricing methodologies will not be considered and may result in the rejection of the bid.

E. Administrative Submission:

i. All required completed forms from IFB Appendix B.

ii. Signed bid addenda (if any)

iii. Important Notes:

i. Insurance – Bidders are reminded of the insurance requirements as described in Appendix D. The selected Bidder will be required to provide all necessary documentation upon notification of selection.

ii. M/WBE & EEO Requirements - Bidders are reminded of the requirements as described in Appendix E.

iii. SDVOB Requirements - Bidders are reminded of the requirements as described in Section 5.17.

iv. Vendor Responsibility - Bidders are reminded of the requirement as described in Section 5.10 and are requested to complete the online questionnaire located on the OSC VendRep System website prior to bid submission. If the vendor has previously certified responsibility online, it shall ensure that the VRQ was recertified in the last six months.

v. Document Consistency - An award will only be made to the entity which has submitted bid. All submitted documents must be consistent with official name of bidding entity, FEIN and NYS Vendor ID number.

3.3 Bid Preparation

All bids must be completed in ink or machine produced. Bids submitted handwritten in pencil will be disqualified.

3.4 Packaging of IFB Response

Please submit:

A. One original of Attachment 1 – Bid Proposal Form
B. One original of the Cover Letter; Minimum Qualifications information; Experience and Operational Plan
C. One original of the Administrative Submission

Please provide one digital record (Thumb Drive) containing the above submission items. If there are any differences between the paper submission and the electronic submission, the paper submission shall take precedence.

Originals contain a unique wet signature for each of the signed and notarized pages. Exact copies can be photocopied and do not require a unique wet signature.

All bid documents must be submitted by mail, hand delivery, overnight carrier or certified mail in a package showing the following information on the outside:

A. Bidder's complete name and address
B. Solicitation Number: IFB #2952
C. Bid Due Date and Time: (as stated in Section 1.3 - Key Events)
D. Bid for Suspended Scaffolds Operation and Maintenance

Failure to complete all information on the bid envelope and/or packages may necessitate the premature opening of the bid and may compromise confidentiality.

3.5 Instructions for Bid Submission

Note that these instructions supersede the generic instructions posted on the OGS website bid calendar.

Only those Bidders who furnish all required information and meet the mandatory requirements will be considered.

Submit all required bid documents to the NYS Office of General Services - Division of Financial Administration at the following address:

NYS Office of General Services
Financial Administration – Agency Procurement Office
32nd Floor, Corning Tower Bldg., Empire State Plaza
Attn: Heather Williams
Bid #2952

E-MAIL BID SUBMISSIONS ARE NOT ACCEPTABLE AND WILL NOT BE CONSIDERED.

The State of New York will not be held liable for any cost incurred by the Bidder for work performed in the preparation and production of a bid or for any work performed prior to the formal execution and approval of a contract.

Bids must be received in the above office on or before 2:00 PM EST on the date indicated in Section 1.3 - Key Events. Bidders assume all risks for timely, properly submitted deliveries. Bidders mailing their bid must allow sufficient mail delivery time to ensure receipt of their bid at the specified location no later than the specified date and time.

The received time of bids will be determined by the clock at the above noted location.

Any Bid received at the designated location after the established time will be considered a Late Bid. A Late Bid may be rejected and disqualified from award. Notwithstanding the foregoing, a Late Bid may be accepted in the Commissioner's sole discretion where (i) no timely Bids meeting the requirements of the Solicitation are received, or (ii) the Bidder has demonstrated to the satisfaction of the Commissioner that the Late Bid was caused solely by factors outside the control of the Bidder. However, in no event will the Commissioner be under any obligation to accept a Late Bid.

The basis for any determination to accept a Late Bid shall be documented in the procurement record.

Bids must remain open and valid for 90 days from the due date, unless the time for awarding the contract is extended by mutual consent of NYS OGS and the Bidder. A bid shall continue to remain an effective offer, firm and irrevocable, subsequent to such 90-day period until either

tentative award of the contract(s) by issuing Office is made or withdrawal of the bid in writing by Bidder. Tentative award of the contract(s) shall consist of written notice to that effect by the issuing Office to the successful Bidder. This IFB remains the property of the State at all times, and all responses to this IFB, once delivered, become the property of the State.

Important Building Access Procedures for Delivered Bids:

Building Access procedures are in effect at the Corning Tower. Photo identification is required. All visitors must register for building access, for delivering bids. **Vendors are encouraged to pre-register by contacting the designated contact at Phone: 518-474-9603 at least 24 hours prior to arrival.** Pre-registered visitors are to report to the visitor desk located at the Concourse level of the Corning Tower. Upon presentation of appropriate photo identification, the visitor will be allowed access to the building.

Upon arrival at the visitor desk, visitors that have not pre-registered will be directed to a designated phone to call the OGS Finance Office. The Finance Office will then enter the visitor's information into the building access system. Access will not be allowed until the system has been updated. Visitors are encouraged to pre-register to ensure timely access to the building. Vendors who intend to deliver bids or conduct business with OGS should allow extra time to comply with these procedures. These procedures may change or be modified at any time.

Visitor parking information can be viewed at the following OGS web site:

https://empirestateplaza.ny.gov/parking

4. Administrative Information

4.1 Issuing Office

This IFB is being released by the New York State Office of General Services, Division of Financial Administration, on behalf of the OGS Division of Real Estate.

4.2 Method of Award

OGS intends to award one contract to the lowest responsive and responsible Bidder. The lowest Bidder shall be determined by the Grand Total Bid as represented on Attachment 1 – Bid Proposal Form.

Prior to notification of tentative award, the lowest responsive and responsible Bidder will be required to attend site inspections of each facility included in Section 2.2 – Building Equipment to be Serviced. OGS reserves the right to schedule the site inspections immediately following bid opening to confirm the lowest responsive and responsible Bidder meets the requirements for the contract.

Upon determination of the lowest responsive and responsible bid and OGS confirms, through the site inspections, that the lowest responsive and responsible Bidder meets the requirements of this contract, a contract will be sent to the successful Bidder for signature and shall be returned to the Issuing Office for all necessary State approvals. Upon final approval, a completely executed contract will be delivered to the Contractor.

The Grand Total bid amount of the successful Bidder shall be used to establish the total contract value. **The established total contract value shall not be exceeded.**

A discount for early payment does not affect bid amounts nor is it considered in making awards, except that a discount may be considered in resolving tie bids.

4.3 Term of Contract

The contract resulting from this Solicitation shall commence on upon OSC approval and will be in effect for five years.

4.4 Price

Bidders must submit pricing using Attachment 1 - Bid Proposal Form. Any alterations, qualifiers, etc. will result in rejection.

The Contractor agrees that from the effective date of the contract until contract termination, the rates charged by the Contractor and paid for by NYS OGS will be equal to or lower than any rates provided by the Contractor to other customers for like services.

The Contractor shall provide all labor, materials, equipment, transportation, license, permits, travel, all other ancillary (administrative, insurance, reporting, overhead, profit, employee training, parking, etc.) costs and equipment necessary for the performance of services under this contract. Details of service not explicitly stated in these specifications, but necessarily attendant thereto, is deemed understood by the Contractor as included herein.

If the Bidder offers an early payment discount for payments made in less than 30 days after receipt of a proper invoice, please detail the discount by providing, in the appropriate place on the Attachment 1 - Bid Proposal Form, the percentage of discount and the specific number of days within which the payment must be made for the discount to apply. If Bidder offers multiple discounts, please provide the details for each discount offered (for example: 2%/15 days; 1%/20 days). A discount for early payment does not affect bid amounts nor is it considered in making awards, except that a discount may be considered in resolving tie bids.

The total bid consists of the following components:

Item 1. Base Bid

Base Bid price shall include all costs to perform monthly services detailed in Section 2 – Scope of Work at each location.

A. Provide an all-inclusive price for monthly service at each location for the period 4/1 – 11/30.

B. Provide an all-inclusive price for monthly service at each location for the period 12/1 – 3/31.

C. Provide an all-inclusive price for NYS Licensed Professional Engineer certification of rigs.

Item 2. Rope Replacement Per Rig

Provide an all-inclusive price for rope replacement for each rig.

Item 3. Standby Labor Services

Provide an all-inclusive hourly labor rate for standby labor services as described in Section 2.15 – Standby Labor Services.

Item 4. Emergency Services

Provide an all-inclusive hourly labor rate for emergency services as described in Section 2.12 – Emergency Services.

Item 5. Additional Services

Additional Services shall be defined as work including labor and materials as requested and approved by the Facility Manager, not covered in the base scope of services. Please refer to Section 2.13 – Additional Services.

A. Provide a percentage mark-up over cost for materials and/or parts needed for additional services. The material percentage mark-up shall remain fixed for the contract term.

B. Provide an hourly labor rate for services performed onsite at an OGS facility. The hourly labor rate shall be expressed as a mark-up over the prevailing wage rate for a job title. No in transit hours shall be billable. Labor cost quotes will be considered straight time costs for work accomplished during regular hours between 7 AM and 5 PM, Monday through Friday, excluding State holidays. Any additional services performed at times other than the specified hours is considered to be overtime and would be allowed only when approved by the Facility Manager. Scheduling of all maintenance, inspections and testing shall be

approved by the Facility Manager and shall not be considered overtime rates as they are a part of the base bid, unless after hours is required.

C. Provide an hourly labor rate for services performed at the Contractors' facility.

D. Provide an hourly labor rate for a NYS Licensed Professional Engineer.

E. Provide an all-inclusive fixed rate for round trip transportation per person. Travel charges shall only be made for onsite additional services. The fixed rate charged by the Contractor and paid for by OGS will be equal to or lower than any rate provided by the Contractor to other clients for like services. Any preapproved overnights shall be reimbursed at the state rate: https://www.gsa.gov/travel/plan-book/per-diem-rates.

4.5 Price Adjustment (Escalation / De-escalation)

The Contractor is to submit a bid that will be fixed for one year only. On each anniversary date of the contract, the Contractor may be granted an increase or decrease in their bid, dependent upon fluctuations in the Consumer Price Index for All Items, (Northeast Urban), as published by the U.S. Department of Labor, Bureau of Labor Statistics, Washington, D.C. 20212. Visit their website at http://www.bls.gov/data/. Actual adjustments shall not exceed 5%.

The 'base' month for determining adjustments will be the third month prior to the start date of the contract. The base month is fixed and will not be adjusted year to year. The adjustments will be based on the difference in the base month CPI for each applicable year and will become effective in the anniversary month. For example, if the contract is awarded in September 2025, the 'base' month will be June. The contract allows for an adjustment after the first year, it would be based on the difference between the June 2025 CPI and the June 2026 CPI and become effective in September 2026.

The Consumer Price Index is published around the middle of each month for the prior month (i.e. the January figure is not published until mid-February). The Contractor has the sole responsibility to request, in writing, a rate adjustment. This request must be received within three months of the base month. As long as the request is submitted and received within the required time frame, the adjustment will be processed using the base month Consumer Price Index. Once approved, the Contractor will be notified in writing. Contractor shall not submit revised invoices until such notification, at which point an invoice may be submitted for any retroactive difference owed.

Requests should be sent to Agency Procurement Office at either:

NYS Office of General Services
Financial Administration – Agency Procurement Office
32nd Floor, Corning Tower Bldg., Empire State Plaza
Albany, New York 12242

OR

ogs.sm.agencyprocurementoffice@ogs.ny.gov

Should a Contractor fail to submit their request, within three months of the applicable base month date, Contractor shall be deemed to have waived their right to any increase in price, but the State shall not be barred from making the appropriate adjustment in the case of a decrease determined in accordance with the above methodology.

4.6 Method of Payment

Invoices will be processed monthly in accordance with established procedures of the Office of General Services and the Office of the State Comptroller (OSC), and payments will be subject to the prompt payment provisions of Article XI-A of the New York State Finance Law.

Each company invoice **must** be itemized and include the following information: Name of NYS agency being billed; Contract ID number; Purchase Order number; Vendor name; Company FEIN; Vendor ID number; a unique invoice number; date(s) of service(s); a detailed description of services performed; and $ amount requested in accordance with contract or PO rates.

Invoices without the above stated information will be returned to Contractor to be completed as required in the paragraph above. **Payment will not be issued and will not be due and owing until a corrected invoice is received and approved by OGS**.

All Invoices are to be submitted for payment to:

Office of General Services
C/O BSC / Accounts Payable
1220 Washington Ave., Bldg. 5, 5th Fl or Accountspayable@ogs.ny.gov
Albany, New York 12226

4.7 Electronic Payment

Contractor shall provide complete and accurate billing invoices in order to receive payment. Billing invoices submitted must contain all information and supporting documentation required by the contract, the agency, and the State Comptroller. Payment for invoices submitted by the Contractor shall only be rendered electronically unless payment by paper check is expressly authorized by the Commissioner, in the Commissioner's sole discretion, due to extenuating circumstances. Such electronic payment shall be made in accordance with ordinary State procedures and practices. The Contractor shall comply with the State Comptroller's procedures to authorize electronic payments. Contractor must arrange for electronic payment through the NYS Statewide Financial System (SFS) Vendor Portal. Information regarding SFS Vendor Portal is available at the following website: http://www.sfs.ny.gov/index.php/vendors. If Contractor doesn't have SFS Vendor Portal credentials, they may request them via e-mail at Helpdesk@sfs.ny.gov, or phone at 518-457-7717. The Contractor acknowledges that it will not receive payment on any invoices submitted under this Contract if it does not comply with the State Comptroller's electronic payment procedures, except where the Commissioner has expressly authorized payment by paper check as set forth above.

4.8 Exceptions and Extraneous Terms

The Issuing Office will consider all requests to waive any Solicitation requirement. The term "Solicitation requirement" as used herein shall include any and all terms and conditions included in the Solicitation documents. Bidders should be aware that failure to obtain a waiver of any bid requirement in advance of bid submission, and/or inclusion of extraneous terms in the form of exceptions, assumptions, qualifiers, ranges, modifications, etc. with bid submission, may result in rejection of bid and disqualification from the bidding process.

Bidders wishing to obtain an exemption or waiver for any part of this Solicitation must contact the Issuing Office in writing by the 'Questions Due Date' as identified in the Section 1.3 – Key Events.

The request must cite the specific section and requirement in question, and clearly identify any proposed alternative. Requests will be considered and responded to in writing, either with the 'Answers to Questions' as identified in the Key Events section (if the response results in a change to the Solicitation), or directly to the requesting vendor.

4.9 Dispute Resolution

It is the policy of the Office of General Services' Financial Administration to provide vendors with an opportunity to administratively resolve disputes, complaints or inquiries related to bid Solicitations, contract awards, and contract administration. OGS Financial Administration encourages vendors to seek resolution of disputes informally, through consultation with OGS Financial Administration staff, prior to commencing a formal dispute process. All such matters will be accorded full, impartial and timely consideration. A copy of the OGS Financial Administration Dispute Resolution Procedures for Vendors may be obtained by contacting the designated contact person identified in the Solicitation.

During the term of the contract, if either party notifies the other of a dispute or dissatisfaction, the other party will make a good faith effort to solve or settle dispute amicably, including meeting with the other party to diligently attempt to reach a satisfactory result. In the event of a dispute, the parties will continue to fulfill their obligations hereunder during the dispute resolution process. The parties agree to proceed in good faith to avoid disputes and resolve disputes that cannot be avoided at the lowest level possible. If party representatives are unable to resolve the dispute or reach a satisfactory result within twenty days of written notice of a dispute, the dispute will be referred to successive higher levels of each organization for final decision.

4.10 Rules of Construction

Words of the masculine and feminine genders shall be deemed and construed to include the neuter gender. Unless the context otherwise indicates, a singular word shall include the plural and vice versa, and words importing persons shall include corporations and associations, including public bodies, as well as natural persons. The terms "hereby," "hereof," "hereto," "herein," "hereunder," and any similar terms, as used in this IFB, refer to this IFB.

4.11 Balanced Bids

Prices quoted must be in balance. A bid is mathematically unbalanced if the bid is structured on the basis of nominal prices for some work and inflated prices for other work; that is, each element of the bid must carry its proportionate share of the total cost of the work plus profits.

Bids with extreme variations, or where obvious unbalancing of unit prices has occurred, will be thoroughly evaluated by OGS. Out-of-balance bids may be rejected in whole or in part; however, OGS reserves the right to negotiate prices with the bidder to balance unbalanced pricing.

4.12 Examination of Contract Documents

A. Each Bidder is under an affirmative duty to inform itself by personal examination of the specifications of the proposed work and by such other means as it may select, of the character, quality, and extent of the work to be performed and the conditions under which the contract is to be executed.

B. Each Bidder shall examine specifications and all other data or instruction pertaining to the work. No pleas of ignorance of conditions that may be encountered or of any other matter

concerning the work to be performed in the execution of the contract will be accepted by the State as an excuse for any failure or omission on the part of the Bidder to fulfill every detail of all the requirements of the documents governing the work. The Bidder, if awarded the contract, will not be allowed any extra compensation by reason of any matter or thing concerning which such bidder might have fully informed itself prior to bidding.

C. Any Bidder in doubt as to the true meaning of any part of the specification or the proposed contract documents shall submit to Heather Williams, NYS Office of General Services, Division of Financial Administration, 32nd Floor, Corning Tower Building, Empire State Plaza, Albany, New York 12242, or e-mail Heather.Williams@ogs.ny.gov a written request for an interpretation thereof. If a major change is involved to which all bidders must be informed, such request for interpretation shall be delivered, in writing, no later than the question due date listed in Section 1.3 – Key Events**.** Any interpretation of the proposed documents will be made only by an addendum duly issued.

D. Any addendum issued prior to the 'Bid Due Date' as stated in Section 1.3 - Key Events, must be acknowledged by signature, dated, and be submitted as part of the Administrative Bid. In awarding a contract, any addenda will become a part thereof.

E. Any verbal information obtained from, or statements made by, representatives of the Commissioner of General Services at the time of examination of the documents, and/or the Mandatory Site Visit shall not be construed as in any way amending contract documents. Only such corrections or addenda as are issued, in writing, to all Bidders shall become a part of the contract.

4.13 Debriefings

Pursuant to Section 163(9)(c) of the State Finance Law, any unsuccessful Bidder may request a debriefing regarding the reasons that the Bid submitted by the Bidder was not selected for award. Requests for a debriefing must be made within 15 calendar days of notification by OGS that the bid submitted by the Bidder was not selected for award. Requests should be submitted in writing to a designated contact(s) identified in the Solicitation.

4.14 Procurement Rights

The State of New York reserves the right to:

A. Reject any and all bids received in response to this Solicitation.

B. Disqualify a Bidder from receiving the award if the Bidder, or anyone in the Bidder's employ, has previously failed to perform satisfactorily in connection with public bidding or contracts.

C. Correct Bidder's mathematical errors and waive or modify other minor irregularities in bids received, after prior notification to the Bidder.

D. Adjust any Bidder's expected costs of the bid price based on a determination of the evaluation committee that the selection of the said Bidder will cause the State to incur additional costs.

E. Utilize any and all ideas submitted in the bids received.

F. Negotiate with Bidders responding to this Solicitation within the Solicitation requirements to serve the best interests of the State.

G. Begin contract negotiations with another bidding Contractor(s) in order to serve the best interests of the State of New York should the State of New York be unsuccessful in negotiating a contract with the selected Contractor within 21 days of selection notification.

H. Waive any non-material requirement not met by all Bidders.

I. Not make an award from this Solicitation.

J. Make an award under this Solicitation in whole or in part.

K. Make multiple contract awards pursuant to the Solicitation.

L. Have any service completed via separate competitive bid or other means, as determined to be in the best interest of the State.

M. Seek clarifications of bids.

N. Disqualify any bidder whose conduct and/or bid fails to conform to the requirements of the IFB.

O. Prior to the bid opening, amend the IFB specifications to correct errors or oversights, or to supply additional information, as it becomes available.

P. Waive any requirements that are not material.

Q. If two or more bids are found to be substantially equivalent, the Commissioner of OGS, at their sole discretion, will determine award using the pre-established process.

Note: The State is not liable for any cost incurred by a Bidder in the preparation and production of a bid or for any work performed prior to the issuance of a contract.

4.15 Use of State Tools and Equipment

Contractor shall be permitted to use any available, State-owned, fixed, and non-fixed tools, equipment and lifting gear ("State Equipment") in the performance of the Contract, provided the use of the State Equipment is within the scope of the services to be performed under the Contract.

Prior to the commencement of any work under this Contract, Contractor shall inspect the State Equipment at each location to determine if Contractor desires to use any available State Equipment. All State Equipment that will be used by Contractor shall be listed on Attachment 8 – State Tools and Equipment Use Request, attached to and made a part of this Contract. The parties may revise or update Attachment 8 – State Tools and Equipment Use Request, when mutually agreed upon by both parties and the revised or updated version shall be made a part of the Contract. Contractor shall not be permitted to use any State Equipment that is not listed on Attachment 8 – State Tools and Equipment Use Request.

State Equipment is available for the use of the Contractor on an "as is/where is" basis, with no representations or warranties as to condition, fitness for use, or compliance with applicable laws, regulations, or requirements. Contractor acknowledges that it is familiar with how to use the State Equipment and is aware of the risks and dangers that may arise as a result of the use (and improper use) of the State Equipment, which may include, without limitation, tripping hazards, falls from a height, and objects falling from above, which are inherently dangerous and could result in, among other things and without limitation, cuts, scrapes, puncture wounds, or bruises; sprained joints; bruised or torn tendons, ligaments, and muscles; broken bones; spinal injuries; concussions or other brain injuries; and even death.

Contractor agrees that the State Equipment may only be used by Contractor's employees, agents or subcontractors who have been properly trained to use the equipment and, if applicable, have read the manufacturer's operations manuals and have been certified or accredited to appropriately operate the State Equipment.

Contractor shall routinely inspect the State Equipment and use each item of State Equipment only for its intended purposes and only if there are no defects or deficiencies noted. If Contractor believes that there is a need for repair, replacement, or maintenance of any of the State Equipment, Contractor shall not use the defective or deficient State Equipment, but Contractor shall notify OGS in accordance with the "Notices" section of any Contract resulting from this solicitation, and OGS shall then, in its sole discretion, determine if repair, replacement, or maintenance is required, and cause the same to be performed in a timely manner at the sole cost and expense of OGS; provided, however, that repairs, replacements, or maintenance that are necessary due to the negligence or willful misconduct of Contractor, its employees, agents, or subcontractors shall be performed by OGS at Contractor's sole cost and expense.

Contractor assumes all risks of injury to itself, its employees, and its property arising out of the use of the State Equipment and hereby releases, indemnifies, and holds harmless the People of the State of New York, and its officers, employees, and agents ("Releasees"), with respect to any and all injury, disability, death, or loss or damage to person or property, whether arising from the negligence of the Releasees or otherwise, to the fullest extent permitted by law.

The State Equipment shall remain the property of OGS and may not be removed by the Contractor. At the expiration or earlier termination of this Contract, the State Equipment shall be returned to OGS in the same condition it was in at the commencement of the Contract, reasonable wear and tear excepted.

5. Contract Clauses and Requirements

5.1 Appendix A / Order of Precedence

Appendix A — Standard Clauses for New York State Contracts, dated June 2023, attached hereto, is hereby expressly made a part of this Solicitation document as fully as if set forth at length herein. The agreement resulting from a successful award will include the following documents. Conflicts between these documents will be resolved in the following descending order of precedence:

1. Appendix A (June 2023)
2. Contract Service Agreement
3. OGS Invitation for Bid Number 2952, including any Addenda
4. Selected Contractor's Bid including Attachment 1 – Bid Proposal Form

5.2 Past Practice

The failure to exercise any right hereunder in the past shall not operate as a waiver of such right. No breach of this Agreement shall be deemed waived unless such waiver shall be in writing and signed by the party claimed to have waived said right. No waiver of any breach of the Agreement at any time in the past shall constitute a waiver of subsequent breach.

5.3 Procurement Lobbying Requirement

Pursuant to State Finance Law §139-j and §139-k, this Solicitation includes and imposes certain restrictions on communications between OGS and a Vendor during the procurement process. A Vendor is restricted from making contacts from the earliest posting, on a governmental entity's website, in a newspaper of general circulation, or in the procurement opportunities newsletter of intent to solicit offers/bids through final award and approval of the Procurement Contract by OGS and, if applicable, the Office of the State Comptroller ("Restricted Period") to other than designated staff unless it is a contact that is included among certain statutory exceptions set forth in State Finance Law §139-j(3)(a). Designated staff, as of the date hereof, is identified on the first page and in Section 1.2. OGS employees are also required to obtain certain information when contacted during the restricted period and make a determination of the responsibility of the Vendor pursuant to these two statutes. Certain findings of non-responsibility can result in rejection for contract award and in the event of two findings within a four-year period; the Vendor is debarred from obtaining governmental Procurement Contracts. Further information about these requirements can be found on the OGS website: http://www.ogs.ny.gov/acpl/

5.4 Tax and Finance Clause

TAX LAW § 5-A:

Section 5-a of the Tax Law, as amended, effective April 26, 2006, requires certain contractors awarded state contracts for commodities, services and technology valued at more than $100,000 to certify to the Department of Taxation and Finance (DTF) that they are registered to collect New York State and local sales and compensating use taxes. The law applies to contracts where the total amount of such contractors' sales delivered into New York State are in excess of $300,000 for the four quarterly periods immediately preceding the quarterly period in which the certification is made, and with respect to any affiliates and Subcontractors whose sales delivered into New

York State exceeded $300,000 for the four quarterly periods immediately preceding the quarterly period in which the certification is made.

This law imposes upon certain contractors the obligation to certify whether or not the contractor, its affiliates, and its Subcontractors are required to register to collect state sales and compensating use tax and contractors must certify to DTF that each affiliate and Subcontractor exceeding such sales threshold is registered with DTF to collect New York State and local sales and compensating use taxes. The law prohibits the State Comptroller, or other approving agency, from approving a contract awarded to a contractor meeting the registration requirements but who is not so registered in accordance with the law.

Contractor certification forms and instructions for completing the forms are attached to this IFB. Form ST-220-TD must be filed with and returned directly to DTF. Unless the information upon which the ST-220-TD is based changes, this form only needs to be filed once with DTF. If the information changes for the contractor, its affiliate(s), or its Subcontractor(s) a new Form ST-220-TD must be filed with DTF.

Form ST-220-CA must be filed with the bid and submitted to the procuring covered agency certifying that the contractor filed the ST-220-TD with DTF. Proposed contractors should complete and return the certification forms within two business days of request (if the forms are not completed and returned with bid submission). Failure to make either of these filings may render a Bidder non-responsive and non-responsible. Bidders shall take the necessary steps to provide properly certified forms within a timely manner to ensure compliance with the law.

Vendors may call DTF at **1-800-698--2909** for any and all questions relating to Section 5-a of the Tax Law and relating to a company's registration status with the DTF. For additional information and frequently asked questions, please refer to the DTF web site: https://www.tax.ny.gov

5.5 Freedom of Information Law / Trade Secrets

During the evaluation process, the content of each bid will be held in confidence and details of any bid will not be revealed (except as may be required under the Freedom of Information Law or other State law). The Freedom of Information Law (FOIL) provides for an exemption from disclosure for trade secrets or information the disclosure of which would cause injury to the competitive position of commercial enterprises. This exception would be effective both during and after the evaluation process. Should you feel your firm's bid contains any such trade secrets or other confidential or proprietary information, you must submit a request to except such information from disclosure. Such request must be in writing, must state the reasons why the information should be excepted from disclosure and must be provided at the time of submission of the subject information. This can be accomplished by completion of the applicable question on the Contractor Information page in IFB Appendix B hereto. Requests for exemption of the entire contents of a bid from disclosure have generally not been found to be meritorious and are discouraged. Kindly limit any requests for exemption of information from disclosure to bona fide trade secrets or specific information, the disclosure of which would cause a substantial injury to the competitive position of your firm.

5.6 General Requirements

A. The Bidder agrees to adhere to all State and Federal laws and regulations in connection with the contract.

B. The Bidder agrees to notify OGS of any changes in the legal status or principal ownership of the firm, 45 days in advance of said change.

C. The Bidder agrees that in any contract resulting from this IFB it shall be completely responsible for its work, including any damages or breakdowns caused by its failure to take appropriate action.

D. The Bidder agrees that any contract resulting from this IFB may not be assigned, transferred, conveyed or the work subcontracted without the prior written consent of OGS.

E. For reasons of safety and public policy, in any contract resulting from this IFB, the use of illegal drugs and/or alcoholic beverages by the Contractor or its personnel shall not be permitted while performing any phase of the work herein specified.

F. For purposes of any contract resulting from this IFB, the State will not be liable for any expense incurred by the Contractor for any parking fees or as a consequence of any traffic infraction or parking violations attributable to employees of the Contractor.

G. OGS interpretation of specifications shall be final and binding upon the Contractor.

H. The Commissioner of OGS will make no allowance or concession to the Bidder for any alleged misunderstanding because of quantity, quality, character, location or other conditions.

I. Should it appear that there is a real or apparent discrepancy between different sections of specifications concerning the nature, quality or extent of work to be furnished, it shall be assumed that the Bidder has based its bid on the more expensive option. Final decision will rest with OGS.

J. INSPECTION – For purposes of any contract resulting from this IFB the quality of service is subject to inspection and may be made at any reasonable time by the State of New York. Should it be found that quality of services being performed is not satisfactory and that the requirements of the specifications are not being met, OGS may terminate the contract and employ another Contractor to fulfill the requirements of the contract. The existing Contractor shall be liable to the State of New York for costs incurred on account thereof.

K. STOP WORK ORDER – OGS reserves the right to stop the work covered by this IFB and any contract(s) resulting there from at any time that it is deemed the Contractor is unable or incapable of performing the work to the State's satisfaction. In the event of such stopping, OGS shall have the right to arrange for the completion of the work in such manner as it may deem advisable and if the cost thereof exceeds the amount of the bid, the Contractor shall be liable to the State of New York for any such costs on account thereof. In the event that OGS issues a stop work order for the work as provided herein, the Contractor shall have ten working days to respond thereto before any such stop work order shall become effective. Provided, however, that if an emergency situation exists, as reasonably determined by OGS, then the stop work order shall be effective immediately.

L. OGS reserves the right to reject and bar from the facility any employee hired by the Contractor.

5.7 Subcontractors

The State will contract only with the successful Bidder who is the Prime Contractor. The Issuing Office considers the Prime Contractor, the sole Contractor with regard to all provisions of the Solicitation and the contract resulting from the Solicitation. When bidding, any known/planned use of Subcontractors must be disclosed in detail with bid submission. If Subcontractors are to be used for base scope services, it shall be understood that the bid price includes the cost of the Subcontractor, and no additional markups will be allowed.

No subcontract entered into by the Contractor shall relieve the Contractor of any liabilities or obligations in this Solicitation or the resultant contract. The Contractor accepts full responsibility for the actions of any employee or Subcontractor/Subcontractor's employee(s) who carry out any of the provisions of any contract resulting from this Solicitation.

The Contractor's use of Subcontractors shall not diminish the Contractor's obligations to complete the work in accordance with the contract. The Contractor shall coordinate and control the work of the Subcontractors.

Any Subcontractor shall be subject to the applicable terms, conditions and requirements contained herein. The Contractor shall be responsible for informing the Subcontractors of all terms, conditions, and requirements of the contract documents.

During the term of the Contract, before any part of the contract shall be sublet, the Contractor shall submit to the OGS Representative, Governor Nelson A. Rockefeller Empire State Plaza, 39th Floor, Corning Tower Building, Albany, New York 12242, in writing, the name of each proposed Subcontractor and obtain written consent to such Subcontractor. The names shall be submitted in ample time to permit acceptance or rejection of each proposed Subcontractor without causing delay in the work of this contract. The Contractor shall promptly furnish such information as the OGS Representative may require concerning the proposed Subcontractor's ability and qualifications.

In the event that Subcontractors must be used during the term of this contract for Additional Services work, the following guidelines shall apply.

A. The Contractor shall procure goods and services using commercially reasonable and prudent practices to obtain the most favorable price and terms. The Contractor will make his/her best efforts and shall document same to obtain written bids from at least three responsible service providers before selecting the best price and terms. Prior OGS approval is required for all Additional Services. The following conditions apply to competitive bidding for subcontracted additional services:

    i. Each bid will be solicited in a form and manner conducive to uniformity in all bids. The Contractor will maintain documentation of the Solicitation and results.

    ii. If the Contractor desires to accept other than the lowest bidder, or where competitive bids are not possible, adequate justification must be provided to the State for required prior approval.

    iii. The OGS shall be free to accept or reject any bid/subcontract submitted for State's approval, and Contractor shall provide OGS with copies of all documentation OGS may request in relation to such approval rights.

5.8 Extent of Services

OGS reserves the right to re-negotiate at its discretion, to reduce the amount of services provided under any contract resulting from this Solicitation. This reduction in services shall be effectuated by written amendment to the contract and subject to approval by the Office of the State Comptroller.

5.9 Termination

A. Termination

The Office of General Services may, upon thirty 30 days' notice, terminate any contract resulting from this Solicitation in the event of the awarded Bidder's failure to comply with any of the bidder's requirements unless the awarded Bidder obtained a waiver of the requirement.

In addition, OGS may also terminate any contract resulting from this Solicitation upon ten days' written notice if the Contractor makes any arrangement for assignment for the benefit of creditors.

Furthermore, OGS shall have the right, in its sole discretion, at any time to terminate a contract resulting from this Solicitation, or any unit portion thereof, with or without cause, by giving 30 days' written notice of termination to the Contractor.

B. Procurement Lobbying Termination

The Office of General Services reserves the right to terminate this Agreement in the event it is found that the certification filed by the Contractor in accordance with New York State Finance Law §139-k was intentionally false or intentionally incomplete. Upon such finding, the Office of General Services may exercise its termination right by providing written notification to the Contractor in accordance with the written notification terms of this Agreement.

C. Effect of Termination

Any termination by OGS under this Section shall in no event constitute or be deemed a breach of any contract resulting from this Solicitation and no liability shall be incurred by or arise against the Office of General Services, its agents, and employees therefore for lost profits or any other damages.

5.10 NYS Vendor Responsibility

OGS conducts a review of prospective contractors ("Bidders") to provide reasonable assurances that the Bidder is responsive and responsible. A For-Profit Business Entity Questionnaire (hereinafter "Questionnaire") is used for non-construction contracts and is designed to provide information to assess a Bidder's responsibility to conduct business in New York based upon financial and organizational capacity, legal authority, business integrity, and past performance history. By submitting a bid, Bidder agrees to fully and accurately complete the Questionnaire. The Bidder acknowledges that the State's execution of the Contract will be contingent upon the State's determination that the Bidder is responsible, and that the State will be relying upon the Bidder's responses to the Questionnaire when making its responsibility determination.

OGS recommends each Bidder file the required Questionnaire online via the New York State VendRep System. To enroll in and use the VendRep System, please refer to the VendRep System Instructions and User Support for Vendors available at the Office of the State Comptroller's (OSC) website, https://www.osc.state.ny.us/vendrep/index.htm or to enroll, go directly to the VendRep System online at https://www.osc.state.ny.us/vendrep/info_vrsystem.htm.

OSC provides direct support for the VendRep System through user assistance, documents, online help, and a help desk. The OSC Help Desk contact information is located at http://www.osc.state.ny.us/portal/contactbuss.htm. Bidders opting to complete the paper questionnaire can access this form and associated definitions via the OSC website at: http://www.osc.state.ny.us/vendrep/forms_vendor.htm .

In order to assist the State in determining the responsibility of the Bidder prior to Contract Award, the Bidder must complete and certify (or recertify) the Questionnaire no more than six months prior to the bid due date. A Bidder's Questionnaire cannot be viewed by OGS until the Bidder has certified the Questionnaire. It is recommended that all Bidders become familiar with all of the requirements of the Questionnaire in advance of the bid opening to provide sufficient time to complete the Questionnaire.

The Bidder agrees that if it is awarded a Contract the following shall apply:

The Contractor shall at all times during the Contract term remain responsible. The Contractor agrees, if requested by the Commissioner of OGS or her designee, to present evidence of its continuing legal authority to do business in New York State, integrity, experience, ability, prior performance, and organizational and financial capacity.

The Commissioner of OGS or her designee, in her sole discretion, reserves the right to suspend any or all activities under this Contract, at any time, when she discovers information that calls into question the responsibility of the Contractor. In the event of such suspension, the Contractor will be given written notice outlining the particulars of such suspension. Upon issuance of such notice, the Contractor must comply with the terms of the suspension order. Contract activity may resume at such time as the Commissioner of OGS or her designee issues a written notice authorizing a resumption of performance under the Contract.

Upon written notice to the Contractor, and a reasonable opportunity to be heard with appropriate OGS officials or staff, the Contract may be terminated by the Commissioner of OGS or her designee at the Contractor's expense where the Contractor is determined by the Commissioner of OGS or her designee to be non-responsible. In such event, the Commissioner of OGS or her designee may complete the contractual requirements in any manner she may deem advisable and pursue available legal or equitable remedies for breach.

In no case shall such termination of the Contract by the State be deemed a breach thereof, nor shall the State be liable for any damages for lost profits or otherwise, which may be sustained by the Contractor as a result of such termination.

5.11 New York State Vendor File Registration

Prior to being awarded a contract pursuant to this Solicitation, the Bidder(s) must be registered in the New York State Vendor File (Vendor File) administered by the Office of the State Comptroller (OSC). This is a central registry for all vendors who do business with New York State Agencies and the registration must be initiated by a State Agency. Following the initial registration, unique New York State ten-digit vendor identification numbers will be assigned to your company for usage on all future transactions with New York State. Additionally, the Vendor File enables vendors to use the Vendor Self-Service application to manage all vendor information in one central location for all transactions related to the State of New York. If Bidder is already registered in the New York State Vendor File, list the ten-digit vendor ID number on the Contractor Information page included in Appendix B of this Solicitation.

If the Bidder is not currently registered in the Vendor File and is recommended for award, OGS shall request completion of OSC Substitute W-9 Form. A fillable form with instructions can be found at the link below. The Office of General Services will initiate the vendor registration process for all Bidders recommended for Contract Award. Once the process is initiated, registrants will receive an email from OSC that includes the unique ten-digit vendor identification number

assigned to the company and instructions on how to enroll in the online Vendor Self-Service application. For more information on the vendor file please visit the following website: www.osc.state.ny.us/vendors/index.htm. Form to be completed: www.osc.state.ny.us/vendors/forms/ac3237s_fe.pdf.

5.12 Ethics Compliance

All Bidders/Contractors and their employees must comply with the requirements of §§73 and 74 of the Public Officers Law, other state codes, rules, regulations, and executive orders establishing ethical standards for the conduct of business with New York State. In signing any contract resulting from this IFB, the Contractor certifies full compliance with those provisions for any present or future dealings, transactions, sales, contracts, services, offers, relations, etc., involving New York State and/or its employees. Failure to comply with those provisions may result in disqualification from the bidding process, termination of contract, and/or other civil or criminal proceedings as required by law.

5.13 Indemnification

The Contractor shall assume all risks of liability for its performance, or that of any of its officers, employees, Subcontractors or agents, of any contract resulting from this Solicitation and shall be solely responsible and liable for all liabilities, losses, damages, costs or expenses, including attorney's fees, arising from any claim, action or proceeding relating to or in any way connected with the performance of this Agreement and covenants and agrees to indemnify and hold harmless the State of New York, its agents, officers and employees, from any and all claims, suits, causes of action and losses of whatever kind and nature, arising out of or in connection with its performance of any contract resulting from this Solicitation, including negligence, active or passive or improper conduct of the Contractor, its officers, agents, Subcontractors or employees, or the failure by the Contractor, its officers, agents, Subcontractors or employees to perform any obligations or commitments to the State or third parties arising out of or resulting from any contract resulting from this Solicitation. Such indemnity shall not be limited to the insurance coverage herein prescribed.

5.14 Force Majeure

Neither party hereto will be liable for losses, defaults, or damages under any contract resulting from this Solicitation which result from delays in performing, or inability to perform, all or any of the obligations or responsibilities imposed upon it pursuant to the terms and conditions of this Solicitation, due to or because of acts of God, the public enemy, acts of government, earthquakes, floods, strikes, civil strife, fire or any other cause beyond the reasonable control of the party that was so delayed in performing or so unable to perform provided that such party was not negligent and shall have used reasonable efforts to avoid and overcome such cause. Such party will resume full performance of such obligations and responsibilities promptly upon removal of any such cause.

5.15 Encouraging Use of New York State Businesses in Contract Performance

New York State businesses have a substantial presence in State contracts and strongly contribute to the economies of the state and the nation. In recognition of the economic activity and leadership such businesses offer, Contractors are strongly encouraged and expected to consider New York

State businesses in the fulfillment of the requirements of this agreement. Such partnering may be as Subcontractors, suppliers, protégés or other supporting roles.

Bidders need to be aware that OGS strongly encourages Bidders, to the maximum extent practical and consistent with legal requirements, to use responsible and responsive New York State businesses in purchasing commodities that are of equal quality and functionality and in utilizing services and technology. Furthermore, Bidders are reminded that they must continue to utilize small, minority and women-owned businesses, consistent with current State law.

Utilizing New York State businesses in State contracts will help create more private sector jobs, rebuild New York's infrastructure, and maximize economic activity to the mutual benefit of the contractor and its New York State business partners. New York State businesses will promote the contractor's optimal performance under the contract, thereby fully benefiting the public sector programs that are supported by associated procurements.

Public procurements can drive and improve the State's economic engine through promotion of the use of New York businesses by its contractors. The State therefore expects Bidders to provide maximum assistance to New York businesses in their use of the contract. The potential participation by all kinds of New York businesses will deliver great value to the State and its taxpayers.

5.16 Sexual Harassment Prevention

Pursuant to N.Y. State Finance Law § 139-l, every bid made on or after January 1, 2019 to the State or any public department or agency thereof, where competitive bidding is required by statute, rule or regulation, for work or services performed or to be performed or goods sold or to be sold, and where otherwise required by such public department or agency, shall contain a certification that the bidder has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of N.Y. State Labor Law § 201-g.

N.Y. State Labor Law § 201-g provides requirements for such policy and training and directs the Department of Labor, in consultation with the Division of Human Rights, to create and publish a model sexual harassment prevention guidance document, sexual harassment prevention policy and sexual harassment prevention training program that employers may utilize to meet the requirements of N.Y. State Labor Law § 201-g. The model sexual harassment prevention policy, model sexual harassment training materials, and further guidance for employers, can be found online at the following URL: https://www.ny.gov/combating-sexual-harassment-workplace/employers.

Pursuant to N.Y. State Finance Law § 139-l, any bid by a corporate bidder containing the certification required above shall be deemed to have been authorized by the board of directors of such bidder, and such authorization shall be deemed to include the signing and submission of such bid and the inclusion therein of such statement as the act and deed of the bidder.

If the Bidder cannot make the required certification, such Bidder shall so state and shall furnish with the bid a signed statement that sets forth in detail the reasons that the Bidder cannot make the certification. After review and consideration of such statement, OGS may reject the bid or may decide that there are sufficient reasons to accept the bid without such certification.

The certification required above can be found on Appendix B – NYS Required Certifications, which Bidder must submit with its bid.

5.17 Participation Opportunities For New York State Certified Service-Disabled Veteran-Owned Businesses

Article 3 of the New York State Veterans' Services Law provides for more meaningful participation in public procurement by certified Service-Disabled Veteran-Owned Businesses ("SDVOBs"), thereby further integrating such businesses into New York State's economy. OGS recognizes the need to promote the employment of service-disabled veterans and to ensure that certified service-disabled veteran-owned businesses have opportunities for maximum feasible participation in the performance of OGS contracts.

In recognition of the service and sacrifices made by service-disabled veterans and in recognition of the economic activity such businesses offer, Bidders/Contractors are strongly encouraged and expected to consider SDVOBs in the fulfillment of the requirements of the Contract. Such participation may be as Subcontractors or suppliers, as protégés, or in other partnering or supporting roles.

For purposes of this procurement, OGS conducted a comprehensive search and determined that the Contract does not offer sufficient opportunities to set specific goals for participation by SDVOBs as Subcontractors, service providers, and suppliers to Contractor. Nevertheless, Bidder/Contractor is encouraged to make good faith efforts to promote and assist in the participation of SDVOBs on the Contract for the provision of services and materials. The directory of New York State Certified SDVOBs can be viewed at: https://ogs.ny.gov/veterans/

Bidder/Contractor is encouraged to contact the Office of General Services' Division of Service-Disabled Veteran's Business Development at 518-474-2015 or VeteransDevelopment@ogs.ny.gov to discuss methods of maximizing participation by SDVOBs on the Contract.

APPENDIX A

STANDARD CLAUSES FOR NEW YORK STATE CONTRACTS

PLEASE RETAIN THIS DOCUMENT
FOR FUTURE REFERENCE.

June 2023

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STANDARD CLAUSES FOR NYS CONTRACTS

The parties to the attached contract, license, lease, amendment or other agreement of any kind (hereinafter, "the contract" or "this contract") agree to be bound by the following clauses which are hereby made a part of the contract (the word "Contractor" herein refers to any party other than the State, whether a contractor, licenser, licensee, lessor, lessee or any other party):

1. EXECUTORY CLAUSE. In accordance with Section 41 of the State Finance Law, the State shall have no liability under this contract to the Contractor or to anyone else beyond funds appropriated and available for this contract.

2. NON-ASSIGNMENT CLAUSE. In accordance with Section 138 of the State Finance Law, this contract may not be assigned by the Contractor or its right, title or interest therein assigned, transferred, conveyed, sublet or otherwise disposed of without the State's previous written consent, and attempts to do so are null and void. Notwithstanding the foregoing, such prior written consent of an assignment of a contract let pursuant to Article XI of the State Finance Law may be waived at the discretion of the contracting agency and with the concurrence of the State Comptroller where the original contract was subject to the State Comptroller's approval, where the assignment is due to a reorganization, merger or consolidation of the Contractor's business entity or enterprise. The State retains its right to approve an assignment and to require that any Contractor demonstrate its responsibility to do business with the State. The Contractor may, however, assign its right to receive payments without the State's prior written consent unless this contract concerns Certificates of Participation pursuant to Article 5-A of the State Finance Law.

3. COMPTROLLER'S APPROVAL. In accordance with Section 112 of the State Finance Law, if this contract exceeds $50,000 (or $75,000 for State University of New York or City University of New York contracts for goods, services, construction and printing, and $150,000 for State University Health Care Facilities) or if this is an amendment for any amount to a contract which, as so amended, exceeds said statutory amount, or if, by this contract, the State agrees to give something other than money when the value or reasonably estimated value of such consideration exceeds $25,000, it shall not be valid, effective or binding upon the State until it has been approved by the State Comptroller and filed in his office. Comptroller's approval of contracts let by the Office of General Services, either for itself or its customer agencies by the Office of General Services Business Services Center, is required when such contracts exceed $85,000. Comptroller's approval of contracts established as centralized contracts through the Office of General Services is required when such contracts exceed $125,000, and when a purchase order or other procurement transaction issued under such centralized contract exceeds $200,000.

4. WORKERS' COMPENSATION BENEFITS. In accordance with Section 142 of the State Finance Law, this contract shall be void and of no force and effect unless the Contractor shall provide and maintain coverage during the life of this contract for the benefit of such employees as are required to be covered by the provisions of the Workers' Compensation Law.

5. NON-DISCRIMINATION REQUIREMENTS. To the extent required by Article 15 of the Executive Law (also known as the Human Rights Law) and all other State and Federal statutory and constitutional non-discrimination provisions, the Contractor will not discriminate against any employee or applicant for employment, nor subject any individual to harassment, because of age, race, creed, color, national origin, citizenship or immigration status, sexual orientation, gender identity or expression, military status, sex, disability, predisposing genetic characteristics, familial status, marital status, or domestic violence victim status or because the individual has opposed any practices forbidden under the Human Rights Law or has filed a complaint, testified, or assisted in any proceeding under the Human Rights Law. Furthermore, in accordance with Section 220-e of the Labor Law, if this is a contract for the construction, alteration or repair of any public building or public work or for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this contract shall be performed within the State of New York, Contractor agrees that neither it nor its subcontractors shall, by reason of race, creed, color, disability, sex, or national origin: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. If this is a building service contract as defined in Section 230 of the Labor Law, then, in accordance with Section 239 thereof, Contractor agrees that neither it nor its subcontractors shall by reason of race, creed, color, national origin, age, sex or disability: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. Contractor is subject to fines of $50.00 per person per day for any violation of Section 220-e or Section 239 as well as possible termination of this contract and forfeiture of all moneys due hereunder for a second or subsequent violation.

6. WAGE AND HOURS PROVISIONS. If this is a public work contract covered by Article 8 of the Labor Law or a building service contract covered by Article 9 thereof, neither Contractor's employees nor the employees of its subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes, except as otherwise provided in the Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, Contractor and its subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates for overtime pay, as determined by the State Labor Department in

accordance with the Labor Law. Additionally, effective April 28, 2008, if this is a public work contract covered by Article 8 of the Labor Law, the Contractor understands and agrees that the filing of payrolls in a manner consistent with Subdivision 3-a of Section 220 of the Labor Law shall be a condition precedent to payment by the State of any State approved sums due and owing for work done upon the project.

7. NON-COLLUSIVE BIDDING CERTIFICATION. In accordance with Section 139-d of the State Finance Law, if this contract was awarded based upon the submission of bids, Contractor affirms, under penalty of perjury, that its bid was arrived at independently and without collusion aimed at restricting competition. Contractor further affirms that, at the time Contractor submitted its bid, an authorized and responsible person executed and delivered to the State a non-collusive bidding certification on Contractor's behalf.

8. INTERNATIONAL BOYCOTT PROHIBITION. In accordance with Section 220-f of the Labor Law and Section 139-h of the State Finance Law, if this contract exceeds $5,000, the Contractor agrees, as a material condition of the contract, that neither the Contractor nor any substantially owned or affiliated person, firm, partnership or corporation has participated, is participating, or shall participate in an international boycott in violation of the federal Export Administration Act of 1979 (50 USC App. Sections 2401 et seq.) or regulations thereunder. If such Contractor, or any of the aforesaid affiliates of Contractor, is convicted or is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the contract's execution, such contract, amendment or modification thereto shall be rendered forfeit and void. The Contractor shall so notify the State Comptroller within five (5) business days of such conviction, determination or disposition of appeal (2 NYCRR § 105.4).

9. SET-OFF RIGHTS. The State shall have all of its common law, equitable and statutory rights of set-off. These rights shall include, but not be limited to, the State's option to withhold for the purposes of set-off any moneys due to the Contractor under this contract up to any amounts due and owing to the State with regard to this contract, any other contract with any State department or agency, including any contract for a term commencing prior to the term of this contract, plus any amounts due and owing to the State for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto. The State shall exercise its set-off rights in accordance with normal State practices including, in cases of set-off pursuant to an audit, the finalization of such audit by the State agency, its representatives, or the State Comptroller.

10. RECORDS. The Contractor shall establish and maintain complete and accurate books, records, documents, accounts and other evidence directly pertinent to performance under this contract (hereinafter, collectively, the "Records"). The Records must be kept for the balance of the calendar year in which they were made and for six (6) additional years thereafter. The State Comptroller, the Attorney General and any other person or entity authorized to conduct an examination, as well as the agency or agencies involved in this contract, shall have access to the Records during normal business hours at an office of the Contractor within the State of New York or, if no such office is available, at a mutually agreeable and reasonable venue within the State, for the term specified above for the purposes of inspection, auditing and copying. The State shall take reasonable steps to protect from public disclosure any of the Records which are exempt from disclosure under Section 87 of the Public Officers Law (the "Statute") provided that: (i) the Contractor shall timely inform an appropriate State official, in writing, that said records should not be disclosed; and (ii) said records shall be sufficiently identified; and (iii) designation of said records as exempt under the Statute is reasonable. Nothing contained herein shall diminish, or in any way adversely affect, the State's right to discovery in any pending or future litigation.

11. IDENTIFYING INFORMATION AND PRIVACY NOTIFICATION. (a) Identification Number(s). Every invoice or New York State Claim for Payment submitted to a New York State agency by a payee, for payment for the sale of goods or services or for transactions (e.g., leases, easements, licenses, etc.) related to real or personal property must include the payee's identification number. The number is any or all of the following: (i) the payee's Federal employer identification number, (ii) the payee's Federal social security number, and/or (iii) the payee's Vendor Identification Number assigned by the Statewide Financial System. Failure to include such number or numbers may delay payment. Where the payee does not have such number or numbers, the payee, on its invoice or Claim for Payment, must give the reason or reasons why the payee does not have such number or numbers.

(b) Privacy Notification. (1) The authority to request the above personal information from a seller of goods or services or a lessor of real or personal property, and the authority to maintain such information, is found in Section 5 of the State Tax Law. Disclosure of this information by the seller or lessor to the State is mandatory. The principal purpose for which the information is collected is to enable the State to identify individuals, businesses and others who have been delinquent in filing tax returns or may have understated their tax liabilities and to generally identify persons affected by the taxes administered by the Commissioner of Taxation and Finance. The information will be used for tax administration purposes and for any other purpose authorized by law. (2) The personal information is requested by the purchasing unit of the agency contracting to purchase the goods or services or lease the real or personal property covered by this contract or lease. The information is maintained in the Statewide Financial System by the Vendor Management Unit within the Bureau of State Expenditures, Office of the State Comptroller, 110 State Street, Albany, New York 12236.

12. EQUAL EMPLOYMENT OPPORTUNITIES FOR MINORITIES AND WOMEN. In accordance with Section 312 of the Executive Law and 5 NYCRR Part 143, if this contract is: (i) a written agreement or purchase order instrument, providing for a total expenditure in excess of $25,000.00, whereby a contracting agency is committed to expend or does expend funds in return for labor, services, supplies, equipment, materials or any combination of the foregoing, to be performed for, or rendered or furnished to the contracting agency; or (ii) a written agreement in excess of $100,000.00 whereby a contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; or (iii) a written agreement in excess of $100,000.00 whereby the owner of a State assisted housing project is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon for such project, then the following shall apply and by signing this agreement the Contractor certifies and affirms that it is Contractor's equal employment opportunity policy that:

(a) The Contractor will not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, shall make and document its conscientious and active efforts to employ and utilize minority group members and women in its work force on State contracts and will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal employment opportunities without discrimination. Affirmative action shall mean recruitment, employment, job assignment, promotion, upgradings, demotion, transfer, layoff, or termination and rates of pay or other forms of compensation;

(b) at the request of the contracting agency, the Contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will affirmatively cooperate in the implementation of the Contractor's obligations herein; and

(c) the Contractor shall state, in all solicitations or advertisements for employees, that, in the performance of the State contract, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.

Contractor will include the provisions of "(a), (b) and (c)" above, in every subcontract over $25,000.00 for the construction, demolition, replacement, major repair, renovation, planning or design of real property and improvements thereon (the "Work") except where the Work is for the beneficial use of the Contractor. Section 312 does not apply to: (i) work, goods or services unrelated to this contract; or (ii) employment outside New York State. The State shall consider compliance by a contractor or subcontractor with the requirements of any federal law concerning equal employment opportunity which effectuates the purpose of this clause. The contracting agency shall determine whether the imposition of the requirements of the provisions hereof duplicate or conflict with any such federal law and if such duplication or conflict exists, the contracting agency shall waive the applicability of Section 312 to the extent of such duplication or conflict. Contractor will comply with all duly promulgated and lawful rules and regulations of the Department of Economic Development's Division of Minority and Women's Business Development pertaining hereto.

13. CONFLICTING TERMS. In the event of a conflict between the terms of the contract (including any and all attachments thereto and amendments thereof) and the terms of this Appendix A, the terms of this Appendix A shall control.

14. GOVERNING LAW. This contract shall be governed by the laws of the State of New York except where the Federal supremacy clause requires otherwise.

15. LATE PAYMENT. Timeliness of payment and any interest to be paid to Contractor for late payment shall be governed by Article 11-A of the State Finance Law to the extent required by law.

16. NO ARBITRATION. Disputes involving this contract, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily authorized), but must, instead, be heard in a court of competent jurisdiction of the State of New York.

17. SERVICE OF PROCESS. In addition to the methods of service allowed by the State Civil Practice Law & Rules ("CPLR"), Contractor hereby consents to service of process upon it by registered or certified mail, return receipt requested. Service hereunder shall be complete upon Contractor's actual receipt of process or upon the State's receipt of the return thereof by the United States Postal Service as refused or undeliverable. Contractor must promptly notify the State, in writing, of each and every change of address to which service of process can be made. Service by the State to the last known address shall be sufficient. Contractor will have thirty (30) calendar days after service hereunder is complete in which to respond.

18. PROHIBITION ON PURCHASE OF TROPICAL HARDWOODS. The Contractor certifies and warrants that all wood products to be used under this contract award will be in accordance with, but not limited to, the specifications and provisions of Section 165 of the State Finance Law, (Use of Tropical Hardwoods) which prohibits purchase and use of tropical hardwoods, unless specifically exempted, by the State or any governmental agency or political subdivision or public benefit corporation. Qualification for an exemption under this

law will be the responsibility of the contractor to establish to meet with the approval of the State.

In addition, when any portion of this contract involving the use of woods, whether supply or installation, is to be performed by any subcontractor, the prime Contractor will indicate and certify in the submitted bid proposal that the subcontractor has been informed and is in compliance with specifications and provisions regarding use of tropical hardwoods as detailed in § 165 State Finance Law. Any such use must meet with the approval of the State; otherwise, the bid may not be considered responsive. Under bidder certifications, proof of qualification for exemption will be the responsibility of the Contractor to meet with the approval of the State.

19. MACBRIDE FAIR EMPLOYMENT PRINCIPLES. In accordance with the MacBride Fair Employment Principles (Chapter 807 of the Laws of 1992), the Contractor hereby stipulates that the Contractor either (a) has no business operations in Northern Ireland, or (b) shall take lawful steps in good faith to conduct any business operations in Northern Ireland in accordance with the MacBride Fair Employment Principles (as described in Section 165 of the New York State Finance Law), and shall permit independent monitoring of compliance with such principles.

20. OMNIBUS PROCUREMENT ACT OF 1992. It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises as bidders, subcontractors and suppliers on its procurement contracts.

Information on the availability of New York State subcontractors and suppliers is available from:

NYS Department of Economic Development
Division for Small Business and Technology Development
625 Broadway
Albany, New York 12245
Telephone: 518-292-5100

A directory of certified minority- and women-owned business enterprises is available from:

NYS Department of Economic Development
Division of Minority and Women's Business Development
633 Third Avenue 33rd Floor
New York, NY 10017
646-846-7364
email: mwbebusinessdev@esd.ny.gov
https://ny.newnycontracts.com/FrontEnd/searchcertifieddirectory.asp

The Omnibus Procurement Act of 1992 (Chapter 844 of the Laws of 1992, codified in State Finance Law § 139-i and Public Authorities Law § 2879(3)(n)–(p)) requires that by signing this bid proposal or contract, as applicable, Contractors certify that whenever the total bid amount is greater than $1 million:

(a) The Contractor has made reasonable efforts to encourage the participation of New York State Business Enterprises as suppliers and subcontractors, including certified minority- and women-owned business enterprises, on this project, and has retained the documentation of these efforts to be provided upon request to the State;

(b) The Contractor has complied with the Federal Equal Opportunity Act of 1972 (P.L. 92-261), as amended;

(c) The Contractor agrees to make reasonable efforts to provide notification to New York State residents of employment opportunities on this project through listing any such positions with the Job Service Division of the New York State Department of Labor, or providing such notification in such manner as is consistent with existing collective bargaining contracts or agreements. The Contractor agrees to document these efforts and to provide said documentation to the State upon request; and

(d) The Contractor acknowledges notice that the State may seek to obtain offset credits from foreign countries as a result of this contract and agrees to cooperate with the State in these efforts.

21. RECIPROCITY AND SANCTIONS PROVISIONS. Bidders are hereby notified that if their principal place of business is located in a country, nation, province, state or political subdivision that penalizes New York State vendors, and if the goods or services they offer will be substantially produced or performed outside New York State, the Omnibus Procurement Act 1994 and 2000 amendments (Chapter 684 and Chapter 383, respectively, codified in State Finance Law § 165(6) and Public Authorities Law § 2879(5)) require that they be denied contracts which they would otherwise obtain. NOTE: As of May 2023, the list of discriminatory jurisdictions subject to this provision includes the states of South Carolina, Alaska, West Virginia, Wyoming, Louisiana and Hawaii.

22. COMPLIANCE WITH BREACH NOTIFICATION AND DATA SECURITY LAWS. Contractor shall comply with the provisions of the New York State Information Security Breach and Notification Act (General Business Law §§ 899-aa and 899-bb and State Technology Law § 208).

23. COMPLIANCE WITH CONSULTANT DISCLOSURE LAW. If this is a contract for consulting services, defined for purposes of this requirement to include analysis, evaluation, research, training, data processing, computer programming, engineering, environmental, health, and mental health services, accounting, auditing, paralegal, legal or similar services, then, in accordance with Section 163 (4)(g) of the State Finance Law (as amended by Chapter 10 of the Laws of 2006), the Contractor shall timely, accurately and properly comply with the requirement to submit an annual employment report for the contract to the agency that awarded the contract, the Department of Civil Service and the State Comptroller.

24. PROCUREMENT LOBBYING. To the extent this agreement is a "procurement contract" as defined by State Finance Law §§ 139-j and 139-k, by signing this agreement the contractor certifies and affirms that all disclosures made in accordance with State Finance Law §§ 139-j and 139-k are complete, true and accurate. In the event such certification is found to be intentionally false or intentionally incomplete, the State may terminate the agreement by providing written notification to the Contractor in accordance with the terms of the agreement.

25. CERTIFICATION OF REGISTRATION TO COLLECT SALES AND COMPENSATING USE TAX BY CERTAIN STATE CONTRACTORS, AFFILIATES AND SUBCONTRACTORS.
To the extent this agreement is a contract as defined by Tax Law § 5-a, if the contractor fails to make the certification required by Tax Law § 5-a or if during the term of the contract, the Department of Taxation and Finance or the covered agency, as defined by Tax Law § 5-a, discovers that the certification, made under penalty of perjury, is false, then such failure to file or false certification shall be a material breach of this contract and this contract may be terminated, by providing written notification to the Contractor in accordance with the terms of the agreement, if the covered agency determines that such action is in the best interest of the State.

26. IRAN DIVESTMENT ACT. By entering into this Agreement, Contractor certifies in accordance with State Finance Law § 165-a that it is not on the "Entities Determined to be Non-Responsive Bidders/Offerers pursuant to the New York State Iran Divestment Act of 2012" ("Prohibited Entities List") posted at: https://ogs.ny.gov/iran-divestment-act-2012

Contractor further certifies that it will not utilize on this Contract any subcontractor that is identified on the Prohibited Entities List. Contractor agrees that should it seek to renew or extend this Contract, it must provide the same certification at the time the Contract is renewed or extended. Contractor also agrees that any proposed Assignee of this Contract will be required to certify that it is not on the Prohibited Entities List before the contract assignment will be approved by the State.

During the term of the Contract, should the state agency receive information that a person (as defined in State Finance Law § 165-a) is in violation of the above-referenced certifications, the state agency will review such information and offer the person an opportunity to respond. If the person fails to demonstrate that it has ceased its engagement in the investment activity which is in violation of the Act within 90 days after the determination of such violation, then the state agency shall take such action as may be appropriate and provided for by law, rule, or contract, including, but not limited to, imposing sanctions, seeking compliance, recovering damages, or declaring the Contractor in default.

The state agency reserves the right to reject any bid, request for assignment, renewal or extension for an entity that appears on the Prohibited Entities List prior to the award, assignment, renewal or extension of a contract, and to pursue a responsibility review with respect to any entity that is awarded a contract and appears on the Prohibited Entities list after contract award.

27. ADMISSIBILITY OF REPRODUCTION OF CONTRACT. Notwithstanding the best evidence rule or any other legal principle or rule of evidence to the contrary, the Contractor acknowledges and agrees that it waives any and all objections to the admissibility into evidence at any court proceeding or to the use at any examination before trial of an electronic reproduction of this contract, in the form approved by the State Comptroller, if such approval was required, regardless of whether the original of said contract is in existence.

Solicitation 2952

IFB Appendix B – Required Forms

Required Forms – Table of Contents

The following required forms are to be submitted with the proposer's proposal. The forms include:

- ☐ Contractor Information Page
- ☐ Corporate Acknowledgement (must be notarized)
- ☐ Offerer's Affirmation of Understanding of and Agreement pursuant to New York State Finance Law §139-j (3) and §139-j (6) (b)
- ☐ Offerer Disclosure of Prior Non-Responsibility Determinations
- ☐ Offerer's Certification of Compliance with State Finance Law §139-k(5)
- ☐ NYS Required Certifications
  - Nondiscrimination In Employment In Northern Ireland Macbride Fair Employment Principles
  - Non-Collusive Bidding Certification
  - Diesel Emission Reduction Act
  - Executive Order No 177 Certification
  - State Finance Law § 139-l Certification
  - Small Business Certification
- ☐ Certification Under Executive Order No. 16- Prohibiting State Agencies and Authorities from Contracting with Businesses Conducting Business in Russia
- ☐ ST-220 -TD Taxation & Finance Contractor Certification (Submitted directly to Taxation & Finance)
- ☐ ST-220 -CA Taxation and Finance Covered Agency Certification
- ☐ EEO 100- Equal Employment Opportunity Staffing Plan

Contractor Information

Solicitation Number **2952**

Offerer affirms that it understands and agrees to comply with the procedures of the Government Entity relative to permissible contacts as required by New York State Finance Law §139-j (3) and §139-j (6) (b).

Authorized Signature			Date
Print Name		Title	
Company Name			
Federal ID Number		NYS Vendor ID Number	
Address			
City	State	Zip	County
Telephone Number	Ext	Toll Free Telephone	Ext
Fax Number		Toll Free Fax Number	
Email of Designated Contact			

Please identify if any of the following apply:

New York State Small Business as defined in Executive Law Section 310(20) and as detailed in the "New York State Required Certifications" included in Appendix B herein.	☐ Yes	☐ No
New York State Certified Minority Owned Business	☐ Yes	☐ No
New York State Certified Woman Owned Business	☐ Yes	☐ No
New York State Certified Service-Disabled Veteran-Owned Business	☐ Yes	☐ No
Do you understand and is your firm capable of meeting the insurance requirements to enter into a contract with New York State?	☐ Yes	☐ No
Will New York State Businesses be used in the performance of this contract?	☐ Yes	☐ No
If yes, identify New York State Business(es) that will be used; (Attach identifying information).		
Does your proposal meet all the requirements of this solicitation?	☐ Yes	☐ No

Is your firm making a claim that any portions of its bid should be exempt from release under the Freedom of Information Law, as they constitute trade secrets, or information the disclosure of which would cause a substantial injury to your firm's competitive position? **(Please review the clause entitled "Freedom of Information Law / Trade Secrets" of this Solicitation before answering).**	☐ Yes	☐ No
If "Yes", please identify the specific portions of your bid for which you are claiming this exemption, and the reasons for such claimed exemption. Attach additional sheets, if necessary		

INDIVIDUAL, CORPORATION, PARTNERSHIP, OR LLC ACKNOWLEDGMENT

STATE OF }

: SS.:

COUNTY OF }

On the ____ day of _____ in the year 20__ , before me personally appeared _____ , known to me to be the person who executed the foregoing instrument, who, being duly sworn by me did depose and say that _he maintains an office at _____,
Town of _____ , County of _____ ,
State of _____ ; and further that:

[Check One]

( ) **If an individual):** _he executed the foregoing instrument in his/her name and on his/her own behalf.

( ) **If a corporation):** _he is the _____ of _____ , the corporation described in said instrument; that, by authority of the Board of Directors of said corporation, _he is authorized to execute the foregoing instrument on behalf of the corporation for purposes set forth therein; and that, pursuant to that authority, _he executed the foregoing instrument in the name of and on behalf of said corporation as the act and deed of said corporation.

( ) **If a partnership):** _he is the _____ of _____, the partnership described in said instrument; that, by the terms of said partnership, _he is authorized to execute the foregoing instrument on behalf of the partnership for purposes set forth therein; and that, pursuant to that authority, _he executed the foregoing instrument in the name of and on behalf of said partnership as the act and deed of said partnership.

( ) **If a limited liability company):** _he is a duly authorized member of _____, LLC, the limited liability company described in said instrument; that _he is authorized to execute the foregoing instrument on behalf of the limited liability company for purposes set forth therein; and that, pursuant to that authority, _he executed the foregoing instrument in the name of and on behalf of said limited liability company as the act and deed of said limited liability company.

_____

Notary Public

Registration No._____ **State of:**_____

Offerer's Affirmation of Understanding of and Agreement pursuant to New York State Finance Law §139-j (3) and §139-j (6) (b)

New York State Finance Law §139-j(6)(b) provides that:

Every Governmental Entity shall seek written affirmations from all Offerers as to the Offerer's understanding of and agreement to comply with the Governmental Entity's procedures relating to permissible contacts during a Governmental Procurement pursuant to subdivision three of this section.

Offerer affirms that it understands and agrees to comply with the procedures of the Government Entity relative to permissible contacts as required by New York State Finance Law §139-j (3) and §139-j (6) (b).			
Authorized Signature		Date	
Print Name		Title	
Company Name			
Address			
City	State	Zip	

Offerer Disclosure of Prior Non-Responsibility Determinations

Background:

New York State Finance Law §139-k(2) obligates a Governmental Entity to obtain specific information regarding prior non-responsibility determinations with respect to State Finance Law §139-j. This information must be collected in addition to the information that is separately obtained pursuant to State Finance Law §163(9). In accordance with State Finance Law §139-k, an Offerer must be asked to disclose whether there has been a finding of non-responsibility made within the previous four (4) years by any Governmental Entity due to: (a) a violation of State Finance Law §139-j or (b) the intentional provision of false or incomplete information to a Governmental Entity. The terms "Offerer" and "Governmental Entity" are defined in State Finance Law § 139-k(1). State Finance Law §139-j sets forth detailed requirements about the restrictions on Contacts during the procurement process. A violation of State Finance Law

§139-j includes, but is not limited to, an impermissible Contact during the restricted period (for example, contacting a person or entity other than the designated contact person, when such contact does not fall within one of the exemptions).

As part of its responsibility determination, State Finance Law §139-k(3) mandates consideration of whether an Offerer fails to timely disclose accurate or complete information regarding the above non-responsibility determination. In accordance with law, no Procurement Contract shall be awarded to any Offerer that fails to timely disclose accurate or complete information under this section, unless a finding is made that the award of the Procurement Contract to the Offerer is necessary to protect public property or public health safety, and that the Offerer is the only source capable of supplying the required Article of Procurement within the necessary timeframe. See State Finance Law §§139-j (10)(b) and 139-k(3).

Instructions:

A Governmental Entity must include a disclosure request regarding prior non-responsibility determinations in accordance with State Finance Law §139-k in its solicitation of proposals or bid documents or specifications or contract documents, as applicable, for procurement contracts. The attached form is to be completed and submitted by the individual or entity seeking to enter into a Procurement Contract. It shall be submitted to the Governmental Entity conducting the Governmental Procurement.

Offerer Disclosure of Prior Non-Responsibility Determinations

Name of Individual or Entity Seeking to Enter into the Procurement Contract			
Address			
City	State	Zip	
Person Submitting this Form	Title	Date	**2952** Contract Procurement Number

1.	Has any Governmental Entity made a finding of non-responsibility regarding the individual or entity seeking to enter into the Procurement Contract in the previous four years?	☐ No ☐ Yes
If yes, please answer questions 2-4 before proceeding to question 5. If no, please go to question 5.		
2.	Was the basis for the finding of non-responsibility due to a violation of State Finance Law §139-j	☐ No ☐ Yes
3.	Was the basis for the finding of non-responsibility due to the intentional provision of false or incomplete information to a Governmental Entity?	☐ No ☐ Yes
4.	If you answered yes to any of the above questions, please provide details regarding the finding of non-responsibility below.	
	Governmental Entity	Date of Finding of Non-responsibility
	Basis of Finding of Non-Responsibility (Add additional pages as necessary)	
5.	Has any Governmental Entity or other governmental agency terminated or withheld a Procurement Contract with the above-named individual or entity due to the intentional provision of false or incomplete information?	☐ No ☐ Yes
6.	If yes, please provide details below.	
	Governmental Entity	Date of Termination or Withholding of Contract
	Basis of Termination or Withholding (Add additional pages as necessary)	

Offerer certifies that all information provided to the Governmental Entity with respect to State Finance Law §139-k is complete, true and accurate.

By: _____ Date: _____
Signature

Offerer's Certification of Compliance with State Finance Law §139-k(5)

New York State Finance Law §139-k(5) requires that every Procurement Contract award subject to the provisions of State Finance Law §§139-k or 139-j shall contain a certification by the Offerer that all information provided to the Office of General Services with respect to State Finance Law §139-k is complete, true and accurate.

Offerer Certification: *I certify that all information provided to the Office of General Services with respect to State Finance Law §139-k is complete, true and accurate.*			
Authorized Signature		Date	
Print Name		Title	
Company Name			
Address			
City	State	Zip	

Procurement Lobbying Termination

The Office of General Services reserves the right to terminate this contract in the event it is found that the certification filed by the Offerer in accordance with New York State Finance Law §139-k was intentionally false or intentionally incomplete. Upon such finding, the Office of General Services may exercise its termination right by providing written notification to the Offerer in accordance with the written notification terms of this contract.

NYS REQUIRED CERTIFICATIONS

Nondiscrimination In Employment In Northern Ireland
Macbride Fair Employment Principles

In accordance with Section 165 of the State Finance Law, the bidder, by submission of this bid, certifies that it or any individual or legal entity in which the bidder holds a 10% or greater ownership interest, or any individual or legal entity that holds a 10% or greater ownership interest in the bidder, either (answer yes or no to one or both of the following, as applicable):

1. have business operations in Northern Ireland ☐ No ☐ Yes , **and if yes**:
2. shall take lawful steps in good faith to conduct any business operations in Northern Ireland in accordance with the MacBride Fair Employment Principles relating to nondiscrimination in employment and freedom of workplace opportunity regarding such operations in Northern Ireland, and shall permit independent monitoring of compliance with such principles.
   ☐ No ☐ Yes

Non-Collusive Bidding Certification

In accordance with Section 139-d of the State Finance Law, by submitting its bid each bidder and each person signing on behalf of any other bidder certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of his or her knowledge and belief:

1. The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor.
2. Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor.
3. No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

In the event that the Bidder is unable to certify as stated above, the Bidder shall provide a signed statement which sets forth in detail the reasons why the Bidder is unable to furnish the certificate as required in accordance with State Finance Law § 139-d(1)(b).

Diesel Emission Reduction Act

Pursuant to N.Y. Environmental Conservation Law § 19-0323 (the “Law”) it is a requirement that heavy duty diesel vehicles in excess of 8,500 pounds use the best available retrofit technology (“BART”) and ultra-low sulfur diesel fuel (“ULSD”). The requirement of the Law applies to all vehicles owned, operated by or on behalf of, or leased by State agencies and State or regional public authorities. It also requires that such vehicles owned, operated by or on behalf of, or leased by State agencies and State or regional public authorities with more than half of its governing body appointed by the Governor utilize BART.

The Law may be applicable to vehicles used by contract vendors “on behalf of” State agencies and public authorities and require certain reports from contract vendors. All heavy duty diesel vehicles must have BART by the deadline provided in the Law. The Law also provides a list of exempted vehicles. Regulations

set forth in 6 NYCRR Parts 248 and 249 provide further guidance. The Bidder hereby certifies and warrants that all heavy duty vehicles, as defined in the Law, to be used under this contract, will comply with the specifications and provisions of the Law, and 6 NYCRR Parts 248 and 249.

Executive Order No. 177 Certification

The New York State Human Rights Law, Article 15 of the Executive Law, prohibits discrimination and harassment based on age, race, creed, color, national origin, sex, pregnancy or pregnancy-related conditions, sexual orientation, gender identity, disability, marital status, familial status, domestic violence victim status, prior arrest or conviction record, military status or predisposing genetic characteristics.

The Human Rights Law may also require reasonable accommodation for persons with disabilities and pregnancy-related conditions. A reasonable accommodation is an adjustment to a job or work environment that enables a person with a disability to perform the essential functions of a job in a reasonable manner. The Human Rights Law may also require reasonable accommodation in employment on the basis of Sabbath observance or religious practices.

Generally, the Human Rights Law applies to:

- all employers of four or more people, employment agencies, labor organizations and apprenticeship training programs in all instances of discrimination or harassment;
- employers with fewer than four employees in all cases involving sexual harassment; and,
- any employer of domestic workers in cases involving sexual harassment or harassment based on gender, race, religion or national origin.

In accordance with Executive Order No. 177, the Bidder hereby certifies that it does not have institutional policies or practices that fail to address the harassment and discrimination of individuals on the basis of their age, race, creed, color, national origin, sex, sexual orientation, gender identity, disability, marital status, military status, or other protected status under the Human Rights Law.

Executive Order No. 177 and this certification do not affect institutional policies or practices that are protected by existing law, including but not limited to the First Amendment of the United States Constitution, Article 1, Section 3 of the New York State Constitution, and Section 296(11) of the New York State Human Rights Law.

State Finance Law § 139-l Certification

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that the bidder has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of section two hundred one-g of the labor law.

If the bidder cannot make the foregoing certification, such bidder shall so state and shall furnish with the bid a signed statement that sets forth in detail the reasons that the bidder cannot make the certification.

Small Business Certifications

State Finance Law § 163(1)(j) (Authorizes Award of Quantitative Factor Credit for Small Business Status in Evaluation for Best Value Contracts)
For purposes of New York State Finance Law § 163(1)(j), the contractor certifies that it:

☐ **IS NOT** a Small Business as defined in New York State Executive Law § 310(20).

☐ **IS** a Small Business as defined in New York State Executive Law § 310(20).

"Small Business" is defined under New York State Executive Law § 310(20) as a business that:

A. has a significant business presence in New York demonstrated through one of the following:
    1. pays taxes in New York State, or
    2. purchases New York State products or materials, or
    3. has any payroll in New York State
B. is independently owned and operated;
C. is not dominant in its field; and,
D. employs less than 300 persons.

State Finance Law § 163(6) (Authorizes Discretionary Purchases of Commodities or Services from Small Business Concerns)

For purposes of New York State Finance Law § 163(6), the contractor certifies that it:

☐ **IS NOT** a Small Business Concern or Small Business as defined in New York State Finance Law § 160(8).

☐ **IS** a Small Business Concern or Small Business as defined in New York State Finance Law § 160(8).

"Small Business Concern" or "Small Business" is defined under New York State Finance Law § 160(8) as a business that:

A. is resident in New York State;
B. is independently owned and operated;
C. is not dominant in its field; and
D. employs 100 or less persons.

By signing you certify your express authority to sign on behalf of yourself, your company, or other entity and full knowledge and acceptance of this Certifications document and that all information provided is complete, true and accurate.

Authorized Signature		Date	
Print Name		Title	
Company Name			
D/B/A – Doing Business As (if applicable)			
Address			
City	State	Zip	

Certification Under Executive Order No. 16- Prohibiting State Agencies and Authorities from Contracting with Businesses Conducting Business in Russia

Executive Order No. 16 provides that "all Affected State Entities are directed to refrain from entering into any new contract or renewing any existing contract with an entity conducting business operations in Russia." The complete text of Executive Order No. 16 can be found here.

The Executive Order remains in effect while sanctions imposed by the federal government are in effect. Accordingly, vendors who may be excluded from award because of current business operations in Russia are nevertheless encouraged to respond to solicitations to preserve their contracting opportunities in case the sanctions are lifted during a solicitation or even after award in the case of some solicitations.

As defined in Executive Order No. 16, an "entity conducting business operations in Russia" means an institution or company, wherever located, conducting any commercial activity in Russia or transacting business with the Russian Government or with commercial entities headquartered in Russia or with their principal place of business in Russia in the form of contracting, sales, purchasing, investment, or any business partnership.

Is Vendor an entity conducting business operations in Russia, as defined above? Please answer by checking one of the following boxes:

☐ 1. No, Vendor does not conduct business operations in Russia within the meaning of Executive Order No. 16.

☐ 2.a. Yes, Vendor conducts business operations in Russia within the meaning of Executive Order No. 16 but has taken steps to wind down business operations in Russia or is in the process of winding down business operations in Russia. (Please provide a detailed description of the wind down process and a schedule for completion.)

☐ 2.b. Yes, Vendor conducts business operations in Russia within the meaning of Executive Order No. 16 but only to the extent necessary to provide vital health and safety services within Russia or to comply with federal law, regulations, executive orders, or directives. (Please provide a detailed description of the services being provided orthe relevant laws, regulations, etc.)

☐ 3. Yes, Vendor conducts business operations in Russia within the meaning of Executive Order No. 16.

The undersigned certifies under penalties of perjury that they are knowledgeable about the Vendor's business and operations and that the answer provided herein is true to the best of their knowledge and belief.

Authorized Signature		Date	
Print Name		Title	
Company Name			
Address			
City	State	Zip	

NYS Department of Taxation and Finance - FORMS

CONTRACTOR CERTIFICATION (ST-220-TD 12/11)
CONTRACTOR CERTIFICATION TO COVERED AGENCY
(ST-220-CA 12/11)

Department of Taxation and Finance

Contractor Certification

(Pursuant to Tax Law Section 5-a, as amended, effective April 26, 2006)

ST-220-TD

(4/15)

For information, consult Publication 223, *Questions and Answers Concerning Tax Law Section 5-a* (see *Need help?* below).

Contractor name			
Contractor's principal place of business	City	State	ZIP code
Contractor's mailing address *(if different than above)*	City	State	ZIP code

Contractor's federal employer identification number (EIN)	Contractor's sales tax ID number (if different from contractor's EIN)	Contractor's telephone number ( )
Covered agency or state agency	Contract number or description	Covered agency telephone number ( )
Covered agency address	City State	ZIP code

Is the estimated contract value over the full term of the contract (but not including renewals) more than $100,000?

Yes ☐ No ☐ Unknown at this time ☐

General information

Tax Law section 5-a, as amended, effective April 26, 2006, requires certain contractors awarded certain state contracts valued at more than $100,000 to certify to the Tax Department that they are registered to collect New York State and local sales and compensating use taxes, if they made sales delivered by any means to locations within New York State of tangible personal property or taxable services having a cumulative value in excess of $300,000, measured over a specified period. In addition, contractors must certify to the Tax Department that each affiliate and subcontractor exceeding such sales threshold during a specified period is registered to collect New York State and local sales and compensating use taxes. Contractors must also file Form ST-220-CA, *Contractor Certification to Covered Agency,* certifying to the procuring state entity that they filed Form ST-220-TD with the Tax Department and that the information contained on Form ST-220-TD is correct and complete as of the date they file Form ST-220-CA.

All sections must be completed including all fields on the top of this page, all sections on page 2, Schedule A on page 3, if applicable, and *Individual, Corporation, Partnership, or LLC Acknowledgement* on page 4. If you do not complete these areas, the form will be returned to you for completion.

For more detailed information regarding this form and Tax Law section 5-a, see Publication 223, *Questions and Answers Concerning Tax Law Section 5-a, (as amended, effective April 26, 2006)*. See *Need help?* for more information on how to obtain this publication.

Note: Form ST-220-TD must be signed by a person authorized to make the certification on behalf of the contractor, and the acknowledgement on page 4 of this form must be completed before a notary public.

Mail completed form to:

NYS TAX DEPARTMENT
DATA ENTRY SECTION
W A HARRIMAN CAMPUS
ALBANY NY 12227-0826

Privacy notification

New York State Law requires all government agencies that maintain a system of records to provide notification of the legal authority for any request, the principal purpose(s) for which the information is to be collected, and where it will be maintained. To view this information, visit our Web site, or, if you do not have Internet access, call and request Publication 54, *Privacy Notification*. See *Need help?* for the Web address and telephone number.

Need help?

Visit our Web site at ***www.tax.ny.gov***

- get information and manage your taxes online
- check for new online services and features

Telephone assistance

Sales Tax Information Center: (518) 485-2889

To order forms and publications: (518) 457-5431

Text Telephone (TTY) Hotline (for persons with hearing and speech disabilities using a TTY): (518) 485-5082

Persons with disabilities: In compliance with the Americans with Disabilities Act, we will ensure that our lobbies, offices, meeting rooms, and other facilities are accessible to persons with disabilities. If you have questions about special accommodations for persons with disabilities, call the information center.

I, _____ , hereby affirm, under penalty of perjury, that I am _____
(name) *(title)*

of the above-named contractor, and that I am authorized to make this certification on behalf of such contractor.

Complete Sections 1, 2, and 3 below. Make **only one** entry in each section.

Section 1 – Contractor registration status

☐ The contractor has made sales delivered by any means to locations within New York State of tangible personal property or taxable services having a cumulative value in excess of $300,000 during the four sales tax quarters which immediately precede the sales tax quarter in which this certification is made. The contractor is registered to collect New York State and local sales and compensating use taxes with the Commissioner of Taxation and Finance pursuant to Tax Law sections 1134 and 1253, and is listed on Schedule A of this certification.

☐ The contractor has not made sales delivered by any means to locations within New York State of tangible personal property or taxable services having a cumulative value in excess of $300,000 during the four sales tax quarters which immediately precede the sales tax quarter in which this certification is made.

Section 2 – Affiliate registration status

☐ The contractor does not have any affiliates.

☐ To the best of the contractor's knowledge, the contractor has one or more affiliates having made sales delivered by any means to locations within New York State of tangible personal property or taxable services having a cumulative value in excess of $300,000 during the four sales tax quarters which immediately precede the sales tax quarter in which this certification is made, and each affiliate exceeding the $300,000 cumulative sales threshold during such quarters is registered to collect New York State and local sales and compensating use taxes with the Commissioner of Taxation and Finance pursuant to Tax Law sections 1134 and 1253. The contractor has listed each affiliate exceeding the $300,000 cumulative sales threshold during such quarters on Schedule A of this certification.

☐ To the best of the contractor's knowledge, the contractor has one or more affiliates, and each affiliate has not made sales delivered by any means to locations within New York State of tangible personal property or taxable services having a cumulative value in excess of $300,000 during the four sales tax quarters which immediately precede the sales tax quarter in which this certification is made.

Section 3 – Subcontractor registration status

☐ The contractor does not have any subcontractors.

☐ To the best of the contractor's knowledge, the contractor has one or more subcontractors having made sales delivered by any means to locations within New York State of tangible personal property or taxable services having a cumulative value in excess of $300,000 during the four sales tax quarters which immediately precede the sales tax quarter in which this certification is made, and each subcontractor exceeding the $300,000 cumulative sales threshold during such quarters is registered to collect New York State and local sales and compensating use taxes with the Commissioner of Taxation and Finance pursuant to Tax Law sections 1134 and 1253. The contractor has listed each subcontractor exceeding the $300,000 cumulative sales threshold during such quarters on Schedule A of this certification.

☐ To the best of the contractor's knowledge, the contractor has one or more subcontractors, and each subcontractor has not made sales delivered by any means to locations within New York State of tangible personal property or taxable services having a cumulative value in excess of $300,000 during the four sales tax quarters which immediately precede the sales tax quarter in which this certification is made.

Sworn to this ___ day of _____ , 20 ____

_____ _____
(sign before a notary public) *(title)*

Schedule A – Listing of each entity (contractor, affiliate, or subcontractor) exceeding $300,000 cumulative sales threshold

List the contractor, or affiliate, or subcontractor in Schedule A only if such entity exceeded the $300,000 cumulative sales threshold during the specified sales tax quarters. See directions below. For more information, see Publication 223.

A Relationship to contractor	B Name	C Address	D Federal ID number	E Sales tax ID number	F Registration in progress

Column A – Enter ***C*** in column A if the contractor; ***A*** if an affiliate of the contractor; or ***S*** if a subcontractor.

Column B – Name - If the entity is a corporation or limited liability company, enter the exact legal name as registered with the NY Department of State, if applicable. If the entity is a partnership or sole proprietor, enter the name of the partnership and each partner's given name, or the given name(s) of the owner(s), as applicable. If the entity has a different DBA (doing business as) name, enter that name as well.

Column C – Address - Enter the street address of the entity's principal place of business. Do not enter a PO box.

Column D – ID number - Enter the federal employer identification number (EIN) assigned to the entity. If the entity is an individual, enter the social security number of that person.

Column E – Sales tax ID number - Enter only if different from federal EIN in column D.

Column F – If applicable, enter an X if the entity has submitted Form DTF-17 to the Tax Department but has not received its certificate of authority as of the date of this certification.

,

Individual, Corporation, Partnership, or LLC Acknowledgment

STATE OF }
: SS.:
COUNTY OF }

On the ____ day of _____ in the year 20__ , before me personally appeared _____ ,

known to me to be the person who executed the foregoing instrument, who, being duly sworn by me did depose and say that

_ he maintains an office at: _____

Town of _____ ,

County of _____ ,

State of _____; and further that:

*(Mark an **X** in the appropriate box and complete the accompanying statement.)*

☐ (If an individual): _he executed the foregoing instrument in his/her name and on his/her own behalf.

☐ (If a corporation): _he is the _____

of _____ , the corporation described in said instrument; that, by authority of the Board of Directors of said corporation, _he is authorized to execute the foregoing instrument on behalf of the corporation for purposes set forth therein; and that, pursuant to that authority, _he executed the foregoing instrument in the name of and on behalf of said corporation as the act and deed of said corporation.

☐ (If a partnership): _he is a _____

of _____ , the partnership described in said instrument; that, by the terms of said partnership, _he is authorized to execute the foregoing instrument on behalf of the partnership for purposes set forth therein; and that, pursuant to that authority, _he executed the foregoing instrument in the name of and on behalf of said partnership as the act and deed of said partnership.

☐ (If a limited liability company): _he is a duly authorized member of _____ LLC, the limited liability company described in said instrument; that _he is authorized to execute the foregoing instrument on behalf of the limited liability company for purposes set forth therein; and that, pursuant to that authority, _he executed the foregoing instrument in the name of and on behalf of said limited liability company as the act and deed of said limited liability company.

_____
Notary Public

Registration No. _____

New York State Department of Taxation and Finance

Contractor Certification to Covered Agency

(Pursuant to Section 5-a of the Tax Law, as amended, effective April 26, 2006)

ST-220-CA

(12/11)

For information, consult Publication 223, *Questions and Answers Concerning Tax Law Section 5-a* (see *Need Help?* on back).

Contractor name				*For covered agency use only* *Contract number or description*
Contractor's principal place of business	City	State	ZIP code	
Contractor's mailing address *(if different than above)*				*Estimated contract value over the full term of contract (but not including renewals)* $
Contractor's federal employer identification number (EIN)	Contractor's sales tax ID number (if different from contractor's EIN)			
Contractor's telephone number	Covered agency name			
Covered agency address				*Covered agency telephone number*

I, _____ , hereby affirm, under penalty of perjury, that I am _____
(name) *(title)*

of the above-named contractor, that I am authorized to make this certification on behalf of such contractor, and I further certify that:

(Mark an **X** *in only one box)*

☐ The contractor has filed Form ST-220-TD with the Department of Taxation and Finance in connection with this contract and, to the best of contractor's knowledge, the information provided on the Form ST-220-TD, is correct and complete.

☐ The contractor has previously filed Form ST-220-TD with the Tax Department in connection with _____
(insert contract number or description)

and, to the best of the contractor's knowledge, the information provided on that previously filed Form ST-220-TD, is correct and complete as of the current date, and thus the contractor is not required to file a new Form ST-220-TD at this time.

Sworn to this ___ day of _____, 20 ____

_____ _____
(sign before a notary public) *(title)*

Instructions

General information

Tax Law section 5-a was amended, effective April 26, 2006. On or after that date, in all cases where a contract is subject to Tax Law section 5-a, a contractor must file (1) Form ST-220-CA, *Contractor Certification to Covered Agency,* with a covered agency, and (2) Form ST-220-TD with the Tax Department before a contract may take effect. The circumstances when a contract is subject to section 5-a are listed in Publication 223, Q&A 3. See *Need help?* for more information on how to obtain this publication. In addition, a contractor must file a new Form ST-220-CA with a covered agency before an existing contract with such agency may be renewed.

Note: Form ST-220-CA must be signed by a person authorized to make the certification on behalf of the contractor, and the acknowledgement on page 2 of this form must be completed before a notary public.

When to complete this form

As set forth in Publication 223, a contract is subject to section 5-a, and you must make the required certification(s), if:

i. The procuring entity is a *covered agency* within the meaning of the statute (see Publication 223, Q&A 5);

ii. The contractor is a *contractor* within the meaning of the statute (see Publication 223, Q&A 6); and

iii. The contract is a *contract* within the meaning of the statute. This is the case when it (a) has a value in excess of $100,000 and (b) is a contract for *commodities* or *services*, as such terms are defined for purposes of the statute (see Publication 223, Q&A 8 and 9).

Furthermore, the procuring entity must have begun the solicitation to purchase on or after January 1, 2005, and the resulting contract must have been awarded, amended, extended, renewed, or assigned *on or after April 26, 2006* (the effective date of the section 5-a amendments).

,

Individual, Corporation, Partnership, or LLC Acknowledgment

STATE OF }
: SS.:
COUNTY OF }

On the ___ day of _____ in the year 20__ , before me personally appeared _____ ,

known to me to be the person who executed the foregoing instrument, who, being duly sworn by me did depose and say that

_ he maintains an office at: _____

Town of _____ ,

County of _____ ,

State of _____; and further that:

[Mark an ***X*** in the appropriate box and complete the accompanying statement.]

☐ (If an individual): _he executed the foregoing instrument in his/her name and on his/her own behalf.

☐ (If a corporation): _he is the _____

of _____ , the corporation described in said instrument; that, by authority of the Board of Directors of said corporation, _he is authorized to execute the foregoing instrument on behalf of the corporation for purposes set forth therein; and that, pursuant to that authority, _he executed the foregoing instrument in the name of and on behalf of said corporation as the act and deed of said corporation.

☐ (If a partnership): _he is a _____

of _____ , the partnership described in said instrument; that, by the terms of said partnership, _he is authorized to execute the foregoing instrument on behalf of the partnership for purposes set forth therein; and that, pursuant to that authority, _he executed the foregoing instrument in the name of and on behalf of said partnership as the act and deed of said partnership.

☐ (If a limited liability company): _he is a duly authorized member of _____ , LLC, the limited liability company described in said instrument; that _he is authorized to execute the foregoing instrument on behalf of the limited liability company for purposes set forth therein; and that, pursuant to that authority, _he executed the foregoing instrument in the name of and on behalf of said limited liability company as the act and deed of said limited liability company.

_____
Notary Public

Registration No. _____

Privacy notification

The Commissioner of Taxation and Finance may collect and maintain personal information pursuant to the New York State Tax Law, including but not limited to, sections 5-a, 171, 171-a, 287, 308, 429, 475, 505, 697, 1096, 1142, and 1415 of that Law; and may require disclosure of social security numbers pursuant to 42 USC 405(c)(2)(C)(i).

This information will be used to determine and administer tax liabilities and, when authorized by law, for certain tax offset and exchange of tax information programs as well as for any other lawful purpose.

Information concerning quarterly wages paid to employees is provided to certain state agencies for purposes of fraud prevention, support enforcement, evaluation of the effectiveness of certain employment and training programs and other purposes authorized by law.

Failure to provide the required information may subject you to civil or criminal penalties, or both, under the Tax Law.

This information is maintained by the Manager of Document Management, NYS Tax Department, W A Harriman Campus, Albany NY 12227; telephone (518) 457-5181.

Need help?

Visit our Web site at ***www.tax.ny.gov***
- get information and manage your taxes online
- check for new online services and features

Telephone assistance

Sales Tax Information Center: (518) 485-2889

To order forms and publications: (518) 457-5431

Text Telephone (TTY) Hotline (for persons with hearing and speech disabilities using a TTY): (518) 485-5082

Persons with disabilities: In compliance with the Americans with Disabilities Act, we will ensure that our lobbies, offices, meeting rooms, and other facilities are accessible to persons with disabilities. If you have questions about special accommodations for persons with disabilities, call the information center.

NEW YORK STATE OF OPPORTUNITY. Office of General Services | Office of Minority and Women-Owned Businesses & Community Relations

EQUAL EMPLOYMENT OPPORTUNITY STAFFING PLAN

General instructions: Contact the Designated Contact(s) for the solicitation if you have any questions. **All Offerors** must complete an EEO Staffing Plan (EEO 100) and submit it as part of the bid or proposal package. Where the work force to be utilized in the performance of the State contract can be separated out from the contractor's total work force, the Offeror shall complete this form only for the anticipated work force to be utilized on the State contract. Where the work force to be utilized in the performance of the State contract cannot be separated out from the contractor's total work force, the Offeror shall complete this form for the contractor's total work force. Subcontractors awarded a subcontract over $25,000 for the construction, demolition, replacement, major repair, renovation, planning or design of real property and improvements thereon (the "Work") except where the Work is for the beneficial use of the Contractor must complete this form upon request of OGS.

Instructions for completing:

1. Enter the Solicitation Number that this report applies to along with the name and address of the Offeror.
2. Check off the appropriate box to indicate if the Offeror completing the report is the contractor or a subcontractor.
3. Check off the appropriate box to indicate if the work force being reported is just for the contract or the Offerors' total work force.
4. Enter the total work force by EEO job category.
5. Break down the total work force by gender and enter under the heading "Work force by Gender."
6. Break down the total work force by race/ethnic background and enter under the heading "Work force by Race/Ethnic Identification." Enter the name, title, phone number and email address for the person completing the form. Sign and date the form in the designated boxes.

RACE/ETHNIC IDENTIFICATION

Race/ethnic designations as used by the Equal Employment Opportunity Commission do not denote scientific definitions of anthropological origins. For the purposes of this report, an employee may be included in the group to which he or she appears to belong, identifies with, or is regarded in the community as belonging. However, no person should be counted in more than one race/ethnic group. The race/ethnic categories for this survey are:

WHITE - (Not of Hispanic origin) All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.

BLACK - A person, not of Hispanic origin, who has origins in any of the black racial groups of the original peoples of Africa.

HISPANIC - A person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race.

ASIAN & PACIFIC ISLANDER - A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent or the Pacific Islands.

AMERICAN INDIAN OR ALASKAN NATIVE (Not of Hispanic Origin) - A person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.

NEW YORK STATE OF OPPORTUNITY. Office of General Services | Office of Minority and Women-Owned Businesses & Community Relations

EQUAL EMPLOYMENT OPPORTUNITY STAFFING PLAN

SUBMIT WITH BID OR PROPOSAL or within a reasonable time thereafter as requested by OGS, but prior to Contract Award.

Solicitation No.: 2952	**Reporting Entity:** ☐ Contractor ☐ Subcontractor	Report includes Contractor's ☐ Contractor's work force to be utilized on this contract ☐ Contractor's total work force ☐ Subcontractor's work force to be utilized on this contract ☐ Subcontractor's total work force
Contractor/Subcontractor's Name:		
Contractor/Subcontractor's Address: **FEIN**:		

Enter the total number of employees for each classification:

EEO Job Category	Total Work Force	Work force by Gender		Work force by Race/Ethnic Identification													
		Total Male (M)	Total Female (F)	White (M)	White (F)	Black (M)	Black (F)	Hispanic (M)	Hispanic (F)	Asian (M)	Asian (F)	American Indian or Alaskan Native (M)	American Indian or Alaskan Native (F)	Veteran (M)	Veteran (F)	(M)	(F)
Executive/Senior level Officials & Managers																	
First/Mid-level officials & Managers																	
Professionals																	
Technicians																	
Sales Workers																	
Administrative Support Workers																	
Craft Workers																	
Operatives																	
Laborers and Helpers																	
Service Workers																	
Totals																	

PREPARED BY (Signature):	**TELEPHONE NO.:** **EMAIL ADDRESS:**	**DATE:**
NAME AND TITLE OF PREPARER (Print or Type):		

Appendix C

Sample Contract

IFB No. 2952

SAMPLE

STATE OF NEW YORK
OFFICE OF GENERAL SERVICES

AGREEMENT FOR

SUSPENDED SCAFFOLDS OPERATION AND MAINTENANCE SERVICES FOR STATE OFFICE BUILDINGS IN ALBANY, NEW YORK

WITH

(CONTRACTOR)

CONTRACT #OGS01-C00XXXX-1140000

THIS AGREEMENT, made this ____ day of _____, 2025 by and between the People of the State of New York, acting by and through the Commissioner of General Services, whose office is in the Corning Tower Building, at the Governor Nelson A. Rockefeller Empire State Plaza, Albany, New York 12242 (hereinafter “Commissioner”, "OGS" or "State"), and (Company Name), (hereinafter "Contractor"), with an office at _____.

W I T N E S S E T H:

WHEREAS, the OGS is responsible for the suspended scaffolds operation and maintenance services for State Office Buildings located in Albany, NY (hereinafter the “State Office Building”) and in fulfilling its responsibility deems it necessary to obtain suspended scaffolds operation and maintenance services therefore, and

WHEREAS, OGS has determined after having solicited bids from bidders willing to supply these services, that the Contractor submitted the bid affording the State the lowest price for such services and that the Contractor possesses the necessary capacity, experience and expertise for provision of suspended scaffolds operation and maintenance services, and that Contractor is ready, willing and able to perform such services on the terms hereinafter set forth.

NOW THEREFORE, in consideration of the mutual covenants herein contained, the parties do hereby agree as follows:

1. CONSIDERATION

OGS shall pay the Contractor for all suspended scaffolds operation and maintenance service fees and other fees and expenses in accordance with the amounts and rates put forth in the Contractor’s bid attached hereto as Appendix "C", which Appendix C is hereby incorporated by reference and made a part hereof as fully as if set forth as length herein. This contract will be established with a not to exceed value of $_____. Services performed beyond this amount will not be compensated.

SAMPLE

2. TERM

This Agreement shall commence upon OSC approval and will be in effect for five years unless sooner terminated as herein specified.

3. SERVICES

The Contractor agrees to perform this Agreement and to furnish the services, labor and materials required in connection therewith in accordance with all the specifications, conditions, covenants and representations contained in the Invitation for Bids No. 2952, which is annexed as Appendix "B" hereto, and the Contractor's bid, annexed as Appendix "C" hereto, except as such Appendices B and C have been revised by the terms hereof. Appendix B is hereby incorporated by reference and made a part hereof with the same force and effect as if set forth at length herein.

4. TERMINATION

This Agreement may be terminated in accordance with the termination provisions set forth in the solicitation attached hereto as Appendix B hereof.

5. RECORDS

The Contractor will maintain accurate records and accounts of services performed and monies expended under this Agreement. Such records will be maintained for six years following the close of the State fiscal year to which they pertain and will be made available to representatives of OGS or the New York State Comptroller, as may be necessary for auditing purposes, upon request.

6. TAXES

The Contractor will be responsible for all applicable Federal, State and Local taxes and all FICA contributions.

7. INDEPENDENT CONTRACTOR

It is understood and agreed that the legal status of the Contractor, its subcontractors, agents, officers and employees is that of an independent contractor and in no manner shall they be deemed employees or agents of the State of New York and, therefore, are not entitled to any of the benefits associated with such employment or designation.

8. APPENDIX A

Appendix A, Standard Clauses for New York State Contracts, attached hereto, is hereby expressly made a part of this Agreement as fully as if set forth at length herein.

9. ASSIGNMENT

Contractor agrees that it will not assign this Agreement, or any interest therein without the prior written consent of the Commissioner of General Services and the approval of the NYS Attorney General and the NYS Office of the State Comptroller.

10. LAW

This Agreement shall be governed by the laws of the State of New York.

SAMPLE

11. CONDITIONS PRECEDENT

This Agreement shall not be deemed executed, valid or binding unless and until approved in writing by the New York State Attorney General and the New York State Office of the State Comptroller.

12. ENTIRE AGREEMENT

This Agreement constitutes the entire Agreement between the parties hereto and no statement, promise, condition, understanding, inducement or representation, oral or written, expressed or implied, which is not contained herein shall be binding or valid and this Agreement shall not be changed, modified or altered in any manner except by an instrument in writing executed by both parties hereto.

13. EXECUTORY CLAUSE

This Agreement shall be deemed executory only to the extent of money available to the State for performance of the terms hereof and no liability on account thereof shall be incurred by the State of New York beyond moneys available for purposes thereof.

14. INCONSISTENCIES

In the event of any discrepancy, disagreement or ambiguity between this contract agreement and Appendix B "Solicitation" and/or Appendix C "Bid", or between any Appendices, the documents shall be given preference in the following order to interpret and to resolve such discrepancy, disagreement or ambiguity:

1. Appendix A (June 2023)
2. This Contract Agreement
3. Appendix B – Solicitation #2952 including Addenda
4. Appendix C – Contractor's Bid

The parties understand and agree that any and all deviations or exceptions taken by Contractor to the State's Invitation to Bid are hereby withdrawn except only to the extent that such exceptions or deviations have been explicitly incorporated into this contract agreement.

15. FORCE MAJEURE

Neither party hereto will be liable for losses, defaults, or damages under this Agreement which result from delays in performing, or inability to perform, all or any of the obligations or responsibilities imposed upon it pursuant to the terms and conditions of this Agreement, due to or because of acts of God, the public enemy, acts of government, earthquakes, floods, strikes, civil strife, fire or any other cause beyond the reasonable control of the party that was so delayed in performing or so unable to perform provided that such party was not negligent and shall have used reasonable efforts to avoid and overcome such cause. Such party will resume full performance of such obligations and responsibilities promptly upon removal of any such cause.

16. ASSIGNMENT BY STATE

The State agrees not to assign this Agreement without prior notice to and reasonable consent of the Contractor provided, however, that this Agreement may be assigned without such consent to

SAMPLE

another agency or subdivision of the State pursuant to a governmental reorganization or assignment of functions under which the pertinent functions of OGS as an agency are transferred to a successor agency or subdivision of the State.

17. NOTICES

All notices, demands, designations, certificates, requests, offers, consents, approvals and other instruments given pursuant to this Agreement shall be in writing and shall be validly given when mailed by registered or certified mail, overnight carrier or hand delivered, (i) if to the State, addressed to the State at its address set forth above, and (ii) if to Contractor, addressed to Contractor at its address set forth above. The parties may from time to time, specify any address in the United States as its address for purpose of notices under this Agreement by giving fifteen 15 days written notice to the other party. The parties agree to mutually designate individuals as their respective representatives for the purposes of this Agreement.

18. CAPTIONS

The captions contained in this Agreement are intended for convenience and reference purposes only and shall in no way be deemed to define or limit any provision thereof.

19. SEVERABILITY

In the event that any one or more of the provisions of this Agreement shall for any reason be declared unenforceable under the laws or regulations in force, such provision will not have any effect on the validity of the remainder of this Agreement, which shall then be construed as if such unenforceable provision had never been written or was never contained in this Agreement.

20. CONTRACTOR RESPONSIBILITY

The Contractor shall at all times during the Contract term remain responsible. The Contractor agrees, if requested by the Commissioner of OGS or her designee, to present evidence of its continuing legal authority to do business in New York State, integrity, experience, ability, prior performance, and organizational and financial capacity.

The Commissioner of OGS or her designee, in his or her sole discretion, reserves the right to suspend any or all activities under this Contract, at any time, when he or she discovers information that calls into question the responsibility of the Contractor. In the event of such suspension, the Contractor will be given written notice outlining the particulars of such suspension. Upon issuance of such notice, the Contractor must comply with the terms of the suspension order. Contract activity may resume at such time as the Commissioner of OGS or her designee issues a written notice authorizing a resumption of performance under the Contract.

Upon written notice to the Contractor, and a reasonable opportunity to be heard with appropriate OGS officials or staff, the Contract may be terminated by the Commissioner of OGS or her designee at the Contractor's expense where the Contractor is determined by the Commissioner of OGS or her designee to be non-responsible. In such event, the Commissioner of OGS or her designee may complete the contractual requirements in any manner he or she may deem advisable and pursue available legal or equitable remedies for breach.

SAMPLE

In no case shall such termination of the Contract by the State be deemed a breach thereof, nor shall the State be liable for any damages for lost profits or otherwise, which may be sustained by the Contractor as a result of such termination.

SAMPLE

CONTRACT NO. OGS01-C00XXXX-1140000

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

Agency Certification
"In addition to the acceptance of this Contract, I also certify that original copies of this signature page will be attached to all other exact copies of this contract."

(**Company Name**)

By:_____
Name:
Title:
Federal I.D. No.:
Date:

THE PEOPLE OF THE STATE OF NEW YORK

By:_____
Name:
Title:
Date:

APPROVED AS TO FORM

Attorney General

APPROVED

State Comptroller

STATE OF)
) ss.:
COUNTY OF _____)

On the _____ day of _____ in the year 20__, before me, the undersigned, personally appeared _____ personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public

SAMPLE

Sample Contract

Appendix A

STANDARD CLAUSES FOR NEW YORK STATE CONTRACTS

[Text not included at this time because it is included elsewhere in the solicitation. Will be added when contract is finalized]

SAMPLE

Sample Contract

Appendix B

Invitation for Bid

SAMPLE

Sample Contract

Appendix C

Contractor's Bid

SAMPLE

Appendix D – Insurance Requirements

Insurance Requirements

The Bidder shall be required to procure, at its sole cost and expense, all insurance required by this Attachment.

The Bidder shall be required to provide proof of compliance with the requirements of this Attachment, as follows:

- Proof of all insurance required by Section B below shall be provided in accordance with the provisions hereof;
- After award, the Contractor shall be required to provide proof of all insurance after renewal or upon request according to the timelines set forth in Section A.13 below.

Contractors shall be required to procure, at their sole cost and expense, and shall maintain in force at all times during the term of any Contract resulting from this Solicitation, policies of insurance as required by this Attachment. All insurance required by this Attachment shall be written by companies that have an A.M. Best Company rating of "A-," Class "VII" or better. In addition, companies writing insurance intended to comply with the requirements of this Attachment should be licensed or authorized by the New York State Department of Financial Services to issue insurance in the State of New York. OGS may, in its sole discretion, accept policies of insurance written by a non-authorized carrier or carriers when certificates and/or other policy documents are accompanied by a completed Excess Lines Association of New York (ELANY) affidavit or other documents demonstrating the company's strong financial rating. If, during the term of a policy, the carrier's A.M. Best rating falls below "A-," Class "VII," the insurance must be replaced, on or before the renewal date of the policy, with insurance that meets the requirements above.

Bidders and Contractors shall deliver to OGS evidence of the insurance required by this Solicitation and any Contract resulting from this Solicitation in a form satisfactory to OGS. Policies must be written in accordance with the requirements of the paragraphs below, as applicable. While acceptance of insurance documentation shall not be unreasonably withheld, conditioned or delayed, acceptance and/or approval by OGS does not, and shall not be construed to, relieve Bidders or Contractors of any obligations, responsibilities or liabilities under this Solicitation or any Contract resulting from this Solicitation.

The Contractor shall not take any action, or omit to take any action that would suspend or invalidate any of the required coverages during the term of the Contract.

A. General Conditions Applicable to Insurance. All policies of insurance required by this Solicitation or any Contract resulting from this Solicitation shall comply with the following requirements:

***1. Coverage Types and Policy Limits*.** The types of coverage and policy limits required from Bidders and Contractors are specified in Paragraph B *Insurance Requirements* below.

2. Policy Forms. Except as otherwise specifically provided herein, or agreed to in the Contract resulting from this Solicitation, all policies of insurance required by this Attachment shall be written on an occurrence basis. In the event that occurrence-based coverage is not commercially available, claims-made policy forms will be considered provided that, at minimum, it includes provisions that allow for (a) reporting circumstances or incidents that may give rise to future claims and (b) an extended reporting period of not less than three (3) years with respect to events that occurred but were not reported during the term of the policy.

3. Certificates of Insurance/Notices. Bidders and Contractors shall provide OGS with a Certificate or Certificates of Insurance, in a form satisfactory to OGS as detailed below, and pursuant to the timelines set forth in Section A.13. below. Certificates shall name **The New York State Office of General Services, Agency Procurement Office, 32nd Floor, Corning Tower, Empire State Plaza, Albany, New York 12242** as the certificate holder.

Certificates of Insurance shall:

- Be in the form acceptable to OGS and in accordance with the New York State Insurance Law (e.g., an ACORD 25 certificate)
- Disclose any deductible, self-insured retention, aggregate limit or exclusion to the policy that materially changes the coverage required by this Solicitation or any Contract resulting from this Solicitation;
- Be signed by an authorized representative of the referenced insurance carriers; and
- Contain the following language in the Description of Operations / Locations / Vehicles section of the Certificate or on a submitted endorsement: **Additional insured protection afforded is on a primary and non-contributory basis. A waiver of subrogation is granted in favor of the additional insureds.**

Only original documents (certificates of insurance and any endorsements and other attachments) or electronic versions of the same that can be directly traced back to the insurer, agent or broker via e-mail distribution or similar means will be accepted.

OGS requires Contractors to submit only certificates of insurance and additional insured endorsements. Contractors should refrain from submitting entire insurance policies. If an entire insurance policy is submitted but not requested, OGS shall not be obligated to review and shall not be chargeable with knowledge of its contents. In addition, submission of an entire insurance policy not requested by OGS does not constitute proof of compliance with the insurance requirements and does not discharge Contractors from submitting the requested insurance documentation. OGS reserves the right to request other proof of insurance, including, but not limited to, policies, and Contractors agree to comply with all reasonable requests.

4. Primary Coverage. All Commercial General Liability, Business Automobile Liability, and Excess Umbrella Liability insurance policies shall provide that the required coverage shall be primary and non-contributory to other insurance available to the People of the State of New York, the New York State Office of General Services, and their officers, agents, and employees. Any other insurance maintained by the People of the State of New York, the New

York State Office of General Services, and their officers, agents, and employees shall be excess of and shall not contribute with the Bidder/Contractor's insurance.

5. Breach for Lack of Proof of Coverage. The failure to comply with the requirements of this Attachment at any time during the term of the Contract shall be considered a breach of the terms of the Contract and shall allow the People of the State of New York, the New York State Office of General Services, and their officers, agents, and employees to avail themselves of all remedies available under the Contract or at law or in equity.

6. Self-Insured Retention/Deductibles. Certificates of Insurance must indicate the applicable deductibles/self-insured retentions for each listed policy. Deductibles or self-insured retentions above $100,000.00 are subject to approval from OGS. Such approval shall not be unreasonably withheld, conditioned or delayed. Bidders and Contractors shall be solely responsible for all claim expenses and loss payments within the deductibles or self-insured retentions. If the Bidder/Contractor is providing the required insurance through self-insurance, evidence of the financial capacity to support the self-insurance program along with a description of that program, including, but not limited to, information regarding the use of a third-party administrator shall be provided upon request.

7. Subcontractors. Prior to the commencement of any work by a Subcontractor, the Contractor shall require such Subcontractor to procure policies of insurance as required by this Attachment and maintain the same in force during the term of any work performed by that Subcontractor. An Additional Insured Endorsement CG 20 38 12 19 (or the equivalent) evidencing such coverage shall be provided to the Contractor prior to the commencement of any work by a subcontractor and pursuant to the timelines set forth in Section A.13. below, as applicable. For subcontractors that are self-insured, the subcontractor shall be obligated to defend and indemnify the above-named additional insureds with respect to Commercial General Liability and Business Automobile Liability, in the same manner that the subcontractor would have been required to pursuant to this section had the subcontractor obtained such insurance policies.

8. Waiver of Subrogation. For all Commercial General Liability, Business Automobile Liability, Excess/Umbrella Liability policies and the workers' compensation insurance required below, the Bidder/Contractor shall cause to be included in its policies insuring against loss, damage or destruction by fire or other insured casualty a waiver of the insurer's right of subrogation against The People of the State of New York, the New York State Office of General Services, and their officers, agents, and employees, or, if such waiver is unobtainable (i) an express agreement that such policy shall not be invalidated if the Contractor waives or has waived before the casualty, the right of recovery against The People of the State of New York, the New York State Office of General Services, and their officers, agents, and employees or (ii) any other form of permission for the release of The People of the State of New York, the New York State Office of General Services, and their officers, agents, and employees. A Waiver of Subrogation Endorsement shall be provided upon request. A blanket Waiver of Subrogation Endorsement evidencing such coverage is also acceptable.

9. Additional Insured. The Contractor shall cause to be included in each of the Commercial General Liability, Business Automobile Liability, and Excess/Umbrella Liability policies required below for on-going and completed operations naming as additional insured

(via ISO form CG 20 10 12 19 and CG 20 37 12 19) and form CA 20 48 10 13, or a form or forms that provide equivalent coverage): The People of the State of New York, the New York State Office of General Services, and their officers, agents, and employees. An Additional Insured Endorsement, or the equivalent, evidencing such coverage shall be provided to OGS pursuant to the timelines set forth in Section A.13. below. A blanket Additional Insured Endorsement evidencing such coverage is also acceptable. For Contractors who are self-insured, the Contractor shall be obligated to defend and indemnify the above-named additional insureds with respect to Commercial General Liability and Business Automobile Liability, in the same manner that the Contractor would have been required to pursuant to this Attachment had the Contractor obtained such insurance policies.

10. Excess/Umbrella Liability Policies. Required insurance coverage limits may be provided through a combination of primary and excess/umbrella liability policies. If coverage limits are provided through excess/umbrella liability policies, then a Schedule of underlying insurance listing policy information for all underlying insurance policies (insurer, policy number, policy term, coverage and limits of insurance), including proof that the excess/umbrella insurance follows form must be provided upon request.

11. Notice of Cancellation or Non-Renewal. Policies shall be written so as to include the requirements for notice of cancellation or non-renewal in accordance with the New York State Insurance Law. Within five (5) business days of receipt of any notice of cancellation or non-renewal of insurance, the Contractor shall provide OGS with a copy of any such notice received from an insurer together with proof of replacement coverage that complies with the insurance requirements of this Solicitation and any Contract resulting from this Solicitation.

12. Policy Renewal/Expiration Upon policy renewal/expiration, evidence of renewal or replacement of coverage that complies with the insurance requirements set forth in this Solicitation and any Contract resulting from this Solicitation shall be delivered to OGS. If, at any time during the term of any Contract resulting from this Solicitation, the coverage provisions and limits of the policies required herein do not meet the provisions and limits set forth in this Solicitation or any Contract resulting from this Solicitation, or proof thereof is not provided to OGS, the Contractor shall immediately cease work. The Contractor shall not resume work until authorized to do so by OGS.

13. Deadlines for Providing Insurance Documents after Renewal or Upon Request. As set forth herein, certain insurance documents must be provided to the OGS Agency Procurement Office contact identified in the Contract Award Notice after renewal or upon request. This requirement means that the Contractor shall provide the applicable insurance document to OGS as soon as possible but in no event later than the following time periods:

- For certificates of insurance: 5 business days;
- For information on self-insurance or self-retention programs: 15 calendar days;
- For other requested documentation evidencing coverage: 15 calendar days;
- For additional insured and waiver of subrogation endorsements: 30 calendar days; and
- For notice of cancellation or non-renewal and proof of replacement coverage that complies with the requirements of this section: 5 business days from request or renewal.

Notwithstanding the foregoing, if the Contractor shall have promptly requested the insurance documents from its broker or insurer and shall have thereafter diligently taken all steps necessary to obtain such documents from its insurer and submit them to OGS, OGS shall extend the time period for a reasonable period under the circumstances, but in no event shall the extension exceed 30 calendar days.

B. Insurance Requirements

Bidders and Contractors shall obtain and maintain in full force and effect, throughout the term of any Contract resulting from this Solicitation, at their own expense, the following insurance with limits not less than those described below and as required by the terms of any Contract resulting from this Solicitation, or as required by law, whichever is greater:

Insurance Type		Proof of Coverage is Due
Commercial General Liability	No less than $2,000,000 each occurrence	Upon notification of tentative award and updated in accordance with Contract
General Aggregate	$3,000,000	
Products-Completed Operations Aggregate	$3,000,000	
Personal and Advertising Injury	$1,000,000	
Medical Expenses Limit	$5,000	
Professional Liability	$2,000,000	
Crime	$50,000	
Business Automobile Liability Insurance	No less than $1,000,000 each accident	
Workers' Compensation		
Disability Benefits		

1. Commercial General Liability Insurance: Such liability shall be written on the current edition of ISO occurrence form CG 00 01, or a substitute form providing equivalent coverage.

Policy shall include bodily injury, property damage and broad form contractual liability coverage.

- General Aggregate
- Products – Completed Operations Aggregate
- Personal and Advertising Injury
- Each Occurrence

Coverage shall include, but not be limited to, the following:

- Premises liability arising from operations;
- Independent contractors;
- Blanket contractual liability, including tort liability of another assumed in a contract;
- Defense and/or indemnification obligations, including obligations assumed under the Contract;
- Cross liability for additional insureds; and
- Products/completed operations for a term of no less than one (1) year, commencing upon acceptance of the work, as required by the Contract.

Liquor Liability: Such insurance shall be written on ISO form CG 00 33 or its equivalent to cover liability arising out of, but not limited to:

- Blanket contractual liability, including tort liability of another assumed in a contract; and
- Defense and/or indemnification obligations, including obligations assumed under the Contract.

2. Professional Liability:
Such insurance shall apply to professional errors, acts, or omissions arising out of the scope of services (i.e. professional services, inspections).

- Such insurance shall apply to professional errors, acts, or omissions arising out of the scope of services.
- If coverage is written on a claims-made policy, the Contractor warrants that any applicable retroactive date precedes the start of work; and that continuous coverage will be maintained, or an extended discovery period exercised, throughout the performance of the services and for a period of not less than one (1) year from the time work under any Contract resulting from this Solicitation is completed or must agree to insure for one year following any Contract under award. Written proof of this extended reporting period or agreement must be provided to OGS upon request.
- The policy shall cover professional misconduct or lack of ordinary skill for those positions defined in the Scope of Services of any Contract resulting from this Solicitation.

3. Crime Insurance: If, during the term of any Contract resulting from this Solicitation, the Contractor plans to enter the premises of an Authorized User to fulfill its obligations under this Solicitation or any Contract resulting from this Solicitation, the Contractor is required to fulfill the Crime Insurance requirements herein and shall be required to provide proof of compliance with the requirements. The Contractor shall maintain, during the term of the Contract, Crime Insurance on a “loss sustained form” or “loss discovered form,” and coverage must include the following:

- The policy must allow for reporting of circumstances or incidents that might give rise to future claims.
- The policy must include an extended reporting period of no less than one (1) year with respect to events which occurred but were not reported during the term of the policy.
- Any warranties required by the Contractor’s insurer as a result of any Contract resulting from this Solicitation must be disclosed and complied with. Said insurance shall extend coverage to include the principals (all directors, officers, agents and employees) of the Contractor as a result of any Contract resulting from this Solicitation.
- The policy shall include coverage for third-party fidelity and name “The People of the State of New York, the New York State Office of General Services, any entity authorized by law or regulation to use any Contract resulting from this Solicitation as an Authorized User and their officers, agents, and employees” as “Loss Payees” for all third-party coverage secured. This requirement applies to both primary and excess liability policies, as applicable.
- The policy shall not contain a condition requiring an arrest and conviction.
- The policy shall include coverage for, but is not limited to, employee theft, forgery or alteration, inside the premises-theft of money and securities, inside the premises-robbery

or safe burglary of other property, outside the premises computer crime/fraud, and money orders and counterfeit paper currency

If coverage is provided as underlying coverage of another policy, all requirements must be met within the primary policy.

4. Business Automobile Liability Insurance: Such insurance shall cover liability arising out of automobiles used in connection with performance under the Contract, including owned, leased, hired and non-owned automobiles bearing or, under the circumstances under which they are being used, required by the Motor Vehicles Laws of the State of New York to bear, license plates.

In the event that the Contractor does not own, lease or hire any automobiles used in connection with performance under the Contract, the Contractor does not need to obtain Business Automobile Liability Insurance, but must attest to the fact that the Contractor does not own, lease or hire any automobiles used in connection with performance under the Contract on a form provided by OGS. If, however, during the term of the Contract, the Contractor acquires, leases or hires any automobiles that will be used in connection with performance under the Contract, the Contractor must obtain Business Automobile Liability Insurance that meets all of the requirements of this section and provide proof of such coverage to OGS in accordance with the insurance requirements of any Contract resulting from this Solicitation.

5. Workers' Compensation Insurance and Disability Benefits Requirements
Sections 57 and 220 of the New York State Workers' Compensation Law require the heads of all municipal and state entities to ensure that businesses applying for contracts have appropriate workers' compensation and disability benefits insurance coverage. These requirements apply to both original contracts and renewals. **Failure to provide proper proof of such coverage or a legal exemption will result in a rejection of a Bid or any contract renewal. A Bidder will not be awarded a Contract unless proof of workers' compensation and disability insurance is provided to OGS.** Proof of workers' compensation and disability benefits coverage, or proof of exemption must be submitted to OGS at the time of notification of tentative award, policy renewal, contract renewal and upon request. Proof of compliance must be submitted on one of the following forms designated by the New York State Workers' Compensation Board. **An ACORD form is not acceptable proof of New York State workers' compensation or disability benefits insurance coverage.**

Proof of Compliance with Workers' Compensation Coverage Requirements:

- Form CE-200*, Certificate of Attestation for New York Entities With No Employees and Certain Out of State Entities, That New York State Workers' Compensation and/or Disability Benefits Insurance Coverage is Not Required*, which is available on the Workers' Compensation Board's website: (www.businessexpress.ny.gov/app/answers/cms/a_id/2263/kw/CE);
- Form C-105.2 (9/15), *Certificate of Workers' Compensation Insurance*, sent to OGS by the Contractor's insurance carrier upon request, or if coverage is provided by the New York State Insurance Fund, they will provide Form U-26.3 to OGS upon request from the Contractor; or

- Form SI-12, *Certificate of Workers' Compensation Self-Insurance*, available from the New York State Workers' Compensation Board's Self-Insurance Office, or
- Form GSI-105.2, *Certificate of Participation in Workers' Compensation Group Self-Insurance*, available from the Contractor's Group Self-Insurance Administrator.

Proof of Compliance with Disability Benefits Coverage Requirements:

- Form CE-200, *Certificate of Attestation for New York Entities With No Employees and Certain Out of State Entities, That New York State Workers' Compensation and/or Disability Benefits Insurance Coverage is Not Required*, which is available on the Workers' Compensation Board's website: (www.businessexpress.ny.gov/app/answers/cms/a_id/2263/kw/CE);
- Form DB-120.1, Certificate of Disability Benefits Insurance, sent to OGS by the Contractor's insurance carrier upon request; or
- Form DB-155, Certificate of Disability Benefits Self-Insurance, available from the New York State Workers' Compensation Board's Self-Insurance Office.

Information clarifying the New York State Workers' Compensation Law requirements is available at the New York State Workers' Compensation Board's website, http://www.wcb.ny.gov/content/main/Employers/requirements-businesses-applying-government-permits-licenses-contracts.pdf .

Contractor acknowledges that failure to obtain and/or keep in effect any or all required insurance on behalf of OGS constitutes a material breach of contract and subjects it to liability for damages, indemnification and all other legal remedies available to OGS. Contractor's failure to obtain and/or keep in effect any or all required insurance shall also provide the basis for OGS' immediate termination of any contract resulting from this Solicitation, subject only to a five (5) business day cure period. Any termination by OGS under this section shall in no event constitute or be deemed a breach of any contract resulting from this Solicitation and no liability shall be incurred by or arise against the Office of General Services, its agents and employees therefore for lost profits or any other damages.

Appendix E – M/WBE and EEO Requirements

CONTRACTOR REQUIREMENTS AND PROCEDURES FOR PARTICIPATION BY NEW YORK STATE CERTIFIED MINORITY- AND WOMEN-OWNED BUSINESS ENTERPRISES AND EQUAL EMPLOYMENT OPPORTUNITIES FOR MINORITY GROUP MEMBERS AND WOMEN

I. New York State Law

Pursuant to New York State Executive Law Article 15-A and Parts 140-145 of Title 5 of the New York Codes, Rules and Regulations ("NYCRR"), the New York State Office of General Services ("OGS") is required to promote opportunities for the maximum feasible participation of New York State-certified Minority- and Women-Owned Business Enterprises ("MWBEs") and the employment of minority group members and women in the performance of OGS contracts.

II. General Provisions

A. OGS is required to implement the provisions of New York State Executive Law Article 15-A and 5 NYCRR Parts 140-145 ("MWBE Regulations") for all State contracts as defined therein, with a value (1) in excess of $25,000 for labor, services, equipment, materials, or any combination of the foregoing or (2) in excess of $100,000 for real property renovations and construction.

B. The Contractor agrees, in addition to any other nondiscrimination provision of the Contract and at no additional cost to OGS, to fully comply and cooperate with OGS in the implementation of New York State Executive Law Article 15-A and the regulations promulgated thereunder. These requirements include equal employment opportunities for minority group members and women ("EEO") and contracting opportunities for MWBEs. Contractor's demonstration of "good faith efforts" pursuant to 5 NYCRR § 142.8 shall be a part of these requirements. These provisions shall be deemed supplementary to, and not in lieu of, the nondiscrimination provisions required by New York State Executive Law Article 15 (the "Human Rights Law") or other applicable federal, State, or local laws.

C. Failure to comply with all of the requirements herein may result in a finding of non-responsiveness, a finding of non-responsibility, breach of contract, withholding of funds, suspension or termination of the Contract, and/or such other actions or enforcement proceedings as allowed by the Contract and applicable law.

III. Equal Employment Opportunity (EEO)

A. The provisions of Article 15-A of the Executive Law and the rules and regulations promulgated thereunder pertaining to equal employment opportunities for minority group members and women shall apply to all Contractors, and any subcontractors, awarded a subcontract over $25,000 for labor, services, including legal, financial and other professional services, travel, supplies, equipment, materials, or any combination of the foregoing, to be performed for, or rendered or furnished to, the contracting State agency (the "Work") except where the Work is for the beneficial use of the Contractor.

1. Contractor and subcontractors shall undertake or continue existing EEO programs to ensure that minority group members and women are afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability, or marital status. For these purposes, EEO shall apply in the areas of recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff or termination, and rates of pay or other forms of compensation. This requirement does not apply to: (i) the performance of work or the provision of

services or any other activity that is unrelated, separate, or distinct from the Contract; or (ii) employment outside New York State.

2. By entering into this Contract, Contractor certifies that the text set forth in clause 12 of Appendix A, attached hereto and made a part hereof, is Contractor's equal employment opportunity policy. In addition, Contractor agrees to comply with the Non-Discrimination Requirements set forth in clause 5 of Appendix A.

B. Form EEO 100 – Staffing Plan

To ensure compliance with this section, the Contractor agrees to submit, or has submitted with the Bid, a staffing plan on Form EEO 100 to OGS to document the composition of the proposed workforce to be utilized in the performance of the Contract by the specified categories listed, including ethnic background, gender, and federal occupational categories.

C. Form EEO - 101 - Workforce Utilization Reporting Form (Commodities and Services) ("Form EEO-101-Commodities and Services")

1. The Contractor shall submit, and shall require each of its subcontractors to submit, a Form EEO-101-Commodities and Services to OGS to report the actual workforce utilized in the performance of the Contract by the specified categories listed including ethnic background, gender, and Federal occupational categories. The Form EEO-101-Commodities and Services must be submitted electronically to OGS at EEO_CentCon@ogs.ny.gov on a quarterly basis during the term of the Contract by the 10th day of April, July, October, and January.

2. Separate forms shall be completed by Contractor and all subcontractors.

3. In limited instances, the Contractor or subcontractor may not be able to separate out the workforce utilized in the performance of the Contract from its total workforce. When a separation can be made, the Contractor or subcontractor shall submit the Form EEO-101-Commodities and Services and indicate that the information provided relates to the actual workforce utilized on the Contract. When the workforce to be utilized on the Contract cannot be separated out from the Contractor's or subcontractor's total workforce, the Contractor or subcontractor shall submit the Form EEO-101-Commodities and Services and indicate that the information provided is the Contractor's or subcontractor's total workforce during the subject time frame, not limited to work specifically performed under the Contract.

D. Contractor shall comply with the provisions of the Human Rights Law and all other State and federal statutory and constitutional non-discrimination provisions. Contractor and subcontractors shall not discriminate against any employee or applicant for employment because of race, creed (religion), color, sex, national origin, sexual orientation, military status, age, disability, predisposing genetic characteristic, marital status, or domestic violence victim status, and shall also follow the requirements of the Human Rights Law with regard to non-discrimination on the basis of prior criminal and conviction and prior arrest.

IV. Contract Goals

A. For purposes of this procurement, OGS conducted a comprehensive search and determined that the Contract does not offer sufficient opportunities to set goals for participation by MWBEs as subcontractors, service providers, or suppliers to Contractor. Contractor is, however, encouraged to make every good faith effort to promote and assist the participation of MWBEs on this Contract for the provision of services and materials. The directory of New York State Certified MWBEs can be viewed

at: https://ny.newnycontracts.com/FrontEnd/searchcertifieddirectory.asp. Additionally, following Contract execution, Contractor is encouraged to contact the Division of Minority and Women's Business Development ((518) 292-5250; (212) 803-2414; or (716) 846-8200) to discuss additional methods of maximizing participation by MWBEs on the Contract.

B. Good Faith Efforts

Pursuant to 5 NYCRR § 142.8, evidence of good faith efforts shall include, but not be limited to, the following:

1. A list of the general circulation, trade, and MWBE-oriented publications and dates of publications in which the Contractor solicited the participation of certified MWBEs as subcontractors/suppliers, copies of such solicitations, and any responses thereto.

2. A list of the certified MWBEs appearing in the Empire State Development ("ESD") MWBE directory that were solicited for this Contract. Provide proof of dates or copies of the solicitations and copies of the responses made by the certified MWBEs. Describe specific reasons that responding certified MWBEs were not selected.

3. Descriptions of the Contract documents/plans/specifications made available to certified MWBEs by the Contractor when soliciting their participation and steps taken to structure the scope of work for the purpose of subcontracting with, or obtaining supplies from, certified MWBEs.

4. A description of the negotiations between the Contractor and certified MWBEs for the purposes of complying with the MWBE goals of this Contract.

5. Dates of any pre-bid, pre-award, or other meetings attended by Contractor, if any, scheduled by OGS with certified MWBEs whom OGS determined were capable of fulfilling the MWBE goals set in the Contract.

6. Other information deemed relevant to the request.

V. Fraud

Any suspicion of fraud, waste, or abuse involving the contracting or certification of MWBEs shall be immediately reported to ESD's Division of Minority and Women's Business Development at (855) 373-4692.

ALL FORMS ARE AVAILABLE AT: https://ogs.ny.gov/mwbe/forms

IFB Attachment 1
Bid Proposal Form

IFB 2952 Attachment 1 – Bid Proposal Form

Bidder's Name_____

The Bidder agrees to perform the work required as outlined in the specifications of this IFB to provide Suspended Scaffolds Operation and Maintenance Services for State Office Buildings in Albany, NY, for the prices indicated below.

Item 1. Base Bid:
A. Period 4/1 – 11/30

Building	Monthly Bid Price		Period (4/1 – 11/30)		Annual Bid Price		Five-Year Bid Price
ESP Corning Tower (Upper Roof)	$	x	8 Months	=	$	x 5 Years =	$
ESP Corning Tower (Lower Roof, 2 Rigs)	$	x	8 Months	=	$	x 5 Years =	$
ESP Agency Building 1	$	x	8 Months	=	$	x 5 Years =	$
ESP Agency Building 2	$	x	8 Months	=	$	x 5 Years =	$
ESP Agency Building 3	$	x	8 Months	=	$	x 5 Years =	$
ESP Agency Building 4	$	x	8 Months	=	$	x 5 Years =	$
625 Broadway	$	x	8 Months	=	$	x 5 Years =	$
						ITEM 1A FIVE-YEAR TOTAL:	$

Item 1. Base Bid:
B. Period 12/1 – 3/31

Building	Monthly Bid Price		Period (12/1 – 3/31)		Annual Bid Price		Five Year Bid Price
ESP Corning Tower (Upper Roof)	$	x	4 Months	=	$	x 5 Years =	$
ESP Corning Tower (Lower Roof, 2 Rigs)	$	x	4 Months	=	$	x 5 Years =	$
ESP Agency Building 1	$	x	4 Months	=	$	x 5 Years =	$
ESP Agency Building 2	$	x	4 Months	=	$	x 5 Years =	$
ESP Agency Building 3	$	x	4 Months	=	$	x 5 Years =	$
ESP Agency Building 4	$	x	4 Months	=	$	x 5 Years =	$
625 Broadway	$	x	4 Months	=	$	x 5 Years =	$
						ITEM 1B FIVE-YEAR TOTAL:	$

Item 1. Base Bid:
C. Certification of Rigs

Building	Certification Price		Estimated # of Certifications		Five Year Bid Price
ESP Corning Tower (Upper Roof)	$	x	1	=	$
ESP Corning Tower (Lower Roof, 2 Rigs)	$	x	2	=	$
ESP Agency Building 1	$	x	2	=	$
ESP Agency Building 2	$	x	2	=	$
ESP Agency Building 3	$	x	2	=	$
ESP Agency Building 4	$	x	2	=	$
625 Broadway	$	x	2	=	$
			ITEM 1C FIVE-YEAR TOTAL:		$

Item 2. Rope Replacement

Building	Replacement Price		Estimated # of Occurrences Per Rig		Five-Year Bid Price
ESP Corning Tower (Upper Roof)	$	x	3	=	$
ESP Corning Tower (Lower Roof, 2 Rigs)	$	x	6	=	$
ESP Agency Building 1	$	x	2	=	$
ESP Agency Building 2	$	x	2	=	$
ESP Agency Building 3	$	x	2	=	$
ESP Agency Building 4	$	x	2	=	$
625 Broadway	$	x	4	=	$
			ITEM 2 FIVE-YEAR TOTAL:		$

Item 3. Standby Labor Services

Building	Hourly Labor Rate		Estimated Annual Hours		Annual Bid Price		Five-Year Bid Price
State Office Buildings, Collectively	$	x	1,680	=	$	x 5 Years =	$
					ITEM 3 FIVE-YEAR TOTAL:		$

Item 4. Emergency Services

Building	Hourly Labor Rate		Estimated Annual Hours		Annual Bid Price		Five-Year Bid Price
State Office Buildings, Collectively	$	x	40	=	$	x 5 Years =	$
						ITEM 4 FIVE-YEAR TOTAL:	$

Item 5. Additional Services
A. Material Percentage Mark-Up:

Building	Estimated Annual Materials	Percentage of Mark-Up	Annual Bid Price		Five-Year Bid Price
Example	*$200,000*	*5%*	*$210,000*	*x 5 Years =*	*$1,050,000.00*
State Office Buildings, Collectively	$200,000	%	$	x 5 Years =	$
				ITEM 5A FIVE-YEAR TOTAL:	$

Item 5. Additional Services
B. Labor Performed at the NYS OGS Facility

Building	Hourly Labor Rate		Estimated Annual Hours		Annual Bid Price		Five-Year Bid Price
State Office Buildings, Collectively	$	x	1,680	=	$	x 5 Years =	$
						ITEM 5B FIVE-YEAR TOTAL:	$

Item 5. Additional Services
C. Labor Performed at the Contractor's Facility

Building	Hourly Labor Rate		Estimated Annual Hours		Annual Bid Price		Five-Year Bid Price
State Office Buildings, Collectively	$	x	560	=	$	x 5 Years =	$
						ITEM 5C FIVE-YEAR TOTAL:	$

Item 5. Additional Services
D. NYS Licensed Professional Engineer

Building	Hourly Labor Rate		Estimated Annual Hours		Annual Bid Price		Five-Year Bid Price
State Office Buildings, Collectively	$	x	70	=	$	x 5 Years =	$
						ITEM 5D FIVE-YEAR TOTAL:	$

Item 5. Additional Services **E. Travel Round Trip (inclusive of time, travel, and mileage)**							
Building	**Round Trip Travel Rate**		**Estimated Annual Trips**		**Annual Bid Price**		**Five-Year Bid Price**
State Office Buildings, Collectively	$	x	25	=	$	x 5 Years =	$
					ITEM 5E FIVE-YEAR TOTAL:		$

FIVE-YEAR GRAND TOTAL: (Item 1A + Item 1B + Item 1C + Item 2 + Item 3 + Item 4 + Item 5A + Item 5B + Item 5C + Item 5D + Item 5E) = $_____

Early payment discounts offered _____% / ___ days after receipt of proper invoice.

_____% / ___ days after receipt of proper invoice.

_____
Company Name

_____
Print Name/Title

_____
Signature

_____
Date

IFB Attachment 2
NYS DOL Approvals

WE ARE YOUR DOL

NEW YORK STATE OF OPPORTUNITY. Department of Labor

Andrew M. Cuomo, Governor
Roberta L. Reardon, Commissioner

Department of Labor
Division of Safety & Health
W. Averell Harriman State Office Campus
Building 12, Room 154, Albany, NY 12240
www.labor.ny.gov
518-457-7056

RESOLUTION OF SPECIAL APPROVAL

APPROVAL NO. 10506

APPLICANT: New York State Office of General Service
Corning Tower
Empire State Plaza
Albany, NY 12242

AGENT FOR THE APPLICANT: Global BMU, LLC.
65 West 36th Street
New York, NY 10018

BUILDING LOCATION: Corning Tower
Empire State Plaza
Albany, NY 12242

WHEREAS:

1. The Agent for the Applicant filed with the Commissioner of Labor of the State of New York, an application for approval of a device designated:

SCAFFOLD INSTALLATION
(FOR WINDOW CLEANING, Light Exterior Building Maintenance)
20'-3" platform, Roof Rigging, Material Hoist & Gondola M-3635
Observation Level Roof, elevation 679'-9"

This Approval Replaces Approval #6793

The system consists of a Atech BCN Platform Model QT 2500 with fixed length of 20'-3", 4 wires platform, and Atech BCN fixed gondola Model QT2500 used to clean the glass from the Observation Level Roof, elevation 679'-9" to the Grade.

2. The Agent for the Applicant filed with the said application certain data as follows:

   a. A set of drawings for the equipment signed and sealed by a professional engineer licensed to practice in the State of New York.
   b. A set of pertinent architectural drawings of the building.
   c. Certifications regarding installation of the structural components of the system.

d. A description of the installation, the equipment and its use.

3. The Commissioner of Labor finds that the said installation is as described in the attached equipment description of Façade Maintenance System (Window Cleaning and Light Exterior Building Maintenance, Corning Tower – Observation Level Roof, Albany, NY, Dated October 7, 2019.

4. On December 5, 2019 ESU staff inspected the above installation and they are acceptable.

NOW, THEREFORE, IT IS RESOLVED:

1. That the said installation is hereby approved for use only at the above described location.

2. The Scaffold is approximately 20'-3" long x 2'-4" width. Stabilization for this installation is achieved by mullion tracks. Two (2) mullion guide assemblies are mounted on the inboard side of the platform on the top rail. After the platform is lowered over the side of the building, the guide assemblies are horizontally adjusted to line up with the building's mullion guide tracks and inserted to hold the platform adjacent to the building façade. The device is designed to sustain 600 lb. or more.

3. The platform Atech BCN Model QT2500 with fixed length of 20'-3" long, 4 wire platform, New York State Approval No. 10125 dated March 13, 2012. The hoist and auxiliary hoist are Atech BCN Model QT 2500 Drum Hoist, New York State Approval No. 10141 dated March 13, 2012. When not in use the window washing equipment is stored on the roof top.

4. The perimeter of the roof is surrounded with a parapet wall approximately 3'-6" high.

5. This approval shall apply only when the said installation is manufactured, installed and maintained and used in accordance with this Approval and the following special requirements:

a. Installations and alterations. (1) Before being put into initial use for its intended purpose, after the date of this Resolution, the equipment installation shall be inspected by the Commissioner of Labor's Albany office personnel. It shall not be used for its intended purpose until such inspection has been completed and the Commissioner has found the installation to be acceptable regarding compliance with this Resolution and has so notified the owner, or the owner's agent, in writing. A similar inspection shall be made following any major alteration to the installation.

b. Periodic inspection and tests. (1) Related building supporting structures shall undergo periodic inspection by a competent person at intervals not to exceed 12 months. (2) All parts of the equipment including control systems shall be inspected, and, where necessary, tested by a manufacturer/supplier, but not to exceed 12 months, to determine that they are in safe operating condition. Parts subject to wear such as wire ropes, bearings, gears, and governors shall be inspected and/or tested to determine that they have not worn to such an extent as to affect the safe operation of the installation. (3) The building

owner shall keep a certification record of each inspection and test required herein.

c. Maintenance inspection and tests. (1) The scaffold owner shall furnish the Commissioner, in writing, a proposed program of maintenance procedures. Such a program shall be acceptable to the Commissioner and shall be subject to such modifications as the Commissioner may thereafter find necessary in order to assure safety. (2) The name and address of the person or firm designated by the owner to carry out such maintenance program shall be submitted, in writing, to the Commissioner and shall be acceptable to him. No other person or firm shall be employed or permitted to perform the required servicing and maintenance of the scaffold. Such designated person or firm shall be competent by reason of training and experience to service and maintain the scaffold. (3) The building owner shall keep a certification record of each maintenance inspection and test performed under c (1). The certification record shall include the date of the inspection and test, the signature of the person who performed the inspection and/or test, and an identifier for the platform installation which was inspected. The certification record shall be kept readily available for review by the Commissioner.

d. Continuous radio communication will be maintained between the window cleaning platform and a manned station at the building during the window washing operations.

e. Suspension wire rope replacement. (1) The suspension wire ropes for this installation shall be replaced after 24 months of use following the date of this approval and at 24 months intervals thereafter. (2) The wire rope shall be identified by means of a metal tag attached to a rigid part of the hoist, to one of the rope fittings or to each rope. Such tag shall contain the following information:

- Diameter in inches
- Manufacturer's rated breaking strength
- Grade of steel used
- Date of installation
- Construction classification
- Person or firm installing ropes
- Name of rope manufacturer

i. Whenever a rope is replaced a new metal tag shall be provided.

f. Defects and abnormal conditions. (1) When a substantial defect or abnormal condition is found in the scaffold or in any part thereof, the scaffold shall not be operated until such time as the defect or condition has been corrected and the scaffold has been re inspected by the Commissioner and found acceptable.

g. The scaffold shall bear, by impression or stamped metal plate, the identification authorized therefore. This scaffold and the parts shall be designated to use exclusively for the floors mentioned above, any dismantling and using the sections of this platform to use with other scaffold of the building shall not be permitted.

h. A copy of the Approval Resolution and a set of the filed data, including drawings, description of the equipment & operating procedures, shall be kept on the premises of the scaffold installation and shall be readily available to operating personnel, maintenance personnel and the Commissioner.

i. A plate indicating the maximum loading and the number of persons required to operate the scaffold shall be attached to the scaffold power unit in a conspicuous location. The lettering on such plate shall be legible and shall be not less than one-eight (1/8) inch in height. Operating controls shall be properly and permanently labeled to identify their respective functions.

j. Access and egress to and from the suspended scaffold shall be only from the roof level except for emergencies and maintenance.

k. Three (3) workers are required when two workers are present in the platform during all procedures requiring the movement of the suspended scaffold. Four (4) workers are required when three workers are present in the platform during all procedures requiring the movement of the suspended scaffold.

l. The persons on the suspended scaffold shall be provided with and shall use an approved body harness. The harness shall have a dual tail line not exceeding four feet in length and each segment must have a minimum breaking strength of 5,400 pounds. At least one segment of the tail line shall be attached to a taut cable attached to the scaffold at all times.

m. Harnesses and attachments shall be used, preserved, maintained and inspected in accordance with the provisions of Industrial Code Part (Rule No.21) and Industrial Code Part (Rule No. 23).

n. Before each daily operation the scaffold shall be subjected to inspection and test to assure its safe condition.

o. The persons designated to use this equipment installation shall be thoroughly trained for the proper and correct operation of the equipment. Such persons shall be directed to discontinue operation of the scaffold immediately upon observing any defect or abnormality and to report the same forthwith to the owner or his agent.

p. It shall be the responsibility of the applicant named in this Resolution to submit annually a Certification no more than (30) days nor less than fifteen (15) days prior to the anniversary date of the Approval, that the scaffold installation is being used and maintained in compliance with the specifications and data filed with his application and the requirements and conditions of the Resolution of Approval. Such annual Certification shall be in the form of a written statement to the Commissioner of Labor signed by an officer or a person duly authorized to act on behalf of the applicant and who is familiar with the materials, processes, controls and approval requirements and conditions of the subject of approval.

q. Filing of a false certification or failure to submit such annual certification shall be cause for proceeding by the Commissioner of Labor to terminate this Approval. Also, failure to notify the Commissioner of Labor of a change of name, ownership or address contained in this Approval, shall be cause of a termination proceeding.

r. The scaffold shall not be used when the prevailing wind velocity exceeds 25 miles per hour.

s. After being placed in service, each installation must be inspected at least once annually by the Commissioner of Labor's Albany office personnel.

t. In order to maintain active approval regularly scheduled equipment certification is required. Seven years after this approval is initially granted and then at least once every five years or sooner, if conditions warrant, the system installation shall be inspected by a licensed NY State Professional Engineer with experience in window washing equipment who shall in writing certify to the Engineering Services Unit (ESU) of the NYSDOL.

i) All components of the system are safe and functioning as Originally designed.
ii) All components of the system are free from defects or wear which would require replacement.
iii) According to all available records maintenance of equipment is in accordance with manufacturer's recommendation and Appendix 101A of NYSDOL Advisory Standard 101.
iv) Structural components continue to be capable of supporting all loading required by design.

6. The window washing platform will be used as a working surface for 3 glaziers and their tools.

Re-glazing procedure

The glazing units new and old will be transferred and positioned using material hoist. The window washing platform will not be used to move the glass up or down. At no time, will glazing units be supported by the platform.

a. Both glaziers working on the platform shall be trained on the operation of the platform
b. All tools used on the platform shall be tethered.
c. At no time, shall workers and tools exceed weight limits of the platform
d. Equipment is to be used for window cleaning and light building maintenance.

7. That exclusive and unassignable authorization is hereby granted to the said applicant to identify the said device as follows:

WINDOW CLEANING SCAFFOLD
20'-3" platform, Roof Rigging, Material Hoist & Gondola M-3635

Owner New York State Office of General Service
Corning Tower
Empire State Plaza
Albany, NY 12242

NEW YORK STATE APPROVAL NO. 10506

DATED: December 18, 2019

Roberta L. Reardon
Commissioner of Labor

BY:
Edward A. Smith, P.E
Professional Engineer 2 - Industrial

Prepared by:
I. John Kunac, P.E.
Professional Engineer 1 - Industrial

Reviewed by:
Edward A. Smith, P.E.
Professional Engineer 2 - Industrial

EQUIPMENT DESCRIPTION

WINDOW CLEANING AND LIGHT BUILDING MAINTENANCE

CORNING TOWER – OBSERVATION LEVEL

ALBANY, NY

October 7, 2019

GENERAL

This installation is designed for use in façade maintenance (window cleaning and light building maintenance) only on the referenced facades of the subject building. This is an existing building located at Corning Tower, Empire State Plaza, Albany, NY.

The new equipment will replace an existing system with an interim approval.

The maximum load limit specified shall not be exceeded nor shall the equipment be used on any other buildings.

Using the existing rail track, two new roof carriage systems will be installed each with a 20'-3" long aluminum platform and all its required safety features as mandated by all governing standards. Each platform will have a capacity of 750 lbs. live load with a four-line suspension system. It is equipped with an integral screening and railing system. Each BMU is equipped with bumper legs with proximity sensors at the ends to maintain a 20 ft separation between the two BMUs.

480V 60Hz electrical outlets are positioned along the path of travel. Each is provided with an adjacent strain relief anchor to protect the outlets from imposed loads from the power cord. Power will only be available while the equipment is in use.

The platform occupants will be provided with a two-way communication system and hand held anemometer.

This installation consists of two roof carriages traveling on rail tracks/along the parapet at the Observation Level Roof. The systems traverse around the building's Observation Level Roof to accommodate each drop location. There are 49 drop locations from the Observation Level Roof to ground level. The carriage is counterweighted for a driving condition stability.

LOCATION OF WORK

The new equipment is intended for use on the building in the following way: around the perimeter of the Observation Level Roof (height 679'- 9") North, South, East, and West sides of the building, to ground level.

SERVICE DROPS

There are service drops on the following sides of the building:

North Side – 20 service drops, from Observation Level Roof to ground level.

South Side – 20 service drops, from Observation Level Roof to ground level.

West Side – 7 service drops, from Observation Level Roof to ground level.

East Side – 2 service drops, from Observation Level Roof to ground level.

ATECH BMU SERIAL No. M3635:

GONDOLA QT 2500

The gondola is a Model QT 2500, manufactured by Atechbcn, with a NYS Approval #10141, and Platform, with a NYS Approval #10125. The gondola's frame is a rigid structure made of rolled steel with a set of wheels secured to the underside. The electrically driven gondola traverses around the Observation Level Roof.

STORAGE LOCATION

The roof carriage has a designated parking area on the Observation Roof Level, one to the north of the track switch on the west side of the upper bulkhead, and one at the track termination to the south. When not in use, each roof carriage will be driven to the designated parking area.

MAINTENANCE AND CONTROL

The platform and gondola will be inspected prior to each cleaning cycle, not to exceed 30 days, by the equipment manufacturer's properly certified mechanics, and daily before its intended use by the equipment's operators. The use of the maintenance equipment operation will be under the direct control of the building's manager or agent.

PLATFORM – NYS APPROVAL #10125

Total Platform Length:	20 ¼ '
Weight of Platform:	1322 lbs.
Live Load:	750 lbs.
Vertical Speed of Platform:	35 fpm

QT 2500 GONDOLA DRUM HOIST – NYS APPROVAL #10141

The gondola shall be equipped with all the accessories and features as listed in the Operation and Maintenance Manual (Machine Serial No. M3635), including but not limited to the following safety features:

- Overspeed Switch – interrupts power to the hoist when the emergency brake is applied.
- Overload Switch – in the event of an overload greater than 25% of the rated load, power to the hoist will be interrupted.
- Slack Cable Switch – interrupts power to the hoist upon relieving tension from the suspension wire ropes.
- Top Limit Switch – interrupts power to the hoist when the scaffold platform is in its uppermost suspension position or when it is obstructed.
- Obstruction Sensor Switch – interrupts power to the hoist when there is anything obstructing the descending platform.
- Emergency Stop Switch – interrupts power to the hoist when pressed.

AUXILIARY HOIST – NYS APPROVAL #10141

The roof carriage is equipped with an auxiliary hoist, which has a capacity of 1750 lbs., and will primarily be used for glass replacement. Each auxiliary hoist features an overload detector that impedes excessive loads, stopping elevation and allowing only lowering.

OPERATION

The key switch at the platform's electrical control panel is to be turned to the **ON** position. This will energize the hoist for operation. The **UP** or **DOWN** switch should then be pressed for the desired direction of travel. The hoist will then move the platform in that direction.

SUSPENSION ROPES

Each platform is suspended by four 8mm wire ropes with an internal conductor. The wire ropes are attached at the roof by means of a drum. Of the four ropes, two are provided as secondary support. The wire ropes shall be replaced every 24 months.

FAÇADE STABILIZATION SYSTEM

The work platform is provided with building face rollers and two sets of continuous type mullion engaging tie-in devices. The mullion engagement extends from the Observation Roof Level down to the lowest scaffold working elevation. The building has mullion guides on all sides.

ANEMOMETER

An anemometer is supplied for the measurement of wind velocity. This equipment is not to be operated when the wind velocity exceeds 25mph.

SYSTEM OPERATION (TWO WORKERS ARE REQUIRED)

Three workers are required for operating this equipment – two workers in the platform and a third worker on the roof. Each gondola will be situated at its parked position at its designated parking area at the Observation Level Roof, and accessible to the operators. The operators gain access to the Observation Level Roof and connect the trailer cord plug into the outlet provided, securing the strain relief. The operators ensure that the emergency button to not pressed. The general switch is placed in Machine position, and the Power button is pressed. All movements of the machine are checked, plus the emergency stop, limit switches and platform anti-collision

detector. Two operators climb into the working platform. Once in the platform, the operators immediately attach their body harnesses to the horizontal steel galvanized safety line provided at the rear. The general switch is placed in the Platform position. The UP/DOWN switch is selected and the platform is then raised to its uppermost position, activating the Upper Limit Switch. At this time, the gondola is energized and driven along the rail tracks until reaching the required work position. The platform is then lifted to clear the parapet wall, slewed to the drop location and the DOWN switch is selected to begin the descent of the platform. The process is reversed to bring the equipment to a different drop position or to return to the storage location.

Further details of the Operational Procedures are detailed in the Operation and Maintenance Manual, Machine Serial No. M3635.

GONDOLA

The gondola rides on a rail track around three sides of the building. The gondola has two electrically powered motors which traverse the unit to its desired working position. The carriage is counterweighted to safely support the working platform which is utilized in the vertical traveling of the building façade.

The roof carriage frame is a rigid structure that consists of plating and tubing made of rolled steel with all the wheels being secured to the underside. The body is a welded plate structure which houses the drum and gear system. The roof carriage is a single jib machine with a T-type spreader bar. Steel weight plates secured to the inboard side of the frame provide counterweight for safety factor during all outboard suspension and occupancy of the work platform.

WE ARE YOUR DOL

NEW YORK STATE OF OPPORTUNITY. Department of Labor

Andrew M. Cuomo, Governor
Roberta L. Reardon, Commissioner

Department of Labor
Division of Safety & Health
W. Averell Harriman State Office Campus
Building 12, Room 154, Albany, NY 12240
www.labor.ny.gov
518-457-7056

RESOLUTION OF SPECIAL APPROVAL

APPROVAL NO. 10503

APPLICANT: New York State Office of General Service
Corning Tower
Empire State Plaza
Albany, NY 12242

AGENT FOR THE APPLICANT: Global BMU, LLC.
65 West 36th Street
New York, NY 10018

BUILDING LOCATION: Corning Tower
Empire State Plaza
Albany, NY 12242

WHEREAS:

1. The Agent for the Applicant filed with the Commissioner of Labor of the State of New York, an application for approval of a device designated:

SCAFFOLD INSTALLATION
(FOR WINDOW CLEANING, Light Exterior Building Maintenance)
20'-3" platform, Roof Rigging, Material Hoist & Gondola M-3634
Observation Level Roof, elevation 679'-9"

This Approval Replaces Approval #6793

The system consists of a Atech BCN Platform Model QT 2500 with fixed length of 20'-3", 4 wires platform, and Atech BCN fixed gondola Model QT2500 used to clean the glass from the Observation Level Roof, elevation 679'-9" to the Grade.

2. The Agent for the Applicant filed with the said application certain data as follows:

   a. A set of drawings for the equipment signed and sealed by a professional engineer licensed to practice in the State of New York.
   b. A set of pertinent architectural drawings of the building.
   c. Certifications regarding installation of the structural components of the system.

d. A description of the installation, the equipment and its use.

3. The Commissioner of Labor finds that the said installation is as described in the attached equipment description of Façade Maintenance System (Window Cleaning and Light Exterior Building Maintenance, Corning Tower – Observation Level Roof, Albany, NY, Dated October 7, 2019.

4. On December 5, 2019 ESU staff inspected the above installation and they are acceptable.

NOW, THEREFORE, IT IS RESOLVED:

1. That the said installation is hereby approved for use only at the above described location.

2. The Scaffold is approximately 20'-3" long x 2'-4" width. Stabilization for this installation is achieved by mullion tracks. Two (2) mullion guide assemblies are mounted on the inboard side of the platform on the top rail. After the platform is lowered over the side of the building, the guide assemblies are horizontally adjusted to line up with the building's mullion guide tracks and inserted to hold the platform adjacent to the building façade. The device is designed to sustain 600 lb. or more.

3. The platform Atech BCN Model QT2500 with fixed length of 20'-3" long, 4 wire platform, New York State Approval No. 10125 dated March 13, 2012. The hoist and auxiliary hoist are Atech BCN Model QT 2500 Drum Hoist, New York State Approval No. 10141 dated March 13, 2012. When not in use the window washing equipment is stored on the roof top.

4. The perimeter of the roof is surrounded with a parapet wall approximately 3'-6" high.

5. This approval shall apply only when the said installation is manufactured, installed and maintained and used in accordance with this Approval and the following special requirements:

   a. Installations and alterations. (1) Before being put into initial use for its intended purpose, after the date of this Resolution, the equipment installation shall be inspected by the Commissioner of Labor's Albany office personnel. It shall not be used for its intended purpose until such inspection has been completed and the Commissioner has found the installation to be acceptable regarding compliance with this Resolution and has so notified the owner, or the owner's agent, in writing. A similar inspection shall be made following any major alteration to the installation.

   b. Periodic inspection and tests. (1) Related building supporting structures shall undergo periodic inspection by a competent person at intervals not to exceed 12 months. (2) All parts of the equipment including control systems shall be inspected, and, where necessary, tested by a manufacturer/supplier, but not to exceed 12 months, to determine that they are in safe operating condition. Parts subject to wear such as wire ropes, bearings, gears, and governors shall be inspected and/or tested to determine that they have not worn to such an extent as to affect the safe operation of the installation. (3) The building

owner shall keep a certification record of each inspection and test required herein.

c. Maintenance inspection and tests. (1) The scaffold owner shall furnish the Commissioner, in writing, a proposed program of maintenance procedures. Such a program shall be acceptable to the Commissioner and shall be subject to such modifications as the Commissioner may thereafter find necessary in order to assure safety. (2) The name and address of the person or firm designated by the owner to carry out such maintenance program shall be submitted, in writing, to the Commissioner and shall be acceptable to him. No other person or firm shall be employed or permitted to perform the required servicing and maintenance of the scaffold. Such designated person or firm shall be competent by reason of training and experience to service and maintain the scaffold. (3) The building owner shall keep a certification record of each maintenance inspection and test performed under c (1). The certification record shall include the date of the inspection and test, the signature of the person who performed the inspection and/or test, and an identifier for the platform installation which was inspected. The certification record shall be kept readily available for review by the Commissioner.

d. Continuous radio communication will be maintained between the window cleaning platform and a manned station at the building during the window washing operations.

e. Suspension wire rope replacement. (1) The suspension wire ropes for this installation shall be replaced after 24 months of use following the date of this approval and at 24 months intervals thereafter. (2) The wire rope shall be identified by means of a metal tag attached to a rigid part of the hoist, to one of the rope fittings or to each rope. Such tag shall contain the following information:

- Diameter in inches
- Manufacturer's rated breaking strength
- Grade of steel used
- Date of installation
- Construction classification
- Person or firm installing ropes
- Name of rope manufacturer

i. Whenever a rope is replaced a new metal tag shall be provided.

f. Defects and abnormal conditions. (1) When a substantial defect or abnormal condition is found in the scaffold or in any part thereof, the scaffold shall not be operated until such time as the defect or condition has been corrected and the scaffold has been re inspected by the Commissioner and found acceptable.

g. The scaffold shall bear, by impression or stamped metal plate, the identification authorized therefore. This scaffold and the parts shall be designated to use exclusively for the floors mentioned above, any dismantling and using the sections of this platform to use with other scaffold of the building shall not be permitted.

h. A copy of the Approval Resolution and a set of the filed data, including drawings, description of the equipment & operating procedures, shall be kept on the premises of the scaffold installation and shall be readily available to operating personnel, maintenance personnel and the Commissioner.

i. A plate indicating the maximum loading and the number of persons required to operate the scaffold shall be attached to the scaffold power unit in a conspicuous location. The lettering on such plate shall be legible and shall be not less than one-eight (1/8) inch in height. Operating controls shall be properly and permanently labeled to identify their respective functions.

j. Access and egress to and from the suspended scaffold shall be only from the roof level except for emergencies and maintenance.

k. Three (3) workers are required when two workers are present in the platform during all procedures requiring the movement of the suspended scaffold. Four (4) workers are required when three workers are present in the platform during all procedures requiring the movement of the suspended scaffold.

l. The persons on the suspended scaffold shall be provided with and shall use an approved body harness. The harness shall have a dual tail line not exceeding four feet in length and each segment must have a minimum breaking strength of 5,400 pounds. At least one segment of the tail line shall be attached to a taut cable attached to the scaffold at all times.

m. Harnesses and attachments shall be used, preserved, maintained and inspected in accordance with the provisions of Industrial Code Part (Rule No.21) and Industrial Code Part (Rule No. 23).

n. Before each daily operation the scaffold shall be subjected to inspection and test to assure its safe condition.

o. The persons designated to use this equipment installation shall be thoroughly trained for the proper and correct operation of the equipment. Such persons shall be directed to discontinue operation of the scaffold immediately upon observing any defect or abnormality and to report the same forthwith to the owner or his agent.

p. It shall be the responsibility of the applicant named in this Resolution to submit annually a Certification no more than (30) days nor less than fifteen (15) days prior to the anniversary date of the Approval, that the scaffold installation is being used and maintained in compliance with the specifications and data filed with his application and the requirements and conditions of the Resolution of Approval. Such annual Certification shall be in the form of a written statement to the Commissioner of Labor signed by an officer or a person duly authorized to act on behalf of the applicant and who is familiar with the materials, processes, controls and approval requirements and conditions of the subject of approval.

q. Filing of a false certification or failure to submit such annual certification shall be cause for proceeding by the Commissioner of Labor to terminate this

Approval. Also, failure to notify the Commissioner of Labor of a change of name, ownership or address contained in this Approval, shall be cause of a termination proceeding.

r. The scaffold shall not be used when the prevailing wind velocity exceeds 25 miles per hour.

s. After being placed in service, each installation must be inspected at least once annually by the Commissioner of Labor's Albany office personnel.

t. In order to maintain active approval regularly scheduled equipment certification is required. Seven years after this approval is initially granted and then at least once every five years or sooner, if conditions warrant, the system installation shall be inspected by a licensed NY State Professional Engineer with experience in window washing equipment who shall in writing certify to the Engineering Services Unit (ESU) of the NYSDOL.

i) All components of the system are safe and functioning as Originally designed.
ii) All components of the system are free from defects or wear which would require replacement.
iii) According to all available records maintenance of equipment is in accordance with manufacturer's recommendation and Appendix 101A of NYSDOL Advisory Standard 101.
iv) Structural components continue to be capable of supporting all loading required by design.

6. The window washing platform will be used as a working surface for 3 glaziers and their tools.

Re-glazing procedure

The glazing units new and old will be transferred and positioned using material hoist. The window washing platform will not be used to move the glass up or down. At no time, will glazing units be supported by the platform.

a. Both glaziers working on the platform shall be trained on the operation of the platform
b. All tools used on the platform shall be tethered.
c. At no time, shall workers and tools exceed weight limits of the platform
d. Equipment is to be used for window cleaning and light building maintenance.

7. That exclusive and unassignable authorization is hereby granted to the said applicant to identify the said device as follows:

WINDOW CLEANING SCAFFOLD
20'-3" platform, Roof Rigging, Material Hoist & Gondola M-3634

Owner New York State Office of General Service
Corning Tower
Empire State Plaza
Albany, NY 12242

NEW YORK STATE APPROVAL NO. 10503

DATED: December 18, 2019

Roberta L. Reardon
Commissioner of Labor

BY:
Edward A. Smith, P.E
Professional Engineer 2 - Industrial

Prepared by:
I. John Kunac, P.E.
Professional Engineer 1 - Industrial

Reviewed by:
Edward A. Smith, P.E.
Professional Engineer 2 - Industrial

EQUIPMENT DESCRIPTION

WINDOW CLEANING AND LIGHT BUILDING MAINTENANCE

CORNING TOWER – OBSERVATION LEVEL

ALBANY, NY

October 7, 2019

GENERAL

This installation is designed for use in façade maintenance (window cleaning and light building maintenance) only on the referenced facades of the subject building. This is an existing building located at Corning Tower, Empire State Plaza, Albany, NY.

The new equipment will replace an existing system with an interim approval.

The maximum load limit specified shall not be exceeded nor shall the equipment be used on any other buildings.

Using the existing rail track, two new roof carriage systems will be installed each with a 20'-3" long aluminum platform and all its required safety features as mandated by all governing standards. Each platform will have a capacity of 750 lbs. live load with a four-line suspension system. It is equipped with an integral screening and railing system. Each BMU is equipped with bumper legs with proximity sensors at the ends to maintain a 20 ft separation between the two BMUs.

480V 60Hz electrical outlets are positioned along the path of travel. Each is provided with an adjacent strain relief anchor to protect the outlets from imposed loads from the power cord. Power will only be available while the equipment is in use.

The platform occupants will be provided with a two-way communication system and hand held anemometer.

This installation consists of two roof carriages traveling on rail tracks/along the parapet at the Observation Level Roof. The systems traverse around the building's Observation Level Roof to accommodate each drop location. There are 49 drop locations from the Observation Level Roof to ground level. The carriage is counterweighted for a driving condition stability.

LOCATION OF WORK

The new equipment is intended for use on the building in the following way: around the perimeter of the Observation Level Roof (height 679'- 9") North, South, East, and West sides of the building, to ground level.

SERVICE DROPS

There are service drops on the following sides of the building:

North Side – 20 service drops, from Observation Level Roof to ground level.

South Side – 20 service drops, from Observation Level Roof to ground level.

West Side – 7 service drops, from Observation Level Roof to ground level.

East Side – 2 service drops, from Observation Level Roof to ground level.

ATECH BMU SERIAL No. M3634:

GONDOLA QT 2500

The gondola is a Model QT 2500, manufactured by Atechbcn, with a NYS Approval #10141, and Platform, with a NYS Approval #10125. The gondola's frame is a rigid structure made of rolled steel with a set of wheels secured to the underside. The electrically driven gondola traverses around the Observation Level Roof.

STORAGE LOCATION

The roof carriage has a designated parking area on the Observation Roof Level, one to the north of the track switch on the west side of the upper bulkhead, and one at the track termination to the south. When not in use, each roof carriage will be driven to the designated parking area.

MAINTENANCE AND CONTROL

The platform and gondola will be inspected prior to each cleaning cycle, not to exceed 30 days, by the equipment manufacturer's properly certified mechanics, and daily before its intended use by the equipment's operators. The use of the maintenance equipment operation will be under the direct control of the building's manager or agent.

PLATFORM – NYS APPROVAL #10125

Total Platform Length:	20 ¼ '
Weight of Platform:	1322 lbs.
Live Load:	750 lbs.
Vertical Speed of Platform:	35 fpm

QT 2500 GONDOLA DRUM HOIST – NYS APPROVAL #10141

The gondola shall be equipped with all the accessories and features as listed in the Operation and Maintenance Manual (Machine Serial No. M3634), including but not limited to the following safety features:

- Overspeed Switch – interrupts power to the hoist when the emergency brake is applied.
- Overload Switch – in the event of an overload greater than 25% of the rated load, power to the hoist will be interrupted.
- Slack Cable Switch – interrupts power to the hoist upon relieving tension from the suspension wire ropes.
- Top Limit Switch – interrupts power to the hoist when the scaffold platform is in its uppermost suspension position or when it is obstructed.
- Obstruction Sensor Switch – interrupts power to the hoist when there is anything obstructing the descending platform.
- Emergency Stop Switch – interrupts power to the hoist when pressed.

AUXILIARY HOIST – NYS APPROVAL #10141

The roof carriage is equipped with an auxiliary hoist, which has a capacity of 1750 lbs., and will primarily be used for glass replacement. Each auxiliary hoist features an overload detector that impedes excessive loads, stopping elevation and allowing only lowering.

OPERATION

The key switch at the platform's electrical control panel is to be turned to the **ON** position. This will energize the hoist for operation. The **UP** or **DOWN** switch should then be pressed for the desired direction of travel. The hoist will then move the platform in that direction.

SUSPENSION ROPES

Each platform is suspended by four 8mm wire ropes with an internal conductor. The wire ropes are attached at the roof by means of a drum. Of the four ropes, two are provided as secondary support. The wire ropes shall be replaced every 24 months.

FAÇADE STABILIZATION SYSTEM

The work platform is provided with building face rollers and two sets of continuous type mullion engaging tie-in devices. The mullion engagement extends from the Observation Roof Level down to the lowest scaffold working elevation. The building has mullion guides on all sides.

ANEMOMETER

An anemometer is supplied for the measurement of wind velocity. This equipment is not to be operated when the wind velocity exceeds 25mph.

SYSTEM OPERATION (TWO WORKERS ARE REQUIRED)

Three workers are required for operating this equipment – two workers in the platform and a third worker on the roof. Each gondola will be situated at its parked position at its designated parking area at the Observation Level Roof, and accessible to the operators. The operators gain access to the Observation Level Roof and connect the trailer cord plug into the outlet provided, securing the strain relief. The operators ensure that the emergency button to not pressed. The general switch is placed in Machine position, and the Power button is pressed. All movements of the machine are checked, plus the emergency stop, limit switches and platform anti-collision

detector. Two operators climb into the working platform. Once in the platform, the operators immediately attach their body harnesses to the horizontal steel galvanized safety line provided at the rear. The general switch is placed in the Platform position. The UP/DOWN switch is selected and the platform is then raised to its uppermost position, activating the Upper Limit Switch. At this time, the gondola is energized and driven along the rail tracks until reaching the required work position. The platform is then lifted to clear the parapet wall, slewed to the drop location and the DOWN switch is selected to begin the descent of the platform. The process is reversed to bring the equipment to a different drop position or to return to the storage location.

Further details of the Operational Procedures are detailed in the Operation and Maintenance Manual, Machine Serial No. M3634.

GONDOLA

The gondola rides on a rail track around three sides of the building. The gondola has two electrically powered motors which traverse the unit to its desired working position. The carriage is counterweighted to safely support the working platform which is utilized in the vertical traveling of the building façade.

The roof carriage frame is a rigid structure that consists of plating and tubing made of rolled steel with all the wheels being secured to the underside. The body is a welded plate structure which houses the drum and gear system. The roof carriage is a single jib machine with a T-type spreader bar. Steel weight plates secured to the inboard side of the frame provide counterweight for safety factor during all outboard suspension and occupancy of the work platform.

Department of Labor
Division of Safety & Health
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RESOLUTION OF SPECIAL APPROVAL

APPROVAL NO. 10455

APPLICANT: New York State Office of General Service
Corning Tower
Empire State Plaza
Albany, NY 12242

AGENT FOR THE APPLICANT: Global BMU, LLC.
65 West 36th Street
New York, NY 10018

BUILDING LOCATION: Corning Tower
Empire State Plaza
Albany, NY 12242

WHEREAS:

1. The Agent for the Applicant filed with the Commissioner of Labor of the State of New York, an application for approval of a device designated:

SCAFFOLD INSTALLATION
(FOR WINDOW CLEANING, Light Exterior Building Maintenance)
20'-3" platform, Roof Rigging & Gondola
Penthouse Roof, elevation 737'-11"

This Approval Replaces Approval #6794

The system consists of a Atech BCN Platform Model QT 2500 with fixed length of 20'-3", 4 wires platform, and Atech BCN fixed gondola Model QT2500 used to clean the glass from the Penthouse Roof level, elevation 737'-11" to the Grade.

2. The Agent for the Applicant filed with the said application certain data as follows:

   a. A set of drawings for the equipment signed and sealed by a professional engineer licensed to practice in the State of New York.
   b. A set of pertinent architectural drawings of the building.

c. Certifications regarding installation of the structural components of the system.
d. A description of the installation, the equipment and its use.

3. The Commissioner of Labor finds that the said installation is as described in the attached equipment description of Façade Maintenance System (Window Cleaning and Light Exterior Building Maintenance, Corning Tower - Penthouse, Albany, NY, Dated December 10, 2018.

4. On December 19, 2018 ESU staff inspected the above installation and they are acceptable.

NOW, THEREFORE, IT IS RESOLVED:

1. That the said installation is hereby approved for use only at the above described location.

2. The Scaffold is approximately 20'-3" long x 2'-4" width. Stabilization for this installation is achieved by mullion tracks. Two (2) mullion guide assemblies are mounted on the inboard side of the platform on the top rail. After the platform is lowered over the side of the building, the guide assemblies are horizontally adjusted to line up with the building's mullion guide tracks and inserted to hold the platform adjacent to the building façade. The device is designed to sustain 600 lb. or more.

3. The platform Atech BCN Model QT2500 with fixed length of 20'-3" long, 4 wire platform, New York State Approval No. 10125 dated March 13, 2012. The hoist is Atech BCN Model QT 2500 Drum Hoist, New York State Approval No. 10141 dated March 13, 2012. When not in use the window washing equipment is stored on the roof top.

4. The perimeter of the roof is surrounded with a parapet wall approximately 3'-6" high.

5. This approval shall apply only when the said installation is manufactured, installed and maintained and used in accordance with this Approval and the following special requirements:

a. Installations and alterations. (1) Before being put into initial use for its intended purpose, after the date of this Resolution, the equipment installation shall be inspected by the Commissioner of Labor's Albany office personnel. It shall not be used for its intended purpose until such inspection has been completed and the Commissioner has found the installation to be acceptable regarding compliance with this Resolution and has so notified the owner, or the owner's agent, in writing. A similar inspection shall be made following any major alteration to the installation.

b. Periodic inspection and tests. (1) Related building supporting structures shall undergo periodic inspection by a competent person at intervals not to exceed 12 months. (2) All parts of the equipment including control systems shall be inspected, and, where necessary, tested by a manufacturer/supplier, but not to exceed 12 months, to determine that they are in safe operating condition. Parts subject to wear such as wire ropes, bearings, gears, and governors shall be inspected and/or tested to determine that they have not worn to such an

extent as to affect the safe operation of the installation. (3) The building owner shall keep a certification record of each inspection and test required herein.

c. Maintenance inspection and tests. (1) The scaffold owner shall furnish the Commissioner, in writing, a proposed program of maintenance procedures. Such a program shall be acceptable to the Commissioner and shall be subject to such modifications as the Commissioner may thereafter find necessary in order to assure safety. (2) The name and address of the person or firm designated by the owner to carry out such maintenance program shall be submitted, in writing, to the Commissioner and shall be acceptable to him. No other person or firm shall be employed or permitted to perform the required servicing and maintenance of the scaffold. Such designated person or firm shall be competent by reason of training and experience to service and maintain the scaffold. (3) The building owner shall keep a certification record of each maintenance inspection and test performed under c (1). The certification record shall include the date of the inspection and test, the signature of the person who performed the inspection and/or test, and an identifier for the platform installation which was inspected. The certification record shall be kept readily available for review by the Commissioner.

d. Continuous radio communication will be maintained between the window cleaning platform and a manned station at the building during the window washing operations.

e. Suspension wire rope replacement. (1) The suspension wire ropes for this installation shall be replaced after 24 months of use following the date of this approval and at 24 months intervals thereafter. (2) The wire rope shall be identified by means of a metal tag attached to a rigid part of the hoist, to one of the rope fittings or to each rope. Such tag shall contain the following information:

- Diameter in inches
- Manufacturer's rated breaking strength
- Grade of steel used
- Date of installation
- Construction classification
- Person or firm installing ropes
- Name of rope manufacturer

i. Whenever a rope is replaced a new metal tag shall be provided.

f. Defects and abnormal conditions. (1) When a substantial defect or abnormal condition is found in the scaffold or in any part thereof, the scaffold shall not be operated until such time as the defect or condition has been corrected and the scaffold has been re inspected by the Commissioner and found acceptable.

g. The scaffold shall bear, by impression or stamped metal plate, the identification authorized therefore. This scaffold and the parts shall be designated to use exclusively for the floors mentioned above, any dismantling

and using the sections of this platform to use with other scaffold of the building shall not be permitted.

h. A copy of the Approval Resolution and a set of the filed data, including drawings, description of the equipment & operating procedures, shall be kept on the premises of the scaffold installation and shall be readily available to operating personnel, maintenance personnel and the Commissioner.

i. A plate indicating the maximum loading and the number of persons required to operate the scaffold shall be attached to the scaffold power unit in a conspicuous location. The lettering on such plate shall be legible and shall be not less than one-eight (1/8) inch in height. Operating controls shall be properly and permanently labeled to identify their respective functions.

j. Access and egress to and from the suspended scaffold shall be only from the roof level except for emergencies and maintenance.

k. Three (3) workers are required during all procedures requiring the movement of the suspended scaffold at the roof level.

l. The persons on the suspended scaffold shall be provided with and shall use an approved body harness. The harness shall have a dual tail line not exceeding four feet in length and each segment must have a minimum breaking strength of 5,400 pounds. At least one segment of the tail line shall be attached to a taut cable attached to the scaffold at all times.

m. Harnesses and attachments shall be used, preserved, maintained and inspected in accordance with the provisions of Industrial Code Part (Rule No.21) and Industrial Code Part (Rule No. 23).

n. Before each daily operation the scaffold shall be subjected to inspection and test to assure its safe condition.

o. The persons designated to use this equipment installation shall be thoroughly trained for the proper and correct operation of the equipment. Such persons shall be directed to discontinue operation of the scaffold immediately upon observing any defect or abnormality and to report the same forthwith to the owner or his agent.

p. It shall be the responsibility of the applicant named in this Resolution to submit annually a Certification no more than (30) days nor less than fifteen (15) days prior to the anniversary date of the Approval, that the scaffold installation is being used and maintained in compliance with the specifications and data filed with his application and the requirements and conditions of the Resolution of Approval. Such annual Certification shall be in the form of a written statement to the Commissioner of Labor signed by an officer or a person duly authorized to act on behalf of the applicant and who is familiar with the materials, processes, controls and approval requirements and conditions of the subject of approval.

q. Filing of a false certification or failure to submit such annual certification shall be cause for proceeding by the Commissioner of Labor to terminate this Approval. Also, failure to notify the Commissioner of Labor of a change of name, ownership or address contained in this Approval, shall be cause of a termination proceeding.

r. The scaffold shall not be used when the prevailing wind velocity exceeds 25 miles per hour.

s. After being placed in service, each installation must be inspected at least once annually by the Commissioner of Labor's Albany office personnel.

t. In order to maintain active approval regularly scheduled equipment certification is required. Seven years after this approval is initially granted and then at least once every five years or sooner, if conditions warrant, the system installation shall be inspected by a licensed NY State Professional Engineer with experience in window washing equipment who shall in writing certify to the Engineering Services Unit (ESU) of the NYSDOL.

   i) All components of the system are safe and functioning as Originally designed.
   ii) All components of the system are free from defects or wear which would require replacement.
   iii) According to all available records maintenance of equipment is in accordance with manufacturer's recommendation and Appendix 101A of NYSDOL Advisory Standard 101.
   iv) Structural components continue to be capable of supporting all loading required by design.

6. The window washing platform will be used as a working surface for 2 glaziers and their tools.

Re-glazing procedure

The glazing units new and old will be passed thru the interior openings of the unit being replaced. The window washing platform will not be used to move the glass up or down. At no time, will glazing units be supported by the platform.

a. Both glaziers working on the platform shall be trained on the operation of the platform
b. All tools used on the platform shall be tethered.
c. At no time, shall workers and tools exceed weight limits of the platform
d. Equipment is to be used for window cleaning and light building maintenance.

7. That exclusive and unassignable authorization is hereby granted to the said applicant to identify the said device as follows:

WINDOW CLEANING SCAFFOLD
Platform length of 20'-3", Roof Rigging & Gondola

Owner New York State Office of General Service
Corning Tower
Empire State Plaza
Albany, NY 12242

NEW YORK STATE APPROVAL NO. 10455

DATED: January 7, 2019

Roberta L. Reardon
Commissioner of Labor

BY:
Edward A. Smith, P.E
Professional Engineer 2 - Industrial

Prepared by:
I. John Kunac, P.E.
Professional Engineer 1 - Industrial

Reviewed by:
Edward A. Smith, P.E.
Professional Engineer 2 - Industrial

EQUIPMENT DESCRIPTION

WINDOW CLEANING AND LIGHT BUILDING MAINTENANCE

CORNING TOWER – PENTHOUSE

ALBANY, NY

DECEMBER 10, 2018

GENERAL

This installation is designed for use in façade maintenance (window cleaning and light building maintenance) only on the referenced facades of the subject building. This is an existing building located at Corning Tower, Penthouse, Albany, NY.

The new equipment will replace an existing system, Approval #6794. This earlier Approval has already been terminated.

The maximum load limit specified shall not be exceeded nor shall the equipment be used on any other buildings.

Using the existing rail track, a new roof carriage system will be installed with a 20 ¼ ' long aluminum platform and all its required safety features as mandated by all governing standards. The platform will have a capacity of 750 lbs. live load with a four line suspension system. It is equipped with an integral screening and railing system.

480V 60Hz electrical outlets are positioned along the path of travel. Each is provided with an adjacent strain relief anchor to protect the outlets from imposed loads from the power cord. Power will only be available while the equipment is in use.

The platform occupants will be provided with a two-way communication system and hand held anemometer.

This installation consists of a roof carriage on a rail track. The system traverses around the building's Penthouse roof to accommodate each drop location. There are 30 drop locations from the Penthouse Roof level to the Main Roof, and 18 drop locations from the Penthouse Roof level to ground level. The carriage is counterweighted for a driving condition stability.

LOCATION OF WORK

The new equipment is intended for use on the building in the following way: around the perimeter of the Penthouse Roof (height 737'-11") North, South and West sides of the building to the Main Roof (height 682'), and from the Penthouse Roof (height 737'-11") North, South and East sides of the building, to ground level.

SERVICE DROPS

There are service drops on the following sides of the building:

North Side – 13 service drops, from Penthouse Roof to Main Roof.

7 service drops, from Penthouse Roof to ground level.

East Side – 4 service drops, from Penthouse Roof to ground level.

South Side – 13 service drops, from Penthouse Roof to Main Roof.

7 service drops, from Penthouse Roof to ground level.

West Side – 4 service drops, from Penthouse Roof to Main Roof.

GONDOLA QT2500

The gondola is a Model QT 2500, manufactured by Atechbcn, with a NYS Approval #10141, and Platform, with a NYS Approval #10125. The gondola's frame is a rigid structure made of rolled steel with a set of wheels secured to the underside. The electrically driven gondola traverses around the Penthouse roof.

STORAGE LOCATION

When not in use, the gondola and platform are driven to a designated enclosed parking area on the Penthouse Roof level, as shown in diagram P15588-01-07, page 4 of 13.

MAINTENANCE AND CONTROL

The platform and gondola will be inspected prior to each cleaning cycle, not to exceed 30 days, by the equipment manufacturer's properly certified mechanics, and daily before its intended use by the equipment's operators. The use of the maintenance equipment operation will be under the direct control of the building's manager or agent.

PLATFORM – NYS APPROVAL #10125

Total Platform Length: 20 ¼ '

Weight of Platform: 1102 lbs.

Live Load: 750 lbs.

Vertical Speed of Platform: 35 fpm

QT 2500 GONDOLA DRUM HOIST – NYS APPROVAL #10141

The gondola shall be equipped with all the accessories and features as listed in the Operation and Maintenance Manual (Machine Serial No. M3633), including but not limited to the following safety features:

- Overspeed Switch – interrupts power to the hoist when the emergency brake is applied.

- Overload Switch – in the event of an overload greater than 25% of the rated load, power to the hoist will be interrupted.
- Slack Cable Switch – interrupts power to the hoist upon relieving tension from the suspension wire ropes.
- Top Limit Switch – interrupts power to the hoist when the scaffold platform is in its uppermost suspension position or when it is obstructed.
- Obstruction Sensor Switch – interrupts power to the hoist when there is anything obstructing the descending platform.
- Emergency Stop Switch – interrupts power to the hoist when pressed.

AUXILIARY HOIST

This new equipment will employ an auxiliary hoist, NYS Approval #10141, which has a capacity of 1750 lbs., and will primarily be used for glass replacement. The auxiliary hoist is equipped with an overload detector that impedes excessive loads, stopping elevation and allowing only lowering.

OPERATION

The key switch at the platform's electrical control panel is to be turned to the **ON** position. This will energize the hoist for operation. The **UP** or **DOWN** switch should then be pressed for the desired direction of travel. The hoist will then move the platform in that direction.

SUSPENSION ROPES

The platform is suspended by four 8mm wire ropes with an internal conductor. The wire ropes are attached at the roof by means of a drum. Of the four ropes, two are provided as secondary support. The wire ropes shall be replaced every 24 months.

FAÇADE STABILIZATION SYSTEM

The work platform is provided with building facerollers and two sets of continuous type mullion engaging tie-in devices. The mullion engagement extends from the Penthouse Roof Level down to the lowest scaffold working elevation. The building has mullion guides on all sides.

ANEMOMETER

An anemometer is supplied for the measurement of wind velocity. This equipment is not to be operated when the wind velocity exceeds 25mph.

SYSTEM OPERATION (TWO WORKERS ARE REQUIRED)

Two workers are required for traversing on the roof. The gondola will be situated at its parked position at its designated parking area at the Penthouse roof level, and accessible to the operators. The operators gain access to the Penthouse roof and connect the trailer cord plug into the outlet provided, securing the strain relief. The main power switch is rotated to the **ON** position and the key switch is selected to the **"0"** Off position, thereby transferring power to the cradle. Two operators climb into the working platform. Once in the platform, the operators immediately attach their body harnesses to the horizontal steel galvanized safety line provided at

the rear. The platform key is then selected to **ON (1)** position. The UP/DOWN switch is selected and the platform is then raised to its uppermost position, activating the Upper Limit Switch. At this time, the gondola is energized and driven along the rail track until reaching the required work position. The rig runs free through the turns and gets driven back onto guide for each straightaway. There are front angle guides on each side to prevent the machine from encountering any obstructions. The machine is moved to drop position and the tie down anchor is engaged into corresponding roof anchor and tightened by turning the tie down assembly tensioning wheel. Machine will not operate unless the tie down is sufficiently tightened to engage a micro-switch which limits all but traversing function unless engaged. Once engaged luffing, ascent, and descent are enabled, and traversing is disabled. The machine is then luffed to clear the parapet wall and the DOWN switch is selected to begin the descent of the platform. The process is reversed to bring the equipment to a different drop position or to return to the storage location.

Complete Operational Procedures are detailed in the Operation and Maintenance Manual, Machine Serial No. M3633.

GONDOLA

The gondola rides on a rail track around the four sides of the building. The gondola has two electrically powered motors which traverse the unit to its desired working position. The carriage is counterweighted to safely support the working platform which is utilized in the vertical traveling of the building façade.

The roof carriage frame is a rigid structure that consists of plating and tubing made of rolled steel with all the wheels being secured to the underside. The body is a welded plate structure which houses the drum and gear system. This is a single jib machine with a T-type spreader bar. Steel weight plates secured to the inboard side of the frame provide counterweight for safety factor during all outboard suspension and occupancy of the work platform.

New York State Department of Labor
Andrew M. Cuomo, *Governor*
Peter M. Rivera, *Commissioner*

December 16, 2013

NYS Office of General Services
Real Property Management
Empire State Plaza, Corning Tower, 39th Floor
Albany, New York 12242

Re: Resolution of Special Approval
No. 10073 & 10074

Dear Sir:

We are enclosing a copy of the Resolution of Special Approval Number 10073 and 10074 dated December 16, 2013.

Sincerely,

Timothy Donlon, P.E.
Senior Safety & Health Engineer

SM:md
cc: NYC Industry

New York State Department of Labor
Andrew M. Cuomo, *Governor*
Peter M. Rivera, *Commissioner*

RESOLUTION OF SPECIAL APPROVAL

APPROVAL NO. 10073
APPLICANT: NYS Office of General Services
Real Property Management
Empire State Plaza, Corning Tower, 39th Floor
Albany, New York 12242

AGENT FOR THE APPLICANT: Upgrade Services
33 West 19th Street, 4th Floor
New York, NY 10011

BUILDING LOCATION: Agency Building 1, Empire State Plaza
Albany, NY 12242

WHEREAS:

1. The Agent for the Applicant filed with the Commissioner of Labor of the State of New York, an application for approval of a device designated:

SCAFFOLD INSTALLATION
(FOR WINDOW CLEANING, Glass replacement & Light Exterior Building Maintenance)
New 21'-9" Platform & Gondola, Roof Rigging
Roof elev. 238' above grade
This Approval Replaces Approval 8021 which was never approved

The system consists of a Manning & Lewis Engineering Company, modular Platform 21'-9", 4 wire platform, and Gondola used to clean the glass from the 20th floor Roof Level to grade.

This equipment has been operating without NYS Approval since 1976 due to a lapse in New York State jurisdictional authority that occurred during its installation, from July 1, 1975 to August 4, 1977. This resolution was requested by the building owner to grant NYS Approval to the equipment.

2. The Agent for the Applicant filed with the said application certain data as follows:
   a. A set of drawings for the equipment signed and sealed by a professional engineer licensed to practice in the State of New York.
   b. A set of pertinent architectural drawings of the building.
   c. Certifications regarding installation of the structural components of the system.
   d. A description of the installation, the equipment and its use.

3. The Commissioner of Labor finds that the said installation is as described in the attached equipment description of Façade Maintenance System (Window Cleaning and Light Exterior Building Maintenance, Roof), Agency Building 1, Empire State Plaza, Albany, NY, Dated November 15, 2013.

4. On December 12, 2013 ESU staff inspected the above installation and they are acceptable.

NOW, THEREFORE, IT IS RESOLVED:

1. That the said installation is hereby approved for use only at the above described location.

2. The Scaffold is approximately 21'-9" long x 2'-4" width stabilization for this installation is achieved by "Two (2) mullion guide assemblies are mounted on the inboard side of the platform on the top rail". After the platform is lowered over the side of the building, the guide assemblies are horizontally adjusted to line up with the building's mullion guide tracks and inserted to hold the platform adjacent to the building façade. The device is designed to sustain 600 lb. or more.

3. The Manning & Lewis Engineering Company modular platform has a maximum length of 21'-9" long, 4 wire platform. The Hoists are Manning & Lewis Engineering Company, and rigging. When not in use the window washing equipment is stored on the roof top garage.

4. The perimeter of the roof is surrounded with a concrete parapet wall approximately 3'-6" high.

5. This approval shall apply only when the said installation is manufactured, installed and maintained and used in accordance with this Approval and the following special requirements:

   a. Installations and alterations. (1) Before being put into initial use for its intended purpose, after the date of this Resolution, the equipment installation shall be inspected by the Commissioner of Labor's New York City office personnel. It shall not be used for its intended purpose until such inspection has been completed and the Commissioner has found the installation to be acceptable regarding compliance with this Resolution and has so notified the owner, or the owner's agent, in writing. A similar inspection shall be made following any major alteration to the installation.

b. Periodic inspection and tests. (1) Related building supporting structures shall undergo periodic inspection by a competent person at intervals not to exceed 12 months. (2) All parts of the equipment including control systems shall be inspected, and, where necessary, tested by a manufacturer/supplier, but not to exceed 12 months, to determine that they are in safe operating condition. Parts subject to wear such as wire ropes, bearings, gears, and governors shall be inspected and/or tested to determine that they have not worn to such an extent as to affect the safe operation of the installation. (3) The building owner shall keep a certification record of each inspection and test required herein.

c. Maintenance inspection and tests. (1) The scaffold owner shall furnish the Commissioner, in writing, a proposed program of maintenance procedures. Such a program shall be acceptable to the Commissioner and shall be subject to such modifications as the Commissioner may thereafter find necessary in order to assure safety. (2) The name and address of the person or firm designated by the owner to carry out such maintenance program shall be submitted, in writing, to the Commissioner and shall be acceptable to him. No other person or firm shall be employed or permitted to perform the required servicing and maintenance of the scaffold. Such designated person or firm shall be competent by reason of training and experience to service and maintain the scaffold. (3) The building owner shall keep a certification record of each maintenance inspection and test performed under c (1). The certification record shall include the date of the inspection and test, the signature of the person who performed the inspection and/or test, and an identifier for the platform installation which was inspected. The certification record shall be kept readily available for review by the Commissioner.

d. Continuous radio communication will be maintained between the window cleaning platform and a manned station at the building during the window washing operations.

e. Suspension wire rope replacement. (1) The suspension wire ropes for this installation shall be replaced after 36 months of use following the date of this approval and at 36 months intervals thereafter. (2) The wire rope shall be identified by means of a metal tag attached to a rigid part of the hoist, to one of the rope fittings or to each rope. Such tag shall contain the following information:

- Diameter in inches
- Manufacturer's rated breaking strength
- Grade of steel used
- Date of installation
- Construction classification
- Person or firm installing ropes
- Name of rope manufacturer

i. Whenever a rope is replaced a new metal tag shall be provided.

ii. Proper testing utilizing the manufacturer's gauge of swaged socket or compression fittings must be performed and documented prior to use of the platform, and gauge must be maintained onsite to inspect fittings before each use of the scaffold.

f. Defects and abnormal conditions. (1) When a substantial defect or abnormal condition is found in the scaffold or in any part thereof, the scaffold shall not be operated until such time as the defect or condition has been corrected and the scaffold has been re inspected by the Commissioner and found acceptable.

g. The scaffold shall bear, by impression or stamped metal plate, the identification authorized therefor. This scaffold and the parts shall be designated to use exclusively for the floors mentioned above, any dismantling and using the sections of this platform to use with other scaffold of the building shall not be permitted.

h. A copy of the Approval Resolution and a set of the filed data, including drawings, description of the equipment & operating procedures, shall be kept on the premises of the scaffold installation and shall be readily available to operating personnel, maintenance personnel and the Commissioner.

i. A plate indicating the maximum loading and the number of persons required to operate the scaffold shall be attached to the scaffold power unit in a conspicuous location. The lettering on such plate shall be legible and shall be not less than one-eight (1/8) inch in height. Operating controls shall be properly and permanently labeled to identify their respective functions.

j. Access and egress to and from the suspended scaffold shall be only from the roof level except for emergencies and maintenance.

k. A minimum of Two (2) and a maximum of Six (6) workers are required during all procedures requiring the movement of the suspended scaffold.

l. The persons on the suspended scaffold shall be provided with and shall use an approved body harness. The harness shall have a dual tail line not exceeding four feet in length and each segment must have a minimum breaking strength of 5,400 pounds. At least one segment of the tail line shall be attached to a taut cable attached to the scaffold at all times.

m. Harnesses and attachments shall be used, preserved, maintained and inspected in accordance with the provisions of Industrial Code Part (Rule No.21) and Industrial Code Part (Rule No. 23).

n. Before each daily operation the scaffold shall be subjected to inspection and test to assure its safe condition.

o. The persons designated to use this equipment installation shall be thoroughly trained for the proper and correct operation of the equipment. Such persons shall be directed to discontinue operation of the scaffold immediately upon observing any defect or abnormality and to report the same forthwith to the owner or his agent.

p. It shall be the responsibility of the applicant named in this Resolution to submit annually a Certification no more than (30) days nor less than fifteen (15) days prior to the anniversary date of the Approval, that the scaffold installation is being used and maintained in compliance with the specifications and data filed with his application and the requirements and conditions of the Resolution of Approval. Such annual Certification shall be in the form of a written statement to the Commissioner of Labor signed by an officer or a person duly authorized to act on behalf of the applicant and who is familiar with the materials, processes, controls and approval requirements and conditions of the subject of approval.

q. Filing of a false certification or failure to submit such annual certification shall be cause for proceeding by the Commissioner of Labor to terminate this Approval. Also, failure to notify the Commissioner of Labor of a change of name, ownership or address contained in this Approval, shall be cause of a termination proceeding.

r. The scaffold shall not be used when the prevailing wind velocity exceeds 25 miles per hour.

s. After being placed in service, each installation must be inspected at least once annually by the Commissioner of Labor's New York City office personnel.

t. In order to maintain active approval regularly scheduled equipment certification is required. Seven years after this approval is initially granted and then at least once every five years or sooner, if conditions warrant, the system installation shall be inspected by a licensed NY State Professional Engineer with experience in window washing equipment who shall in writing certify to the Engineering Services Unit (ESU) of the NYSDOL.

i) All components of the system are safe and functioning as Originally designed.
ii) All components of the system are free from defects or wear which would require replacement.
iii) According to all available records maintenance of equipment is in accordance with manufacturer's recommendation and Appendix 101A of NYSDOL Advisory Standard 101.
iv) Structural components continue to be capable of supporting all loading required by design.

8. The window washing platform will be used as a working surface for 2 glaziers and their tools.

Re-glazing procedure

The glazing units new and old will be passed thru the interior openings of the unit being replaced. The window washing platform will not be used to move the glass up or down. At no time will glazing units be supported by the platform.

a. Both glaziers working on the platform shall be trained on the operation of the platform
b. All tools used on the platform shall be tethered.
c. At no time shall workers and tools exceed weight limits of the platform
d. Equipment is to be used for window cleaning and light building maintenance.

9. That exclusive and unassignable authorization is hereby granted to the said applicant to identify the said device as follows:

WINDOW CLEANING SCAFFOLD
21'-9" Platform & Gondola

Owner

NEW YORK STATE APPROVAL NO. 10073

DATED: December 16, 2013

PETER M. RIVERA
COMMISSIONER OF LABOR

BY
VINCENT RAPACCIUOLO, P.E.
ASSOCIATE SAFETY & HEALTH ENGINEER

Prepared by:
Timothy Donlon, P.E.
Senior Safety and Health Engineer

Reviewed by:
Vincent Rapacciuolo, P.E.
Associate Safety and Health Engineer

upgrade SERVICES

33 West 19th Street, 4th Floor
New York, NY 10011
(646) 619-1377

October 8, 2013

Mr. Vincent Rapacciuolo
NYS Department of Labor
Associate Safety and Health Engineer
W. Averell Harriman State Office Campus
Building 12, Room 159
Albany NY 12240

Re: NYSDOL Advisory Standard 101 Certification at OGS Agency Bldg. 1

Mr. Rapacciuolo,

An inspection as required by NYSDOL Advisory Standard 101 was conducted at Agency Bldg. 1, Empire State Plaza, Albany, NY on July 10, 2013. The inspection was performed by Blaise Thomas, PE. The Approval Number for this installation is 8021. The approval was never issued.

I certify that the results of the inspection are as follows:

1. All components of the system are safe and functioning as originally designed.
2. All components of the system are free from defects or wear which would require replacement.
3. According to all available records, maintenance of equipment is in accordance with manufacturer's recommendation and Appendix 101A of NYSDOL Advisory Standard 101.
4. Structural components continue to be capable of supporting all loading required by design.

If you require additional information, please do not hesitate to contact me.

Sincerely,

Blaise Thomas, PE



cc:
OGS

upgrade SERVICES

33 West 19th Street, 4th Floor
New York, NY 10011
(646) 619-1377

EQUIPMENT DESCRIPTION
FAÇADE MAINTENANCE SYSTEM
(WINDOW CLEANING AND LIGHT BUILDING MAINTENANCE)
AGENCY BUILDING #1 – EMPIRE STATE PLAZA
ALBANY, NY
OCTOBER 8, 2013

GENERAL INFORMATION

This installation is designed for use in façade maintenance (window cleaning and light building maintenance) only on the referenced facades of the subject building. This is an existing building located at the Empire State Plaza, Albany NY. The Approval Number for this installation is #8021.

This equipment installation consists of a scaffold suspended by 4 wire ropes, from a track-type roof carriage. The work platform is made from structural aluminum shapes and is approximately 21 feet, 9 inches long and 4 feet wide. It has guardrails, midrails and toeboards on 4 sides, which are covered with wire mesh.

The track upon which the roof car travels consists of steel I-beams, which are supported and fastened to tubular steel posts. These posts in turn are welded to the building's roof structure. Appropriate track switches are provided for access to building corners and to the storage area. Power is provided to the roof car through a four conductor No.4 neoprene covered flexible power cable, which has an automatic take-up reel. A strain relief device is provided on the cable for attachment to anchor devices placed at the weather-proofed twist-lock outlets at appropriate intervals along the roof top. Both the platform and roof car hoist were manufactured by Manning & Lewis Engineering Co.

ROOF CAR HOIST

The Roof Car is positively and automatically locked at each work drop location before vertical operation of the work platform can begin. The Roof Car contains a single wrap winding drum, electrical controllers, and related equipment. The Roof Car is propelled by two 3/4 horsepower electric motors, one at each outboard wheel-truck. Both drive motors are equipped with a disc type magnetic brake to prevent further horizontal motion. The wire rope sheaves which guide the ropes are not less than 18 inches, which is greater than 40 rope diameters. The Roof Car has an access ladder and protected catwalks, allowing safe access to the Roof Car and the work platform.

FAÇADE STABILIZATION SYSTEM

Continuous tie-in devices are provided on the work platform, to engage the mullion guides provided on the face of the building. Guidance of the platform is also provided by tracks and rollers on the roof carriage while the platform is transferred to and from the roof carriage to the face of the building.

SUSPENSION ROPES

The platform is suspended from four 3/8 inch diameter wire ropes which are attached through spring-type load-equalizers to the platform structure. The wire ropes are suspended from outriggers which are attached to a track mounted roof carriage. The roof carriage is counterweighted and also has a continuously engaged-rolling rail claw. The overall stability with the rail claw exceeds 4:1. The hoisting ropes are each 3/8 inch diameter, 6x25, improved plow steel, with a minimum breaking strength of 13,200 pounds. The connections to the work platform are by means of forged and babbited thimbles, maintained by Upgrade Services.

HOISTING EQUIPMENT

The hoisting equipment consists of a 30 inch diameter grooved winding drum, directly driven through worm and spur gear speed reducers and a crane and hoist type electric motor with a magnetic disc brake. A centrifugally activated overspeed brake is also provided. A hand crank may be attached to the wormdrive to facilitate emergency retrieval of the platform. There is also an added safety feature, provided by the automatic setting of the secondary brake after a time delay of approximately two seconds after stopping the main drive motors, as a safety backup for the primary brake. This operation is accomplished so that the secondary brake does no work during normal operation, insuring that only the primary brake will be subject to wear.

SYSTEM OPERATION

No less than two, or more than six, workers will occupy the platform. The platform has a live load rating of 1,500 pounds. Constant pressure type of pushbutton controls and an emergency stop pushbutton are provided on the work platform as well as an emergency control station within a sealed enclosure on the Roof Car. Access to the platform at the roof elevation is through electrically interlocked gates of the Roof Car and the work platform.

LIMIT SWITCHES AND PUSH BUTTON CONTROLS

The design and general operation of pushbutton controls and limit switches for safety and operational purposes are listed below. Equipment will be controlled by pushbuttons of the constant-pressure type, allowing motion only while the operator is pressing the required button. It is intended that all operations of the equipment will be completely interlocked and provided with limit switches or mechanical interlocks to control operation.

On the Operator's Platform –

"UP" "DOWN" "INCH" "EMERGENCY STOP"

In the Roof Car –

"RIGHT TRAVERSE" "LEFT TRAVERSE" "EMERGENCY STOP"

Separately mounted on the Roof Car –

"EMERGENCY UP" "EMERGENCY DOWN" "EMERGENCY INCH BUTTON"

Each of the Stop buttons is of the maintained contact type and affords protection against sticking of the constant pressure pushbuttons which could be affected by cold weather or other external conditions. All the pushbuttons are weatherproof and equipped with rubber weather guards.

Other controls include:

Stop-Motion Multi-Cam Switch – acts as a stop motion switch, and to establish upper and lower inching zones.

Upper Limit Stop – also closes the circuit which permits traversing of the Roof Car, struck by the platform.

Upper Limit Final or Safe Stop (2 switches) – 2 switches are used, one at each end, which protects against overrunning the normal stop and against the platform not being level.

Lower Limit Stop – stops at bottom of track so you don't go past mullion guides.

Lower Limit Final or Safe Stop – activated by stop-motion device.

Slack Rope and Overtension Switches (4 switches) – one on each cable attachment, switches cut out main line contacts when cable is either slack or too tight.

Traveling Cable Protective Switches (2 switches) – activated by the weight at the traveling cable platform tie-off. Stops the down motion if the weight reaches the upper or lower limits of the guides, to avoid too much tension.

Locating Pin Down Switch – enforces alignment of the Roof Car at each working position.

Locating Pin Up Switch – insures disengagement of the locating pin before traversing of the Roof Car can occur.

Roof Car Gate Switch

Platform Gate Switch

Traverse Limiting Switches (2 switches) – prevents running past the storage spur track or past open switching.

Dummy Mullion Control (2 switches) – insures that dummy mullions are aligned with the mullions on the building before the platform can move, and that the mullions are raised before traversing can occur.

Power Cable Reel Protection – switch that stops motion of the Roof Car when the power cable has been drawn to the full effective limit of the cable reel.

Hand Crank Cut-Out – renders the power hoisting inoperative whenever the hand crank is positioned on the worm shaft.

Interference Switch – Guide Shoes - detects any obstruction in guide mullions and stops down travel.

ADDITIONAL TECHNICAL DATA

Building height – 20 stories, 238 feet above grade

Vertical Rise of Platform – 500 feet

Platform Dead Load – 2300 pounds

Platform Live Load – 1500 pounds, including workers, tools and equipment

Platform dimensions – 21.7 feet long, 4 feet wide, 3.58 feet high

Platform materials – 6061 – T6 Aluminum

Platform speed – 33 feet per minute for ascent and descent

Platform communication – occupants will have a two-way communication system (cell phone)

Power required – 440 volts, 3 phase, 60 HZ, 17 KVA

Wire Rope – 3/8 inch diameter

Ratio of wire rope diameter to drum diameter – 112:1

Ratio of wire rope diameter to pulley diameter – 40:1 or greater

B.S.A. Application Number _____ (copies required)

WINDOW CLEANING AND BUILDING MAINTENANCE SCAFFOLD

INSTALLATION DATA

[Re: Advisory Standards AS-101]

I. GENERAL DATA

(a) Applicant name Manning & Lewis Engineering Co. Address 675 Rahway Avenue Union, N.J.

(b) Building location Albany South Mall - Agency (c) Building height 262 ft. 20 Stories

(d) Vertical rise of platform 238 ft.

(e) Authorized agent: Name Manning & Lewis Engineering Co.

Address 675 Rahway Avenue, Union, N.J.

(f) Equipment supplied by: Name Manning & Lewis Engineering Co.,

Address 675 Rahway Avenue, Union, N.J.

II. SUSPENDED PLATFORM DATA

(a) Outline dwg. no. EW - 27310-3

(b) Loading: Live 1500 lbs.; Number of workmen 6

(c) Size: Length 21.7 ft.; Width 4.0 ft.; Weight 2300 lbs.

(d) Guardrail data:

(1) Height of outboard side & ends 3.58 ft. (2) Height of inboard side 3.0 ft.

(3) Material specifications Aluminum Type 6061-T6

(4) Toeboard specifications 5" High All Around

(e) Anchorage provided for tail line from approved safety belts (Check (1) or (2)):

(1) [ ] A 5/16-inch galvanized wire rope, secured at both ends of the scaffold and at the midpoint of the guardrail.

(f) Access to and egress from the suspended scaffold platform will be at Roof Level - Through Electrically Enforced Gates.

(g) Tie-in device: (1) Continuous X Dwg. No. EW-27363

(h) Vertical speed: (1) Ascent 32.9 fpm. (2) Descent 37.6 fpm.

B.S.A. Application Number _____ [copies required]

(i) Suspension data:

(1) Single point ____ (2) Double point X (3) Number of ropes per point 2

(4) Wire rope: Diameter 3/8 in.; Class Const.; Type 6 x 19

Breaking strength 13,200 lbs.; Total load per rope 1004 lbs.

(j) Personnel protection:

(1) An approved safety belt for each workman on the scaffold. By Owner

(2) An approved fire extinguisher on the scaffold platform. By Owner

(k) Emergency communication facilities to a manned station in the building _____

_____

(1) Telephone X (2) Two-way radio ____ (3) Other _____

III. SUSPENDED SCAFFOLD HOIST DATA: (Re: Advisory Standards AS-111)

(a) Hoist location: On suspended scaffold ____ ; Roof unit X

Approval number _____; Qty. 1 ; Number of drums 1

(b) Brakes: (1) Primary: Rating 50 ft.lbs.; Approval number _____

(2) Secondary: Rating 125 ft.lbs.; Approval number _____

(c) Prime mover:

(1) Electric: Speed 1200 rpm.; 7.5 hp.; 440 volts; 3 phase; 60 hz.

Maximum current per line _____

(2) Power or control cable: Wire size 16 ; No.of conductors 16 ; Ground Cond. Yes

Length 340 ft.; Stabilizers: Yes [ ]; No [X]

(d) Hoist drum: Single wrap X Diameter: 30 in.

Length: 74.875 in. Speed: 4.8 rpm.

(e) Ratio of wire rope diameter to drum diameter 80/1.

(f) Speed reduction: 250/1. Worm & gear [X]. Spur gear [X]. Other [ ] (Submit data)

(g) Electrical equipment is in compliance with the National Electrical Code in effect on the date of 1968 CODE.

(1) Thermal protection ____. (2) Current protection X. (3) Equip. Ground X.

B.S.A. Application Number _____ [copies required]

IV. SUSPENSION EQUIPMENT DATA

(a) Roof carriage:

(2) Track type: Dwg. No. DW-27309 ; No.of wheels 4 ; Wheel diameter 17 in.

Track specifications 8 WF 20+X-Ties No. of tracks 2 .

Position of tracks: Horizontal [X] Vertical [ ]

Track system is electrically grounded. Yes

Track system drawing number DW-27302-1 .

(Drawing and calculations to be made by or under the direction of a professional engineer licensed to practice in the State of New York and shall bear his seal and signature.)

(3) Horizontal carriage speed 25 fpm.

(4) Prime mover Electra Gearmotor .

(i) Electrical: .75 hp; 440 volts; 3 phase; 60 hz.; Amp/Ph _____.

Power cable: Wire size 12 . No.of conductors 3 .

Supplied with a ground conductor.

Length 80 ft. with a strain relief at both ends.

(ii) Electrical equipment is in compliance with the National Electrical Code in effect on the date of 1968 Code .

(5) Outriggers: Fixed [X]; Telescoping [ ]; Other _____.

Material Steel . Interlocked _____.

V. ELECTRICAL SYSTEM DATA

(a) Power and control schematic diagram number EW - 27348-2 .

(b) Installation is provided with an independent power circuit.

KVA 40 ; Volts 480 ; Phase 3 ; Amps/Phase 50 ; Hz. 60 .

(c) Total electrical load: Max. KVA 17 ; Max. Amps./Ph. 21 (Equipment)

I.S.A. Application Number _____ (copies required)

VI. BUILDING DATA

(a) Architectural drawings: Elevations 64/4-14 ; 64/4-37 ; _____ : _____.

Sections 64/4-15 : _____ ; _____ ; _____.

Plot plan 64/4-1 . Roof plan 64/4-10 .

Electrical receptacle plan 64/8-9, 64/8-3, 64/8-16 .

Window detail or sections 64/4-30 ; _____.

(b) Structural data: Associated plans or sections 64/3-5A, 64/3-5, 64/3-11 .

Engineering calculations submitted: Yes [X] - No [ ]

(c) All drawings and calculations are to be made by or under the direction of a registered architect or a professional engineer licensed to practice in the State of New York and shall bear his seal and signature.

VII. OTHER DATA SUBMITTED: Machine Specifications Dated - 10/5/66
Letter of Authorization - dated 12/8/72

SUBMITTED BY: Name Manning & Lewis Eng. Co. Signature _____
675 Rahway Ave., Union, N.J.

New York State Department of Labor
Andrew M. Cuomo, *Governor*
Peter M. Rivera, *Commissioner*

RESOLUTION OF SPECIAL APPROVAL

APPROVAL NO. 10074
APPLICANT: NYS Office of General Services
Real Property Management
Empire State Plaza, Corning Tower, 39th Floor
Albany, New York 12242

AGENT FOR THE APPLICANT: Upgrade Services
33 West 19th Street, 4th Floor
New York, NY 10011

BUILDING LOCATION: Agency Building 2, Empire State Plaza
Albany, NY 12242

WHEREAS:

1. The Agent for the Applicant filed with the Commissioner of Labor of the State of New York, an application for approval of a device designated:

SCAFFOLD INSTALLATION
(FOR WINDOW CLEANING, Glass replacement & Light Exterior Building Maintenance)
New 21'-9" Platform & Gondola, Roof Rigging
Roof elev. 238' above grade
This Approval Replaces Approval 8022 which was never approved

The system consists of a Manning & Lewis Engineering Company, modular Platform 21'-9", 4 wire platform, and Gondola used to clean the glass from the 20th floor Roof Level to grade.

This equipment has been operating without NYS Approval since 1976 due to a lapse in New York State jurisdictional authority that occurred during its installation, from July 1, 1975 to August 4, 1977. This resolution was requested by the building owner to grant NYS Approval to the equipment.

2. The Agent for the Applicant filed with the said application certain data as follows:
   a. A set of drawings for the equipment signed and sealed by a professional engineer licensed to practice in the State of New York.
   b. A set of pertinent architectural drawings of the building.
   c. Certifications regarding installation of the structural components of the system.
   d. A description of the installation, the equipment and its use.

3. The Commissioner of Labor finds that the said installation is as described in the attached equipment description of Façade Maintenance System (Window Cleaning and Light Exterior Building Maintenance, Roof), Agency Building 1, Empire State Plaza, Albany, NY, Dated November 15, 2013.

4. On December 12, 2013 ESU staff inspected the above installation and they are acceptable.

NOW, THEREFORE, IT IS RESOLVED:

1. That the said installation is hereby approved for use only at the above described location.

2. The Scaffold is approximately 21'-9" long x 2'-4" width stabilization for this installation is achieved by "Two (2) mullion guide assemblies are mounted on the inboard side of the platform on the top rail". After the platform is lowered over the side of the building, the guide assemblies are horizontally adjusted to line up with the building's mullion guide tracks and inserted to hold the platform adjacent to the building façade. The device is designed to sustain 600 lb. or more.

3. The Manning & Lewis Engineering Company modular platform has a maximum length of 21'-9" long, 4 wire platform. The Hoists are Manning & Lewis Engineering Company, and rigging. When not in use the window washing equipment is stored on the roof top garage.

4. The perimeter of the roof is surrounded with a concrete parapet wall approximately 3'-6" high.

5. This approval shall apply only when the said installation is manufactured, installed and maintained and used in accordance with this Approval and the following special requirements:

   a. Installations and alterations. (1) Before being put into initial use for its intended purpose, after the date of this Resolution, the equipment installation shall be inspected by the Commissioner of Labor's New York City office personnel. It shall not be used for its intended purpose until such inspection has been completed and the Commissioner has found the installation to be acceptable regarding compliance with this Resolution and has so notified the owner, or the owner's agent, in writing. A similar inspection shall be made following any major alteration to the installation.

b. Periodic inspection and tests. (1) Related building supporting structures shall undergo periodic inspection by a competent person at intervals not to exceed 12 months. (2) All parts of the equipment including control systems shall be inspected, and, where necessary, tested by a manufacturer/supplier, but not to exceed 12 months, to determine that they are in safe operating condition. Parts subject to wear such as wire ropes, bearings, gears, and governors shall be inspected and/or tested to determine that they have not worn to such an extent as to affect the safe operation of the installation. (3) The building owner shall keep a certification record of each inspection and test required herein.

c. Maintenance inspection and tests. (1) The scaffold owner shall furnish the Commissioner, in writing, a proposed program of maintenance procedures. Such a program shall be acceptable to the Commissioner and shall be subject to such modifications as the Commissioner may thereafter find necessary in order to assure safety. (2) The name and address of the person or firm designated by the owner to carry out such maintenance program shall be submitted, in writing, to the Commissioner and shall be acceptable to him. No other person or firm shall be employed or permitted to perform the required servicing and maintenance of the scaffold. Such designated person or firm shall be competent by reason of training and experience to service and maintain the scaffold. (3) The building owner shall keep a certification record of each maintenance inspection and test performed under c (1). The certification record shall include the date of the inspection and test, the signature of the person who performed the inspection and/or test, and an identifier for the platform installation which was inspected. The certification record shall be kept readily available for review by the Commissioner.

d. Continuous radio communication will be maintained between the window cleaning platform and a manned station at the building during the window washing operations.

e. Suspension wire rope replacement. (1) The suspension wire ropes for this installation shall be replaced after 36 months of use following the date of this approval and at 36 months intervals thereafter. (2) The wire rope shall be identified by means of a metal tag attached to a rigid part of the hoist, to one of the rope fittings or to each rope. Such tag shall contain the following information:

- Diameter in inches
- Manufacturer's rated breaking strength
- Grade of steel used
- Date of installation
- Construction classification
- Person or firm installing ropes
- Name of rope manufacturer

i. Whenever a rope is replaced a new metal tag shall be provided.

ii. Proper testing utilizing the manufacturer's gauge of swaged socket or compression fittings must be performed and documented prior to use of the platform, and gauge must be maintained onsite to inspect fittings before each use of the scaffold.

f. Defects and abnormal conditions. (1) When a substantial defect or abnormal condition is found in the scaffold or in any part thereof, the scaffold shall not be operated until such time as the defect or condition has been corrected and the scaffold has been re inspected by the Commissioner and found acceptable.

g. The scaffold shall bear, by impression or stamped metal plate, the identification authorized therefor. This scaffold and the parts shall be designated to use exclusively for the floors mentioned above, any dismantling and using the sections of this platform to use with other scaffold of the building shall not be permitted.

h. A copy of the Approval Resolution and a set of the filed data, including drawings, description of the equipment & operating procedures, shall be kept on the premises of the scaffold installation and shall be readily available to operating personnel, maintenance personnel and the Commissioner.

i. A plate indicating the maximum loading and the number of persons required to operate the scaffold shall be attached to the scaffold power unit in a conspicuous location. The lettering on such plate shall be legible and shall be not less than one-eight (1/8) inch in height. Operating controls shall be properly and permanently labeled to identify their respective functions.

j. Access and egress to and from the suspended scaffold shall be only from the roof level except for emergencies and maintenance.

k. A minimum of Two (2) and a maximum of Six (6) workers are required during all procedures requiring the movement of the suspended scaffold.

l. The persons on the suspended scaffold shall be provided with and shall use an approved body harness. The harness shall have a dual tail line not exceeding four feet in length and each segment must have a minimum breaking strength of 5,400 pounds. At least one segment of the tail line shall be attached to a taut cable attached to the scaffold at all times.

m. Harnesses and attachments shall be used, preserved, maintained and inspected in accordance with the provisions of Industrial Code Part (Rule No.21) and Industrial Code Part (Rule No. 23).

n. Before each daily operation the scaffold shall be subjected to inspection and test to assure its safe condition.

o. The persons designated to use this equipment installation shall be thoroughly trained for the proper and correct operation of the equipment. Such persons shall be directed to discontinue operation of the scaffold immediately upon observing any defect or abnormality and to report the same forthwith to the owner or his agent.

p. It shall be the responsibility of the applicant named in this Resolution to submit annually a Certification no more than (30) days nor less than fifteen (15) days prior to the anniversary date of the Approval, that the scaffold installation is being used and maintained in compliance with the specifications and data filed with his application and the requirements and conditions of the Resolution of Approval. Such annual Certification shall be in the form of a written statement to the Commissioner of Labor signed by an officer or a person duly authorized to act on behalf of the applicant and who is familiar with the materials, processes, controls and approval requirements and conditions of the subject of approval.

q. Filing of a false certification or failure to submit such annual certification shall be cause for proceeding by the Commissioner of Labor to terminate this Approval. Also, failure to notify the Commissioner of Labor of a change of name, ownership or address contained in this Approval, shall be cause of a termination proceeding.

r. The scaffold shall not be used when the prevailing wind velocity exceeds 25 miles per hour.

s. After being placed in service, each installation must be inspected at least once annually by the Commissioner of Labor's New York City office personnel.

t. In order to maintain active approval regularly scheduled equipment certification is required. Seven years after this approval is initially granted and then at least once every five years or sooner, if conditions warrant, the system installation shall be inspected by a licensed NY State Professional Engineer with experience in window washing equipment who shall in writing certify to the Engineering Services Unit (ESU) of the NYSDOL.

i) All components of the system are safe and functioning as Originally designed.
ii) All components of the system are free from defects or wear which would require replacement.
iii) According to all available records maintenance of equipment is in accordance with manufacturer's recommendation and Appendix 101A o NYSDOL Advisory Standard 101.
iv) Structural components continue to be capable of supporting all loading required by design.

8. The window washing platform will be used as a working surface for 2 glaziers and their tools.

Re-glazing procedure

The glazing units new and old will be passed thru the interior openings of the unit being replaced. The window washing platform will not be used to move the glass up or down. At no time will glazing units be supported by the platform.

a. Both glaziers working on the platform shall be trained on the operation of the platform
b. All tools used on the platform shall be tethered.
c. At no time shall workers and tools exceed weight limits of the platform
d. Equipment is to be used for window cleaning and light building maintenance.

9. That exclusive and unassignable authorization is hereby granted to the said applicant to identify the said device as follows:

WINDOW CLEANING SCAFFOLD
21'-9" Platform & Gondola

Owner

NEW YORK STATE APPROVAL NO. 10074

DATED: December 16, 2013

PETER M. RIVERA
COMMISSIONER OF LABOR

BY
VINCENT RAPACCIUOLO, P.E.
ASSOCIATE SAFETY & HEALTH ENGINEER

Prepared by:
Timothy Donlon, P.E.
Senior Safety and Health Engineer

Reviewed by:
Vincent Rapacciuolo, P.E.
Associate Safety and Health Engineer

upgrade SERVICES

33 West 19th Street, 4th Floor
New York, NY 10011
(646) 619-1377

October 8, 2013

Mr. Vincent Rapacciuolo
NYS Department of Labor
Associate Safety and Health Engineer
W. Averell Harriman State Office Campus
Building 12, Room 159
Albany NY 12240

Re: NYSDOL Advisory Standard 101 Certification at OGS Agency Bldg. 1

Mr. Rapacciuolo,

An inspection as required by NYSDOL Advisory Standard 101 was conducted at Agency Bldg. 1, Empire State Plaza, Albany, NY on July 10, 2013. The inspection was performed by Blaise Thomas, PE. The Approval Number for this installation is 8021. The approval was never issued.

I certify that the results of the inspection are as follows:

1. All components of the system are safe and functioning as originally designed.
2. All components of the system are free from defects or wear which would require replacement.
3. According to all available records, maintenance of equipment is in accordance with manufacturer's recommendation and Appendix 101A of NYSDOL Advisory Standard 101.
4. Structural components continue to be capable of supporting all loading required by design.

If you require additional information, please do not hesitate to contact me.

Sincerely,

Blaise Thomas, PE

STATE OF NEW YORK
BLAISE A. THOMAS
065612-1
LICENSED PROFESSIONAL ENGINEER

cc:
OGS

upgrade SERVICES

33 West 19th Street, 4th Floor
New York, NY 10011
(646) 619-1377

EQUIPMENT DESCRIPTION
FAÇADE MAINTENANCE SYSTEM
(WINDOW CLEANING AND LIGHT BUILDING MAINTENANCE)
AGENCY BUILDING #1 – EMPIRE STATE PLAZA
ALBANY, NY
OCTOBER 8, 2013

GENERAL INFORMATION

This installation is designed for use in façade maintenance (window cleaning and light building maintenance) only on the referenced facades of the subject building. This is an existing building located at the Empire State Plaza, Albany NY. The Approval Number for this installation is #8021.

This equipment installation consists of a scaffold suspended by 4 wire ropes, from a track-type roof carriage. The work platform is made from structural aluminum shapes and is approximately 21 feet, 9 inches long and 4 feet wide. It has guardrails, midrails and toeboards on 4 sides, which are covered with wire mesh.

The track upon which the roof car travels consists of steel I-beams, which are supported and fastened to tubular steel posts. These posts in turn are welded to the building's roof structure. Appropriate track switches are provided for access to building corners and to the storage area. Power is provided to the roof car through a four conductor No.4 neoprene covered flexible power cable, which has an automatic take-up reel. A strain relief device is provided on the cable for attachment to anchor devices placed at the weather-proofed twist-lock outlets at appropriate intervals along the roof top. Both the platform and roof car hoist were manufactured by Manning & Lewis Engineering Co.

ROOF CAR HOIST

The Roof Car is positively and automatically locked at each work drop location before vertical operation of the work platform can begin. The Roof Car contains a single wrap winding drum, electrical controllers, and related equipment. The Roof Car is propelled by two 3/4 horsepower electric motors, one at each outboard wheel-truck. Both drive motors are equipped with a disc type magnetic brake to prevent further horizontal motion. The wire rope sheaves which guide the ropes are not less than 18 inches, which is greater than 40 rope diameters. The Roof Car has an access ladder and protected catwalks, allowing safe access to the Roof Car and the work platform.

FACADE STABILIZATION SYSTEM

Continuous tie-in devices are provided on the work platform, to engage the mullion guides provided on the face of the building. Guidance of the platform is also provided by tracks and rollers on the roof carriage while the platform is transferred to and from the roof carriage to the face of the building.

SUSPENSION ROPES

The platform is suspended from four 3/8 inch diameter wire ropes which are attached through spring-type load-equalizers to the platform structure. The wire ropes are suspended from outriggers which are attached to a track mounted roof carriage. The roof carriage is counterweighted and also has a continuously engaged-rolling rail claw. The overall stability with the rail claw exceeds 4:1. The hoisting ropes are each 3/8 inch diameter, 6x25, improved plow steel, with a minimum breaking strength of 13,200 pounds. The connections to the work platform are by means of forged and babbited thimbles, maintained by Upgrade Services.

HOISTING EQUIPMENT

The hoisting equipment consists of a 30 inch diameter grooved winding drum, directly driven through worm and spur gear speed reducers and a crane and hoist type electric motor with a magnetic disc brake. A centrifugally activated overspeed brake is also provided. A hand crank may be attached to the wormdrive to facilitate emergency retrieval of the platform. There is also an added safety feature, provided by the automatic setting of the secondary brake after a time delay of approximately two seconds after stopping the main drive motors, as a safety backup for the primary brake. This operation is accomplished so that the secondary brake does no work during normal operation, insuring that only the primary brake will be subject to wear.

SYSTEM OPERATION

No less than two, or more than six, workers will occupy the platform. The platform has a live load rating of 1,500 pounds. Constant pressure type of pushbutton controls and an emergency stop pushbutton are provided on the work platform as well as an emergency control station within a sealed enclosure on the Roof Car. Access to the platform at the roof elevation is through electrically interlocked gates of the Roof Car and the work platform.

LIMIT SWITCHES AND PUSH BUTTON CONTROLS

The design and general operation of pushbutton controls and limit switches for safety and operational purposes are listed below. Equipment will be controlled by pushbuttons of the constant-pressure type, allowing motion only while the operator is pressing the required button. It is intended that all operations of the equipment will be completely interlocked and provided with limit switches or mechanical interlocks to control operation.

On the Operator's Platform –

"UP" "DOWN" "INCH" "EMERGENCY STOP"

In the Roof Car –

"RIGHT TRAVERSE" "LEFT TRAVERSE" "EMERGENCY STOP"

Separately mounted on the Roof Car –

"EMERGENCY UP" "EMERGENCY DOWN" "EMERGENCY INCH BUTTON"

Each of the Stop buttons is of the maintained contact type and affords protection against sticking of the constant pressure pushbuttons which could be affected by cold weather or other external conditions. All the pushbuttons are weatherproof and equipped with rubber weather guards.

Other controls include:

Stop-Motion Multi-Cam Switch – acts as a stop motion switch, and to establish upper and lower inching zones.

Upper Limit Stop – also closes the circuit which permits traversing of the Roof Car, struck by the platform.

Upper Limit Final or Safe Stop (2 switches) – 2 switches are used, one at each end, which protects against overrunning the normal stop and against the platform not being level.

Lower Limit Stop – stops at bottom of track so you don't go past mullion guides.

Lower Limit Final or Safe Stop – activated by stop-motion device.

Slack Rope and Overtension Switches (4 switches) – one on each cable attachment, switches cut out main line contacts when cable is either slack or too tight.

Traveling Cable Protective Switches (2 switches) – activated by the weight at the traveling cable platform tie-off. Stops the down motion if the weight reaches the upper or lower limits of the guides, to avoid too much tension.

Locating Pin Down Switch – enforces alignment of the Roof Car at each working position.

Locating Pin Up Switch – insures disengagement of the locating pin before traversing of the Roof Car can occur.

Roof Car Gate Switch

Platform Gate Switch

Traverse Limiting Switches (2 switches) – prevents running past the storage spur track or past open switching.

Dummy Mullion Control (2 switches) – insures that dummy mullions are aligned with the mullions on the building before the platform can move, and that the mullions are raised before traversing can occur.

Power Cable Reel Protection – switch that stops motion of the Roof Car when the power cable has been drawn to the full effective limit of the cable reel.

Hand Crank Cut-Out – renders the power hoisting inoperative whenever the hand crank is positioned on the worm shaft.

Interference Switch – Guide Shoes - detects any obstruction in guide mullions and stops down travel.

ADDITIONAL TECHNICAL DATA

Building height – 20 stories, 238 feet above grade

Vertical Rise of Platform – 500 feet

Platform Dead Load – 2300 pounds

Platform Live Load – 1500 pounds, including workers, tools and equipment

Platform dimensions – 21.7 feet long, 4 feet wide, 3.58 feet high

Platform materials – 6061 – T6 Aluminum

Platform speed – 33 feet per minute for ascent and descent

Platform communication – occupants will have a two-way communication system (cell phone)

Power required – 440 volts, 3 phase, 60 HZ, 17 KVA

Wire Rope – 3/8 inch diameter

Ratio of wire rope diameter to drum diameter – 112:1

Ratio of wire rope diameter to pulley diameter – 40:1 or greater

B.S.A. Application Number _____ (4 copies required)

WINDOW CLEANING AND BUILDING MAINTENANCE SCAFFOLD

INSTALLATION DATA

[Re: Advisory Standards AS-101]

I. GENERAL DATA

(a) Applicant name Manning & Lewis Engineering Co. Address 675 Rahway Avenue Union, N.J.

(b) Building location Albany South Mall - Agency (c) Building height 262 ft. 20 Stories (d) Vertical rise of platform 238 ft.

(e) Authorized agent: Name Manning & Lewis Engineering Co.
Address 675 Rahway Avenue, Union, N.J.

(f) Equipment supplied by: Name Manning & Lewis Engineering Co.,
Address 675 Rahway Avenue, Union, N.J.

II. SUSPENDED PLATFORM DATA

(a) Outline dwg. no. EW - 27310-3

(b) Loading: Live 1500 lbs.; Number of workmen 6

(c) Size: Length 21.7 ft.; Width 4.0 ft.; Weight 2300 lbs.

(d) Guardrail data:

(1) Height of outboard side & ends 3.58 ft. (2) Height of inboard side 3.0 ft.

(3) Material specifications Aluminum Type 6061-T6

(4) Toeboard specifications 5" High All Around

(e) Anchorage provided for tail line from approved safety belts (Check (1) or (2)):

(1) [ ] A 5/16-inch galvanized wire rope, secured at both ends of the scaffold and at the midpoint of the guardrail.

(f) Access to and egress from the suspended scaffold platform will be at Roof Level - Through Electrically Enforced Gates.

(g) Tie-in device: (1) Continuous X Dwg. No. EW-27363

(h) Vertical speed: (1) Ascent 32.9 fpm. (2) Descent 37.6 fpm

B.S.A. Application Number: _____ [copies required]

(i) Suspension data:

(1) Single point____ (2) Double point X (3) Number of ropes per point 2

(4) Wire rope: Diameter 3/8 in.; Class Const.; Type 6 x 19

Breaking strength 13,200 lbs.; Total load per rope 1004 lbs.

(j) Personnel protection:

(1) An approved safety belt for each workman on the scaffold. By Owner

(2) An approved fire extinguisher on the scaffold platform. By Owner

(k) Emergency communication facilities to a manned station in the building _____

_____

(1) Telephone X (2) Two-way radio ____ (3) Other _____

III. SUSPENDED SCAFFOLD HOIST DATA: (Re: Advisory Standards AS-111)

(a) Hoist location: On suspended scaffold ____; Roof unit X

Approval number_____; Qty. 1 ; Number of drums 1

(b) Brakes: (1) Primary: Rating 50 ft.lbs.; Approval number _____

(2) Secondary: Rating 125 ft.lbs.; Approval number _____

(c) Prime mover:

(1) Electric: Speed 1200 rpm.; 7.5 hp.; 440 volts; 3 phase; 60 hz.

Maximum current per line _____

(2) Power or control cable: Wire size 16; No.of conductors 16; Ground Cond. Yes

Length 340 ft.; Stabilizers: Yes [ ]; No [X]

(d) Hoist drum: Single wrap X Diameter: 30 in.

Length: 74.875 in. Speed: 4.8 rpm.

(e) Ratio of wire rope diameter to drum diameter 80/1.

(f) Speed reduction: 250/1. Worm & gear[X]. Spur gear [X]. Other [ ] (Submit data).

(g) Electrical equipment is in compliance with the National Electrical Code in effect on the date of 1968 CODE.

(1) Thermal protection____. (2) Current protection X. (3) Equip. Ground X.

B.S.A. Application Number _____ [copies required]

IV. SUSPENSION EQUIPMENT DATA

(a) Roof carriage:

(2) Track type: Dwg. No. DW-27309; No.of wheels 4; Wheel diameter 17 in.

Track specifications 8 WF 20+X-Ties No. of tracks 2.

Position of tracks: Horizontal [X] Vertical [ ]

Track system is electrically grounded. Yes

Track system drawing number DW-27302-1.

(Drawing and calculations to be made by or under the direction of a professional engineer licensed to practice in the State of New York and shall bear his seal and signature.)

(3) Horizontal carriage speed 25 fpm.

(4) Prime mover Electra Gearmotor.

(i) Electrical: .75 hp; 440 volts; 3 phase; 60 hz.; Amp/Ph _____.

Power cable: Wire size 12. No.of conductors 3.

Supplied with a ground conductor.

Length 80 ft. with a strain relief at both ends.

(ii) Electrical equipment is in compliance with the National Electrical Code in effect on the date of 1968 Code.

(5) Outriggers: Fixed [X]; Telescoping [ ]; Other _____.

Material Steel. Interlocked _____.

V. ELECTRICAL SYSTEM DATA

(a) Power and control schematic diagram number EW - 27348-2.

(b) Installation is provided with an independent power circuit.

KVA 40; Volts 480; Phase 3; Amps/Phase 50; Hz. 60.

(c) Total electrical load: Max. KVA 17; Max. Amps./Ph. 21 (Equipment)

(copies required)

I.S.A. Application Number: _____

VI. BUILDING DATA

(a) Architectural drawings: Elevations 64/4-14 ; 64/4-37 ; _____ : _____.

Sections 64/4-15 : _____ ; _____ ; _____.

Plot plan 64/4-1 . Roof plan 64/4-10 .

Electrical receptacle plan 64/8-9, 64/8-3, 64/8-16 .

Window detail or sections 64/4-30 ; _____.

(b) Structural data: Associated plans or sections 64/3-5A, 64/3-5, 64/3-11 .

Engineering calculations submitted: Yes [X] - No [ ]

(c) All drawings and calculations are to be made by or under the direction of a registered architect or a professional engineer licensed to practice in the State of New York and shall bear his seal and signature.

VII. OTHER DATA SUBMITTED: Machine Specifications Dated - 10/5/66
Letter of Authorization - dated 12/8/72

SUBMITTED BY: Name Manning & Lewis Eng. Co. Signature [signature]

New York State Department of Labor
Andrew M. Cuomo, *Governor*
Peter M. Rivera, *Commissioner*

January 14, 2014

NYS Office of General Services
Real Property Management
Empire State Plaza, Corning Tower, 39th Floor
Albany, New York 12242

Re: Resolution of Special Approval
No. 10075

Dear Sir:

We are enclosing a copy of the Resolution of Special Approval Number 10075 dated January 14, 2014.

Sincerely,

Timothy Donlon, P.E.
Senior Safety & Health Engineer

SM:md
cc: NYC Industry

New York State Department of Labor
Andrew M. Cuomo, *Governor*
Peter M. Rivera, *Commissioner*

RESOLUTION OF SPECIAL APPROVAL

APPROVAL NO. 10075
APPLICANT: NYS Office of General Services
Real Property Management
Empire State Plaza, Corning Tower, 39th Floor
Albany, New York 12242

AGENT FOR THE APPLICANT: Upgrade Services
33 West 19th Street, 4th Floor
New York, NY 10011

BUILDING LOCATION: Agency Building 3, Empire State Plaza
Albany, NY 12242

WHEREAS:

1. The Agent for the Applicant filed with the Commissioner of Labor of the State of New York, an application for approval of a device designated:

SCAFFOLD INSTALLATION
(FOR WINDOW CLEANING, Glass replacement & Light Exterior Building Maintenance)
New 21'-9" Platform & Gondola, Roof Rigging
Roof elev. 238' above grade
This Approval Replaces Approval 8023 which was never approved

The system consists of a Manning & Lewis Engineering Company, modular Platform 21'-9", 4 wire platform, and Gondola used to clean the glass from the 20th floor Roof Level to grade.

This equipment has been operating without NYS Approval since 1976 due to a lapse in New York State jurisdictional authority that occurred during its installation, from July 1, 1975 to August 4, 1977. This resolution was requested by the building owner to grant NYS Approval to the equipment.

2. The Agent for the Applicant filed with the said application certain data as follows:
   a. A set of drawings for the equipment signed and sealed by a professional engineer licensed to practice in the State of New York.
   b. A set of pertinent architectural drawings of the building.
   c. Certifications regarding installation of the structural components of the system.
   d. A description of the installation, the equipment and its use.

3. The Commissioner of Labor finds that the said installation is as described in the attached equipment description of Façade Maintenance System (Window Cleaning and Light Exterior Building Maintenance, Roof), Agency Building 1, Empire State Plaza, Albany, NY, Dated November 15, 2013.

4. On January 13, 2014 ESU staff inspected the above installation and they are acceptable.

NOW, THEREFORE, IT IS RESOLVED:

1. That the said installation is hereby approved for use only at the above described location.

2. The Scaffold is approximately 21'-9" long x 4'-0" width stabilization for this installation is achieved by "Two (2) mullion guide assemblies are mounted on the inboard side of the platform on the top rail". After the platform is lowered over the side of the building, the guide assemblies are horizontally adjusted to line up with the building's mullion guide tracks and inserted to hold the platform adjacent to the building façade. The device is designed to sustain 600 lb. or more.

3. The Manning & Lewis Engineering Company modular platform has a maximum length of 21'-9" long, 4 wire platform. The Hoists are Manning & Lewis Engineering Company, and rigging. When not in use the window washing equipment is stored on the roof top garage.

4. The perimeter of the roof is surrounded with a concrete parapet wall approximately 3'-6" high.

5. This approval shall apply only when the said installation is manufactured, installed and maintained and used in accordance with this Approval and the following special requirements:

   a. Installations and alterations. (1) Before being put into initial use for its intended purpose, after the date of this Resolution, the equipment installation shall be inspected by the Commissioner of Labor's New York City office personnel. It shall not be used for its intended purpose until such inspection has been completed and the Commissioner has found the installation to be acceptable regarding compliance with this Resolution and has so notified the owner, or the owner's agent, in writing. A similar inspection shall be made following any major alteration to the installation.

b. Periodic inspection and tests. (1) Related building supporting structures shall undergo periodic inspection by a competent person at intervals not to exceed 12 months. (2) All parts of the equipment including control systems shall be inspected, and, where necessary, tested by a manufacturer/supplier, but not to exceed 12 months, to determine that they are in safe operating condition. Parts subject to wear such as wire ropes, bearings, gears, and governors shall be inspected and/or tested to determine that they have not worn to such an extent as to affect the safe operation of the installation. (3) The building owner shall keep a certification record of each inspection and test required herein.

c. Maintenance inspection and tests. (1) The scaffold owner shall furnish the Commissioner, in writing, a proposed program of maintenance procedures. Such a program shall be acceptable to the Commissioner and shall be subject to such modifications as the Commissioner may thereafter find necessary in order to assure safety. (2) The name and address of the person or firm designated by the owner to carry out such maintenance program shall be submitted, in writing, to the Commissioner and shall be acceptable to him. No other person or firm shall be employed or permitted to perform the required servicing and maintenance of the scaffold. Such designated person or firm shall be competent by reason of training and experience to service and maintain the scaffold. (3) The building owner shall keep a certification record of each maintenance inspection and test performed under c (1). The certification record shall include the date of the inspection and test, the signature of the person who performed the inspection and/or test, and an identifier for the platform installation which was inspected. The certification record shall be kept readily available for review by the Commissioner.

d. Continuous radio communication will be maintained between the window cleaning platform and a manned station at the building during the window washing operations.

e. Suspension wire rope replacement. (1) The suspension wire ropes for this installation shall be replaced after 36 months of use following the date of this approval and at 36 months intervals thereafter. (2) The wire rope shall be identified by means of a metal tag attached to a rigid part of the hoist, to one of the rope fittings or to each rope. Such tag shall contain the following information:

- Diameter in inches
- Manufacturer's rated breaking strength
- Grade of steel used
- Date of installation
- Construction classification
- Person or firm installing ropes
- Name of rope manufacturer

i. Whenever a rope is replaced a new metal tag shall be provided.

ii. Proper testing utilizing the manufacturer's gauge of swaged socket or compression fittings must be performed and documented prior to use of the platform, and gauge must be maintained onsite to inspect fittings before each use of the scaffold.

f. Defects and abnormal conditions. (1) When a substantial defect or abnormal condition is found in the scaffold or in any part thereof, the scaffold shall not be operated until such time as the defect or condition has been corrected and the scaffold has been re inspected by the Commissioner and found acceptable.

g. The scaffold shall bear, by impression or stamped metal plate, the identification authorized therefor. This scaffold and the parts shall be designated to use exclusively for the floors mentioned above, any dismantling and using the sections of this platform to use with other scaffold of the building shall not be permitted.

h. A copy of the Approval Resolution and a set of the filed data, including drawings, description of the equipment & operating procedures, shall be kept on the premises of the scaffold installation and shall be readily available to operating personnel, maintenance personnel and the Commissioner.

i. A plate indicating the maximum loading and the number of persons required to operate the scaffold shall be attached to the scaffold power unit in a conspicuous location. The lettering on such plate shall be legible and shall be not less than one-eight (1/8) inch in height. Operating controls shall be properly and permanently labeled to identify their respective functions.

j. Access and egress to and from the suspended scaffold shall be only from the roof level except for emergencies and maintenance.

k. A minimum of Two (2) and a maximum of Six (6) workers are required during all procedures requiring the movement of the suspended scaffold.

l. The persons on the suspended scaffold shall be provided with and shall use an approved body harness. The harness shall have a dual tail line not exceeding four feet in length and each segment must have a minimum breaking strength of 5,400 pounds. At least one segment of the tail line shall be attached to a taut cable attached to the scaffold at all times.

m. Harnesses and attachments shall be used, preserved, maintained and inspected in accordance with the provisions of Industrial Code Part (Rule No.21) and Industrial Code Part (Rule No. 23).

n. Before each daily operation the scaffold shall be subjected to inspection and test to assure its safe condition.

o. The persons designated to use this equipment installation shall be thoroughly trained for the proper and correct operation of the equipment. Such persons shall be directed to discontinue operation of the scaffold immediately upon observing any defect or abnormality and to report the same forthwith to the owner or his agent.

p. It shall be the responsibility of the applicant named in this Resolution to submit annually a Certification no more than (30) days nor less than fifteen (15) days prior to the anniversary date of the Approval, that the scaffold installation is being used and maintained in compliance with the specifications and data filed with his application and the requirements and conditions of the Resolution of Approval. Such annual Certification shall be in the form of a written statement to the Commissioner of Labor signed by an officer or a person duly authorized to act on behalf of the applicant and who is familiar with the materials, processes, controls and approval requirements and conditions of the subject of approval.

q. Filing of a false certification or failure to submit such annual certification shall be cause for proceeding by the Commissioner of Labor to terminate this Approval. Also, failure to notify the Commissioner of Labor of a change of name, ownership or address contained in this Approval, shall be cause of a termination proceeding.

r. The scaffold shall not be used when the prevailing wind velocity exceeds 25 miles per hour.

s. After being placed in service, each installation must be inspected at least once annually by the Commissioner of Labor's New York City office personnel.

t. In order to maintain active approval regularly scheduled equipment certification is required. Seven years after this approval is initially granted and then at least once every five years or sooner, if conditions warrant, the system installation shall be inspected by a licensed NY State Professional Engineer with experience in window washing equipment who shall in writing certify to the Engineering Services Unit (ESU) of the NYSDOL.

i) All components of the system are safe and functioning as Originally designed.
ii) All components of the system are free from defects or wear which would require replacement.
iii) According to all available records maintenance of equipment is in accordance with manufacturer's recommendation and Appendix 101A of NYSDOL Advisory Standard 101.
iv) Structural components continue to be capable of supporting all loading required by design.

8. The window washing platform will be used as a working surface for 2 glaziers and their tools.

Re-glazing procedure

The glazing units new and old will be passed thru the interior openings of the unit being replaced. The window washing platform will not be used to move the glass up or down. At no time will glazing units be supported by the platform.

a. Both glaziers working on the platform shall be trained on the operation of the platform
b. All tools used on the platform shall be tethered.
c. At no time shall workers and tools exceed weight limits of the platform
d. Equipment is to be used for window cleaning and light building maintenance.

9. That exclusive and unassignable authorization is hereby granted to the said applicant to identify the said device as follows:

WINDOW CLEANING SCAFFOLD
21'-9" Platform & Gondola

Owner

NEW YORK STATE APPROVAL NO. 10075

DATED: January 14, 2014

PETER M. RIVERA
COMMISSIONER OF LABOR

BY
VINCENT RAPACCIUOLO, P.E.
ASSOCIATE SAFETY & HEALTH ENGINEER

Prepared by:
Timothy Donlon, P.E.
Senior Safety and Health Engineer

Reviewed by:
Vincent Rapacciuolo, P.E.
Associate Safety and Health Engineer

EQUIPMENT DESCRIPTION

FAÇADE MAINTENANCE SYSTEM

(WINDOW CLEANING AND LIGHT BUILDING MAINTENANCE)

AGENCY BUILDING #3 – EMPIRE STATE PLAZA

ALBANY, NY

JANUARY 6, 2014

GENERAL INFORMATION

This installation is designed for use in façade maintenance (window cleaning and light building maintenance) only on the referenced facades of the subject building. This is an existing building located at the Empire State Plaza, Albany NY. The Approval Number for this installation is #8023.

This equipment installation consists of a scaffold suspended by 4 wire ropes, from a track-type roof carriage. The work platform is made from structural aluminum shapes and is approximately 21 feet, 9 inches long and 4 feet wide. It has guardrails, midrails and toeboards on 4 sides, which are covered with wire mesh.

The track upon which the roof car travels consists of steel I-beams, which are supported and fastened to tubular steel posts. These posts in turn are welded to the building's roof structure. Appropriate track switches are provided for access to building corners and to the storage area. Power is provided to the roof car through a four conductor No.4 neoprene covered flexible power cable, which has an automatic take-up reel. A strain relief device is provided on the cable for attachment to anchor devices placed at the weather-proofed twist-lock outlets at appropriate intervals along the roof top. Both the platform and roof car hoist were manufactured by Manning & Lewis Engineering Co.

ROOF CAR HOIST

The Roof Car is positively and automatically locked at each work drop location before vertical operation of the work platform can begin. The Roof Car contains a single wrap winding drum, electrical controllers, and related equipment. The Roof Car is propelled by two 3/4 horsepower electric motors, one at each outboard wheel-truck. Both drive motors are equipped with a disc type magnetic brake to prevent further horizontal motion. The wire rope sheaves which guide the ropes are not less than 18 inches, which is greater than 40 rope diameters. The Roof Car has an access ladder and protected catwalks, allowing safe access to the Roof Car and the work platform.

FAÇADE STABILIZATION SYSTEM

Continuous tie-in devices are provided on the work platform, to engage the mullion guides provided on the face of the building. Guidance of the platform is also provided by tracks and rollers on the roof carriage while the platform is transferred to and from the roof carriage to the face of the building.

SUSPENSION ROPES

The platform is suspended from four 3/8 inch diameter wire ropes which are attached through spring-type load-equalizers to the platform structure. The wire ropes are suspended from outriggers which are attached to a track mounted roof carriage. The roof carriage is counterweighted and also has a continuously engaged-rolling rail claw. The overall stability with the rail claw exceeds 4:1. The hoisting ropes are each 3/8 inch diameter, 6x25, improved plow steel, with a minimum breaking strength of 13,200 pounds. The connections to the work platform are by means of forged and babbited thimbles, maintained by Upgrade Services.

HOISTING EQUIPMENT

The hoisting equipment consists of a 30 inch diameter grooved winding drum, directly driven through worm and spur gear speed reducers and a crane and hoist type electric motor with a magnetic disc brake. A centrifugally activated

overspeed brake is also provided. A hand crank may be attached to the wormdrive to facilitate emergency retrieval of the platform. There is also an added safety feature, provided by the automatic setting of the secondary brake after a time delay of approximately two seconds after stopping the main drive motors, as a safety backup for the primary brake. This operation is accomplished so that the secondary brake does no work during normal operation, insuring that only the primary brake will be subject to wear.

SYSTEM OPERATION

No less than two, or more than six, workers will occupy the platform. The platform has a live load rating of 1,500 pounds. Constant pressure type of pushbutton controls and an emergency stop pushbutton are provided on the work platform as well as an emergency control station within a sealed enclosure on the Roof Car. Access to the platform at the roof elevation is through electrically interlocked gates of the Roof Car and the work platform.

LIMIT SWITCHES AND PUSH BUTTON CONTROLS

The design and general operation of pushbutton controls and limit switches for safety and operational purposes are listed below. Equipment will be controlled by pushbuttons of the constant-pressure type, allowing motion only while the operator is pressing the required button. It is intended that all operations of the equipment will be completely interlocked and provided with limit switches or mechanical interlocks to control operation.

On the Operator's Platform –

"UP" "DOWN" "INCH" "EMERGENCY STOP"

In the Roof Car –

"RIGHT TRAVERSE" "LEFT TRAVERSE" "EMERGENCY STOP"

Separately mounted on the Roof Car –

"EMERGENCY UP" "EMERGENCY DOWN" "EMERGENCY INCH BUTTON"

Each of the Stop buttons is of the maintained contact type and affords protection against sticking of the constant pressure pushbuttons which could be affected by cold weather or other external conditions. All the pushbuttons are weatherproof and equipped with rubber weather guards.

Other controls include:

Stop-Motion Multi-Cam Switch – acts as a stop motion switch, and to establish upper and lower inching zones.

Upper Limit Stop – also closes the circuit which permits traversing of the Roof Car, struck by the platform.

Upper Limit Final or Safe Stop (2 switches) – 2 switches are used, one at each end, which protects against overrunning the normal stop and against the platform not being level.

Lower Limit Stop – stops at bottom of track so you don't go past mullion guides.

Lower Limit Final or Safe Stop – activated by stop-motion device.

Slack Rope and Overtension Switches (4 switches) – one on each cable attachment, switches cut out main line contacts when cable is either slack or too tight.

Traveling Cable Protective Switches (2 switches) – activated by the weight at the traveling cable platform tie-off. Stops the down motion if the weight reaches the upper or lower limits of the guides, to avoid too much tension.

Locating Pin Down Switch – enforces alignment of the Roof Car at each working position.

Locating Pin Up Switch – insures disengagement of the locating pin before traversing of the Roof Car can occur.

Roof Car Gate Switch

Platform Gate Switch

Traverse Limiting Switches (2 switches) – prevents running past the storage spur track or past open switching.

Dummy Mullion Control (2 switches) – insures that dummy mullions are aligned with the mullions on the building before the platform can move, and that the mullions are raised before traversing can occur.

Power Cable Reel Protection – switch that stops motion of the Roof Car when the power cable has been drawn to the full effective limit of the cable reel.

Hand Crank Cut-Out – renders the power hoisting inoperative whenever the hand crank is positioned on the worm shaft.

Interference Switch – Guide Shoes - detects any obstruction in guide mullions and stops down travel.

ADDITIONAL TECHNICAL DATA

Building height – 20 stories, 238 feet above grade

Vertical Rise of Platform – 500 feet

Platform Dead Load – 2300 pounds

Platform Live Load – 1500 pounds, including workers, tools and equipment

Platform dimensions – 21.7 feet long, 4 feet wide, 3.58 feet high

Platform materials – 6061 – T6 Aluminum

Platform speed – 33 feet per minute for ascent and descent

Platform communication – occupants will have a two-way communication system (cell phone)

Power required – 440 volts, 3 phase, 60 HZ, 17 KVA

Wire Rope – 3/8 inch diameter

Ratio of wire rope diameter to drum diameter – 112:1

Ratio of wire rope diameter to pulley diameter – 40:1 or greater

Department of Labor
Division of Safety & Health
W. Averell Harriman State Office Campus
Building 12, Room 154, Albany, NY 12240
www.labor.ny.gov
518-457-7056

AMENDMENT OF

RESOLUTION OF SPECIAL APPROVAL

APPROVAL NO. 8024A

OWNER/APPLICANT: NYS Office of General Services
39th Floor Corning Tower, ESP
Albany, NY 12242

AGENT FOR THE APPLICANT Upgrade Services, LLC
51 W 19th Street
New York, NY 10011

BUILDING LOCATION: Agency Building 4, ESP
Albany, NY 12242

WHEREAS:

1. Resolution of Special Approval No. 8024 was issued by the Commissioner of Labor on October 2, 1974.

2. By a request was made to modernization of the BMU control system. This included changing all control wiring and switches to low voltage. All of these limit switches are now wired back to a A tech PLC controller and operator control panel.

NOW, THEREFORE, IT IS RESOLVED:

1. On May 25, 2016 ESU staff inspected the above installation and they are acceptable.
2. The scaffold platform shall be labeled with approval # 8024A.
3. Item 3, under "Now Resolved" on the Resolution dated October 2, 1974 shall be revised to read:

NEW YORK STATE **APPROVAL NO. 8024A**

DATED: May 23, 2016

Mario J. Musolino
Acting Commissioner of Labor

BY



Edward A. Smith P.E.
Associate Safety & Health Engineer

PREPARED BY:
Timothy Donlon P.E.
Senior Safety and Health Engineer

REVIEWED BY:
Edward A. Smith P.E.
Associate Safety and Health Engineer

ESP Agency Building 4 (typical of all 4 Agency Buildings)

[STATE OF NEW YORK]
DEPARTMENT OF LABOR

MEMBERS
HARRY R. MASON, CHAIRMAN
B. FRANKLIN SPENCER
RICHARD H. BOLTON
WILLIAM E. ADAMS
GAYLORD W. SMITH

BOARD OF STANDARDS AND APPEALS
Tower Building
Empire State Plaza
Albany, N.Y. 12223

RESOLUTION OF SPECIAL APPROVAL

APPROVAL NO. 8024

APPLICANT: State of New York
Office of General Services
Division of South Mall Development Operations
Empire State Plaza, Swan Street
Albany, NY 12201

AGENT FOR THE APPLICANT:
Manning and Lewis Engineering Company
675 Rahway Avenue
Union, NJ 07083

BUILDING NAME AND LOCATION:
Agency Building No. 4
Empire State Plaza, Albany, NY

WHEREAS:

1. The applicant's agent filed with the Board of Standards and Appeals of the State of New York, an application for approval of a device designated

WINDOW CLEANING SCAFFOLD INSTALLATION
(Track-Type)

2. The applicant filed with the said application certain data as follows:

a) A complete set of building plans sealed by a registered architect.
b) Engineering calculations and a certification of adequacy of the building to support the installation, as signed by a professional engineer licensed to practice in the State of New York.

Re: Approval No. 8024
Window Cleaning Scaffold Installation

c) A complete set of drawings for the equipment, signed and sealed by a professional engineer licensed to practice in the State of New York.
d) Engineering calculations for the equipment, signed and sealed by a professional engineer licensed to practice in the State of New York.
e) A typewritten description of the installation.
f) A stability test report for the equipment, signed and sealed by a professional engineer licensed to practice in the State of New York.
g) A letter of authorization to the manufacturer to act as agent for the building owner.
h) A completed BSA-15 technical data form for this installation.
i) A certification from the equipment manufacturer and installer that the equipment has been manufactured and installed in accordance with the filed data.

3. The installation was inspected by members of the Board's Approval staff on November 19, 1973 followed by a hearing held at the South Mall Tower in the O.G.S. conference room on November 20, 1973.

4. Based upon the filed data, the Board's Approval Unit has recommended that the said installation be approved.

5. The Board finds that said installation is described as follows:

DESCRIPTION

This equipment installation consists of a scaffold suspended by four wire ropes from a track-type roof carriage. It is intended for window cleaning and light building maintenance purposes and is located at the roof of the Agency Building No. 4, Empire State Plaza, Albany, New York.

The work platform is fabricated from structural aluminum shapes and is approximately 21'-9" long x 4'-0" wide and has guardrails, midrails and toeboards on 4 sides, which are covered with wire mesh.

Re: Approval No. 8024
Window Cleaning Scaffold Installation

A minimum of two men and a maximum of (6) men, materials and tools will occupy the platform. The platform has a live load rating of 1,500 pounds. Constant pressure type of pushbutton controls and an emergency stop pushbutton (maintained type) are provided on the work platform as well as an emergency control station within a sealed enclosure on the roof-car.

Access and egress to the platform at the roof elevation is through electrically interlocked gates of the roof-car and the work platform.

Continuous tie-in devices are provided on the work platform to engage the mullion-guides provided on the face of the building.

Guidance of the platform is also provided by tracks and rollers on the roof carriage while the platform is transferred to and from the roof carriage to the building face.

Ascent/descent speeds are provided at approximately 33 and 33 feet per minute.

The work platform is suspended from four (4) 3/8" diameter wire ropes which are attached through spring-type load-equalizers to the platform structure.

The wire ropes are suspended from outriggers which are attached to a track mounted roof-carriage. The roof carriage is counterweighted and also has a continuously engaged-rolling rail-claw. The overall stability with the rail-claw exceeds four to one in any circumstance.

The roof car is positively and automatically locked at each work drop location before vertical operation of the work-platform can be effected.

The roof car contains a single wrap winding drum, the electrical controllers, and related equipment.

The hoisting equipment consists of a 30" diameter grooved winding drum directly driven through worm and spur gear speed reducers and a crane and hoist type electric motor with a magnetic disc-brake. A centrifugally actuated overspeed brake is also provided.

Re: Approval No. 8024
Window Cleaning Scaffold Installation

A hand crank may be attached to the wormdrive to facilitate emergency retrieval of the platform.

The track upon which the roof carriage travels consists of steel I-beams supported and fastened to tubular steel posts, which in turn are welded to the building's roof structure. Appropriate track switches are provided for access to building corners and to the storage area.

The roof carriage is propelled by two 3/4 horsepower electric motors, one at each outboard wheel-truck. Both drive motors are equipped with a disc type magnetic brake to prevent further horizontal motion.

The wire rope sheaves which guide the ropes are not less than 18" (i.e. greater than 40 rope diameters).

The roof car is provided with an access ladder and protected catwalks allowing safe access to the roof car and the work platform.

The hoisting ropes are each 3/8" diameter, 6 x 25, improved plow steel, having a minimum breaking strength of 13,200 pounds. The connections to the work platform are by means of Otis Elevator forged and babbited thimbles.

A special feature of safety is provided by the automatic setting of the secondary brake after a time delay of approximately two seconds after stopping the main drive motors, as a backup for the primary brake. This operation is accomplished so that the secondary brake does no work during normal operation thus insuring that only the primary brake will be subject to wear.

The electrical controller is of a elevator service type and is further provided with phase failure, phase reversal and overload protection features. The operating circuitry is of a safe failing design.

Power is provided to the roof car through a four conductor No. 4 neoprene covered flexible power cable which is provided with an automatic take-up reel. A strain relief device is provided on the cable for attachment to anchor devices placed at the weatherproofed twist-lock outlets at appropriate intervals along the roof top.

Re: Approval No. 8024
Window Cleaning Scaffold Installation

There is also a take up reel which may be used for a telephone cable.

The telephone and control wiring cable for the work platform is attached to a winding drum which is directly coupled to the main-winding drum drives for proper synchronism. The end of this cable is attached to its winding drum and carried through a hollow drum shaft to a weatherproofed slip-ring assembly.

The control cable is a weatherproofed multi-conductor neoprene covered cable having a stainless steel core of adequate strength to accept the full tension in the cable with a minimum safety factor of four.

The design and general operation of push button controls and limit switches for safety and operational purposes are as follows:

> Equipment will be controlled by pushbuttons of the constant-pressure type, permitting motion only while the operator is pressing the required button. It is intended that all operations of the machine will be completely interlocked and provided with limit switches or mechanical interlocks to enforce operation exactly in the manner intended. The points of control anticipated are as follows:

Limit Switches and Push Button Controls

On the Operators' Platform	"Up" "Down" "Inch" "Emergency Stop"
In the Roof Car	"Right Traverse" "Left Traverse" "Emergency Stop"
Also separately mounted (in glass enclosure) on the Roof Car	"Emergency Up" "Emergency Down" "Emergency Inch Button"

Each of the Stop buttons is of the maintained contact type and affords protection against sticking of the constant pressure pushbuttons which might be caused by freezing rain or snow or

Re: Approval No. 8024
Window Cleaning Scaffold Installation

other external cause. It is noted that all pushbuttons are weatherproof, as manufactured by the National Acme Company, and provided with rubber weather guards to prevent malfunction from such external causes.

1. "Stop-Motion Multi-Cam Switch" Allen Bradley, Type 803A64, or equal, to act as Stop Motion switch and to establish the upper and lower inching zones.

2. "Upper Limit Stop".
This switch will also close the circuit permitting traversing of the Roof Car, and is directly struck by the platform.

3. "Upper Limit Final" or "Safe Stop" (2)
Two switches are used, one at each end, which has the effect of protecting both against over-run of the normal stop and against out-of-levelness of the platform.

4. "Lower Limit Stop".

5. "Lower Limit Final" or "Safe Stop".
Will be actuated by stop-motion device.

6. Slack Rope and Overtension Switches". (4), i.e., one on each cable attachment.
Swiches cut out main line contacts upon slackness of any cable or overtension.

7. "Traveling Cable Protective Switches". (2)
Switches actuated by the dancer weight at the traveling cable platform tie-off, to stop down motion should the dancer weight reach the upper or lower limits of the guides, thus anticipating possible excess tension.

8. "Locating Pin Down Switch"
"Locating Pin Up Switch"

Locating Pin Down Switch to enforce alignment of the Roof Car at each working position.

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Locating Pin Up Switch to insure disengagement of the locating pin before traversing of the Roof Car can take place.

9. "Roof Car Gate Switch"

9a. "Platform Gate Switch"

10. "Traverse Limiting Switches". (2)
To prevent running past the storage spur track or past open switching.

11. "Dummy Mullion Control" (2)
To insure that dummy mullions are aligned with building mullions before platform can move, and that the mullions are raised before traversing can take place.

12. "Power Cable Reel Protection"
This switch stops motion of the Roof Car when the power cable has been drawn to the full effective limit of the cable reel.

13. "Hand Crank Cut-Out".
Renders the power hoisting inoperative whenever the hand crank is positioned on the worm shaft.

14. "Interference Switch – Guide Shoes" – Detects obstruction in Guide Mullions and stops Down Travel.

Other details of the equipment are contained in the filed data and drawings.

The following are some technical data of interest:

Building height – 20 stories (238 feet above grade)
Vertical rise of platform – 500 feet
Platform
dead load – 2300 pounds
live load – 1500 pounds (including 6 workmen & tools
dimensions – 21.7' long by 4' wide by 3.58' high
material – 6061 – T6 Aluminum
speeds – 33 feet per minute

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Window Cleaning Scaffold Installation

Communications - two way radio or two way telephone to a continually manned central location on the Empire State Plaza site.
Power required - 440 volts, 3 phase, 60 HZ, 17 KVA
Wire rope - 3/8" dia.
Ratio of wire rope dia. to drum dia. - 112:1
Ratio of wire rope dia. to pulley dia. - 40:1 or greater.

NOW, THEREFORE, IT IS RESOLVED

1. That the said installation is hereby approved for use only at the above described location and that this Resolution of Approval shall Terminate upon the completion of use of the said installation at the above described location.

2. This approval shall apply only when the said installation is manufactured, installed, used, maintained and preserved to be in all respects in accordance with the filed data, with the description in this Resolution of Approval with, "SAC-1 STANDARD CONDITIONS FOR OPERATION AND MAINTENANCE OF SUSPENDED SCAFFOLDS USED FOR WINDOW CLEANING AND LIGHT BUILDING MAINTENANCE" which is attached hereto and herewith made a part of this Resolution, and also when in compliance with the following special requirements:

a. The suspension wire ropes of this installation shall be replaced within 36 month intervals following the date of this Resolution, and tagged in accordance with SAC-1 requirements.

b. Before being put into use for its intended purposes and after the date of this Resolution, the installation shall be inspected by the Industrial Commissioner. The installation shall not be used for its intended purposes until such inspection is completed and the Commissioner has found the installation to be acceptable for compliance with this Resolution of Approval and has so notified the owner, or lessee or agent, in writing.

c. Access and egress for the work platform shall be only from the roof carriage.

Re: Approval No. 8024
Window Cleaning Scaffold Installation

d. The suspended platform is approved for a total live load of 1,500 pounds, including 6 workmen and tools or materials. There shall be a minimum of two (2) workmen on the work platform.

e. A padlock with a key common to all other window cleaning installations of the Empire State Plaza shall be provided on the power-shutoff switch of the roof carriage. The keys shall be available only to authorized persons.

f. A person in O.G.S. shall be made responsible for, and be adequately trained by the equipment manufacturer for maintenance of this equipment. This person may supervise and instruct other O.G.S. personnel or sub-contractors regarding proper maintenance for said equipment.

g. Either two-way telephone or two-way radio communications shall be provided from the work platform to a continually manned station within the building or on the Empire State Plaza Site.

h. Whenever the equipment is left unattended, the power switch of the roof carriage shall be padlocked in the "off" position.

3. That exclusive and unassignable authorization is hereby granted to the said applicant to identify the said installation as follows:

STATE OF NEW YORK - OFFICE OF GENERAL SERVICES

NEW YORK STATE B.S.A. APPROVAL NO. 8024

Dated at Albany, New York
October 2, 1974

Prepared by:
L. R. Stafford, P.E.

Harry R. Mason, Chairman

B. Franklin Spencer, Member

Richard H. Bolton, Member

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WE ARE YOUR DOL

NEW YORK STATE | Department of Labor

Kathy Hochul, Governor
Roberta Reardon, Commissioner

Department of Labor
Division of Safety & Health
Engineering Services Unit
W. Averell Harriman State Office Campus
Building 12, Room 154, Albany, NY 12240
www.labor.ny.gov
518-457-7056

November 13, 2023

NYS Office of General Services
625 Broadway, LLC.
625 Broadway
Albany, NY 12233

Re: Resolution of Special Approval
No. 10705

Dear Sir:

We are enclosing a copy of the Resolution of Special Approval Number 10705 dated November 13, 2023.

Sincerely,

Timothy Donlon, P.E.
Professional Engineer 1 - Industrial

TD:md
cc: Albany Industry

WE ARE YOUR DOL

Department of Labor

Kathy Hochul, Governor
Roberta Reardon, Commissioner

Department of Labor
Division of Safety & Health
W. Averell Harriman State Office Campus
Building 12, Room 154, Albany, NY 12240
www.labor.ny.gov
518-457-7056

RESOLUTION OF SPECIAL APPROVAL

APPROVAL NO. 10705

APPLICANT: NYS Office of General Services
625 Broadway, LLC.
625 Broadway
Albany, NY 12233

AGENT FOR THE APPLICANT: Tractel Ltd. - Swingstage Division
1615 Warden Avenue
Toronto, ON M1R 2T3

BUILDING LOCATION: 625 Broadway
Albany, NY 12207

WHEREAS:

1. The Agent for the Applicant filed with the Commissioner of Labor of the State of New York, an application for approval of a device designated:

SCAFFOLD INSTALLATION
(FOR WINDOW CLEANING, Light Exterior Building Maintenance)
Modular Platform length of 30'-0", Singleman, Roof Rigging & Davits
Main Roof elevations 231'-0"

The system consisting of a modular platform with maximum length of 30'-0", 4-wire platform, and davits, is used to clean the glass from Main roof level elevation 231'-0' to the 6th Floor.

2. The Agent for the Applicant filed with the said application certain data as follows:

   a. A set of drawings for the equipment signed and sealed by a professional engineer licensed to practice in the State of New York.
   b. A set of pertinent architectural drawings of the building.
   c. Certifications regarding installation of the structural components of the system.
   d. A description of the installation, the equipment, and its use.

3. The Commissioner of Labor finds that the said installation is as described in the attached equipment description of Façade Maintenance System (Window Cleaning and Light Exterior Building Maintenance, Roof Rigged), 625 Broadway, Albany, NY, Dated September 13, 2023.

4. On November 13, 2023, ESU staff inspected the above installation, and they are acceptable.

NOW, THEREFORE, IT IS RESOLVED:

1. That the said installation is hereby approved for use only at the above-described location.

2. Platform stabilization for this installation is achieved by a "button and lanyard" tie-in device is provided as means for intermittent stabilization installed every third floor. The intermittent tie-in device consists of a tie-in button in the façade and a wire rope lanyard attached on the scaffold platform around the suspension wire rope. As the platform descends a lanyard will be tied to each façade button. The device is designed to sustain 600 lb. or more.

3. The modular platform PPIA-F has a maximum length of 30'-0" long, 4 wire platform, New York State Approval No. 10105 dated January 4, 2011. Hoists are Tractel TIRAK traction XED 500P, New York State Approval No. 9500 dated April 8, 1994. When not in use the window washing equipment is stored on the roof top.

4. The perimeter of the roof is surrounded with a parapet wall approximately 3'-6" high.

5. This approval shall apply only when the said installation is manufactured, installed, and maintained and used in accordance with this Approval and the following special requirements:

   a. Installations and alterations. (1) Before being put into initial use for its intended purpose, after the date of this Resolution, the equipment installation shall be inspected by the Commissioner of Labor's Albany office personnel. It shall not be used for its intended purpose until such inspection has been completed and the Commissioner has found the installation to be acceptable regarding compliance with this Resolution and has so notified the owner, or the owner's agent, in writing. A similar inspection shall be made following any major alteration to the installation.

   b. Periodic inspection and tests. (1) Related building supporting structures shall undergo periodic inspection by a competent person at intervals not to exceed 12 months. (2) All parts of the equipment including control systems shall be inspected, and, where necessary, tested by a manufacturer/supplier, but not to exceed 12 months, to determine that they are in safe operating condition. Parts subject to wear such as wire ropes, bearings, gears, and governors shall be inspected and/or tested to determine that they have not worn to such an extent as to affect the safe operation of the installation. (3) The building owner shall keep a certification record of each inspection and test required herein.

c. Maintenance inspection and tests. (1) The scaffold owner shall furnish the Commissioner, in writing, a proposed program of maintenance procedures. Such a program shall be acceptable to the Commissioner and shall be subject to such modifications as the Commissioner may thereafter find necessary in order to assure safety. (2) The name and address of the person or firm designated by the owner to carry out such maintenance program shall be submitted, in writing, to the Commissioner and shall be acceptable to him. No other person or firm shall be employed or permitted to perform the required servicing and maintenance of the scaffold. Such designated person or firm shall be competent by reason of training and experience to service and maintain the scaffold. (3) The building owner shall keep a certification record of each maintenance inspection and test performed under c (1). The certification record shall include the date of the inspection and test, the signature of the person who performed the inspection and/or test, and an identifier for the platform installation which was inspected. The certification record shall be kept readily available for review by the Commissioner.

d. Continuous radio communication will be maintained between the window cleaning platform and a manned station at the building during the window washing operations.

e. Suspension wire rope replacement. (1) The suspension wire ropes for this installation shall be replaced after 18 months of use following the date of this approval and at 18 months intervals thereafter. (2) The wire rope shall be identified by means of a metal tag attached to a rigid part of the hoist, to one of the rope fittings or to each rope. Such tag shall contain the following information:

- Diameter in inches
- Manufacturer's rated breaking strength
- Grade of steel used
- Date of installation
- Construction classification
- Person or firm installing ropes
- Name of rope manufacturer

i. Whenever a rope is replaced a new metal tag shall be provided.

ii. Proper testing utilizing the manufacturer's gauge of swaged socket or compression fittings must be performed and documented prior to use of the platform, and gauge must be maintained onsite to inspect fittings before each use of the scaffold.

f. Defects and abnormal conditions. (1) When a substantial defect or abnormal condition is found in the scaffold or in any part thereof, the scaffold shall not be operated until such time as the defect or condition has been corrected and the scaffold has been re inspected by the Commissioner and found acceptable.

g. The scaffold shall bear, by impression or stamped metal plate, the identification authorized, therefore. This scaffold and the parts shall be designated to use exclusively for the floors mentioned above, any dismantling and using the sections of this platform to use with other scaffold of the building shall not be permitted.

h. A copy of the Approval Resolution and a set of the filed data, including drawings, description of the equipment & operating procedures, shall be kept on the premises of the scaffold installation and shall be readily available to operating personnel, maintenance personnel and the Commissioner.

i. A plate indicating the maximum loading and the number of persons required to operate the scaffold shall be attached to the scaffold power unit in a conspicuous location. The lettering on such plate shall be legible and shall be not less than one-eight (1/8) inch in height. Operating controls shall be properly and permanently labeled to identify their respective functions.

j. Access and egress to and from the suspended scaffold shall be only from the roof level except for emergencies and maintenance.

k. Three (3) workers are required during all procedures requiring the movement of the suspended scaffold

m. The persons on the suspended scaffold shall be provided with and shall use an approved body harness. The harness shall have a dual tail line not exceeding four feet in length and each segment must have a minimum breaking strength of 5,000 pounds. At least one segment of the tail line shall be attached to a taut cable attached to the scaffold at all times.

n. Harnesses and attachments shall be used, preserved, maintained and inspected in accordance with the provisions of Industrial Code Part (Rule No.21) and Industrial Code Part (Rule No. 23).

o. Before each daily operation the scaffold shall be subjected to inspection and test to assure its safe condition.

p. The persons designated to use this equipment installation shall be thoroughly trained for the proper and correct operation of the equipment. Such persons shall be directed to discontinue operation of the scaffold immediately upon observing any defect or abnormality and to report the same forthwith to the owner or his agent.

q. It shall be the responsibility of the applicant named in this Resolution to submit annually a Certification no more than (30) days nor less than fifteen (15) days prior to the anniversary date of the Approval, that the scaffold installation is being used and maintained in compliance with the specifications and data filed with his application and the requirements and conditions of the Resolution of Approval. Such annual Certification shall be in the form of a written statement to the Commissioner of Labor signed by an officer or a person duly authorized to act on behalf of the applicant and who is familiar with the materials, processes, controls and approval requirements and conditions of the subject of approval.

u. Filing of a false certification or failure to submit such annual certification shall be cause for proceeding by the Commissioner of Labor to terminate this Approval. Also, failure to notify the Commissioner of Labor of a change of name, ownership or address contained in this Approval, shall be cause of a termination proceeding.

r. The scaffold shall not be used when the prevailing wind velocity exceeds 25 miles per hour.

s. After being placed in service, each installation must be inspected at least once annually by the Commissioner of Labor's Albany office personnel.

t. In order to maintain active approval regularly scheduled equipment certification is required. Seven years after this approval is initially granted and then at least once every five years or sooner, if conditions warrant, the system installation shall be inspected by a licensed NY State Professional Engineer with experience in window washing equipment who shall in writing certify to the Engineering Services Unit (ESU) of the NYSDOL. All components of the system are safe and functioning as originally designed.

i) All components of the system are free from defects or wear which would require replacement.
ii) According to all available records maintenance of equipment is in accordance with manufacturer's recommendation and Appendix 101A of NYSDOL Advisory Standard 101.
iii) Structural components continue to be capable of supporting all loading required by design.

6. That exclusive and unassignable authorization is hereby granted to the said applicant to identify the said device as follows:

WINDOW CLEANING SCAFFOLD

Modular Platform with maximum length of 30'-0",Singleman Cage, Roof rigging & Davits

Owner NYS Office of General Services
625 Broadway, LLC.
625 Broadway
Albany, NY 12233

NEW YORK STATE APPROVAL NO. 10705

DATED: November 13, 2023

Roberta Reardon
Commissioner of Labor

BY:

Chek beng Ng, P.E
Professional Engineer 2 - Industrial

Prepared by:
Timothy Donlon, P.E.
Professional Engineer 1 - Industrial

Reviewed by:
Chek beng Ng, P.E.
Professional Engineer 2 - Industrial

SYSTEM DESCRIPTION – 30-FT PLATFORM & DAVITS

Date (System Description): September 13, 2023

Building Address: 625 Broadway
Albany, NY 12207

Previous RSA: 9705

Purpose of the Equipment: to permit (facilitate) window cleaning and light maintenance activities on the vertical, external surfaces along the buildings perimeter. Installation of the new 30-ft platform with new davits will give maintenance crews access to the vertical building surfaces. See drawing 8R04012 for the stage drop layouts respectively.

Platform – 30-ft (See shop drawing 8R04050) & Portable Davit Arm Assemblies – 6'-0" reach with 10'-10" masts (See drawing 8R04030): The 30-ft modular, powered platform is used in conjunction with a pair of portable davit arm assemblies to perform service drops from the main floor level (el. 231'-0") and 14th floor level (el. 209'-0") around the building. The davit arm assemblies are installed onto the permanently installed davit bases on the varying roof elevations. The platform is transferred between the different levels for use with the davit arms. The stage serves as a working platform for 2 maintenance crew members except when its in its Single Man Cage configuration where it serves as a working platform for 1 maintenance worker. The 25-ft platform is stored on the main floor level (el. 231'-0") and secured to davit bases during storage. See drawings 8R04012 for the stage drop layouts respectively.

Reason for the Approval: the building is existing; therefore approval is being sought for the following new installations for a retrofit project:

- One 30-FT existing modular, powered platform (RSA 9705).

- Two (qty:2) portable HD Davit arm assemblies are provided with 6'-0" reach and a 10'-10" mast. This davit unit is used to suspend the modular, powered platform on drops along the main floor level (el. 231'-0").

- Two (qty:2) portable HD Davit arm assemblies are provided with 6'-0" reach and a 10'-10" mast. This davit unit is used to suspend the modular, powered platform on drops along the 14th floor level (el. 209'-0").

Service Drop Description: For a plan view of the stage drop layout, see drawing 8R04012. The stage drop locations are represented by the rectangles (with their lengths presented inside). The entry and egress points for all drops are located from the main floor level (el. 231'-0") and 14th floor level (el. 209'-0") around the building. The 30-ft platform is stored on the main floor level (el. 231'-0") and secured to davit bases during storage. The stage drop locations are outlined below:

14th Level (el. 209'-0"):

West Face

- 3 planned drops requiring 30-ft stage configuration to be roof rigged on the 14th floor roof level (el. 209'-0") to commence service drop from the 14th floor roof level (el. 209'-0") to the 6th floor level (el. 93'-0"). Davits # 01, 40, 41, 42, 43 and 44.

- 2 planned drops requiring 30-ft stage configuration to be roof rigged on the 14th floor roof level (el. 209'-0") to commence service drop from the 14th floor roof level (el. 209'-0") to the ground floor level (el. 93'-0"). Davits # 42 to 44.

- 1 planned drop requiring Single-Man-Cage (SMC) stage configuration to be roof rigged on the 14th floor roof level (el. 209'-0") to commence service drop from the 14th floor roof level (el. 209'-0") to the 6th floor level (el. 93'-0"). Davits # 39.

- 1 planned drop requiring Single-Man-Cage (SMC) stage configuration to be roof rigged on the 14th floor roof level (el. 209'-0") to commence service drop from the 14th floor roof level (el. 209'-0") to the 6th floor level (el. 93'-0"). Davits # 02.

East Face

- 5 planned drops requiring 30-ft stage configuration to be roof rigged on the 14th floor roof level (el. 209'-0") to commence service drop from the 14th floor roof level (el. 209'-0") to the 6th floor level (el. 93'-0"). Davits # 18 to 23.

- 1 planned drop requiring Single-Man-Cage (SMC) stage configuration to be roof rigged on the 14th floor roof level (el. 209'-0") to commence service drop from the 14th floor roof level (el. 209'-0") to the ground floor level (el.0'-0"). Davits # 17.

- 1 planned drop requiring Single-Man-Cage (SMC) stage configuration to be roof rigged on the 14th floor roof level (el. 209'-0") to commence service drop from the 14th floor roof level (el. 209'-0") to the ground floor level (el.0'-0"). Davits # 24.

North Face

- 1 planned drop requiring 28-ft stage configuration to be roof rigged on the 14th floor roof level (el. 209'-0") to commence service drop from the 14th floor roof level (el. 209'-0") to the 6th floor level (el. 93'-0"). Davits # 23 and 24.

- 1 planned drop requiring 28-ft stage configuration to be roof rigged on the 14th floor roof level (el. 209'-0") to commence service drop from the 14th floor roof level (el. 209'-0") to the 6th floor level (el. 93'-0"). Davits # 39 and 40.

South Face

- 1 planned drop requiring 28-ft stage configuration to be roof rigged on the 14th floor roof level (el. 209'-0") to commence service drop from the 14th floor roof level (el. 209'-0") to the 6th floor level (el. 93'-0"). Davits # 17 and 18.

- 1 planned drop requiring 28-ft stage configuration to be roof rigged on the 14th floor roof level (el. 209'-0") to commence service drop from the 14th floor roof level (el. 209'-0") to the 6th floor level (el. 93'-0"). Davits # 01 and 02.

Main Roof Level (el. 231'-0"):

West Face

- 1 planned drop requiring 13-ft stage configuration to be roof rigged on the main floor roof level (el. 231'-0") to commence service drop from the main floor roof level (el. 231'-0") to the 6th floor level (el. 93'-0"). Davits # 07 and 08.

- 1 planned drop requiring 13-ft stage configuration to be roof rigged on the main floor roof level (el. 231'-0") to commence service drop from the main floor roof level (el. 231'-0") to the 6th floor level (el. 93'-0"). Davits # 33 and 34.

- 2 planned drops requiring 20-ft stage configuration to be roof rigged on the main floor roof level (el. 231'-0") to commence service drop from the main floor roof level (el. 231'-0") to the 14th floor level (el. 209'-0"). Davits # 03, 04, 37 and 38.

- 2 planned drops requiring Single-Man-Cage (SMC) stage configuration to be roof rigged on the main floor roof level (el. 231'-0") to commence service drop from the main floor roof level (el. 231'-0") to the 6th floor level (el. 93'-0"). Davits # 05 and 37.

North Face

- 2 planned drops requiring 13-ft stage configuration to be roof rigged on the main floor roof level (el. 231'-0") to commence service drop from the main floor roof level (el. 231'-0") to the 6th floor level (el. 93'-0"). Davits # 27, 28, 35 and 36.

- 1 planned drop requiring 20-ft stage configuration to be roof rigged on the main floor roof level (el. 231'-0") to commence service drop from the main floor roof level (el. 231'-0") to the 6th floor level (el. 93'-0"). Davits # 32 and 33.

- 1 planned drop requiring 20-ft stage configuration to be roof rigged on the main floor roof level (el. 231'-0") to commence service drop from the main floor roof level (el. 231'-0") to the ground floor level (el. 0'-0"). Davits # 30 and 31.

- 1 planned drop requiring 20-ft stage configuration to be roof rigged on the main floor roof level (el. 231'-0") to commence service drop from the main floor roof level (el. 231'-0") to the 6th floor level (el. 93'-0"). Davits # 31 and 32.

South Face

- 2 planned drops requiring 13-ft stage configuration to be roof rigged on the main floor roof level (el. 231'-0") to commence service drop from the main floor roof level (el. 231'-0") to the 6th floor level (el. 93'-0"). Davits # 05, 06, 13 and 14.

- 1 planned drop requiring 20-ft stage configuration to be roof rigged on the main floor roof level (el. 231'-0") to commence service drop from the main floor roof level (el. 231'-0") to the 6th floor level (el. 93'-0"). Davits # 08 and 09.

- 1 planned drop requiring 20-ft stage configuration to be roof rigged on the main floor roof level (el. 231'-0") to commence service drop from the main floor roof level (el. 231'-0") to the ground floor level (el. 0'-0"). Davits # 10 and 11.

- 1 planned drop requiring 20-ft stage configuration to be roof rigged on the main floor roof level (el. 231'-0") to commence service drop from the main floor roof level (el. 231'-0") to the 6th floor level (el. 93'-0"). Davits # 09 and 10.

East Face

- 5 planned drop requiring 28-ft stage configuration to be roof rigged on the main floor roof level (el. 231'-0") to commence service drop from the main floor roof level (el. 231'-0") to the ground floor level (el. 0'-0"). Davits # 18 to 23.

- 2 planned drops requiring Single-Man-Cage (SMC) stage configuration to be roof rigged on the main floor roof level (el. 231'-0") to commence service drop from the main floor roof level (el. 231'-0") to the ground floor level (el. 0'-0"). Davits # 14 and 27.

- 2 planned drops requiring 20-ft stage configuration to be roof rigged on the main floor roof level (el. 231'-0") to commence service drop from the main floor roof level (el. 231'-0") to the 14th floor level (el. 209'-0"). Davits # 15, 16, 25 and 26.

- 1 planned drop requiring 13-ft stage configuration to be roof rigged on the main floor roof level (el. 231'-0") to commence service drop from the main floor roof level (el. 231'-0") to the ground floor level (el. 0'-0"). Davits # 29 and 30.

- 1 planned drop requiring 13-ft stage configuration to be roof rigged on the main floor roof level (el. 231'-0") to commence service drop from the main floor roof level (el. 231'-0") to the ground floor level (el. 0'-0"). Davits # 11 and 13.

Stage Transfer Location:
For service drops from the 14th floor level (el. 209'-0"), the 30-ft platform is lowered using the davit arms on the main floor level (el. 231'-0") to the 14th floor level.

Specifications:

Powered Platform:

Total Length:	30'-0"
Weight:	1514 lbs Approx.
Load Capacity:	500 lbs
Number of Operators:	2
Vertical Speed of Platform:	35 F.P.M.
Wire Rope Length:	270-ft
Maximum Suspension Height:	250-ft
Hoist (Traction Type):	2 x TIRAK XE 500P
Power:	230V, 3 Phase, 60 Hz, 30 A
Bumper Rollers – Bolt On:	6
Bumper Rollers – Clamp On End Panel:	2
Caster Assemblies:	16
Obstruction Bar:	1
Accessories:	Fire Extinguisher (1), Anemometer (1), Water Container (2)

Portable HD Davit:

Boom Reach:	6'-0"
Boom Rotation:	360°
Mast Height:	10'-10"
Service Load:	1150 lbs
Winch (Manually Operated):	TIRFOR T-508D
Suspension Trolley:	Dual Eye (With Position Lock)
Transportation Wheel:	1

Approval Numbers:

- PPIA-F Platform — Approval No.: 10105
- TIRAK Traction Hoist XED 500P — Approval No.: 9500

PPIA-F Platform (Approval No. 10105): This scaffold platform is fabricated by welding 1-3/4" square tubes as top rails; 1-3/4" x 1-3/4" extruded sections as mid-rails; and 1-7/8" x 1-13/16" extruded sections as bottom rails. The bottom rails are joined by welding 1-1/2" square tubes as horizontal rungs at a spacing of 19 inches from center to center. The horizontal rungs support the aluminum nonskid deck. The vertical supports and diagonal bracings are 1-1/2" square tubes. The bottom rail has a toe-board, which is an integral part of the extrusion. Refer to drawing 8R04050 for an illustration of the platform.

The platform serves as a working surface and is designed to carry two maintenance workers and their equipment during a service drop. The platform is equipped with a control panel, perforated aluminum sheets, a basket for collecting and storing electrical cable, a pair of water containers

for window cleaning, a fire extinguisher, bumper rollers, obstruction bar and steps for climbing into the platform.

Platform length can be adjusted with the use of the fold-out sections on one end of the platform. Only one person may be present on extension section at any given time.

Suspension Wire Ropes: The platform is suspended by four 5/16 inch, 5x26 SPECOO1A wire ropes (270 feet long). Each wire rope is fed through a traction hoist, and is then fed and stored in a wire rope winder. The minimum breaking strength of the 5x26 SPECOO1A wire rope is 12367 lbs and has the capacity to support loads with a safety factor of 10.

$$\text{S.F: } \frac{\text{Minimum Breaking Strength * \# of Hoisting Wire Ropes}}{\text{(Platform Weight + Load Capacity)}} = 12367*2/(1514+500) = 24734/2014 = \sim 12.28$$

Davit Arm

The HD davit arms are used in this application from the main floor level (el. 231'-0") and 14th floor level (el. 209'-0") around the building. The new davits are equipped with 6'-0" reach booms and have mast heights of 10'-10". For an illustration of the HD davits see shop-drawing 8R04012. Two davits (a davit unit) are required to support the 30-FT modular platform used on the drops. Each portable davit consists of a mast that is mounted on permanent bases located along the buildings varying roof elevations. See drawing: 8R04012 for locations of davits. The davit can be pivoted down when not in use by means of a davit-raising winch (provided with the davit). The platform is suspended from a trolley, mounted on each davit boom.

Each davit consists of a head and a mast. The davit head is comprised of a boom and its support bracket. The boom support bracket has a roller ring at the bottom, and a thick bar at the top. It is bolted to the rear end of the boom. The roller ring slips over the outside of the round mast until the top bar is engaged to the shaft at the top of the mast. This arrangement allows the head to swivel about the mast.

The boom support bracket is a steel weldment. The mast is made from structural aluminum pipe, while the boom is made from structural aluminum extruded section.

Platform Stabilization Type: On the buildings vertical facade, platform stabilization is provided by a system of existing stainless steel button type ISA's (intermittent stabilization anchors) . The anchors are used in conjunction with an intermittent stabilization tie-in lanyard (Fig. 1) to secure each platform suspension wire rope to the building surface during a service drop. Each platform suspension wire rope is inserted through a lanyard loop prior to rigging. Thus connected, the connecting end (Intermittent Lasso "DMC" Stabilizer) of each lanyard (two lanyards to each platform) is attached to the appropriate stabilization anchor closest to the level that is being worked on. This arrangement limits any horizontal movement of the platform generated by wind or crew movement. The ISA's permit movement in the vertical but not in the horizontal. Refer to drawings 8R04020, 8R04021, 8R04022 and 8R04023 for locations.

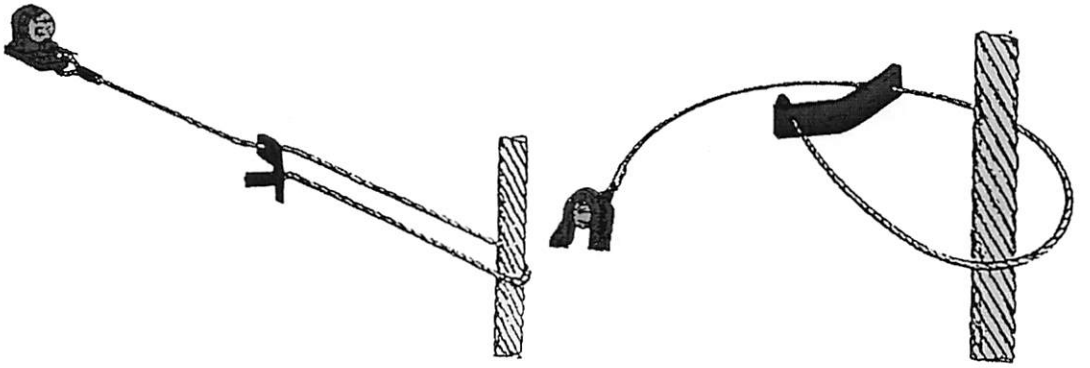


Figure 1: Intermittent Stabilization Tie-In Lanyard

System Operation

30-FT Powered Platform & Davit: A minimum of three workers are required for operation of the system. A trained worker must be present at the roof at all times. A trained person must do all loading and unloading of wire rope to/from the reelers. Platform connection are to be carried out at the main floor level (el. 231'-0") and 14th floor level (el. 209'-0") (i.e., the platform is ground/roof rigged to the davits located on the varying roof levels) and raised up or lowered down the various vertical surfaces to provide service. The 30-ft platform is stored on the main floor level (el. 231'-0") and secured to davit bases during storage. **NOTE:** Continuous radio communication is maintained between the two workers in the platform and trained worker stationed at the roof during window cleaning operations (By others).

The following general procedure is used to perform the service drops (see drawing 8R04012):

1. Move the 30'-0" modular, powered platform from its storage position to the desired drop location.
2. At the drop location, rig the portable HD davits to the bases.
3. Configure the platform accordingly (see service drop description above).
4. Roof rig the platform to the davits as required. Refer to drawings 8R04001D for service drop locations.
5. Board the platform and commence the service drop.
6. Attach the intermittent stabilization tie-in lanyard with connecting end (Lasso) to the applicable ISA button guide and then continue the service drop.
7. During the drop clean the accessible building surfaces.
8. Once completed return the platform back to the roof level.
9. De-rig the platform from the davits.
10. Continue service drops along the roof by repeating steps 2 thru 9.
11. On completion of all service return the 30-FT platform to its storage location on the main floor level (el. 231'-0").

2/1/1972

NEW YORK STATE BOARD OF STANDARDS AND APPEALS

SAC -1 STANDARD CONDITIONS FOR OPERATION AND MAINTENANCE OF SUSPENDED SCAFFOLDS USED FOR WINDOW CLEANING AND LIGHT MAINTENANCE

1) The scaffold shall bear, by impression or stamped metal plate, the identification authorized therefore.

2) Access to and egress from the suspended scaffold shall be restricted to the area designated in the Resolution, except in the case of an emergency.

3) Before each daily operation the scaffold shall be subjected to inspection and test to assure its safe condition.

4) The scaffold shall be used in normal operation only by persons who have been thoroughly instructed in its use and control. Such persons shall be directed to discontinue operation of the scaffold immediately upon observing any defect or abnormality and to report the same forthwith to the owner or his agent.

5) Each person on the suspended scaffold platform shall be provided with and shall use an approved safety belt. Each such belt shall have a tail line not exceeding four feet in length and which has a minimum breaking strength of 4,000 pounds.

6) (a) Unless otherwise stated in the Resolution, the tail line from each safety belt shall be attached to a separate hanging lifeline by an approved device that will permit vertical adjustment of such attachment.

(b) The foregoing applies to all single-point suspended scaffolds regardless of the vertical travel of the scaffold and also to scaffolds suspended by two (2) or more points whenever such scaffolds are suspended 300 feet or less below the suspension points.

(c) Each such separate hanging lifeline shall be secured to a sufficient anchorage above the working level, and shall extend in a continuous unspliced length not exceeding 300 feet to the grade or set-back below. Such lifeline anchorage shall be independent of the scaffold suspension except that it may be an integral part of a mobile roof carriage.

(d) Each separate hanging lifeline shall consist of either first grade manila or nylon rope with a minimum breaking strength of 4,000 pounds or a wire rope having minimum diameter of five-sixteenths (5/16) inch.

7. Unless otherwise stated in the Resolution, all two- or more point suspension scaffolds whenever suspended more than 300 feet, measured from the suspension points to the platforms at their lowest levels, shall have each tail line attached to substantial parts of the scaffold platforms or to single-piece horizontal anchorage cables of at least five sixteenths (5/16) inch diameter galvanized improved plow steel. Every such anchorage cable shall extend taut between the ends of the scaffold platform at its midpoint as well as at each end.

8. Safety belts and attachments shall be used, preserved, maintained and inspected in accordance with the provisions of Industrial Code Part (Rule No.) 21 and Industrial Code Part (Rule No.) 23.

9. Where power cables under tension contact any part of the building, mobile unit, or scaffold platform, such cables shall be protected against abrasion or damage by padding or other means. Power cables hung from, or supported by, any part of the mobile unit or scaffold platform shall be provided with adequate fittings to prevent damage. Power cables hung from outriggers shall have fittings equipped with safety hooks.

10. The roof slab or other supporting surface shall be marked with painted lines or other permanent indicators to assist the operator in aligning the scaffold with the face of the building for each working position.

11. A manually-operated, portable-type approved fire extinguisher shall be securely attached to the scaffold platform. Such extinguisher shall be designed to control grease and electrical fires without

damaging rope suspensions or other parts of the scaffold installation. Such extinguishers shall be suitable for effective use in all conceivable weather and temperature conditions. Such extinguisher shall be properly maintained and shall be provided with a durable maintenance and inspection work tag fastened thereto showing dates of inspection, recharge or repair and signature of the responsible person conducting such inspection and service.

12. When a telephone or two-way voice radio is provided for emergency communication between the suspended scaffold and the building, the communication station in the building shall be manned whenever the scaffold is being used. Such communication system shall be tested prior to the daily use of the scaffold and at intervals during such use to assure its proper operation.
13. The operating controls on the suspended scaffold shall be properly and permanently labeled to identify their respective functions.
14. Power at electrical outlets used for the scaffold shall be available only while the scaffold is in use and shall not be available at any other time.
15. The scaffold shall not be used when the prevailing wind velocity exceeds 25 miles per hour.
16. Accessories, containers, tools or other materials on the scaffold platform shall be secured to prevent their movement and to prevent their falling off the scaffold platform.
17. A plate indicating the maximum loading and number of persons required to operate the scaffold shall be attached to the platform in a conspicuous location. The lettering on such plate shall be legible and shall be not less than one-eight (1/8) inch in height
18. The suspended scaffold and all its components shall be maintained in good repair.
19. The scaffold owner shall furnish the Commissioner in writing, a proposed program of maintenance procedures. Such a program shall be acceptable to the Commissioner and shall be subject to such modifications as the Commissioner may thereafter find essential in order to assure continued safety.
20. The name and address of the person or firm designated by the owner to carry out such maintenance program shall be submitted, in writing, to the Commissioner and shall acceptable to him or her. No other person or firm shall be employed or permitted to perform the required servicing and maintenance of the scaffold. Such designated person or firm shall be competent by reason of training and experience to service and maintain the scaffold.
21. Each maintenance inspection of a suspended scaffold shall be conducted by two such designated persons cooperatively.
22. Upon the discovery of any substantial defect or abnormal condition in the scaffold or in any part thereof, the scaffold shall not be operated until such time as the defect or condition has been corrected; the scaffold restored to its normal condition and reinspected by the Commissioner and found acceptable to him or her. A written report, in such form as the Commissioner may require, shall be submitted to him or her immediately upon completion of each inspection or service which the Commissioner may require to be reported.
23. Any repairs or maintenance required or performed on the roof slab or other supporting surface shall be performed under the supervision of a professional engineer licensed to practice in the State of New York. Upon completion of such repairs or maintenance, the professional engineer shall submit to the Commissioner, in writing, certification that the supporting surface and anchors, if originally provided, conform to at least the original design specifications and meet the design strength.
24. All repair welding shall be performed by certified welders. Non-destructive tests of all critical repair welds shall be performed and reports of such tests shall be submitted to the Commissioner.

25. Paintings of aluminum alloy members shall conform to the specifications of ASCE (American Society of Civil Engineers), paper No. 3341.

26. (a) Wire rope hoisting cables and their fastenings shall be renewed as required by Resolution unless conditions of wear, corrosion or other safety considerations warrant prior renewal.

    (b) A non-corrosive metal data tag shall be attached to a rigid part of the hoist, to one of the rope fittings or to each rope. Such tag shall contain the following information stamped or etched in letters not less than one-sixteenth (1/16) inch in height.

        (1) Diameter in inches.
        (2) Manufacturer's rated breaking strength.
        (3) Grade of steel used.
        (4) Date of installation (month and year).
        (5) Construction classification.
        (6) Person or firm installing ropes.
        (7) Name of rope manufacturer.

    (c) Whenever such a rope is replaced a new metal tag shall be provided.

27. No changes or alterations affecting safety shall be made in or upon the scaffold nor shall any additions or accessories be attached thereto unless previously authorized, in writing, by the Commissioner. Except for the replacement of identical equipment or accessories, any changes or additions shall be subject to final approval by amendment of the Resolution of Special Approval.

28. All pertinent provisions of Industrial Code Rule Part 21, and Industrial Code Rule Part 23 shall apply.

29. A copy of the Approval Resolution and a set of filed data, including drawings, description of the equipment and operating procedures, shall be kept on the premises of the scaffold installation readily available to the persons using the equipment for their information and training, to the maintenance personnel and to the Commissioner.

30. Where the vertical travel of the scaffold platform exceeds 150 feet, a means shall be provided to stabilize the separate hanging lifelines and the electrical power and control cables to the building to prevent displacement by wind or any other force. Such stabilizing means shall be provided for each additional 150 feet of vertical travel.

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ESP Agency Building 4 (typical of all 4 Agency Buildings)

STATE OF NEW YORK
DEPARTMENT OF LABOR

MEMBERS
HARRY R. MASON, CHAIRMAN
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RICHARD H. HOLTON
WILLIAM E. ADAMS
GENERAL COUNSEL
GAYLORD W. HYMAN
EXECUTIVE SECRETARY

BOARD OF STANDARDS AND APPEALS
Tower Building
Empire State Plaza
Albany, N.Y. 12223

RESOLUTION OF SPECIAL APPROVAL

APPROVAL NO. 8024

APPLICANT: State of New York
Office of General Services
Division of South Mall Development Operations
Empire State Plaza, Swan Street
Albany, NY 12201

AGENT FOR THE APPLICANT:
Manning and Lewis Engineering Company
675 Rahway Avenue
Union, NJ 07083

BUILDING NAME AND LOCATION:
Agency Building No. 4
Empire State Plaza, Albany, NY

WHEREAS:

1. The applicant's agent filed with the Board of Standards and Appeals of the State of New York, an application for approval of a device designated

WINDOW CLEANING SCAFFOLD INSTALLATION
(Track-Type)

2. The applicant filed with the said application certain data as follows:

a) A complete set of building plans sealed by a registered architect.
b) Engineering calculations and a certification of adequacy of the building to support the installation, as signed by a professional engineer licensed to practice in the State of New York.

Re: Approval No. 8024

Window Cleaning Scaffold Installation

c) A complete set of drawings for the equipment, signed and sealed by a professional engineer licensed to practice in the State of New York.

d) Engineering calculations for the equipment, signed and sealed by professional engineer' licensed to practice in the State of New York.

e) A typewritten description of the installation.

f) A stability test report for the equipment, signed and sealed by a professional engineer licensed to practice in the State of New York.

g) A letter of authorization to the manufacturer to act as agent or the building owner.

h) A completed BSA-15 technical date form for this installation.

i) A certification from the equipment manufacturer and installer that the equipment has been manufactured and installed in accordance with the filed data.

3. The installation was inspected by members of the Board's Approval staff on November 19, 2973 followed by a hearing held at the South Mall Tower in the O.G.S conference room November 20, 1973.

4. Based upon the filed data, the Board's Approval Unit has Recommended that the said installation be approved.

5. The board finds that said installation is described as follows:

DESCRIPTION

This equipment installation consists of a scaffold suspended by four wire ropes from a track-type roof carriage. It is intended for window cleaning and light building maintenance purposes and is located at the roof of the Agency Building No. 4, Empire State Plaza, Albany, New York.

The work platform is fabricated from structural aluminum shapes and is approximately 21'-9" long x 4'-0" wide and has guardrails, midrails and toeboards on 4 sides, which is covered with wire mesh.

Re: Approval No. 8024
Window Cleaning Scaffold Installation

A minimum of two men and a maximum of (6) men, materials and tools will occupy the platform. The platform has a live load rating of 1,500 pounds. Constant pressure type of pushbutton controls and an emergency stop pushbutton (maintained type) are provided on the work platform as well as an emergency control station within a sealed enclosure on the roof-car.

Access and egress to the platform at the roof elevation is through electrically interlocked gates of the roof-car and the work platform.

Continuous tie-in devices are provided on the work platform to engage the mullion-guides provided on the face of the building.

Guidance of the platform is also provided by tracks and rollers on the roof carriage while the platform is transferred to and from the roof carriage to the building face.

Ascent/descent speeds are provided at approximately 33 and 33 feet per minute.

The work platform is suspended from four (4) 3/8" diameter wire ropes which are attached through spring-type load-equalizers to the platform structure.

The wire ropes are suspended from outriggers which are attached to a track mounted roof-carriage. The roof carriage is counter-weighted and also has a continuously engaged-rolling rail-claw. The overall stability with the rail-crew exceeds four to one in any circumstance.

The roof car is positively and automatically locked at each work drop location before vertical operation of the work-platform can be affected.

The roof car contains a single wrap winding drum, the electrical controllers, and related equipment.

The hoisting equipment consists of a 30" diameter grooved winding drum directly driven through worm and spur gear speed reducers and a crane and hoist type electric motor with a magnetic disc-brake. A centrifugally actuated overspeed brake is also provided.

Re: Approval No. 8024
Window Cleaning Scaffold Installation

A hand crank may be attached to the wormdrive to facilitate emergency retrieval of the platform.

The track upon which the roof carriage travels consists of steel I-beams supported and fastened to tubular steel posts, which in turn are welded to the building's roof structure. Appropriate track switches are provided for access to building corners and to the storage area.

The roof carriage is propelled by two ¾ horsepower electric motors, one at each outboard wheel-truck. Both drive motors are equipped with a disc type magnetic brake to prevent further horizontal motion.

The wire rope sheaves which guide the ropes are not less than 18" (i.e. greater than 40 rope diameters).

The roof car is provided with an access ladder and protected catwalks allowing safe access to the roof car and the work platform.

The hoisting ropes are each 3/8" diameter, 6 x 25, improved plow steel, having a minimum breaking strength of 13,200 pounds. The connections to the work platform are by means of Otis Elevator forged and babbited thimbles.

A special feature of safety is provided by the automatic setting of the secondary brake after a time delay of approximately two seconds after stopping the main drive motors, as a backup for the primary brake. This operation is accomplished so that the secondary brake does no work during normal operation thus insuring that only the primary brake will be subject to wear.

The electrical controller is of a elevator service type and is further provided with phase failure, phase reversal and overhead protection features. The operating circuitry is of a safe failing design.

Power is provided to the roof car through a four conductor No. 4 neoprene covered flexible power cable which is provided with an automatic take-up reel. A strain relief device is provided on the cable for attachment to anchor devices placed at the weather proofed twist-lock outlets at appropriate intervals along the roof top.

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Window Cleaning Scaffold Installation

There is also a take up reel which may be used for a telephone cable.

The telephone and control wiring cable for the work platform is attached to a winding drum which is directly coupled to the main winding drum drives for proper synchronism. The end of this cable is attached to its winding drum and carried through a hollow drum shaft to a weatherproofed slip-ring assembly.

The control cable is a weatherproofed multi-conductor neoprene covered cable having a stainless steel core of adequate strength to accept the full tension in the cable with a minimum safety factor of four.

The design and general operation of push button controls and limit switches for safety and operational purposes are as follows:

> Equipment will be controlled by pushbuttons of the constant-pressure type, permitting motion only while the operator is pressing the required button. It is intended that all operations of the machine will be completely interlocked and provided with limit switches or mechanical interlocks to enforce operation exactly in the manner intended. The points of control anticipated are as follows:

<u>Limit Switches and Push Button Controls</u>

On the Operator' Platform	"Up"
	"Down"
	"Inch"
	"Emergency Stop"
In the Roof Car	"Right Traverse"
	"Left Traverse"
	"Emergency Stop"
Also separately mounted	"Emergency Up"
(in glass enclosure) on the	"Emergency Down"
Roof Car	"Emergency Inch Button"

Each of the stop buttons is of the maintained contract type and affords protection against sticking of the constant pressure pushbuttons which might be caused by freezing rain or snow or

other external cause. It is noted that all pushbuttons are weatherproof, as manufactures by the National Acme Company, and provided with rubber weather guards to prevent malfunction from such external causes.

1. "Stop-Motion Multi-Cam Switch" Allen Bradley, Type 803A64, or equal, to act as Stop Motion switch and to establish the upper and lower inching zones.

2. "Upper Limit Stop"
This switch will also close the circuit permitting traversing of the Roof Car, and is directly struck by the platform.

3. "Upper Limit Final" or "Safe Stop" (2)
Two switches are used, one at each end, which has the effect of protecting both against over-run of the normal stop and against out-of-levelness of the platform.

4. "Lower Limit Stop"

5. "Lower Limit Final" or "Safe Stop".
Will be actuated by stop-motion device.

6. Slack Rope Overtension Switches". (4), i.e., one on each cable attachment. Switches cut out mainline contacts upon slackness of any cable or overtension.

7. "Traveling Cable Protective Switches". (2)
Switches actuated by the dancer weight at the traveling cable platform tie-off, to stop down motion should the dancer weight reach the upper or lower limits of the guides, thus anticipating possible excess tension.

8. "Locating Pin Down Switch"
"Locating Pin Up Switch"

   Locating Pin Down Switch to enforce alignment of the Roof Car at each working position.

Re: Approval No: 8024
Window Cleaning Scaffold Installation

Locating Pin Up Switch to insure disengagement of the locating pin before traversing of the Roof Car can take place.

9. "Roof Car Gate Switch"

9a. "Platform Gate Switch"

10. "Traverse Limiting Switches". (2)
To prevent running past the storage spur track or past open switching.

11. "Dummy Mullion Control" (2)
To insure that dummy millions are aligned with building mullions before platform can move, and that the mullions are raised before traversing can take place.

12. "Power Cable Reel Protection"
This switch stops motion of the Roof Car when the power cable has been drawn to the full effective limit of the cable reel.

13. "Hand Crank Cut-Out".
Renders the power hositing inoperative whenever the hand crank is positioned on the worm shaft.

14. "Interference Switch – Guide Shoes" – Detects obstruction in Guide Mullions and stops Down Travel.

Other details of the equipment are contained in the filed data and drawings.

The following are some technical data of interest:

Building height – 20 stories (238 feet above grade)
Vertical rise of platform – 500 feet
Platform dead load – 2300 pounds
live load – 1500 pounds (including 6 workmen & tools
dimensions – 21.7' long by 4' wide by 3.58' high
material – 6061 – T6 Aluminum
speeds – 33 feet per minute

Re: Approval No. 8024
Window Cleaning Scaffold Installation

Communications – two way radio or two way telephone to a continually manned central location on the Empire State Plaza site.
Power required – 440 volts, 3 phase, 60 HZ, 17 KVA
Wire rope – 3/8" dia.
Ratio of wire rope dia. to drum dia. – 112:1
Ratio of wire rope dia. to pulley dia. – 40:1 or greater.

NOW, THEREFORE, IT IS RESOLVED

1. That the said installation is hereby approved for use only at the above described location and that this Resolution of Approval shall Terminate upon the completion of use of the said installation at the above described location.

2. This approval shall apply only when the said installation is manufactured, installed, used, maintained and preserved to be in all respects in accordance with the filed data, with the description in the Resolution of Approval with, "SAC-1 STANDARD CONDITIONS FOR OPERATION AND MAINTENANCE OF SUSPENDED SCAFFOLDS USED FOR WINDOW CLEANING AND LIGHT BUILDING MAINTENANCE" which is attached hereto and herewith made a part of this Resolution, and also when in compliance with the following special requirements:

a. The suspension wire ropes of this installation shall be replaced within 36 month intervals following the date of this Resolution, and tagged I accordance with SAC-1 requirements.

b. Before being put into use for its intended purposes and after the date of this Resolution, the installation shall be inspected by the Industrial Commissioner. The installation shall not be used for its intended purposes until such inspection is completed and the Commissioner has found the installation to be acceptable for compliance with this Resolution of Approval and has so notified the owner, or lessee, or agent, in writing.

c. Access and egress for the work platform shall be only from the roof carriage.

Re: Approval No. 8024
Window Cleaning Scaffold Installation

d. The suspended platform is approved for a total live load of 1,500 pounds, including 6 workmen and tools or materials. There shall be a minimum of two (2) workmen on the work platform.

e. A padlock with a key common to all other window cleaning installations of the Empire State Plaza shall be provided on the power-shutoff switch of the roof carriage. The keys shall be available only to authorized persons.

f. A person in O.G.S. shall be made responsible for, and be adequately trained by the equipment manufacturer for maintenance of this equipment. This person may supervise and instruct other O.G.S. personnel or sub-contractors regarding proper maintenance for said equipment.

g. Either two-way telephone or two-way radio communications shall be provided from the work platform to a continually manned station within the building or on the Empire State Plaza Site.

h. Whenever the equipment is left unattended, the power switch of the roof carriage shall be padlocked in the "off" position.

3. That exclusive and unassignable authorization is hereby granted to the said applicant to identify the said installation as follows:

STATE OF NEW YORK - OFFICE OF GENERAL SERVICES

NEW YORK STATE B.S.A. APPROVAL NO. 8024

Dated at Albany, New York
October 2, 1974

Prepared by:
L. R. Stafford, P.E.

Harry R. Mason, Chairman

B. Franklin Spencer, Member

Richard H. Bolton, Member

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ESP Corning Tower (Penthouse)

STATE OF NEW YORK
DEPARTMENT OF LABOR

MEMBERS
HARRY R. MASON, CHAIRMAN
B. FRANKLIN SPENCER
RICHARD H. BOLTON
WILLIAM E. ADAMS
GENERAL COUNSEL
GAYLORD W. HYMEN
EXECUTIVE SECRETARY

BOARD OF STANDARDS AND APPEALS
11 NORTH PEARL STREET
ALBANY, N. Y. 12207

RESOLUTION OF SPECIAL APPROVAL

APPLICATION NO. 5270 APPROVAL NO. 6794

APPLICANT: State of New York
Office of General Services
Division of South Mall Development Operations
South Mall, Swan Street
Albany, New York 12201

AGENT FOR THE APPLICANT:
Manning and Lewis Engineering Company
675 Rahway Avenue
Union, New Jersey 07083

BUILDING NAME
AND LOCATION: South Mall - (Penthouse)
Empire State Plaza, Albany, N. Y.

WHEREAS:

1. The applicant's agent filed with the Board of Standards and Appeals of the State of New York, an application for approval of a device designated,

WINDOW CLEANING SCAFFOLD INSTALLATION
(Track-Type)

2. The applicant filed with the said application certain data as follows:

a) A complete set of building plans sealed by a registered architect.

b) Engineering calculations and a certification of adequacy of the building to support the installation, as signed by a professional engineer licensed to practice in the State of New York.

c) A complete set of drawings for the equipment, signed and sealed by a professional engineer licensed to practice in the State of New York.

d) Engineering calculations for the equipment, signed and sealed by a professional engineer licensed to practice in the State of New York.

Re: Approval No. 6794
Window Cleaning Scaffold Installation

e) A typewritten description of the installation.

f) A stability test report for the equipment, signed and sealed by a professional engineer licensed to practice in the State of New York.

g) A letter of authorization to the manufacturer from the building owner.

h) A completed BSA-15 technical date form for this installation.

i) A certification from the equipment manufacturer and installer that the equipment has been manufactured and installed in accordance with the filed data.

3. The installation was inspected by members of the Board's Approval staff on November 19, 1973, followed by a hearing held at the South Mall Tower in the O.G.S. conference room on November 20, 1973.

4. Based upon the filed data, the Board's Approval Unit has recommended that the said installation be approved.

5. The board finds that said installation is described as follows:

DESCRIPTION

This equipment installation consists of a scaffold suspended by four wire ropes from a track-type carriage. It is intended for window cleaning and light building maintenance purposes and is located at the penthouse roof of the South Mall Tower Building.

The work platform is fabricated from structural aluminum shapes and is approximately 21'-9" long x 4'-3" wide and has guardrails, midrails and toeboards on 4 sides, which are covered with wire mesh.

Anchorage for approved safety belts tail lines is provided by a 5/16" wire rope tautly secured to the outboard side of the work platform.

A minimum of two men and a maximum of six men, materials and tools will occupy the platform. The platform has a live load rating of 1500 pounds.

Constant pressure type of pushbutton controls and an emergency stop pushbutton (maintained type) are provided on the work platform as well as an emergency control station within a protected enclosure on the roof-car.

Access and egress to the platform is through electrically interlocked gates of the roof-car and the work platform.

Re: Approval No. 6794
Window Cleaning Scaffold Installation

Continuous tie-in devices are provided on the work platform to engage the mullion-guides provided on the face of the building.

Guidance of the platform is also provided by tracks and rollers on the roof carriage while the platform is transferred to and from the roof carriage to the building face.

Two ascent/descent speeds are provided at approximately 30 and 60 feet per minute.

The work platform is suspended from four (4) 3/8" diameter wire ropes which are attached through spring type load-equalizers to the platform structure.

The wire ropes are suspended from outriggers which are attached to a track mounted roof-carriage and which are raised and lowered by an electrically driven screwjack system. A power actuated locating device is provided for additional support of the outrigger load. The roof-carriage is counterweighted and also has a continuously engaged rolling rail-claw. The overall stability with the rail-claw exceeds four to one in any circumstance.

The roof car is positively and automatically locked at each work drop location before vertical operation of the work-platform can be effected.

The roof-car contains dual, single wrap, winding drums, the electrical controllers, and related equipment.

The hoisting equipment consists of two 42" diameter grooved winding drums, directly driven through worm and spur gear speed reducers and a two-speed crane and hoist type electric motor with a magnetic disc-brake. A centrifugally actuated overspeed brake is also provided.

A hand crank may be attached to the wormdrive to facilitate emergency retrieval of the platform.

Provision is made for a synchronized horizontal travel of the winding drums which are mounted on a separate carriage attached to rails on the roof carriage, thus providing a means for precision winding and unwinding of suspension cables.

Stabilizing devices are applied to the 4 wire ropes and control cable at intervals by the operators during descent to minimize sway at said cables. These are secured to pins in the building face.

The track upon which the roof carriage travels consists of steel I-beams supported and fastened to tubular steel posts which in turn are welded to the buildings roof structure. Appropriate track switches are provided for access to building corners and to the storage area.

Re: Approval No. 6794
Window Cleaning Scaffold Installation

The roof carriage is propelled by two 4-horsepower electric motors, one at each outboard wheel-truck. Both drive motors are equipped with a disc type magnetic brake to prevent further horizontal motion.

The wire rope sheaves which guide the ropes are not less than 18 inches, (i.e. greater than 40 rope diameters).

The roof-car is provided with an access ladder and protected catwalks allowing safe access to the roof-car and the work platform.

An auxiliary outrigger is provided for the control cable to the work platform. This outrigger is mechanically connected to the moving drum truck so as to provide a level winding device for the control cable.

The hoisting ropes are each 3/8" diameter, 6x25 improved plow steel, having a minimum breaking strength of 12,200 pounds. The connections to the work platform are by means of Otis Elevator forged and babbited thimbles.

A special feature of safety is provided by the automatic setting of the secondary brake after a time delay of approximately two seconds after stopping the main drive motors, as a backup for the primary brake. This operation is accomplished so that the secondary brake does not work during normal operation, thus insuring that only the primary brake will be subject to wear.

Another feature is a provision for field testing of the secondary brake to insure its operability by maintenance personnel.

The electrical controller is of an elevator service type and is further provided with phase failure, phase reversal and overload protection features. The operating circuitry is of a safe failing design.

Power is provided to the roof car through a four conductor, No. 4 neoprene covered flexible power cable which is provided with an automatic take-up reel. A strain relief device is provided on the cable for attachment to anchor devices placed at the weatherproofed twist-lock outlets of appropriate intervals along the roof top.

There is also a take-up reel which may be used for a telephone cable.

The telephone and control wiring cable for the work platform is attached to the main-winding drum drives for proper synchronism. The end of this cable is attached to its winding drum and carried through a hollow drum shaft to a weatherproofed slip-ring assembly.

The control cable is a weatherproofed multi-conductor neoprene covered cable having a stainless steel core of adequate strength to accept the full tension in the cable with a minimum safety factor of four.

Re: Approval No. 6794
Window Cleaning Scaffold Installation

The design and general operation of pushbutton controls and limit switches for safety and operational purposes are as follows:

Equipment will be controlled by pushbuttons of the constant pressure type, permitting motion only while the operator is pressing the required button. It is intended that all operations of the machine will be completely interlocked and provided with limit switches or mechanical interlocks to enforce operation exactly in the manner intended. The points of control anticipated are as follows, although additional switches may be provided for protection:

On the Operators' Platform:	"Up"
	"Down"
	"High Speed"
	"Inch"
	*"Stop"
In the Roof Car	"Right Traverse"
	"Left Traverse"
	*"Stop"
	**"Outriggers Up"
	**"Outriggers Down"
Also separately mounted	"Emergency Up" and
	"Emergency Down"
	*"Stop"

* Each of the stop buttons is of the maintained-contact type and affords protection against sticking of the constant pressure pushbuttons which might be caused by freezing rain or snow or other external cause. It is noted that all pushbuttons are weatherproof, as manufactured by the National Acme Company, or equal, and provided with rubber weather guards to prevent malfunction from external causes.

** Tied in with Hydraulic System.

The principal points of interlock protection are:

1. "Stop-Motion Multi-Cam Switch" Allan Bradley, Type 803A64, or equal, to act as Stop motion switch and to establish the upper and lower inching zones and the enforced slow speed at the points of transfer of the cable stabilizer. This Rotary Switch also contains circuits for zone control of the stabilizer, operating in conjunction with the stabilizer switches, to enforce its proper positioning. (Auxiliary contacts may be provided by Limit Switches, actuated by traverse of Drum Truck).

Re: Approval No. 6794
Window Cleaning Scaffold Installation

2. "Upper Limit Stop". This switch will also close the circuit permitting traversing of the Roof Car, and is directly struck by the platform.

3. "Upper Limit Final" or "Safe Stop". (2).
Two switches are used, one at each end, which has the effect of protecting both against over-run of the normal stop and against out-of-levelness of the platform.

4. "Lower Limit Stop". Directly struck by building attachments.

5. "Lower Limit Final" or "Safe Stop". Will be actuated by stop motion device.

6. "Slack rope and Overtension Switches". (4), i.e., one on each cable attachment. Switches cut out main line contacts upon slackness of any cable or overtension.

7. "Locating Pin Down Switch"
"Locating Pin Up Switch"

Locating Pin Down Switch to enforce alignment of the Roof Car at each working position.

Locating Pin Up Switch to insure disengagement of the locating pin before traversing of the Roof Car can take place.

8. "Roof Car Gate Switch"

8a. "Platform Gate Switch"

* Switches enforce closing of the Roof Car and Platform Gates before motion of the operators' platform can take place. Roof car Gate Switch interlocked with "Up" Limit Switch to prevent opening gates unless platform is up.

9. "Traverse Limiting Switches". (2)

To prevent running past the storage spur track or past open switching.

10. "Dummy Mullions Control" (2) or (4), as required to insure that dummy mullions are engaged with building mullions before platform can move, and that the mullions are raised before traversing can take place.

11. "Outriggers Up". (1) or (2), as required. To enforce raising of outriggers before traversing of Roof Car or vertical motion of Platform can take place, and to stop up motion or booms.

Re: Approval No. 6794
Window Cleaning Scaffold Installation

11a. "Outrigger Lock (2)
To enforce locking of booms by separate dogs before any motion can take place.

12. "Storage Position Detect"
Switch actuated by track attachments at the storage positions, to establish position where booms can be lowered.

*13. "Lower Roof Detect" (Penthouse Machine Only)
Switch on Penthouse Roof Machine actuated by track attachments at each position where machine operates over Tower Building Roof, to establish inching and stopping zones corresponding to the foreshortened travel.

*14. "Stabilizer Position Switch". (2)
Switches insure the proper setting of the stabilizer when being carried on top of the operator's platform. In combination with the Rotary Cam Zone Switch these switches enforce the proper detachment of the stabilizer at the pick-off positions.

15. "Traveling Cable Protective Switches (2)
Switches actuated by the dancer weight at the traveling cable platform tie-off, to stop down motion should the dancer weight reach the upper or lower limits of the guides, thus anticipating possible excess tension.

16. "Power Cable Real Protection"
This switch stops motion of the Roof Car when the power cable has been drawn to the full effective limit of the cable real.

17. "Hand Crank Cut-Out"
Renders the power hoisting inoperative whenever the hand crank is positioned on the worm shaft.

Other details of the equipment are contained in the filed data and drawings.

The following are some technical date of interest:
Building height – 48 stories (590 feet above grade)
Vertical rise of platform – 565 feet
Platform dead load – 3000 pounds
live load – 1500 pounds (including 6 workmen and tools)
dimensions – 21.5' long x 4.25' wide x 3.58' high
material – 6061-T6 Aluminum
speeds – 30 and 60 feet per minute

Re: Approval No. 6794
Window Cleaning Scaffold Installation

Communications – two way radio or two way telephone to a continually manned central location on the South Mall site
Power required – 440 volts, 3 phase, 60 Hz, 17 KVA
Wire rope – 3/8" diameter
Ratio of wire rope dia. to drum dia. – 112:1
Ratio of wire rope dia. to pulley dia. – 40:1 or greater

NOW, THEREFORE, IT IS RESOLVED

1. That the said installation is hereby approved for use only at the above described location and that this Resolution of Approval shall Terminate upon the completion of use of the said installation at the above described location.

2. This approval shall apply only when the said installation is manufactured, installed, used, maintained and preserved to be in all respects in accordance with the filed date, with the description in this Resolution of Approval with "SAC-1, STANDARD CONDITIONS FOR OPERATION AND MAINTENANCE OF SUSPENED SCAFFOLDS USED FOR WINDOW CLEANING AND LIGHT BUILDING MAINTENANCE which is attached hereto and herewith made a part of this Resolution, and also when in compliance with the following special requirements:

a) The suspension wire ropes of this installation shall be replaced within 36 month intervals following the date of this resolution, and tagged in accordance with SAC-1 requirements.

b) Before being put into use for its intended purposes and after the date of this Resolution, the installation shall be inspected by the Industrial Commissioner. The installation shall not be used for its intended purposes until such inspection is completed and the Commissioner has found the installation to be acceptable for compliance with this Resolution of Approval and has so notified the owner, or lessee or agent, in writing.

c) Access and egress for the work platform shall be only from the roof carriage.

d) The suspended platform is approved for a total live load of 1500 pounds, including six workmen and tools or materials. There shall be a minimum of two workmen on the work platform.

e) A padlock with a key common to all other window cleaning installations of the South Mall shall be provided on the power-shutoff switch of the roof carriage. The keys shall be available only to authorized persons.

Re: Approval No. 6794
Window Cleaning Scaffold Installation

f) A person in O.G.S. shall be made responsible for, and be adequately trained by the equipment manufacturer for maintenance of this equipment. This person may supervise and instruct other O.G.S. personnel or sub-contractors regarding proper maintenance for said equipment.

g) Either two-way telephone or two-way radio communications shall be provided from the work platform to a continually manned station within the building or on the South Mall site.

h) Whenever the equipment is left unattended, the power switch of the roof carriage shall be padlocked in the "off" position.

3. That exclusive and unassignable authorization is hereby granted to the said applicant to identify the said installation as follows:

STATE OF NEW YORK - OFFICE OF GENERAL SERVICES

NEW YORK STATE B.S.A. APPROVAL NO. 6794

Dated at Albany, New York
February 5, 1974

Harry R. Mason, Chairman

Prepared by:
D. M. Wilsey, P.E.

Richard H. Bolton, Member

DMW/sv

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ESP Corning Tower (Roof Top)

STATE OF NEW YORK
DEPARTMENT OF LABOR

MEMBERS
HARRY R. MASON, CHAIRMAN
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EXECUTIVE SECRETARY

BOARD OF STANDARDS AND APPEALS
11 NORTH PEARL STREET
ALBANY, N. Y. 12207

RESOLUTION OF SPECIAL APPROVAL

APPLICATION NO. 4234 APPROVAL NO. 6793

APPLICANT: State of New York
Office of General Services
Division of South Mall Development Operations
Empire State Plaza, Swan Street
Albany, New York 12201

AGENT FOR THE APPLICANT:
Manning and Lewis Engineering Company
675 Rahway Avenue
Union, New Jersey 07083

BUILDING NAME AND LOCATION:
Tower Building (Roof Top Rig.)
N. Y. State South Mall, Albany

WHEREAS:

1. The applicant's agent filed with the Board of Standards and Appeals of the State of New York, an application for approval of a device designated:

WINDOW CLEANING SCAFFOLD INSTALLATION
(Track-Type)

2. The applicant filed with the said application certain data as follows:

a) A complete set of building plans sealed by a registered architect.
b) Engineering calculations and a certification of adequacy of the building to support the installation, as signed by a professional engineer licensed to practice in the State of New York.
c) A complete set of drawings for the equipment, signed and sealed by a professional engineer licensed to practice in the State of New York.
d) Engineering calculations for the equipment, signed and sealed by a professional engineer licensed to practice in the State of New York.

Re: Approval No. 6793
Window Cleaning Scaffold Installation

e) A typewritten description of the installation.

f) A stability test report for the equipment, signed and sealed by a professional engineer licensed to practice in the State of New York.

g) A letter of authorization to the manufacturer to act as agent for the building owner.

h) A completed BSA-15 technical data form for this installation.

i) A certification from the equipment manufacturer and installer that the equipment has been manufactured and installed in accordance with the filed data.

3. The installation was inspected by members of the Board's Approval staff on November 19, 1973 followed by a hearing held at the South Mall Tower in the O.G.S conference room on November 20, 1973.

4. Based upon the filed data, the Board's Approval Unit has recommended that the said installation be approved.

5. The Board finds that said installation is described as follows:

DESCRIPTION

This equipment installation consists of a scaffold suspended by four wire ropes from a track-type roof carriage. It is intended for window cleaning and light building maintenance purposes and is located at the main roof of the South Mall Tower Building. The work platform is fabricated from structural aluminum shapes and is approximately 21'9" long x 4'-3" wide and has guardrails, midrails and toeboards on 4 sides, which are covered with wire mesh.

Anchorage for approved safety belts tail lines is provided by a 5/16 inch wire rope tautly secured to the outboard side of the work platform.

A minimum of two men and a maximum of (6) men, materials and tools will occupy the platform. The platform has a live load rating of 1500 pounds. Constant pressure type of pushbutton controls and an emergency stop pushbutton (maintained type) are provided on the work platform as well as an emergency control station within a sealed enclosure on the roof-car.

Access and egress to the platform is through electrically interlocked gates of the roof-car and the work platform.

Continuous tie-in devices are provided on the work platform to engage the mullion-guides provided on the face of the building.

Guidance of the platform is also provided by tracks and rollers on the roof carriage while the platform is transferred to and from the roof carriage to the building face.

Two ascent/descent speeds are provided at approximately 30 and 60 feet per minute.

Re: Approval No. 6793

Window Cleaning Scaffold Installation

The work platform is suspended from four (4) 3/8" diameter wire ropes which are attached through spring-type load-equalizers to the platform structure.

The wire ropes are suspended from outriggers which are attached to a track mounted roof-carriage, and which are raised and lowered by an electrically driven screwjack system. A power actuated locating device is provided for additional support of the outrigger load. The roof carriage is counterweighted and also has a continuously engaged-rolling rail-claw. The overall stability with the rail-claw exceeds four to one in any circumstances.

The roof car is positively and automatically locked at each work drop location before vertical operation of the work-platform can be affected.

The roof car contains two dual-single wrap winding drums, the electrical controllers, and related equipment.

The hoisting equipment consists of two 42" diameter grooved winding drums, directly driven through worm and spur gear speed reducers and a two-speed crane and hoist type electric motor with a magnetic disc-brake. A centrifugally actuated overspeed brake is also provided.

A hand crank may be attached to the wormdrive to facilitate emergency retrieval of the platform.

Provision is made for a synchronized horizontal travel of the winding drums which are mounted on a separate carriage attached to rails on the roof carriage, thus providing a means for precision winding and unwinding of suspension cables.

Stabilizing devices are applied to the 4 wire ropes and control cable at intervals by the operators during descent to minimize sway at said cables. These are secured to pins in the building face.

The track upon which the roof carriage travels consists of steel I-beams supported and fastened to tubular steel posts, which in turn are welded to the building's roof structure. Appropriate track switches are provided for access to building corners and to the storage area.

The roof carriage is propelled by two 1 horsepower electric motors, one at each outboard wheel-truck. Both drive motors are equipped with a disc type magnetic brake to prevent further horizontal motion.

The wire rope sheaves which guide the ropes are not less than 18" (i.e. greater than 40 rope diameters).

The roof car is provided with an access ladder and protected catwalks allowing safe access to the roof car and the work platform.

Window Cleaning Scaffold Installation

An auxiliary outrigger is provided for the control cable to the work platform. This outrigger is mechanically connected to the moving drum truck so as to provide a level-winding device for the control cable.

The hoisting ropes are each 3/8" diameter, 6 x25, improved plow steel, having a minimum breaking strength of 12, 200 pounds. The connections to the work platform are by means of Otis Elevator forged and babbited thimbles.

A special feature of safety is provided by automatic setting of the secondary brake after a time delay of approximately two seconds after stopping the main drive motors, as a backup for the primary brake. This operation is accomplished so that the secondary brake does not work during normal operation thus insuring that only the primary brake will be subject to wear.

Another feature is a provision for field testing of the secondary brake to insure its operability, by maintenance personnel.

The electrical controller is of a elevator service type and is further provided with phase failure, phase reversal and overload protection features. The operating circuitry is of a safe failing design.

Power is provided to the roof car through a four conductor No. 4 neoprene covered flexible power cable which is provided with an automatic take-up reel. A strain relief device is provided on the cable for attachment to anchor devices placed at the weatherproofed twist-lock outlets at appropriate intervals along the roof top.

There is also a take up reel which may be used for a telephone cable.

The telephone and control wiring cable for the work platform is attached to a winding drum which is directly coupled to the main-winding drum drives for proper synchronism. The end of this cable is attached to its winding drum and carried through a hollow drum shaft to a weather-proofed slip-ring assembly.

The control cable is a weatherproofed multi-conductor neoprene covered cable having a stainless steel core of adequate strength to accept the full tension in the cable with a minimum safety factor of four.

The design and general operation of push button controls and limit switches for safety and operational purposes are as follows:

Equipment will be controlled by pushbuttons of the constant pressure type, permitting motion only while the operator is pressing the required button. It is intended that all operations of the machine will be completely interlocked and provided with limit switches or mechanical interlocks to enforce operation exactly in the manner intended. The points of control anticipated are as follows, although additional switches may be provided for protection:

On the Operators' Platform		"Up"
		"Down"
		"High Speed"
		"Inch"
	*	"Stop"
In the Roof Car		"Right Traverse"
		"Left Traverse"
	*	"Stop"
	**	"Outriggers Up"
	**	"Outriggers Down"
Also separately mounted		"Emergency Up" and "Emergency Down"
	*	"Stop"

* Each of the Stop buttons is of the maintained-contract type and affords protection against sticking of the constant pressure pushbuttons which might be caused by freezing rain or snow or other external cause. It is noted that all pushbuttons are weatherproof, as manufactured by the National Acme Company, or equal, and provided with rubber weather guards to prevent malfunction from such external causes.

** Tied in with Hydraulic System.

The principal points of interlock protection are:

1. "Stop-Motion Mutli-Cam Switch" Allen Bradley, Type 803A64, or equal, to act as Stop motion switch and to establish the upper and lower inching zones and the enforced slow speed at the points of transfer of the cable stabilizer. This Rotary Switch also contains circuits for control of the stabilizer, operating in conjunction with the stabilizer switches, to enforce its proper positioning. (Auxiliary contacts may be provided by Limit Switches, actuated by traverse of Drum Truck.)
2. "Upper Limit Stop" – This switch will also close the circuit permitting traversing of the Roof Car, and is directly struck by the platform.

* 3. "Upper Limit Final" or "Safe Stop". (2) Two switches are used, one at each end, which has the effect of protecting both against over-run of the normal stop and against out-of-levelness of the platform.

4. "Lower Limit Stop". Directly struck by building attachments.
5. "Lower Limit Final" or Safe Stop". Will be actuated by stop motion device.

6. "Slack rope and Overtension Switches". (4), i.e., one on each cable attachment.
   Switches cut out main line contacts upon slackness of any cable or overtension.

7. "Locating Pin Down Switch"
   "Locating Pin Up Switch"

   Locating Pin Down Switch to enforce alignment of the Roof Car at each working position.

   Locating Pin Up Switch to insure disengagement of the locating pin before traversing of the Roof Car can take place.

8. "Roof Car Gate Switch"

8a. "Platform Gate Switch"

* Switches enforce closing of the Roof Car and Platform Gates before motion of the operators' platform can take place. Roof Car Gate Switch interlocked with "Up" Limit Switch to prevent opening gates unless platform is up.

9. "Traverse Limiting Switches". (2)

10. "Dummy Mullions Control" (2) or (4), as required to insure that dummy mullions are engaged with building mullions before platform can move, and that the mullions are raised before traversing can take place.

11. "Outriggers Up" (1) or (2), as required. To enforce raising of outriggers before traversing of Roof Car or vertical motion of Platform can take place, and to stop up motion of booms.

11a. "Outrigger Lock (2)
   To enforce locking of booms by separate dogs before any motion can take place.

12. "Storage Position Detect"
   Switch actuated by track attachments at the storage positions, to establish position where booms can be lowered.

Re: Approval No. 6793

Window Cleaning Scaffold Installation

* 13. "Stabilizer Position Switch". (2)
Switches insure the proper setting of the stabilizer when being carried on top of the operators' platform. In combination with the Rotary Cam Zone Switch these switches enforce the proper detachment f the stabilizer at the pick-off positions.

14. "Traveling Cable Protecting Switches (2)
Switches actuated by the dancer weight at the traveling cable platform tie-off, to stop down motion should the dancer weight reach the upper or lower limits of the guides, thus anticipating possible excess tension.

15. "Power Cable Real Protection".
This switch stops motion of the Roof Car when the power cable has been drawn to the full effective limit of the cable reel.

16. "Hand Crank Cut-Out"
Renders the power hoisting inoperative whenever the hand crank is positioned on the worm shaft.

Other details of the equipment are contained in the filed data and drawings.

The following are some technical data of interest:

Building height – 42 stories (526 feet above grade)
Vertical rise of platform – 500 feet
Platform dead load – 3000 pounds
live load – 1500 pounds
dimensions – 21.5' long x 4.25' wide x 3.58' high
material – 6061 – T6 Aluminum
speeds – 30 and 60 feet per minute
Communications – two way radio or two way telephone to a continually manned central location on the South Mall site.
Power required – 440 volts, 3 phase, 60 HZ, 17 KVA
Wire rope 3/8" dia.
Ratio of wire rope dia. to drum dia. – 112:1
Ratio of wire rope dia. to pully dia. – 40:1 or greater.

NOW, THEREFORE, IT IS RESOLVED

1. That the said installation is hereby approved for use only at the above described location and that this Resolution of Approval shall Terminate upon the completion of use of the said installation at the above described location.

2. This approval shall apply only when the said installation is manufactured, installed, used, maintained and preserved to be in all respects in accordance with the filed data, with the description in this Resolution of Approval with, "SAC-1 STANDARD CONDITIONS FOR OPERATION AND MAINTENANCE OF SUSPENDED SCAFFOLDS USED FOR WINDOW CLEANING AND LIGHT BUILDING MAINTENANCE" which is attached hereto and herewith made a part of this Resolution, and also when in compliance with the following special requirements:

a) The suspension wire ropes of this installation shall be replaced within 36 month intervals following the date of this Resolution, and tagged in accordance with SAC-1 requirements.

b) Before being put into use for its intended purposes and after the date of this Resolution, the installation shall be inspected by the Industrial Commissioner. The installation shall not be used for its intended purposes until such inspection is completed and the Commissioner has found the installation to be acceptable for compliance with this Resolution of Approval and has so notified the owner, or lessee or agent, in writing.

c) Access and egress for the work platform shall be only from the roof carriage.

d) The suspended platform is approved for a total live load of 1500 pounds, including 6 workmen and tools or materials. There shall be a minimum of two (2) workmen on the work platform.

e) A padlock with a key common to all other window cleaning installations of the South Mall shall be provided on the power-shutoff switch of the roof carriage. The keys shall be available only to authorized persons.

f) A person in O.G.S shall be made responsible for, and be adequately trained by the equipment manufacturer for maintenance of this equipment. This person may supervise and instruct other O.G.S personnel or sub-contractors regarding proper maintenance for said equipment.

g) Either two-way telephone or two-way radio communications shall be provided from the work platform to a continually manned station within the building or on the South Mall site.

h) Whenever the equipment is left unattended, the power switch of the roof carriage shall be padlocked in the "off" position.

Re: Approval No. 6793
Window Cleaning Scaffold Installation

3. That exclusive and unassignable authorization is hereby granted to the said applicant to identify the said installation as follows:

STATE OF NEW YORK - OFFICE OF GENERAL SERVICES

NEW YORK STATE

B.S.A. APPROVAL NO. 6793

Dated at Albany, New York
January 28, 1974

Harry R. Mason, Chairman

Prepared by:
D. M. Wilsey, P.E.

Richard H. Bolton, Member

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IFB Attachment 3
Corning Tower Manual

P15588, CORNING TOWER
B.M.U. A-25, Series Number: M-3633
Use and maintenance manual

12/2017

Atechbcn

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CERTIFICATE OF COMPLIANCE

Certificate Number	20151216-SA32692
Report Reference	SA32692-20080422
Issue Date	2015-DECEMBER-16
Issued to:	BCN GONDOLAS S L Bruc 72-74 4th floor 08009 Barcelona SPAIN
This is to certify that representative samples of	EQUIPMENT, SCAFFOLDING Classified Scaffold Hoists Model QT-2500
	Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.
Standard(s) for Safety:	UL 1322 -Fabricated Scaffold Planks and Stages UL1323 - Scaffold Hoists
Additional Information:	See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.

Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at http://ul.com/aboutul/locations/

BUREAU VERITAS Certification

Certificación
Certification

Concedida a / Awarded to

Atechbcn, S.L.

C/ TOMAS VILADOMIU 29-35 POLIGON INDUSTRIAL L'ILLA, 08650, SALLENT
CL BRUCH, 74, 4º, 08009, BARCELONA

Bureau Veritas Certification certifica que el Sistema de Gestión ha sido auditado y encontrado conforme con los requisitos de la norma:

Bureau Veritas certify that the Management System has been audited and found to be in accordance with the requirements of standard:

NORMA / STANDARD

ISO 9001:2008

El Sistema de Gestión se aplica a:

Scope of certification:

DISEÑO, MONTAJE, MANTENIMIENTO Y COMERCIALIZACIÓN DE EQUIPOS DE ELEVACIÓN Y ACCESO A FACHADAS PARA MANTENIMIENTO Y LIMPIEZA.

DESIGN, ASSEMBLY, MAINTENANCE AND SALES OF BUILDING MAINTENANCE UNITS.

Número del Certificado *Certificate Number*	**ES064311-1**
Aprobación original : *Original approval date :*	**25/05/2015**
Certificado en vigor: *Effective date:*	**25/05/2015**
Caducidad del certificado: *Certificate expiration date:*	***24/05/2018***

Directora de Certificación / Certification Manager

Este certificado está sujeto a los términos y condiciones generales y particulares de los servicios de certificación
This certificate is valid, subject to the general and specific terms and conditions of certification services

Entidad de Certificación / Certification Body: Bureau Veritas Iberia S.L.
C/ Valportillo Primera 22-24, Edificio Caoba, Pol. Ind. La granja, 28108 Alcobendas - Madrid, Spain



ENAC CERTIFICACIÓN Nº 04/C-SC004

BUREAU VERITAS
Certification

Certificación
Certification

Concedida a / Awarded to

Atechbcn, S.L.

SEDE CENTRAL / CL TOMÁS VILADOMIU 29-35, POLIGON INDUSTRIAL L'ILLA ,08650, SALLENT
CENTRO / CL TOMÁS VILADOMIU 29-35, POLIGON INDUSTRIAL L'ILLA, 08650, SALLENT
OFICINA / CL BRUCH, 74, 4º, 08009, BARCELONA

Bureau Veritas Certification certifica que el Sistema de Gestión ha sido auditado y encontrado conforme con los requisitos de la norma:

Bureau Veritas certify that the Management System has been audited and found to be in accordance with the requirements of standard:

NORMA / STANDARD

ISO 14001:2015

El Sistema de Gestión se aplica a:

Scope of certification:

DISEÑO, MONTAJE, MANTENIMIENTO Y COMERCIALIZACIÓN DE EQUIPOS DE ELEVACIÓN Y ACCESO A FACHADAS PARA MANTENIMIENTO Y LIMPIEZA.

DESIGN, ASSEMBLY, MAINTENANCE AND COMMERCIALIZATION OF LIFTING EQUIPMENT FOR BUILDING MAINTENANCE AND FACADES CLEANING

Número del Certificado *Certificate Number*	**ES074498-1**
Aprobación original : *Original approval date :*	**27/10/2016**
Certificado en vigor: *Effective date:*	**27/10/2016**
Caducidad del certificado: *Certificate expiration date:*	**26/10/2019**

Directora de Certificación / Certification Manager

Este certificado está sujeto a los términos y condiciones generales y particulares de los servicios de certificación
This certificate is valid, subject to the general and specific terms and conditions of certification services



Entidad de Certificación / Certification Body: Bureau Veritas Iberia S.L.
C/ Valportillo Primera 22-24, Edificio Caoba, Pol. Ind. La granja, 28108 Alcobendas – Madrid, Spain

ENAC
CERTIFICACIÓN
Nº 01/C-MA607

Certificate of guarantee

Manufacturer: **ATECHBCN, S.L.**
C/Tomàs Viladomiu, 29-35
Pol. Ind. Illa
08650 Sallent, Barcelona, Spain

Hereby certifies that all our machines for cleaning and maintenance of facades are guaranteed for a period of two years from the date of installation or from the date despatched from the Factory if the installation is carried out by the Client.
This guarantee covers design and/or manufacturing defects under normal usage conditions.

The guarantee will be void under the following circumstances:

- Misuse or use by untrained personnel.

- Not following the instructions of Chapter 7 “Maintenance”.

- Absence of adequate maintenance operations as specified in this Manual.

- Maintenance by personnel not authorised by the manufacturer, as well as the use of spare parts or modifications nor authorised by the manufacturer.

Atechbcn, S.L.

- In general, non-compliance with the instructions given in this Manual.

This guarantee only applies to the following machine:

Model: **A25 Type**
Series number: **M-3633**
Year of manufacture: **2017**
Project: **P15588, CORNING TOWER**

ATECHBCN S.L.
Barcelona
1st of December 2017

1. General aspects and warnings

This machine is a building maintenance unit (BMU). BMU are platforms suspended at variable height (SAE) for planned routine inspections, cleaning and maintenance of the building.

Operators must read and perfectly understand the use and maintenance instructions for the machine. Not following the instructions could produce hazardous situations and accidents.

1.1. Indications for use

- The owner of the machine is responsible for ensuring that this machine is only used by authorised and adequately trained personnel.
- Before putting the machine into service, operators must have received training on its correct use and control by a competent person.
- In addition to the instructions given in this manual, all safety measures for working at heights must be strictly followed.
- **Atech** will not be held liable for any incident caused by inappropriate use or poor maintenance of the machine.
- This manual must be at the disposal of any worker requiring it, (which does not exempt the worker from receiving the necessary training). If this manual is lost, the person in charge of the machine must request a new copy from **Atech**.
- The instructions and warnings notices adhered to the machine must be kept in good conditions and the information they contain must be perfectly legible and understandable.
- The work of the BMU operator must be adequately planned and supervised so that in case of an emergency, aid can be given immediately.
- Verification and commissioning of the BMU must be carried out by a representative of **Atech**.
- It is the responsibility of the owner of the BMU to keep a Logbook, which should contain the following data:
    - Name of the person in charge of the machine.
    - Name of the operators and date of use.
    - Number of hours the machine is used.

- Specifications of the suspension cables.
- Number of hours the suspension cables are used.
- A record of incidents and corrective actions carried out.
- Dates of regular inspections.

The Logbook must be available for maintenance personnel.

- The data contained in the Logbook must be at the disposal of the competent labour authorities and must be kept during the entire service life of the machine.
- An organisation or competent person will be responsible for the technical maintenance of the whole installation, composed of the machine and its runway, which will be carried out **at least 6 months or every 100 hours of operation** (see maintenance instructions in chapter 7 of the manual).
- **Atech** only guarantees original spare parts.
- In case of any sign of malfunction, the machine must immediately be taken out of service and the person responsible for the installation notified.
- It is mandatory to wear personal protection equipment when using this machine.
- While using the machine, operators must have a means of communication with the exterior that is autonomous and fully operational in case of emergency (mobile phone, walkie-talkie or other).
- It is mandatory to use the facade retaining systems where applicable (according to UNE EN 1808:2016 standard). Under no circumstances will the BMU be used without connecting the retaining systems to the facade at the indicated levels.
- The electric cable winder should be used in a controlled manner, without jerking.

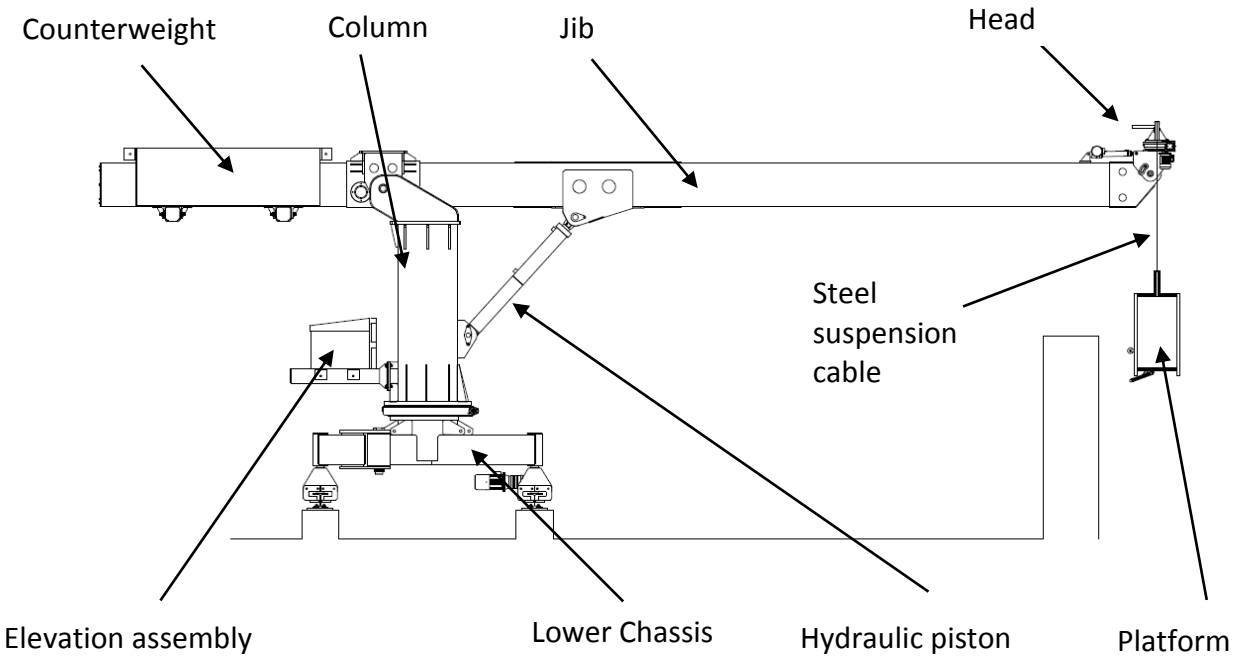
1.2. Usage prohibitions

- The perimeter of the work area must be duly signposted when accessed by the general public.
- The machine must not be used in conditions of insufficient lighting. It should only be used with natural sunlight.

- It is absolutely forbidden to use this machine under adverse weather conditions such as presence of plenty of snow or ice, storms, heavy rain, extreme temperatures below -10ºC and above 55ºC or with wind exceeding 51 km/h.
- The maximum number of operators allowed on the suspended platform simultaneously is indicated inside the platform and must not be exceeded.
- It is not allowed to carry out two movements simultaneously.
- Before accessing the suspended platform, always remove the key from the chassis control panel.
- The machine must be governed from the control panel of the main chassis only in emergency situations. In normal working conditions, the operator of the platform should always be in control of the BMU.
- The machine is supplied to safely carry out cleaning and light maintenance work on facades of buildings. The machine must not under any circumstance be used for any task not contemplated in the Instruction Manual.
- Never exceed the nominal load capacity indicated on the suspended platform and the specification sheet of the machine.
- The BMU should be used in a controlled manner, avoiding erratic, sudden or contradictory movements, such as ON/OFF, left/right, etc.
- It is absolutely forbidden to use the machine as a crane.
- It is not allowed to suspend loads above the platform.
- Use of the machine to transport passengers from one level to another is not allowed.
- Manipulation of dangerous loads is not allowed.

2. Description of the machine

2.1. Parts of the B.M.U.



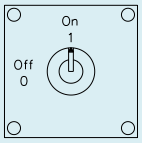
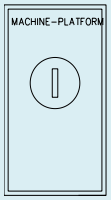
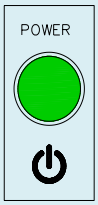
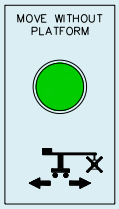
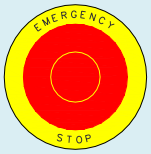
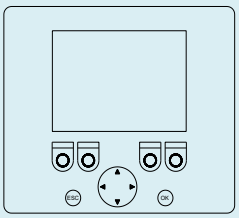
* This is a generic illustration of the parts, it is not a faithful depiction of the machine. Annexe I specifies the main elements of the BMU (Plan of the machine).

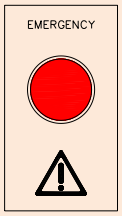
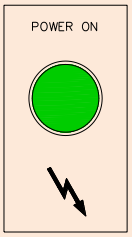
2.2. Description of manual controls

The controls on the main electrical panel and the suspended platform are comprised of switches, selectors and push buttons to execute the movements of the machine, as well as warning lights for incidents.

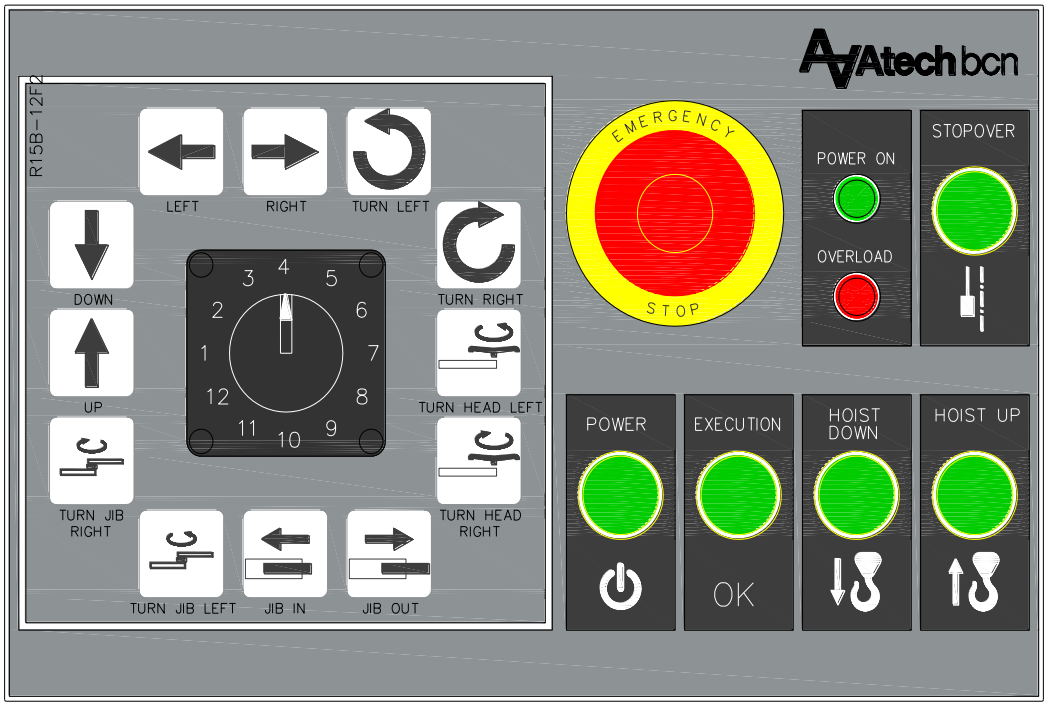
2.2.1. Control instruments on the main electrical panel

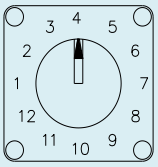
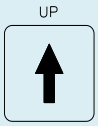
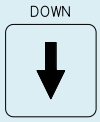


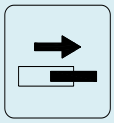
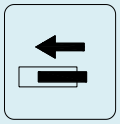
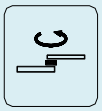
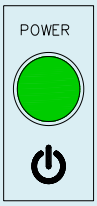
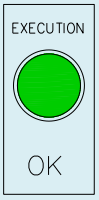
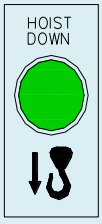
Switches and buttons of the machine main control			
Symbol	**Type**	**Description**	**Actions/Observations**
	Switch	General switch.	Switch used to power the machine.
	Switch	Checkpoint selector.	Left enables you to select the chassis control and right enables you to select the platform control.
	Button	Turn on machine.	Enables mains contactor.
	Button	Enable translation without platform.	Pulse to enable functionality without the suspended platform.
	Button	Emergency Stop.	Disable main contactor, the machine is blocked temporarily.
	Display	Control display.	To manage machine functions.

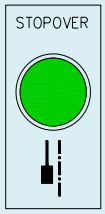
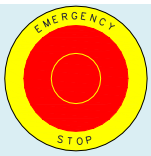
Alarm light of the machine main control			
Symbol	**Description**	**Cause**	**Actions/Observations**
	Emergency	Activation of some safety device.	The machine is locked. Contact to technical service.
	Power on	Enables mains contactor.	The machine is ready to perform movements.

2.2.2. Control instruments on the platform

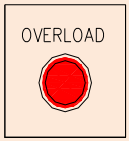
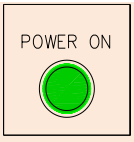


Selectors and buttons of the platform control			
Symbol	**Type**	**Description**	**Actions/Observations**
	Switch	Selection movement switch.	Select the movement you want to perform.
		Platform up.	
		Platform down.	
		Left translation.	
		Right translation.	
		Left slewing.	
		Right slewing.	
		Spreader bar left slewing.	
		Spreader bar right slewing.	

		Telescopic jib out.	
		Telescopic jib in.	
		Turn jib left.	
		Turn jib right.	
	Button	Turn on machine.	Enables mains contactor.
	Button	Movement execution.	Pulse to execute the selected movement.
	Button	Hoist up.*	
	Button	Hoist down.*	

	Button	Stopover.*	Pulse to carry on the drop after fix the lanyard in the building.
	Button	Emergency stop equipment.	Disable main contactor, the machine is blocked temporarily.

The orientation is being inside the platform and facing the machine.
**Auxiliary function available on case.*

Alarm lights of the platform control			
Symbol	**Type**	**Description**	**Actions/Observations**
	Overload	Platform or hoist rated load has been surpassed.	All the machine's movements are locked except down the platform, jib back (folding jib machines) and telescopic jib in.
	Power on	Enables mains contactor.	The machine is ready to perform movements.

**Auxiliary function available on case.*

3. Use of the machine

Warning!

Before using the machine, check it is in good conditions as well as ensuring that the weather and light conditions are adequate. If any anomaly is detected, immediately inform the person responsible for the machine.

3.1. Personal protection equipment

Operators must use the following personal protection equipment:

- Helmet.
- A safety harness that must be connected to the platform.
- Gloves.
- Safety boots.



Additionally, the operator must always have equipment for communicating with the outside, autonomous and fully operational in emergencies (mobile phone, walkie-talkie or other).

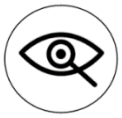
3.2. Checks before using the machine

Below is the procedure for starting up the machine before use:

- ☞ Check that the weather conditions are adequate.



- ☞ Visually inspect the machine and the platform.



- ☞ Fill in the Logbook correctly (see section 1).



- ☞ Ensure that the work area is free from obstacles that could impede free movement of the machine.
- ☞ Check that there are no projecting elements on the facade that the platform or the suspension cables could collide with.
- ☞ Check that there is no risk of trapping for people due to insufficient space between the machine and certain parts of the building. If this risk exists, the area must be signposted.
- ☞ Check that the power supply connection is correct.
- ☞ Check that the platform is in its highest position and it allows the machinery to make its movements.
- ☞ Check that the machine makes all the movements correctly from the main chassis:

- Make sure that the emergency button is NOT pressed.



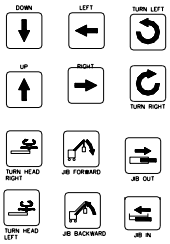
- Place the general switch in MACHINE position.



- Press the Power button.



- Check all the movements of the machine.



- Check the operation of the following devices:

1. Emergency stop.



2. Acoustic movement warning.



- Action of the stroke limit switches.



- Action of the platform anti-collision detector.



3. Electric cable winder.



- In case of any anomalies, contact the technical service.



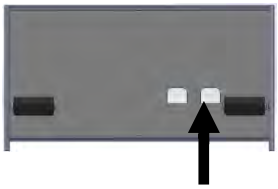
☞ Only enter or exit the platform in the defined parking positions or areas.

☞ Access the platform respecting the following safety measures:

Connect the safety harness to the platform.



1. Place your right foot in the left cut-out of the front bodywork and then access the inside placing the other foot in the right-hand cut-out.



2. ☞ Check that the machine makes all the movements correctly both from the suspended platform (PLATFORM position) and the main chassis (MACHINE position).



3.3. Procedure for using the machine

Once all the machine elements have been checked, you can begin the building maintenance work.

Below is the procedure for using the machine:

☞ Keep the machine connected to the power supply.



☞ Make sure that the emergency button is not pressed.



☞ Place the general switch selector in PLATFORM position.



☞ Press the power button.



☞ Carry out the facade maintenance operations following the instructions and prohibitions for use specified in the section: 1. *General aspects and Warnings* in this manual.



☞ When the maintenance work is finished, return the machine to the defined parking position.

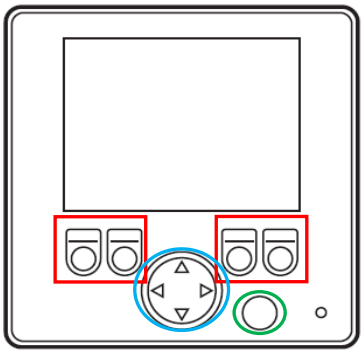


☞ Turn the main switch key selector to the central off position.

☞ Disconnect the machine from the power supply of the building.

☞ Use the systems for securing the machine to avoid damage caused by gusts of wind.

3.4. Functions of the machine



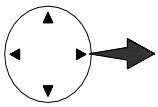
The display control is made up by the following elements:

- Display of 4,3''.
- In red, key to execute the movement in one direction or another.
- In blue, key to change the movement.
- In green, key not functional.

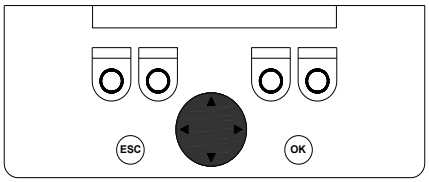
1. Client and project



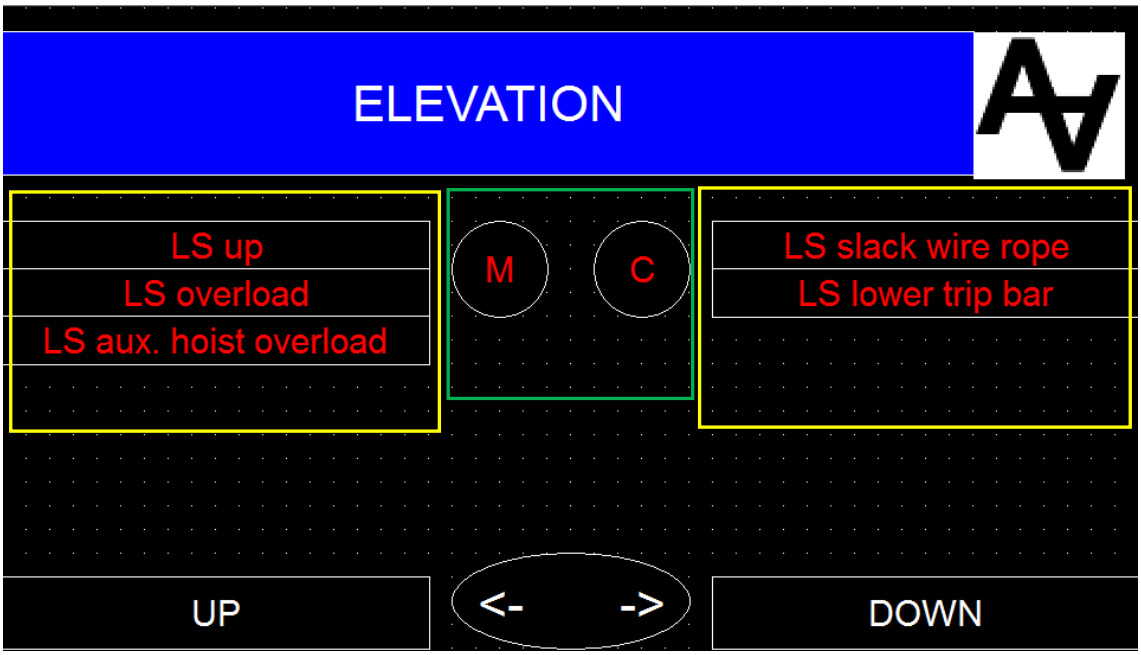
Starting page. The project name is shown.



Press the key to change to the next page.



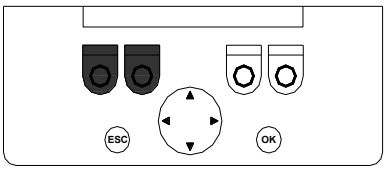
2. Platform elevation



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

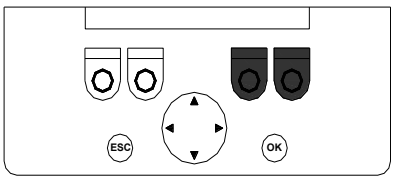


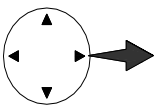
Press the key to go up the cradle.



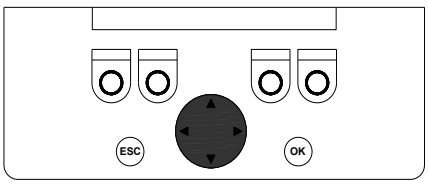


Press the key to go down the cradle.

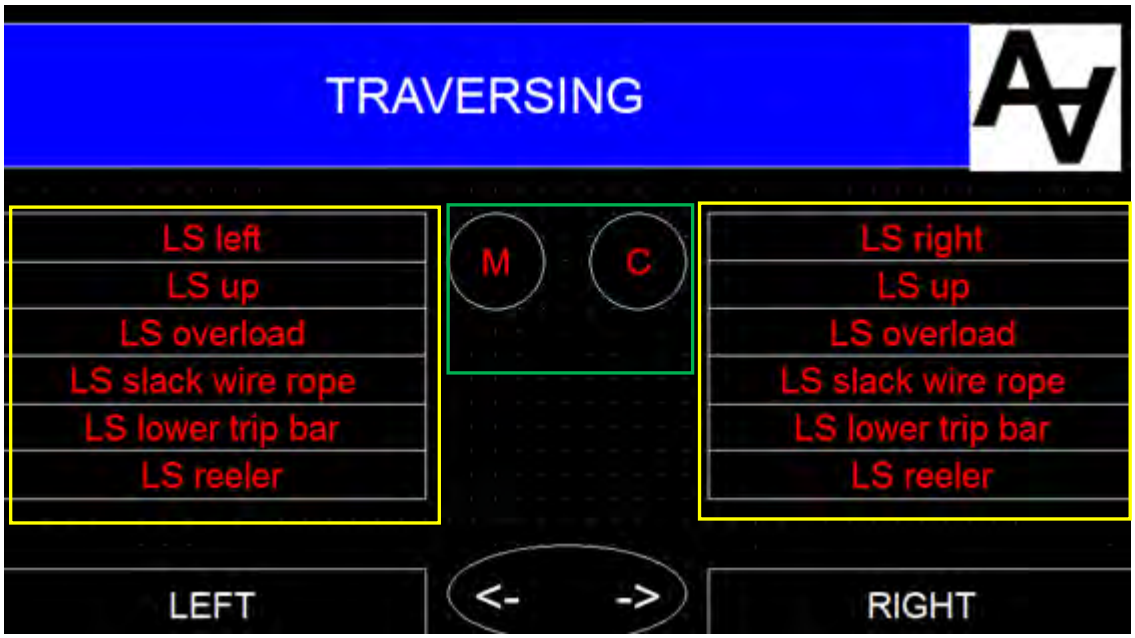




Press the key to change to the next page.



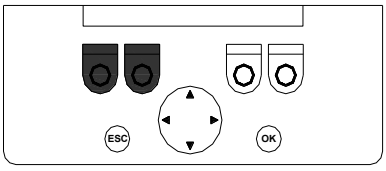
3. Traversing



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

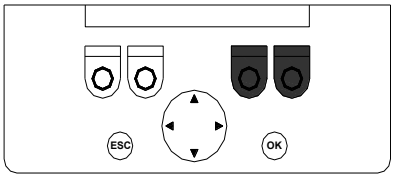


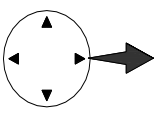
Press the key to move the machine to the left.



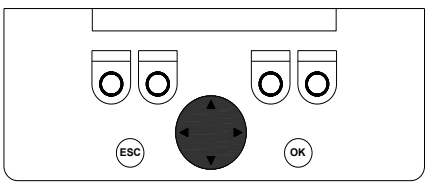


Press the key to move the machine to the right.

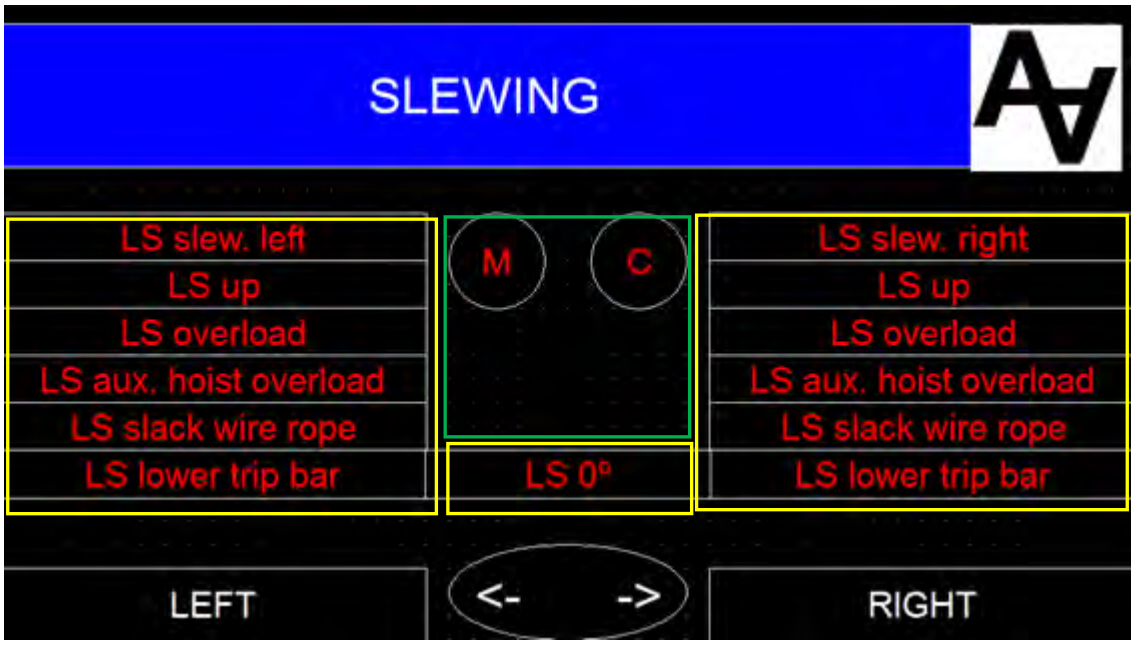




Press the key to change to the next page.



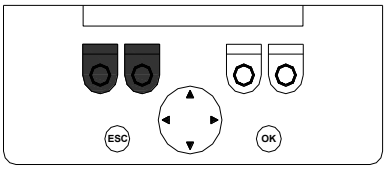
4. Slewing



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

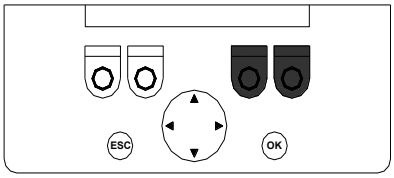


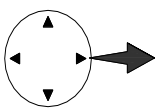
Press the key to slew the machine to the left.



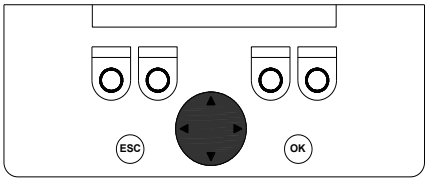


Press the key to slew the machine to the right.

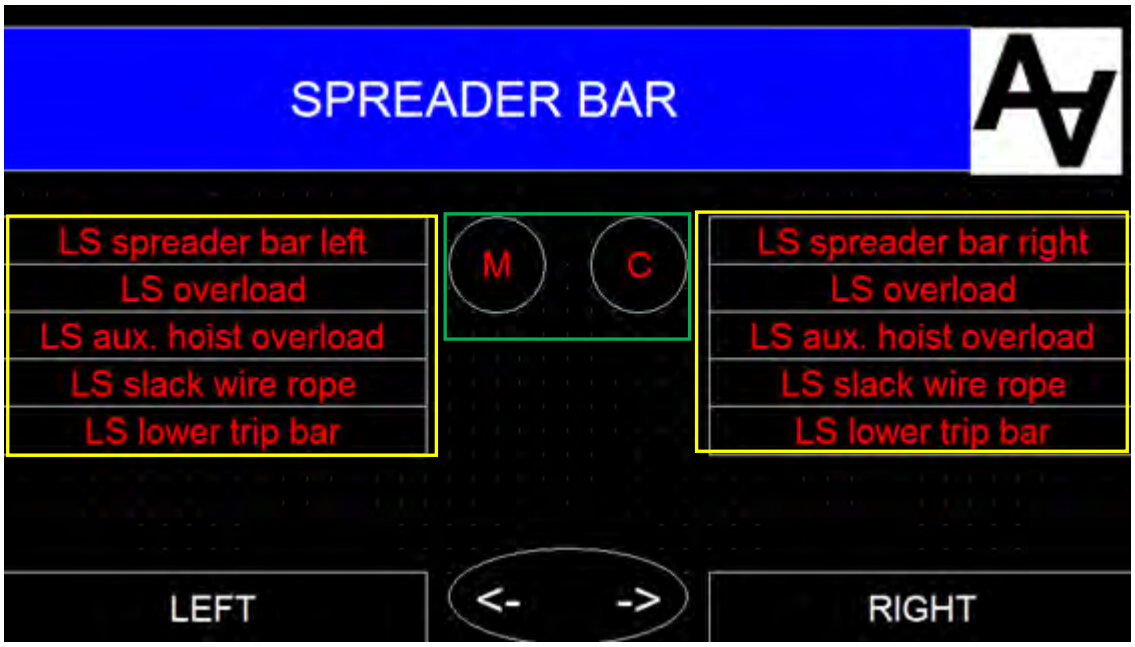




Press the key to change to the next page.



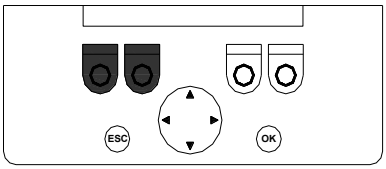
5. Spreader bar



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

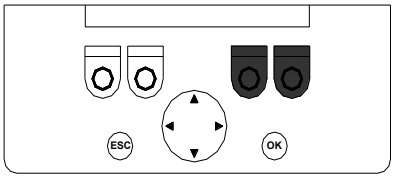


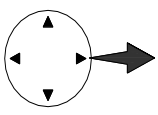
Press the key to slew the spreader bar to the left.



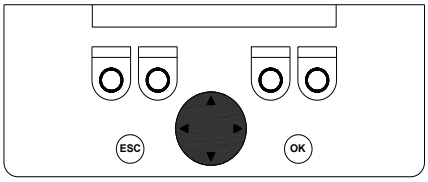


Press the key to slew the spreader bar to the right.





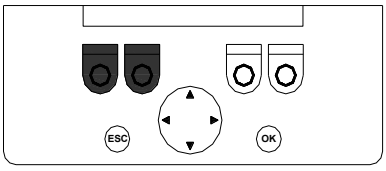
Press the key to change to the next page.



6. Hoist Jib

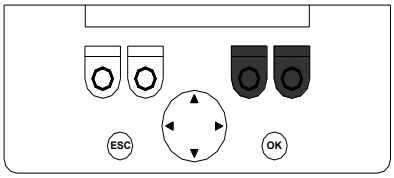


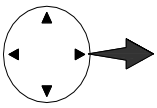
Press the key to slew the hoist jib to the left.



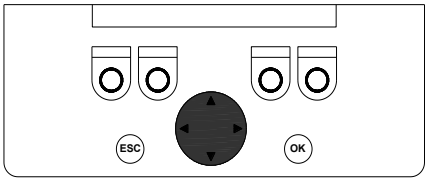


Press the key to slew the hoist jib to the right.

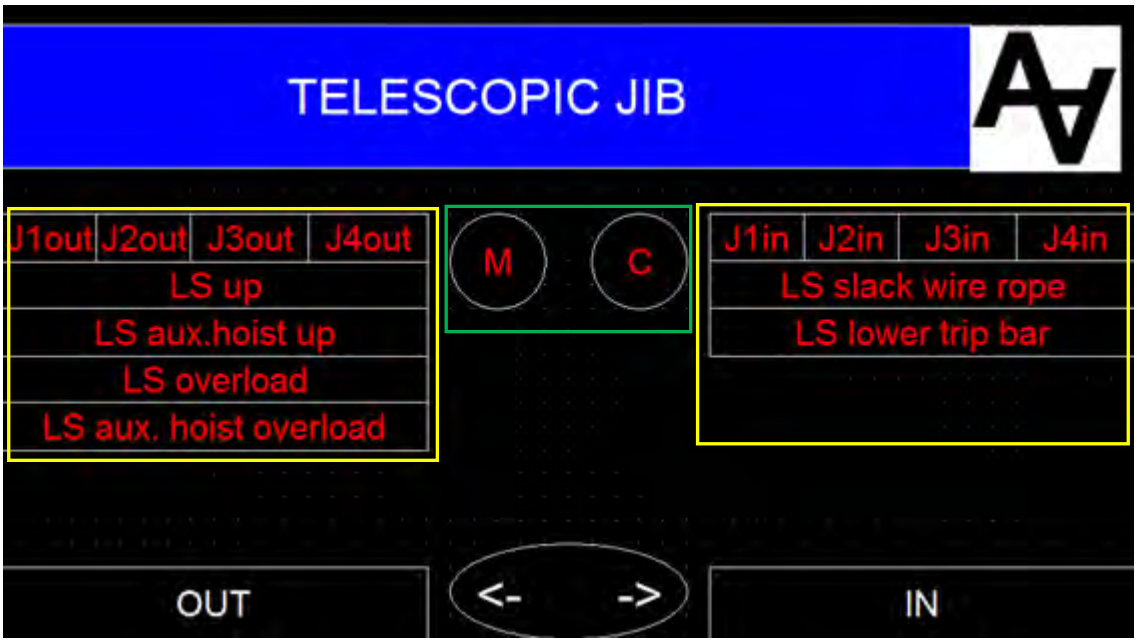




Press the key to change to the next page.



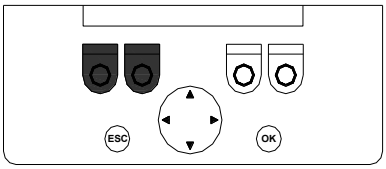
7. Telescopic jib



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

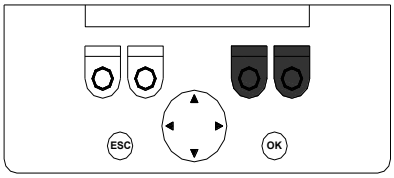


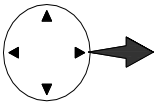
Press the key to open de telescopic jib.



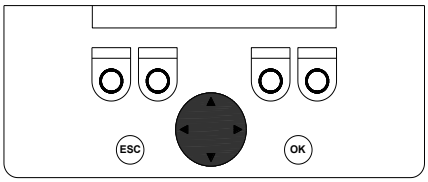


Press the key to close de telescopic jib.

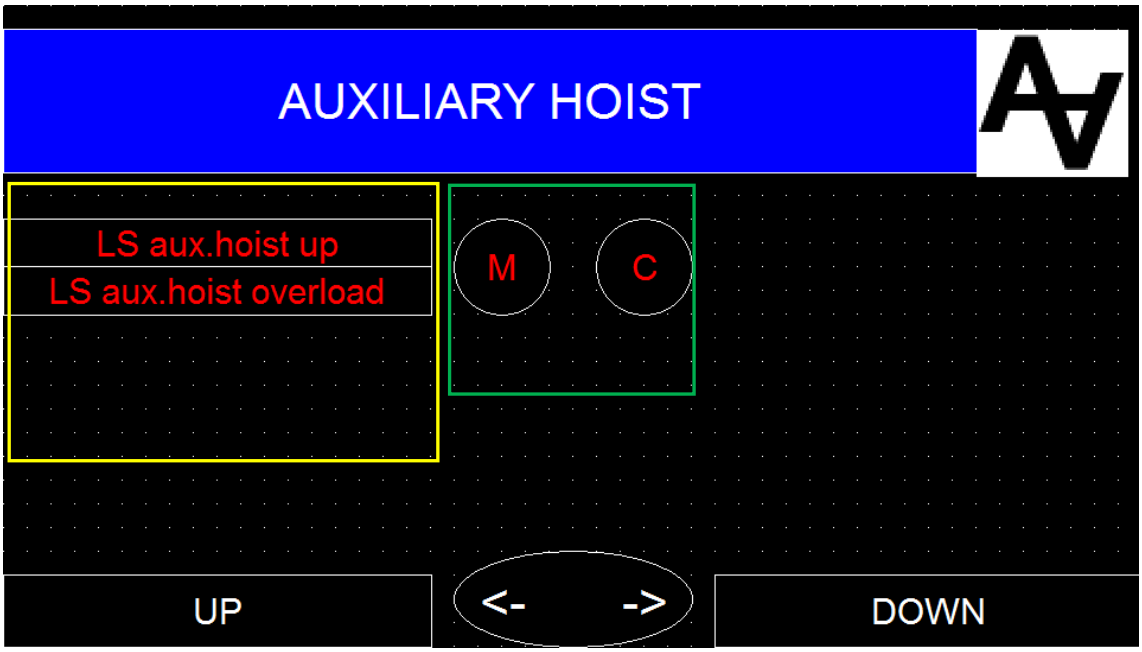




Press the key to change to the next page.



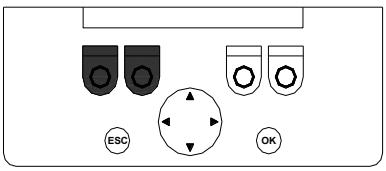
8. Auxiliary hoist



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

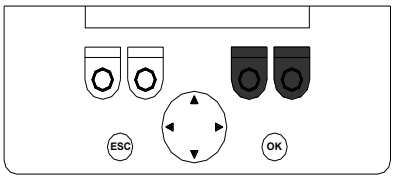


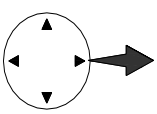
Press the key to go up the hoist.



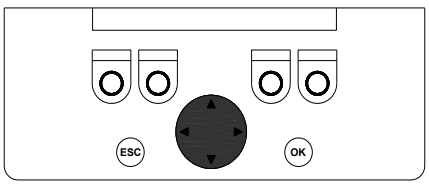


Press the key to go down the hoist.

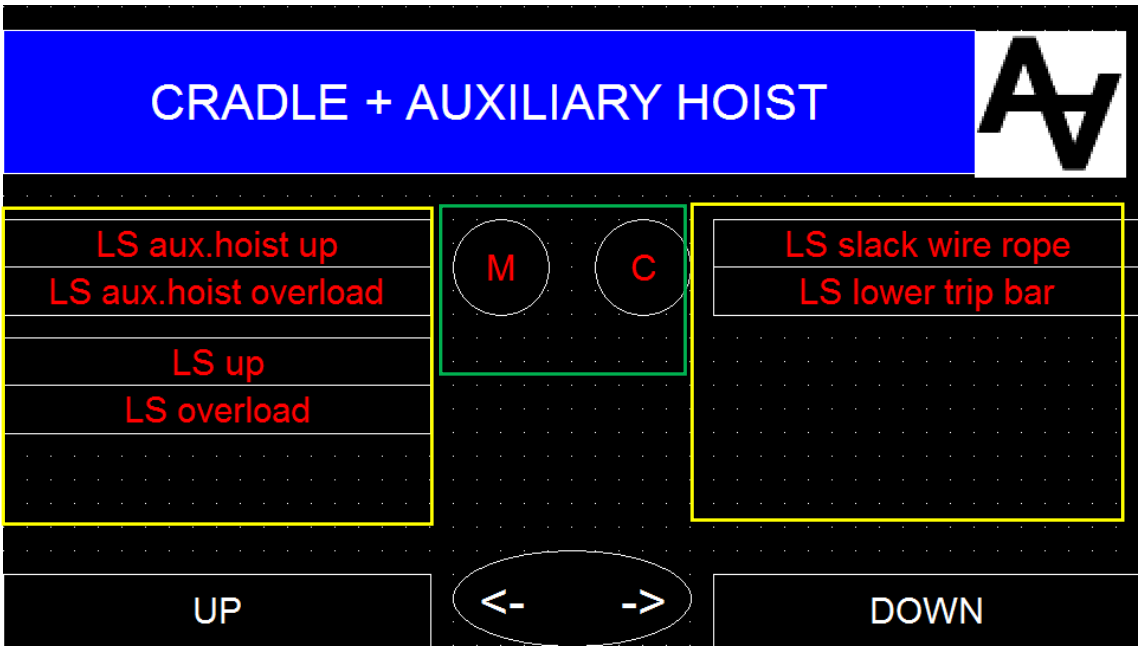




Press the key to change to the next page.



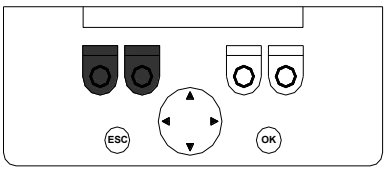
9. Cradle & Auxiliary hoist



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

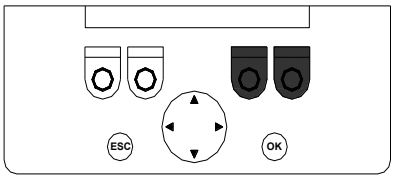


Press the key to go up the platform and the auxiliary hoist at the same time.

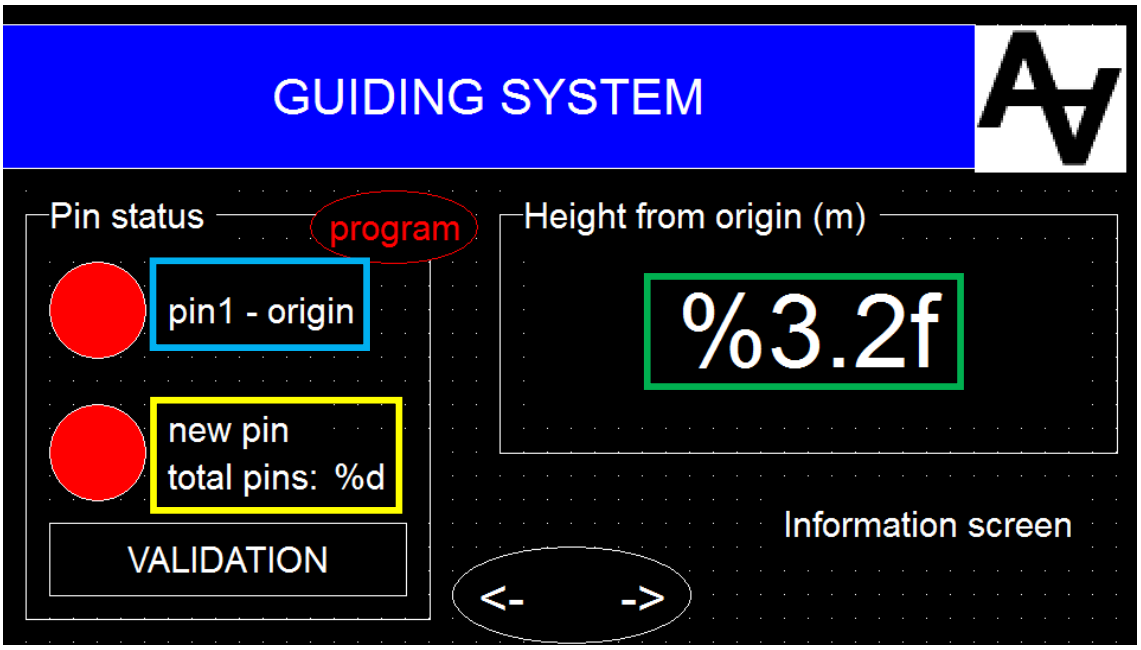




Press the key to go down the platform and the auxiliary hoist at the same time.



10.Restrain system

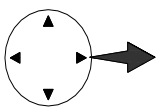


User can program the height of the pins by itself only in one drop and when it is done operator will see how many pins are set taking a look where yellow arrow shows. Two modes can be performed:

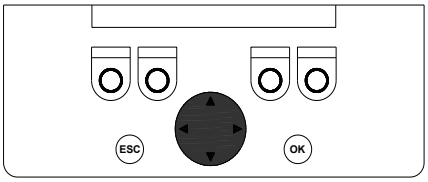
a) Pin programming mode.

b) Intermediate stops mode.

- When Origin/first pin is defined then *pin1 – origin* circle will be green. And *height from origin* will be set to 0m.
- When second pin or higher pins are set/validated then "new pin" circle will be green. *Total pins* shows the total defined pins in the facade in that moment.
- *Height from origin* shows the real height once Origin/first pin is defined when the operator had defined/validated *pin1-Origin.*

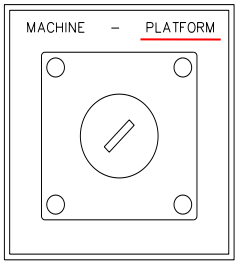


Press the key to change to the next page.

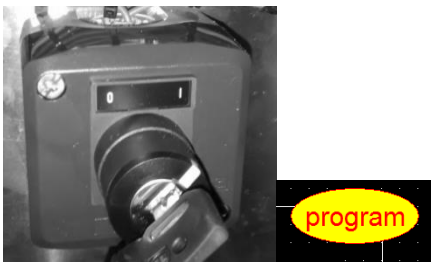


A. Pin programming mode

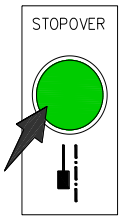
☞ Operator has to control the machine from the cradle control.



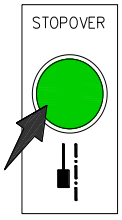
☞ Set the switch which is located inside the machine main control in 1 position. Thus, the program indicator will be flashing, indicating that pin programming mode is activated.



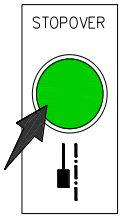
☞ Descend the platform to the first pin position and then press the *Stopover* Key to validate. At that time, *pin1-origin* will be green and the height from the origin will be 0 m. **The platform will never stop in this position.**



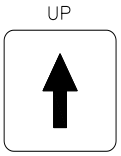
☞ Descend the platform to the second pin position and then press the *Stopover* Key again to validate. Then, *new pin* will be green.



☞ Repeat the last step for all pin locations. At the end of the drop, total pins will show the pins total number validated.



☞ Ascend the platform to the up limit switch, then system restarts the procedure to start a new drop, red circles will be flashing again.

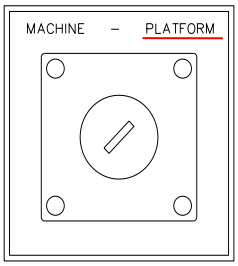


☞ Set the switch in 0 position.

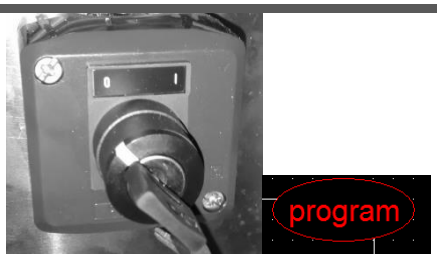


B. Intermediate stops mode

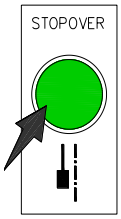
☞ Set the switch which is located inside the machine main control in 1 position. Thus, the program indicator will be flashing.



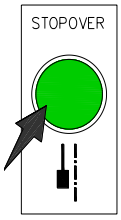
☞ Set the switch which is located inside the machine main control in 0 position. Thus, the program indicator will be red indicating that intermediate strops mode is activated.



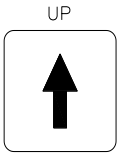
☞ Descend the platform to the first pin position and then press the *Stopover* Key to validate. At that time, *pin1-origin* will be green and the height from the origin will be 0 m. **The platform will never stop in this position.**



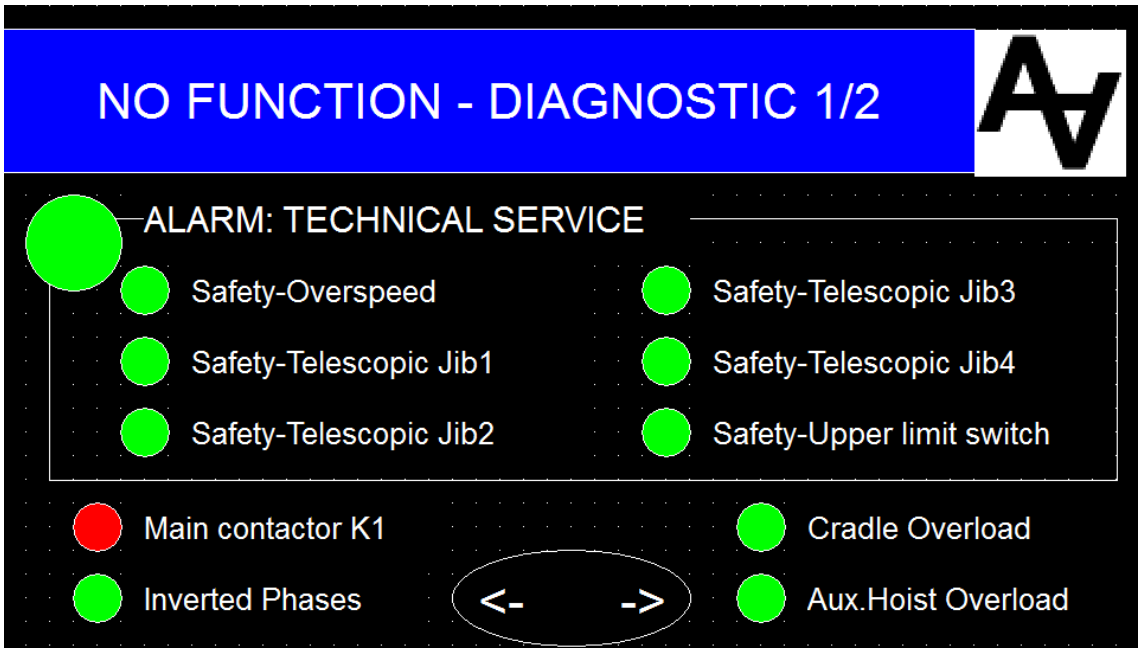
☞ Descend the platform to the second pin position and then press the *Stopover* Key again to back on track .



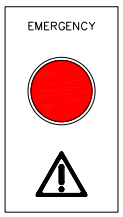
☞ Ascend the platform to the up limit switch, then system restarts the procedure to start a new drop.



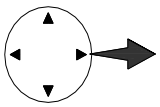
11.No function - Diagnostic 1/2.



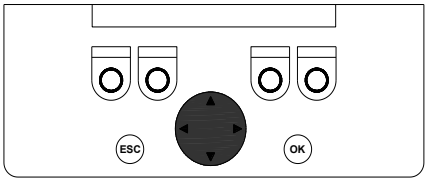
In case of breakdown, this page shows which safety device has tripped. Then, the main control emergency light will turn on or will be flashing, depending upon the breakdown case.



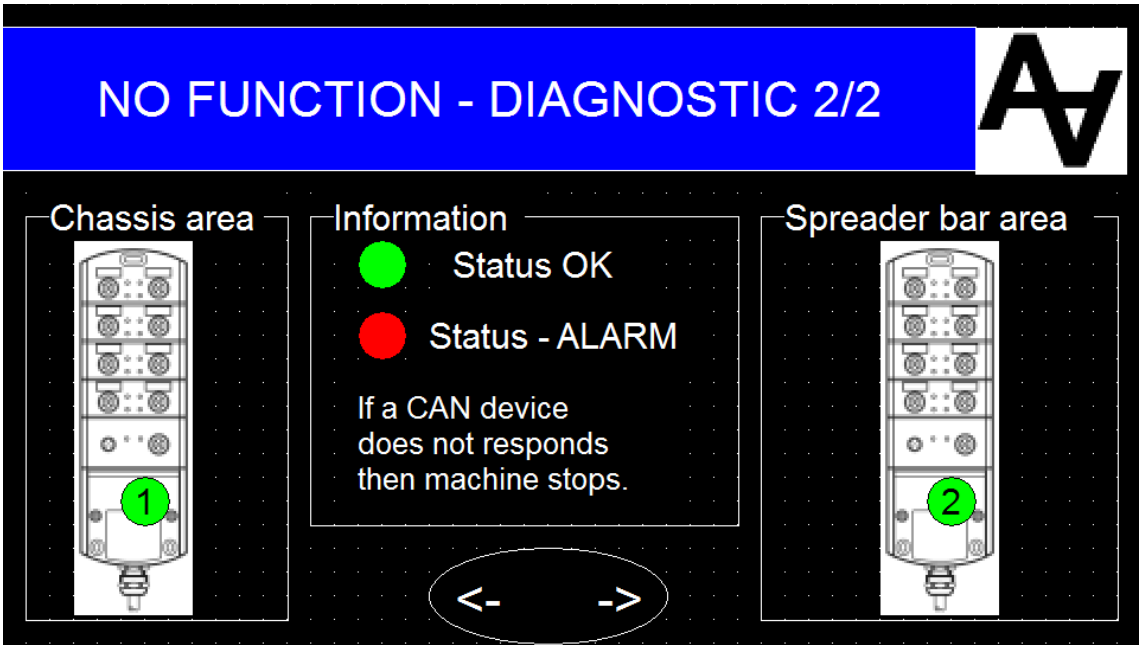
- **Fixed light:** Some safety device has been activated. Contact to technical service.
- **Flashing light of 1 second**: The building power phases are reversed or in bad conditions. Contact to technical service.
- **Flashing light of 3 second:** The rated load of the platform or of the hoist has been exceeded. All the machine's movements will be blocked except the descent of the platform, move the jib backward and close the telescopic jib.



Press the key to change to the next page.



12.No function - Diagnostic 2/2.



This page shows the Can devices status. In normal conditions indicator will be green and in case of breakdown will be red and besides the machine will stop.

3.5. Activation of the functions

Below, the conditions that must be complied **with to carry out each movement**, showing the stroke limit switches that must be activated or deactivated in each case are described.

Functions	Conditioning switches: Platform lose cable detector	Platform anti-collision detector	Platform overload	Platform lifting limit	Platform lowering limit	Left movement limit	Right movement limit	Left chassis turn limit	Right chassis turn limit	Left head turn limit	Right head turn limit	Forward folding down jib limit	Backward folding down jib limit	Telescopic jib retraction limit	Telescopic jib extension limit	Left middle gear turn limit	Right middle gear turn limit	Telescopic column lifting limit	Telescopic column lowering limit	Hoist lifting limit	Hoist overload	Winder travel limit	Parking turn limit
Lift platform			×	×																	×		
Lower platform	×	×			×																		
Left movement	×	×	×	✓	×	×														✓			×	×	
Right movement	×	×	×	✓	×		×													✓			×	×	
Left chassis turn	×	×	×	✓	×			×												✓			×		
Right chassis turn	×	×	×	✓	×				×											✓			×		
Left head turn	×	×	×		×					×										✓			×		
Right head turn	×	×	×		×						×									✓			×		
Forward folding down jib	×	×			×							×								✓					
Backward folding down jib			×										×							✓		×	×		
Retract telescopic job	×	×												×						✓					
Extend telescopic jib			×	×											×					✓		×	×		
Left middle gear turn	×	×	×		×											×				✓					
Right middle gear turn	×	×	×		×												×			✓					
Lift telescopic column			×	×																×			×		
Lower telescopic column	×	×			×							✓		✓							×				✓
Lift auxiliary hoist				×																		×	×		
Lower auxiliary hoist	×																								

✓ Stroke limit switch activated mechanically.

× Stroke limit switch deactivated mechanically.

3.6. Machine access points: ladders, platforms and safety anchor points



The operator must connect the snap hook of the safety harness to the anchor points located inside the platform before using it.



All the anchor points for the safety harness will be duly identified with pictograms.

If there are high points in the machine, they will have ladders and/or platforms for safe access.

3.7. Manual evacuation operation

3.7.1. Description of the service brake

The elevation assemblies of the machine will have a service brake. In service conditions, the brake is permanently supplied with electricity and kept open. The brake will come into action automatically in the following cases:

- Release of manual force applied to the motor lever of the elevation assembly.
- Loss of electrical supply to the power circuit.
- Loss of electrical power supply to the control operation circuit.

The service brake enables emergency evacuation operations, with controlled descent of the suspended platform, in a short period of time. The descent speed of the platform will be less than the activation speed of the secondary device (15 m/min).

The manual emergency evacuation operation may be necessary in the following cases:

- Loss of power supply to the machine.
- The operator does not feel well.
- Adverse weather conditions.

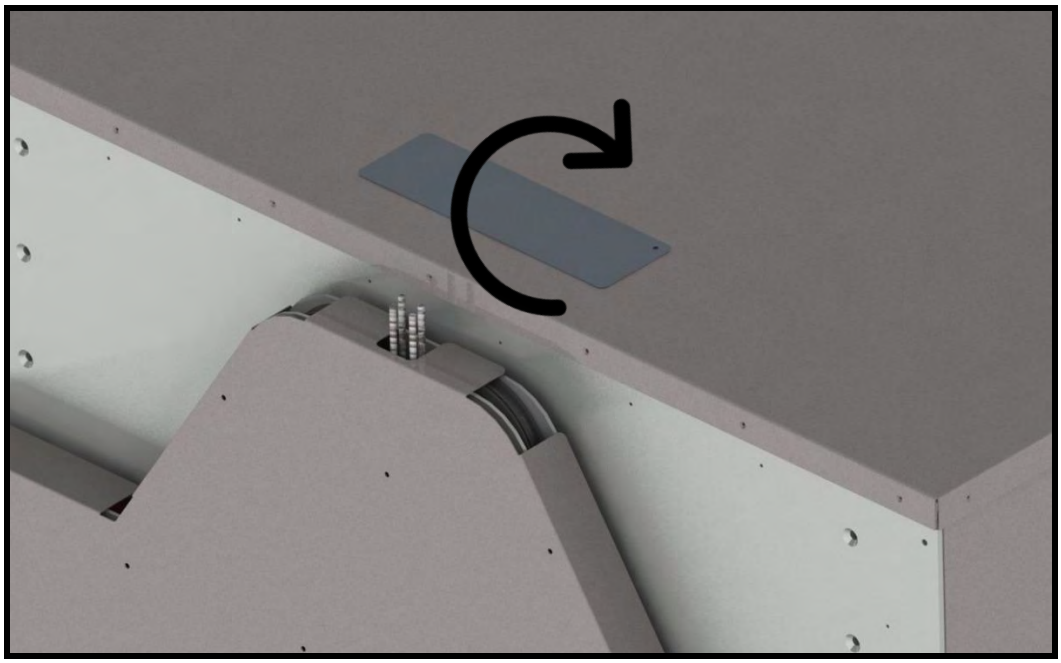
3.7.2. Manual evacuation operation

The evacuation operation will be carried out from the machine, when the workers are in the suspended platform, for this reason, it is indispensable to have a communication system between the person responsible for carrying out the operation and the operators in the suspended platform.

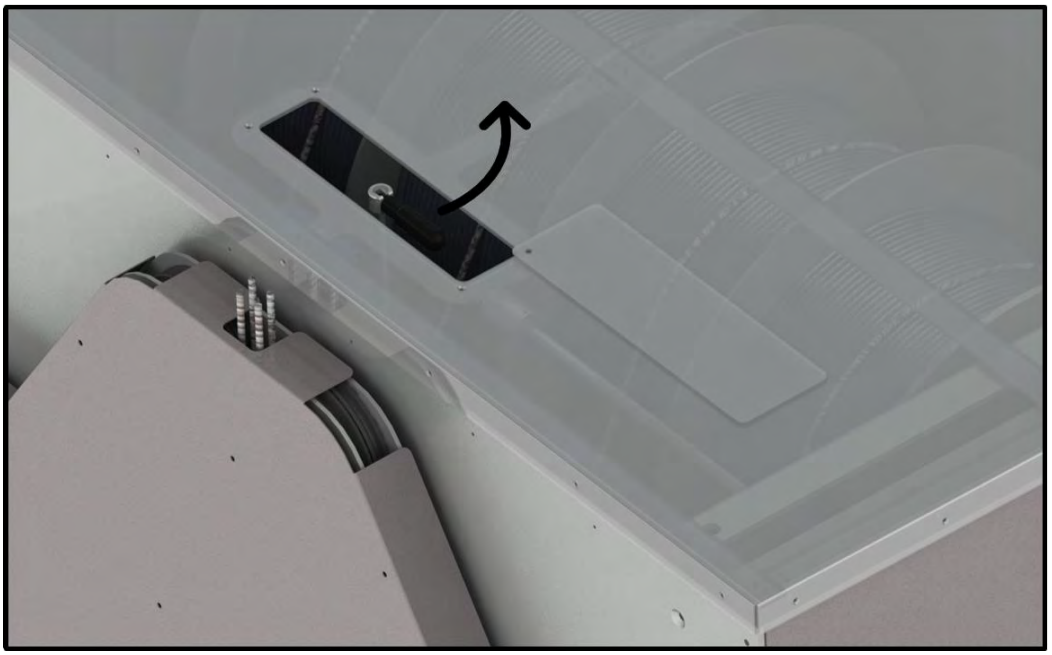
To evacuate the platform in the aforementioned cases, the following steps should be taken:

1. Disconnect the general power supply.
2. Locate the position of the elevation assembly on the machine.

3. Open the cover at the top of the elevation assembly, sliding it on its rotation point.

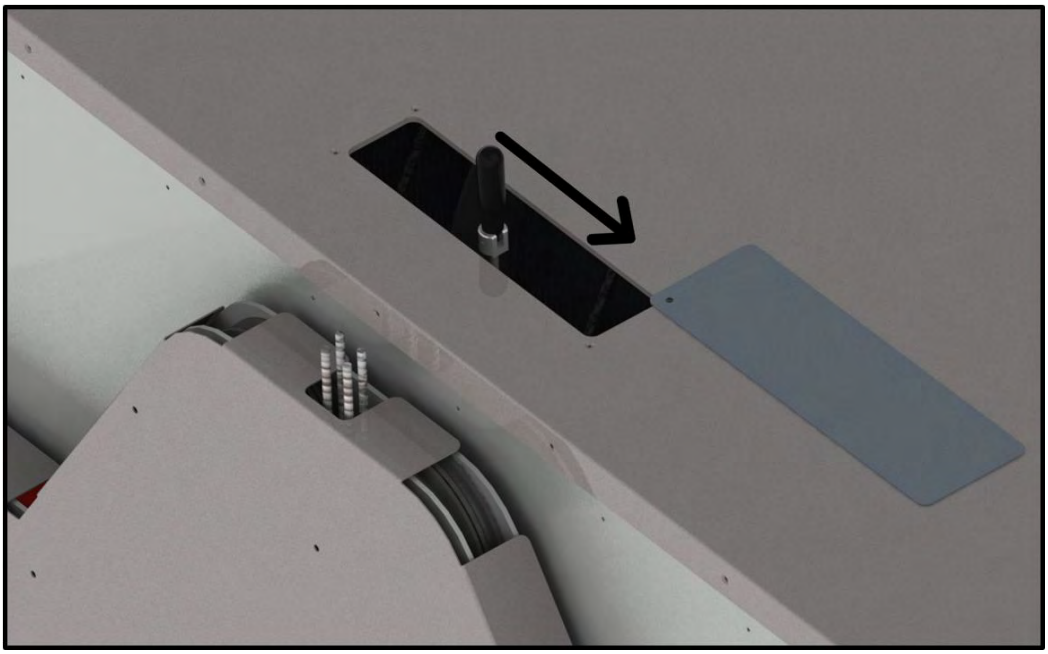


4. Move out the service brake handle.



Do not pull the service brake handle until the operators of the platform have been contacted.

5. Contact the operators.
6. Pull the handle to unlock the service brake.



On pulling the handle to activate the service brake, the platform will descend at a controlled speed. Before carrying out this operation, the operators of the platform must be contacted and they should evaluate if they have a close evacuation point and that there are no obstacles that could collide with the platform during the descent.

3.8. Residual risks

Cause	Effect	Measure
Movement of the machine.	Risk of collision for people.	Acoustic movement warning.
Movement of the machine.	Risk of trapping for people due to insufficient space between the machine and certain parts of the building.	Signpost the areas with risk of trapping.
Moving the platform without operators or maintenance personnel.	Risk of hitting the facade of the building with the suspended platform.	Carry out the movements of the machine with an operator or maintenance personnel inside the platform.

4. Safety

4.1. Safety regulations for using the machine

This machine should only be used by authorised competent personnel that have received training for using it safely.

It is absolutely forbidden to use the machine as a crane.

It is absolutely forbidden to use this machine in adverse weather conditions such as presence of snow or ice, electric storms, heavy rain, extreme temperatures (below -10ºC and above 55ºC) or with winds exceeding 51 km/h.

The work area must be duly signposted.

Check the conditions of the machine before every use.

If the machine has retaining systems for securing to the facade, they must be used.

The machine must not be used in conditions of insufficient lighting.

Never enter the platform without previously removing the key from the control panel of the machine chassis.

The platform operators must enter or exit it using the areas supplied for this purpose, the platform must be on a firm surface, in whatever location it is. Never do this with the platform suspended.

Do not exceed the number of simultaneous operators inside the platform, which is indicated on the specifications plate inside the platform and in section 8 of the manual.

When finishing the work with the machine, take the machine to its parking position. Place the operation key in “OFF” position and disconnect the machine from the power supply.

When the machine is parked, ensure it is immobilised. (In some models, there are additional securing systems).

The person responsible for the machine must ensure that it cannot be used improperly or by non-authorised personnel.

In case of an incident, notify the maintenance personnel and wait for them to arrive.

It is forbidden to control the machine form the control panel of the main chassis while there are people on the platform, except in cases of emergency evacuation andalways informing the people on the suspended platform.

Atech will accept no liability for damage, breakdowns or malfunction resulting from intervention, manipulation, modification or replacement of any component of the machine by personnel not authorised by **Atech**, and this will render the commitments in the and obligations in the guarantee void.

The machine is supplied to safely carry out cleaning and light maintenance work on facades of buildings. The machine must not under any circumstance be used for any task not contemplated in the Instruction Manual.

4.2. Safety devices: safety limit switches and mechanical stops

The control system of the **Atech** machine complies with ISO-13849-1 standard.

Emergency stop

The machine has an emergency button on each control point and in the locations where an emergency stop may be required. The emergency stop system is operational from any control point of the machine.



There are two types of end of travel safety switches:

- Elements limiting the function (see section 3 of the manual).

- Elements limiting maximum movement of the function.

4.2.1. Safety elements limiting the function

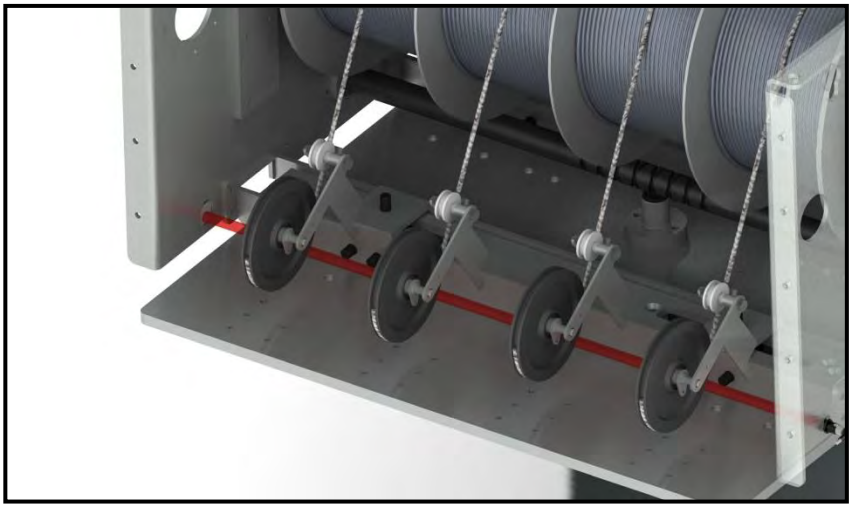
Stroke limit switch detecting suspended platform overload

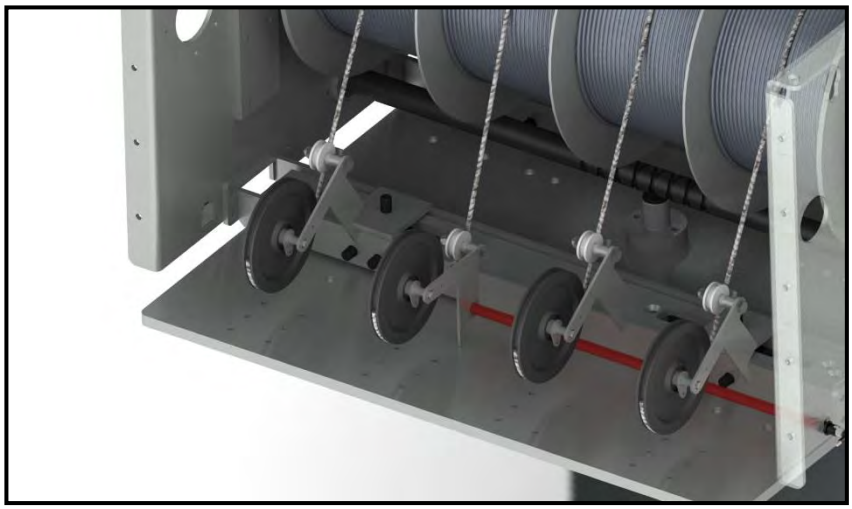
The suspended platform is fitted with overload detectors set for the nominal admissible load of people, tools and materials. The limit of activation is defined in 1.25 RL of the platform. (See picture of the device in section 7.1. of the manual (4)).

Activation of “overload” will stop all movements of the machine except descent until the load is removed.

Stroke limit switch detecting slack cable

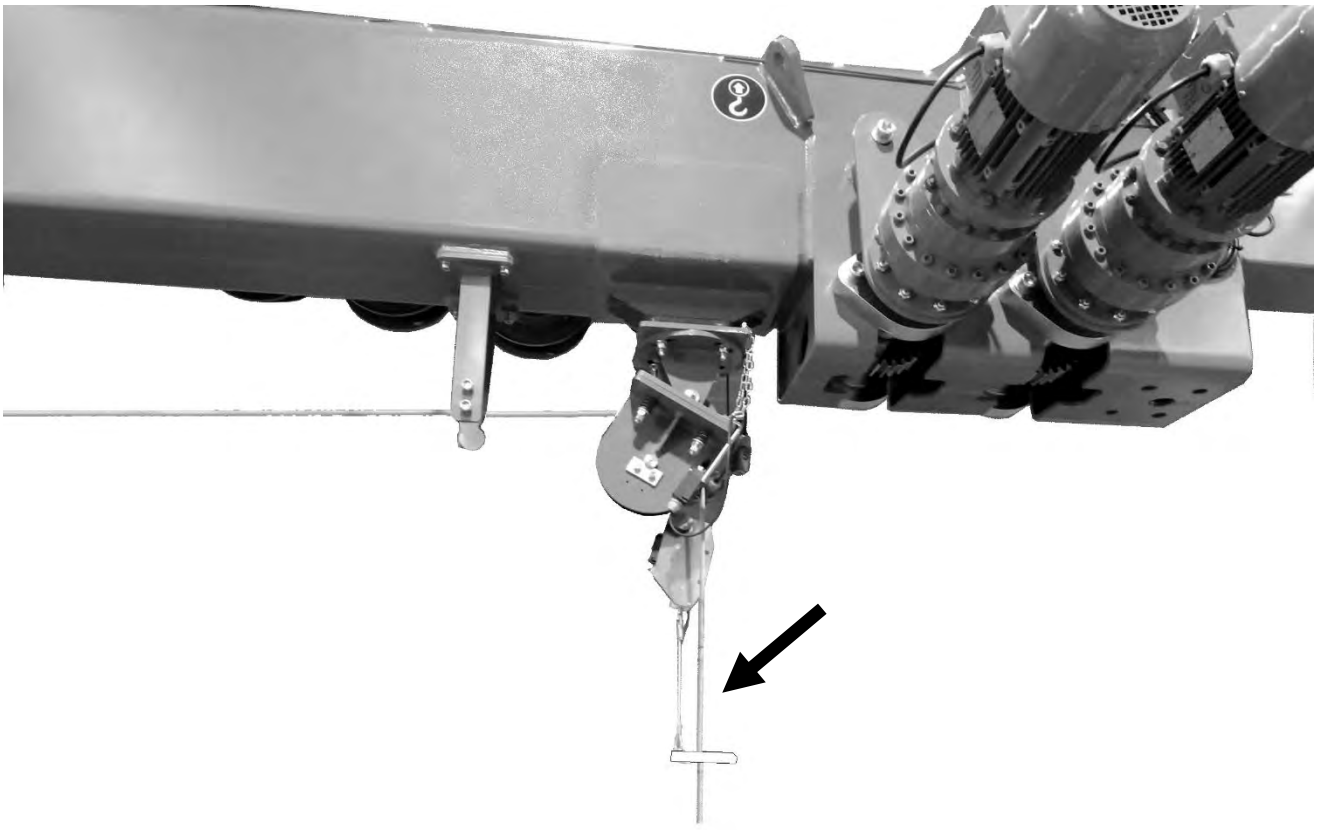
The elevation assembly has a lack of load detection system, that locks all the movements of the machine except lifting the platform.





Stroke limit switch detecting auxiliary hoist overload (optional in some machines)

The auxiliary hoist is equipped with an overload detector that impedes excessive load materials, stopping elevation and only allowing lowering.



Stroke limit switch detecting platform collision (descent)

If any obstacles are found in the descent of the platform, the anti-collision detector will stop the following movements: descent, movement forward of jib, travel, turning of machine, turning of head and folding of telescopic jib. This function enables maintenance of stability of the suspended platform. (See picture of the device in section 7.1. of this manual (2)).

Stroke limit switch detecting platform collision (ascent) (according to model)

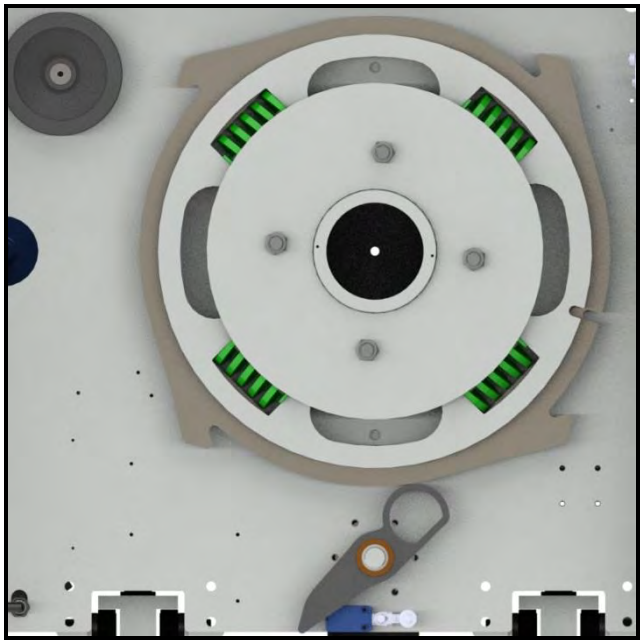
If any obstacles are found in the ascent of the platform, the anti-collision detector will stop the ascent movement of the platform.

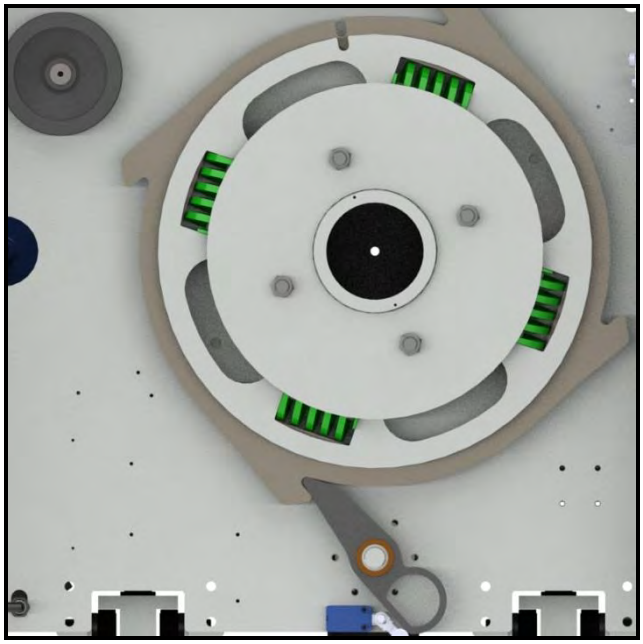
Stroke limit switch detecting synchronisation chain breakage

The elevation assembly includes a synchronisation chain for winding the suspension cables with a stroke limit switch that detects its detensioning or breakage, totally locking the machine. (See picture of the device in section 7.1. of the manual (13)).

Stroke limit switch detecting the secondary brake of the elevation assembly

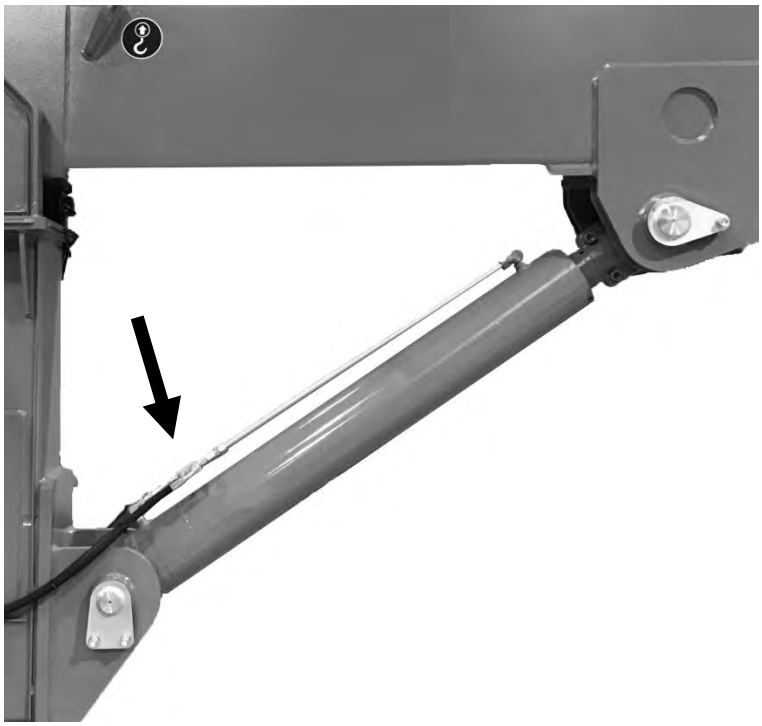
In case of excessive descent speed of the platform, the secondary emergency brake will come into action. Once activated, the machine will be locked mechanically as well as electrically.





Piloted valve/parachute in hydraulic cylinders (according to model)

In case of sudden loss of pressure, the hydraulic cylinders have a valve that immobilises the shaft until it is examined by a technician.



Stroke limit switch detecting the retaining points (facade guiding systems)

For buildings more than 40 m high, the machine has a retaining guide system to secure the platform to the facade and avoid swinging movements caused by the wind. (See picture of the device in section 7.1. of the manual (3)).

Stroke switch detecting limit of electric cable winding

The electric cable winder has a detector that limits the complete unwinding of the cable, stopping the movement of the machine. For reactivation, connect the machine to the closest power socket.



A competent person must guarantee the integrity of all the safety functions whenever the gondola is put into service.

4.2.2. Safety elements limiting movement of the function

Safety limit switch or mechanical stop

All movements are limited by a safety limit switch or a mechanical safety stop, that stops movement in case of failure of the service detector.

LIFTING: Lifting or lowering safety limit switch.

MOVEMENT: Mechanical safety stop in open circuit runways.

CHASSIS SLEWING: Safety limit switch turning left or right.

HEAD SLEWING: Safety limit switch turning left or right.

AUXILIARY GEAR SLEWING: Safety limit switch turning left or right.

TELESCOPIC JIB: Safety limit switch moving outwards and inwards. **Atech** additionally incorporates a mechanical stop that increases redundancy and safety of the system.

JIB FOLDING DOWN: A mechanical stop consisting of an exterior metal body of the hydraulic cylinder that limits the folding movement.

TELESCOPIC COLUMN: Upper and lower mechanical stop on the structure of the column plus the redundancy of the exterior metal body of the cylinders.

AUXILIARY LOAD HOIST: This device only has service limit switches.

4.3. Description of safety functions

Representation of safety functions of the gondola according to EN ISO 12100-1 standard:

CAUSE	EFFECT	SAFETY FUNCTION
UNCONTROLLED MOVEMENT DUE TO ELECTRICAL FAILURE.	MOVEMENT CONTINUES UNTIL CONTACT WITH THE SAFETY LIMIT SWITCH OR MECHANICAL STOP.	EMERGENCY STOP.
PLATFORM OVERLOAD.	MAXIMUM ADMISSIBLE LOAD ON THE PLATFORM HAS BEEN EXCEEDED.	STROKE LIMIT SWITCH DETECTING PLATFORM OVERLOAD.
UNLEVELLED SUSPENDED PLATFORM.	INCORRECT WINDING OF SUSPENSION CABLES ON ELEVATION SYSTEM DRUM.	STROKE LIMIT SWITCH DETECTING SLACK CABLE.
AUXILIARY LOAD HOIST OVERLOAD.	MAXIMUM ADMISSIBLE LOAD ON THE AUXILIARY LOAD HOIST HAS BEEN EXCEEDED.	STROKE LIMIT SWITCH DETECTING AUXILIARY LOAD HOIST OVERLOAD.
COLLISION WITH OBSTACLES DURING VERTICAL DESCENT OF SUSPENDED PLATFORM.	SUSPENDED PLATFORM NOT LEVEL RISKING OVERTURNING DUE TO AN OBSTACLE WHEN DESCENDING.	LOWER ANTI-COLLISION SAFETY LIMIT SWITCH ON THE SUSPENDED PLATFORM.
COLLISION WITH OBSTACLES DURING VERTICAL ASCENT OF SUSPENDED PLATFORM.	SUSPENDED PLATFORM NOT LEVEL RISKING OVERTURNING DUE TO AN OBSTACLE WHEN LIFTING.	UPPER ANTI-COLLISION SAFETY LIMIT SWITCH ON THE SUSPENDED PLATFORM.
FAILURE OF IN-SERVICE MOVEMENT LIMITER.	ACTIVATION OF SAFETY LIMIT SWITCH OR MECHANICAL STOP.	SAFETY LIMIT SWITCH.
BREAKDOWN OF ELEVATION SYSTEM	PLATFORM STOPS ON THE FACADE.	MANUAL OPENING OF THE SERVICE BRAKE AND

GEARED MOTOR.		CONTROLLED DESCENT OF THE PLATFORM.
FLUID LEAK IN HYDRAULIC CIRCUIT.	MOVEMENT OF HYDRAULIC CYLINDER LOCKED.	AUTOMATIC ACTIVATION OF SAFETY PILOTED VALVE.
NON-DISCONNECTION OF RETAINING SYSTEM DURING ASCENT OF PLATFORM.	PLATFORM NOT LEVEL DUE TO RESISTANCE OF THE RETAINING SYSTEM THAT IMPEDES REGULAR ASCENT.	STROKE LIMIT SWITCH DETECTING THE RETAINING POINTS OF THE FACADE GUIDING SYSTEM.
INTERRUPTION OF ELECTRICAL POWER SUPPLY TO MACHINE.	MACHINE STOPPED OUT OF SERVICE.	END STROKE SWITCH DETECTING LIMIT FOR POWER SUPPLY CABLE WINDER.
PHASE REVERSAL IN POWER SUPPLY CABLE.	WRONG DIRECTION OF ROTATION OF MOTORS OR STOPPAGE.	CONTROLLER OF THREE-PHASE POWER SUPPLY SYSTEM.
SYNCHRONISATION CHAIN BROKEN.	MALADJUSTMENT OF SYSTEM FOR WINDING SUSPENSION CABLES ON DRUM.	STROKE LIMIT SWITCH DETECTING SYNCHRONISATION CHAIN BREAKAGE.

5. Secondary brake

5.1. Description of the secondary brake

The elevation assembly of the drum has an anti-fall mechanical device. The system is activated automatically in case of excessive speed in the descent of the platform (more than 15 m/min). If the safety brake is activated it should only be reset by authorised technical personnel. It will be necessary to study the cause for activation of the device and check the conditions of all the components of the elevation assembly before using the machine again.

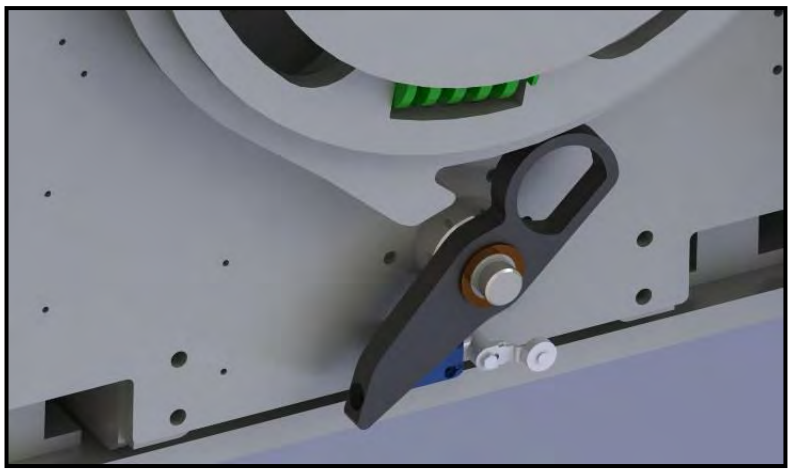
The anti-fall device is composed of a brake disk and an interlocking cam.

- Brake disk:



The brake disk is attached to the cable winding drum, from which the platform is suspended.

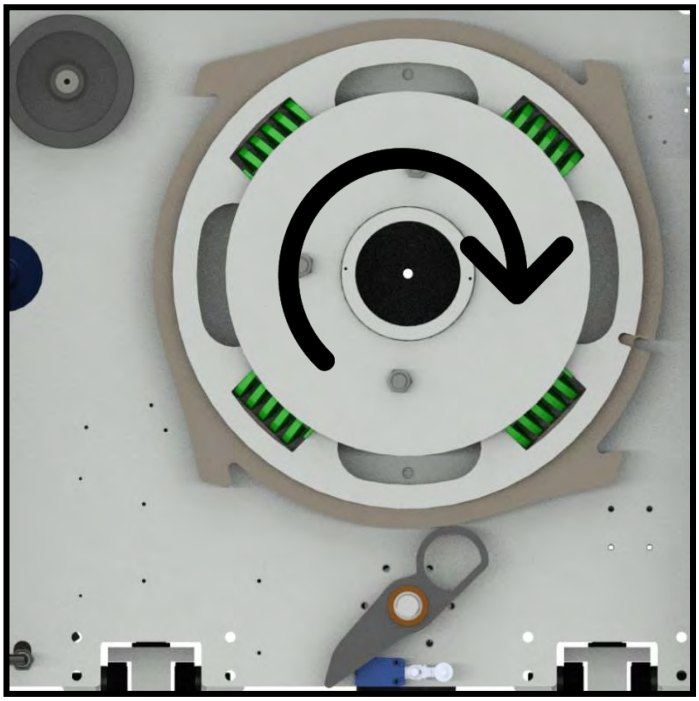
- Interlocking cam:



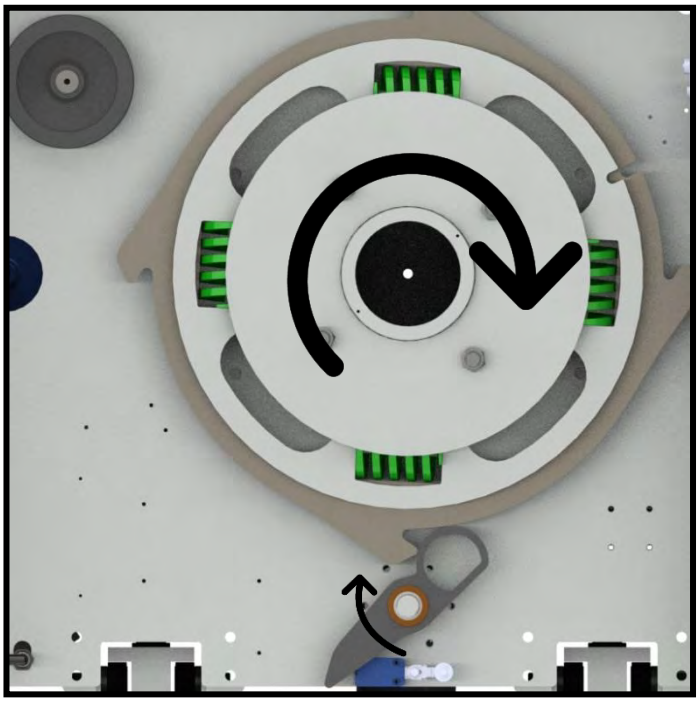
By means of a calibrated monitoring system, the interlocking cam detects an increased nominal speed and locks the brake disk on the cable winding drum occurring immediate stoppage of the suspended platform.

Operation of the device in case of excessive speed:

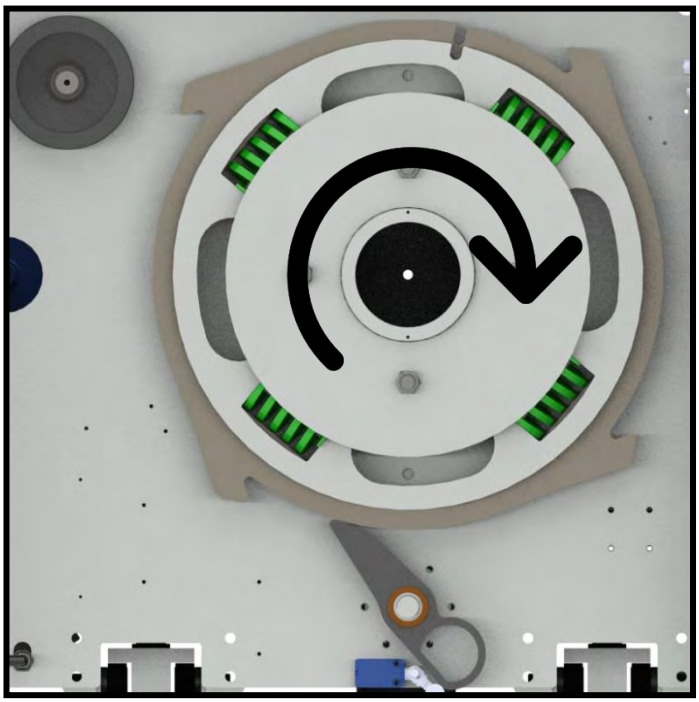
1. The interlocking cam follows the perimeter of the brake disk, oscillating regularly due to the geometry of the component.



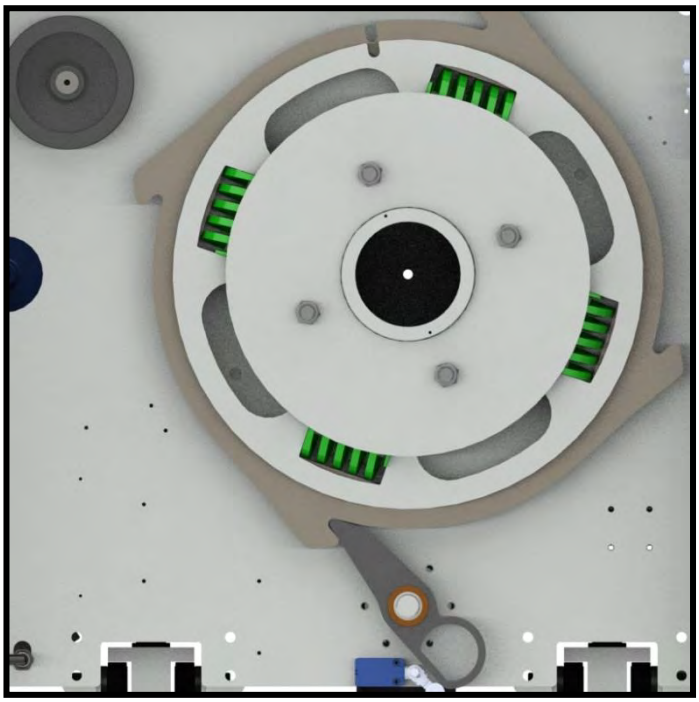
2. An increased speed of the drum, causes a variation of oscillation speed of the interlock cam.



3. The cam will enter one of the interlock points of the brake disk.



4. The interlock of the cam onto the brake disk impedes its rotation and completely locks the cable winding drum for the suspended platform.



The secondary brake will be activated automatically in a situation of excessive speed, even without electrical power. When, on platform descent, the drum rotates faster than 15 m/min, there is an increased inertia of rotation of the brake disk and the cam will lock.

The brake disk has four springs that will produce progressive deceleration as well as protecting the components of the power transmission and motor assembly.

Once the secondary brake has been activated, the electrical detector of the emergency brake, power supply is cut and the machine is completely out of service. All personnel must evacuate the platform using means apart from the machine.

The secondary brake cannot be reset manually if there is a suspended load.

The secondary brake device has been designed to avoid damage to the elevation assembly, allowing its reactivation after being triggered due to excessive speed, and maintaining the elevation system completely operational for a new service.

Reactivation of the brake must always be done by trained technical personnel authorised by the manufacturer, who will study the possible cause of the automatic activation of the brake and correct conditions of the components of the elevation assembly.

5.2. Causes of activation of the secondary brake

Warning!

These instructions must only be carried out by technical personnel trained and authorised by **Atech**.

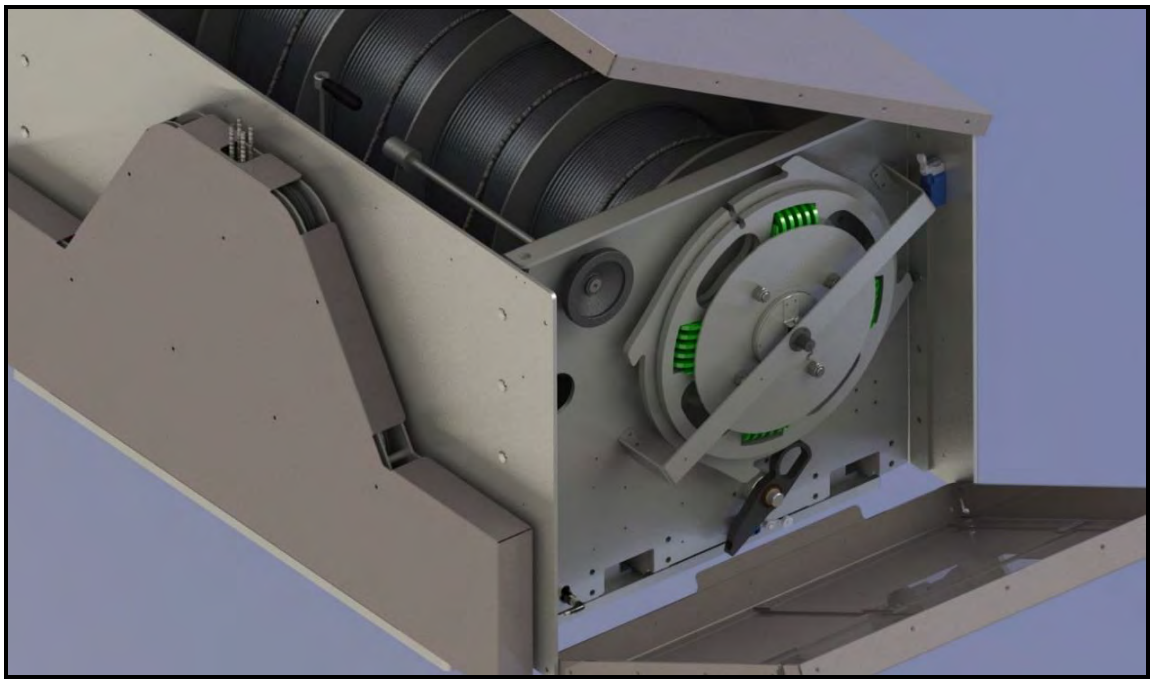
Under normal working conditions, the secondary brake should not be activated during the service life of the machine, if there is an activation, its causes must be carefully analysed before putting the machine back into service.

In case of activation of the secondary brake, the machine will be out of service and the technical service signal will be displayed on the control panel.

Then you should disconnect the machine from the electrical power supply, switching it off from the control panel and disconnecting it from the building power socket.

To check that the secondary brake has been activated, locate the elevation assembly in the machine and check the position of the interlocking cam on the brake disk.

The secondary brake device is on one of the sides of the elevation assembly, to access it, lift the upper cover and fold down the side panel.



Possible causes of activation of the secondary brake:

1- A problem in the transmission system.

A failure in the transmission system, due to breakage of a component or mishandling. The transmission components are in the elevation assembly, on the opposite side to the secondary brake. To check the conditions of the transmission system, fold down the side panel that protects it and check:

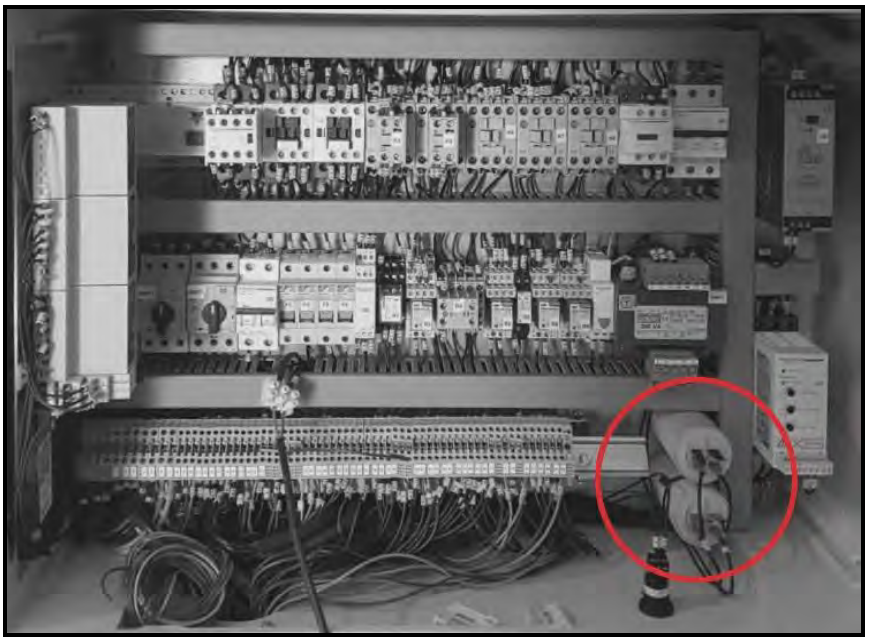
- That the motor and the gearbox are perfectly fitted and the transmission shaft joining them is not damaged.

- That the shafts and fasteners securing the transmission gears are in good conditions.

- That the transmission gears are in good conditions and properly adjusted.

2- Problem in the service brake and controlled lowering device.

On the main electrical panel, the machine incorporates a device for controlled descent in case of unlocking of the service brake.



This device enables the platform to descend at a moderate speed if it is necessary to evacuate, using the service brake. The platform will descend at a speed of less than 15 m/min, avoiding the action of the secondary brake. If, on unlocking the service brake manually or if it stops working due to breakdown, the secondary brake is triggered, there may be a failure in the controlled descent device.

The controlled descent device comprises a group of condensers located inside the main electrical panel of the machine. The wiring and connections to the group of condensers indicated on the picture should be checked.

Activation of the secondary brake implies the existence of a failed component. The machine must not be used or the system reactivated without first having evacuated the operators from the suspended platform.

Activation of the secondary brake means that all the components related to the possible cause of the brake and any components that could have been damaged after the activation of the device must be carefully checked. This check-up should be carried out taking all necessary precautions. Never manipulate the components of the elevation assembly to the control panel without having disconnected the machine.

Especially avoid manipulating the transmission system and the brake system with a suspended load without having the necessary tools, so as to avoid possible entrapments.

5.3. Operation for resetting the secondary brake

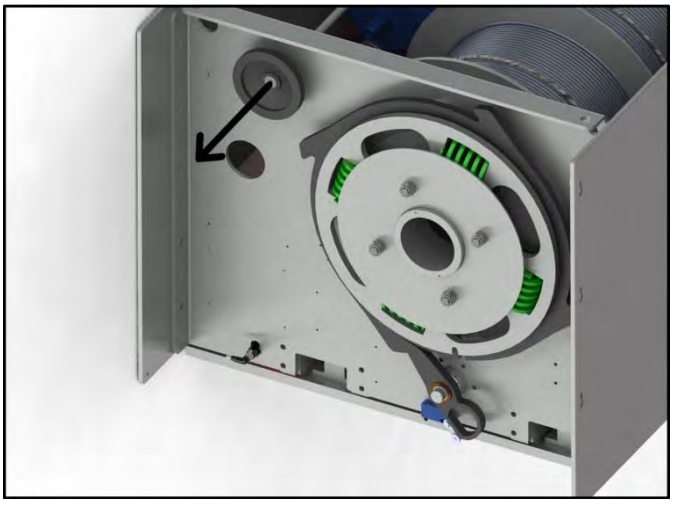
Warning!

These instructions must only be performed by technical personnel trained and authorised by the manufacturer.

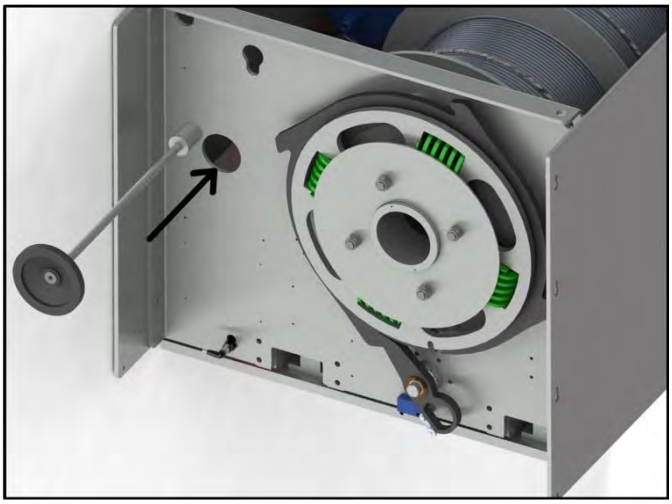
Before reactivating the secondary brake and complementing the revision of the elements described in section 5.2 that could be directly involved in the activation of the device, it is necessary to carry out a visual inspection of all the other elements of the elevation assembly, paying special attention to the transmission chain, shafts and fasteners of the drum cable winding synchronisation system, the intermediate stops of the platform and the horizontal movement of the elevation assembly.

Once all the components have been checked, reactivate emergency the brake following the steps given below:

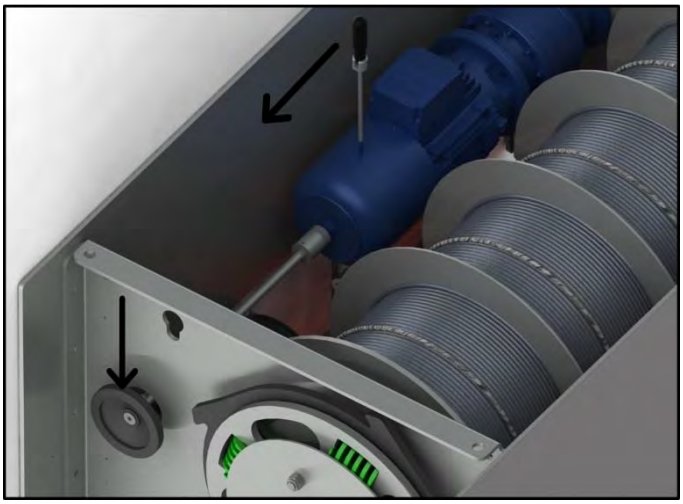
1- Remove the emergency wheel, located beside the secondary brake, by lifting and pulling it out.



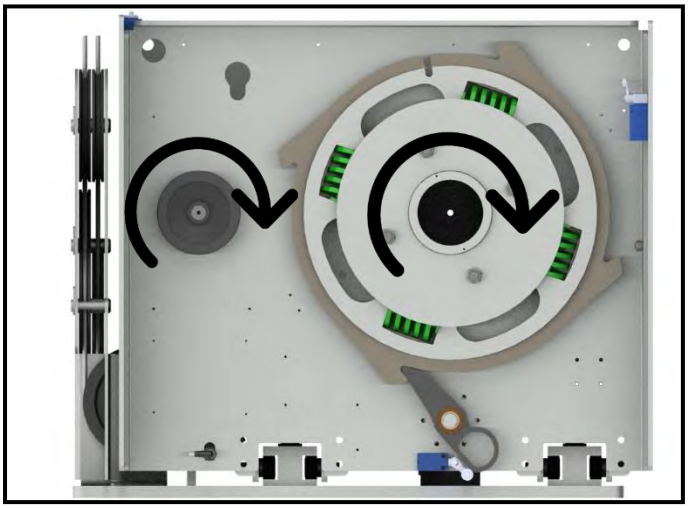
2- Fit the emergency wheel to the motor output shaft through the orifice on the chassis of the elevation assembly.



3- While holding the emergency wheel, pull the motor lever, to unlock the service brake. Whenever you wish to carry out any action with the emergency wheel, it is necessary to pull the motor lever and keep it pulled, otherwise, the service brake will impede the manual rotation of the wheel.



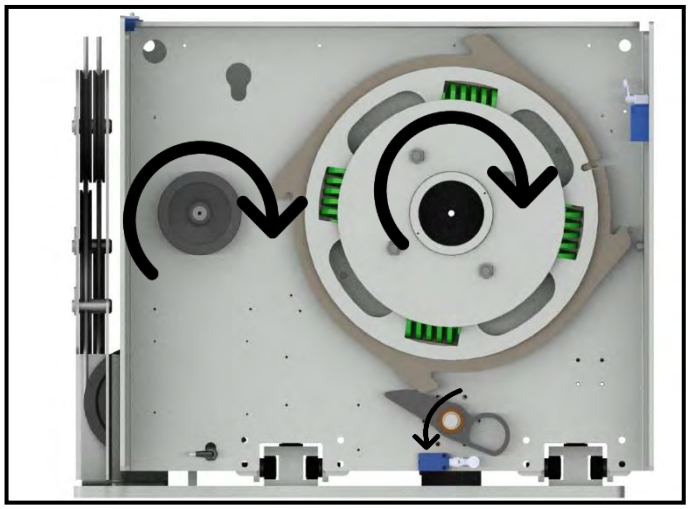
4- With the service brake unlocked, turn the emergency wheel clockwise to turn the brake disk. When you do this, the platform will also rise.



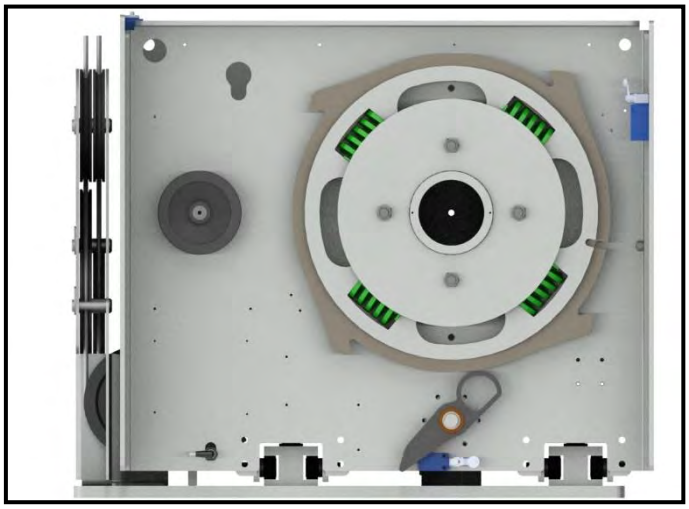
If at any time you release the wheel, it is necessary to stop pulling the lever, so that the suspended load does not make the drum turn in the undesired direction, in this case, carry out the previous action again.

The end of the cam contains a magnet that stops it from returning to its working position. Under no circumstances should this action be forced manually, as there is a high risk of trapping. To release it, continue turning the wheel to the right until the cam returns to its working position expelled by the projection in the brake disk.

5- Turning the emergency wheel until the brake disk makes a quarter of a turn, the cam will meet the next projection of the disk that will return it to its normal working position and will deactivate the safety limit switch.



6- Once the cam is in its working position, stop pulling the motor brake lever and return the emergency wheel to its original support.



To put the machine into service again, it is necessary to refit the side covers and the upper cover. Finally, reconnect the machine to the electrical power and put it into action using the main control panel.

6. Installation and assembly

Before using the machine for the first time, the dimensions should be checked using the approval plans (see annexe 1) and correct installation of the machine components verified.

- ✓ The dimensions of the parapet of the building correspond to those on the approval plan.
- ✓ The type of profile, distance between the rail tracks and rail supports correspond to the approval plan.
- ✓ The type of element securing the rail to the building is correctly fitted and corresponds to the approval plan.
- ✓ The position, number and conditions of the power sockets in the building coincide with those indicated on the approval plan.
- ✓ The electrical voltage and frequency coincide with those indicated in section 8.5 of the machine manual.
- ✓ The minimum and maximum range positions and parking coincide with those described on the approval plan.
- ✓ The steel cable is correctly wound through the pulleys.
- ✓ The torque tightness of the slewing gear and structural elements is compliant with indications in the machine manual.
- ✓ The type and number of facade guides (lanyards) have been checked.
- ✓ There is a wheel for emergency manual evacuation.
- ✓ Check alignment and tension of the steel cables of the elevation assembly and the hoist, descending to the lower level, ensuring the necessary length safeguard and levelling of the cables that will ensure stability of the suspended platform.
- ✓ Carry out the horizontal movement of the machine along the whole runway, checking that there are no obstacles in any critical point of the circuit.

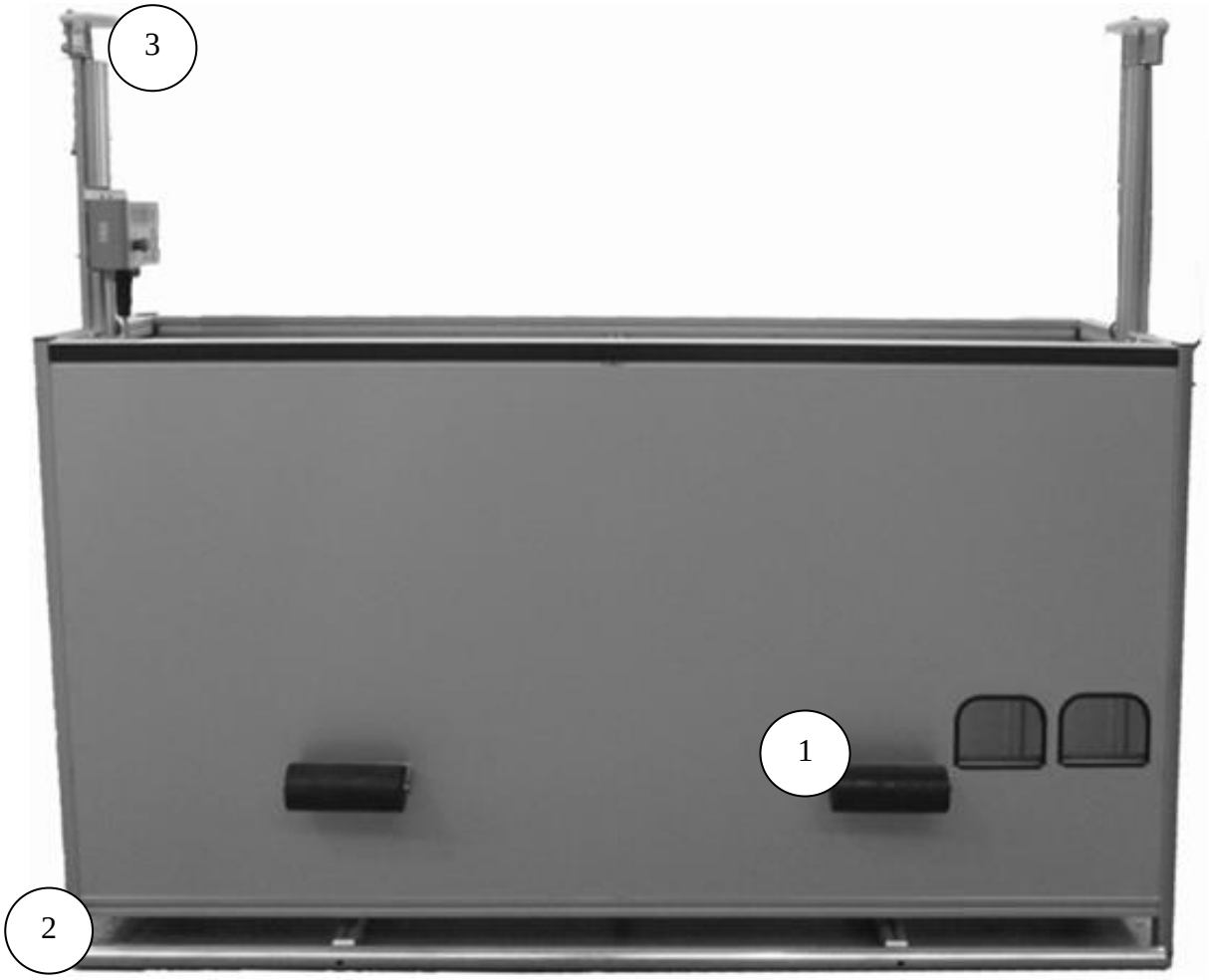
7. Maintenance

The preventive maintenance operations must be carried out before each use, or once a year if the machine is used infrequently. **Atech's** maintenance programme recommends carrying out maintenance of the installation every three months in the case of machines in regular use.

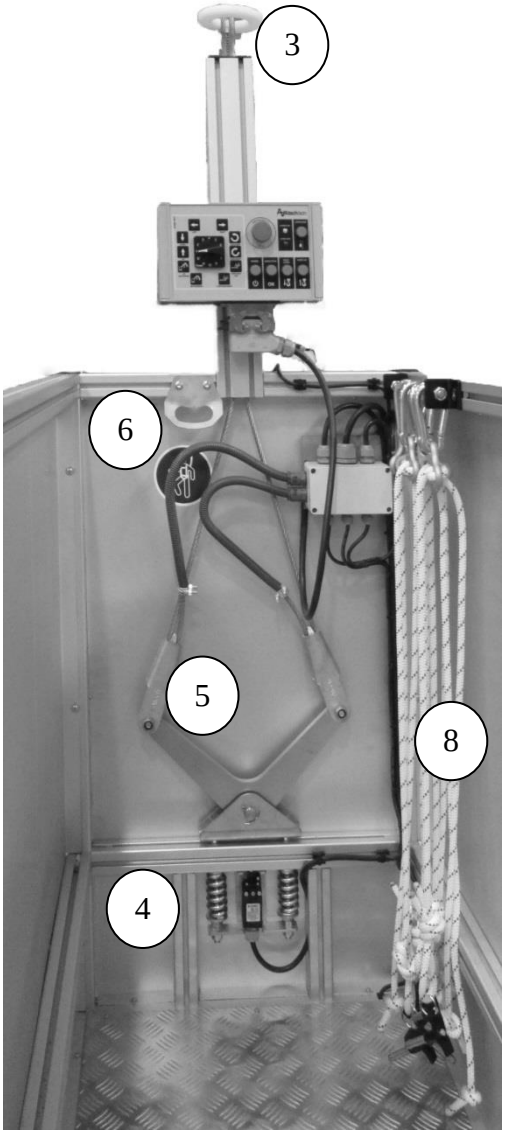
Maintenance operations on the parts and components of the machine:

7.1. Suspended platform

- 1.1. Check the general conditions of the platform. Check welds, coatings and mechanisms.
- 1.2. Check the conditions of the rollers protecting the facade. (1)
- 1.3. Check the general conditions and operation of the anti-collision device. (2)
- 1.4. Clean and grease the joints of moving points: upper anti-collision device, lower anti-collision device and platform levelling device.
- 1.5. General cleanliness of the platform.



- 1.6. Check the general conditions and operation of the overload system. (4)
- 1.7. Check the anchoring points of the suspension cables (supports, wedge terminals and thimbles). (5)
- 1.8. Check the general conditions of the warning and safety notices. (6)
- 1.9. Check the general conditions and operation of the continuous guide system on the facade (softrope). (7)
- 1.10. Check that the drainage holes are not obstructed.
- 1.11. Check the general conditions and operation of the guides securing to the facade (lanyards). (8)
- 1.12. Check the conditions of the anchor points of the safety harness. (6)

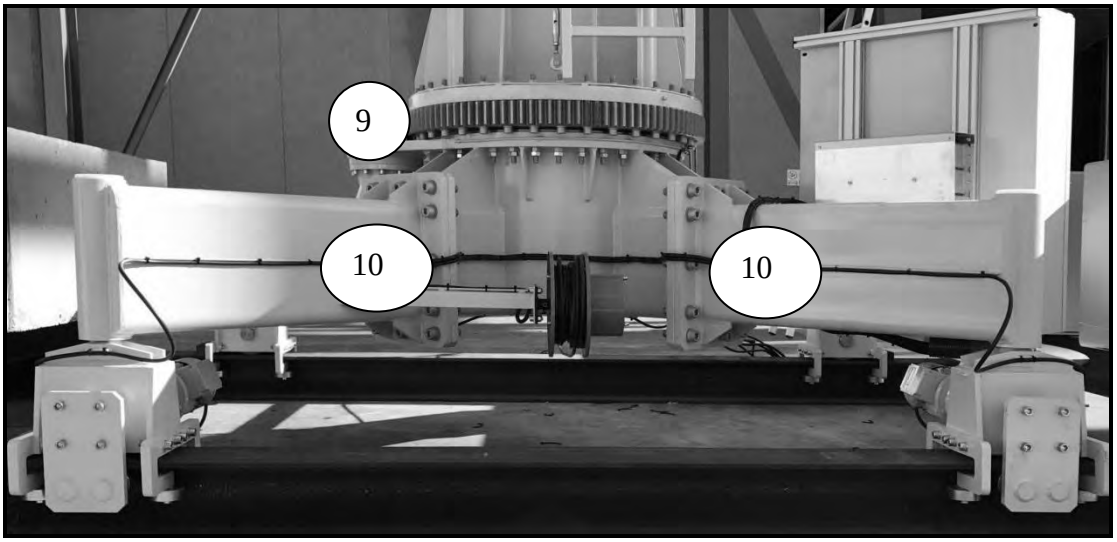




7.2. Metallic structure

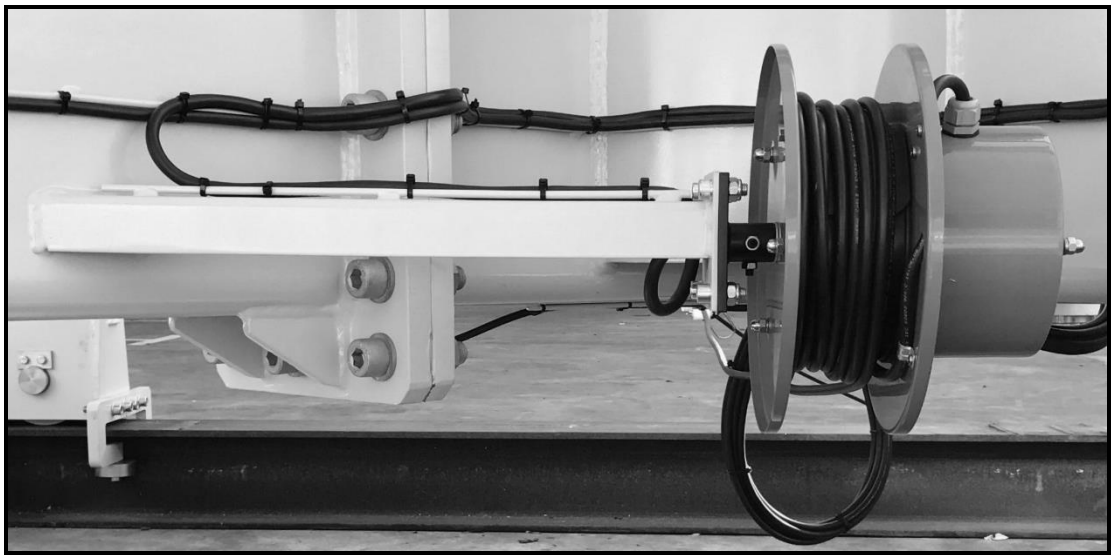
7.2.1. Lower chassis

- 2.1.1. Check the general conditions of chassis. Check welds, coatings and mechanisms.
- 2.1.2. Check that the torque tightness of the slewing gear and the joints with the legs is adequate. (See table below).
- 2.1.3. Check the conditions and tightness of fasteners.
- 2.1.4. Clean and grease bearings and joints of moving points.
- 2.1.5. General cleanliness of chassis.

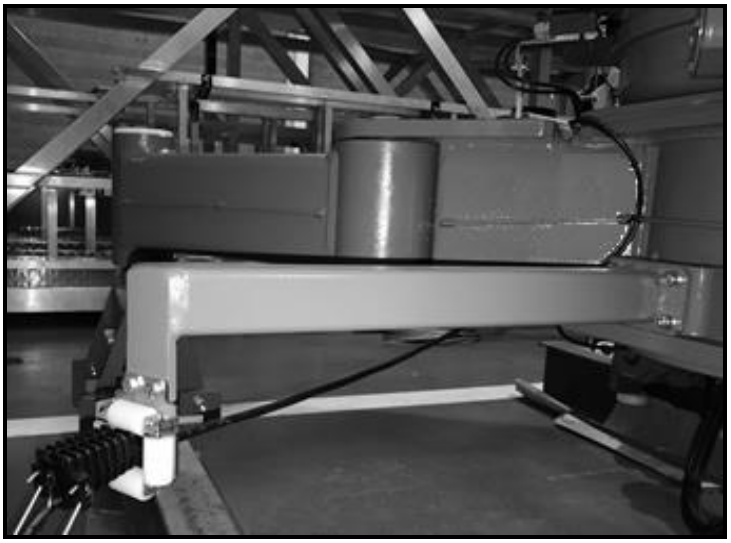


	Fasteners	Torque tightness (Nm)
Slewing gear of the head (12)	M16 CAL.8.8	193
Slewing gear of the lower chassis (9)	M20 CAL.12.9	648
Leg joints of the lower chassis (10)	M27 CAL.8.8	990
Column joint with jib	M24 CAL.12.9	1116

- 2.1.6. Check the general conditions of the power supply cable winder support.



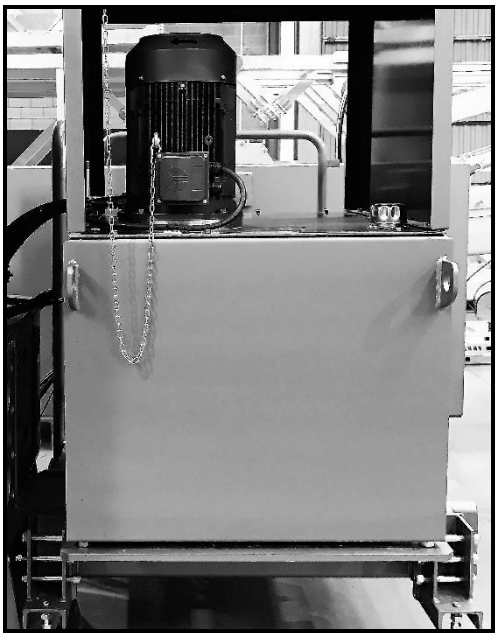
- 2.1.7. Check the general conditions and operation of the guide support of the power cable.
- 2.1.8. Check the general conditions of the power supply cable.



- 2.1.9. Check the general conditions of the electrical panel support.



- 2.1.10. Check the general conditions of the hydraulic assembly support.



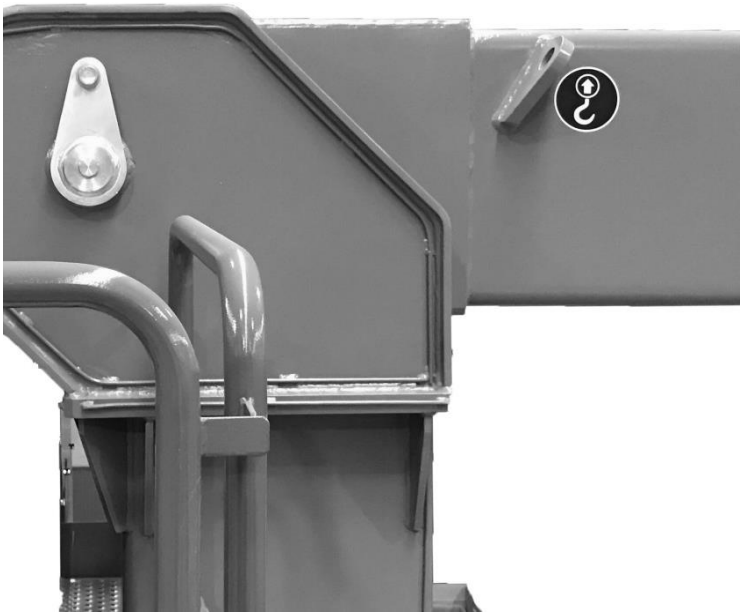
7.2.2. Column

- 2.2.1. Check the general conditions of the column. Check welds, coatings and mechanisms.
- 2.2.2. Check that the torque tightness of the column joint with the jib is adequate. (See table in section 7.2.1 of the manual).
- 2.2.3. Check the conditions and tightness of fasteners.
- 2.2.4. Clean and grease the joints of moving points.
- 2.2.5. General cleanliness of the column.
- 2.2.6. Check the general conditions of the lifeline support.

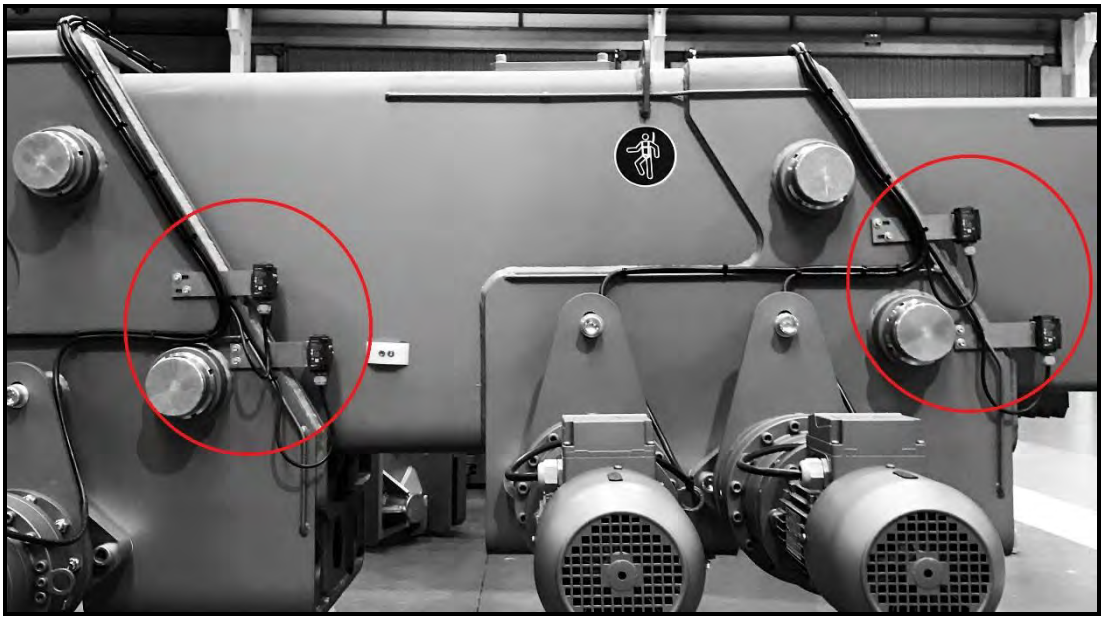


7.2.3. Jibs

- 2.3.1. Check the general conditions of jibs and pulleys support.
- 2.3.2. Check welds, coatings and mechanisms.
- 2.3.3. Check the conditions and tightness of fasteners.
- 2.3.4. clean and grease bearings and joints of moving points.
- 2.3.5. General cleanliness of jibs and pulleys support.

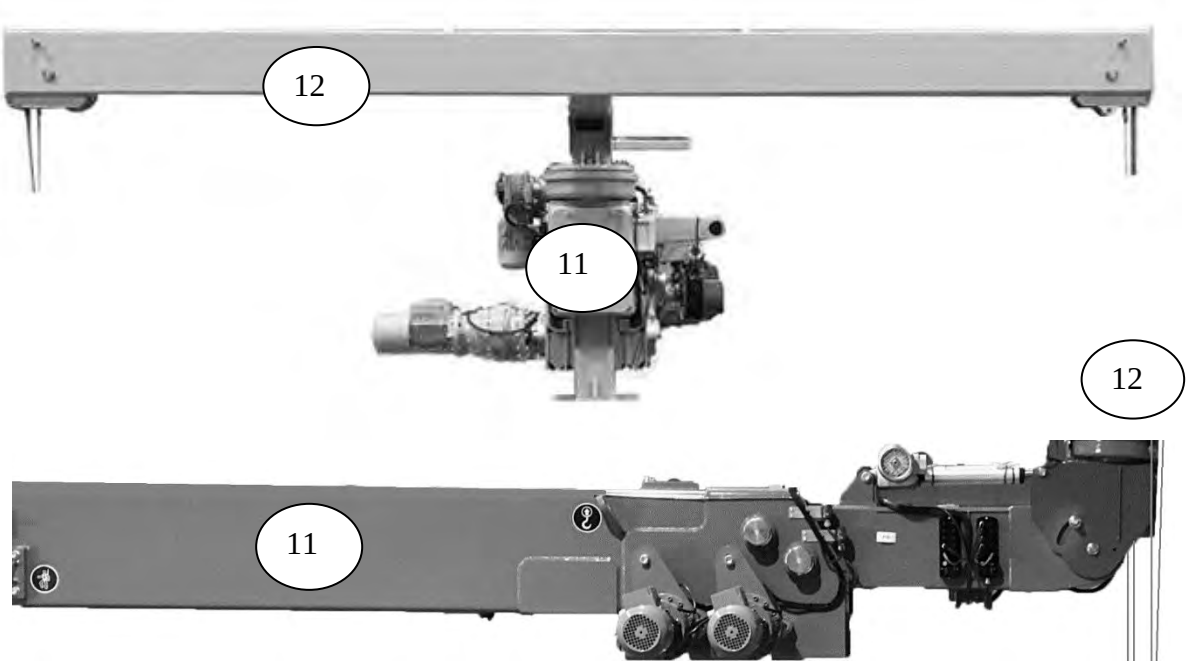


- 2.3.6. Check the general conditions of limit switches supports.



7.2.4. Head

- 2.4.1. Check the general conditions of jibs (11) and head (12). Check welds, coatings and mechanisms.
- 2.4.2. Check that the torque tightness of the slewing gear of the head is adequate. (See table in section 7.2.1 of the manual).
- 2.4.3. Check the conditions and tightness of fasteners.
- 2.4.4. Clean and grease bearings and joints of moving points.
- 2.4.5. General cleanliness of jibs and bells.



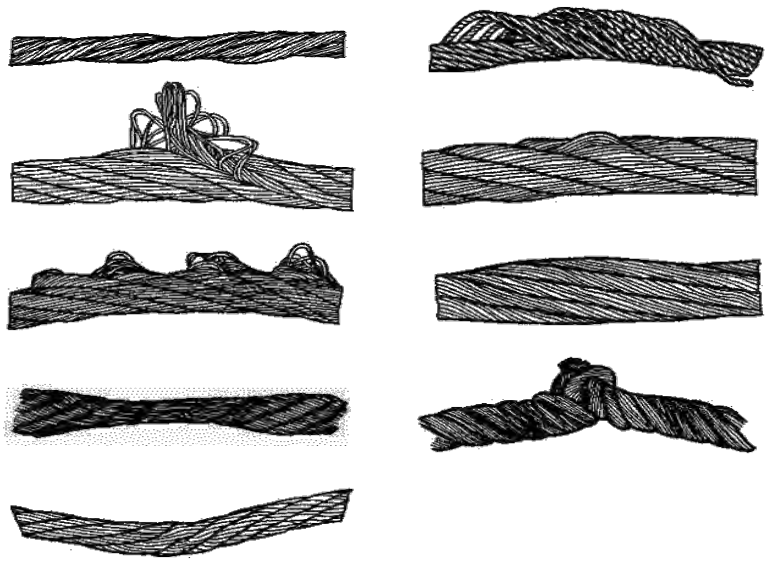
7.2.5. Pantograph device

- 2.5.1. Check the general conditions and operation of the pantograph device. Check welds, coatings and mechanisms.
- 2.5.2. Clean and grease the bearings and moving points joints of the pantograph device.
- 2.5.3. Check the anchoring points of the suspension cables (supports, wedge terminals and thimbles). (5)

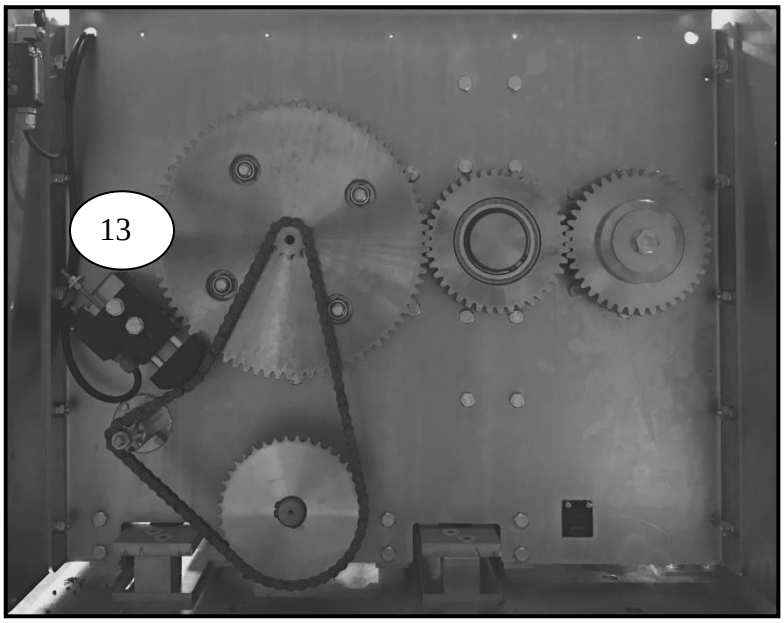


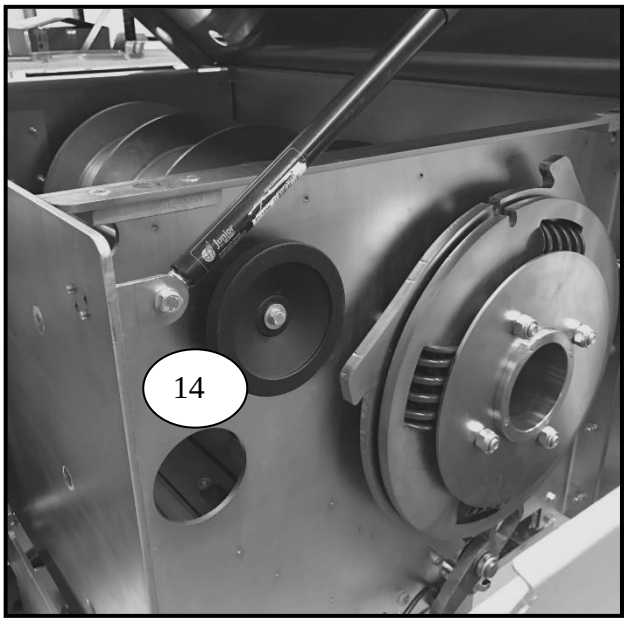
7.3. Elevation assembly

- 3.1. Check the general conditions of the elevation assembly. Check welds, coatings and mechanisms.
- 3.2. Clean and grease bearings and joints of moving points.
- 3.3. Clean and grease the transmission chain and the synchronisation chain.
- 3.4. Clean and grease the transmission gears.
- 3.5. Check the general conditions of elevation drum steel cables. It must not have more than 10% of untangled cable. If damage similar to that shown below is observed, do not use the machine and notify the authorised technical service.

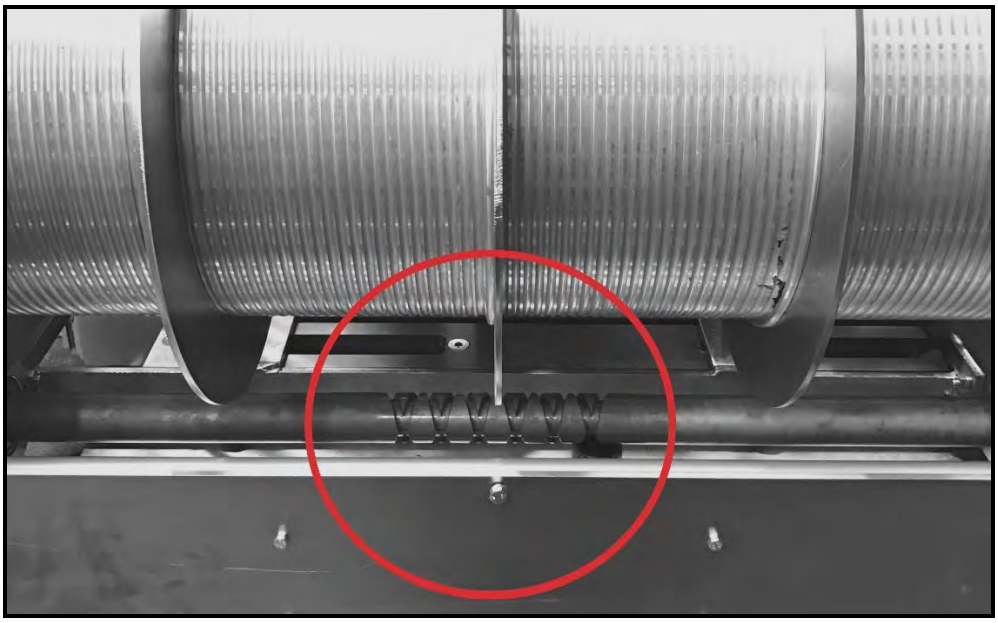


- 3.6. Check the general conditions of the ropes, weights, thimbles, wedge terminals and clamps of the steel cables.
- 3.7. Check the presence and fitting of the emergency wheel. (14)

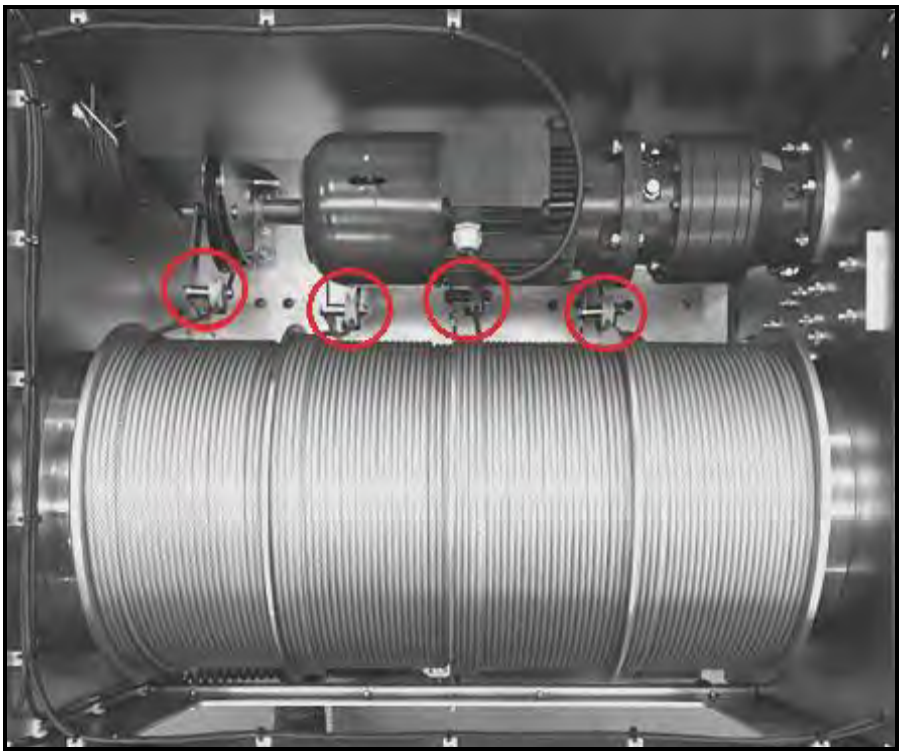




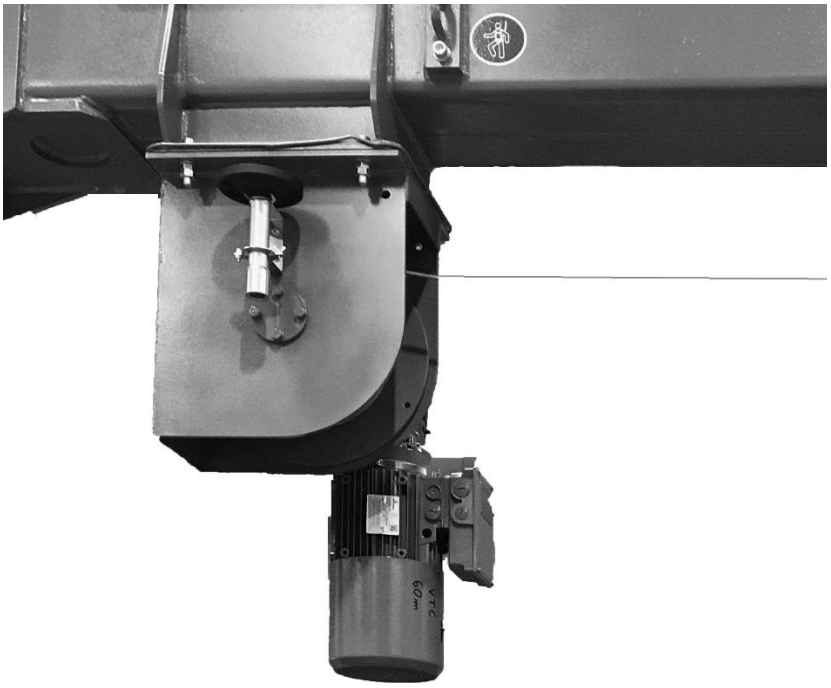
- 3.8. Clean and grease the synchronization shaft.



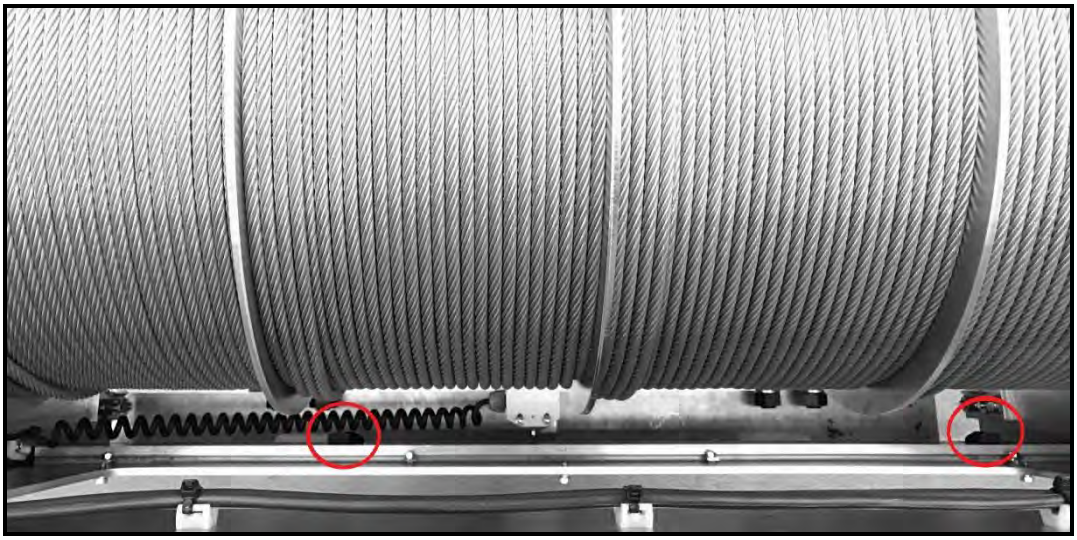
- 3.9. Check the general conditions of the slack cable system. Check welds, coatings and mechanisms.



- 3.10. Check the general conditions and presence of the components of the secondary brake. (See section 5 of the manual).
- 3.11. Check that the secondary brake has not been manipulated.
- 3.12. Check the general conditions of the auxiliary hoist steel cable. (See the previous picture of damaged steel cable).
- 3.13. Clean and grease the auxiliary hoist steel cable.



- 3.14. Check the general conditions and operation of the intermediate stops and vertical movement limiters.



7.4. Hydraulic, electric and electronic systems

- 4.1. Check the general conditions of the electrical cabinet and all its components.
- 4.2. Check the correct operation of the control panel.
- 4.3. Check the general conditions of the platform control keypad.
- 4.4. Check the correct operation of the platform control keypad.
- 4.5. Check the general conditions of the connection boxes and all their components.
- 4.6. Clean the inside of the electrical cabinet and the platform control keypad.
- 4.7. Check that the platform control keypad and connection boxes are correctly sealed.
- 4.8. Retighten all connections of the electrical cabinet, the platform control keypad and the connection boxes.
- 4.9. Check the general conditions and operation of the service limit switches.
- 4.10. Check the general conditions and operation of the safety limit switches.
- 4.11. Check the general conditions of the electric operation cable.
- 4.12. Check the general conditions of sockets and connectors.
- 4.13. Check the general conditions and operation of the remote-control system (antennas, chargers, batteries, etc.)
- 4.14. Check the general conditions and operation of the electric rail.
- 4.15. Check the general conditions and operation of the hydraulic cylinders.
- 4.16. Check the general conditions of the flexible hoses.
- 4.17. Check the general conditions and operation of the hydraulic circuit.
- 4.18. Check the sealing of hydraulic hose couplings.
- 4.19. Check that the maximum pressure of the hydraulic system does not exceed 120 bar.

7.5. Motors and slewing gears

Warning!

Motors must be protected and insulated from extreme temperatures (-10 °C and 50 °C).

- 5.1. Check the general conditions and operation of the motor/gears for elevation.
- 5.2. Check the general conditions and operation of the motor/gears for movement.
- 5.3. Check the general conditions and operation of the motor/gear for folding down.
- 5.4. Check the general conditions and operation of the hydraulic motor.
- 5.5. Check the general conditions and operation of the head motor/gear.
- 5.6. Check the general conditions and operation of the auxiliary hoist motor/gear.
- 5.7. Check the general conditions and operation of the motor/gear for turning the chassis.
- 5.8. Check the sealing of the terminal boxes of all motors.
- 5.9. Check the tightness of fasteners securing all motors/gears.
- 5.10. Check the general conditions and operation of the chassis slewing gear.

- 5.11. Check the general conditions and operation of the head slewing gear.
- 5.12. Clean and grease the chassis slewing gear.
- 5.13. Clean and grease the head slewing gear.
- 5.14. Check the general conditions of fasteners securing the chassis slewing gear.
- 5.15. Check the conditions of fasteners securing the head slewing gear.

7.6. Wheels

- 6.1. Check the general conditions and operation of wheels.
- 6.2. Check the general conditions and operation of guide wheels.
- 6.3. Clean and grease bearings and joints of wheels and moving points.
- 6.4. Clean and grease the guide wheels.
- 6.5. Clean and grease bearings and joints of movement carriages and moving points.



7.7. Runway

- 7.1. Check the general conditions of the movement rail track. Check welds, coatings and mechanisms.
- 7.2. Check the general conditions of rail tracks.
- 7.3. Check the general conditions of the anchoring points, fasteners.
- 7.4. Check the torque tightness of anchoring points, fasteners.
- 7.5. Check the general conditions of base plate, cross-members, struts, etc.
- 7.6. Check the general conditions of base plates supports, rubber bases, concrete slabs, etc.
- 7.7. Check the general conditions and correct operation of expansion joints.
- 7.8. Clean and grease bearings and articulated expansion joints.
- 7.9. Check the general conditions and correct operation of rail sidings.
- 7.10. Clean and grease bearings and joints of rail sidings.
- 7.11. Check the general conditions of rail track mechanical stops.

7.8. Maintenance program

	Maintenance operations / Periods (quarters of the year)	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1	**Suspended platform**				
1.1	Check the general conditions of the platform.	■			
1.2	Check the conditions of the rollers protecting the facade.	■	■	■	■
1.3	Check the general conditions and operation of the anti-collision detector.	■	■	■	■
1.4	Clean and grease the joints of moving points.	■	■	■	■
1.5	General cleanliness of the platform.	■			
1.6	Check the general conditions and operation of the overload system.	■	■	■	■
1.7	Check the anchor points of the suspension cables.	■	■	■	■
1.8	Check the general conditions of the warning and safety notices.	■	■	■	■
1.9	Check the general conditions and operation of the continuous guide system on the façade.	■	■	■	■
1.10	Check that the drainage holes are not obstructed.	■			
1.11	Check the general conditions and operation of the guides securing to the facade.	■	■	■	■
1.12	Check the conditions of the anchor points of the safety harness.	■			
2	**Metallic structure**				
2.1	**Lower chassis**				
2.1.1	Check the general conditions of chassis.	■			
2.1.2	Check the torque tightness of the slewing gear and the joints with the legs of the lower chassis.	■			
2.1.3	Check the conditions and tightness of fasteners.	■			
2.1.4	Clean and grease bearings and joints of moving points.	■	■	■	■
2.1.5	General cleanliness of chassis.	■			
2.1.6	Check the general conditions of the power supply cable winder support.	■			
2.1.7	Check the general conditions and operation of the guide support of the power cable.	■	■	■	■
2.1.8	Check the general conditions of the power supply cable.	■	■	■	■
2.1.9	Check the general conditions of the electrical panel support.	■			
2.1.10	Check the general conditions of the hydraulic assembly support.	■			
2.2	**Column**				
2.2.1	Check the general conditions of the column.	■			
2.2.2	Check that the torque tightness of the column joint with the jib is adequate.	■			
2.2.3	Check the conditions and tightness of all fasteners.	■			
2.2.4	Clean and grease the joints of moving points.	■	■	■	■
2.2.5	General cleanliness of the column.	■			
2.2.6	Check the general conditions of the lifeline support.	■			
2.3	**Jibs**				
2.3.1	Check the general conditions of jibs and pulleys support.	■			
2.3.2	Check welds, coatings and mechanisms.	■			
2.3.3	Check the conditions and tightness of fasteners.	■			
2.3.4	Clean and grease bearings and joints of moving points.	■	■	■	■
2.3.5	General cleanliness of jibs and pulleys support.	■			
2.3.6	Check the general conditions of limit switches supports.	■			
2.4	**Head**				
2.4.1	Check the general conditions of jibs and head.	■			
2.4.2	Check the torque tightness of the slewing gear of the head.	■			
2.4.3	Check the conditions and tightness of fasteners.	■			
2.4.4	Clean and grease bearings and joints of moving points.	■	■	■	■
2.4.5	General cleanliness of jibs and bells.	■			
2.5	**Pantograph device**				
2.5.1	Check the general conditions and operation of the pantograph device.	■			
2.5.2	Clean and grease the bearings and moving points joints of the pantograph device.	■	■	■	■
2.5.3	Check the anchor points of the suspension cables.	■			

■ **Quarterly inspection**

Quarterly inspections of the machine.
Check the points marked on the programme.

■ **Annual inspection**

Annual inspections of the machine.

	Maintenance operations / Periods (quarters of the year)	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
3	**Elevation assembly**				
3.1	Check the general conditions of the elevation assembly.	■			
3.2	Clean and grease bearings and joints of moving points.	■	■	■	■
3.3	Clean and grease the transmission chain and the synchronisation chain.	■	■	■	■
3.4	Clean and grease the transmission gears.	■	■	■	■
3.5	Check the general conditions of elevation drum steel cables.	■	■	■	■
3.6	Check the general conditions of the ropes, weights, thimbles, wedge terminals and clamps.	■	■	■	■
3.7	Check the presence and fitting of the emergency wheel.	■	■	■	■
3.8	Clean and grease the synchronization shaft.	■	■	■	■
3.9	Check the general conditions of the slack cable system.	■	■	■	■
3.10	Check the general conditions and presence of the components of the secondary brake.	■			
3.11	Check that the secondary brake has not been manipulated.	■	■	■	■
3.12	Check the general conditions of the auxiliary hoist steel cable.	■	■	■	■
3.13	Clean and grease the auxiliary hoist steel cable.	■			
3.14	Check the general conditions and operation of the intermediate stops and vertical movement limiters.	■	■	■	■
4	**Hydraulic, electric and electronic systems**				
4.1	Check the general conditions of the electrical cabinet and all its components.	■			
4.2	Check the correct operation of the control panel.	■	■	■	■
4.3	Check the general conditions of the platform control keypad.	■			
4.4	Check the correct operation of the platform control keypad.	■	■	■	■
4.5	Check the general conditions of the connection boxes and all their components.	■			
4.6	Clean the inside of the electrical cabinet and the platform control keypad.	■			
4.7	Check that the platform control keypad and connection boxes are correctly sealed.	■			
4.8	Retighten all connections of the electrical cabinet, the control keypad and the connection boxes.	■			
4.9	Check the general conditions and operation of the service limit switches.	■	■	■	■
4.10	Check the general conditions and operation of the safety limit switches.	■	■	■	■
4.11	Check the general conditions of the electric operation cable.	■	■	■	■
4.12	Check the general conditions of sockets and connectors.	■			
4.13	Check the general conditions and operation of the remote-control system.	■	■	■	■
4.14	Check the general conditions and operation of the electric rail.	■	■	■	■
4.15	Check the general conditions and operation of the hydraulic cylinders.	■	■	■	■
4.16	Check the general conditions of the flexible hoses.	■			
4.17	Check the general conditions and operation of the hydraulic circuit.	■			
4.18	Check the sealing of hydraulic hose couplings.	■			
4.19	Check that the maximum pressure of the hydraulic system does not exceed 120 bar.	■			

■ **Quarterly inspection**

Quarterly inspections of the machine.
Check the points marked on the programme.

■ **Annual inspection**

Annual inspections of the machine.
Check the points marked on the programme.

	Maintenance operations / Periods (quarters of the year)	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
5	**Motors and slewing gears**				
5.1	Check the general conditions and operation of the motor/gears for elevation.				
5.2	Check the general conditions and operation of the motor/gears for movement.				
5.3	Check the general conditions and operation of the motor/gear for folding down.				
5.4	Check the general conditions and operation of the hydraulic motor.				
5.5	Check the general conditions and operation of the head motor/gear.				
5.6	Check the general conditions and operation of the auxiliary hoist motor/gear.				
5.7	Check the general conditions and operation of the motor/gear for turning the chassis.				
5.8	Check the sealing of the terminal boxes of the motors.				
5.9	Check the tightness of fasteners securing the motors/gears.				
5.10	Check the general conditions and operation of the chassis slewing gear.				
5.11	Check the general conditions and operation of the head slewing gear.				
5.12	Clean and grease the chassis slewing gear.				
5.13	Clean and grease the head slewing gear.				
5.14	Check the general conditions of fasteners securing the chassis slewing gear.				
5.15	Check the conditions of fasteners securing the head slewing gear.				
6	**Wheels**				
6.1	Check the general conditions and operation of wheels.				
6.2	Check the general conditions and operation of guide wheels.				
6.3	Clean and grease bearings and joints of wheels and moving points.				
6.4	Clean and grease the guide wheels.				
6.5	Clean and grease bearings and joints of movement carriages and moving points.				
7	**Runway**				
7.1	Check the general conditions of the movement rail track. Check welds, coatings and mechanisms.				
7.2	Check the general conditions of rail tracks.				
7.3	Check the general conditions of the anchoring points, fasteners.				
7.4	Check the torque tightness of anchoring points, fasteners.				
7.5	Check the general conditions of base plate, cross-members, struts, etc.				
7.6	Check the general conditions of base plates supports, rubber bases, etc.				
7.7	Check the general conditions and correct operation of expansion joints.				
7.8	Clean and grease bearings and articulated expansion joints.				
7.9	Check the general conditions and correct operation of rail sidings.				
7.10	Clean and grease bearings and joints of rail sidings.				
7.11	Check the general conditions of rail track mechanical stops.				

Quarterly inspection

Quarterly inspections of the machine.
Check the points marked on the programme.

Annual inspection

Annual inspections of the machine.
Check the points marked on the programme.

7.9. Lubrication

Motors-gearboxes

The motors-gearboxes installed by **Atech** need no maintenance. It is not necessary to replace the lubricant of the gearboxes of the motors. Never open the gearbox. In case of leakage of hydraulic fluid, disassemble the complete assembly and send it to **Atech**.

Hydraulic system

If the machine contains hydraulic components, the oil used is as indicated below:

SIL POWER HLP-46 ISO 6743/4 HM

Gears, bearings and racks

The grease used in bearings, racks and slewing gears of the lower chassis and the head is as follows:

CEPSA ARGA EP-2 ESPECIAL

Joints of the machine

In joints, use the following grease:

CONSISTENT SPRAY GREASE - WURTH

8. Technical factsheet of the machine

8.1. B.M.U.

Model	A25 Type
Series number	M-3633
Nominal load of the suspended platform	748 lbs (2 people + tools)
Load capacity of the auxiliary hoist	1648 lb
Total weight of the machine	29257 lbs
Year of manufacture	2017
Project	P15588, CORNING TOWER, USA

8.2. Elevation assembly

Size of the elevation assembly (feet)	**Load (lbs)**	**Engine power (kW)**
590	-	3
Material	**ERP Code**	**Series Number**
STEEL	EG 11 02 A03 02	P15588, CORNING TOWER, USA

8.3. Runway

Fitting of rail to the building	Anchored
Type of beam	W 10x12
Distance between rails	1824 mm

Annex I - Certificates

Steel cable certificate

GUSTAV WOLF

Drahtseilwerk GmbH

ISO 9001:2008

CE

Atechbcn
C/ Tomás Viladomiu 29-35
08650 Sallent Barcelona
Spanien

Gustav Wolf
Drahtseilwerk GmbH
Sundernstr. 40

33332 Gütersloh
Germany
+49 5241/876-0
+49 5241/876-160
info@gustav-wolf.de

GW-Auftrag: 10563792
GW-commission:

Kunden-Nr.: 301635
Customer No.:

Datum: 08.08.16
date:

zugelassen von: Germanischer Lloyd,
authorized by: Lloyd's Register
RINA

Werksbescheinigung / Herstellererklärung gem. DIN EN 10204-2.1

Works certificate / EC manufacturing declaration acc. to DIN EN 10204-2.1

Ihr Auftrag / Datum / Ihre Referenz MZ 350 / 27.06.16 / Ernest Chaure Moix
your order / date / your reference:
Kommission / Auftrag-Referenzen: /
commission / order references:

Pos. *pos.*	Artikel-Nr. *article-no.*	Beschreibung *description*	Menge *quantity*	Einheit *unit*
1	**775308032**	**8 mm PAWO F5e+1x0,96 E-Leiter** 6 x 19S 114Dr.1770 B (nozn) sZ	4.000	m
		Längenaufteilung / *length break-up* 4 X 1.000 m		

Art der Einlage	/ *type of core:*		DC	
Schlagart-Schlagrichtung	/ *type and direction of lay:*		Kr. rechtsg. mit SE	
Nennfestigkeit	/ *tensile grade:*		1770	N/mm²
Oberfläche	/ *finish:*		verzinkt	
Metall. Seilquerschnitt	/ *metallic cross section:*		25,080	mm²
Längengewicht	/ *rope weight:*		0,234	kg/m
rechn. Bruchkraft	/ *calculated breaking load:*		44,40	kN
Mindestbruchkraft	/ *minimum breaking load:*		38,20	kN
Max. Tragkraft bei	/ *max. load at:*			
Sicherheitsfaktor	/ *safety factor:*	5	7,64	kN
Sicherheitsfaktor	/ *safety factor:*	12	3,18	kN

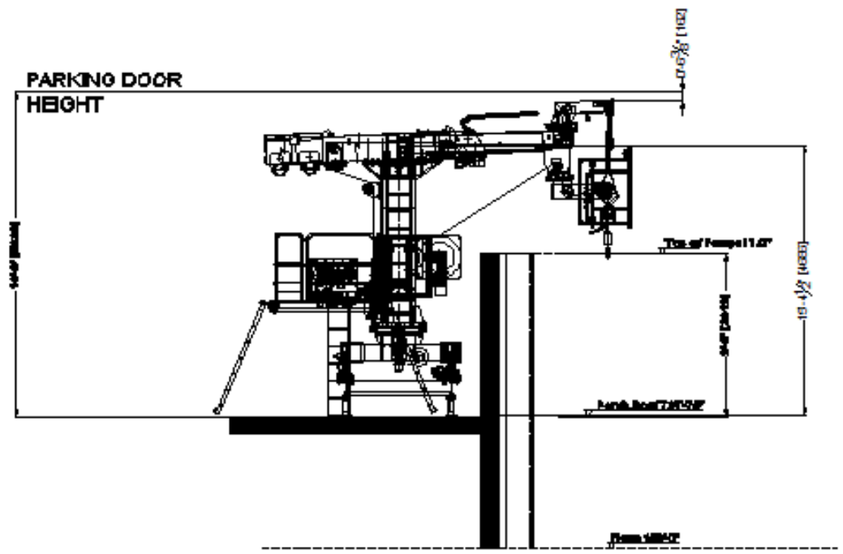
Annex II – Plans and electrical diagrams

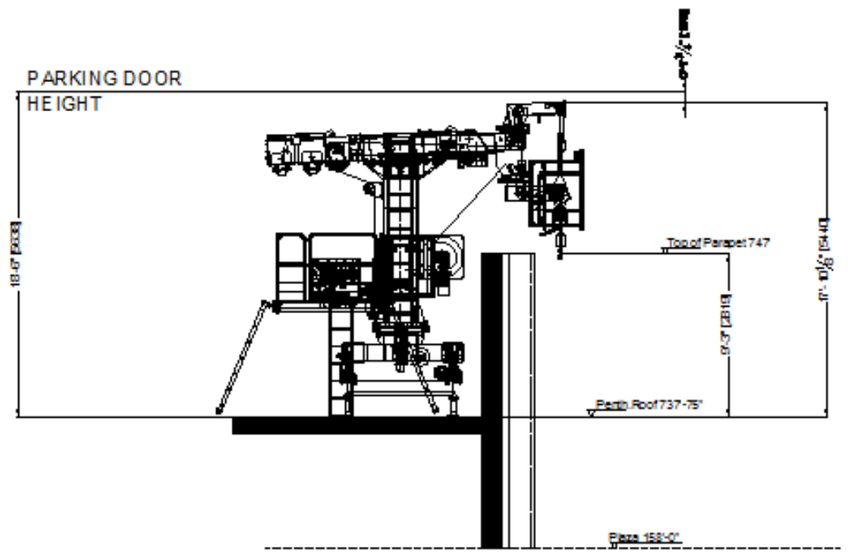
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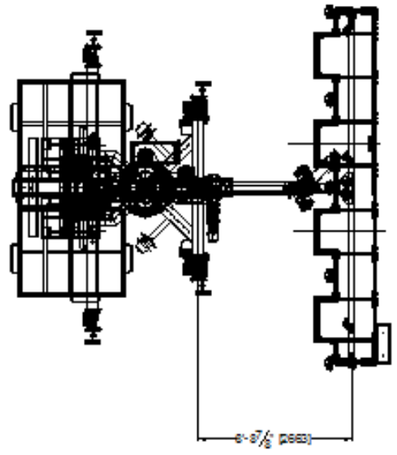
2. Machine plan

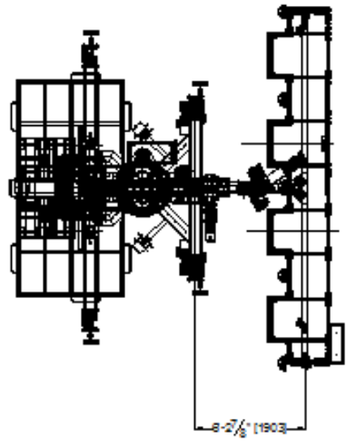
3. Transport plan

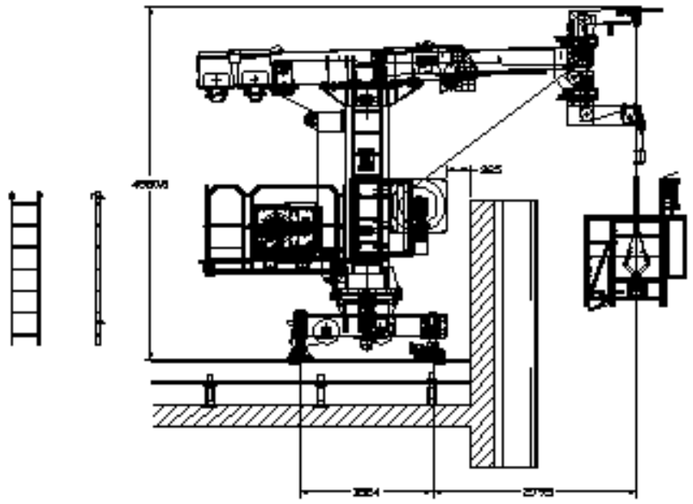
4. Electrical diagram

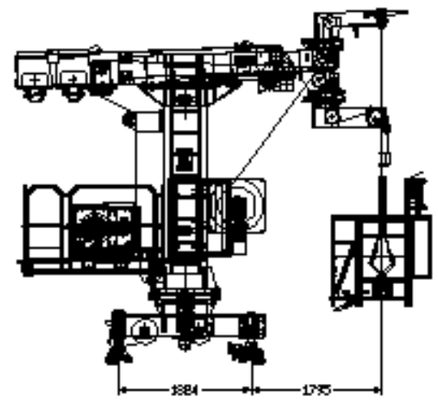

PARKING DOOR
HEIGHT

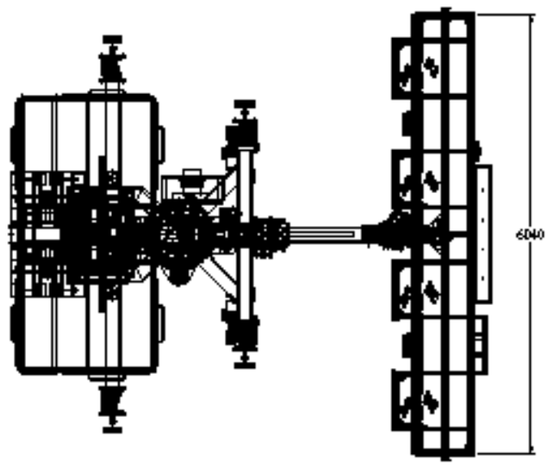

PARKING DOOR
HEIGHT
Top of Parapet 747
Roof 737'-7"

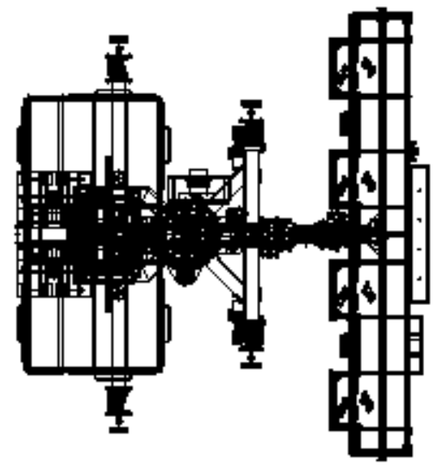






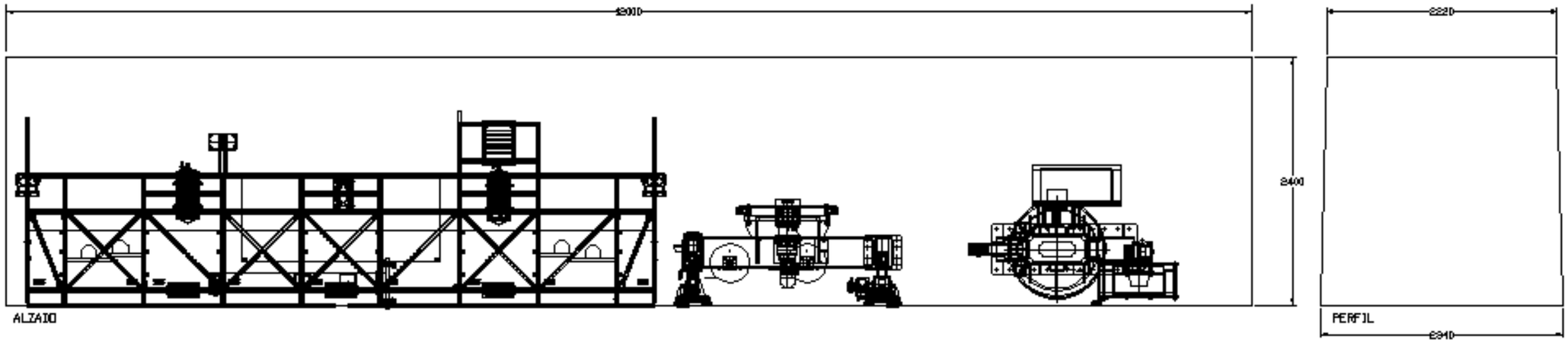






Atechbcn

Escala:	CORNING TOWER	Nº Plano: N-3633
1/30	A-25 P15588-01	Fecha: 19-10-17 Creation



ITEM	DESCRIPTION	DIMENSIONS			WEIGHT (Kg)	WEIGHT (lg)
1	CRADLE (M-3633)	6.300	1.400	1.800	600,00	1.322,77
2	COLUMN SECTION (M-3633)	1.800	510	450	100,00	220,46
3	LOWER CHASSIS (M-3633)	5.500	2.200	1.050	1.790,00	3.946,27
4	HOIST (M-3633)	800	800	500	500,00	1.102,31
5	COLUMN (M-3633)	2.900	1.400	1.300	830,00	1.829,83
TOTAL		LENGHT (mm)	WIDTH (mm)	HEIGHT (mm)	3.820,00	8.421,86

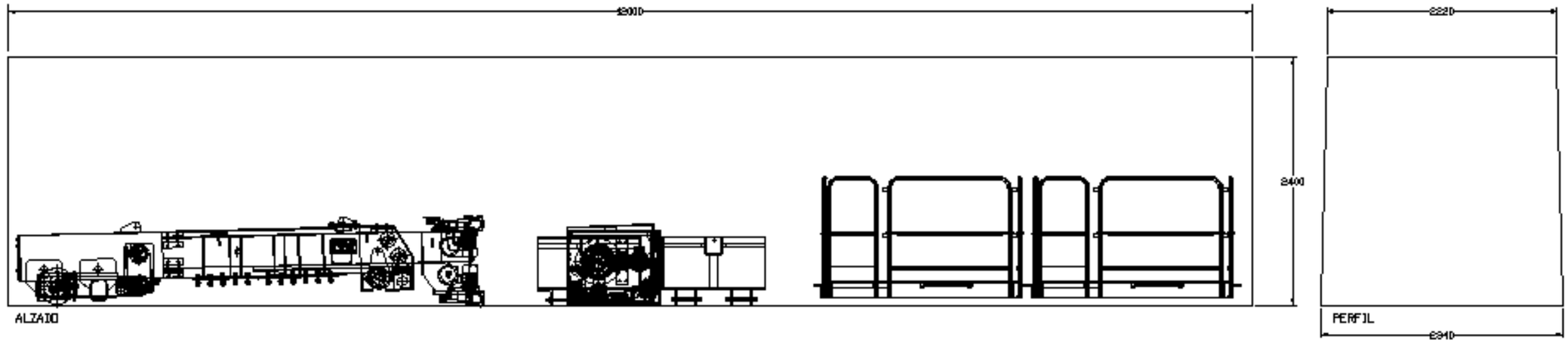
TRANSPORT-1

CRANE: 7500 lb (3402 kg.)

Atechbcn

OPEN TOP 40'
CORNING TOWER 1

Drawing: T-3633
Date: 01/12/2017



ITEM	DESCRIPTION	DIMENSIONS			WEIGHT (Kg)	WEIGHT (lg)
6	JIB (M-3633)	4500	1700	850	1.350	2.976
7	LADDER 1 (M-3633)	3000	450	200	50	110
8	LADDER 2 (M-3633)	2100	400	100	10	22
9	HOIST SPREADER BAR (M-3633)	1000	500	400	70	154
10	SPREADER BAR (M-3633)	6200	1400	500	250	551
11	DRUM (M-3633)	1400	1000	500	650	1.433
12	COUNTERWEIGHT 1 (M-3633)	1000	700	700	800	1.763
13	COUNTERWEIGHT 2 (M-3633)	1000	700	700	800	1.763
14	ACCESSORIES (M-3633)	800	600	300	50	110
15	GATEWAY 1 (M-3633)	2000	2000	1200	160	352
16	GATEWAY 2 (M-3633)	2000	2000	1200	160	352
TOTAL		LENGHT (mm)	WIDTH (mm)	HEIGHT (mm)	4.350	9.590

TRANSPORT-2

CRANE: 7500 lb (3402 kg.)

Atechban

OPEN TOP 40'
CORNING TOWER 1

Drawing: T-3633

Date: 01/12/2017

Atechbcn

Atech
C/Bruc, 72-74, 4ª Planta
08009, Barcelona (Spain)
T. +34 934 110 281
info@atechbcn.com

Client: CORNING

Project: P15588

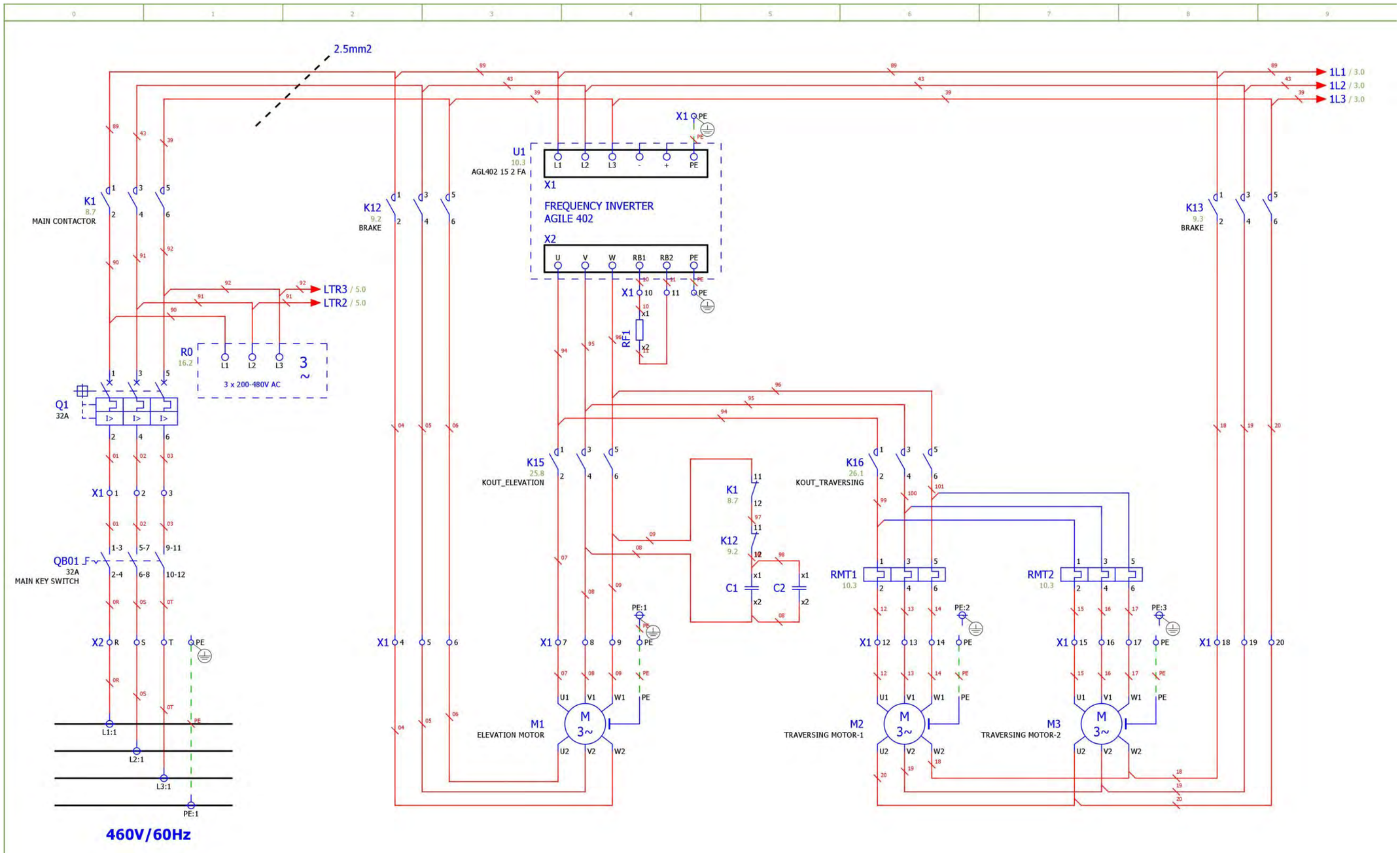
Serial Number: M3633

City: USA

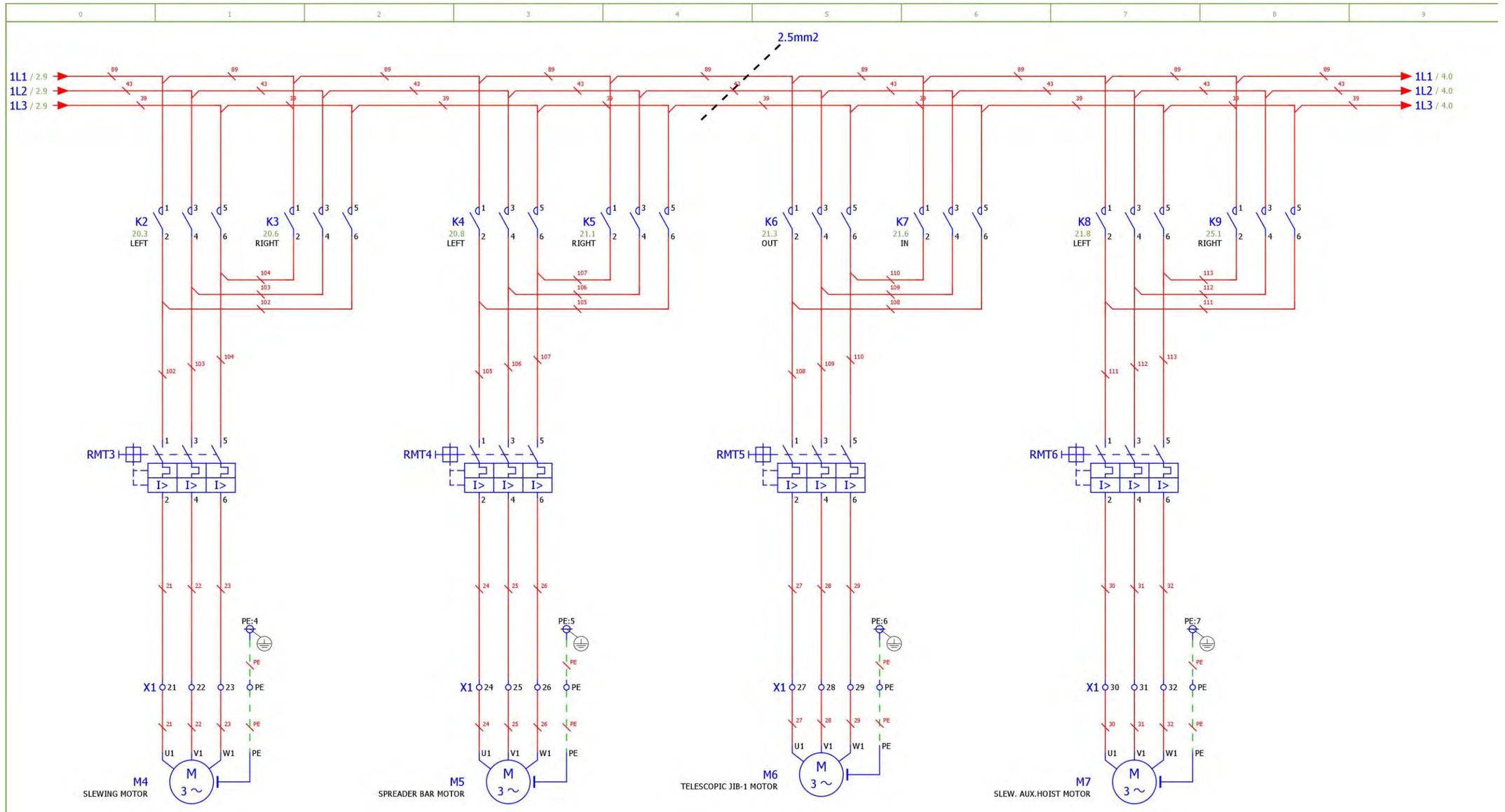
Country: USA

Modification: 29/11/2017

Total Sheets: 40



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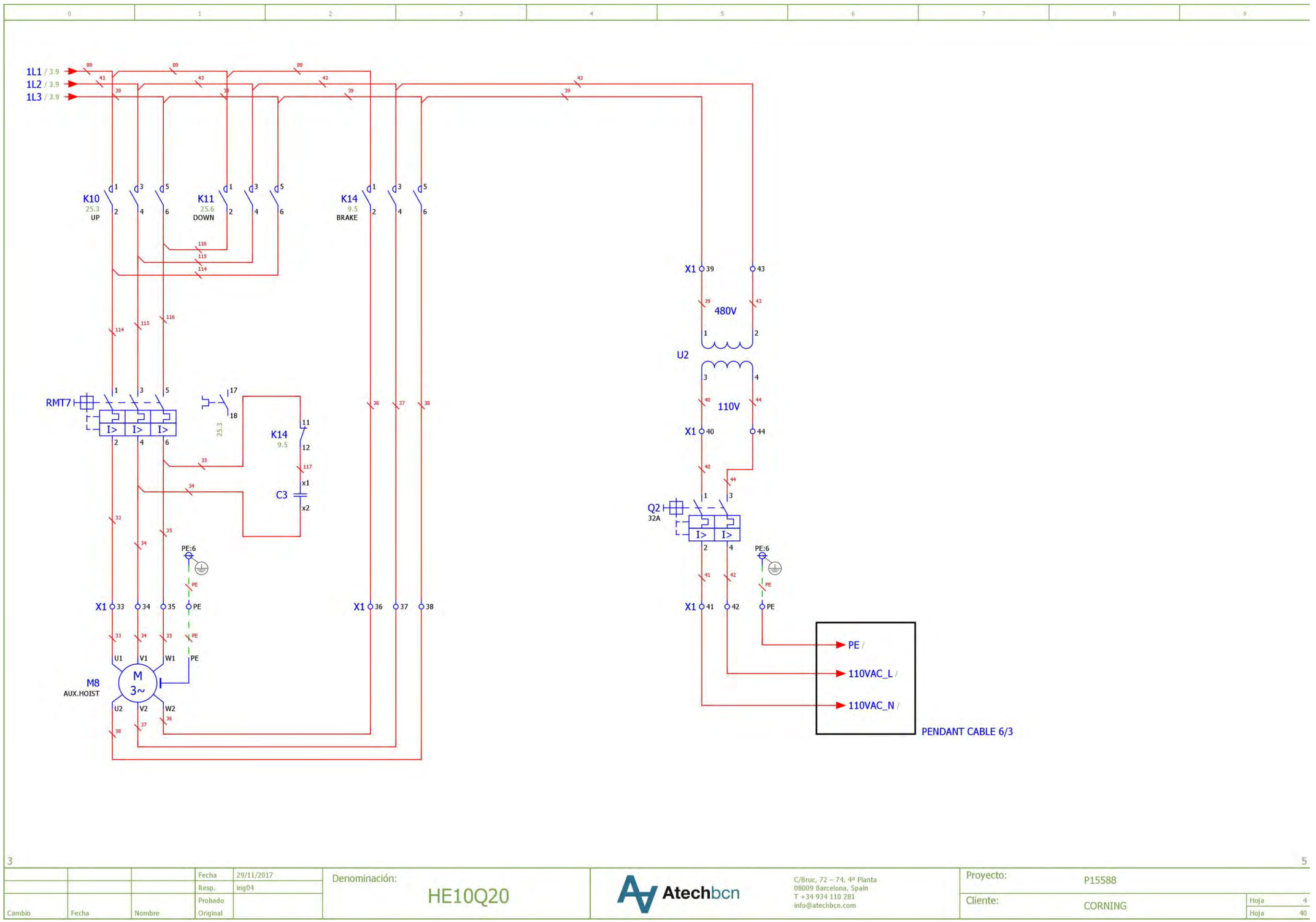


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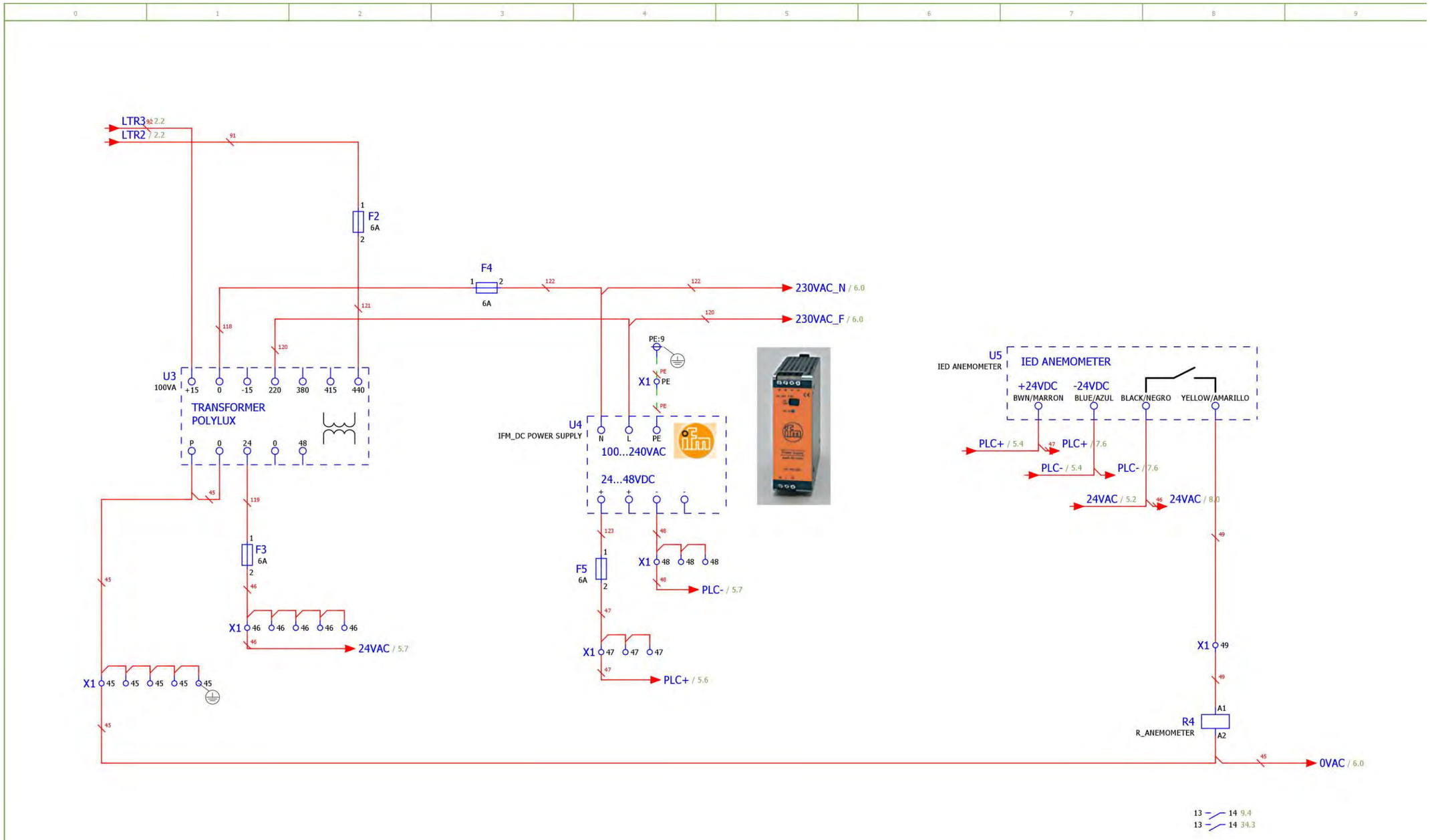
Denominación: HE10Q20

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08009 Barcelona, Spain
T +34 934 110 281
info@atechbcn.com

Proyecto:	P15588		
Cliente:	CORNING	Hoja	3
		Hoja	40

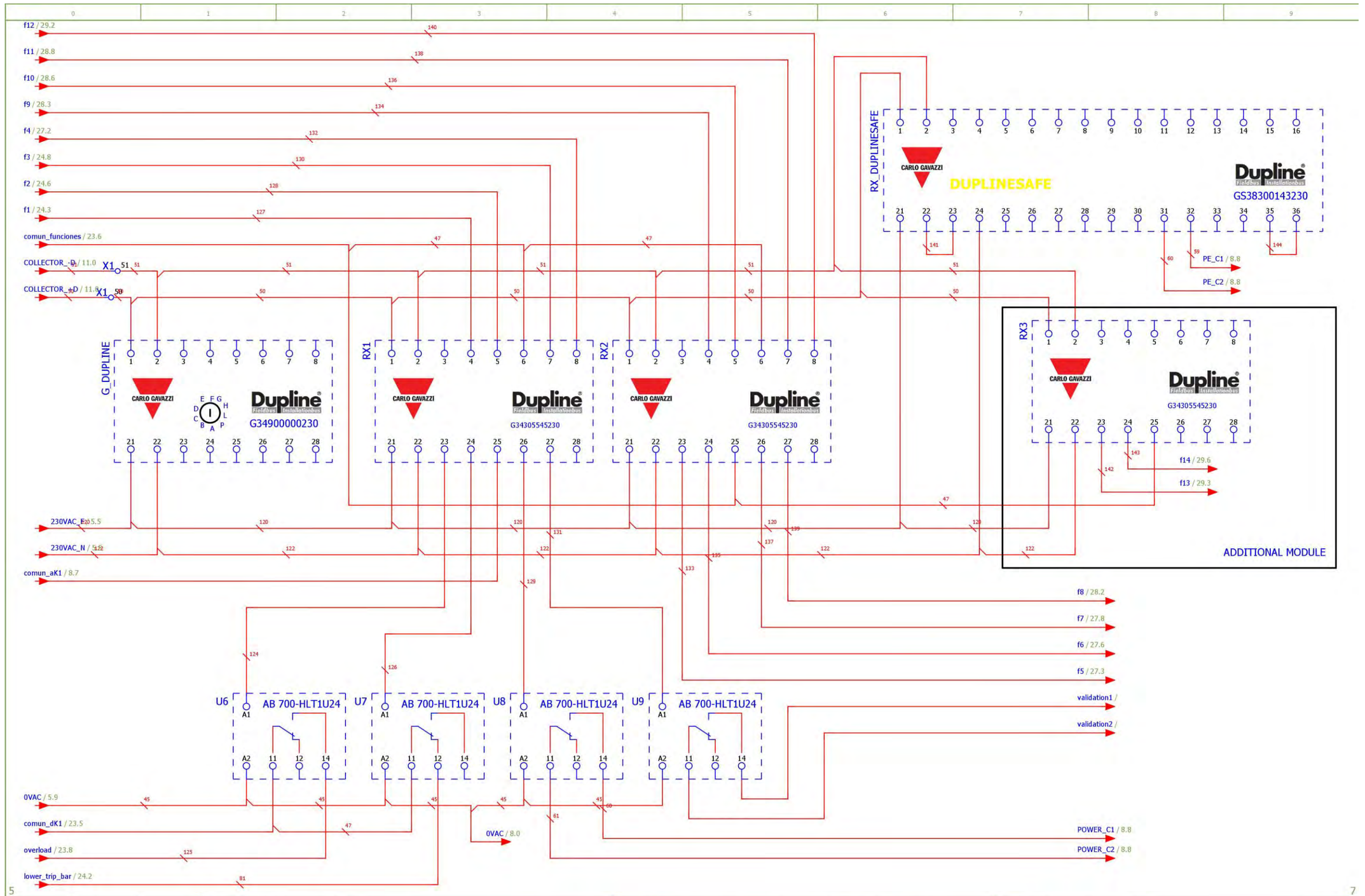


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Cambio	Fecha	Nombre	Probado Original				Hoja 40



4 6

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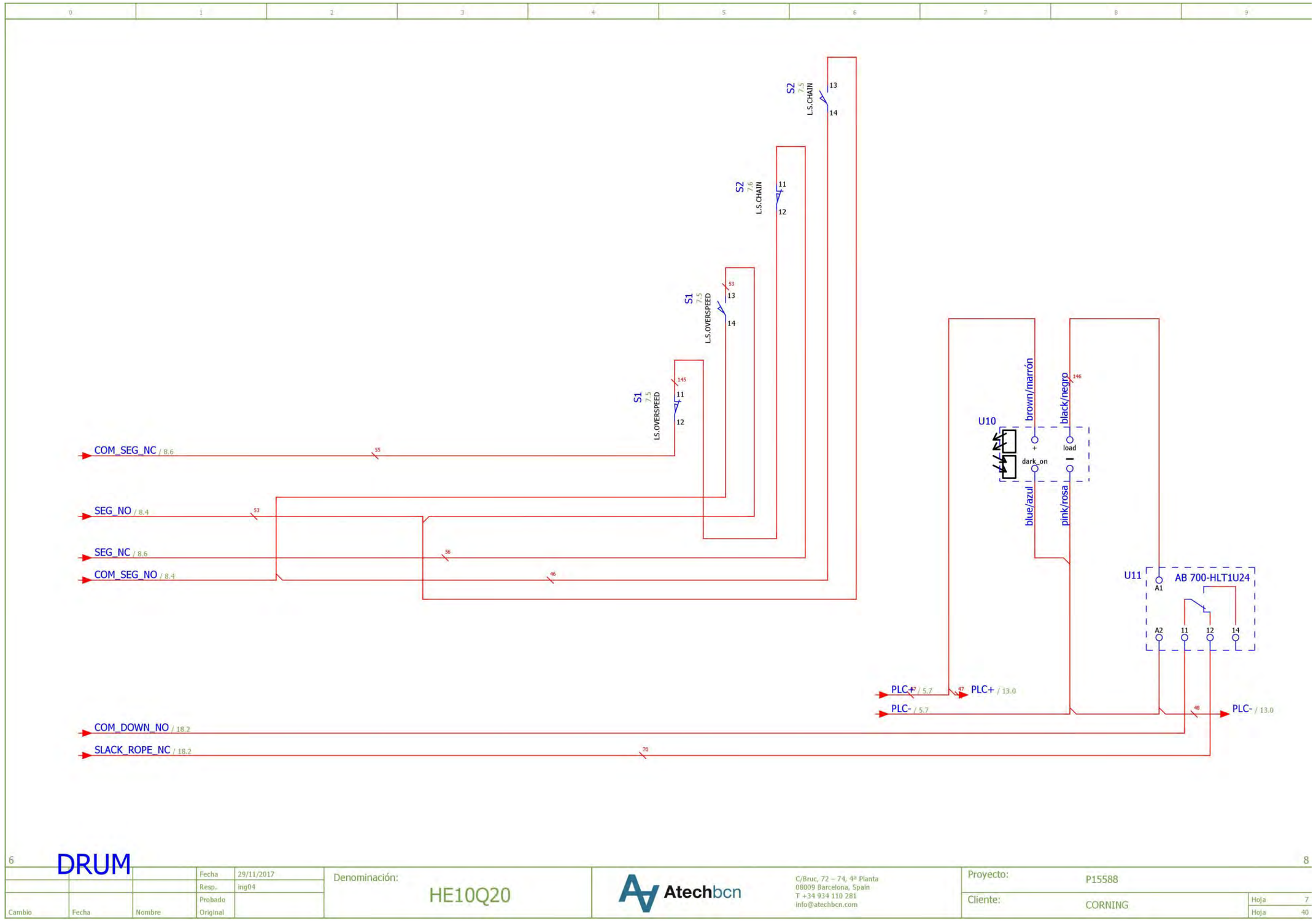


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Denominación: HE10Q20

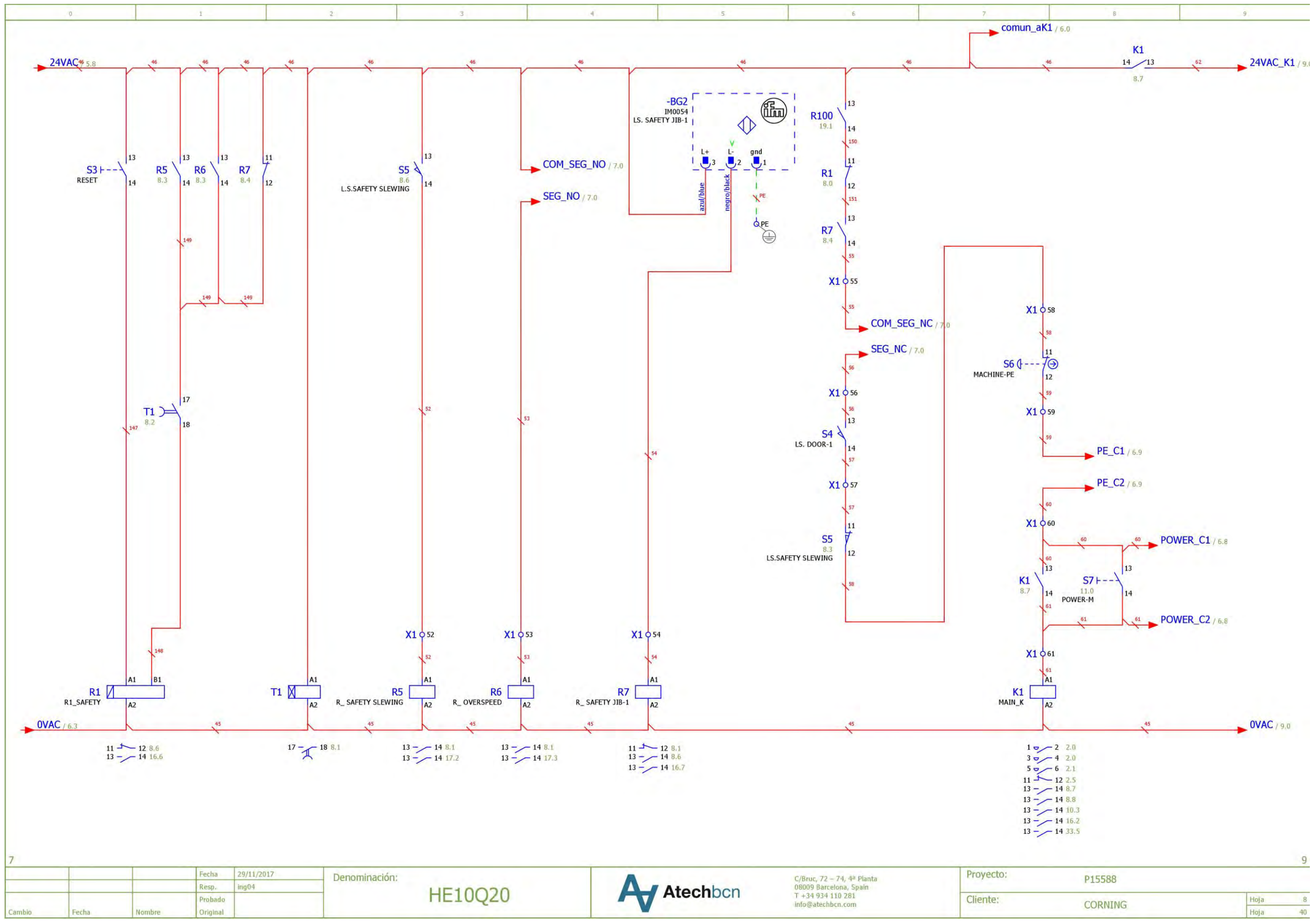
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08009 Barcelona, Spain
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Proyecto:	P15588		
Cliente:	CORNING	Hoja	6
		Hoja	40



6 DRUM 8

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			Original				Hoja 40

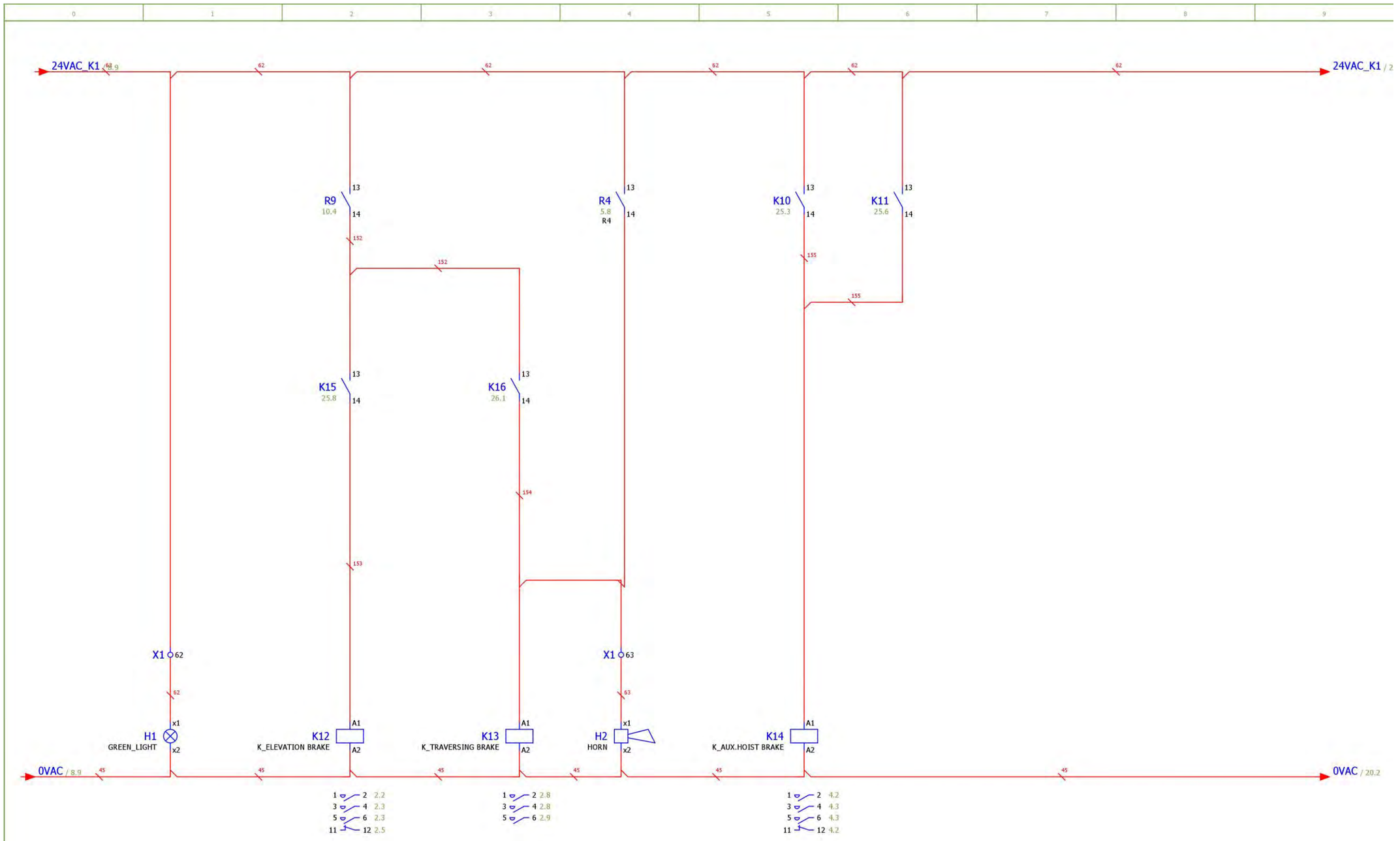


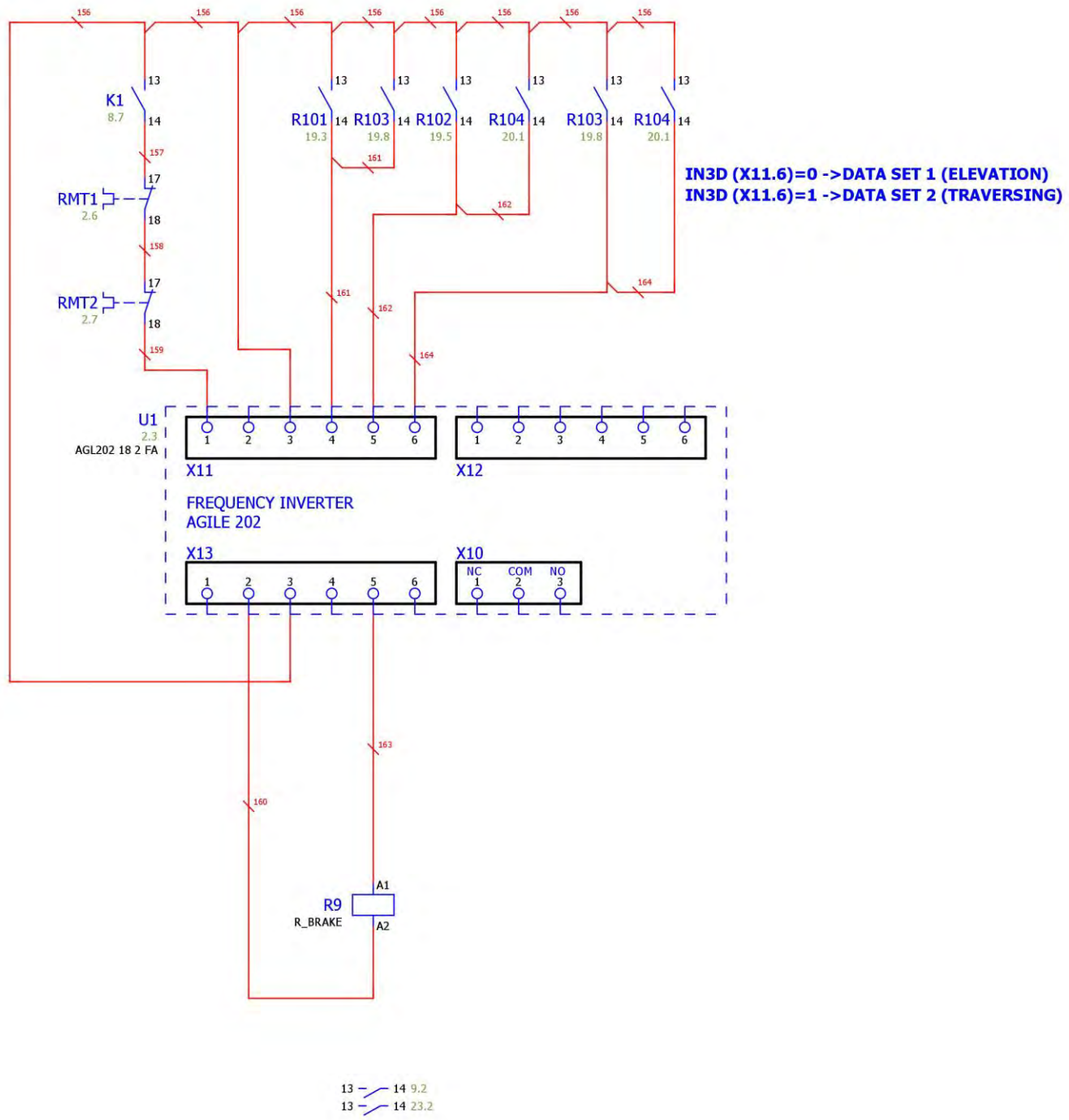
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Denominación: HE10Q20

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Proyecto: P15588
Cliente: CORNING
Hoja 8
Hoja 40


0 1 2 3 4 5 6 7 8 9
24VAC_K1 / 8.9
24VAC_K1 / 2
62
R9
10.4
13
14
152
R4
5.8
R4
K10
25.3
155
K11
25.6
K15
25.8
K16
26.1
154
153
X1 62
82
X1 63
63
H1
GREEN_LIGHT
x1
x2
K12
K_ELEVATION BRAKE
A1
A2
K13
K_TRAVERSING BRAKE
H2
HORN
K14
K_AUX.HOIST BRAKE
0VAC / 8.9
0VAC / 20.2
45
1 2 2.2
3 4 2.3
5 6 2.3
11 12 2.5
1 2 2.8
3 4 2.8
5 6 2.9
1 2 4.2
3 4 4.3
5 6 4.3
11 12 4.2
8
10
Fecha 29/11/2017
Resp. ing04
Probado
Original
Cambio
Fecha
Nombre
Denominación:
HE10Q20
Atechbcn
C/Bruc, 72 – 74, 4ª Planta
08009 Barcelona, Spain
T +34 934 110 281
info@atechbcn.com
Proyecto: P15588
Cliente: CORNING
Hoja 9
Hoja 40

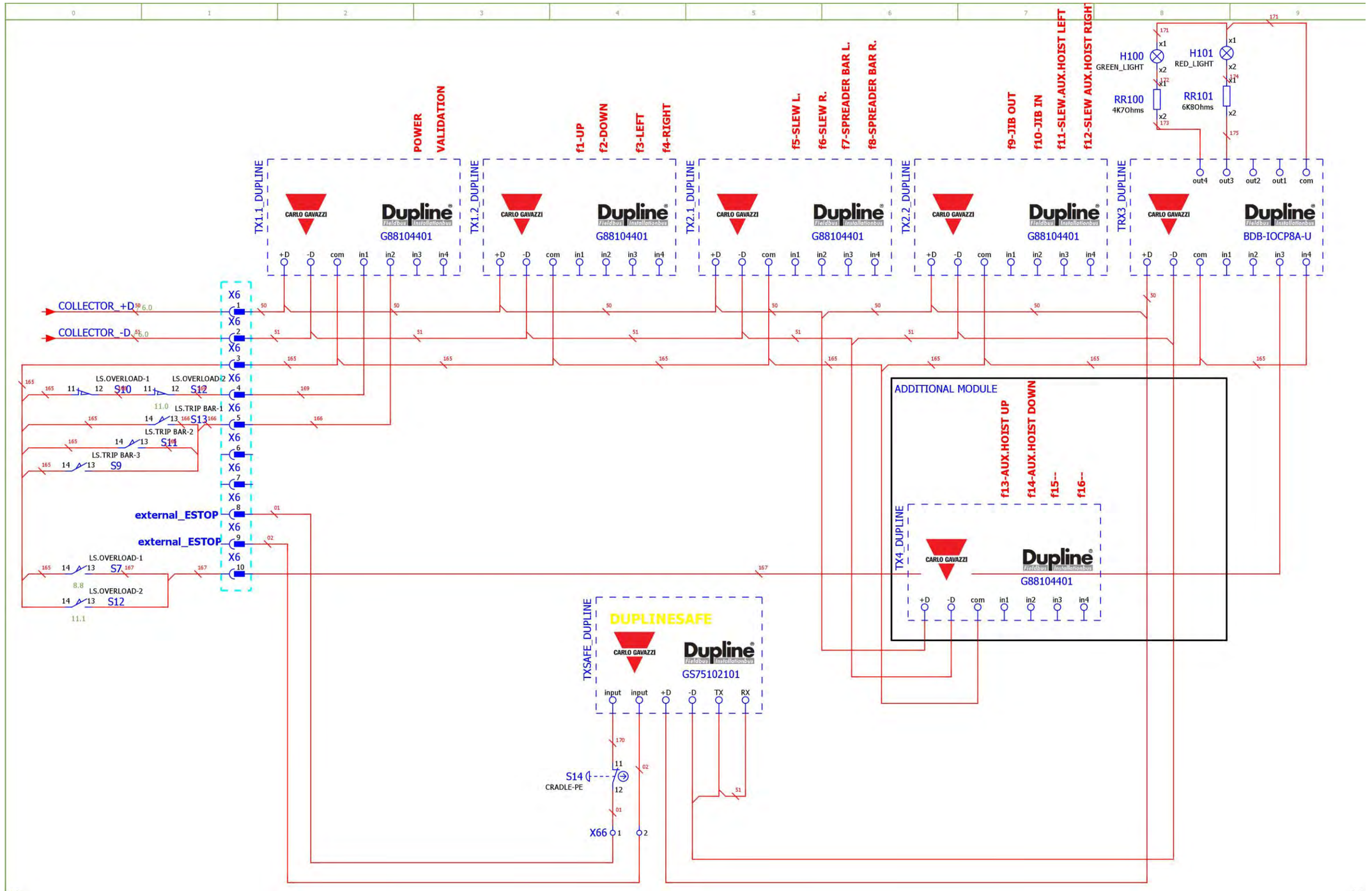




9 11

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Atechbcn
C/Bruc, 72 – 74, 4ª Planta
08009 Barcelona, Spain
T +34 934 110 281
info@atechbcn.com

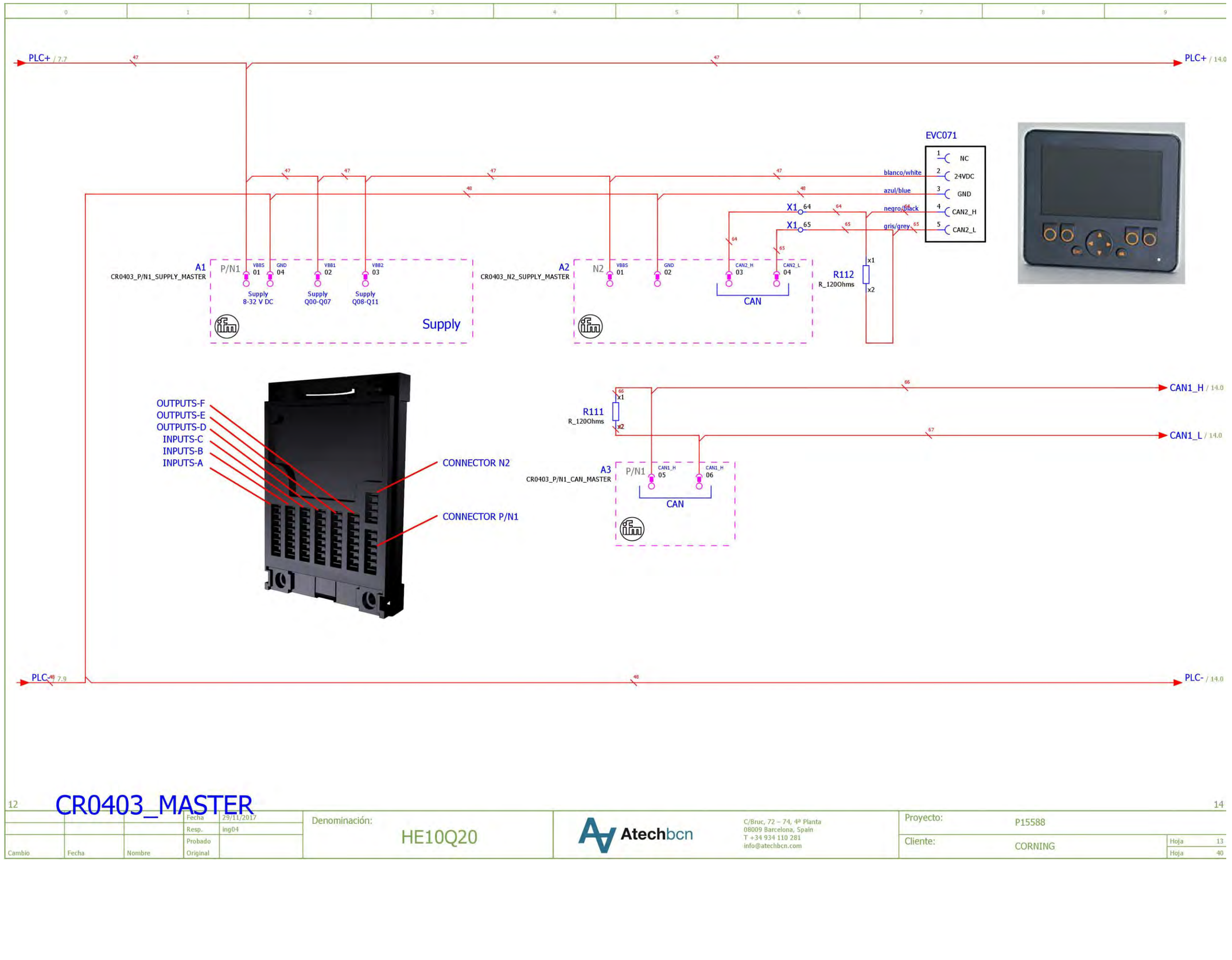


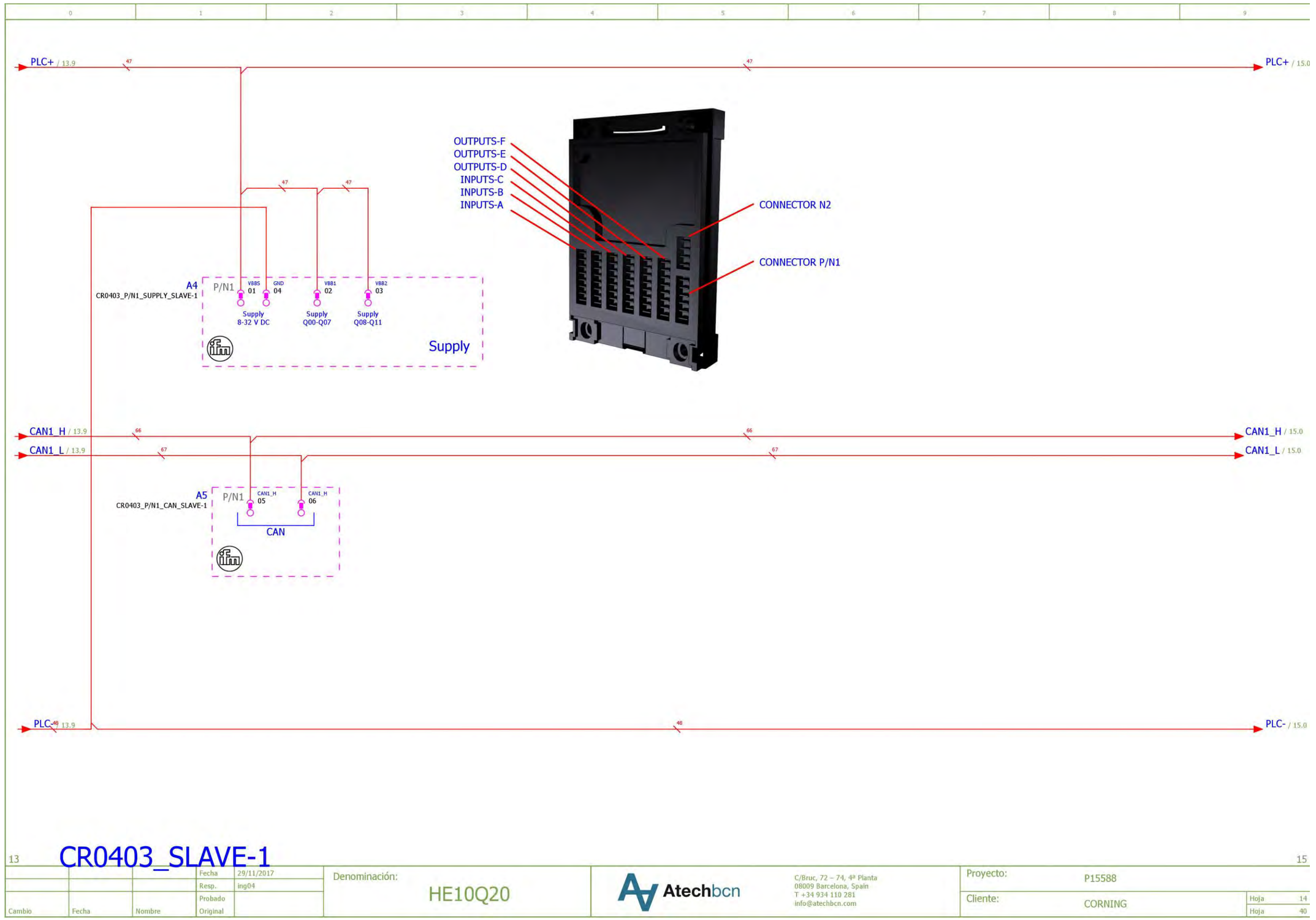
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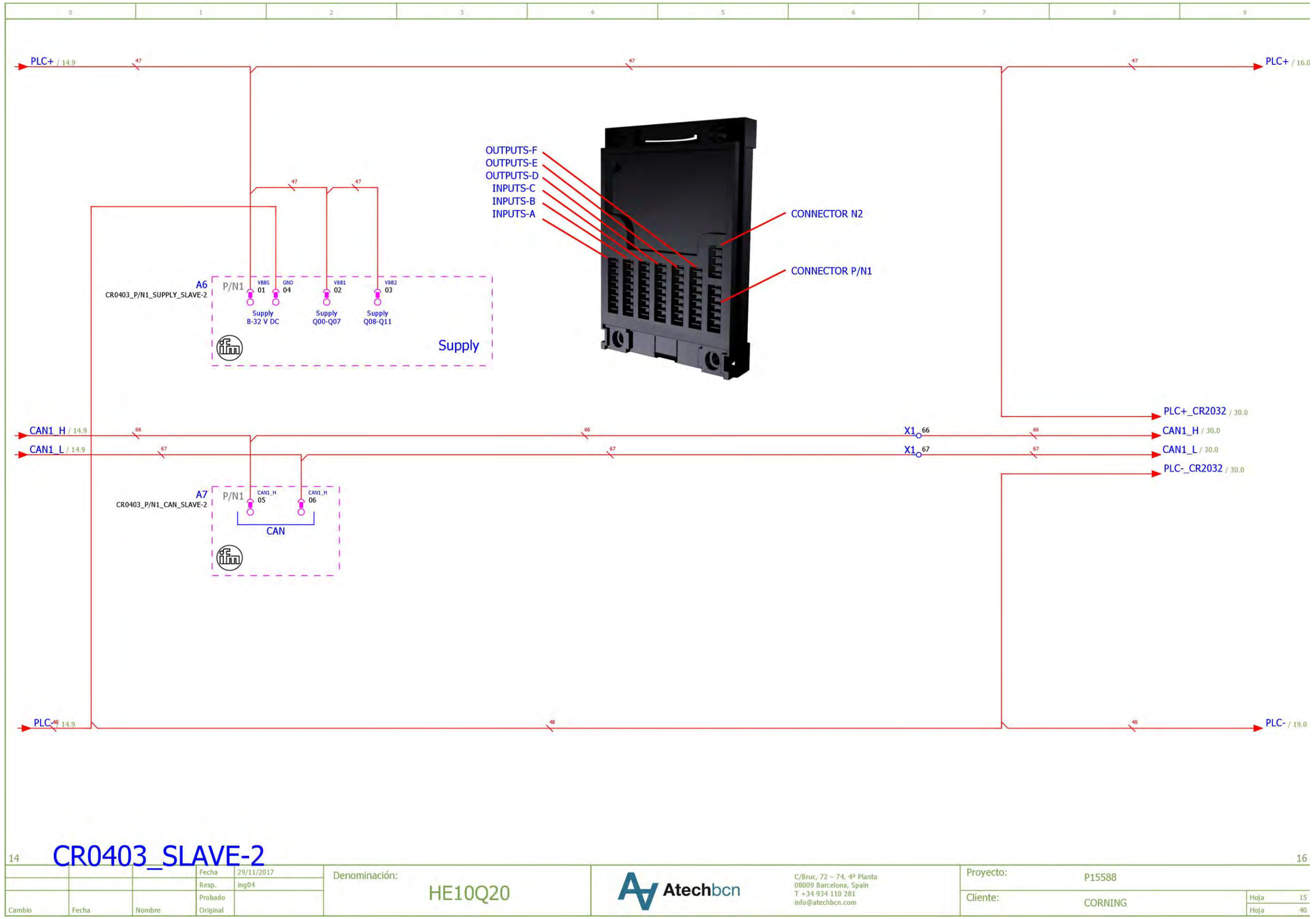


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Cambio	Fecha	Nombre	Probado Original				Cliente: CORNING Hoja 12 Hoja 40

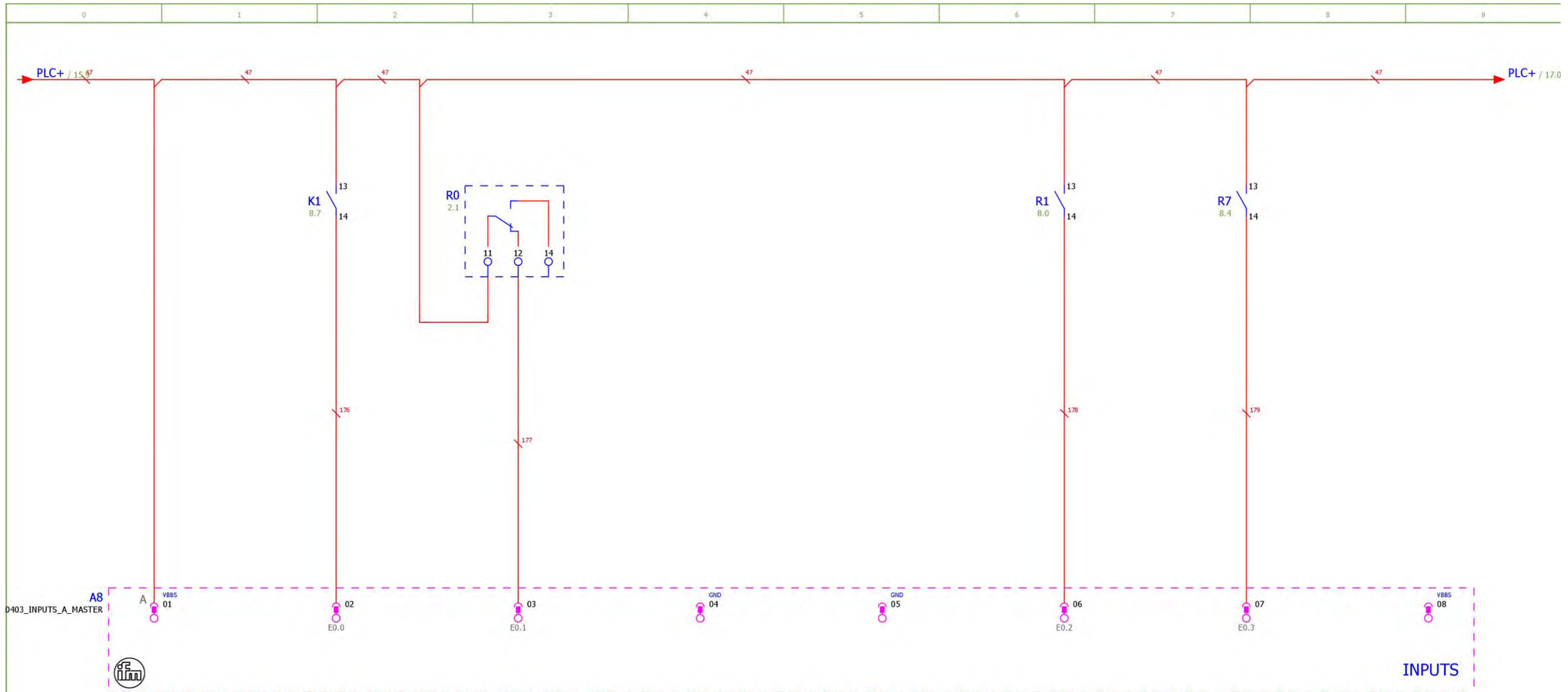

PLC+ / 7.7
PLC+ / 14.0
EVC071
1 NC
2 24VDC
3 GND
4 CAN2_H
5 CAN2_L
blanco/white
azul/blue
negro/black
gris/grey
X1 64
X1 65
A1
CR0403_P/N1_SUPPLY_MASTER
P/N1
VBBS 01
GND 04
VBB1 02
VBB2 03
Supply 8-32 V DC
Supply Q00-Q07
Supply Q08-Q11
Supply
A2
CR0403_N2_SUPPLY_MASTER
N2
VBBS 01
GND 02
CAN2_H 03
CAN2_L 04
CAN
R112
R_120Ohms
x1
x2
OUTPUTS-F
OUTPUTS-E
OUTPUTS-D
INPUTS-C
INPUTS-B
INPUTS-A
CONNECTOR N2
CONNECTOR P/N1
R111
R_120Ohms
CAN1_H / 14.0
CAN1_L / 14.0
A3
CR0403_P/N1_CAN_MASTER
P/N1
CAN1_H 05
CAN1_H 06
CAN
PLC- / 7.9
PLC- / 14.0
12
CR0403_MASTER
14
Fecha 29/11/2017
Resp. ing04
Probado
Original
Cambio
Fecha
Nombre
Denominación:
HE10Q20
Atechbcn
C/Bruc, 72 – 74, 4ª Planta
08009 Barcelona, Spain
T +34 934 110 281
info@atechbcn.com
Proyecto:
P15588
Cliente:
CORNING
Hoja 13
Hoja 40


PLC+ / 13.9
PLC+ / 15.0
OUTPUTS-F
OUTPUTS-E
OUTPUTS-D
INPUTS-C
INPUTS-B
INPUTS-A
CONNECTOR N2
CONNECTOR P/N1
A4
CR0403_P/N1_SUPPLY_SLAVE-1
P/N1
VBBS 01
GND 04
VBB1 02
VBB2 03
Supply 8-32 V DC
Supply Q00-Q07
Supply Q08-Q11
Supply
CAN1_H / 13.9
CAN1_L / 13.9
CAN1_H / 15.0
CAN1_L / 15.0
A5
CR0403_P/N1_CAN_SLAVE-1
P/N1
CAN1_H 05
CAN1_H 06
CAN
PLC- / 13.9
PLC- / 15.0
13
CR0403_SLAVE-1
15
Fecha 29/11/2017
Resp. ing04
Probado
Original
Cambio
Fecha
Nombre
Denominación:
HE10Q20
Atechbcn
C/Bruc, 72 – 74, 4ª Planta
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info@atechbcn.com
Proyecto:
P15588
Cliente:
CORNING
Hoja 14
Hoja 40



14 CR0403_SLAVE-2 16

			Fecha	29/11/2017	Denominación: HE10Q20	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588
			Resp.	ing04			Cliente: CORNING Hoja 15
Cambio	Fecha	Nombre	Probado Original				Hoja 40



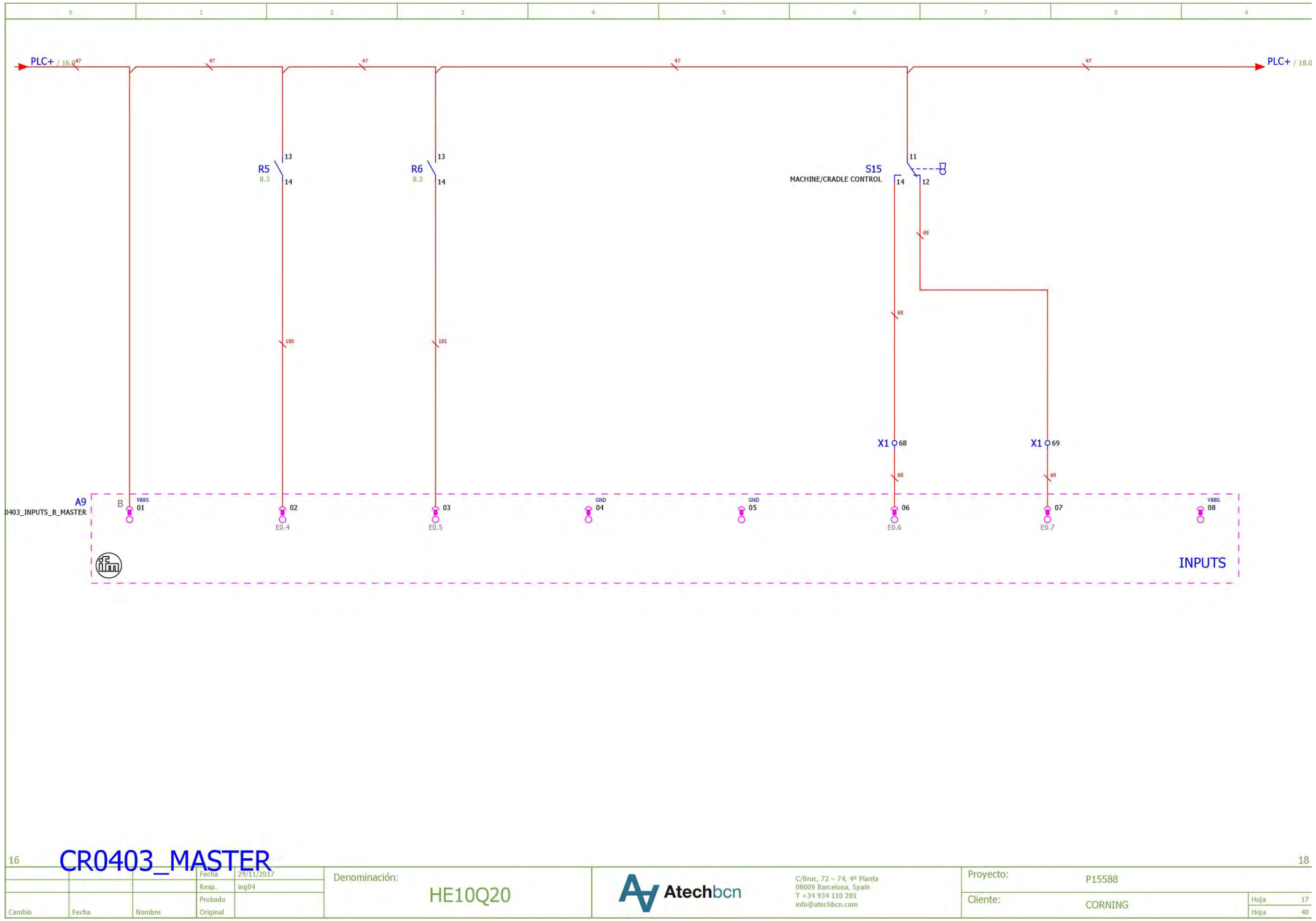
15 CR0403_MASTER 17

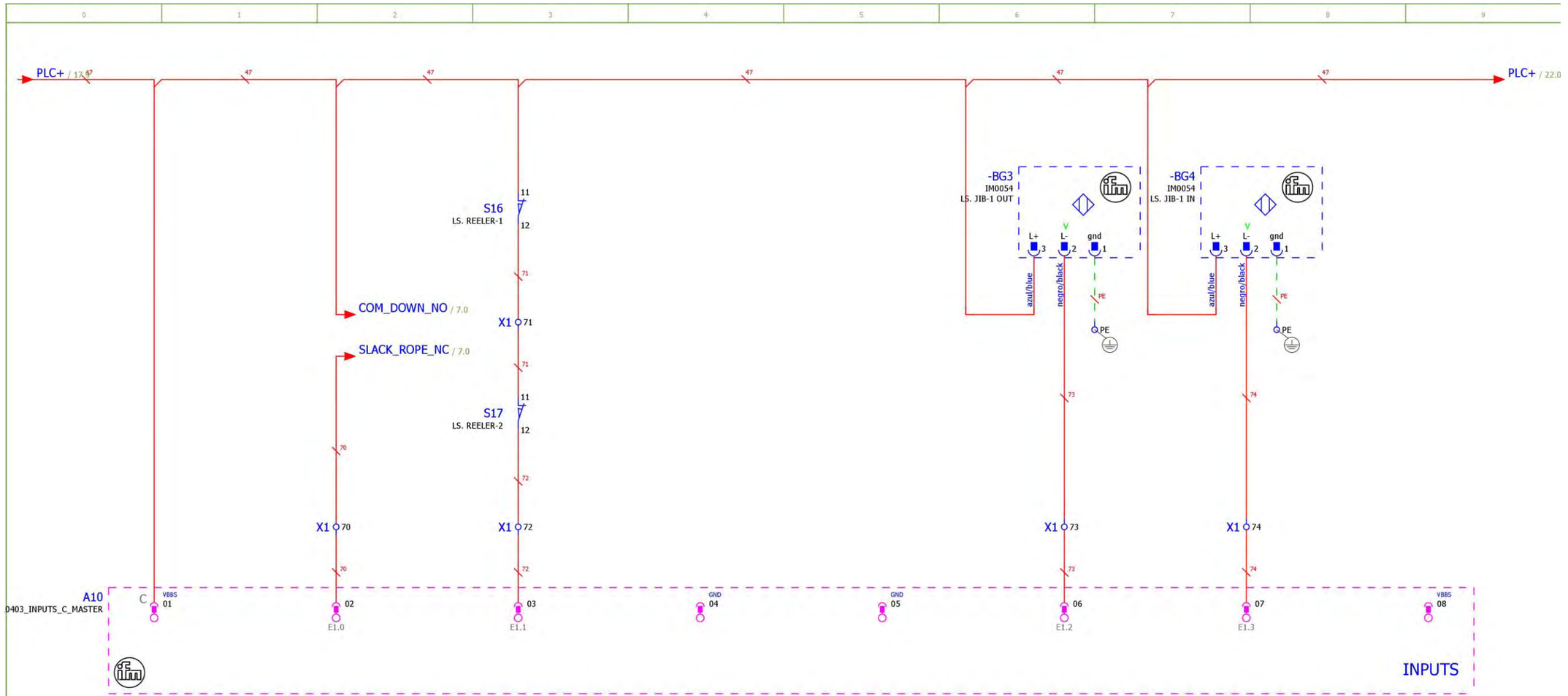
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			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q20

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Proyecto: P15588
Cliente: CORNING
Hoja 16
Hoja 40


PLC+ / 16.0
PLC+ / 18.0
R5
8.3
R6
8.3
S15
MACHINE/CRADLE CONTROL
X1 68
X1 69
A9
0403_INPUTS_B_MASTER
VBBS 01
02 E0.4
03 E0.5
GND 04
GND 05
06 E0.6
07 E0.7
VBBS 08
INPUTS
16
CR0403_MASTER
18
Denominación:
HE10Q20
Atechbcn
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08009 Barcelona, Spain
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info@atechbcn.com
Proyecto:
P15588
Cliente:
CORNING
Fecha 29/11/2017
Resp. ing04
Probado
Original
Cambio
Fecha
Nombre
Hoja 17
Hoja 40



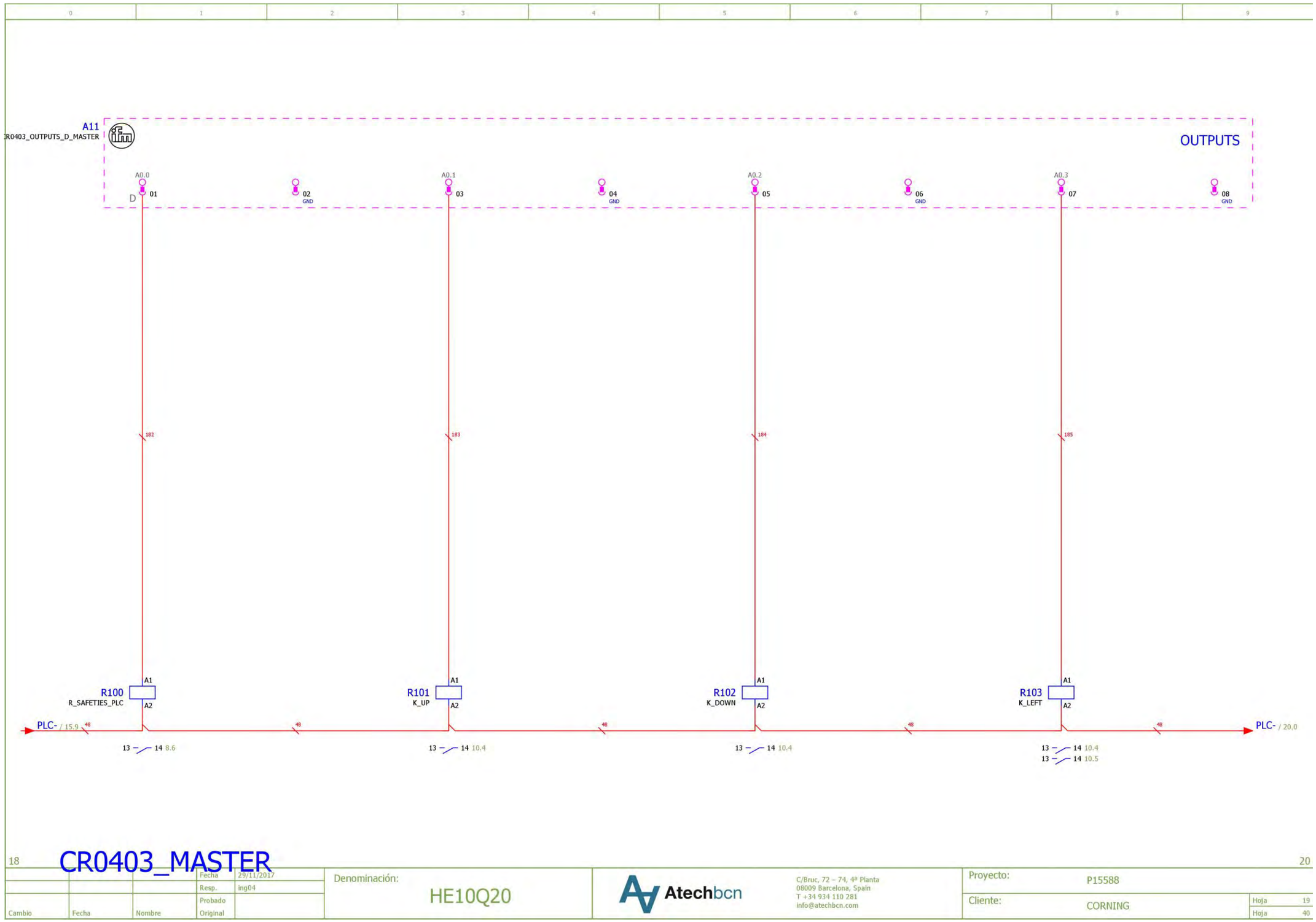
17 CR0403_MASTER 19

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q20

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Proyecto: P15588
Cliente: CORNING
Hoja 18
Hoja 40



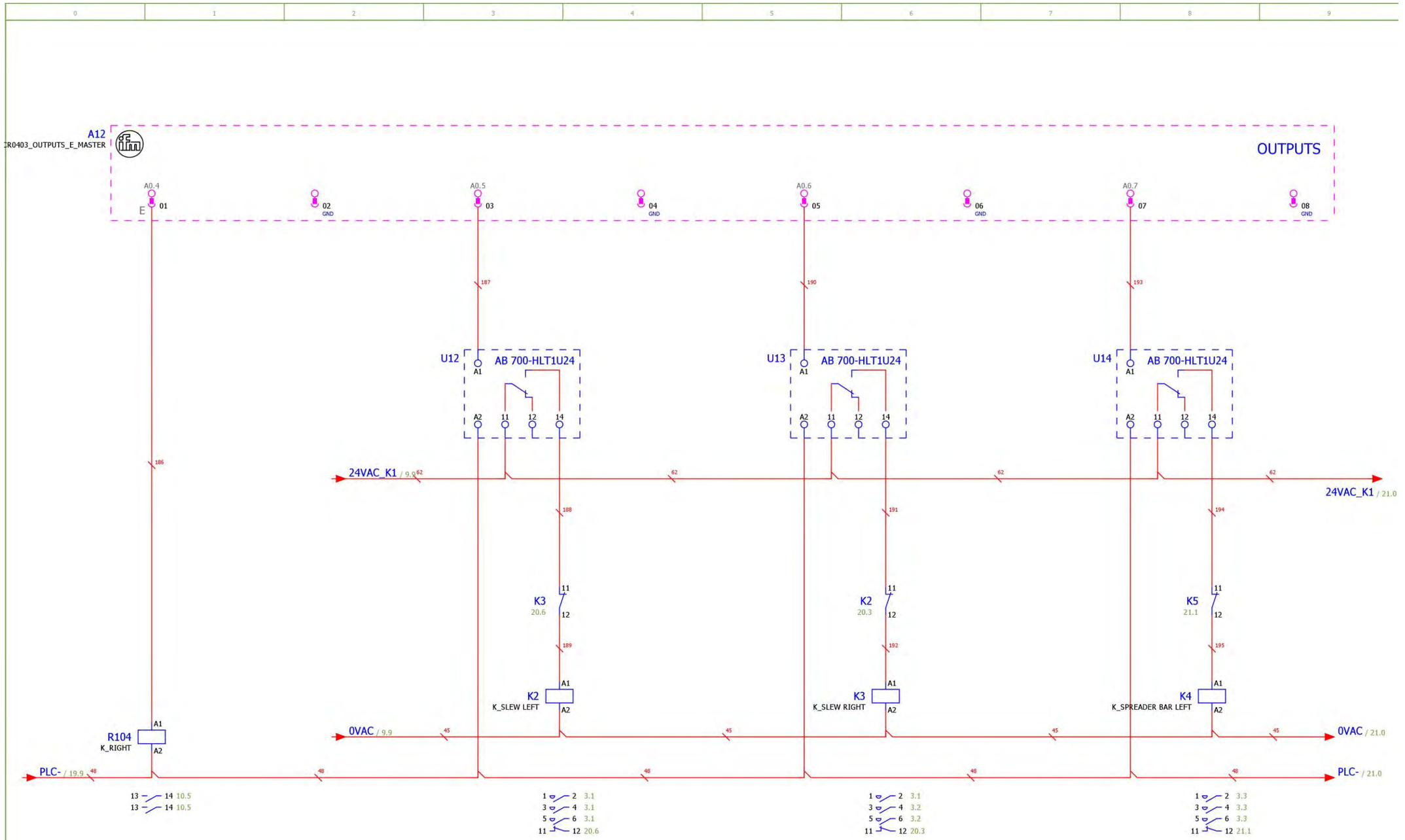
18 CR0403_MASTER 20

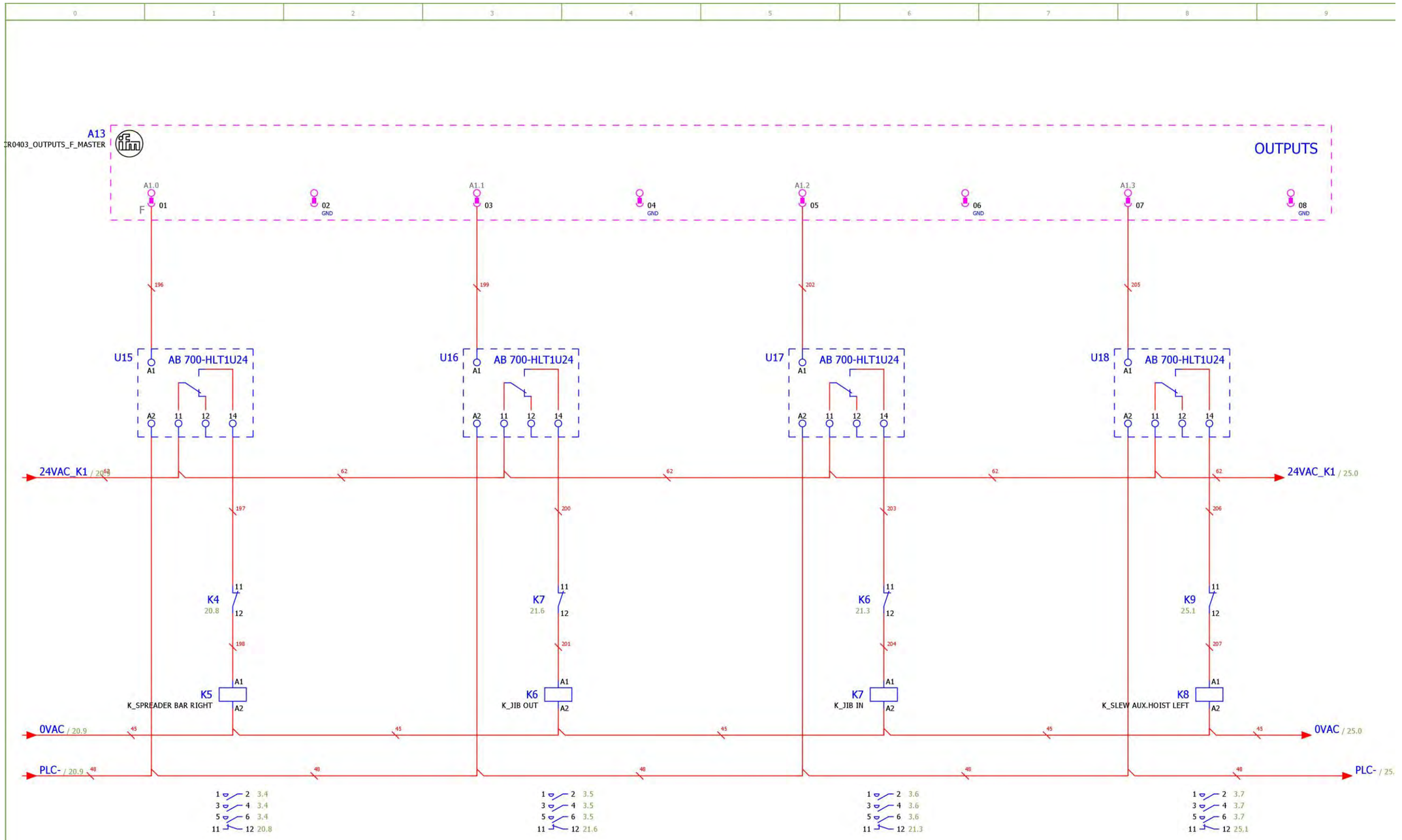
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			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

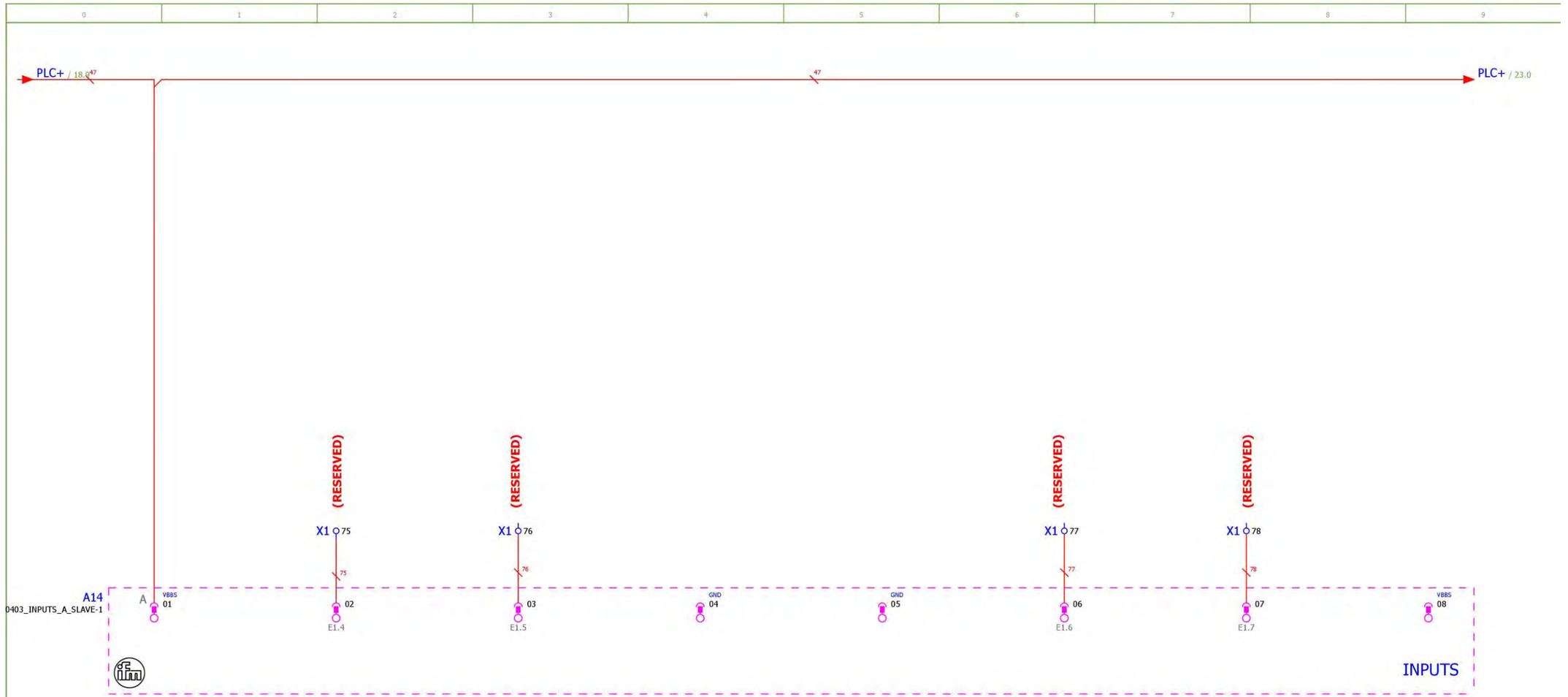
Denominación: HE10Q20

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Proyecto:	P15588		
Cliente:	CORNING	Hoja	19
		Hoja	40


A12
CR0403_OUTPUTS_E_MASTER
OUTPUTS
A0.4
A0.5
A0.6
A0.7
E
01
02 GND
03
04 GND
05
06 GND
07
08 GND
187
190
193
U12
AB 700-HLT1U24
U13
AB 700-HLT1U24
U14
AB 700-HLT1U24
A1
A2
11
12
14
186
24VAC_K1 / 9.9
62
24VAC_K1 / 21.0
188
191
194
K3
20.6
K2
20.3
K5
21.1
189
192
195
K2
K_SLEW LEFT
K3
K_SLEW RIGHT
K4
K_SPREADER BAR LEFT
R104
K_RIGHT
0VAC / 9.9
45
0VAC / 21.0
PLC- / 19.9
48
PLC- / 21.0
13 14 10.5
13 14 10.5
1 2 3.1
3 4 3.1
5 6 3.1
11 12 20.6
1 2 3.1
3 4 3.2
5 6 3.2
11 12 20.3
1 2 3.3
3 4 3.3
5 6 3.3
11 12 21.1
19
21
CR0403_MASTER
Fecha 29/11/2017
Resp. ing04
Probado
Original
Cambio
Fecha
Nombre
Denominación:
HE10Q20
Atechbcn
C/Bruc, 72 – 74, 4ª Planta
08009 Barcelona, Spain
T +34 934 110 281
info@atechbcn.com
Proyecto:
P15588
Cliente:
CORNING
Hoja 20
Hoja 40


A13
CR0403_OUTPUTS_F_MASTER
OUTPUTS
A1.0
A1.1
A1.2
A1.3
F
01
02 GND
03
04 GND
05
06 GND
07
08 GND
196
199
202
205
U15 AB 700-HLT1U24
U16 AB 700-HLT1U24
U17 AB 700-HLT1U24
U18 AB 700-HLT1U24
A1
A2 11 12 14
24VAC_K1 / 20.9
24VAC_K1 / 25.0
62
197
200
203
206
K4 20.8
K7 21.6
K6 21.3
K9 25.1
198
201
204
207
K5 K_SPREADER BAR RIGHT
K6 K_JIB OUT
K7 K_JIB IN
K8 K_SLEW AUX.HOIST LEFT
0VAC / 20.9
0VAC / 25.0
45
PLC- / 20.9
PLC- / 25.
48
1 2 3.4
3 4 3.4
5 6 3.4
11 12 20.8
1 2 3.5
3 4 3.5
5 6 3.5
11 12 21.6
1 2 3.6
3 4 3.6
5 6 3.6
11 12 21.3
1 2 3.7
3 4 3.7
5 6 3.7
11 12 25.1
20
22
CR0403_MASTER
Fecha 29/11/2017
Resp. ing04
Probado
Original
Cambio Fecha Nombre
Denominación:
HE10Q20
Atechbcn
C/Bruc, 72 – 74, 4ª Planta
08009 Barcelona, Spain
T +34 934 110 281
info@atechbcn.com
Proyecto: P15588
Cliente: CORNING
Hoja 21
Hoja 40



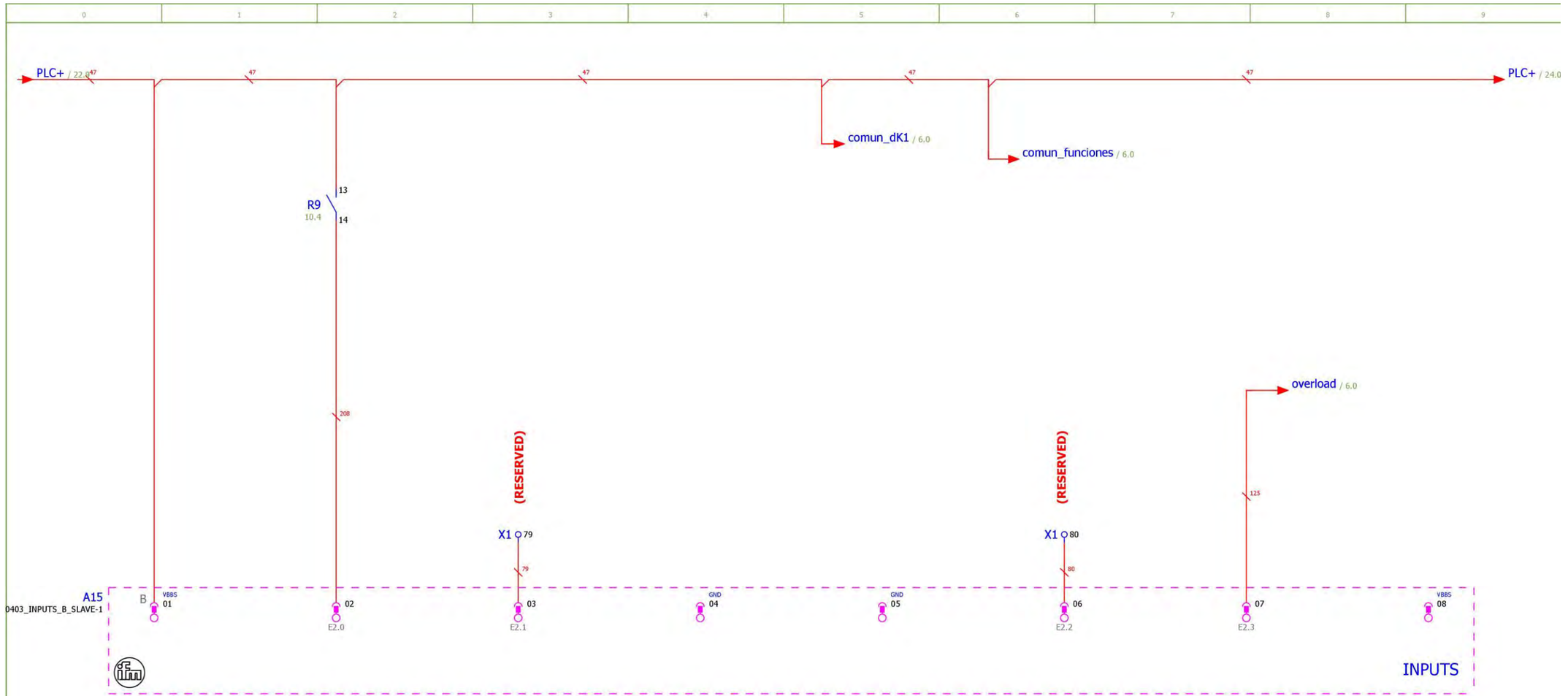
21 CR0403_SLAVE-1 23

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q20

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Proyecto:	P15588		
Cliente:	CORNING	Hoja	22
		Hoja	40



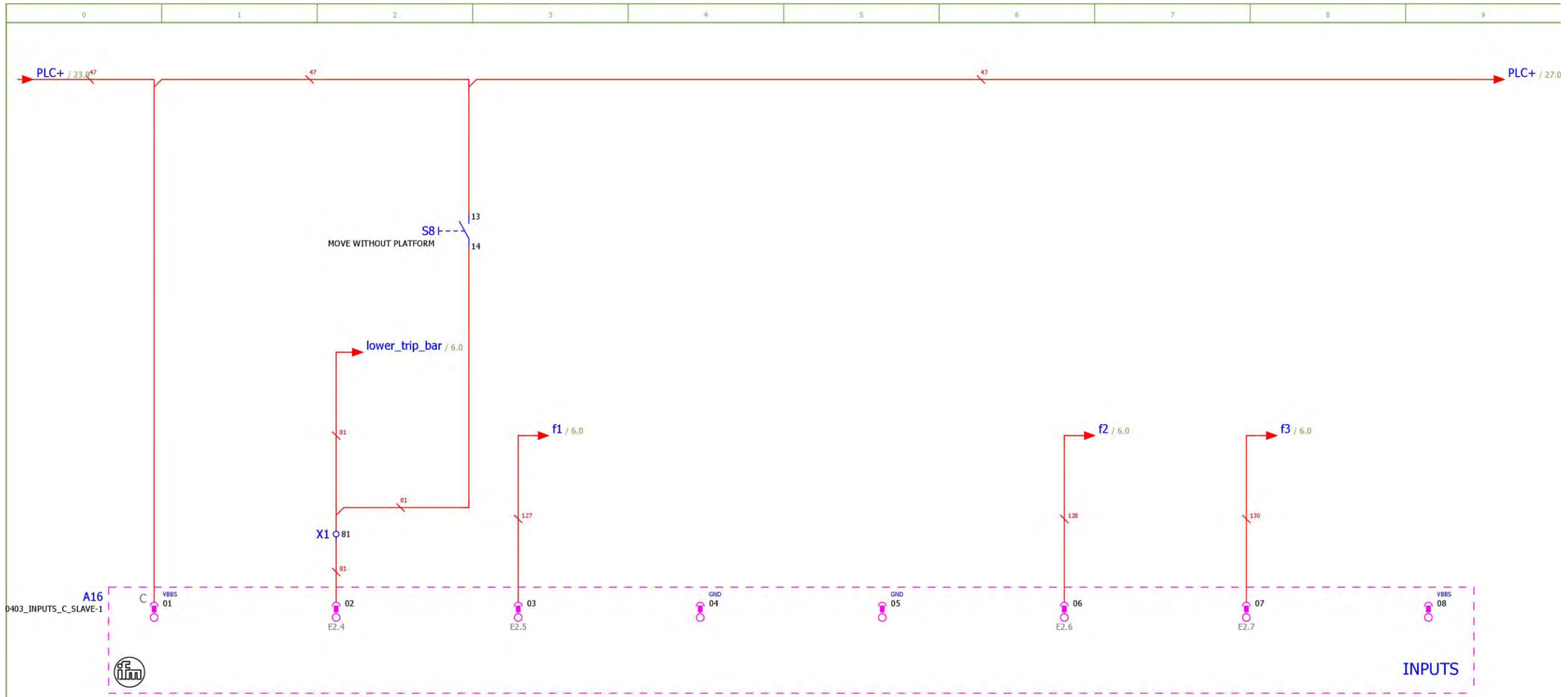
22 CR0403_SLAVE-1 24

Cambio	Fecha	Nombre		
			Fecha	29/11/2017
			Resp.	ing04
			Probado	
			Original	

Denominación: HE10Q20

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Proyecto: P15588
Cliente: CORNING
Hoja 23
Hoja 40



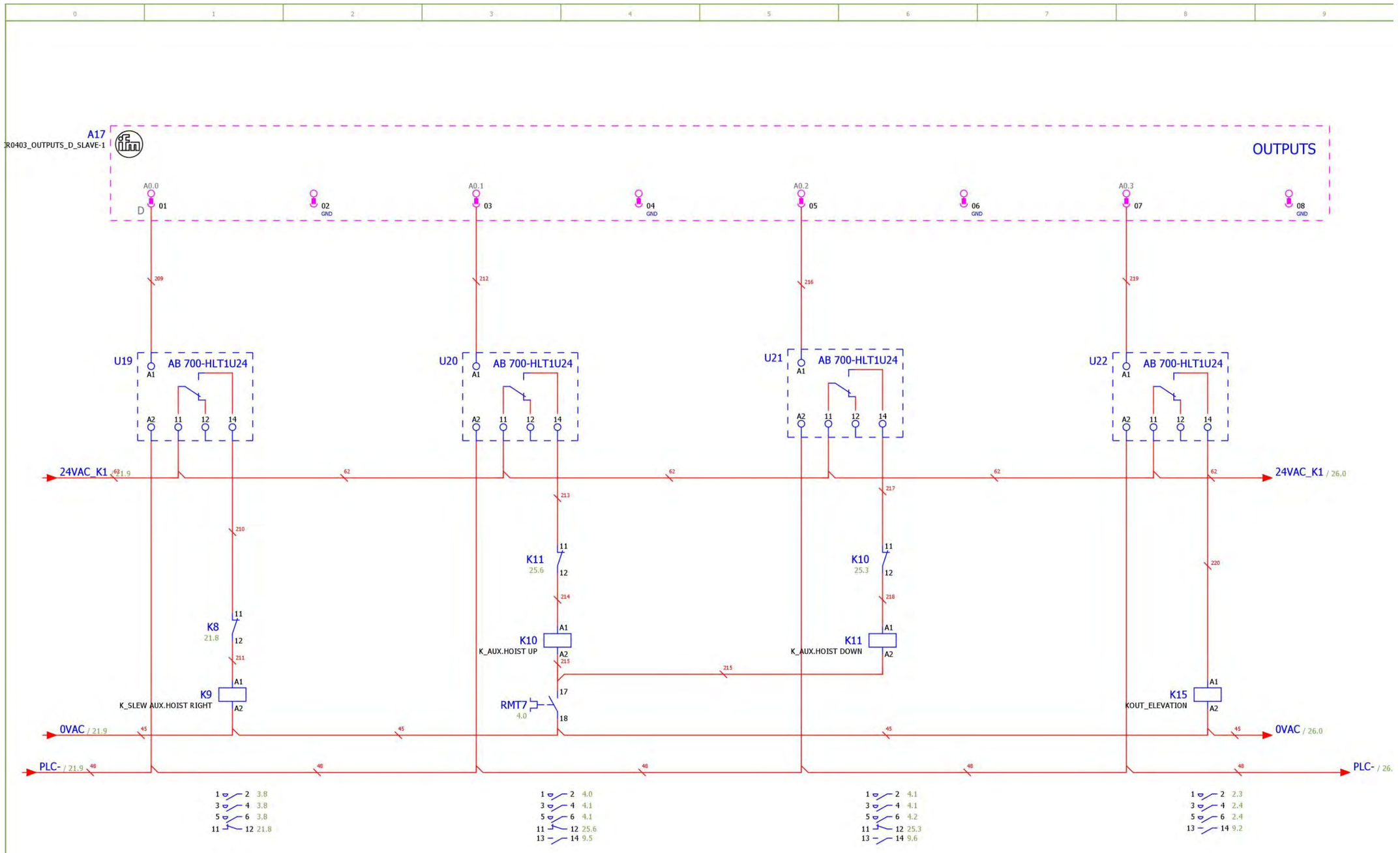
23 CR0403_SLAVE-1 25

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q20

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info@atechbcn.com

Proyecto: P15588
Cliente: CORNING
Hoja 24
Hoja 40



24 CR0403_SLAVE-1 26

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q20

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08009 Barcelona, Spain
T +34 934 110 281
info@atechbcn.com

Proyecto: P15588
Cliente: CORNING
Hoja 25
Hoja 40



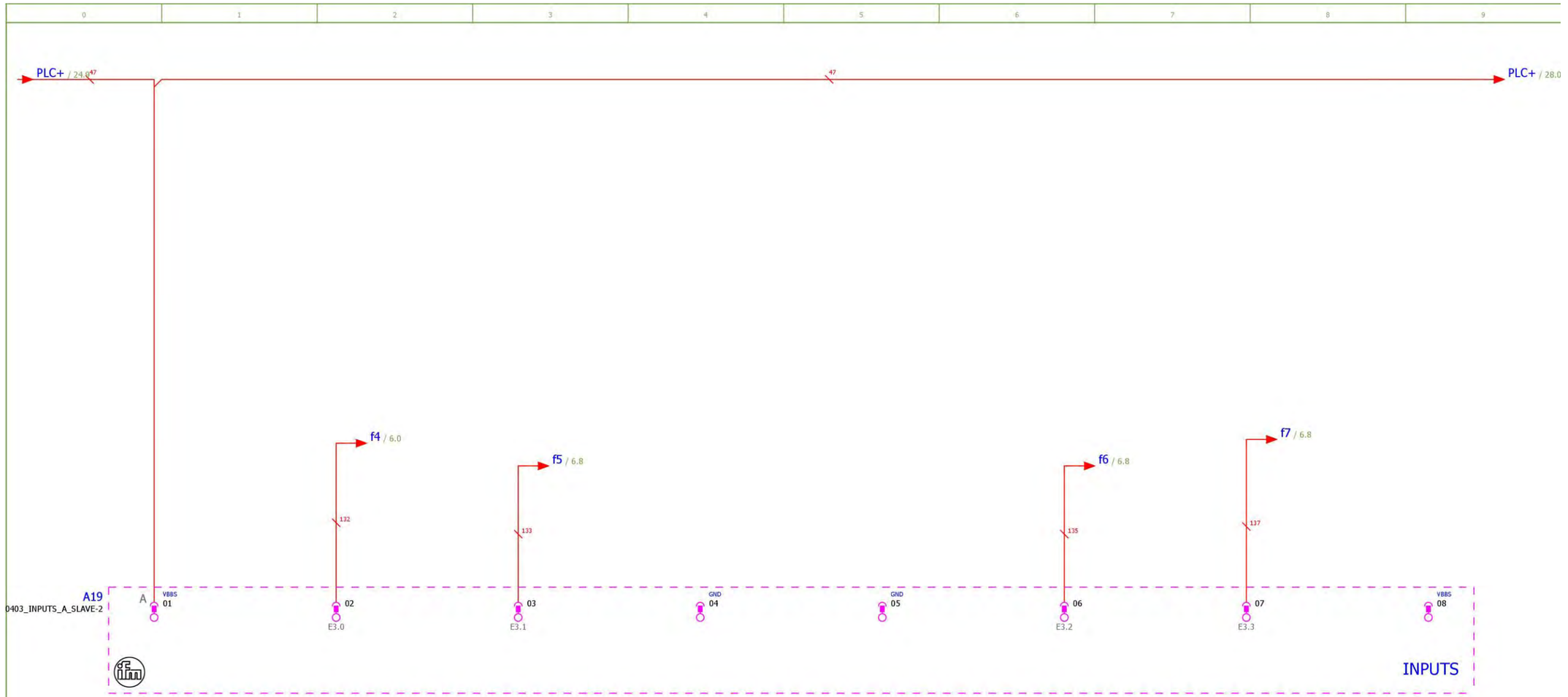
25 CR0403_SLAVE-1 27

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado Original	

Denominación: HE10Q20

Atechbcn
C/Bruc, 72 – 74, 4ª Planta
08009 Barcelona, Spain
T +34 934 110 281
info@atechbcn.com

Proyecto:	P15588		
Cliente:	CORNING	Hoja	26
		Hoja	40



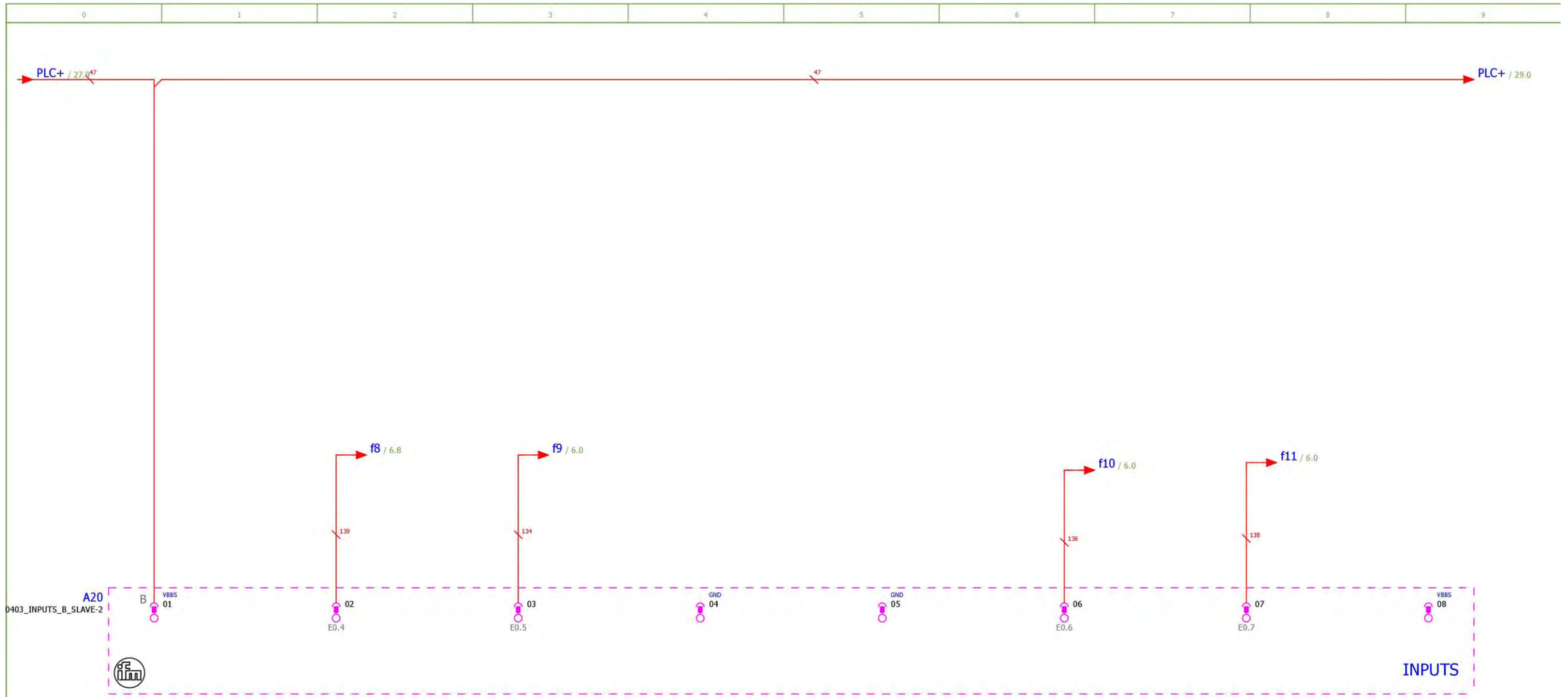
26 CR0403_SLAVE-2 28

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q20

Atechbcn
C/Bruc, 72 – 74, 4ª Planta
08009 Barcelona, Spain
T +34 934 110 281
info@atechbcn.com

Proyecto: P15588
Cliente: CORNING
Hoja 27
Hoja 40



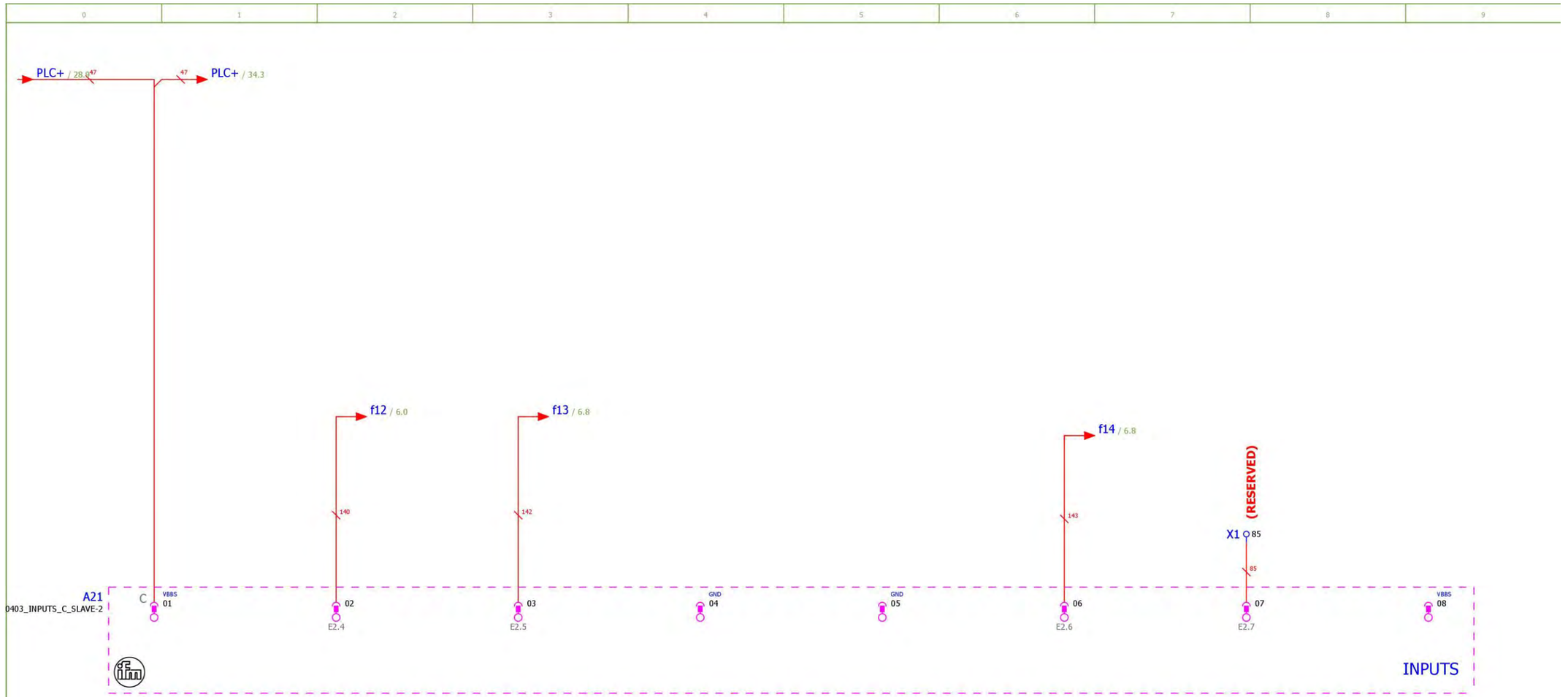
27 CR0403_SLAVE-2 29

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q20

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08009 Barcelona, Spain
T +34 934 110 281
info@atechbcn.com

Proyecto: P15588
Cliente: CORNING
Hoja 28
Hoja 40



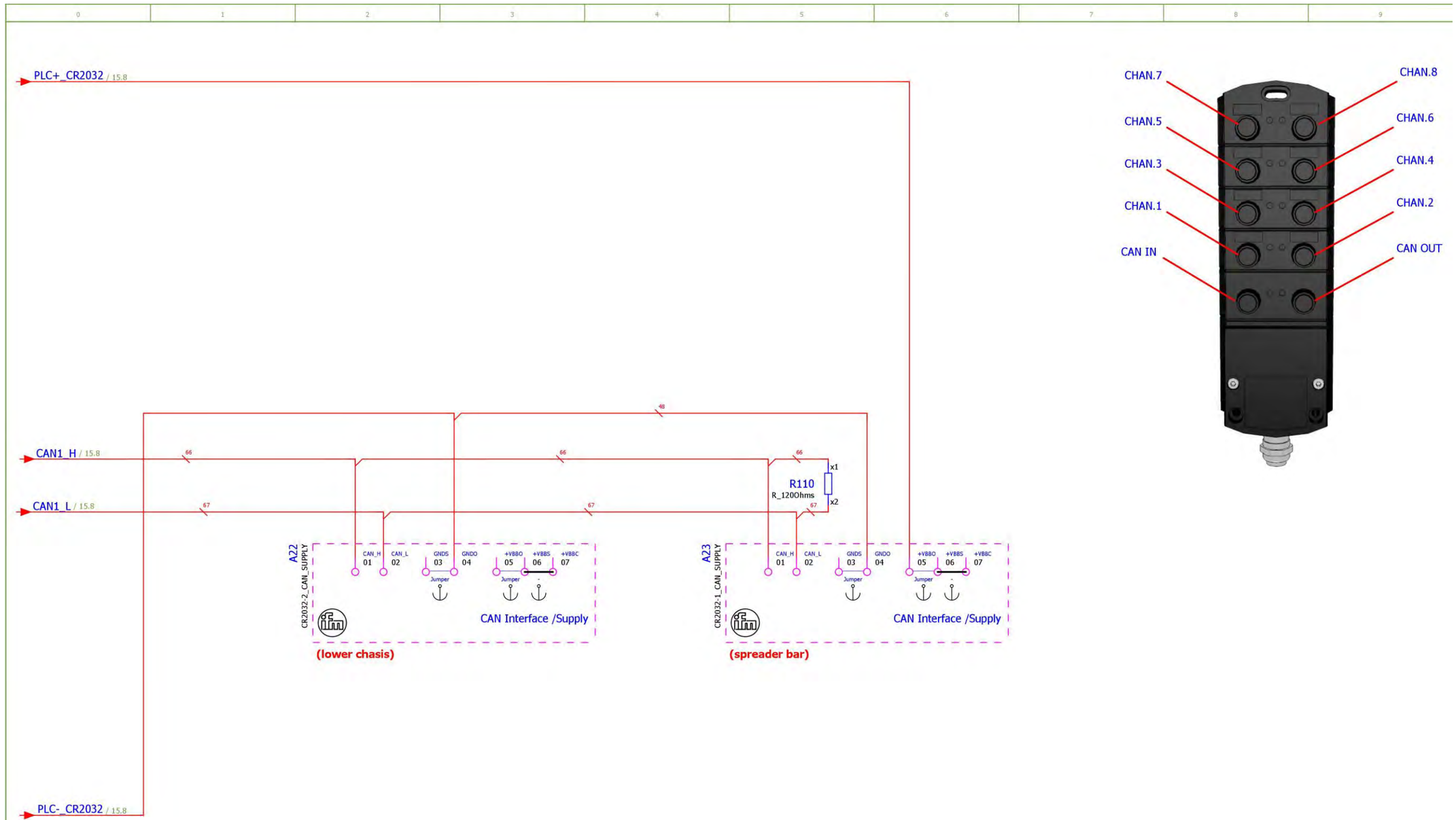
28 CR0403_SLAVE-2 30

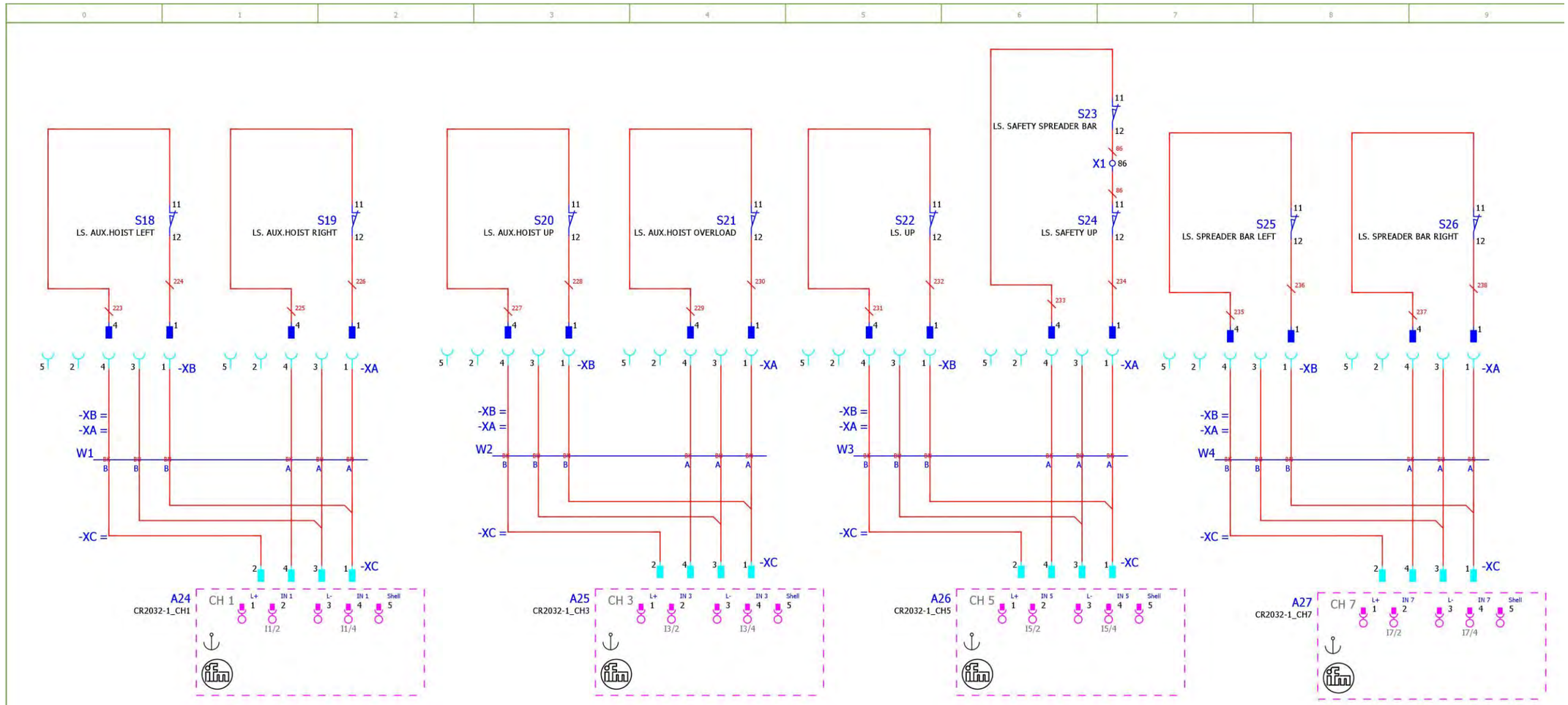
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			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q20

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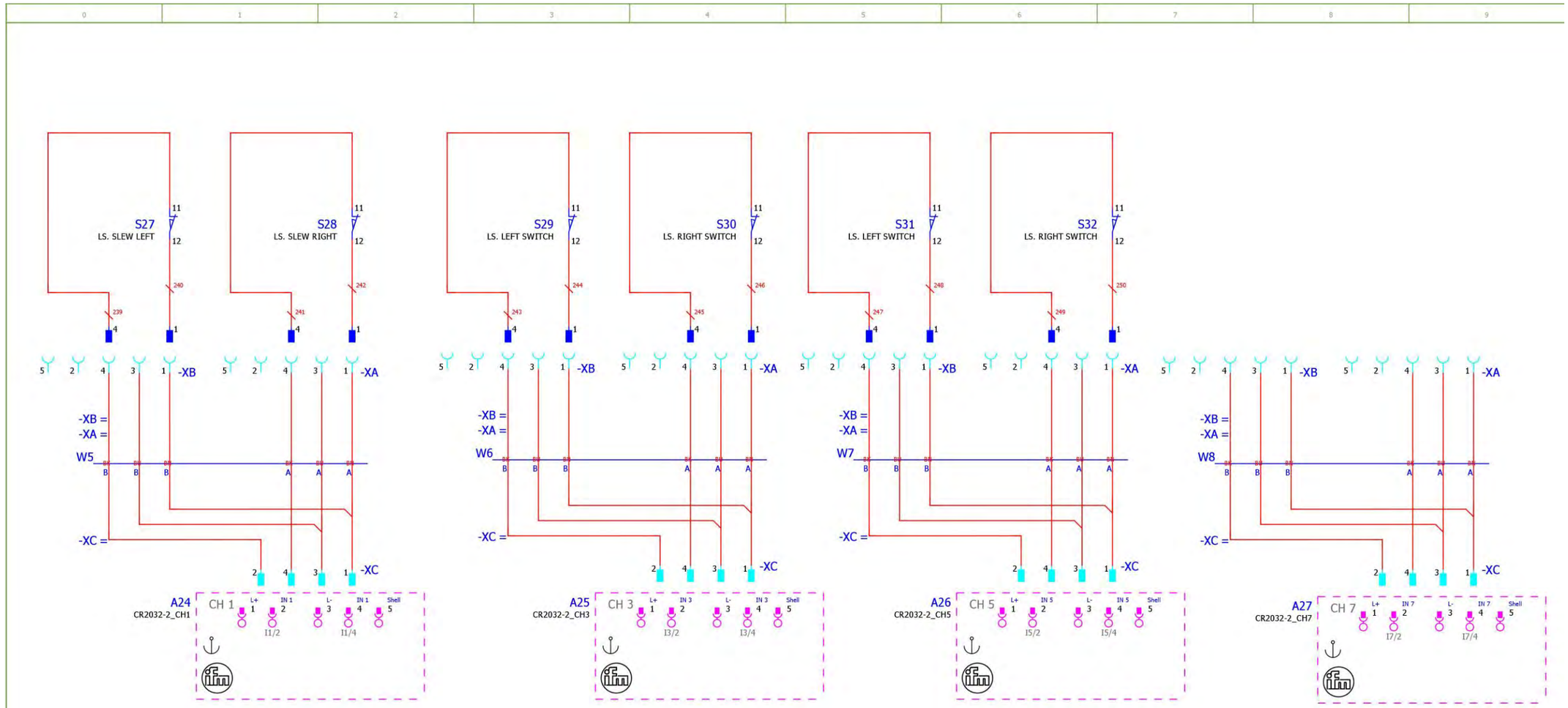
Proyecto: P15588
Cliente: CORNING
Hoja 29
Hoja 40


PLC+_CR2032 / 15.8
CAN1_H / 15.8
CAN1_L / 15.8
PLC-_CR2032 / 15.8
R110
R_120Ohms
x1
x2
A22
CR2032-2_CAN_SUPPLY
A23
CR2032-1_CAN_SUPPLY
CAN_H 01
CAN_L 02
GNDS 03
GNDO 04
+VBBO 05
+VBBS 06
+VBBC 07
Jumper
CAN Interface /Supply
(lower chasis)
(spreader bar)
CHAN.7
CHAN.8
CHAN.5
CHAN.6
CHAN.3
CHAN.4
CHAN.1
CHAN.2
CAN IN
CAN OUT
CR2032-1
Fecha 29/11/2017
Resp. ing04
Probado
Original
Denominación: HE10Q20
Atechbcn
C/Bruc, 72 – 74, 4ª Planta
08009 Barcelona, Spain
T +34 934 110 281
info@atechbcn.com
Proyecto: P15588
Cliente: CORNING
Hoja 30
Hoja 40



30 CR2032-1 32

			Fecha	29/11/2017	Denominación: HE10Q20	Proyecto: P15588	
			Resp.	ing04			
Cambio	Fecha	Nombre	Probado / Original		Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Cliente: CORNING	Hoja 31 / Hoja 40



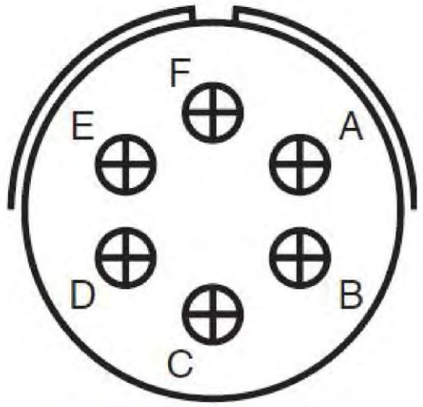
31 33

CR2032-2

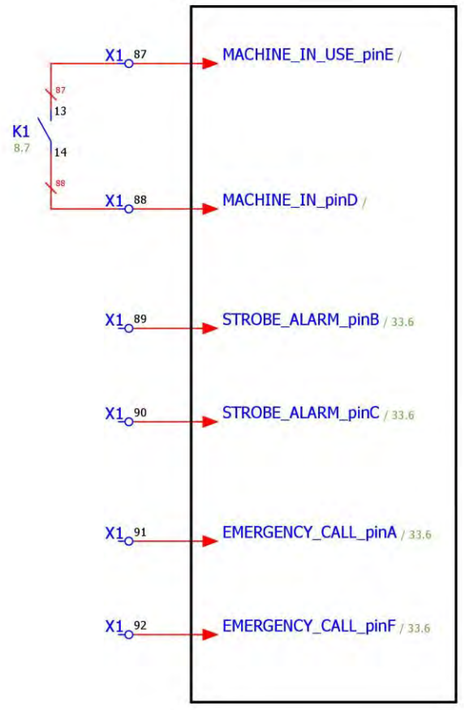
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		Resp.	ing04	
Cambio	Fecha	Nombre	Probado / Original	

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08009 Barcelona, Spain
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Proyecto: P15588
Cliente: CORNING
Hoja 32
Hoja 40

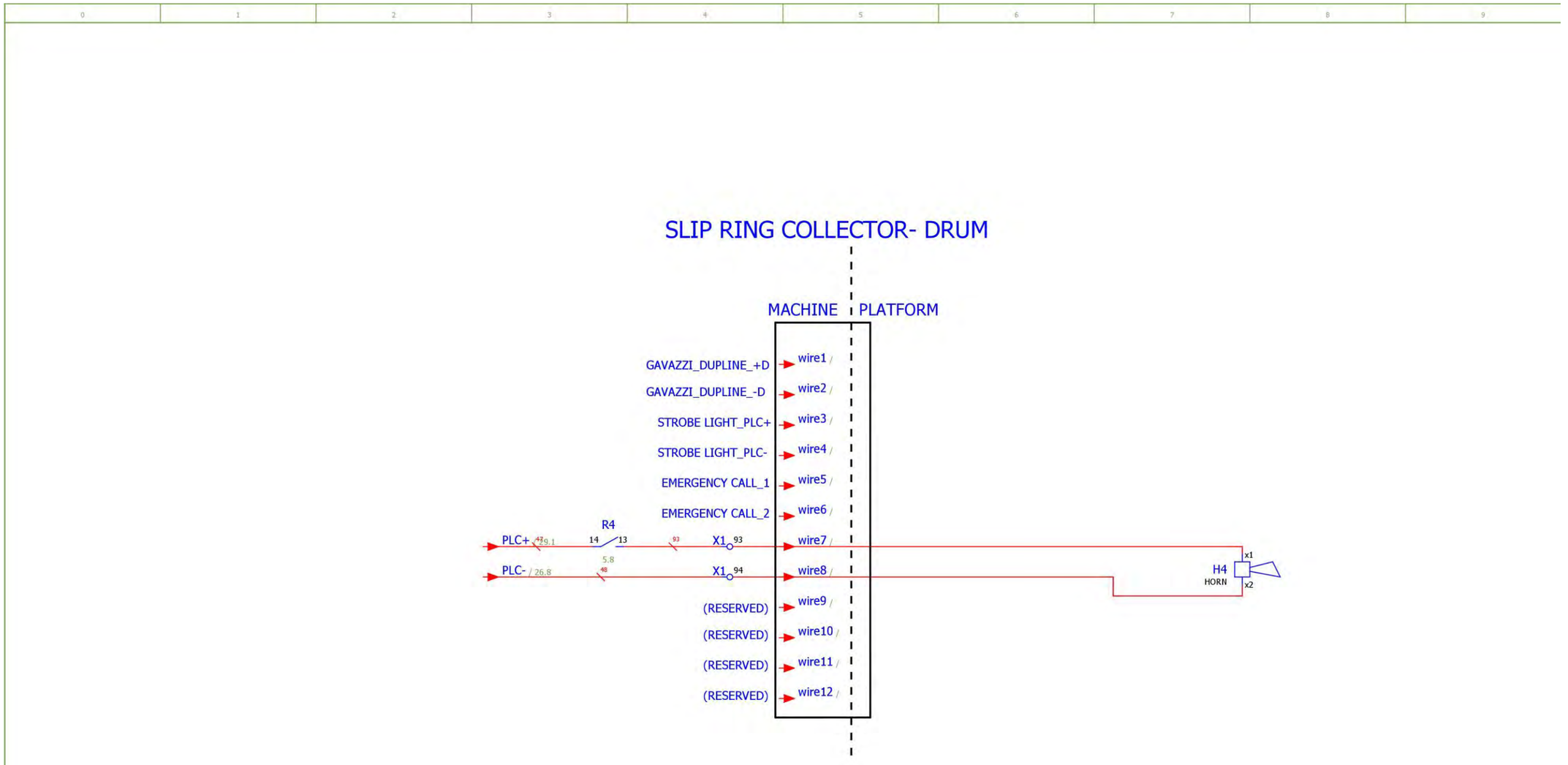


A-F: Contacts for Emergency call - INTERCOM
D-E Contacts for In use signal
B-C Contacts for fire alarm - STROBE LIGHT



32 34

			Fecha	29/11/2017	Denominación: HE10Q20	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588	
			Resp.	ing04				
Cambio	Fecha	Nombre	Probado Original				Cliente: CORNING	Hoja 33 / Hoja 40



33 35

			Fecha	29/11/2017	Denominación: HE10Q20	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588
			Resp.	ing04			
Cambio	Fecha	Nombre	Probado Original				Cliente: CORNING Hoja 34 Hoja 40

BOX2-input:
W07y 7X1.5: SPREADER BAR MOTOR+AUX.HOIST SLEW MOTOR
W07y 4X2.5+(4X1): PLATFORM CABLE
W07y 7X1.5: TELESCOPIC MOTOR

W05w 5x1: CANBUS from CR2032
W05w 2x1: JIB IN DETECTOR
W05w 2x1: JIB OUT DETECTOR
W05w 2x1: SAFTY JIB DETECTOR

BOX2-output:
W07y 7X1.5: SPREADER BAR MOTOR+AUX.HOIST SLEW MOTOR
W07y 4X2.5+(4X1): PLATFORM CABLE
W07y 7X1.5: TELESCOPIC MOTOR

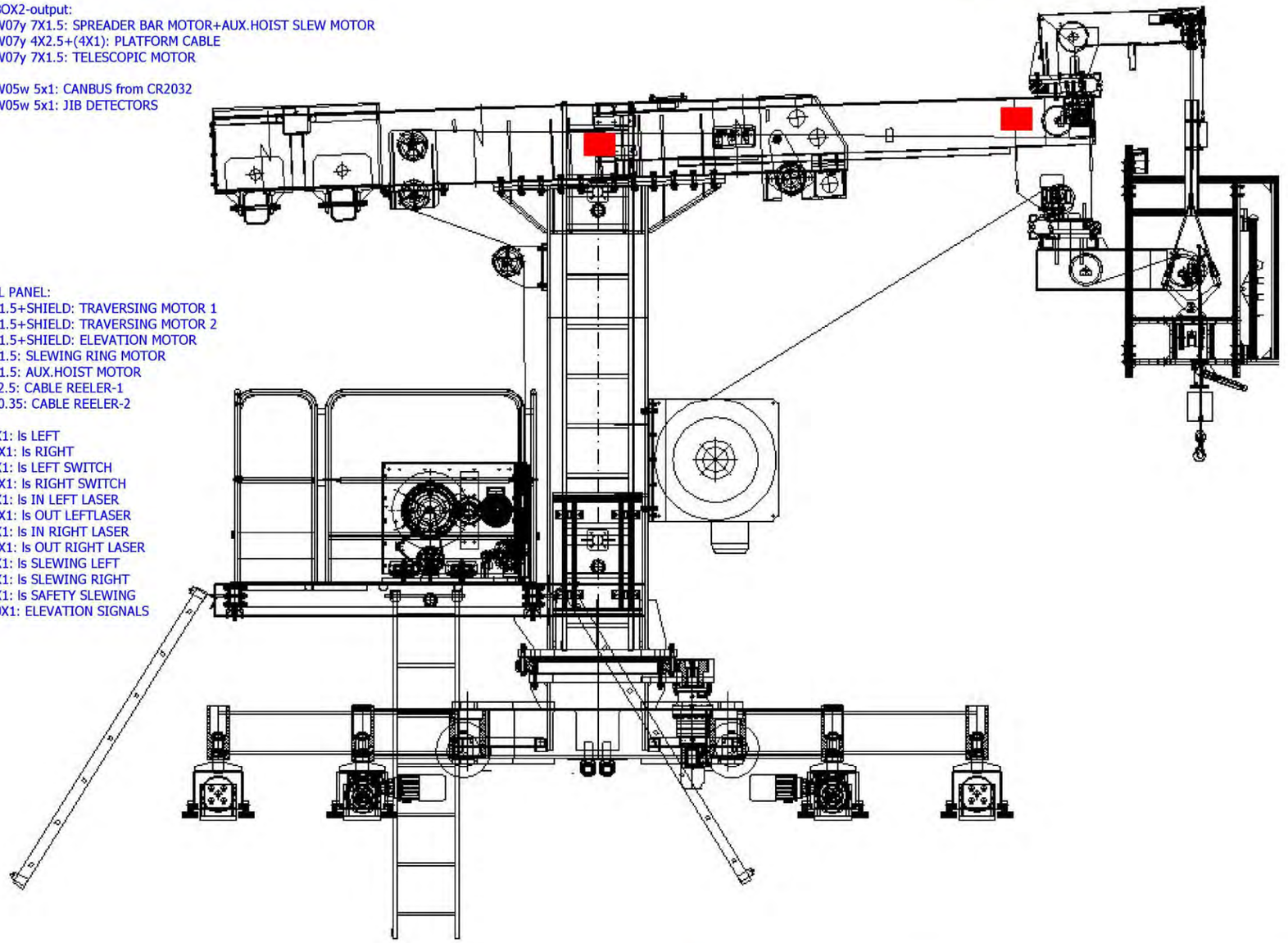
W05w 5x1: CANBUS from CR2032
W05w 5x1: JIB DETECTORS

BOX1-input:
W07y 7X1.5: SPREADER BAR MOTOR+AUX.HOIST SLEW MOTOR
W07y 4X2.5+(4X1): PLATFORM CABLE

W05w 5x1: CANBUS from CR2032

BOX1-output:
W07y 7X1.5: SPREADER BAR MOTOR+AUX.HOIST SLEW MOTOR
W07y 4X2.5+(4X1): PLATFORM CABLE

W05w 5x1: CANBUS from CR2032



CONTROL PANEL:
W01y 7X1.5+SHIELD: TRAVERSING MOTOR 1
W02y 7X1.5+SHIELD: TRAVERSING MOTOR 2
W03y 7X1.5+SHIELD: ELEVATION MOTOR
W05y 4X1.5: SLEWING RING MOTOR
W05y 4X1.5: AUX.HOIST MOTOR
W06y 4x2.5: CABLE REELER-1
W06y 8x0.35: CABLE REELER-2

W01w 2X1: ls LEFT
W02w 2X1: ls RIGHT
W01w 2X1: ls LEFT SWITCH
W02w 2X1: ls RIGHT SWITCH
W01w 2X1: ls IN LEFT LASER
W02w 2X1: ls OUT LEFTLASER
W01w 2X1: ls IN RIGHT LASER
W02w 2X1: ls OUT RIGHT LASER
W03w 2X1: ls SLEWING LEFT
W04w 2X1: ls SLEWING RIGHT
W05w 5X1: ls SAFETY SLEWING
W06w 10X1: ELEVATION SIGNALS

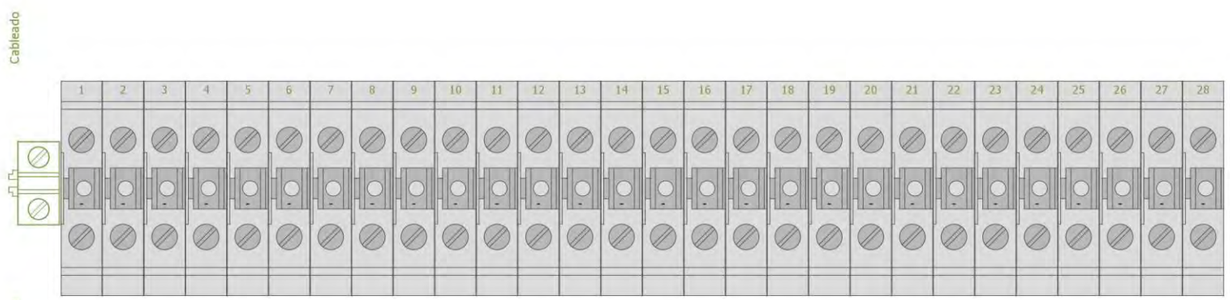
34 36

Cambio Fecha Nombre Original info@atechbcn.com CORNING Hoja 35 Hoja 40

Plano de bornes

F13_005

Regleta X1



	Destinos internos	Texto de función	Potencial	Destinos externos	Página
1	Q1	BRAKE		QB01	2.0
2	Q1			QB01	2.0
3	Q1			QB01	2.1
4	K12			M1	2.2
5	K12			M1	2.3
6	K12			M1	2.3
7	K15	KOUT_ELEVATION		M1	2.3
8	K15			M1	2.4
9	K15			M1	2.4
10	U1			RF1	2.4
11	U1			RF1	2.4
12	RMT1			M2	2.6
13	RMT1			M2	2.6
14	RMT1			M2	2.6
15	RMT2			M3	2.7
16	RMT2			M3	2.7
17	RMT2			M3	2.8
18	K13	BRAKE		M3	2.8
19	K13			M3	2.8
20	K13			M3	2.9
21	RMT3			M3	3.1
22	RMT3			M4	3.1
23	RMT3			M4	3.1
24	RMT4			M4	3.3
25	RMT4			M5	3.3
26	RMT4			M5	3.3
27	RMT5			M6	3.5
28	RMT5			M6	3.5

Cableado

Cableado

	Destinos externos	Texto de función	Potencial	Página
1	QB01	MAIN KEY SWITCH		2.0
2	QB01	=		2.0
3	QB01	=		2.1
4	M1	ELEVATION MOTOR		2.2
5	M1	=		2.3
6	M1	=		2.3
7	M1	=		2.3
8	M1	=		2.4
9	M1	=		2.4
10	RF1			2.4
11	RF1			2.4
12	M2	TRAVERSING MOTOR-1		2.6
13	M2	=		2.6
14	M2	=		2.6
15	M3	TRAVERSING MOTOR-2		2.7
16	M3	=		2.7
17	M3	=		2.8
18	M3	=		2.8
19	M3	=		2.8
20	M3	=		2.9
21	M4	SLEWING MOTOR		3.1
22	M4	=		3.1
23	M4	=		3.1
24	M5	SPREADER BAR MOTOR		3.3
25	M5	=		3.3
26	M5	=		3.3
27	M6	TELESCOPIC JIB-1 MOTOR		3.5
28	M6	=		3.5

35 37

Cambio	Fecha	Nombre		
			Fecha	29/11/2017
			Resp.	ing04
			Probado	
			Original	

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Cliente: CORNING

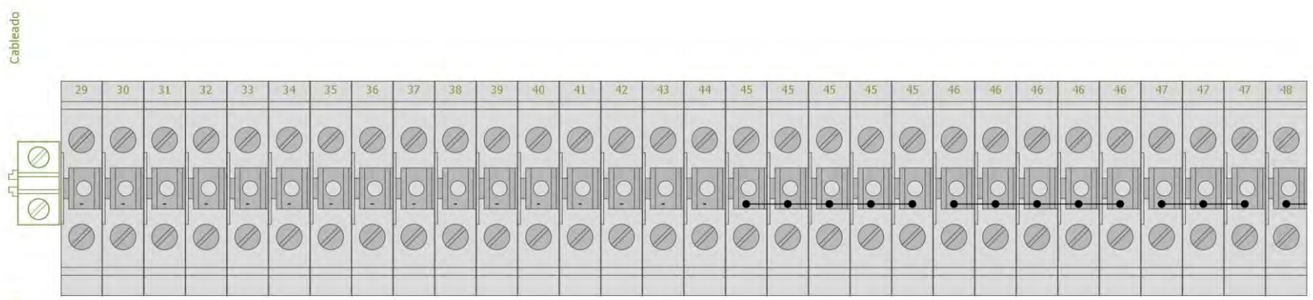
Hoja 36

Hoja 40

Plano de bornes

F13_005

Regleta X1



Página	Texto de función	Potencial	Destinos externos
3.5	TELESCOPIC JIB-1 MOTOR		M6
3.7	SLEW. AUX.HOIST MOTOR		M7
3.7	=		M7
3.7	=		M7
4.0	AUX.HOIST		M8
4.1	=		M8
4.1	=		M8
4.2	=		M8
4.3	=		M8
4.3	=		M8
4.5			U2
4.5			Q2
4.5			
4.5			
4.5			U2
4.5			Q2
5.0	R_ANEMOMETER		R4
5.0			
5.1			
5.1			
5.1			U5
5.1			
5.2			
5.2			
5.2			
5.4			U5
5.4			
5.4			
5.4			U5

Destinos internos	Texto de función	Potencial	Destinos externos
RMT5	BRAKE		
RMT6			
RMT6			
RMT6			
RMT7			
RMT7			
RMT7			
K14			
K14			
K14			
K14			
U2			
Q2			
Q2			
K14			
U2			
U3			
F3			
F5			
U4			

36 38

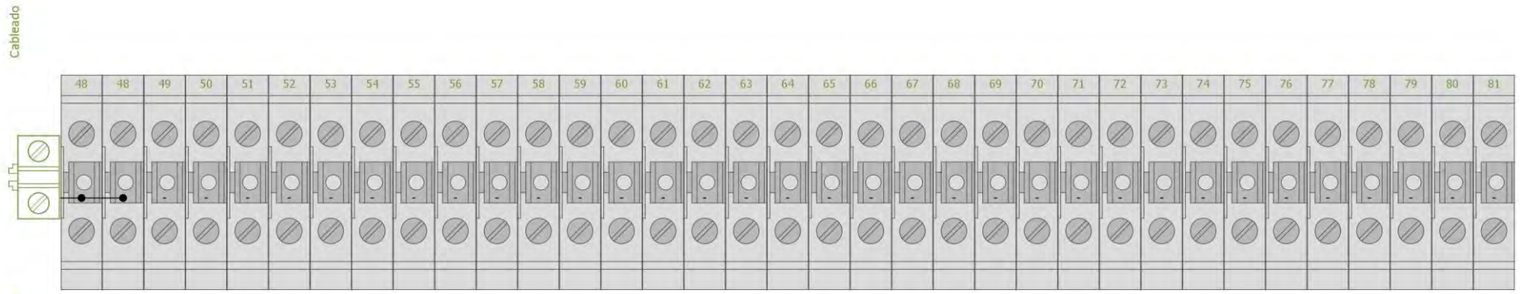
Cambio	Fecha	Nombre				
			Fecha	29/11/2017	Denominación: HE10Q20	Proyecto: P15588
			Resp.	ing04		
			Probado			Cliente: CORNING
			Original			Hoja 37 / Hoja 40

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Plano de bornes

F13_005

Regleta X1



Página	Texto de función	Potencial	Destinos externos	Cableado	Destinos internos	Texto de función	Cableado
5.4					R4	R_ANEMOMETER	48
5.4					X6		48
5.8			U5		X6		49
6.0			G_DUPLINE		R5	R_SAFETY SLEWING	50
6.0			G_DUPLINE		R6	R_ OVERSPEED	51
8.3	L.S.SAFETY SLEWING		S5		R7	R_SAFETY JIB-1	52
8.3	L.S.CHAIN		S2		R7		53
8.4			BG2		S2	L.S.CHAIN	54
8.6	LS.OVERSPEED		S1		S4	LS. DOOR-1	55
8.6	LS. DOOR-1		S4		S5	LS.SAFETY SLEWING	56
8.6	LS.SAFETY SLEWING		S5		S6	MACHINE-PE	57
8.7	MACHINE-PE		S6		RX_DUPLINESAFE	POWER-M	58
8.7	POWER-M		RX_DUPLINESAFE		S7		59
8.7			S7		K1		60
8.7	MAIN_K		K1		R9		61
9.1	GREEN_LIGHT		K1		K1		62
9.4	HORN		H1		R112		63
13.6			H2		R112		64
13.6			A2		A7		65
15.7			A2		A7		66
15.7			A22		A9	MACHINE/CRADLE CONTROL	67
17.6	MACHINE/CRADLE CONTROL		A22		A9	=	68
17.7	=		S15		A10		69
18.2			S15		S17	LS. REELER-2	70
18.3	LS. REELER-1		U11		A10	=	71
18.3	LS. REELER-2		S16		BG1		72
18.6			S17		BG1		73
18.7			A10		A14		74
22.2			A10		A15		75
22.3			A14		A15		76
22.6			A14		A16		77
22.7			A14				78
23.3							79
23.6			S8				80
24.2	MOVE WITHOUT PLATFORM		U7				81

37

39

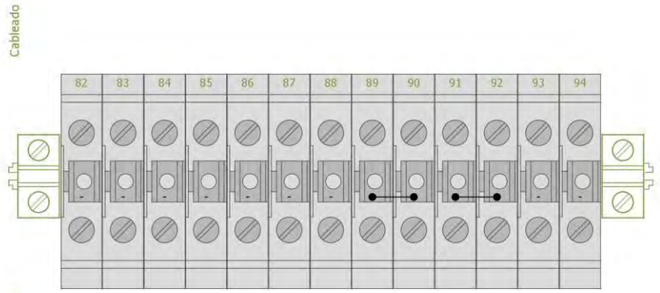
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			Resp.	ing04			Cliente: CORNING
Cambio	Fecha	Nombre	Probado				Hoja 38
			Original				Hoja 40

0 1 2 3 4 5 6 7 8 9

F13_005

Plano de bornes

Regleta X1



Página	Texto de función	Potencial	Destinos externos
			Cableado
26.3			
26.5			
26.8	RED_LIGHT		H3
29.7			
31.7	LS. SAFETY SPREADER BAR		S23
33.5			
33.5			
33.5			
33.5			
33.5			
33.5			
34.4			
34.4			

Destinos internos	Texto de función
Cableado	
A18	RED_LIGHT
A18	
A18	
A21	
S24	LS. SAFETY UP
K1	
K1	
R4	RED_LIGHT
H3	

38 40

Cambio	Fecha	Nombre		
			Fecha	29/11/2017
			Resp.	ing04
			Probado	
			Original	

Denominación: HE10Q20

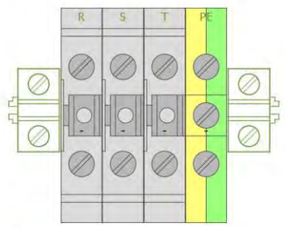
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Hoja 39
Hoja 40

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Plano de bornes

Regleta X2



Página	Texto de función	Destinos internos	Cableado	Potencial	Texto de función	Destinos externos	Cableado	Página
	MAIN KEY SWITCH	QB01				L1		2.0
		QB01				L2		2.0
		QB01				L3		2.1
						PE		2.1

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			Fecha	29/11/2017
			Resp.	ing04
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Proyecto:	P15588		
Cliente:	CORNING	Hoja	40
		Hoja	40

P15588, CORNING TOWER
B.M.U. A-25, Series Number: M-3634
Use and maintenance manual

12/2017

Atechbcn

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3. TRANSPORT PLAN 87
4. ELECTRICAL DIAGRAM 87

CERTIFICATE OF COMPLIANCE

Certificate Number	20151216-SA32692
Report Reference	SA32692-20080422
Issue Date	2015-DECEMBER-16

Issued to: BCN GONDOLAS S L
Bruc
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4th floor
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This is to certify that representative samples of EQUIPMENT, SCAFFOLDING
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Model QT-2500

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 1322 -Fabricated Scaffold Planks and Stages
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Bruce Mahrenholz, Director North American Certification Program

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El Sistema de Gestión se aplica a:

Scope of certification:

DISEÑO, MONTAJE, MANTENIMIENTO Y COMERCIALIZACIÓN DE EQUIPOS DE ELEVACIÓN Y ACCESO A FACHADAS PARA MANTENIMIENTO Y LIMPIEZA.

DESIGN, ASSEMBLY, MAINTENANCE AND SALES OF BUILDING MAINTENANCE UNITS.

Número del Certificado *Certificate Number*	**ES064311-1**
Aprobación original : *Original approval date :*	**25/05/2015**
Certificado en vigor: *Effective date:*	**25/05/2015**
Caducidad del certificado: *Certificate expiration date:*	***24/05/2018***

Directora de Certificación / Certification Manager

Este certificado está sujeto a los términos y condiciones generales y particulares de los servicios de certificación
This certificate is valid, subject to the general and specific terms and conditions of certification services

Entidad de Certificación / Certification Body: Bureau Veritas Iberia S.L.
C/ Valportillo Primera 22-24, Edificio Caoba, Pol. Ind. La granja, 28108 Alcobendas - Madrid, Spain



ENAC CERTIFICACIÓN Nº 04/C-SC004

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Bureau Veritas certify that the Management System has been audited and found to be in accordance with the requirements of standard:

NORMA / STANDARD

ISO 14001:2015

El Sistema de Gestión se aplica a:

Scope of certification:

DISEÑO, MONTAJE, MANTENIMIENTO Y COMERCIALIZACIÓN DE EQUIPOS DE ELEVACIÓN Y ACCESO A FACHADAS PARA MANTENIMIENTO Y LIMPIEZA.

DESIGN, ASSEMBLY, MAINTENANCE AND COMMERCIALIZATION OF LIFTING EQUIPMENT FOR BUILDING MAINTENANCE AND FACADES CLEANING

Número del Certificado *Certificate Number*	**ES074498-1**
Aprobación original : *Original approval date :*	**27/10/2016**
Certificado en vigor: *Effective date:*	**27/10/2016**
Caducidad del certificado: *Certificate expiration date:*	***26/10/2019***

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ENAC
CERTIFICACIÓN
Nº 01/C-MA607

Certificate of guarantee

Manufacturer: **ATECHBCN, S.L.**
C/Tomàs Viladomiu, 29-35
Pol. Ind. Illa
08650 Sallent, Barcelona, Spain

Hereby certifies that all our machines for cleaning and maintenance of facades are guaranteed for a period of two years from the date of installation or from the date despatched from the Factory if the installation is carried out by the Client.
This guarantee covers design and/or manufacturing defects under normal usage conditions.

The guarantee will be void under the following circumstances:

- Misuse or use by untrained personnel.

- Not following the instructions of Chapter 7 “Maintenance”.

- Absence of adequate maintenance operations as specified in this Manual.

- Maintenance by personnel not authorised by the manufacturer, as well as the use of spare parts or modifications nor authorised by the manufacturer.

Atechbcn, S.L.

- In general, non-compliance with the instructions given in this Manual.

This guarantee only applies to the following machine:

Model: **A25 Type**
Series number: **M-3634**
Year of manufacture: **2017**
Project: **P15588, CORNING TOWER**

ATECHBCN S.L.
Barcelona
1st of December 2017

1. General aspects and warnings

This machine is a building maintenance unit (BMU). BMU are platforms suspended at variable height (SAE) for planned routine inspections, cleaning and maintenance of the building.

Operators must read and perfectly understand the use and maintenance instructions for the machine. Not following the instructions could produce hazardous situations and accidents.

1.1. Indications for use

- The owner of the machine is responsible for ensuring that this machine is only used by authorised and adequately trained personnel.
- Before putting the machine into service, operators must have received training on its correct use and control by a competent person.
- In addition to the instructions given in this manual, all safety measures for working at heights must be strictly followed.
- **Atech** will not be held liable for any incident caused by inappropriate use or poor maintenance of the machine.
- This manual must be at the disposal of any worker requiring it, (which does not exempt the worker from receiving the necessary training). If this manual is lost, the person in charge of the machine must request a new copy from **Atech**.
- The instructions and warnings notices adhered to the machine must be kept in good conditions and the information they contain must be perfectly legible and understandable.
- The work of the BMU operator must be adequately planned and supervised so that in case of an emergency, aid can be given immediately.
- Verification and commissioning of the BMU must be carried out by a representative of **Atech**.
- It is the responsibility of the owner of the BMU to keep a Logbook, which should contain the following data:
    - Name of the person in charge of the machine.
    - Name of the operators and date of use.
    - Number of hours the machine is used.

- Specifications of the suspension cables.
- Number of hours the suspension cables are used.
- A record of incidents and corrective actions carried out.
- Dates of regular inspections.

The Logbook must be available for maintenance personnel.

- The data contained in the Logbook must be at the disposal of the competent labour authorities and must be kept during the entire service life of the machine.
- An organisation or competent person will be responsible for the technical maintenance of the whole installation, composed of the machine and its runway, which will be carried out **at least 6 months or every 100 hours of operation** (see maintenance instructions in chapter 7 of the manual).
- **Atech** only guarantees original spare parts.
- In case of any sign of malfunction, the machine must immediately be taken out of service and the person responsible for the installation notified.
- It is mandatory to wear personal protection equipment when using this machine.
- While using the machine, operators must have a means of communication with the exterior that is autonomous and fully operational in case of emergency (mobile phone, walkie-talkie or other).
- It is mandatory to use the facade retaining systems where applicable (according to UNE EN 1808:2016 standard). Under no circumstances will the BMU be used without connecting the retaining systems to the facade at the indicated levels.
- The electric cable winder should be used in a controlled manner, without jerking.

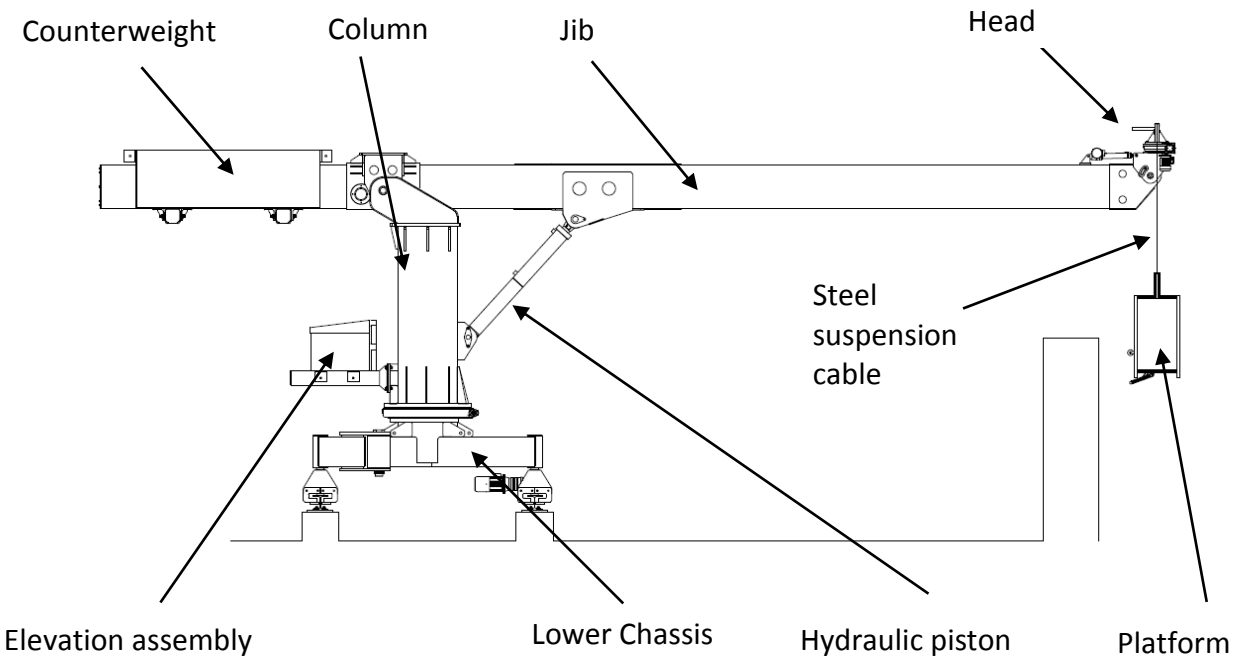
1.2. Usage prohibitions

- The perimeter of the work area must be duly signposted when accessed by the general public.
- The machine must not be used in conditions of insufficient lighting. It should only be used with natural sunlight.

- It is absolutely forbidden to use this machine under adverse weather conditions such as presence of plenty of snow or ice, storms, heavy rain, extreme temperatures below -10ºC and above 55ºC or with wind exceeding 51 km/h.
- The maximum number of operators allowed on the suspended platform simultaneously is indicated inside the platform and must not be exceeded.
- It is not allowed to carry out two movements simultaneously.
- Before accessing the suspended platform, always remove the key from the chassis control panel.
- The machine must be governed from the control panel of the main chassis only in emergency situations. In normal working conditions, the operator of the platform should always be in control of the BMU.
- The machine is supplied to safely carry out cleaning and light maintenance work on facades of buildings. The machine must not under any circumstance be used for any task not contemplated in the Instruction Manual.
- Never exceed the nominal load capacity indicated on the suspended platform and the specification sheet of the machine.
- The BMU should be used in a controlled manner, avoiding erratic, sudden or contradictory movements, such as ON/OFF, left/right, etc.
- It is absolutely forbidden to use the machine as a crane.
- It is not allowed to suspend loads above the platform.
- Use of the machine to transport passengers from one level to another is not allowed.
- Manipulation of dangerous loads is not allowed.

2. Description of the machine

2.1. Parts of the B.M.U.



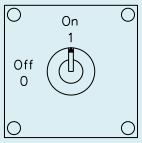
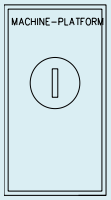
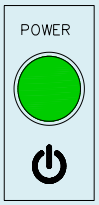
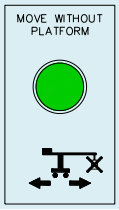
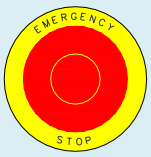
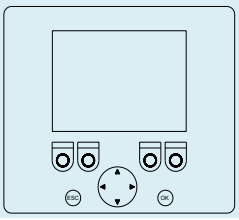
* This is a generic illustration of the parts, it is not a faithful depiction of the machine. Annexe I specifies the main elements of the BMU (Plan of the machine).

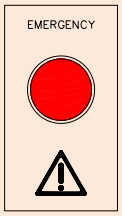
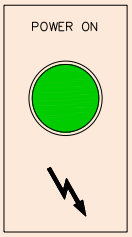
2.2. Description of manual controls

The controls on the main electrical panel and the suspended platform are comprised of switches, selectors and push buttons to execute the movements of the machine, as well as warning lights for incidents.

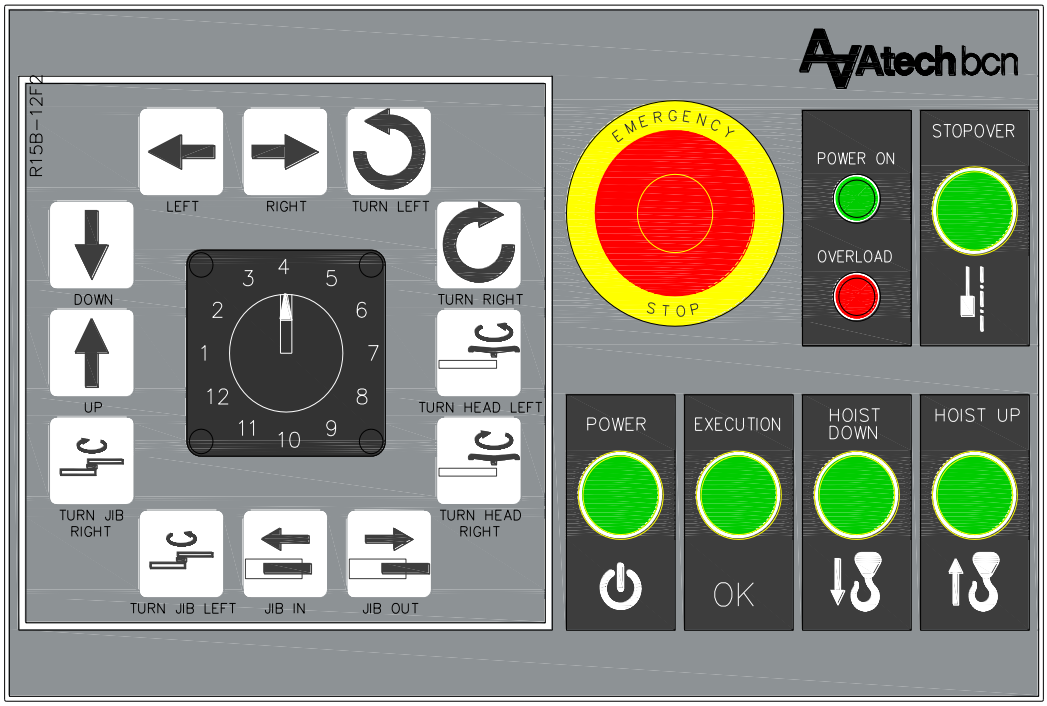
2.2.1. Control instruments on the main electrical panel

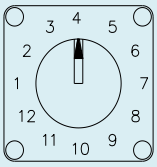
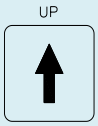
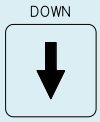


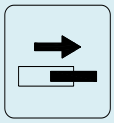
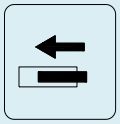
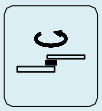
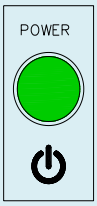
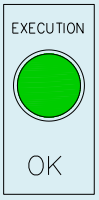
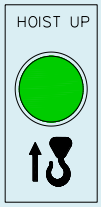
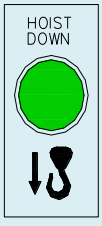
Switches and buttons of the machine main control			
Symbol	**Type**	**Description**	**Actions/Observations**
	Switch	General switch.	Switch used to power the machine.
	Switch	Checkpoint selector.	Left enables you to select the chassis control and right enables you to select the platform control.
	Button	Turn on machine.	Enables mains contactor.
	Button	Enable translation without platform.	Pulse to enable functionality without the suspended platform.
	Button	Emergency Stop.	Disable main contactor, the machine is blocked temporarily.
	Display	Control display.	To manage machine functions.

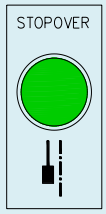
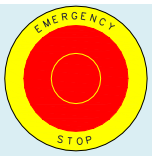
Alarm light of the machine main control			
Symbol	**Description**	**Cause**	**Actions/Observations**
	Emergency	Activation of some safety device.	The machine is locked. Contact to technical service.
	Power on	Enables mains contactor.	The machine is ready to perform movements.

2.2.2. Control instruments on the platform



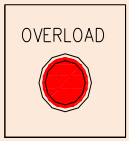
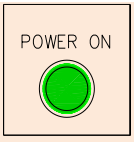
Selectors and buttons of the platform control			
Symbol	**Type**	**Description**	**Actions/Observations**
	Switch	Selection movement switch.	Select the movement you want to perform.
		Platform up.	
		Platform down.	
		Left translation.	
		Right translation.	
		Left slewing.	
		Right slewing.	
		Spreader bar left slewing.	
		Spreader bar right slewing.	

		Telescopic jib out.	
		Telescopic jib in.	
		Turn jib left.	
		Turn jib right.	
	Button	Turn on machine.	Enables mains contactor.
	Button	Movement execution.	Pulse to execute the selected movement.
	Button	Hoist up.*	
	Button	Hoist down.*	

	Button	Stopover.*	Pulse to carry on the drop after fix the lanyard in the building.
	Button	Emergency stop equipment.	Disable main contactor, the machine is blocked temporarily.

The orientation is being inside the platform and facing the machine.

**Auxiliary function available on case.*

Alarm lights of the platform control			
Symbol	**Type**	**Description**	**Actions/Observations**
	Overload	Platform or hoist rated load has been surpassed.	All the machine's movements are locked except down the platform, jib back (folding jib machines) and telescopic jib in.
	Power on	Enables mains contactor.	The machine is ready to perform movements.

**Auxiliary function available on case.*

3. Use of the machine

Warning!

Before using the machine, check it is in good conditions as well as ensuring that the weather and light conditions are adequate. If any anomaly is detected, immediately inform the person responsible for the machine.

3.1. Personal protection equipment

Operators must use the following personal protection equipment:

- Helmet.
- A safety harness that must be connected to the platform.
- Gloves.
- Safety boots.



Additionally, the operator must always have equipment for communicating with the outside, autonomous and fully operational in emergencies (mobile phone, walkie-talkie or other).

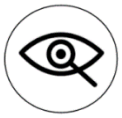
3.2. Checks before using the machine

Below is the procedure for starting up the machine before use:

- ☞ Check that the weather conditions are adequate.



- ☞ Visually inspect the machine and the platform.



- ☞ Fill in the Logbook correctly (see section 1).



- ☞ Ensure that the work area is free from obstacles that could impede free movement of the machine.
- ☞ Check that there are no projecting elements on the facade that the platform or the suspension cables could collide with.
- ☞ Check that there is no risk of trapping for people due to insufficient space between the machine and certain parts of the building. If this risk exists, the area must be signposted.
- ☞ Check that the power supply connection is correct.
- ☞ Check that the platform is in its highest position and it allows the machinery to make its movements.
- ☞ Check that the machine makes all the movements correctly from the main chassis:

- Make sure that the emergency button is NOT pressed.



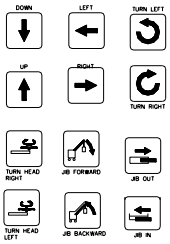
- Place the general switch in MACHINE position.



- Press the Power button.



- Check all the movements of the machine.



- Check the operation of the following devices:

1. Emergency stop.



2. Acoustic movement warning.



- Action of the stroke limit switches.



- Action of the platform anti-collision detector.



3. Electric cable winder.



- In case of any anomalies, contact the technical service.



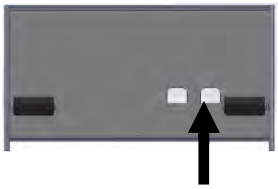
☞ Only enter or exit the platform in the defined parking positions or areas.

☞ Access the platform respecting the following safety measures:

Connect the safety harness to the platform.



1. Place your right foot in the left cut-out of the front bodywork and then access the inside placing the other foot in the right-hand cut-out.



2. ☞ Check that the machine makes all the movements correctly both from the suspended platform (PLATFORM position) and the main chassis (MACHINE position).



3.3. Procedure for using the machine

Once all the machine elements have been checked, you can begin the building maintenance work.

Below is the procedure for using the machine:

☞ Keep the machine connected to the power supply.



☞ Make sure that the emergency button is not pressed.



☞ Place the general switch selector in PLATFORM position.



☞ Press the power button.



☞ Carry out the facade maintenance operations following the instructions and prohibitions for use specified in the section: 1. *General aspects and Warnings* in this manual.



☞ When the maintenance work is finished, return the machine to the defined parking position.

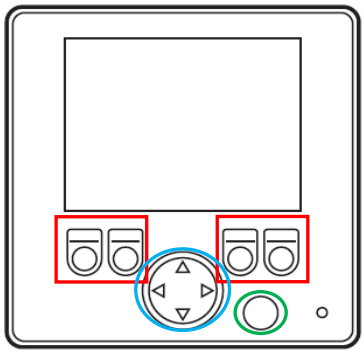


☞ Turn the main switch key selector to the central off position.

☞ Disconnect the machine from the power supply of the building.

☞ Use the systems for securing the machine to avoid damage caused by gusts of wind.

3.4. Functions of the machine



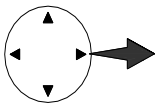
The display control is made up by the following elements:

- Display of 4,3''.
- In red, key to execute the movement in one direction or another.
- In blue, key to change the movement.
- In green, key not functional.

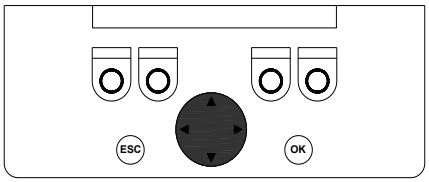
1. Client and project



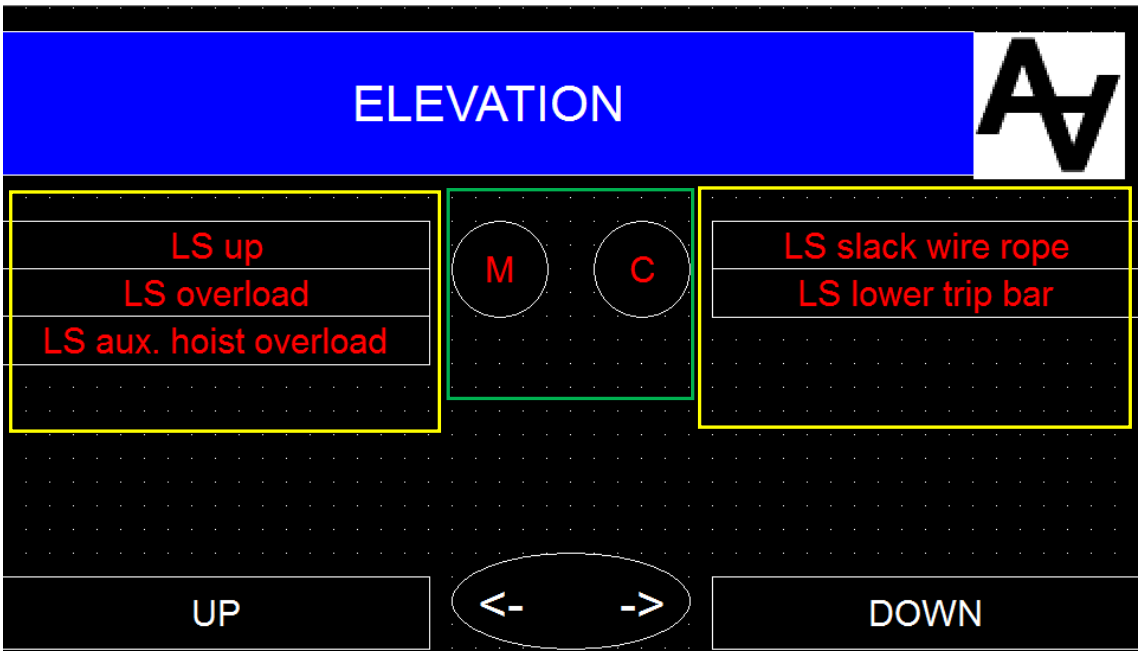
Starting page. The project name is shown.



Press the key to change to the next page.



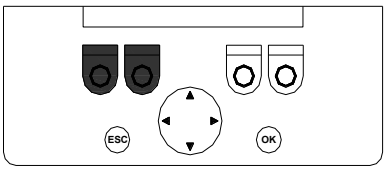
2. Platform elevation



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

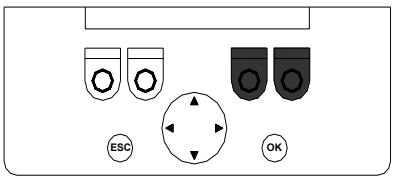


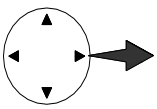
Press the key to go up the cradle.



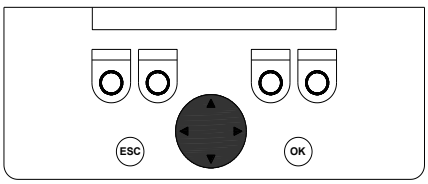


Press the key to go down the cradle.

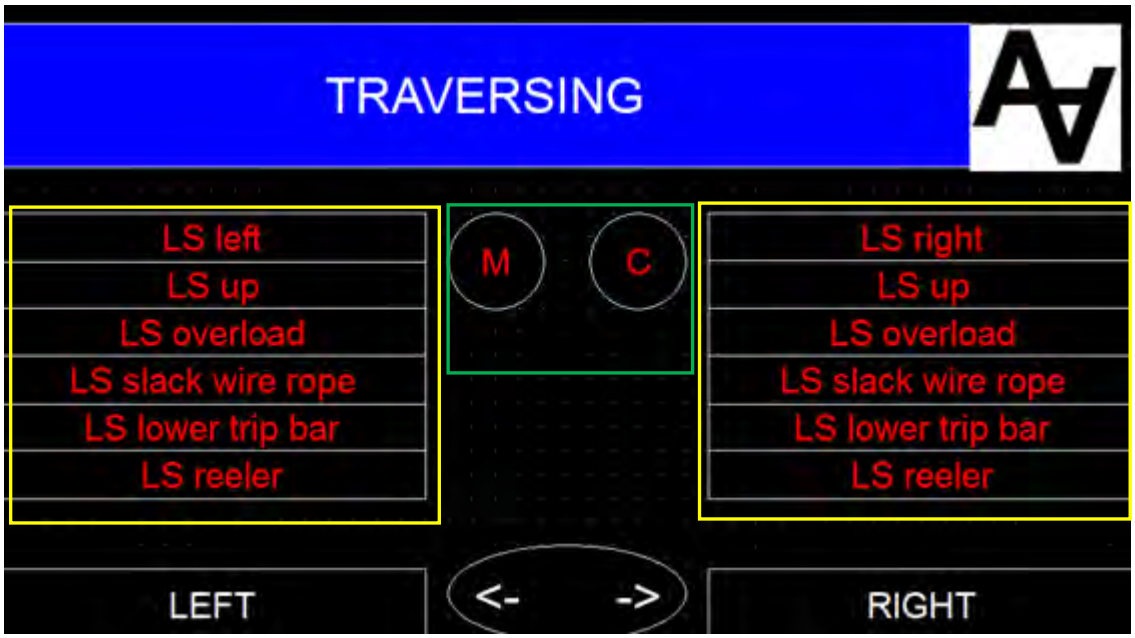




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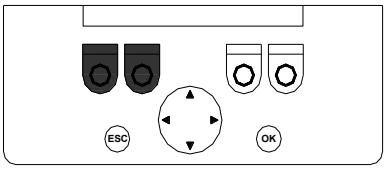
3. Traversing



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

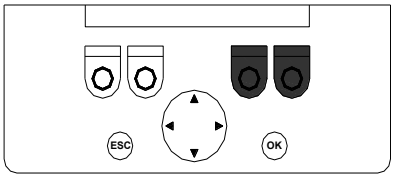


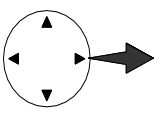
Press the key to move the machine to the left.



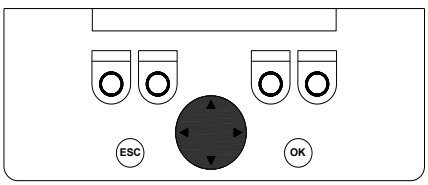


Press the key to move the machine to the right.

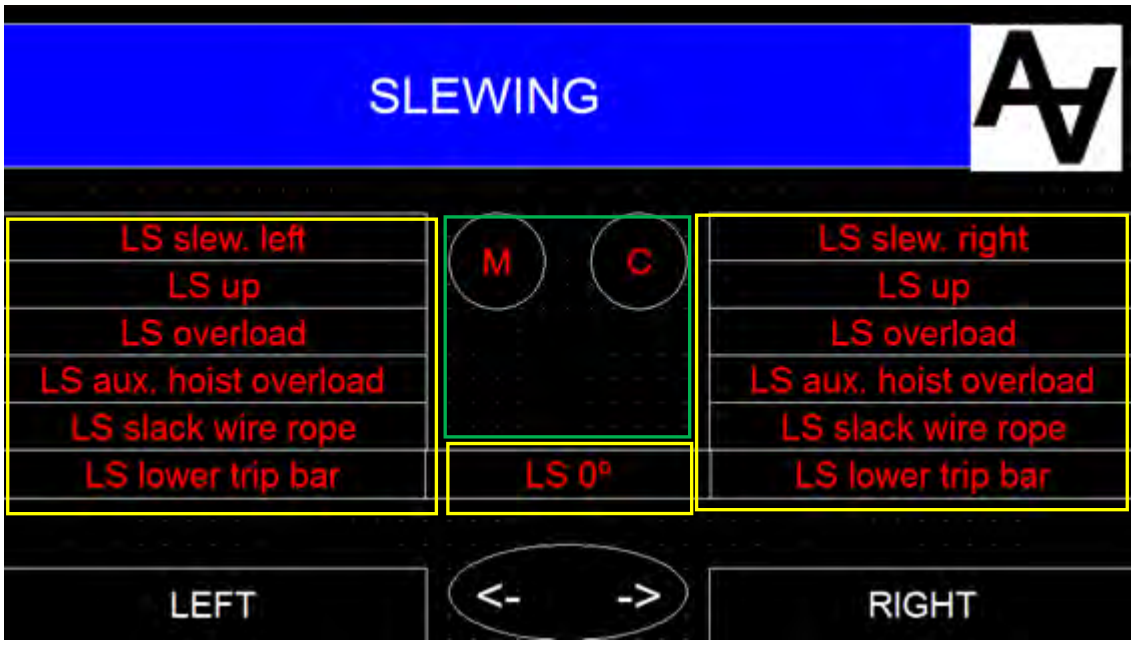




Press the key to change to the next page.



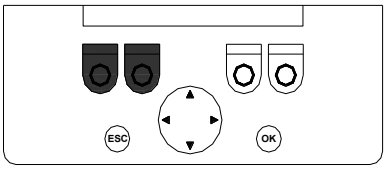
4. Slewing



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

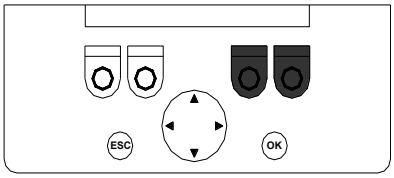


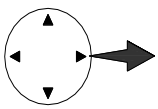
Press the key to slew the machine to the left.



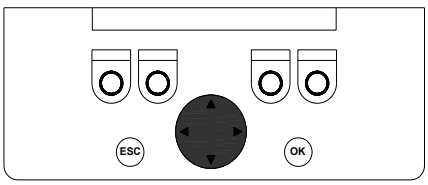


Press the key to slew the machine to the right.

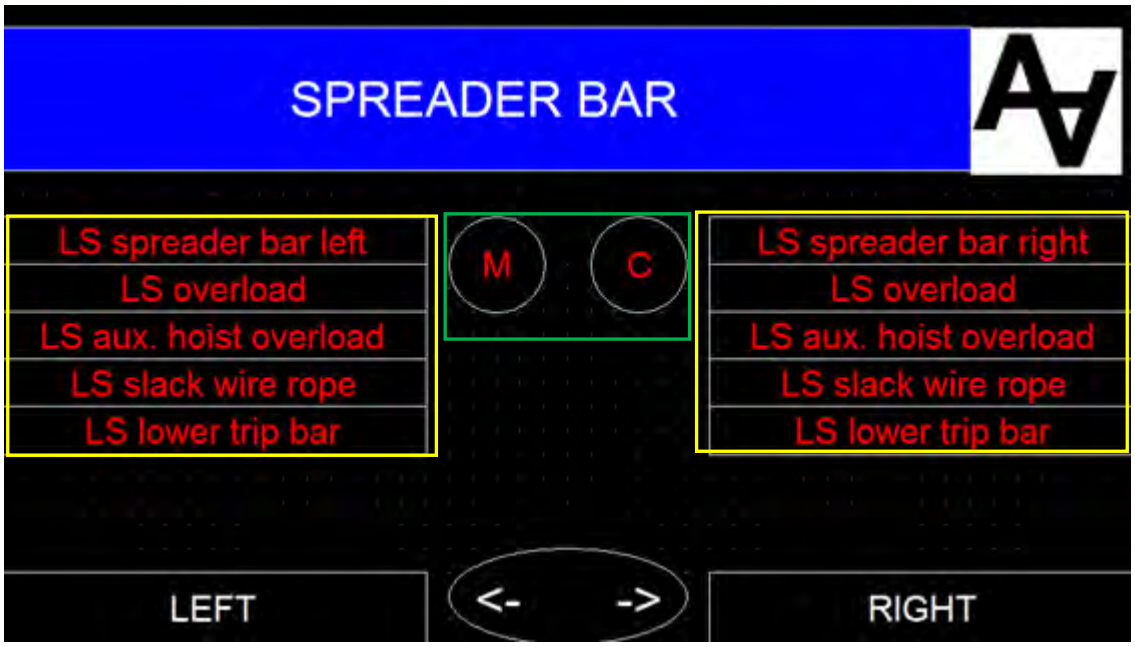




Press the key to change to the next page.



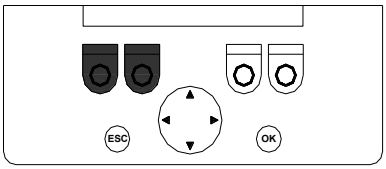
5. Spreader bar



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

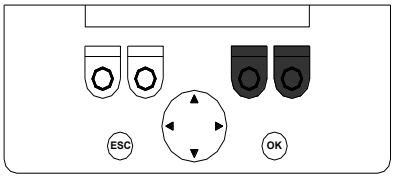


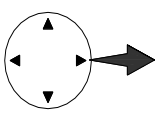
Press the key to slew the spreader bar to the left.



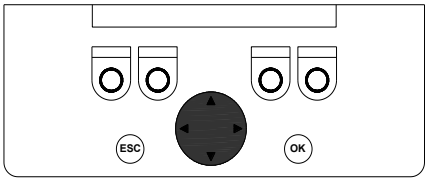


Press the key to slew the spreader bar to the right.





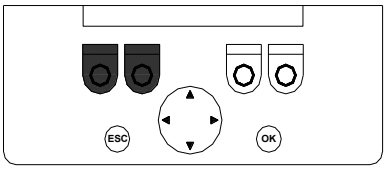
Press the key to change to the next page.



6. Hoist Jib

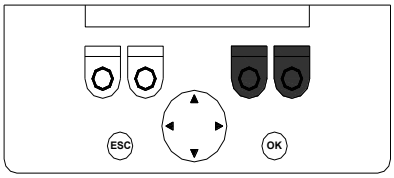


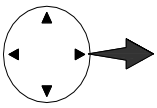
Press the key to slew the hoist jib to the left.



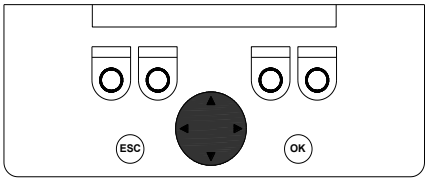


Press the key to slew the hoist jib to the right.

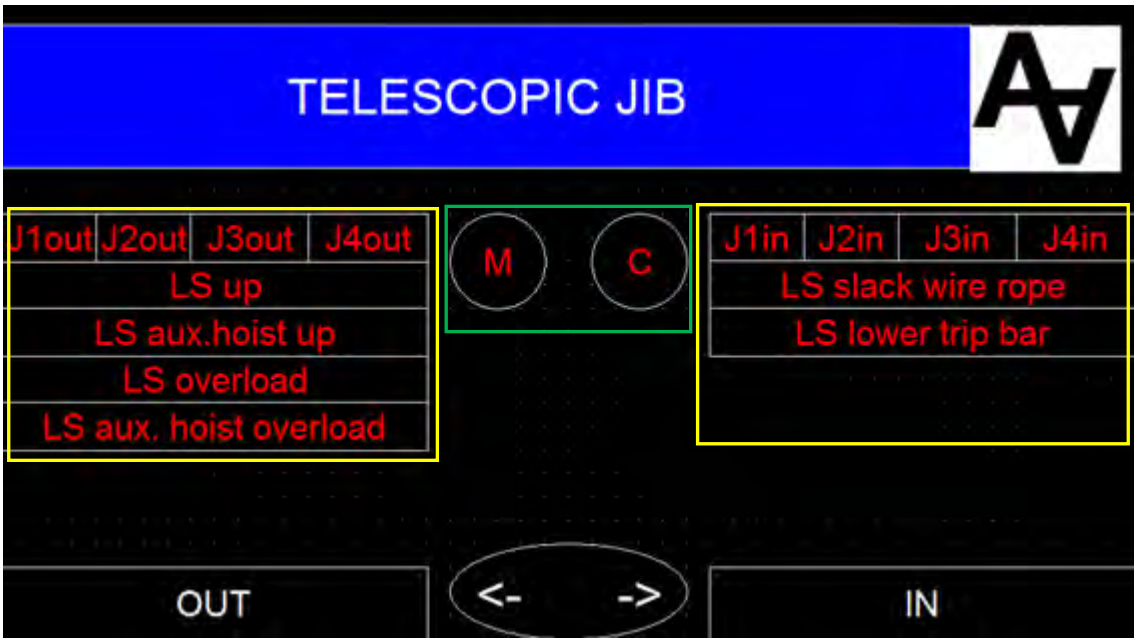




Press the key to change to the next page.



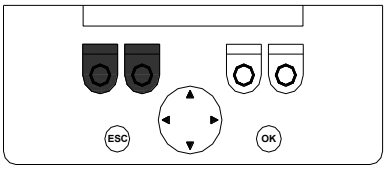
7. Telescopic jib



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

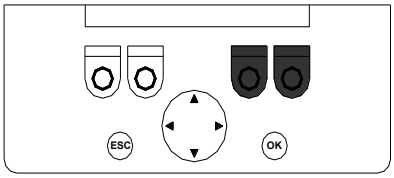


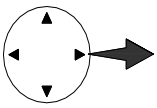
Press the key to open de telescopic jib.



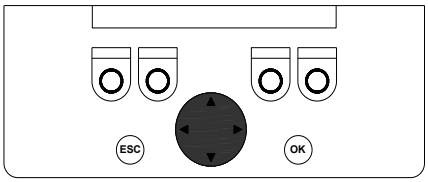


Press the key to close de telescopic jib.

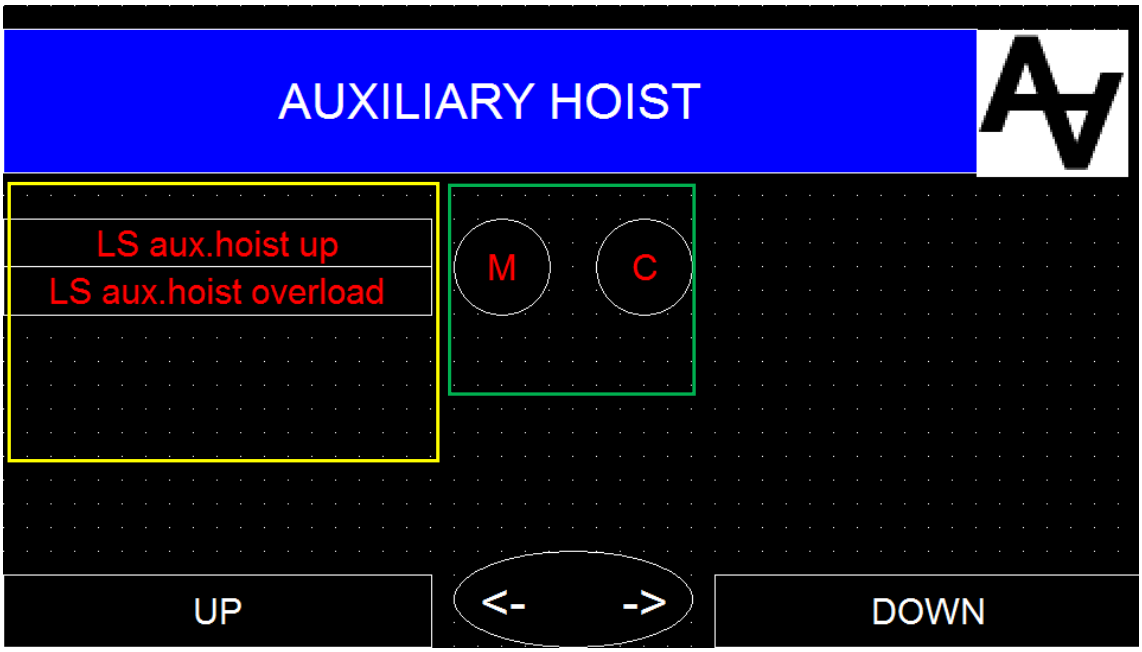




Press the key to change to the next page.



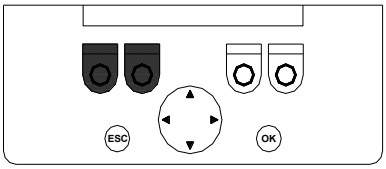
8. Auxiliary hoist



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

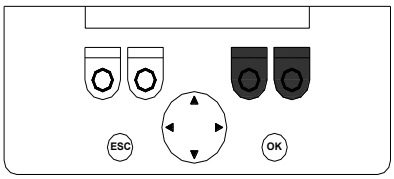


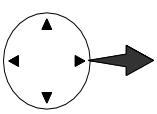
Press the key to go up the hoist.



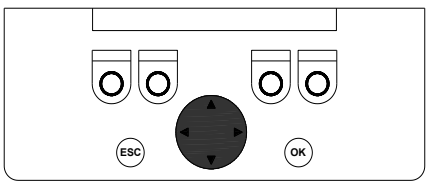


Press the key to go down the hoist.

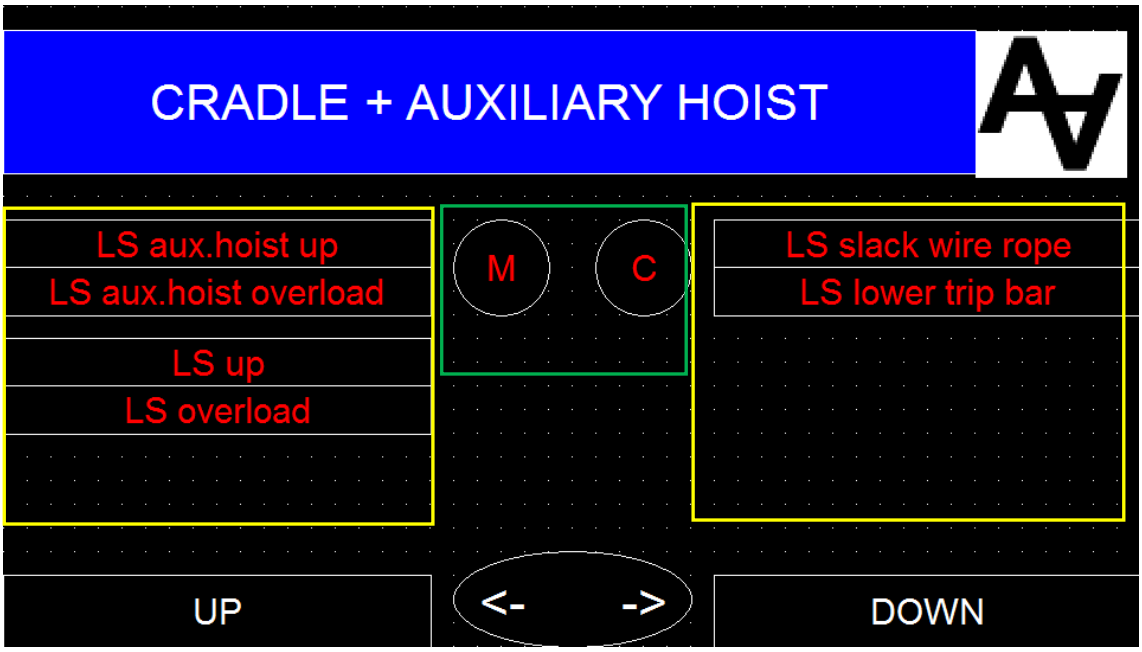




Press the key to change to the next page.



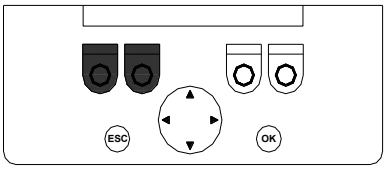
9. Cradle & Auxiliary hoist



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

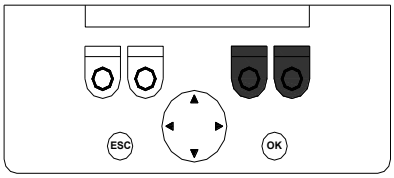


Press the key to go up the platform and the auxiliary hoist at the same time.

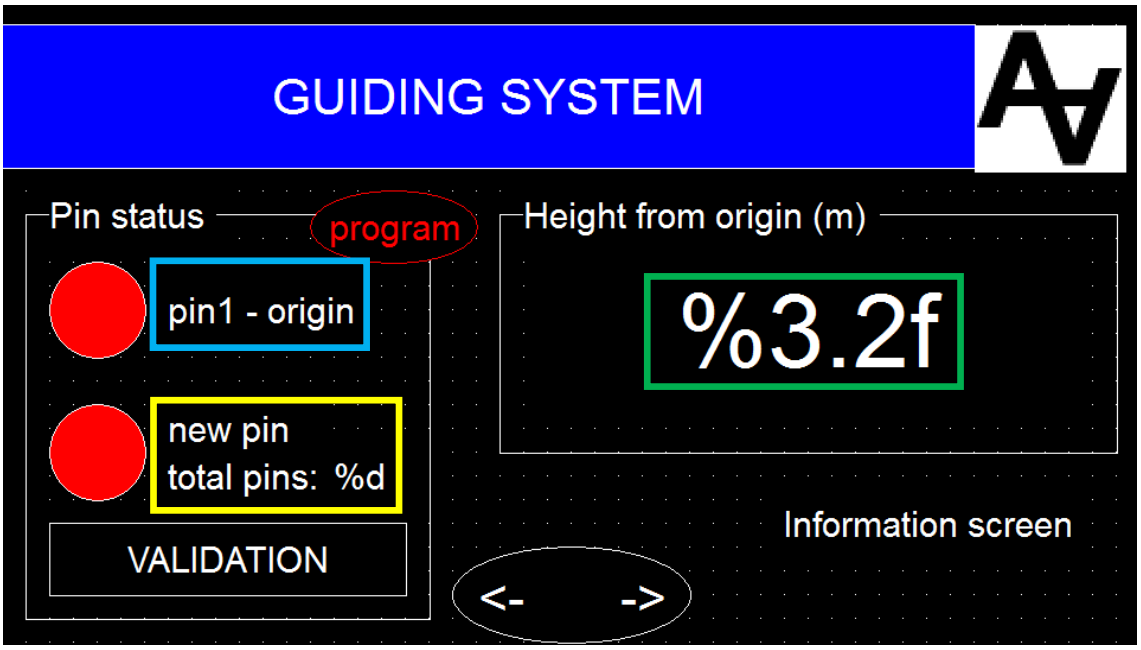




Press the key to go down the platform and the auxiliary hoist at the same time.



10.Restrain system

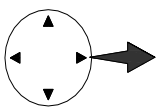


User can program the height of the pins by itself only in one drop and when it is done operator will see how many pins are set taking a look where yellow arrow shows. Two modes can be performed:

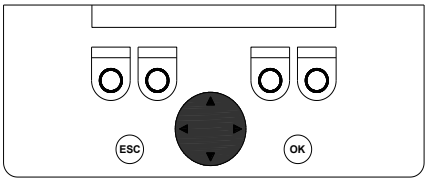
a) Pin programming mode.

b) Intermediate stops mode.

- When Origin/first pin is defined then *pin1 – origin* circle will be green. And *height from origin* will be set to 0m.
- When second pin or higher pins are set/validated then "new pin" circle will be green. *Total pins* shows the total defined pins in the facade in that moment.
- *Height from origin* shows the real height once Origin/first pin is defined when the operator had defined/validated *pin1-Origin.*

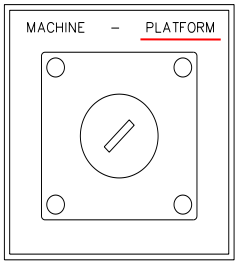


Press the key to change to the next page.

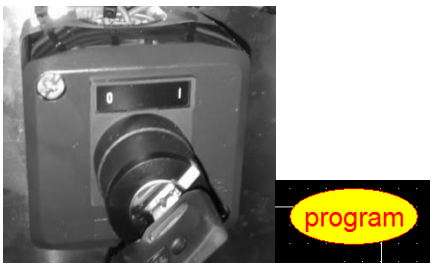


A. Pin programming mode

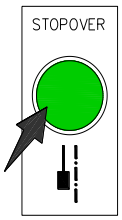
☞ Operator has to control the machine from the cradle control.



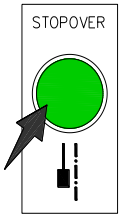
☞ Set the switch which is located inside the machine main control in 1 position. Thus, the program indicator will be flashing, indicating that pin programming mode is activated.



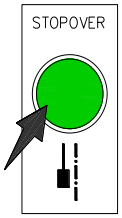
☞ Descend the platform to the first pin position and then press the *Stopover* Key to validate. At that time, *pin1-origin* will be green and the height from the origin will be 0 m. **The platform will never stop in this position.**



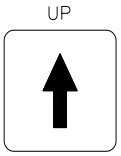
☞ Descend the platform to the second pin position and then press the *Stopover* Key again to validate. Then, *new pin* will be green.



☞ Repeat the last step for all pin locations. At the end of the drop, total pins will show the pins total number validated.



☞ Ascend the platform to the up limit switch, then system restarts the procedure to start a new drop, red circles will be flashing again.

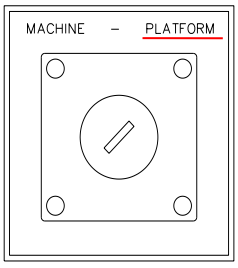


☞ Set the switch in 0 position.

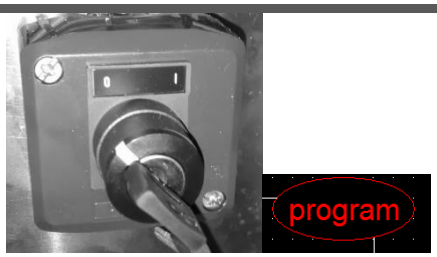


B. Intermediate stops mode

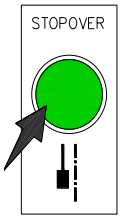
☞ Set the switch which is located inside the machine main control in 1 position. Thus, the program indicator will be flashing.



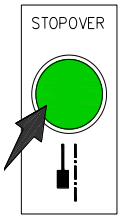
☞ Set the switch which is located inside the machine main control in 0 position. Thus, the program indicator will be red indicating that intermediate strops mode is activated.



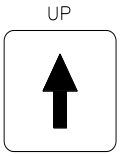
☞ Descend the platform to the first pin position and then press the *Stopover* Key to validate. At that time, *pin1-origin* will be green and the height from the origin will be 0 m. **The platform will never stop in this position.**



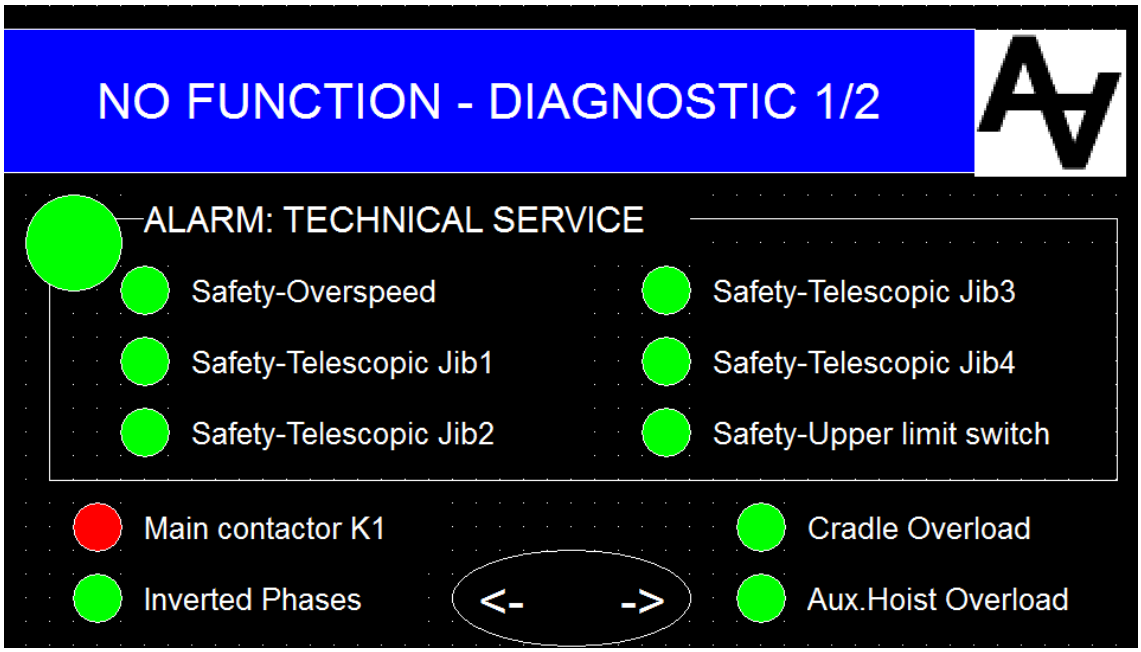
☞ Descend the platform to the second pin position and then press the *Stopover* Key again to back on track .



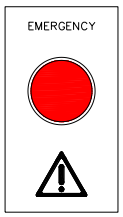
☞ Ascend the platform to the up limit switch, then system restarts the procedure to start a new drop.



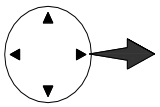
11.No function - Diagnostic 1/2.



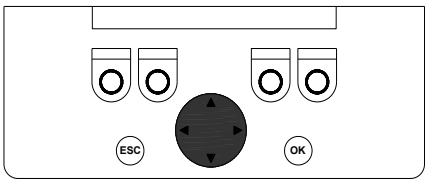
In case of breakdown, this page shows which safety device has tripped. Then, the main control emergency light will turn on or will be flashing, depending upon the breakdown case.



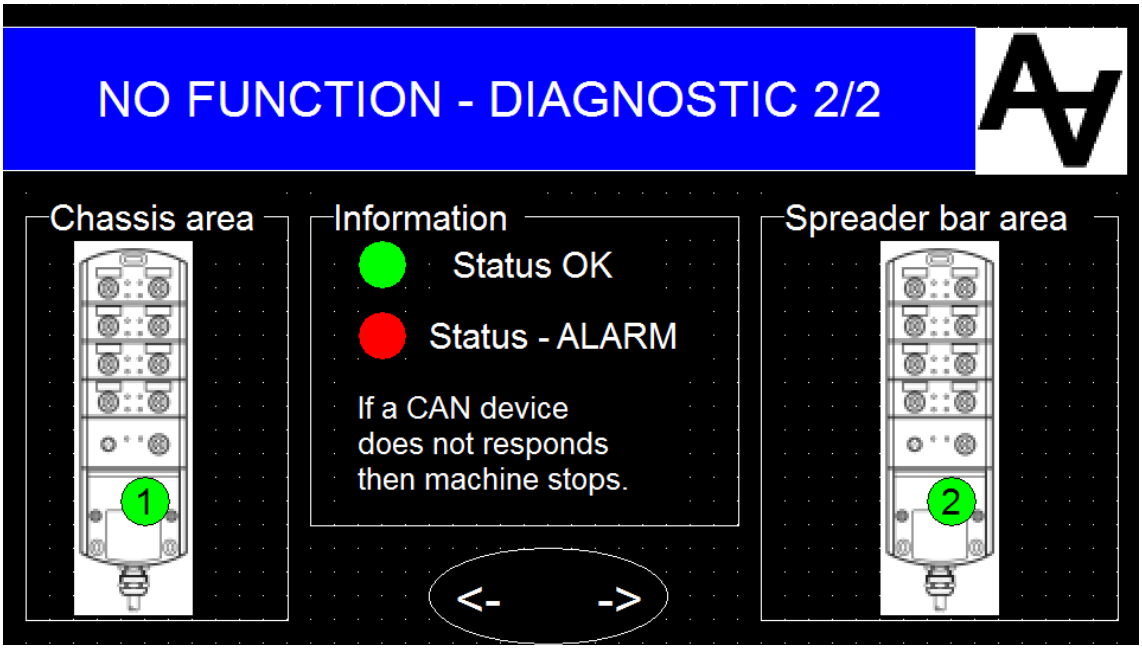
- **Fixed light:** Some safety device has been activated. Contact to technical service.
- **Flashing light of 1 second**: The building power phases are reversed or in bad conditions. Contact to technical service.
- **Flashing light of 3 second:** The rated load of the platform or of the hoist has been exceeded. All the machine's movements will be blocked except the descent of the platform, move the jib backward and close the telescopic jib.



Press the key to change to the next page.



12.No function - Diagnostic 2/2.



This page shows the Can devices status. In normal conditions indicator will be green and in case of breakdown will be red and besides the machine will stop.

3.5. Activation of the functions

Below, the conditions that must be complied **with to carry out each movement**, showing the stroke limit switches that must be activated or deactivated in each case are described.

Functions	Conditioning switches: Platform lose cable detector	Platform anti-collision detector	Platform overload	Platform lifting limit	Platform lowering limit	Left movement limit	Right movement limit	Left chassis turn limit	Right chassis turn limit	Left head turn limit	Right head turn limit	Forward folding down jib limit	Backward folding down jib limit	Telescopic jib retraction limit	Telescopic jib extension limit	Left middle gear turn limit	Right middle gear turn limit	Telescopic column lifting limit	Telescopic column lowering limit	Hoist lifting limit	Hoist overload	Winder travel limit	Parking turn limit
Lift platform			×	×																	×		
Lower platform	×	×			×																		
Left movement	×	×	×	✓	×	×														✓			×	×	
Right movement	×	×	×	✓	×		×													✓			×	×	
Left chassis turn	×	×	×	✓	×			×												✓			×		
Right chassis turn	×	×	×	✓	×				×											✓			×		
Left head turn	×	×	×		×					×										✓			×		
Right head turn	×	×	×		×						×									✓			×		
Forward folding down jib	×	×			×							×								✓					
Backward folding down jib			×										×							✓		×	×		
Retract telescopic job	×	×												×						✓					
Extend telescopic jib			×	×											×					✓		×	×		
Left middle gear turn	×	×	×		×											×				✓					
Right middle gear turn	×	×	×		×												×			✓					
Lift telescopic column			×	×																×			×		
Lower telescopic column	×	×			×							✓		✓							×				✓
Lift auxiliary hoist				×																		×	×		
Lower auxiliary hoist	×																								

✓ Stroke limit switch activated mechanically.

× Stroke limit switch deactivated mechanically.

3.6. Machine access points: ladders, platforms and safety anchor points



The operator must connect the snap hook of the safety harness to the anchor points located inside the platform before using it.



All the anchor points for the safety harness will be duly identified with pictograms.

If there are high points in the machine, they will have ladders and/or platforms for safe access.

3.7. Manual evacuation operation

3.7.1. Description of the service brake

The elevation assemblies of the machine will have a service brake. In service conditions, the brake is permanently supplied with electricity and kept open. The brake will come into action automatically in the following cases:

- Release of manual force applied to the motor lever of the elevation assembly.
- Loss of electrical supply to the power circuit.
- Loss of electrical power supply to the control operation circuit.

The service brake enables emergency evacuation operations, with controlled descent of the suspended platform, in a short period of time. The descent speed of the platform will be less than the activation speed of the secondary device (15 m/min).

The manual emergency evacuation operation may be necessary in the following cases:

- Loss of power supply to the machine.
- The operator does not feel well.
- Adverse weather conditions.

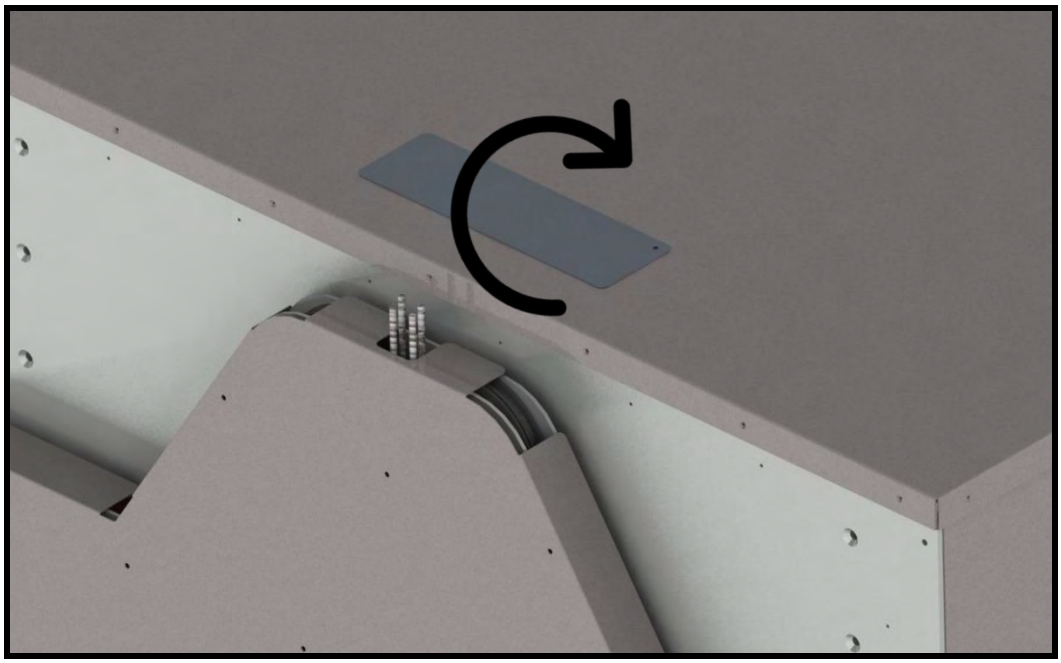
3.7.2. Manual evacuation operation

The evacuation operation will be carried out from the machine, when the workers are in the suspended platform, for this reason, it is indispensable to have a communication system between the person responsible for carrying out the operation and the operators in the suspended platform.

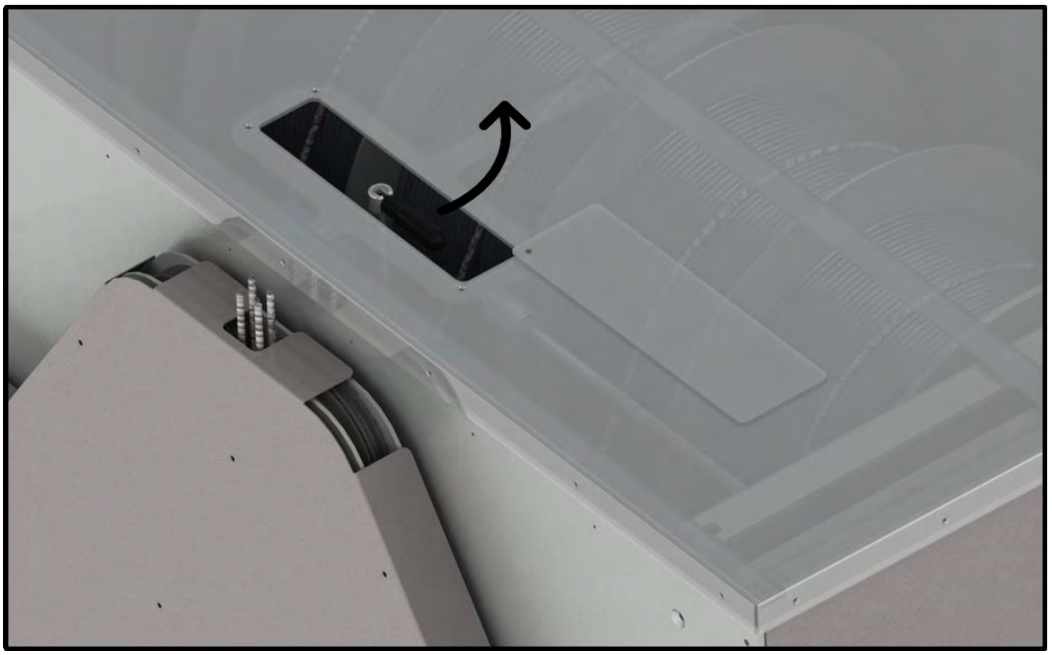
To evacuate the platform in the aforementioned cases, the following steps should be taken:

1. Disconnect the general power supply.
2. Locate the position of the elevation assembly on the machine.

3. Open the cover at the top of the elevation assembly, sliding it on its rotation point.

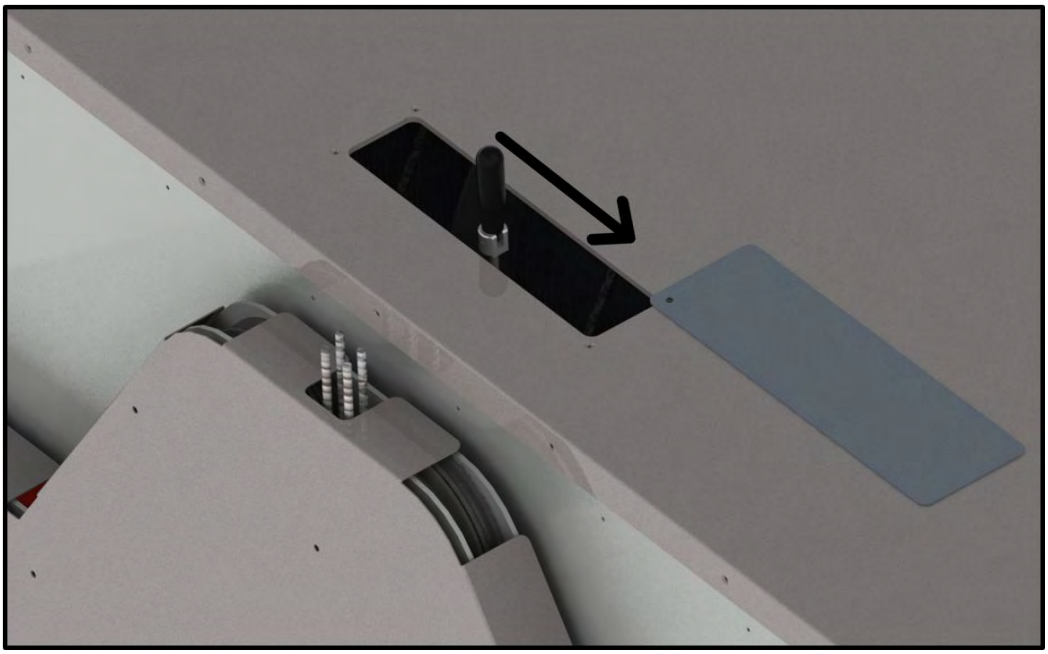


4. Move out the service brake handle.



Do not pull the service brake handle until the operators of the platform have been contacted.

5. Contact the operators.
6. Pull the handle to unlock the service brake.



On pulling the handle to activate the service brake, the platform will descend at a controlled speed. Before carrying out this operation, the operators of the platform must be contacted and they should evaluate if they have a close evacuation point and that there are no obstacles that could collide with the platform during the descent.

3.8. Residual risks

Cause	Effect	Measure
Movement of the machine.	Risk of collision for people.	Acoustic movement warning.
Movement of the machine.	Risk of trapping for people due to insufficient space between the machine and certain parts of the building.	Signpost the areas with risk of trapping.
Moving the platform without operators or maintenance personnel.	Risk of hitting the facade of the building with the suspended platform.	Carry out the movements of the machine with an operator or maintenance personnel inside the platform.

4. Safety

4.1. Safety regulations for using the machine

This machine should only be used by authorised competent personnel that have received training for using it safely.

It is absolutely forbidden to use the machine as a crane.

It is absolutely forbidden to use this machine in adverse weather conditions such as presence of snow or ice, electric storms, heavy rain, extreme temperatures (below -10ºC and above 55ºC) or with winds exceeding 51 km/h.

The work area must be duly signposted.

Check the conditions of the machine before every use.

If the machine has retaining systems for securing to the facade, they must be used.

The machine must not be used in conditions of insufficient lighting.

Never enter the platform without previously removing the key from the control panel of the machine chassis.

The platform operators must enter or exit it using the areas supplied for this purpose, the platform must be on a firm surface, in whatever location it is. Never do this with the platform suspended.

Do not exceed the number of simultaneous operators inside the platform, which is indicated on the specifications plate inside the platform and in section 8 of the manual.

When finishing the work with the machine, take the machine to its parking position. Place the operation key in “OFF” position and disconnect the machine from the power supply.

When the machine is parked, ensure it is immobilised. (In some models, there are additional securing systems).

The person responsible for the machine must ensure that it cannot be used improperly or by non-authorised personnel.

In case of an incident, notify the maintenance personnel and wait for them to arrive.

It is forbidden to control the machine form the control panel of the main chassis while there are people on the platform, except in cases of emergency evacuation andalways informing the people on the suspended platform.

Atech will accept no liability for damage, breakdowns or malfunction resulting from intervention, manipulation, modification or replacement of any component of the machine by personnel not authorised by **Atech**, and this will render the commitments in the and obligations in the guarantee void.

The machine is supplied to safely carry out cleaning and light maintenance work on facades of buildings. The machine must not under any circumstance be used for any task not contemplated in the Instruction Manual.

4.2. Safety devices: safety limit switches and mechanical stops

The control system of the **Atech** machine complies with ISO-13849-1 standard.

Emergency stop

The machine has an emergency button on each control point and in the locations where an emergency stop may be required. The emergency stop system is operational from any control point of the machine.



There are two types of end of travel safety switches:

- Elements limiting the function (see section 3 of the manual).

- Elements limiting maximum movement of the function.

4.2.1. Safety elements limiting the function

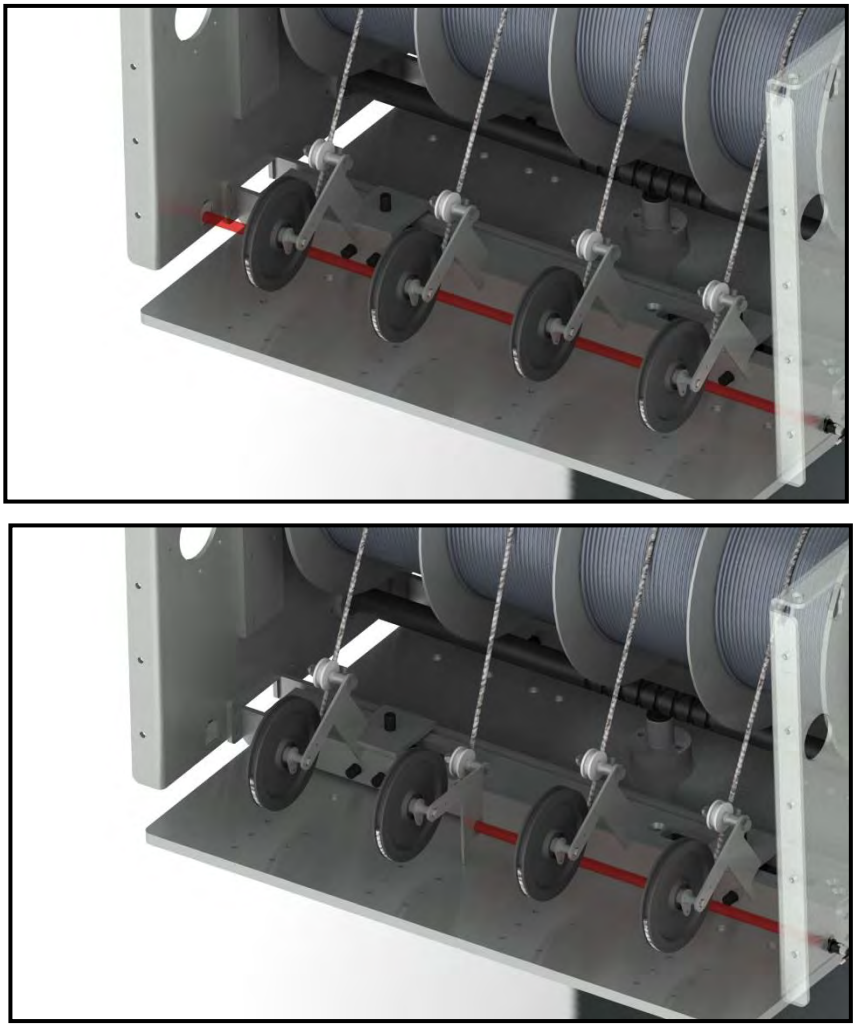
Stroke limit switch detecting suspended platform overload

The suspended platform is fitted with overload detectors set for the nominal admissible load of people, tools and materials. The limit of activation is defined in 1.25 RL of the platform. (See picture of the device in section 7.1. of the manual (4)).

Activation of “overload” will stop all movements of the machine except descent until the load is removed.

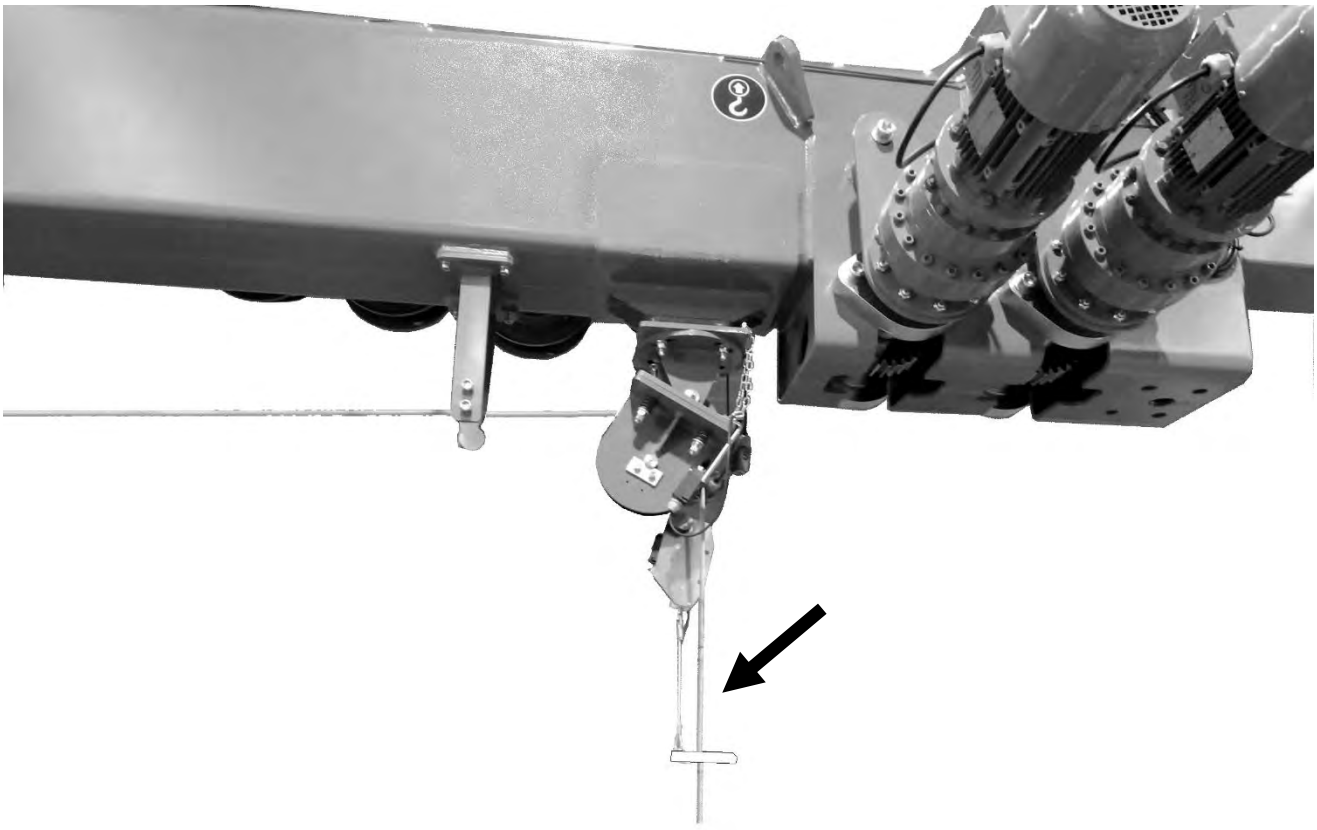
Stroke limit switch detecting slack cable

The elevation assembly has a lack of load detection system, that locks all the movements of the machine except lifting the platform.



Stroke limit switch detecting auxiliary hoist overload (optional in some machines)

The auxiliary hoist is equipped with an overload detector that impedes excessive load materials, stopping elevation and only allowing lowering.



Stroke limit switch detecting platform collision (descent)

If any obstacles are found in the descent of the platform, the anti-collision detector will stop the following movements: descent, movement forward of jib, travel, turning of machine, turning of head and folding of telescopic jib. This function enables maintenance of stability of the suspended platform. (See picture of the device in section 7.1. of this manual (2)).

Stroke limit switch detecting platform collision (ascent) (according to model)

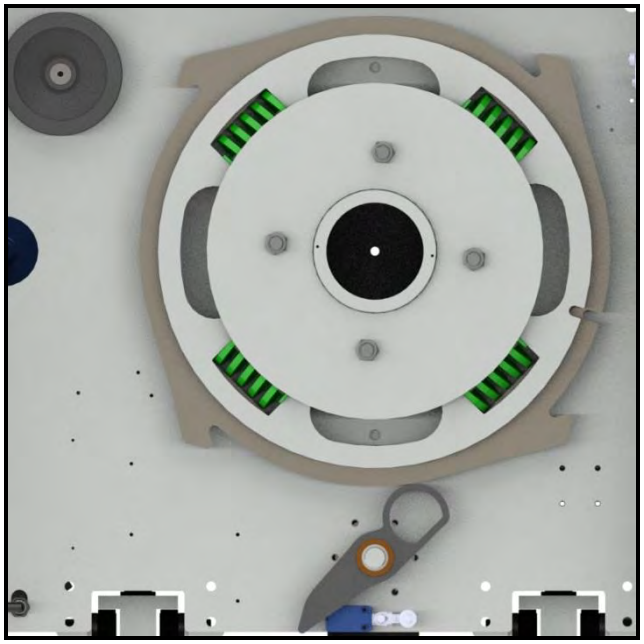
If any obstacles are found in the ascent of the platform, the anti-collision detector will stop the ascent movement of the platform.

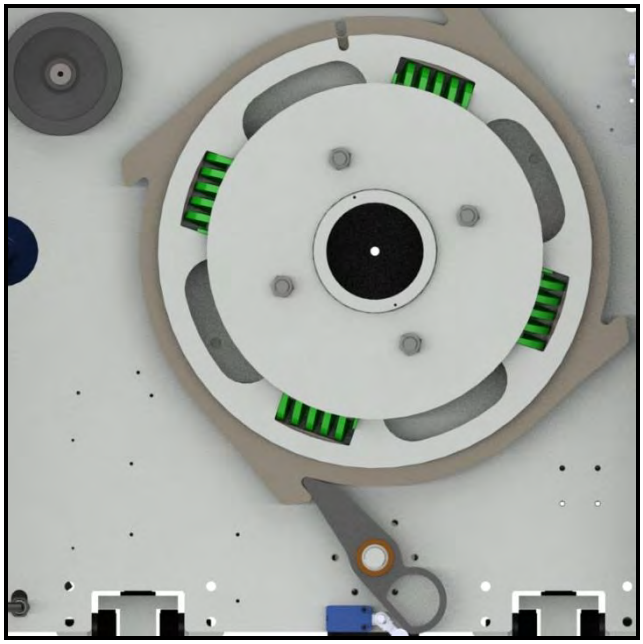
Stroke limit switch detecting synchronisation chain breakage

The elevation assembly includes a synchronisation chain for winding the suspension cables with a stroke limit switch that detects its detensioning or breakage, totally locking the machine. (See picture of the device in section 7.1. of the manual (13)).

Stroke limit switch detecting the secondary brake of the elevation assembly

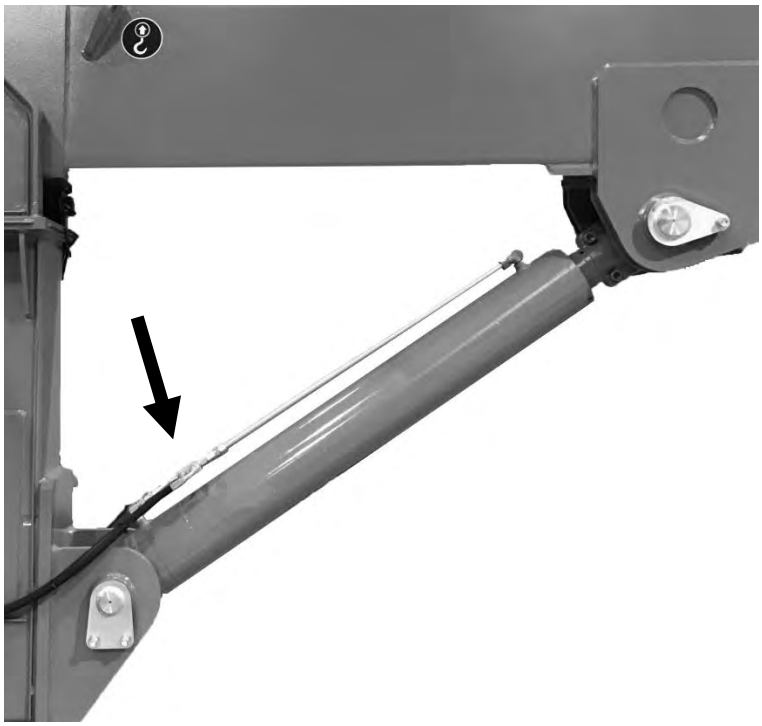
In case of excessive descent speed of the platform, the secondary emergency brake will come into action. Once activated, the machine will be locked mechanically as well as electrically.





Piloted valve/parachute in hydraulic cylinders (according to model)

In case of sudden loss of pressure, the hydraulic cylinders have a valve that immobilises the shaft until it is examined by a technician.



Stroke limit switch detecting the retaining points (facade guiding systems)

For buildings more than 40 m high, the machine has a retaining guide system to secure the platform to the facade and avoid swinging movements caused by the wind. (See picture of the device in section 7.1. of the manual (3)).

Stroke switch detecting limit of electric cable winding

The electric cable winder has a detector that limits the complete unwinding of the cable, stopping the movement of the machine. For reactivation, connect the machine to the closest power socket.



A competent person must guarantee the integrity of all the safety functions whenever the gondola is put into service.

4.2.2. Safety elements limiting movement of the function

Safety limit switch or mechanical stop

All movements are limited by a safety limit switch or a mechanical safety stop, that stops movement in case of failure of the service detector.

LIFTING: Lifting or lowering safety limit switch.

MOVEMENT: Mechanical safety stop in open circuit runways.

CHASSIS SLEWING: Safety limit switch turning left or right.

HEAD SLEWING: Safety limit switch turning left or right.

AUXILIARY GEAR SLEWING: Safety limit switch turning left or right.

TELESCOPIC JIB: Safety limit switch moving outwards and inwards. **Atech** additionally incorporates a mechanical stop that increases redundancy and safety of the system.

JIB FOLDING DOWN: A mechanical stop consisting of an exterior metal body of the hydraulic cylinder that limits the folding movement.

TELESCOPIC COLUMN: Upper and lower mechanical stop on the structure of the column plus the redundancy of the exterior metal body of the cylinders.

AUXILIARY LOAD HOIST: This device only has service limit switches.

4.3. Description of safety functions

Representation of safety functions of the gondola according to EN ISO 12100-1 standard:

CAUSE	EFFECT	SAFETY FUNCTION
UNCONTROLLED MOVEMENT DUE TO ELECTRICAL FAILURE.	MOVEMENT CONTINUES UNTIL CONTACT WITH THE SAFETY LIMIT SWITCH OR MECHANICAL STOP.	EMERGENCY STOP.
PLATFORM OVERLOAD.	MAXIMUM ADMISSIBLE LOAD ON THE PLATFORM HAS BEEN EXCEEDED.	STROKE LIMIT SWITCH DETECTING PLATFORM OVERLOAD.
UNLEVELLED SUSPENDED PLATFORM.	INCORRECT WINDING OF SUSPENSION CABLES ON ELEVATION SYSTEM DRUM.	STROKE LIMIT SWITCH DETECTING SLACK CABLE.
AUXILIARY LOAD HOIST OVERLOAD.	MAXIMUM ADMISSIBLE LOAD ON THE AUXILIARY LOAD HOIST HAS BEEN EXCEEDED.	STROKE LIMIT SWITCH DETECTING AUXILIARY LOAD HOIST OVERLOAD.
COLLISION WITH OBSTACLES DURING VERTICAL DESCENT OF SUSPENDED PLATFORM.	SUSPENDED PLATFORM NOT LEVEL RISKING OVERTURNING DUE TO AN OBSTACLE WHEN DESCENDING.	LOWER ANTI-COLLISION SAFETY LIMIT SWITCH ON THE SUSPENDED PLATFORM.
COLLISION WITH OBSTACLES DURING VERTICAL ASCENT OF SUSPENDED PLATFORM.	SUSPENDED PLATFORM NOT LEVEL RISKING OVERTURNING DUE TO AN OBSTACLE WHEN LIFTING.	UPPER ANTI-COLLISION SAFETY LIMIT SWITCH ON THE SUSPENDED PLATFORM.
FAILURE OF IN-SERVICE MOVEMENT LIMITER.	ACTIVATION OF SAFETY LIMIT SWITCH OR MECHANICAL STOP.	SAFETY LIMIT SWITCH.
BREAKDOWN OF ELEVATION SYSTEM	PLATFORM STOPS ON THE FACADE.	MANUAL OPENING OF THE SERVICE BRAKE AND

GEARED MOTOR.		CONTROLLED DESCENT OF THE PLATFORM.
FLUID LEAK IN HYDRAULIC CIRCUIT.	MOVEMENT OF HYDRAULIC CYLINDER LOCKED.	AUTOMATIC ACTIVATION OF SAFETY PILOTED VALVE.
NON-DISCONNECTION OF RETAINING SYSTEM DURING ASCENT OF PLATFORM.	PLATFORM NOT LEVEL DUE TO RESISTANCE OF THE RETAINING SYSTEM THAT IMPEDES REGULAR ASCENT.	STROKE LIMIT SWITCH DETECTING THE RETAINING POINTS OF THE FACADE GUIDING SYSTEM.
INTERRUPTION OF ELECTRICAL POWER SUPPLY TO MACHINE.	MACHINE STOPPED OUT OF SERVICE.	END STROKE SWITCH DETECTING LIMIT FOR POWER SUPPLY CABLE WINDER.
PHASE REVERSAL IN POWER SUPPLY CABLE.	WRONG DIRECTION OF ROTATION OF MOTORS OR STOPPAGE.	CONTROLLER OF THREE-PHASE POWER SUPPLY SYSTEM.
SYNCHRONISATION CHAIN BROKEN.	MALADJUSTMENT OF SYSTEM FOR WINDING SUSPENSION CABLES ON DRUM.	STROKE LIMIT SWITCH DETECTING SYNCHRONISATION CHAIN BREAKAGE.

5. Secondary brake

5.1. Description of the secondary brake

The elevation assembly of the drum has an anti-fall mechanical device. The system is activated automatically in case of excessive speed in the descent of the platform (more than 15 m/min). If the safety brake is activated it should only be reset by authorised technical personnel. It will be necessary to study the cause for activation of the device and check the conditions of all the components of the elevation assembly before using the machine again.

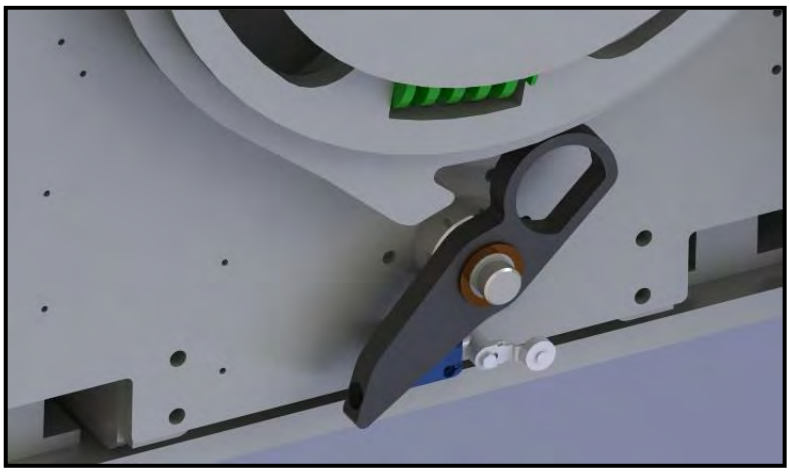
The anti-fall device is composed of a brake disk and an interlocking cam.

- Brake disk:



The brake disk is attached to the cable winding drum, from which the platform is suspended.

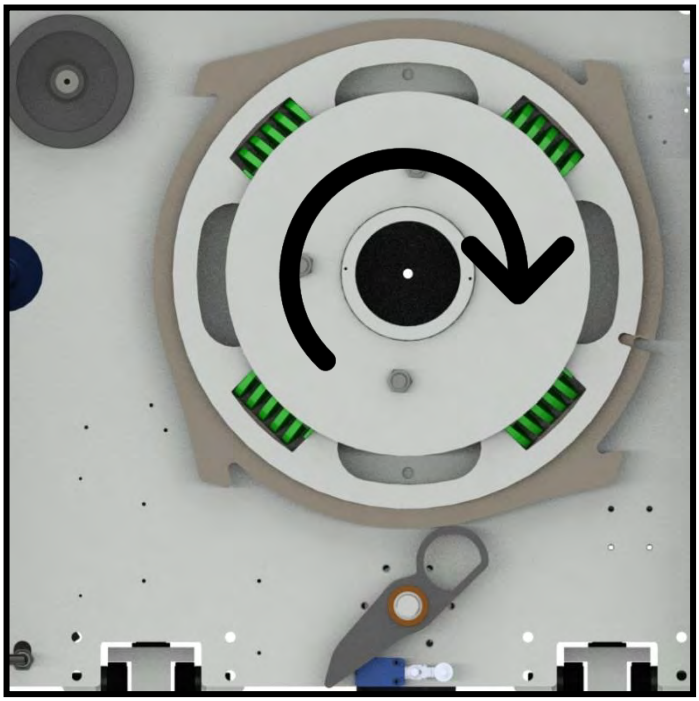
- Interlocking cam:



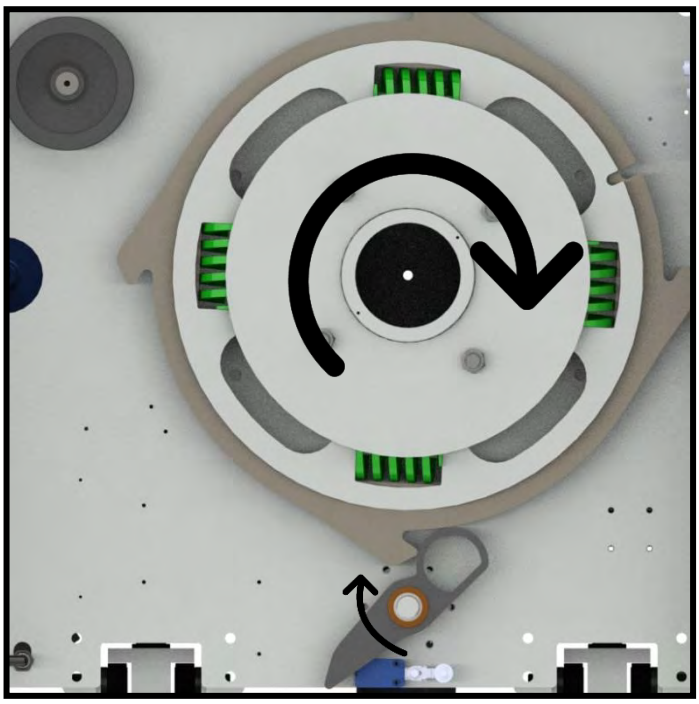
By means of a calibrated monitoring system, the interlocking cam detects an increased nominal speed and locks the brake disk on the cable winding drum occurring immediate stoppage of the suspended platform.

Operation of the device in case of excessive speed:

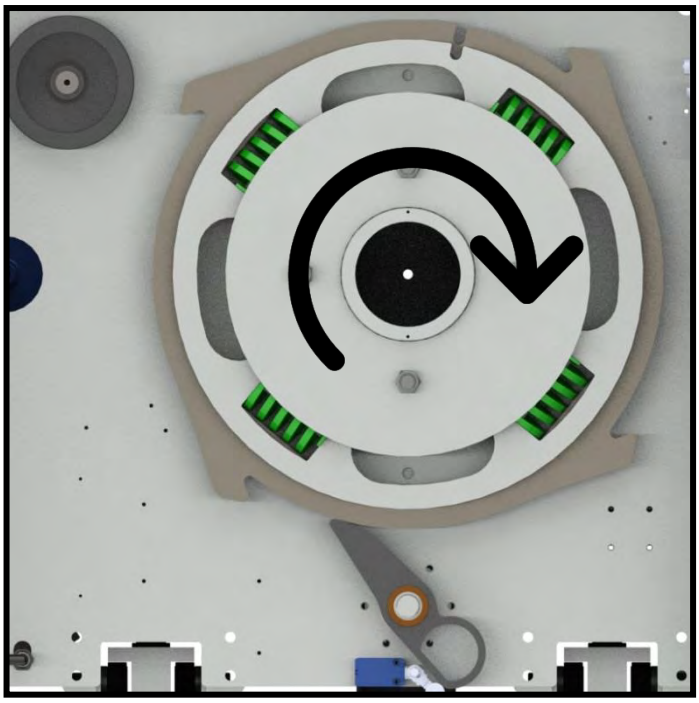
1. The interlocking cam follows the perimeter of the brake disk, oscillating regularly due to the geometry of the component.



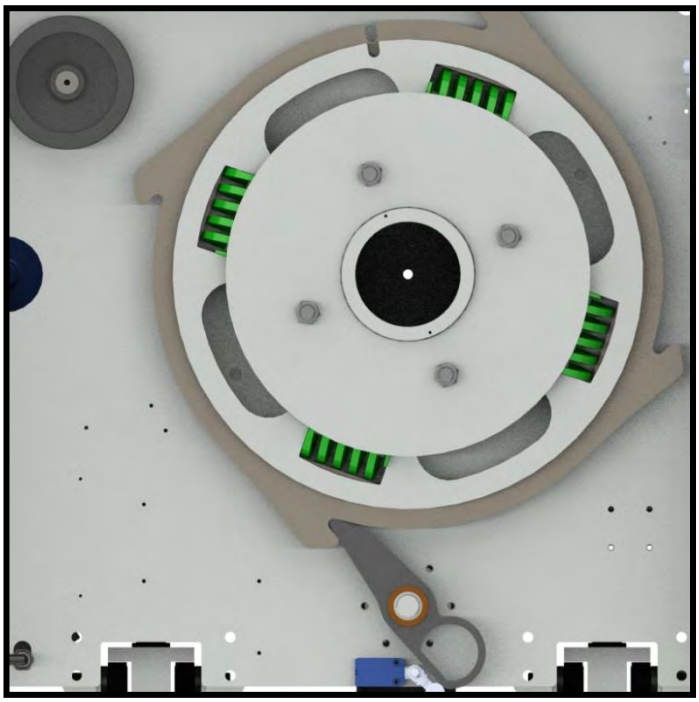
2. An increased speed of the drum, causes a variation of oscillation speed of the interlock cam.



3. The cam will enter one of the interlock points of the brake disk.



4. The interlock of the cam onto the brake disk impedes its rotation and completely locks the cable winding drum for the suspended platform.



The secondary brake will be activated automatically in a situation of excessive speed, even without electrical power. When, on platform descent, the drum rotates faster than 15 m/min, there is an increased inertia of rotation of the brake disk and the cam will lock.

The brake disk has four springs that will produce progressive deceleration as well as protecting the components of the power transmission and motor assembly.

Once the secondary brake has been activated, the electrical detector of the emergency brake, power supply is cut and the machine is completely out of service. All personnel must evacuate the platform using means apart from the machine.

The secondary brake cannot be reset manually if there is a suspended load.

The secondary brake device has been designed to avoid damage to the elevation assembly, allowing its reactivation after being triggered due to excessive speed, and maintaining the elevation system completely operational for a new service.

Reactivation of the brake must always be done by trained technical personnel authorised by the manufacturer, who will study the possible cause of the automatic activation of the brake and correct conditions of the components of the elevation assembly.

5.2. Causes of activation of the secondary brake

Warning!

These instructions must only be carried out by technical personnel trained and authorised by **Atech**.

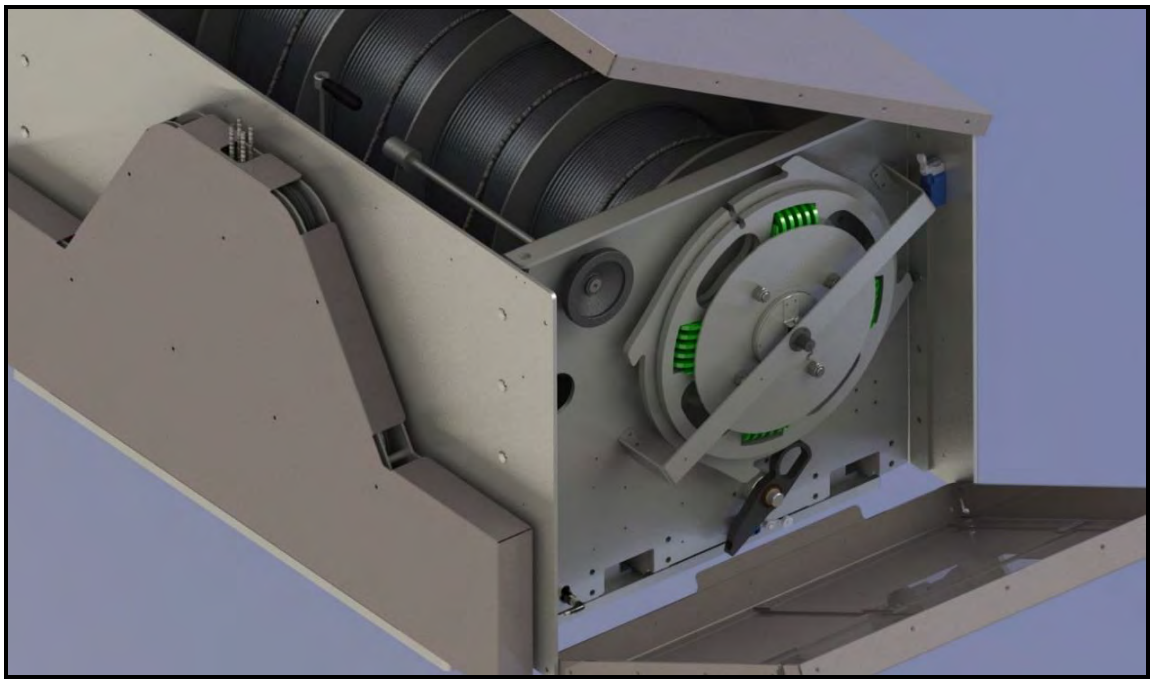
Under normal working conditions, the secondary brake should not be activated during the service life of the machine, if there is an activation, its causes must be carefully analysed before putting the machine back into service.

In case of activation of the secondary brake, the machine will be out of service and the technical service signal will be displayed on the control panel.

Then you should disconnect the machine from the electrical power supply, switching it off from the control panel and disconnecting it from the building power socket.

To check that the secondary brake has been activated, locate the elevation assembly in the machine and check the position of the interlocking cam on the brake disk.

The secondary brake device is on one of the sides of the elevation assembly, to access it, lift the upper cover and fold down the side panel.



Possible causes of activation of the secondary brake:

1- A problem in the transmission system.

A failure in the transmission system, due to breakage of a component or mishandling. The transmission components are in the elevation assembly, on the opposite side to the secondary brake. To check the conditions of the transmission system, fold down the side panel that protects it and check:

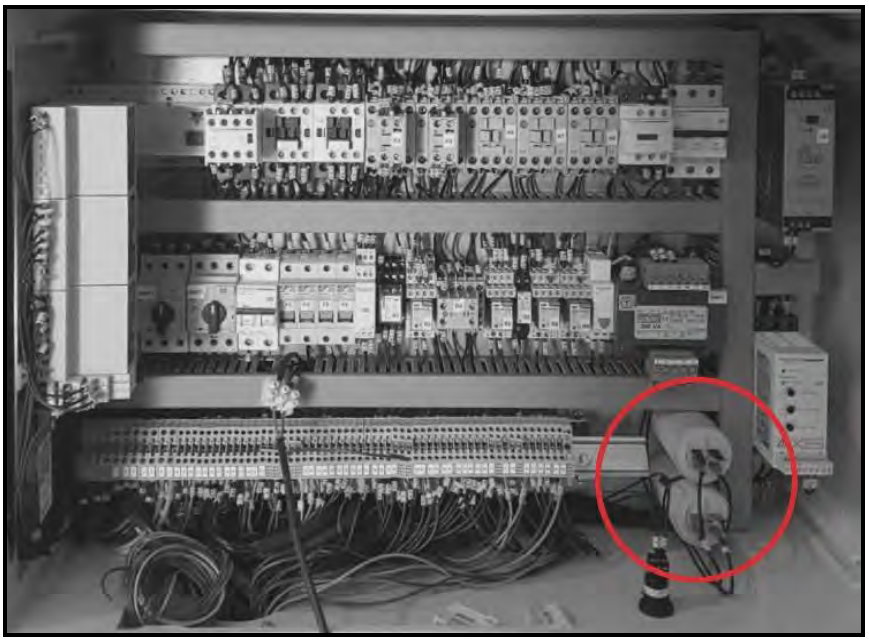
- That the motor and the gearbox are perfectly fitted and the transmission shaft joining them is not damaged.

- That the shafts and fasteners securing the transmission gears are in good conditions.

- That the transmission gears are in good conditions and properly adjusted.

2- Problem in the service brake and controlled lowering device.

On the main electrical panel, the machine incorporates a device for controlled descent in case of unlocking of the service brake.



This device enables the platform to descend at a moderate speed if it is necessary to evacuate, using the service brake. The platform will descend at a speed of less than 15 m/min, avoiding the action of the secondary brake. If, on unlocking the service brake manually or if it stops working due to breakdown, the secondary brake is triggered, there may be a failure in the controlled descent device.

The controlled descent device comprises a group of condensers located inside the main electrical panel of the machine. The wiring and connections to the group of condensers indicated on the picture should be checked.

Activation of the secondary brake implies the existence of a failed component. The machine must not be used or the system reactivated without first having evacuated the operators from the suspended platform.

Activation of the secondary brake means that all the components related to the possible cause of the brake and any components that could have been damaged after the activation of the device must be carefully checked. This check-up should be carried out taking all necessary precautions. Never manipulate the components of the elevation assembly to the control panel without having disconnected the machine.

Especially avoid manipulating the transmission system and the brake system with a suspended load without having the necessary tools, so as to avoid possible entrapments.

5.3. Operation for resetting the secondary brake

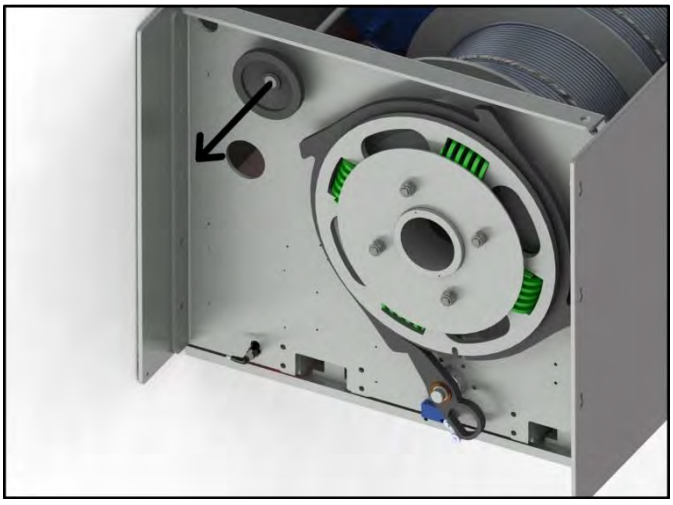
Warning!

These instructions must only be performed by technical personnel trained and authorised by the manufacturer.

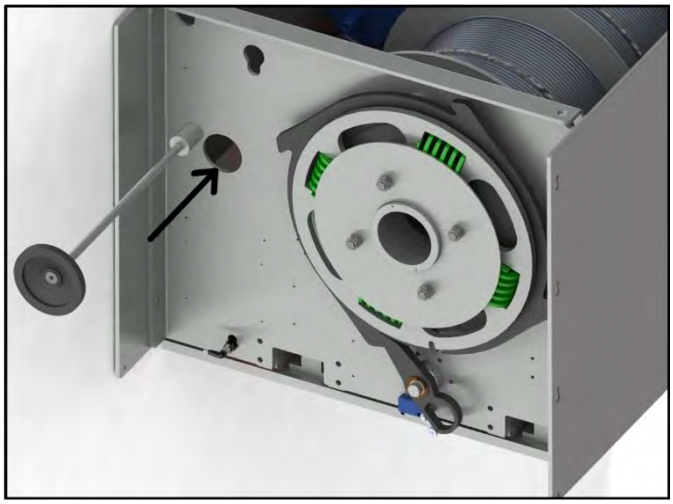
Before reactivating the secondary brake and complementing the revision of the elements described in section 5.2 that could be directly involved in the activation of the device, it is necessary to carry out a visual inspection of all the other elements of the elevation assembly, paying special attention to the transmission chain, shafts and fasteners of the drum cable winding synchronisation system, the intermediate stops of the platform and the horizontal movement of the elevation assembly.

Once all the components have been checked, reactivate emergency the brake following the steps given below:

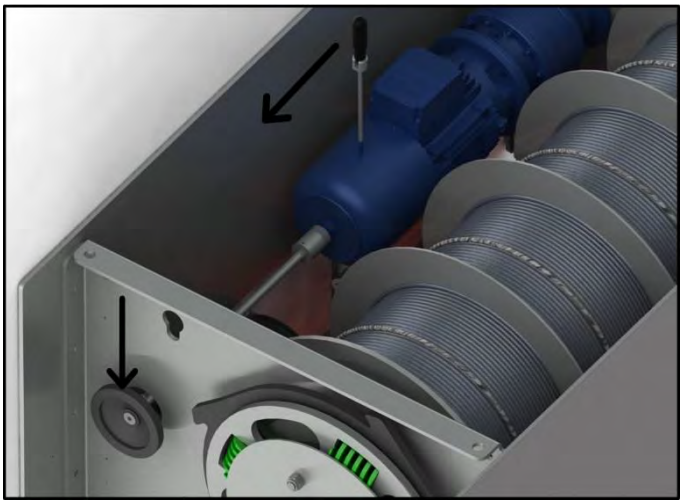
1- Remove the emergency wheel, located beside the secondary brake, by lifting and pulling it out.



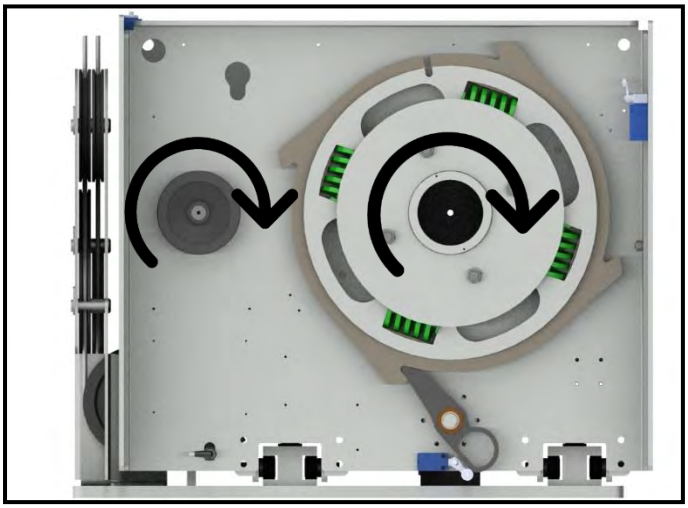
2- Fit the emergency wheel to the motor output shaft through the orifice on the chassis of the elevation assembly.



3- While holding the emergency wheel, pull the motor lever, to unlock the service brake. Whenever you wish to carry out any action with the emergency wheel, it is necessary to pull the motor lever and keep it pulled, otherwise, the service brake will impede the manual rotation of the wheel.



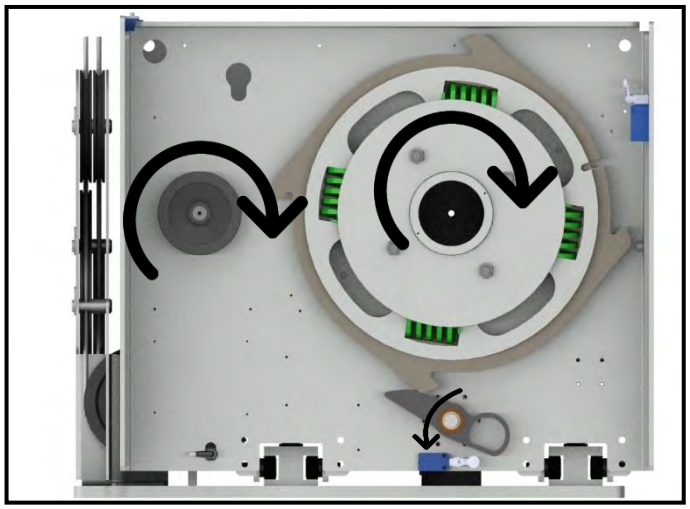
4- With the service brake unlocked, turn the emergency wheel clockwise to turn the brake disk. When you do this, the platform will also rise.



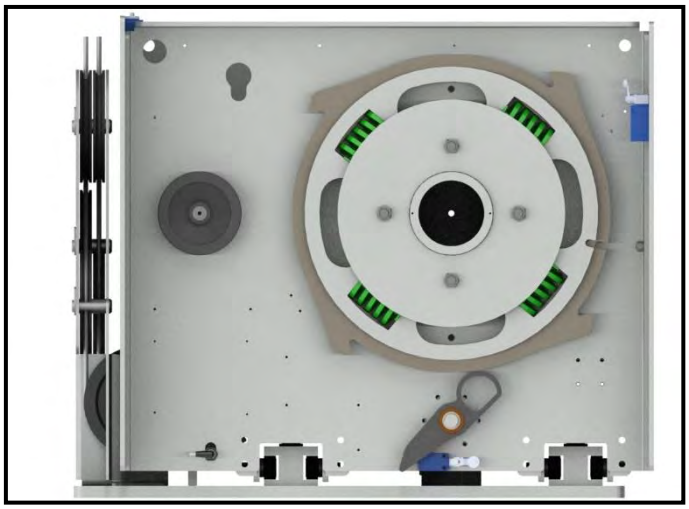
If at any time you release the wheel, it is necessary to stop pulling the lever, so that the suspended load does not make the drum turn in the undesired direction, in this case, carry out the previous action again.

The end of the cam contains a magnet that stops it from returning to its working position. Under no circumstances should this action be forced manually, as there is a high risk of trapping. To release it, continue turning the wheel to the right until the cam returns to its working position expelled by the projection in the brake disk.

5- Turning the emergency wheel until the brake disk makes a quarter of a turn, the cam will meet the next projection of the disk that will return it to its normal working position and will deactivate the safety limit switch.



6- Once the cam is in its working position, stop pulling the motor brake lever and return the emergency wheel to its original support.



To put the machine into service again, it is necessary to refit the side covers and the upper cover. Finally, reconnect the machine to the electrical power and put it into action using the main control panel.

6. Installation and assembly

Before using the machine for the first time, the dimensions should be checked using the approval plans (see annexe 1) and correct installation of the machine components verified.

- ✓ The dimensions of the parapet of the building correspond to those on the approval plan.
- ✓ The type of profile, distance between the rail tracks and rail supports correspond to the approval plan.
- ✓ The type of element securing the rail to the building is correctly fitted and corresponds to the approval plan.
- ✓ The position, number and conditions of the power sockets in the building coincide with those indicated on the approval plan.
- ✓ The electrical voltage and frequency coincide with those indicated in section 8.5 of the machine manual.
- ✓ The minimum and maximum range positions and parking coincide with those described on the approval plan.
- ✓ The steel cable is correctly wound through the pulleys.
- ✓ The torque tightness of the slewing gear and structural elements is compliant with indications in the machine manual.
- ✓ The type and number of facade guides (lanyards) have been checked.
- ✓ There is a wheel for emergency manual evacuation.
- ✓ Check alignment and tension of the steel cables of the elevation assembly and the hoist, descending to the lower level, ensuring the necessary length safeguard and levelling of the cables that will ensure stability of the suspended platform.
- ✓ Carry out the horizontal movement of the machine along the whole runway, checking that there are no obstacles in any critical point of the circuit.

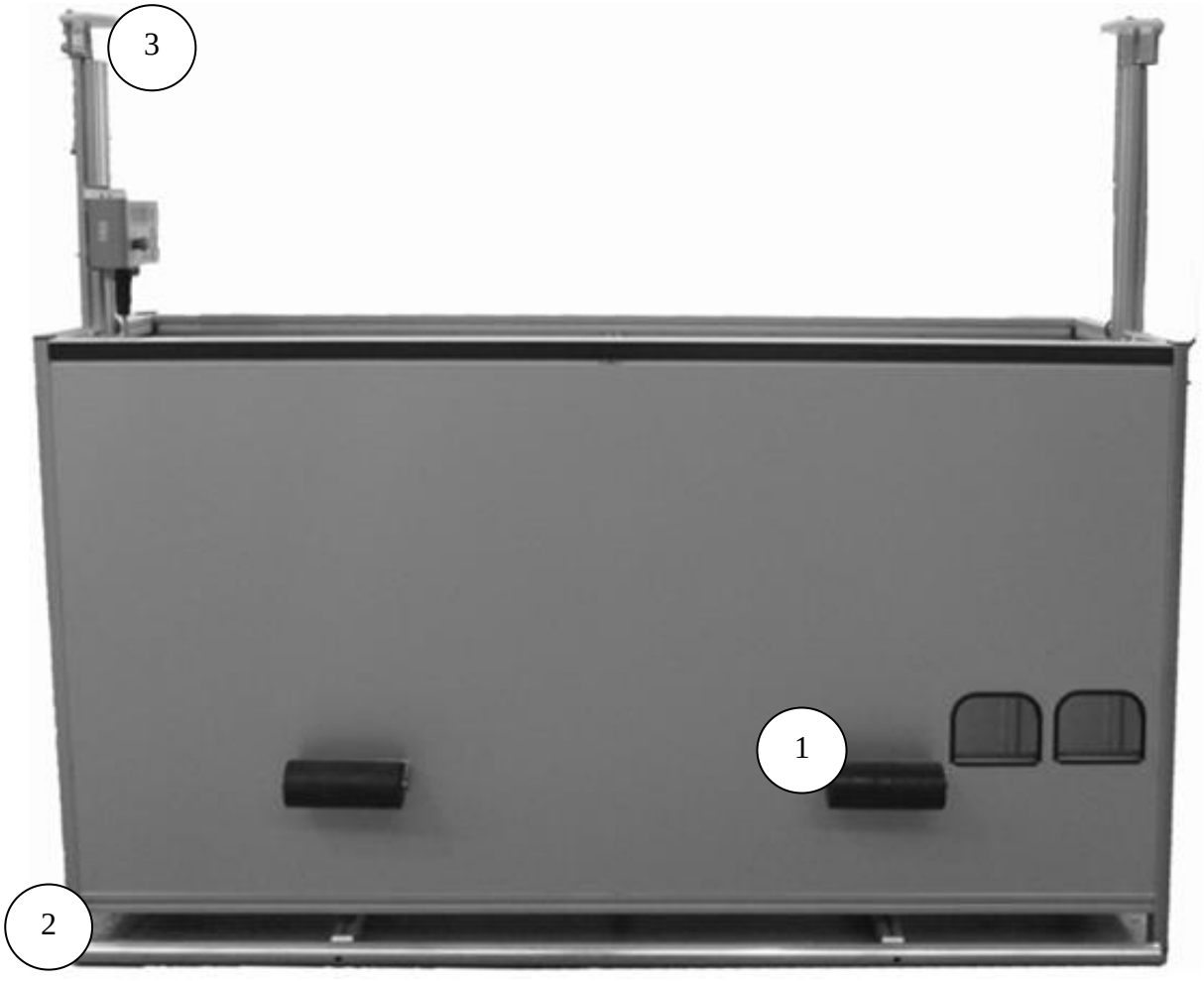
7. Maintenance

The preventive maintenance operations must be carried out before each use, or once a year if the machine is used infrequently. **Atech's** maintenance programme recommends carrying out maintenance of the installation every three months in the case of machines in regular use.

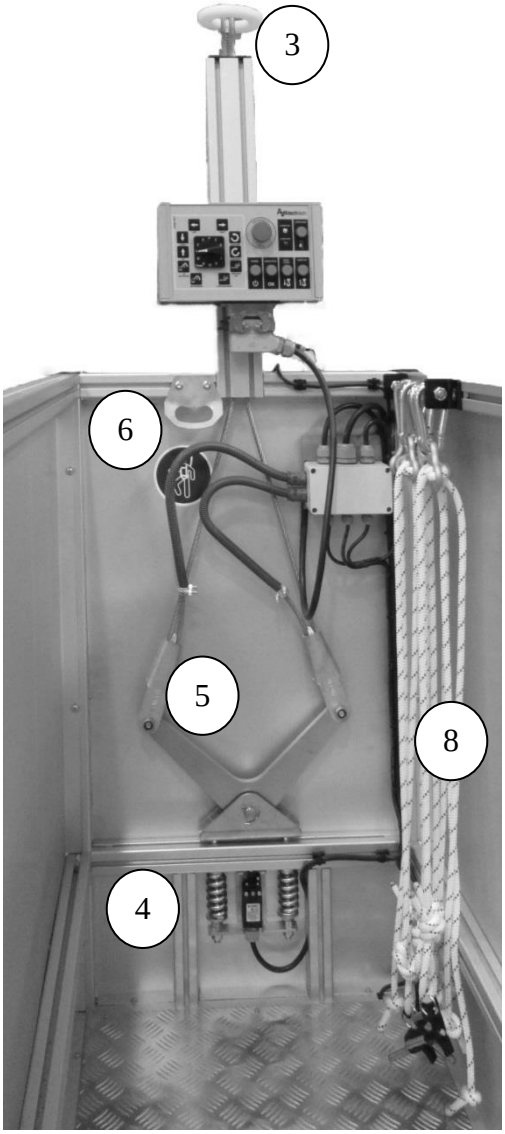
Maintenance operations on the parts and components of the machine:

7.1. Suspended platform

- 1.1. Check the general conditions of the platform. Check welds, coatings and mechanisms.
- 1.2. Check the conditions of the rollers protecting the facade. (1)
- 1.3. Check the general conditions and operation of the anti-collision device. (2)
- 1.4. Clean and grease the joints of moving points: upper anti-collision device, lower anti-collision device and platform levelling device.
- 1.5. General cleanliness of the platform.



- 1.6. Check the general conditions and operation of the overload system. (4)
- 1.7. Check the anchoring points of the suspension cables (supports, wedge terminals and thimbles). (5)
- 1.8. Check the general conditions of the warning and safety notices. (6)
- 1.9. Check the general conditions and operation of the continuous guide system on the facade (softrope). (7)
- 1.10. Check that the drainage holes are not obstructed.
- 1.11. Check the general conditions and operation of the guides securing to the facade (lanyards). (8)
- 1.12. Check the conditions of the anchor points of the safety harness. (6)

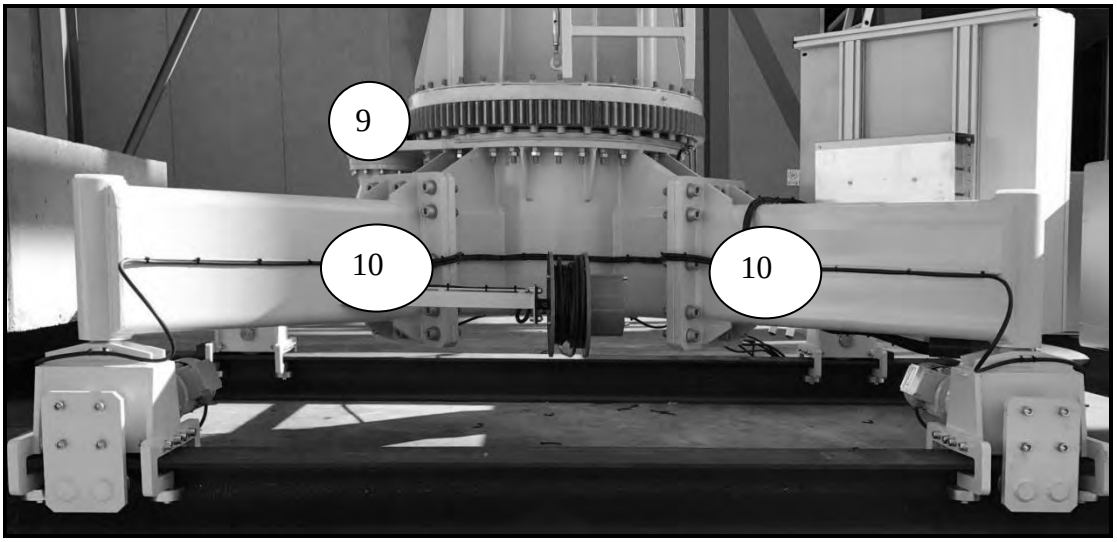




7.2. Metallic structure

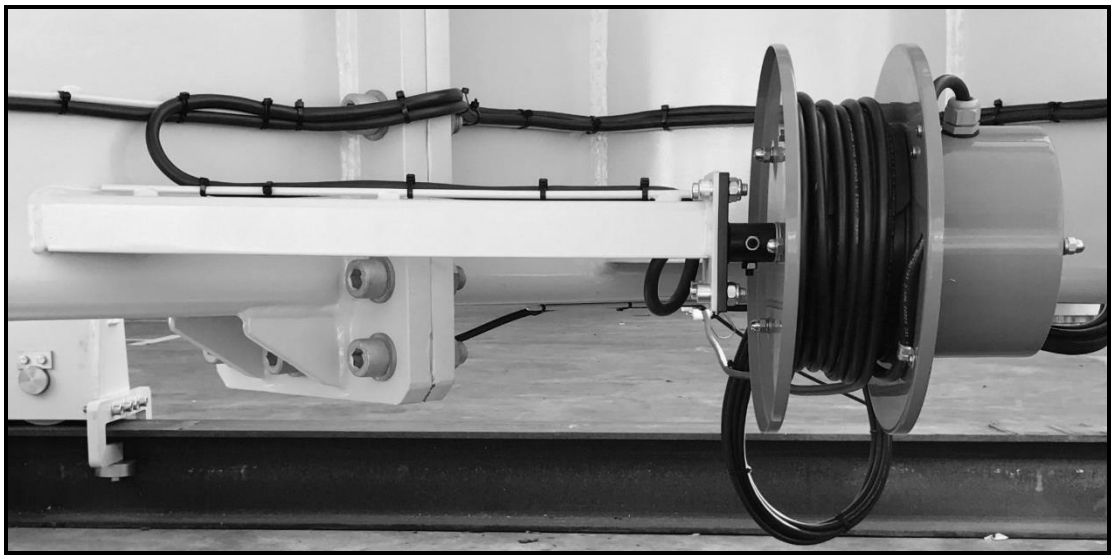
7.2.1. Lower chassis

- 2.1.1. Check the general conditions of chassis. Check welds, coatings and mechanisms.
- 2.1.2. Check that the torque tightness of the slewing gear and the joints with the legs is adequate. (See table below).
- 2.1.3. Check the conditions and tightness of fasteners.
- 2.1.4. Clean and grease bearings and joints of moving points.
- 2.1.5. General cleanliness of chassis.

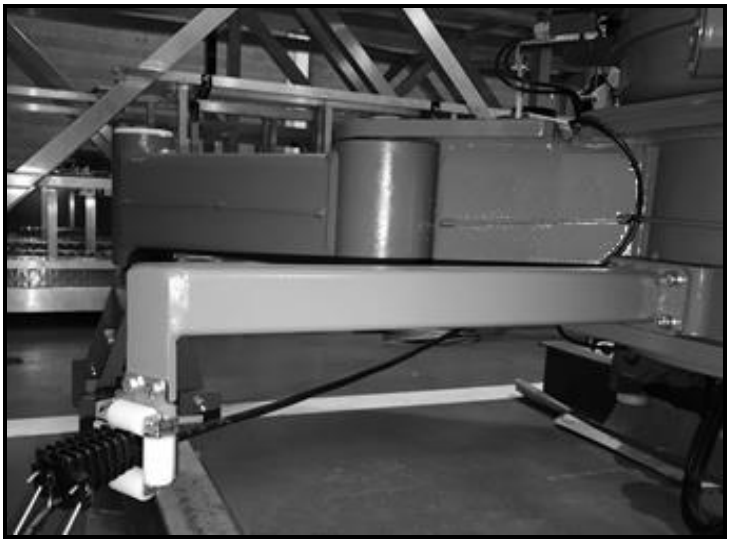


	Fasteners	Torque tightness (Nm)
Slewing gear of the head (12)	M16 CAL.8.8	193
Slewing gear of the lower chassis (9)	M20 CAL.12.9	648
Leg joints of the lower chassis (10)	M27 CAL.8.8	990
Column joint with jib	M24 CAL.12.9	1116

- 2.1.6. Check the general conditions of the power supply cable winder support.



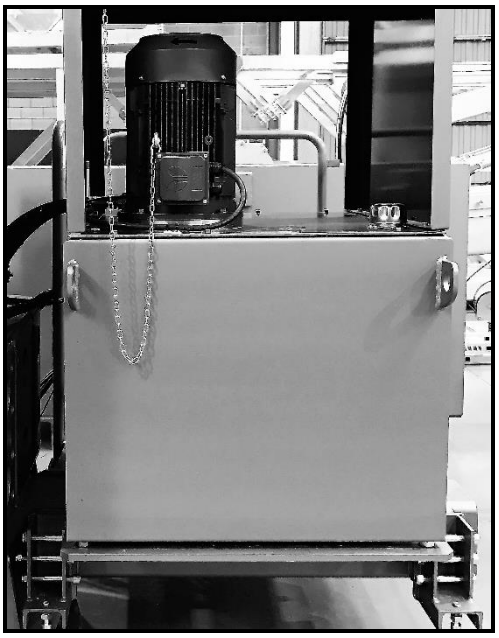
- 2.1.7. Check the general conditions and operation of the guide support of the power cable.
- 2.1.8. Check the general conditions of the power supply cable.



- 2.1.9. Check the general conditions of the electrical panel support.



- 2.1.10. Check the general conditions of the hydraulic assembly support.



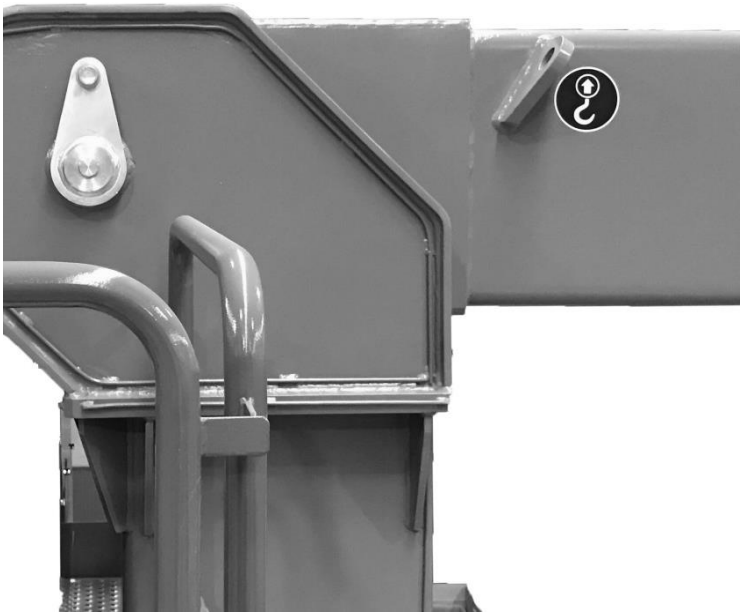
7.2.2. Column

- 2.2.1. Check the general conditions of the column. Check welds, coatings and mechanisms.
- 2.2.2. Check that the torque tightness of the column joint with the jib is adequate. (See table in section 7.2.1 of the manual).
- 2.2.3. Check the conditions and tightness of fasteners.
- 2.2.4. Clean and grease the joints of moving points.
- 2.2.5. General cleanliness of the column.
- 2.2.6. Check the general conditions of the lifeline support.

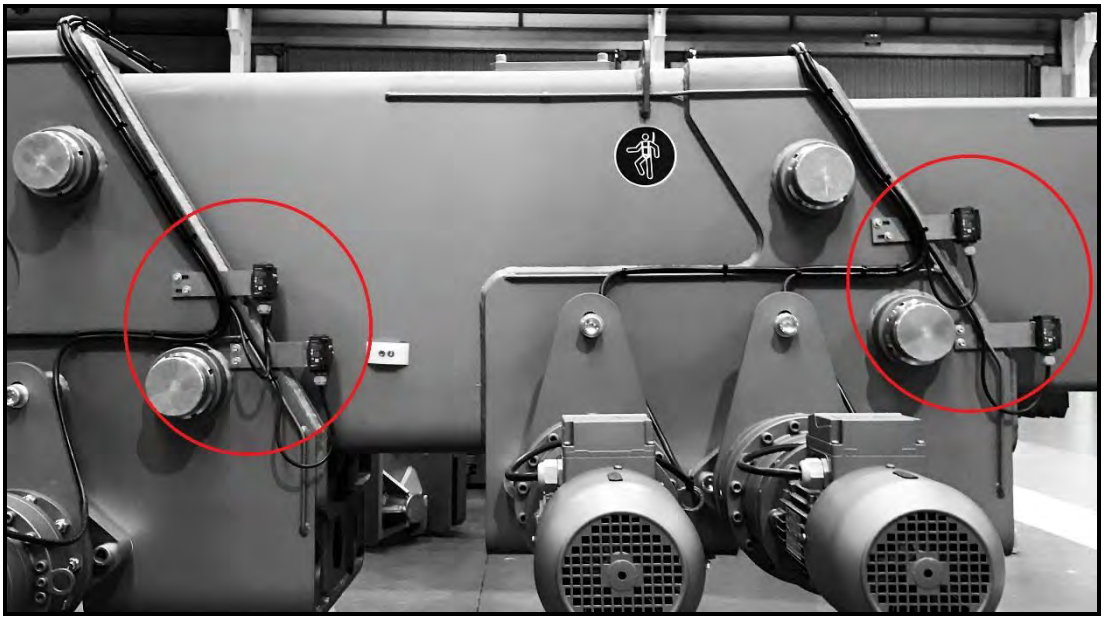


7.2.3. Jibs

- 2.3.1. Check the general conditions of jibs and pulleys support.
- 2.3.2. Check welds, coatings and mechanisms.
- 2.3.3. Check the conditions and tightness of fasteners.
- 2.3.4. clean and grease bearings and joints of moving points.
- 2.3.5. General cleanliness of jibs and pulleys support.

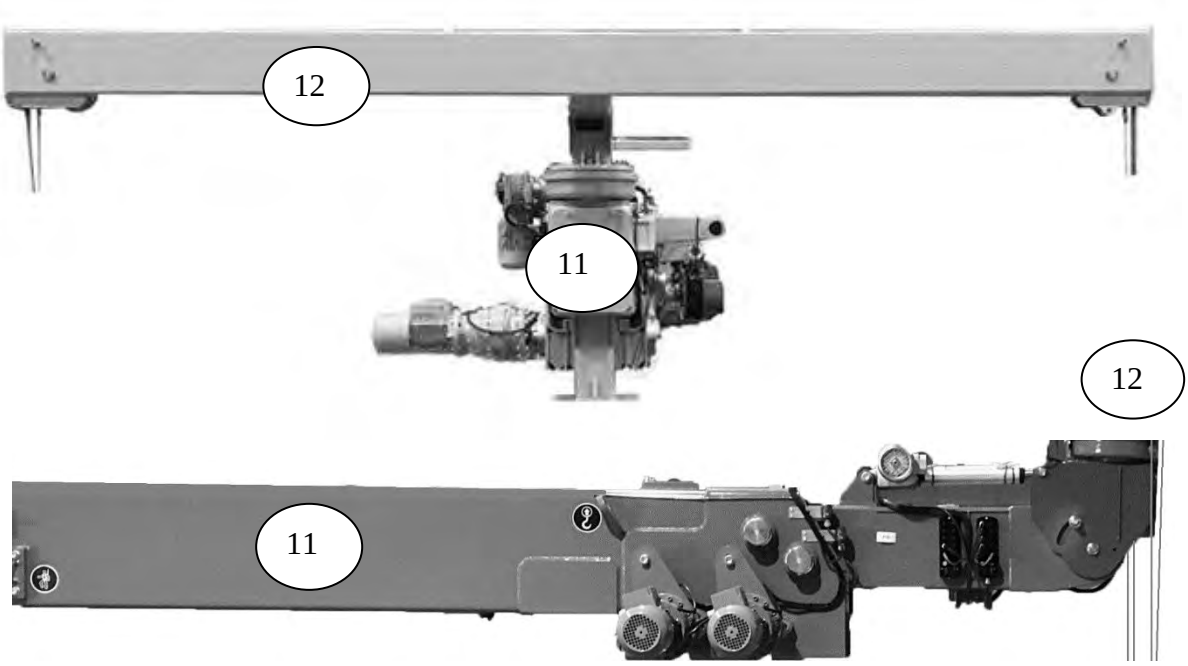


- 2.3.6. Check the general conditions of limit switches supports.



7.2.4. Head

- 2.4.1. Check the general conditions of jibs (11) and head (12). Check welds, coatings and mechanisms.
- 2.4.2. Check that the torque tightness of the slewing gear of the head is adequate. (See table in section 7.2.1 of the manual).
- 2.4.3. Check the conditions and tightness of fasteners.
- 2.4.4. Clean and grease bearings and joints of moving points.
- 2.4.5. General cleanliness of jibs and bells.



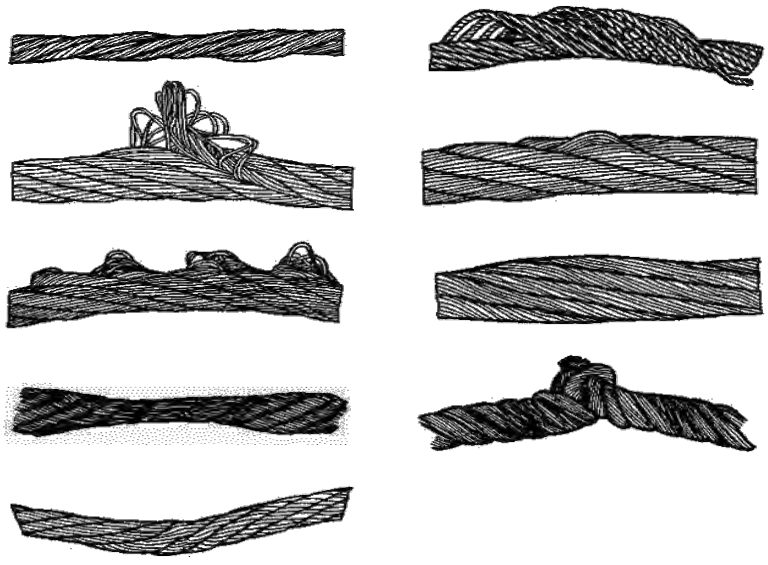
7.2.5. Pantograph device

- 2.5.1. Check the general conditions and operation of the pantograph device. Check welds, coatings and mechanisms.
- 2.5.2. Clean and grease the bearings and moving points joints of the pantograph device.
- 2.5.3. Check the anchoring points of the suspension cables (supports, wedge terminals and thimbles). (5)

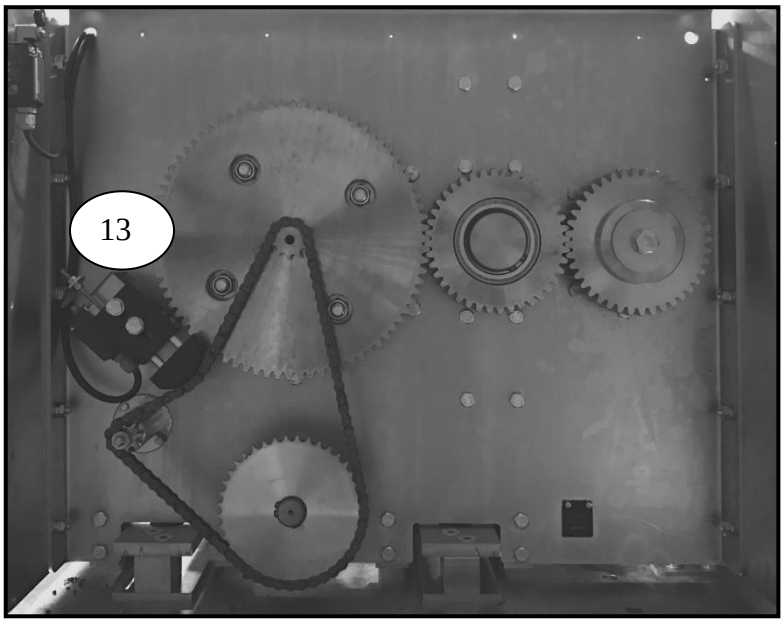


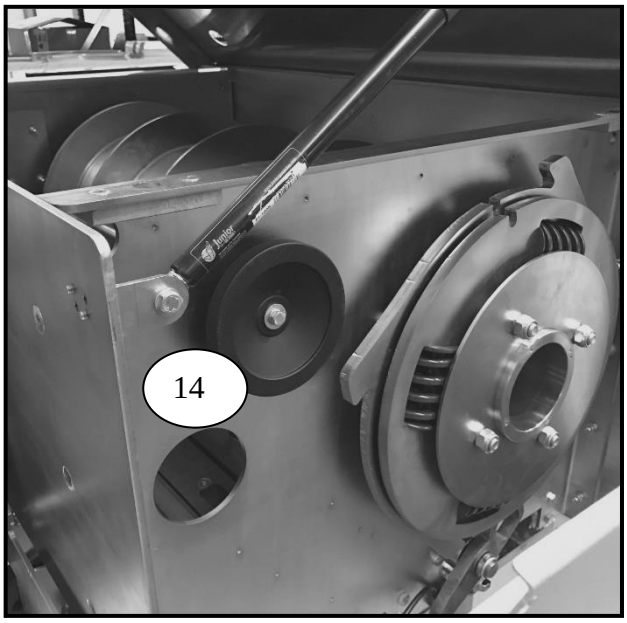
7.3. Elevation assembly

- 3.1. Check the general conditions of the elevation assembly. Check welds, coatings and mechanisms.
- 3.2. Clean and grease bearings and joints of moving points.
- 3.3. Clean and grease the transmission chain and the synchronisation chain.
- 3.4. Clean and grease the transmission gears.
- 3.5. Check the general conditions of elevation drum steel cables. It must not have more than 10% of untangled cable. If damage similar to that shown below is observed, do not use the machine and notify the authorised technical service.

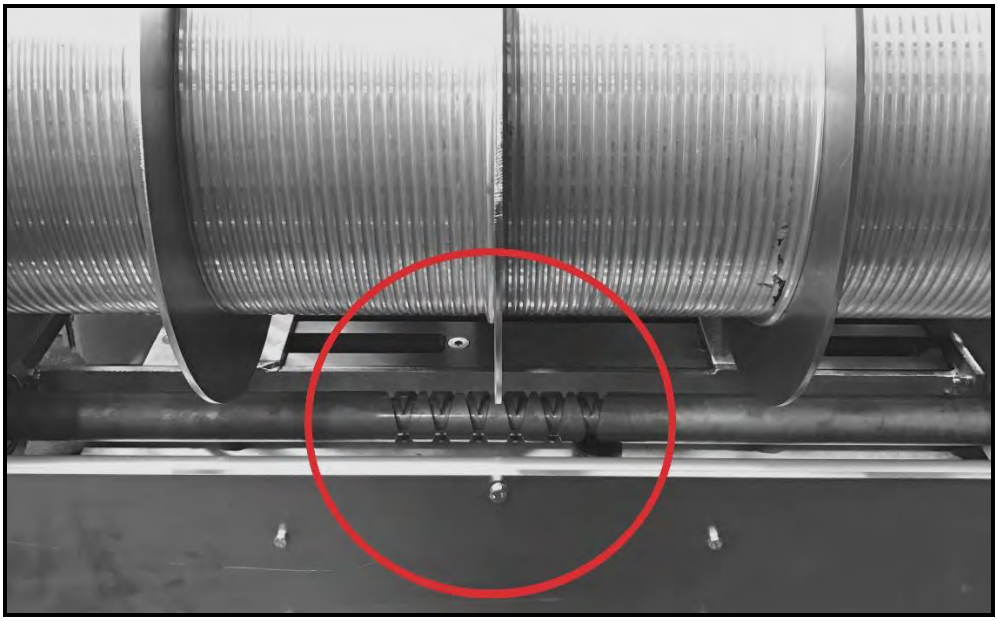


- 3.6. Check the general conditions of the ropes, weights, thimbles, wedge terminals and clamps of the steel cables.
- 3.7. Check the presence and fitting of the emergency wheel. (14)

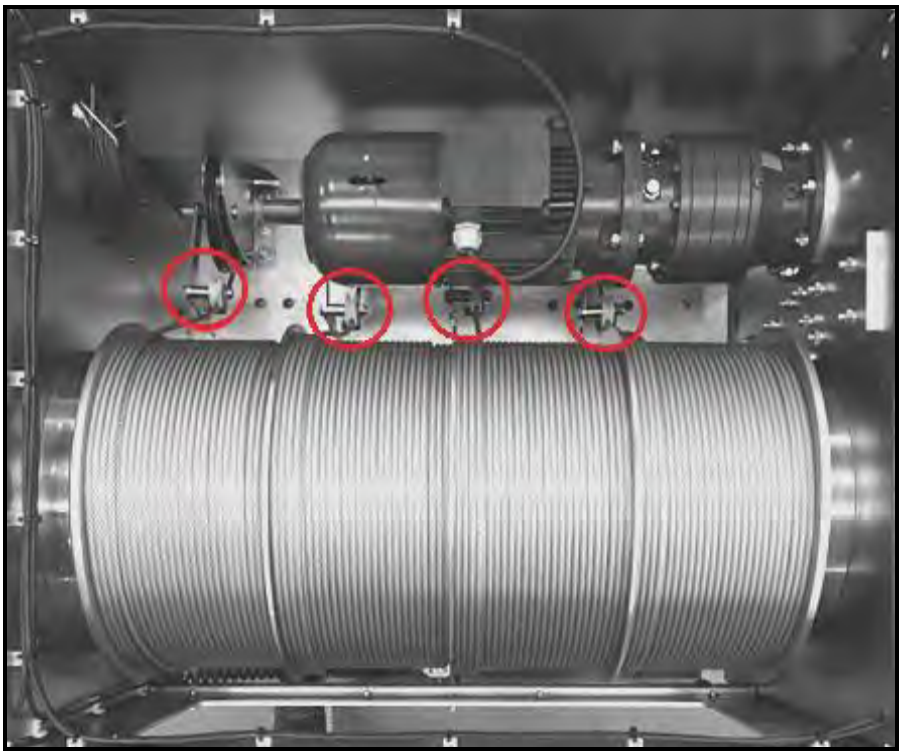




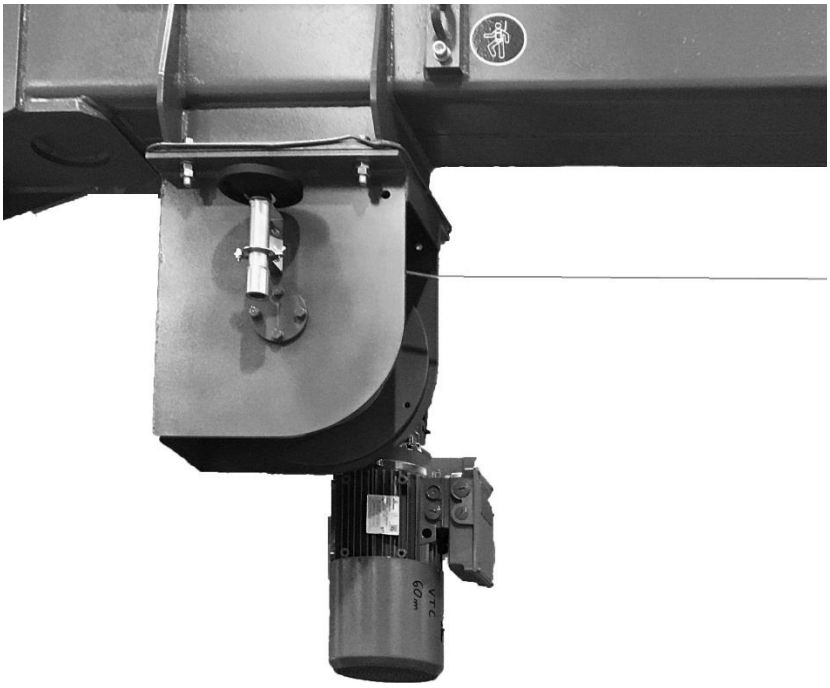
- 3.8. Clean and grease the synchronization shaft.



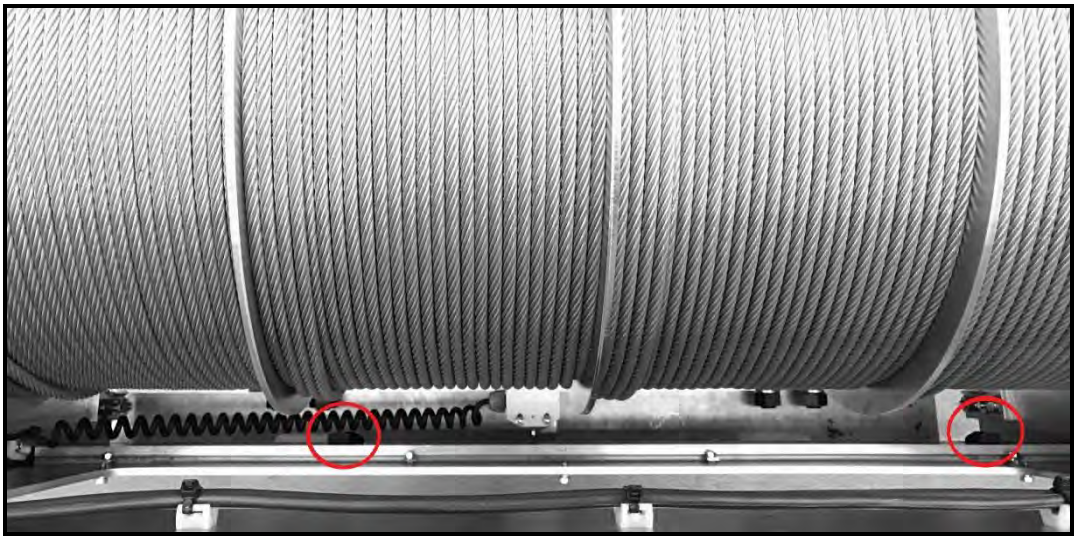
- 3.9. Check the general conditions of the slack cable system. Check welds, coatings and mechanisms.



- 3.10. Check the general conditions and presence of the components of the secondary brake. (See section 5 of the manual).
- 3.11. Check that the secondary brake has not been manipulated.
- 3.12. Check the general conditions of the auxiliary hoist steel cable. (See the previous picture of damaged steel cable).
- 3.13. Clean and grease the auxiliary hoist steel cable.



- 3.14. Check the general conditions and operation of the intermediate stops and vertical movement limiters.



7.4. Hydraulic, electric and electronic systems

- 4.1. Check the general conditions of the electrical cabinet and all its components.
- 4.2. Check the correct operation of the control panel.
- 4.3. Check the general conditions of the platform control keypad.
- 4.4. Check the correct operation of the platform control keypad.
- 4.5. Check the general conditions of the connection boxes and all their components.
- 4.6. Clean the inside of the electrical cabinet and the platform control keypad.
- 4.7. Check that the platform control keypad and connection boxes are correctly sealed.
- 4.8. Retighten all connections of the electrical cabinet, the platform control keypad and the connection boxes.
- 4.9. Check the general conditions and operation of the service limit switches.
- 4.10. Check the general conditions and operation of the safety limit switches.
- 4.11. Check the general conditions of the electric operation cable.
- 4.12. Check the general conditions of sockets and connectors.
- 4.13. Check the general conditions and operation of the remote-control system (antennas, chargers, batteries, etc.)
- 4.14. Check the general conditions and operation of the electric rail.
- 4.15. Check the general conditions and operation of the hydraulic cylinders.
- 4.16. Check the general conditions of the flexible hoses.
- 4.17. Check the general conditions and operation of the hydraulic circuit.
- 4.18. Check the sealing of hydraulic hose couplings.
- 4.19. Check that the maximum pressure of the hydraulic system does not exceed 120 bar.

7.5. Motors and slewing gears

Warning!

Motors must be protected and insulated from extreme temperatures (-10 °C and 50 °C).

- 5.1. Check the general conditions and operation of the motor/gears for elevation.
- 5.2. Check the general conditions and operation of the motor/gears for movement.
- 5.3. Check the general conditions and operation of the motor/gear for folding down.
- 5.4. Check the general conditions and operation of the hydraulic motor.
- 5.5. Check the general conditions and operation of the head motor/gear.
- 5.6. Check the general conditions and operation of the auxiliary hoist motor/gear.
- 5.7. Check the general conditions and operation of the motor/gear for turning the chassis.
- 5.8. Check the sealing of the terminal boxes of all motors.
- 5.9. Check the tightness of fasteners securing all motors/gears.
- 5.10. Check the general conditions and operation of the chassis slewing gear.

- 5.11. Check the general conditions and operation of the head slewing gear.
- 5.12. Clean and grease the chassis slewing gear.
- 5.13. Clean and grease the head slewing gear.
- 5.14. Check the general conditions of fasteners securing the chassis slewing gear.
- 5.15. Check the conditions of fasteners securing the head slewing gear.

7.6. Wheels

- 6.1. Check the general conditions and operation of wheels.
- 6.2. Check the general conditions and operation of guide wheels.
- 6.3. Clean and grease bearings and joints of wheels and moving points.
- 6.4. Clean and grease the guide wheels.
- 6.5. Clean and grease bearings and joints of movement carriages and moving points.



7.7. Runway

- 7.1. Check the general conditions of the movement rail track. Check welds, coatings and mechanisms.
- 7.2. Check the general conditions of rail tracks.
- 7.3. Check the general conditions of the anchoring points, fasteners.
- 7.4. Check the torque tightness of anchoring points, fasteners.
- 7.5. Check the general conditions of base plate, cross-members, struts, etc.
- 7.6. Check the general conditions of base plates supports, rubber bases, concrete slabs, etc.
- 7.7. Check the general conditions and correct operation of expansion joints.
- 7.8. Clean and grease bearings and articulated expansion joints.
- 7.9. Check the general conditions and correct operation of rail sidings.
- 7.10. Clean and grease bearings and joints of rail sidings.
- 7.11. Check the general conditions of rail track mechanical stops.

7.8. Maintenance program

	Maintenance operations / Periods (quarters of the year)	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1	**Suspended platform**				
1.1	Check the general conditions of the platform.	■			
1.2	Check the conditions of the rollers protecting the facade.				
1.3	Check the general conditions and operation of the anti-collision detector.				
1.4	Clean and grease the joints of moving points.				
1.5	General cleanliness of the platform.	■			
1.6	Check the general conditions and operation of the overload system.				
1.7	Check the anchor points of the suspension cables.				
1.8	Check the general conditions of the warning and safety notices.				
1.9	Check the general conditions and operation of the continuous guide system on the façade.				
1.10	Check that the drainage holes are not obstructed.	■			
1.11	Check the general conditions and operation of the guides securing to the facade.				
1.12	Check the conditions of the anchor points of the safety harness.	■			
2	**Metallic structure**				
2.1	**Lower chassis**				
2.1.1	Check the general conditions of chassis.	■			
2.1.2	Check the torque tightness of the slewing gear and the joints with the legs of the lower chassis.	■			
2.1.3	Check the conditions and tightness of fasteners.	■			
2.1.4	Clean and grease bearings and joints of moving points.				
2.1.5	General cleanliness of chassis.	■			
2.1.6	Check the general conditions of the power supply cable winder support.	■			
2.1.7	Check the general conditions and operation of the guide support of the power cable.				
2.1.8	Check the general conditions of the power supply cable.				
2.1.9	Check the general conditions of the electrical panel support.	■			
2.1.10	Check the general conditions of the hydraulic assembly support.	■			
2.2	**Column**				
2.2.1	Check the general conditions of the column.	■			
2.2.2	Check that the torque tightness of the column joint with the jib is adequate.	■			
2.2.3	Check the conditions and tightness of all fasteners.	■			
2.2.4	Clean and grease the joints of moving points.				
2.2.5	General cleanliness of the column.	■			
2.2.6	Check the general conditions of the lifeline support.	■			
2.3	**Jibs**				
2.3.1	Check the general conditions of jibs and pulleys support.	■			
2.3.2	Check welds, coatings and mechanisms.	■			
2.3.3	Check the conditions and tightness of fasteners.	■			
2.3.4	Clean and grease bearings and joints of moving points.				
2.3.5	General cleanliness of jibs and pulleys support.	■			
2.3.6	Check the general conditions of limit switches supports.	■			
2.4	**Head**				
2.4.1	Check the general conditions of jibs and head.	■			
2.4.2	Check the torque tightness of the slewing gear of the head.	■			
2.4.3	Check the conditions and tightness of fasteners.	■			
2.4.4	Clean and grease bearings and joints of moving points.				
2.4.5	General cleanliness of jibs and bells.	■			
2.5	**Pantograph device**				
2.5.1	Check the general conditions and operation of the pantograph device.	■			
2.5.2	Clean and grease the bearings and moving points joints of the pantograph device.				
2.5.3	Check the anchor points of the suspension cables.	■			

Quarterly inspection

Quarterly inspections of the machine.
Check the points marked on the programme.

Annual inspection

Annual inspections of the machine.

	Maintenance operations / Periods (quarters of the year)	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
3	**Elevation assembly**				
3.1	Check the general conditions of the elevation assembly.	■			
3.2	Clean and grease bearings and joints of moving points.	■	■	■	■
3.3	Clean and grease the transmission chain and the synchronisation chain.	■	■	■	■
3.4	Clean and grease the transmission gears.	■	■	■	■
3.5	Check the general conditions of elevation drum steel cables.	■	■	■	■
3.6	Check the general conditions of the ropes, weights, thimbles, wedge terminals and clamps.	■	■	■	■
3.7	Check the presence and fitting of the emergency wheel.	■	■	■	■
3.8	Clean and grease the synchronization shaft.	■	■	■	■
3.9	Check the general conditions of the slack cable system.	■	■	■	■
3.10	Check the general conditions and presence of the components of the secondary brake.	■			
3.11	Check that the secondary brake has not been manipulated.	■	■	■	■
3.12	Check the general conditions of the auxiliary hoist steel cable.	■	■	■	■
3.13	Clean and grease the auxiliary hoist steel cable.	■			
3.14	Check the general conditions and operation of the intermediate stops and vertical movement limiters.	■	■	■	■
4	**Hydraulic, electric and electronic systems**				
4.1	Check the general conditions of the electrical cabinet and all its components.	■			
4.2	Check the correct operation of the control panel.	■	■	■	■
4.3	Check the general conditions of the platform control keypad.	■			
4.4	Check the correct operation of the platform control keypad.	■	■	■	■
4.5	Check the general conditions of the connection boxes and all their components.	■			
4.6	Clean the inside of the electrical cabinet and the platform control keypad.	■			
4.7	Check that the platform control keypad and connection boxes are correctly sealed.	■			
4.8	Retighten all connections of the electrical cabinet, the control keypad and the connection boxes.	■			
4.9	Check the general conditions and operation of the service limit switches.	■	■	■	■
4.10	Check the general conditions and operation of the safety limit switches.	■	■	■	■
4.11	Check the general conditions of the electric operation cable.	■	■	■	■
4.12	Check the general conditions of sockets and connectors.	■			
4.13	Check the general conditions and operation of the remote-control system.	■	■	■	■
4.14	Check the general conditions and operation of the electric rail.	■	■	■	■
4.15	Check the general conditions and operation of the hydraulic cylinders.	■	■	■	■
4.16	Check the general conditions of the flexible hoses.	■			
4.17	Check the general conditions and operation of the hydraulic circuit.	■			
4.18	Check the sealing of hydraulic hose couplings.	■			
4.19	Check that the maximum pressure of the hydraulic system does not exceed 120 bar.	■			

■ **Quarterly inspection**

Quarterly inspections of the machine.
Check the points marked on the programme.

■ **Annual inspection**

Annual inspections of the machine.
Check the points marked on the programme.

	Maintenance operations / Periods (quarters of the year)	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
5	**Motors and slewing gears**				
5.1	Check the general conditions and operation of the motor/gears for elevation.				
5.2	Check the general conditions and operation of the motor/gears for movement.				
5.3	Check the general conditions and operation of the motor/gear for folding down.				
5.4	Check the general conditions and operation of the hydraulic motor.				
5.5	Check the general conditions and operation of the head motor/gear.				
5.6	Check the general conditions and operation of the auxiliary hoist motor/gear.				
5.7	Check the general conditions and operation of the motor/gear for turning the chassis.				
5.8	Check the sealing of the terminal boxes of the motors.				
5.9	Check the tightness of fasteners securing the motors/gears.				
5.10	Check the general conditions and operation of the chassis slewing gear.				
5.11	Check the general conditions and operation of the head slewing gear.				
5.12	Clean and grease the chassis slewing gear.				
5.13	Clean and grease the head slewing gear.				
5.14	Check the general conditions of fasteners securing the chassis slewing gear.				
5.15	Check the conditions of fasteners securing the head slewing gear.				
6	**Wheels**				
6.1	Check the general conditions and operation of wheels.				
6.2	Check the general conditions and operation of guide wheels.				
6.3	Clean and grease bearings and joints of wheels and moving points.				
6.4	Clean and grease the guide wheels.				
6.5	Clean and grease bearings and joints of movement carriages and moving points.				
7	**Runway**				
7.1	Check the general conditions of the movement rail track. Check welds, coatings and mechanisms.				
7.2	Check the general conditions of rail tracks.				
7.3	Check the general conditions of the anchoring points, fasteners.				
7.4	Check the torque tightness of anchoring points, fasteners.				
7.5	Check the general conditions of base plate, cross-members, struts, etc.				
7.6	Check the general conditions of base plates supports, rubber bases, etc.				
7.7	Check the general conditions and correct operation of expansion joints.				
7.8	Clean and grease bearings and articulated expansion joints.				
7.9	Check the general conditions and correct operation of rail sidings.				
7.10	Clean and grease bearings and joints of rail sidings.				
7.11	Check the general conditions of rail track mechanical stops.				

Quarterly inspection

Quarterly inspections of the machine.
Check the points marked on the programme.

Annual inspection

Annual inspections of the machine.
Check the points marked on the programme.

7.9. Lubrication

Motors-gearboxes

The motors-gearboxes installed by **Atech** need no maintenance. It is not necessary to replace the lubricant of the gearboxes of the motors. Never open the gearbox. In case of leakage of hydraulic fluid, disassemble the complete assembly and send it to **Atech**.

Hydraulic system

If the machine contains hydraulic components, the oil used is as indicated below:

SIL POWER HLP-46 ISO 6743/4 HM

Gears, bearings and racks

The grease used in bearings, racks and slewing gears of the lower chassis and the head is as follows:

CEPSA ARGA EP-2 ESPECIAL

Joints of the machine

In joints, use the following grease:

CONSISTENT SPRAY GREASE - WURTH

8. Technical factsheet of the machine

8.1. B.M.U.

Model	A25 Type
Series number	M-3634
Nominal load of the suspended platform	748 lbs (2 people + tools)
Load capacity of the auxiliary hoist	1648 lb
Total weight of the machine	20416lbs
Year of manufacture	2017
Project	P15588, CORNING TOWER, USA

8.2. Elevation assembly

Size of the elevation assembly (feet)	**Load (lbs)**	**Engine power (kW)**
590	-	3
Material	**ERP Code**	**Series Number**
STEEL	EG 11 02 A03 02	P15588, CORNING TOWER, USA

8.3. Runway

Fitting of rail to the building	Anchored
Type of beam	W 10x12
Distance between rails	1824 mm

Annex I - Certificates

Steel cable certificate

GUSTAV WOLF

Drahtseilwerk GmbH

ISO 9001:2008

CE

Atechbcn
C/ Tomás Viladomiu 29-35
08650 Sallent Barcelona
Spanien

Gustav Wolf
Drahtseilwerk GmbH
Sundernstr. 40

33332 Gütersloh
Germany
+49 5241/876-0
+49 5241/876-160
info@gustav-wolf.de

GW-Auftrag: 10563792
GW-commission:

Kunden-Nr.: 301635
Customer No.:

Datum: **08.08.16**
date:

zugelassen von: Germanischer Lloyd,
authorized by: Lloyd's Register
RINA

Werksbescheinigung / Herstellererklärung gem. DIN EN 10204-2.1

Works certificate / EC manufacturing declaration acc. to DIN EN 10204-2.1

Ihr Auftrag / Datum / Ihre Referenz MZ 350 / 27.06.16 / Ernest Chaure Moix
your order / date / your reference:
Kommission / Auftrag-Referenzen: /
commission / order references:

Pos. *pos.*	Artikel-Nr. *article-no.*	Beschreibung *description*	Menge *quantity*	Einheit *unit*
1	**775308032**	**8 mm PAWO F5e+1x0,96 E-Leiter** 6 x 19S 114Dr.1770 B (nozn) sZ	4.000	m
		Längenaufteilung / *length break-up* 4 X 1.000 m		

Art der Einlage	/ *type of core:*		DC	
Schlagart-Schlagrichtung	/ *type and direction of lay:*		Kr. rechtsg. mit SE	
Nennfestigkeit	/ *tensile grade:*		1770	N/mm²
Oberfläche	/ *finish:*		verzinkt	
Metall. Seilquerschnitt	/ *metallic cross section:*		25,080	mm²
Längengewicht	/ *rope weight:*		0,234	kg/m
rechn. Bruchkraft	/ *calculated breaking load:*		44,40	kN
Mindestbruchkraft	/ *minimum breaking load:*		38,20	kN
Max. Tragkraft bei	/ *max. load at:*			
Sicherheitsfaktor	/ *safety factor:*	5	7,64	kN
Sicherheitsfaktor	/ *safety factor:*	12	3,18	kN

Annex II – Plans and electrical diagrams

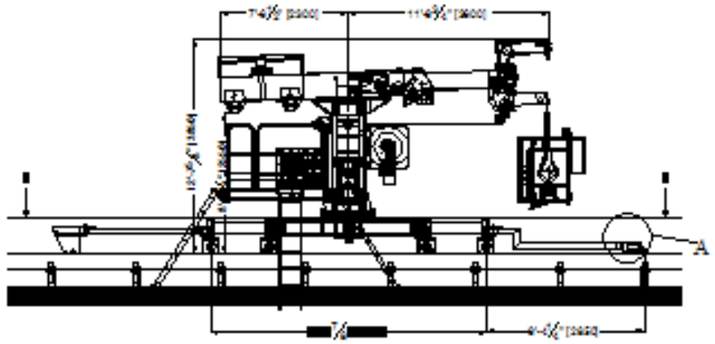
1. Approval plan

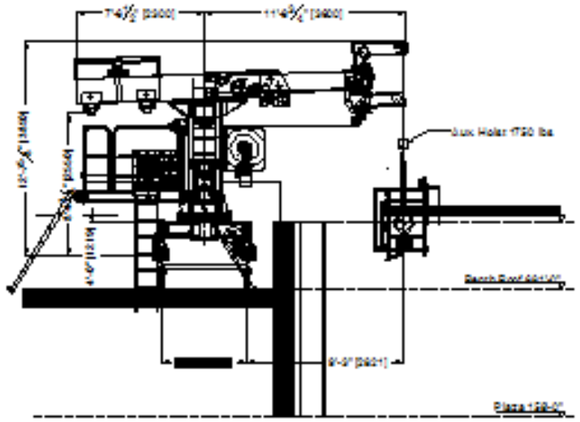
2. Machine plan

3. Transport plan

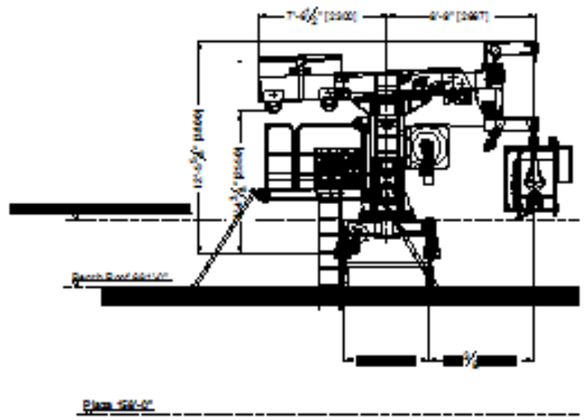
4. Electrical diagram

LOWER FLOOR BMU2.1

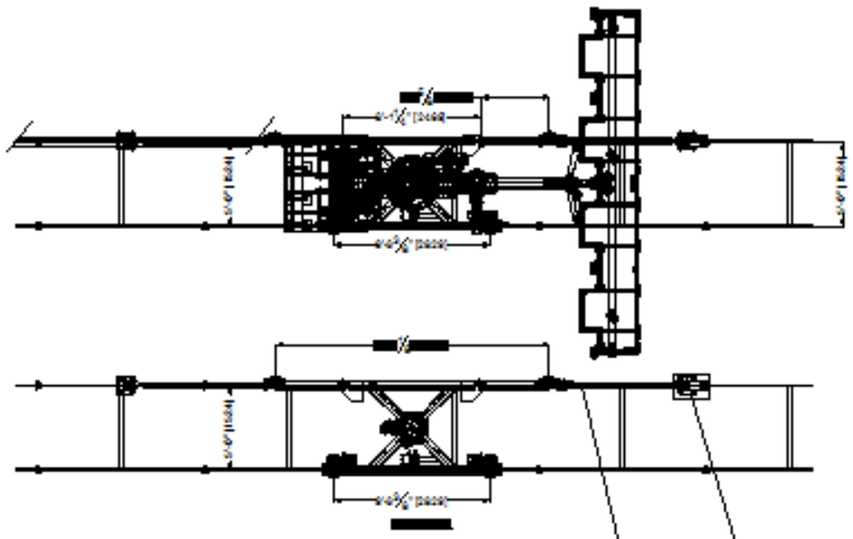




BMU GENERAL VIEW:
MAX REACH

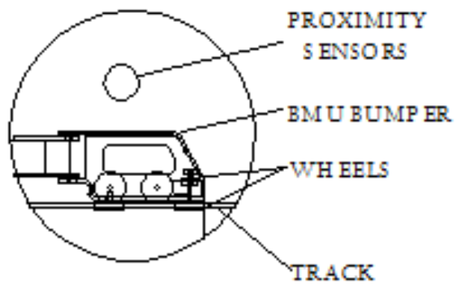


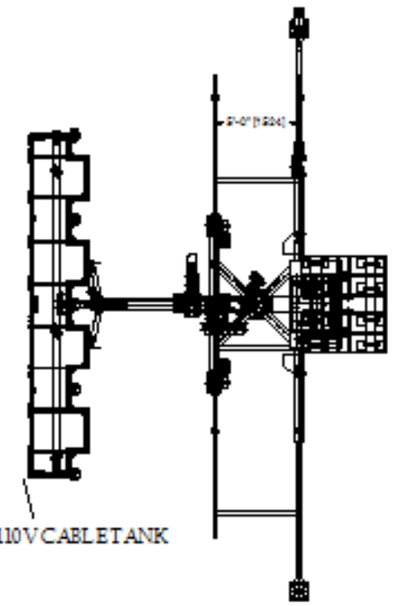
BMU GENERAL VIEW:
MIN REACH

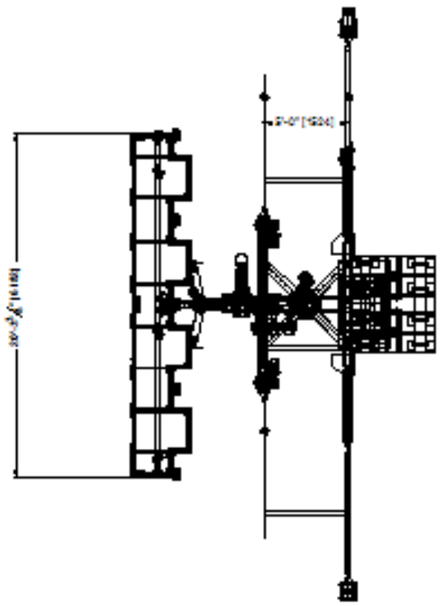


BUMPER LEG

PROXIMITY SENSOR



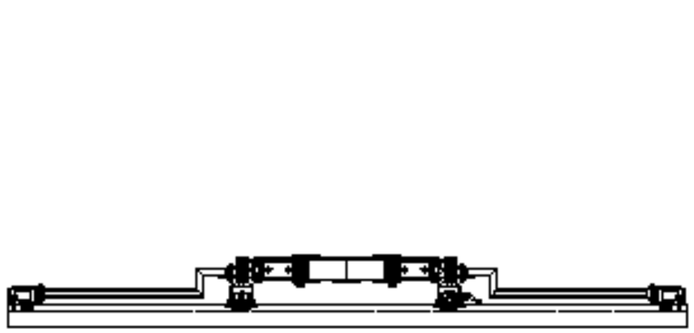


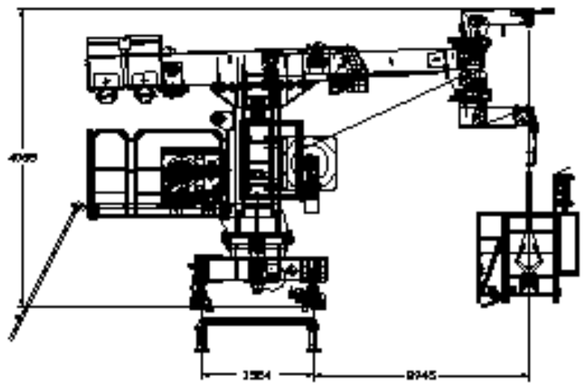


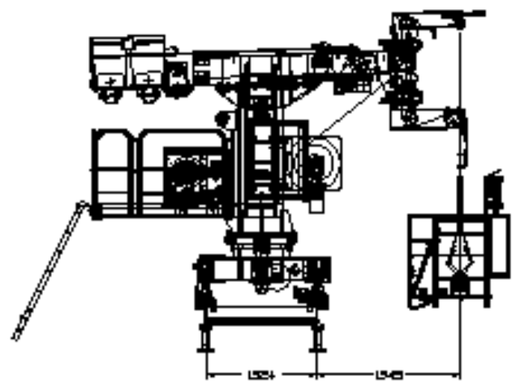
Existing anchored track

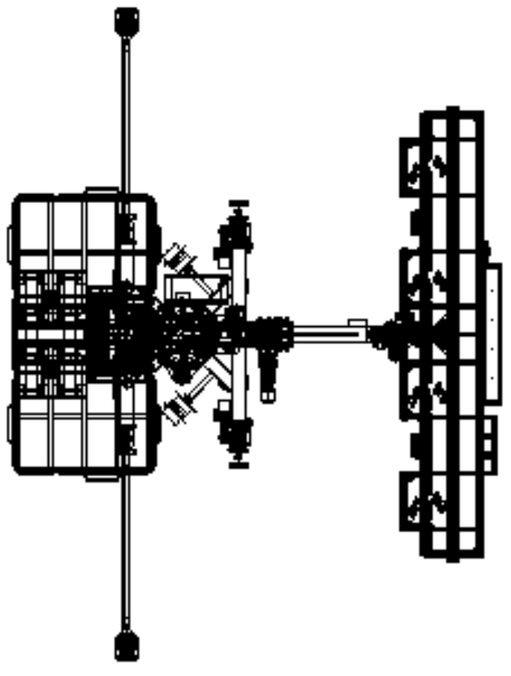
GLOBALBMU

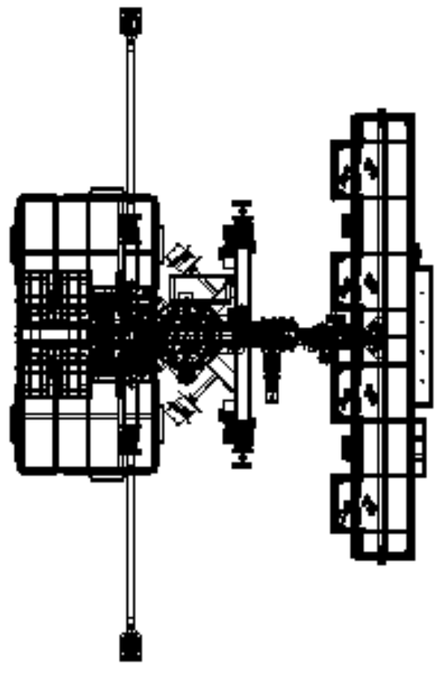
Corning Tower Albany, N.Y., U.S.A.	~~	~~
B.MU. 21	12.09.2017	1/2500
P15588-02-10_APP		01/18





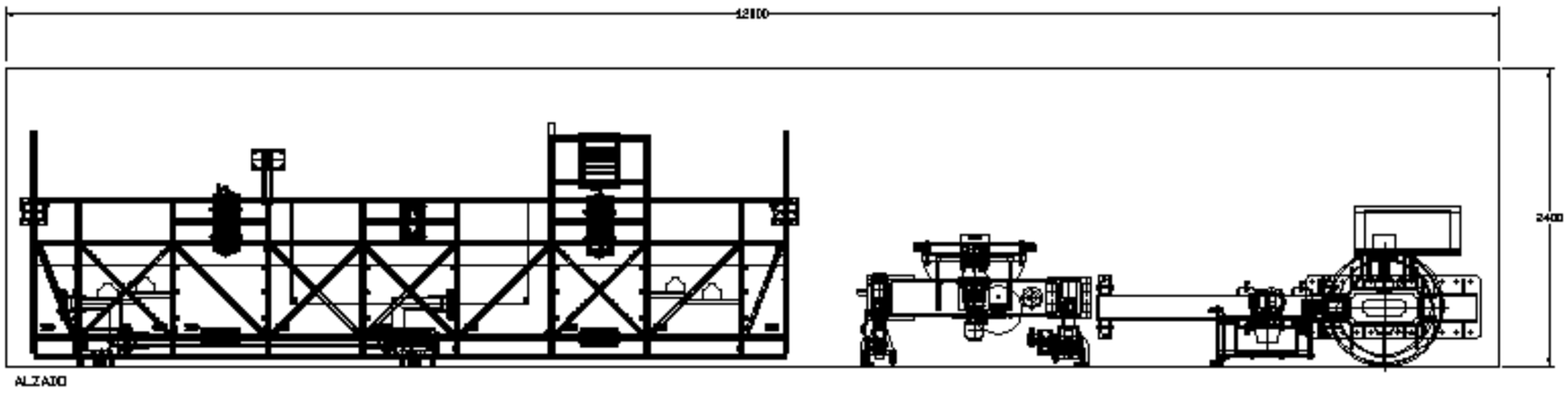


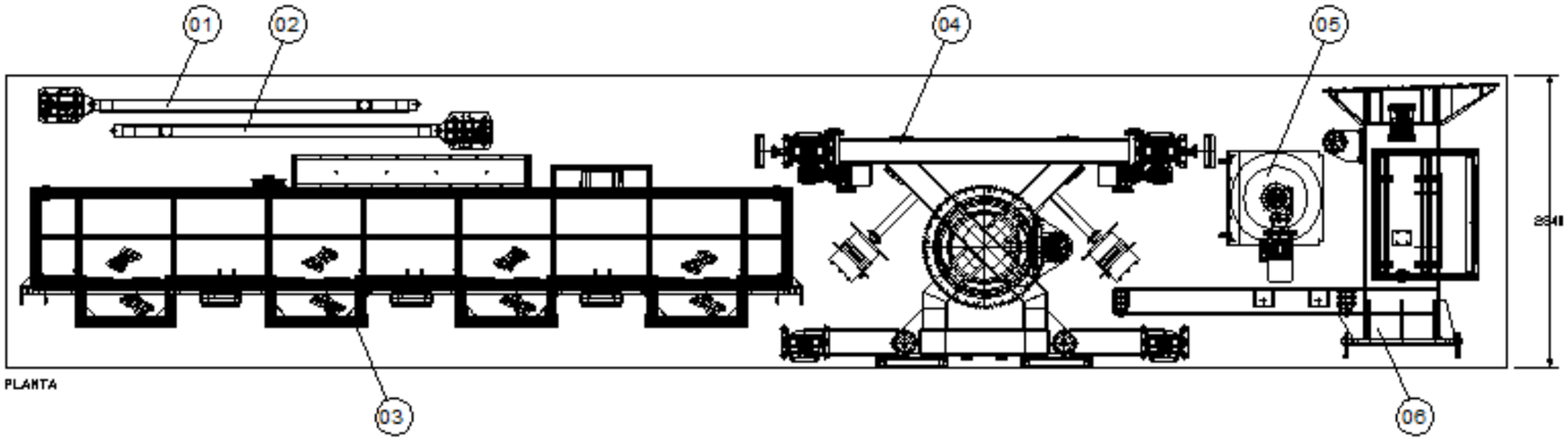




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Escala: 1/75	CORNING TOWER A-25 P15568-02	Nº Plano: M-3634
		Fecha: 10-11-17 Orientación





ITEM	DESCRIPTION	DIMENSIONS			WEIGHT (Kg)	WEIGHT (lg)
1	BUMPER 1 (M-3634)	3000	300	300	100	220
2	BUMPER 2 (M-3634)	3000	300	300	100	220
3	CRADLE (M-3634)	6300	1400	1800	600	1.322
4	LOWER CHASSIS (M-3634)	3700	1800	1050	1.740	3.836
5	HOIST (M-3634)	800	800	500	500	1.102
6	COLUMN (M-3634)	2900	1400	1300	820	1.807
TOTAL		LENGHT (mm)	WIDTH (mm)	HEIGHT (mm)	3.880.00000	8.609

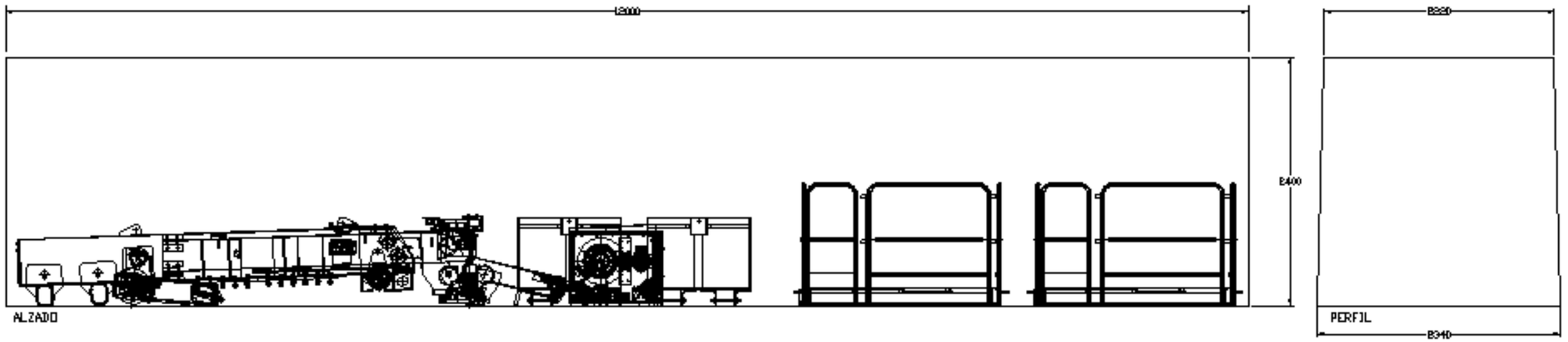
TRANSPORT-1

CRANE: 7500 lb (3402 kg.)

Alechben

OPEN TOP 40'
CORNING TOWER 2

Drawing: T-3634
Date: 01/12/2017



ITEM	DESCRIPTION	DIMENSIONS			WEIGHT (Kg)	WEIGHT (lg)
7	JIB (M-3634)	4500	1700	850	1.350	2.976
8	LADDER 1 (M-3634)	2100	450	200	50	75
9	LADDER 2 (M-3634)	2100	400	100	10	22
10	HOIST SPREADER BAR (M-3634)	1000	500	400	70	154
11	SPREADER BAR (M-3634)	6200	1400	500	250	551
12	DRUM (M-3634)	1400	1000	500	650	1.433
13	COUNTERWEIGHT 1 (M-3634)	1000	700	850	1.100	2.425
14	COUNTERWEIGHT 2 (M-3634)	1000	700	850	1.100	2.425
15	ACCESSORIES (M-3634)	800	600	300	50	110
16	GATEWAY 1 (M-3634)	2000	2000	1200	160	352
17	GATEWAY 2 (M-3634)	2000	2000	1200	160	352
TOTAL		LENGHT (mm)	WIDTH (mm)	HEIGHT (mm)	4.960.00000	10.912

TRANSPORT-2

CRANE: 7500 lb (3402 kg.)

Atechbcn

OPEN TOP 40'
CORNING TOWER 2

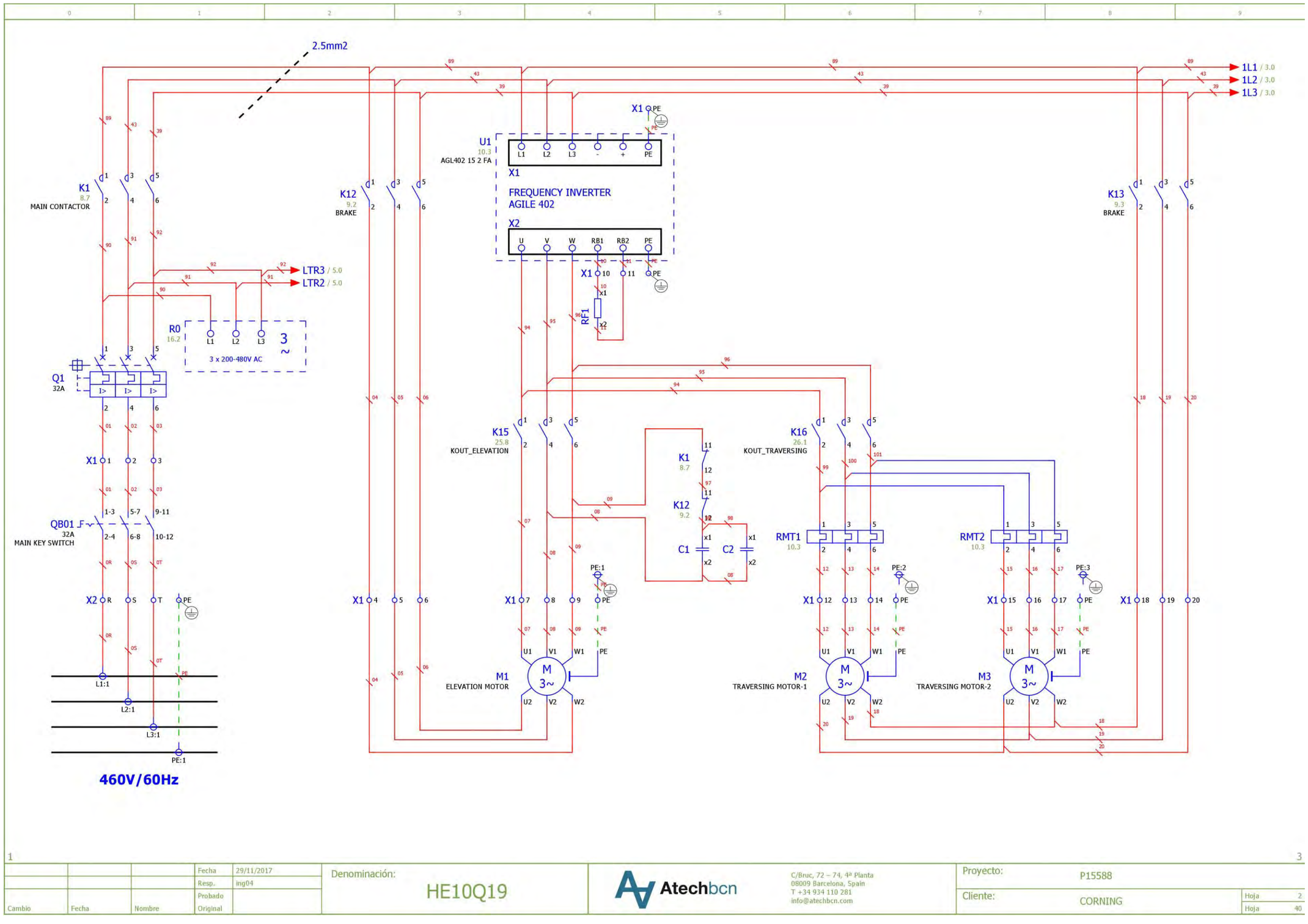
Drawing: T-3634
Date: 01/12/2017

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08009, Barcelona (Spain)
T. +34 934 110 281
info@atechbcn.com

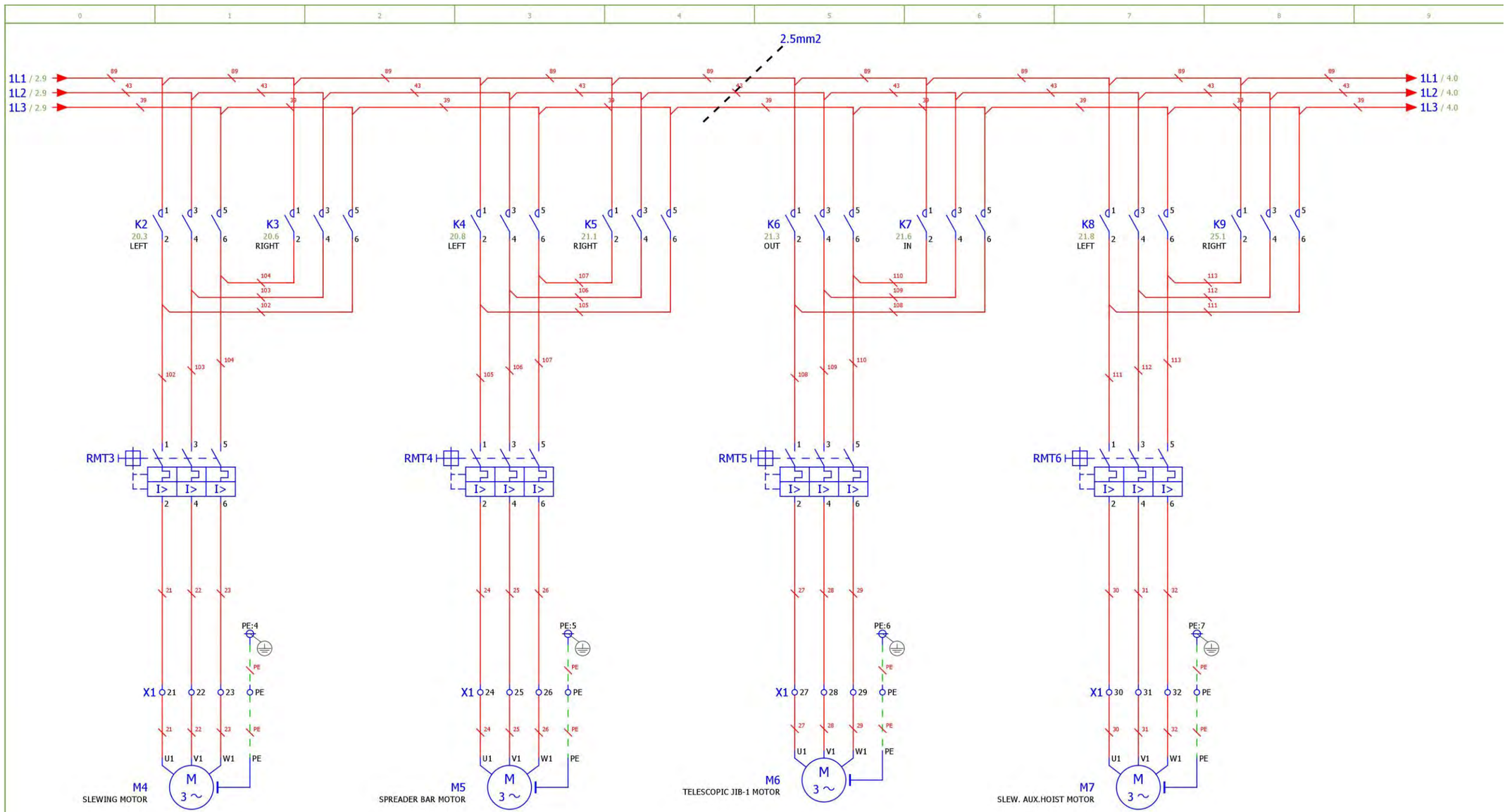
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Project:	P15588
Serial Number:	M3635/M3634
City:	USA
Country:	USA

Modification: 29/11/2017

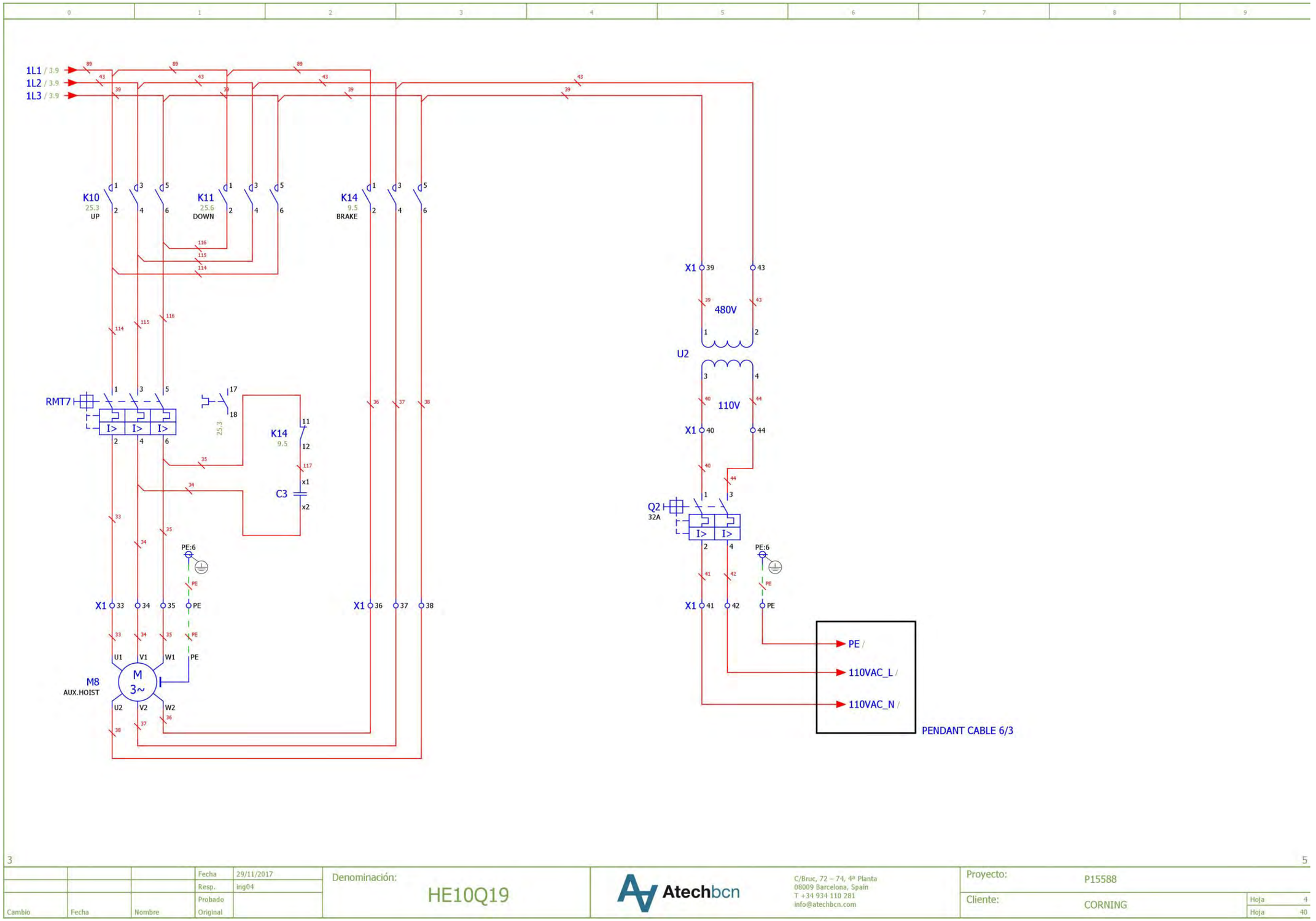
Total Sheets: 40



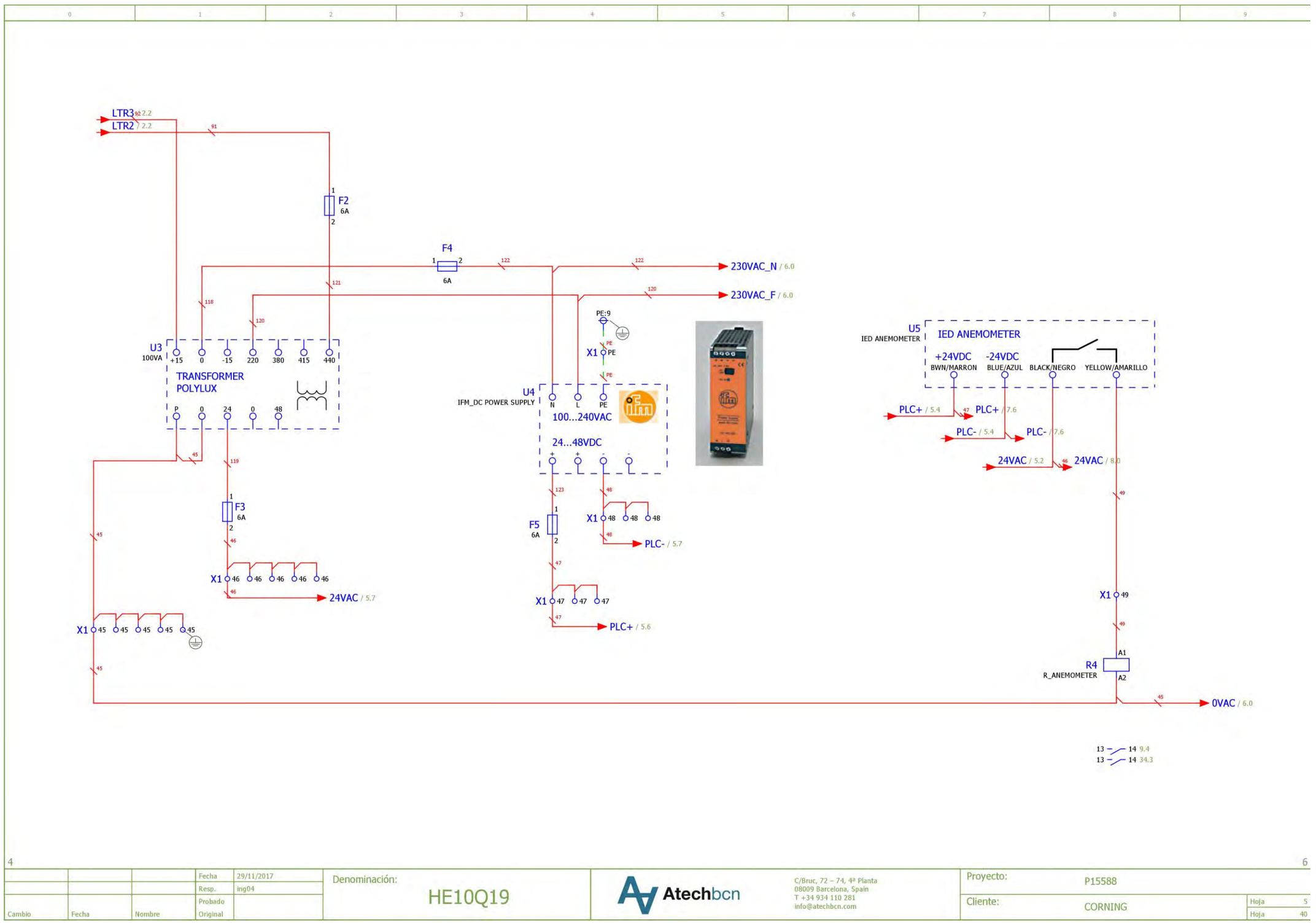
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Cambio	Fecha	Nombre	Probado Original				Hoja 40



			Fecha	29/11/2017	Denominación: HE10Q19	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588
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Cambio	Fecha	Nombre	Probado Original				Hoja 40



			Fecha	29/11/2017	Denominación: HE10Q19	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588
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Cambio	Fecha	Nombre	Probado / Original				Hoja 4 / Hoja 40



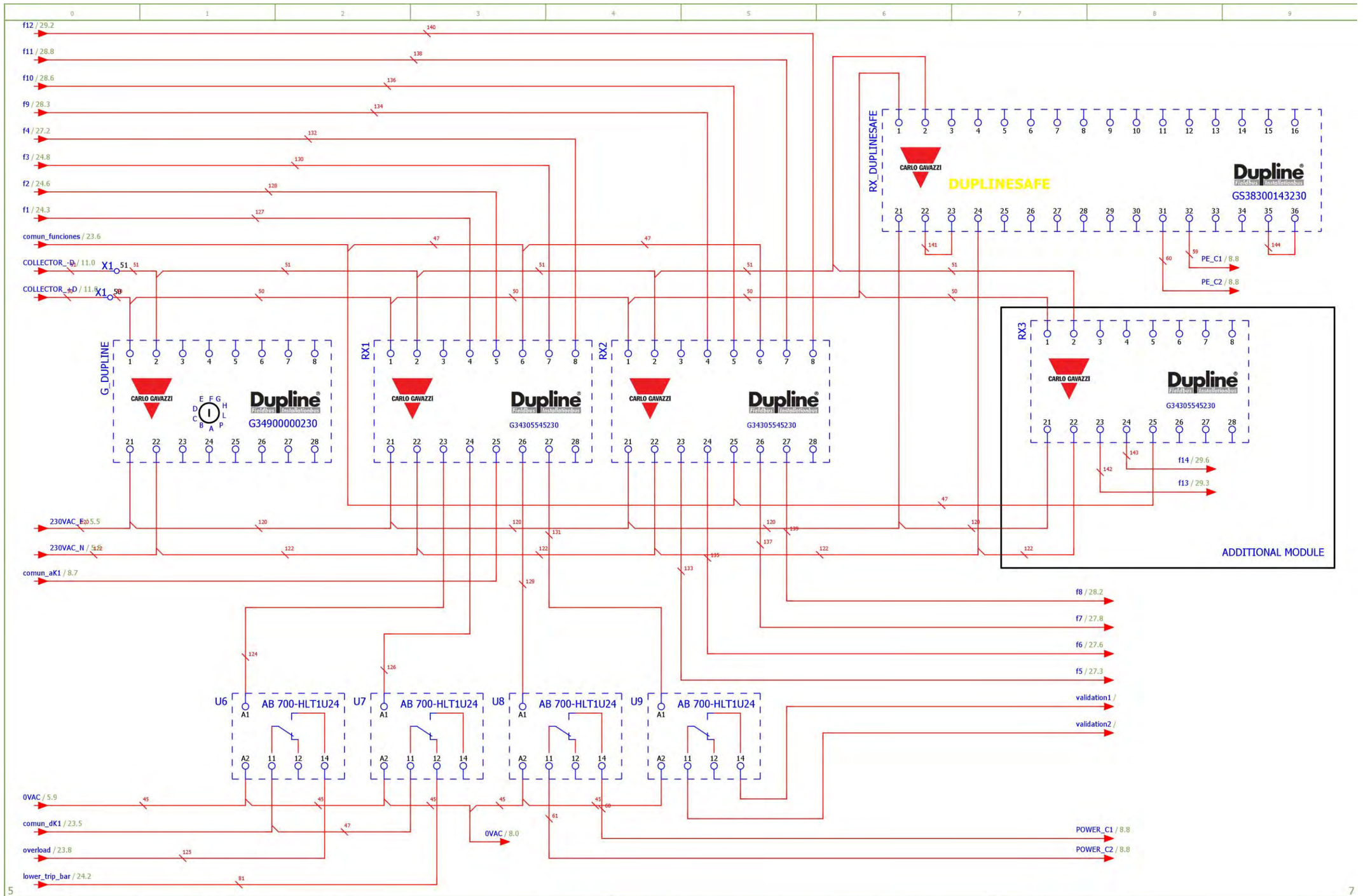
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Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q19

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Proyecto: P15588
Cliente: CORNING
Hoja 5
Hoja 40

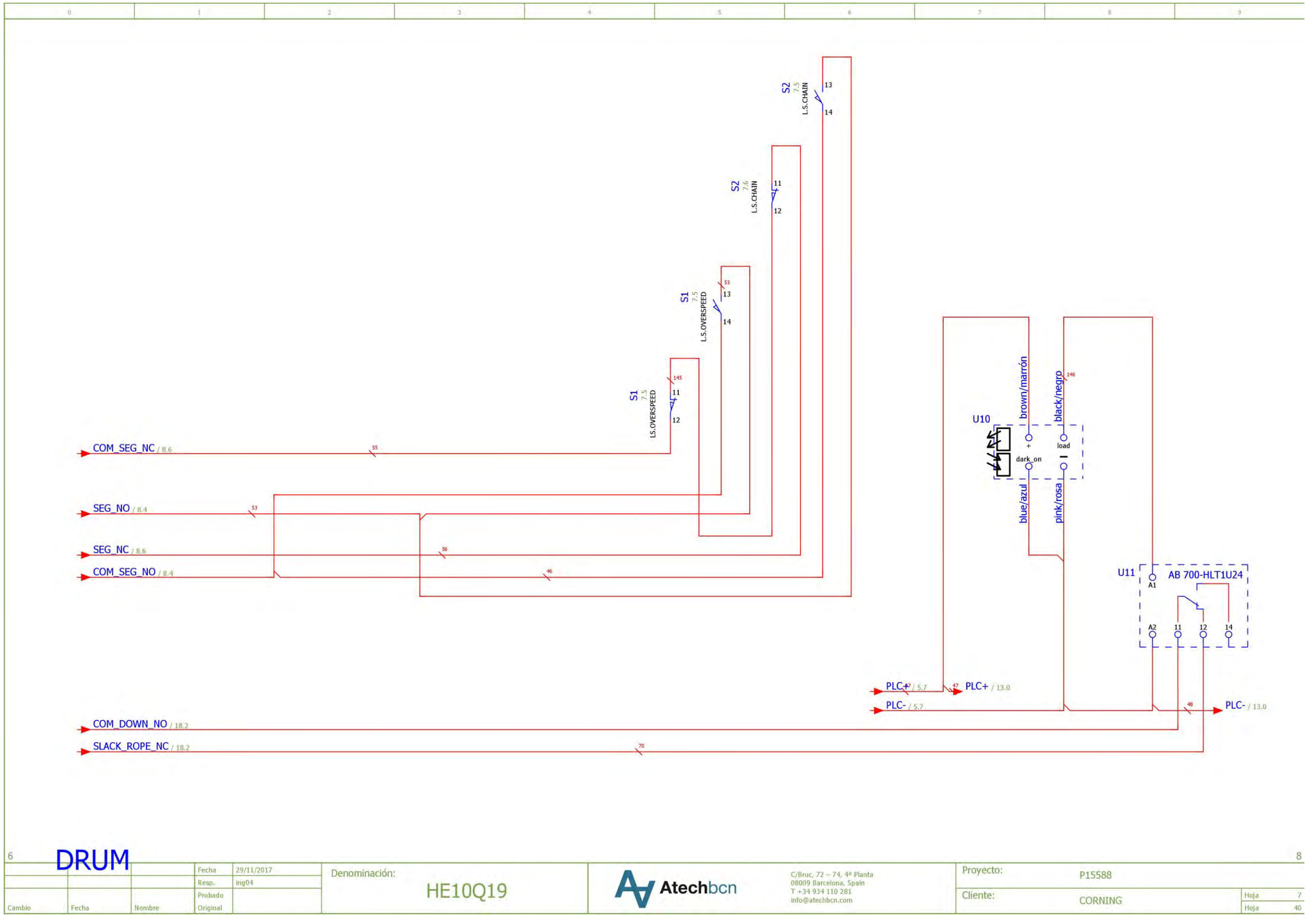


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Cambio	Fecha	Nombre	Probado	
			Original	

Denominación: HE10Q19

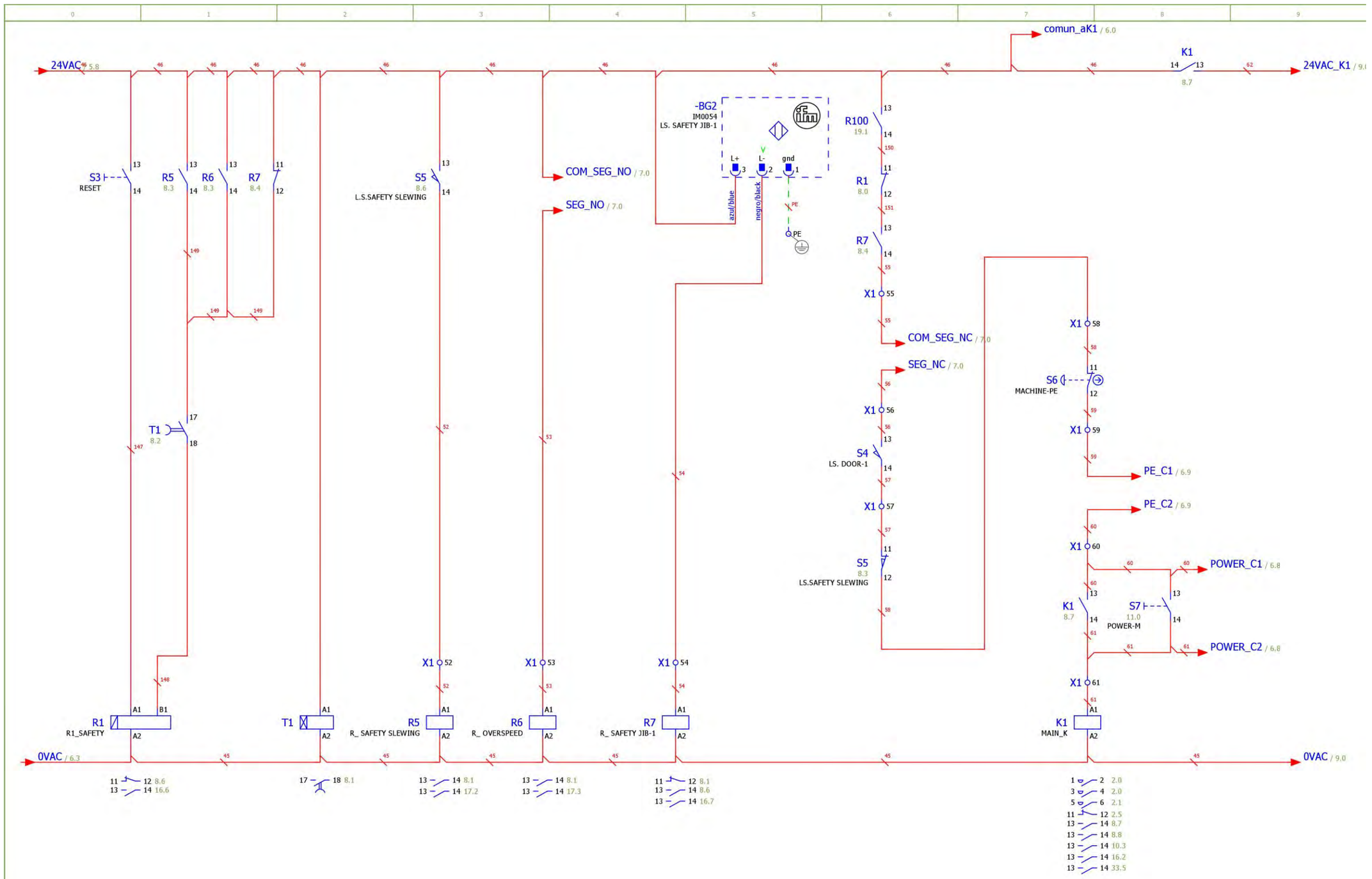
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Proyecto:	P15588		
Cliente:	CORNING	Hoja	6
		Hoja	40

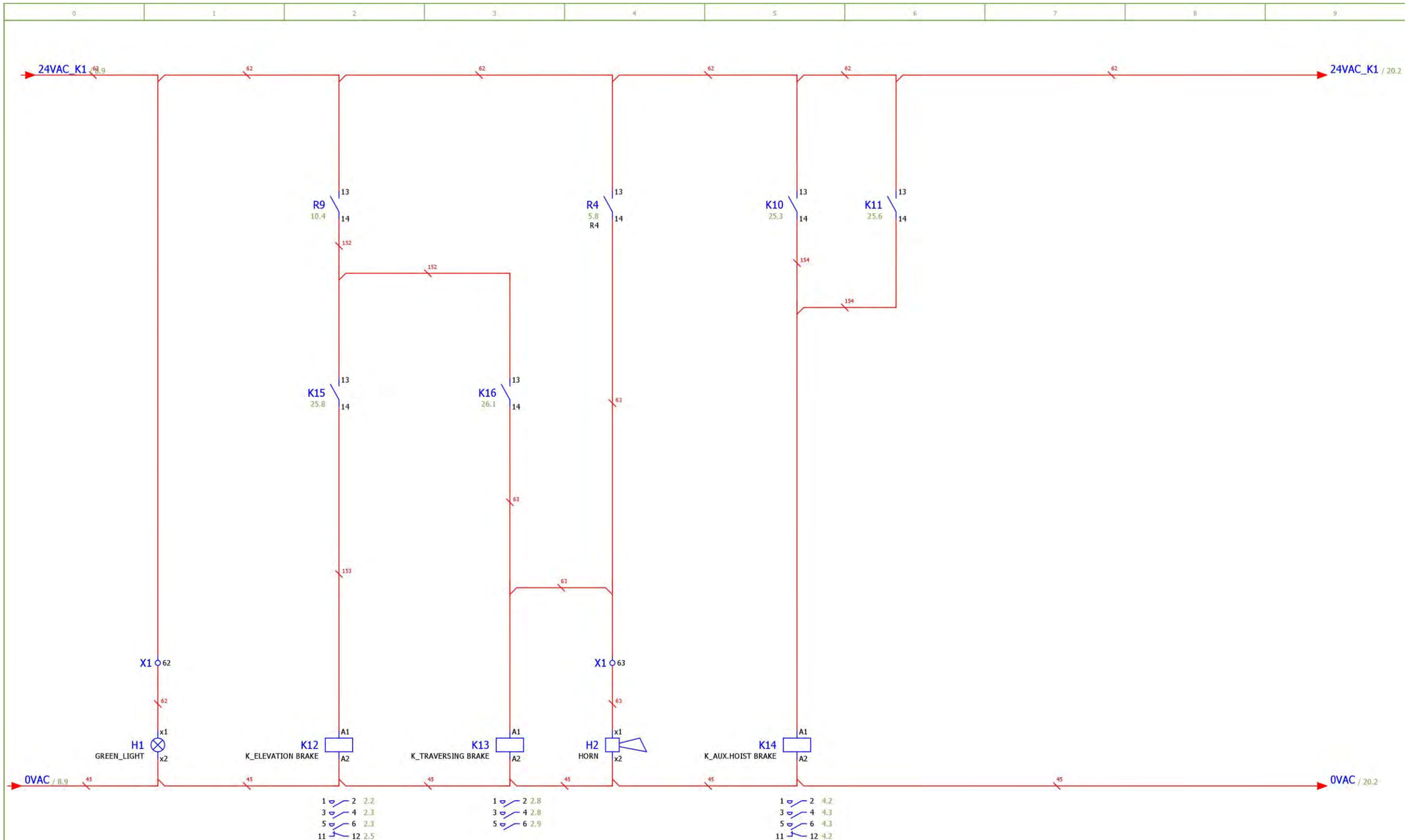


6 DRUM 8

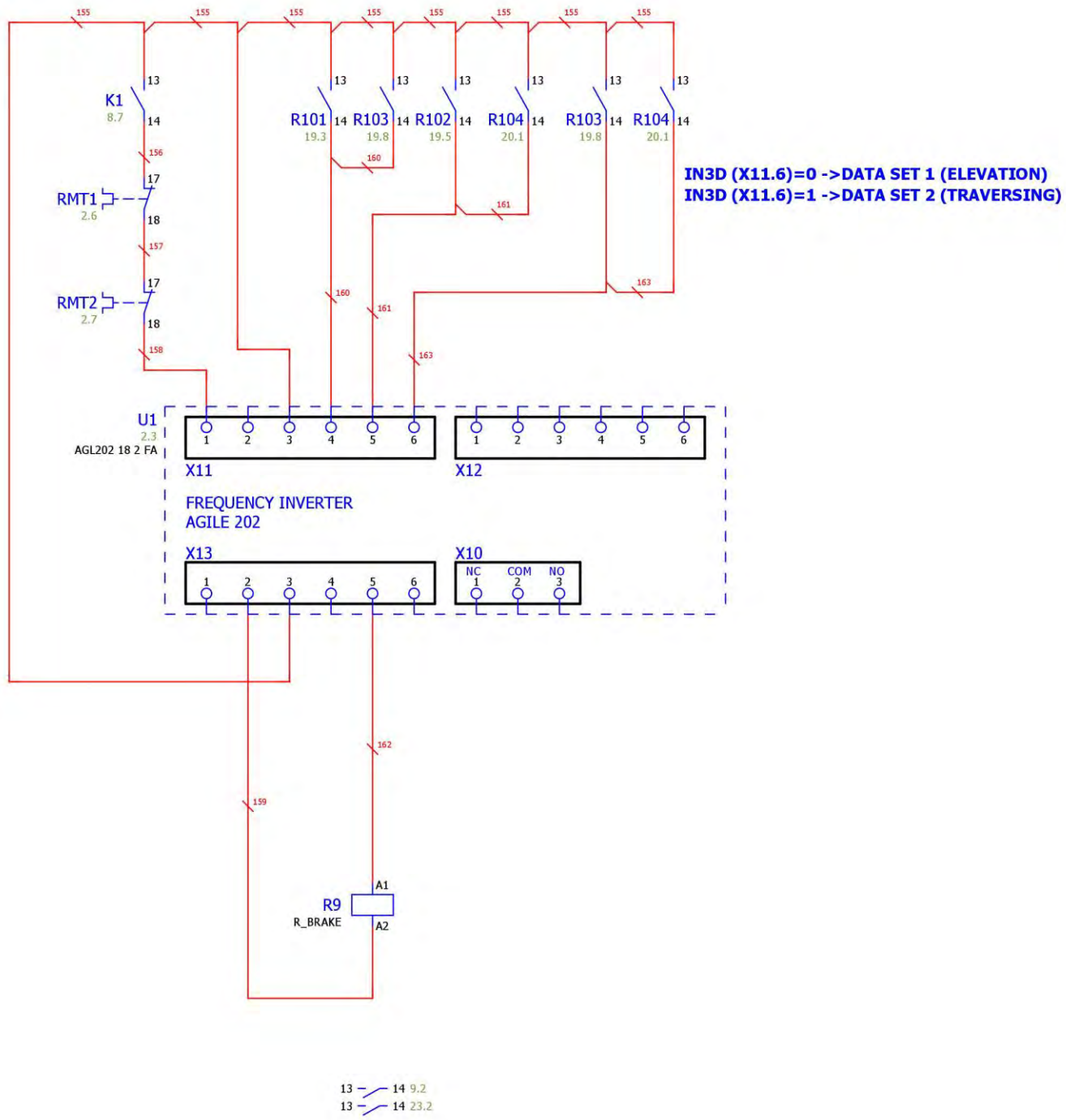
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Cambio	Fecha	Nombre	Probado Original				Cliente: CORNING Hoja 7 Hoja 40



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Cambio	Fecha	Nombre	Probado Original				Hoja 40

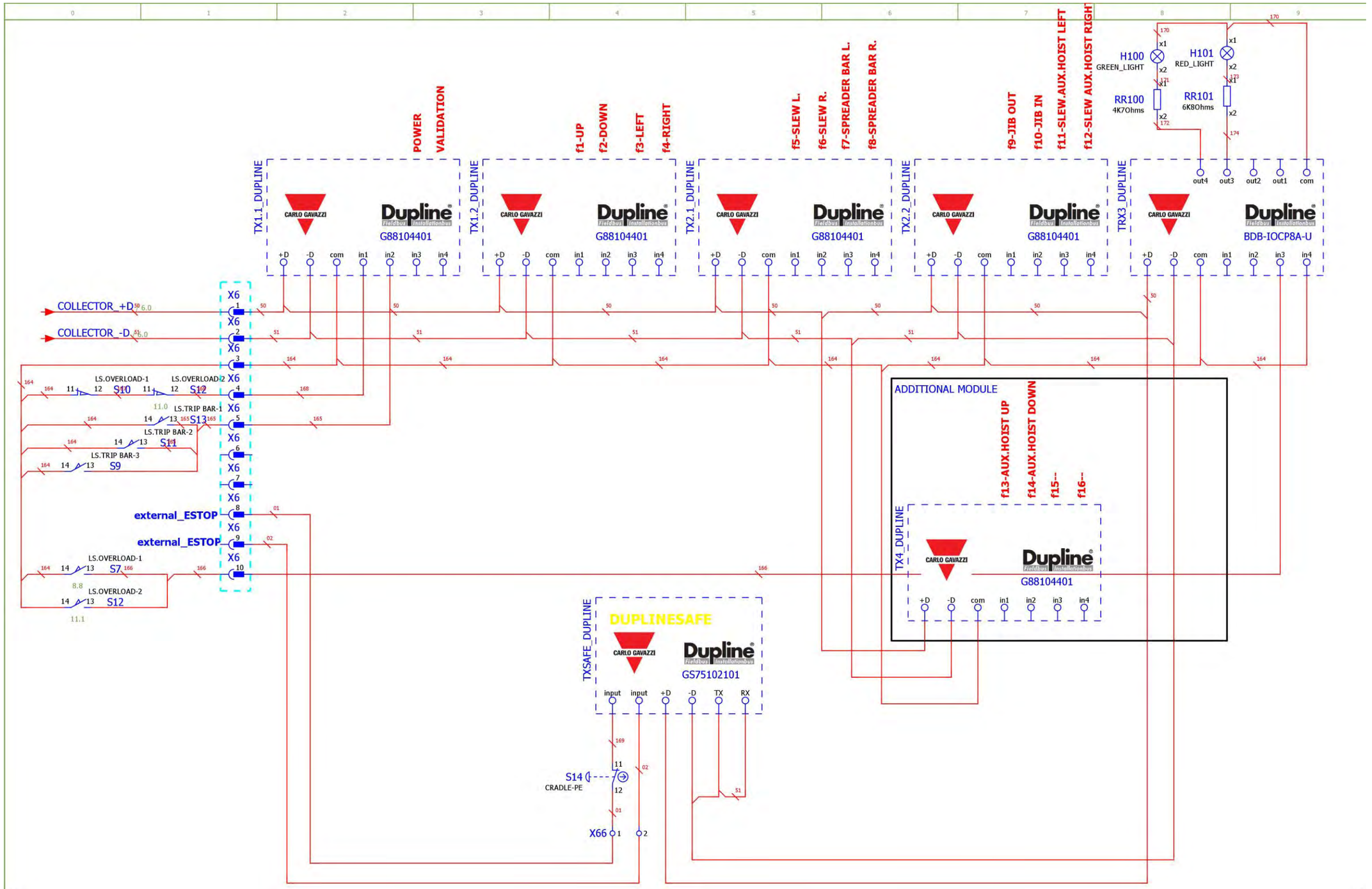


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Cambio	Fecha	Nombre	Probado				Hoja 40
			Original				





			Fecha	29/11/2017	Denominación: HE10Q19	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588	
			Resp.	ing04				
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			Fecha	29/11/2017	Denominación: HE10Q19	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588
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Cambio	Fecha	Nombre	Probado				Hoja 11
			Original				Hoja 40



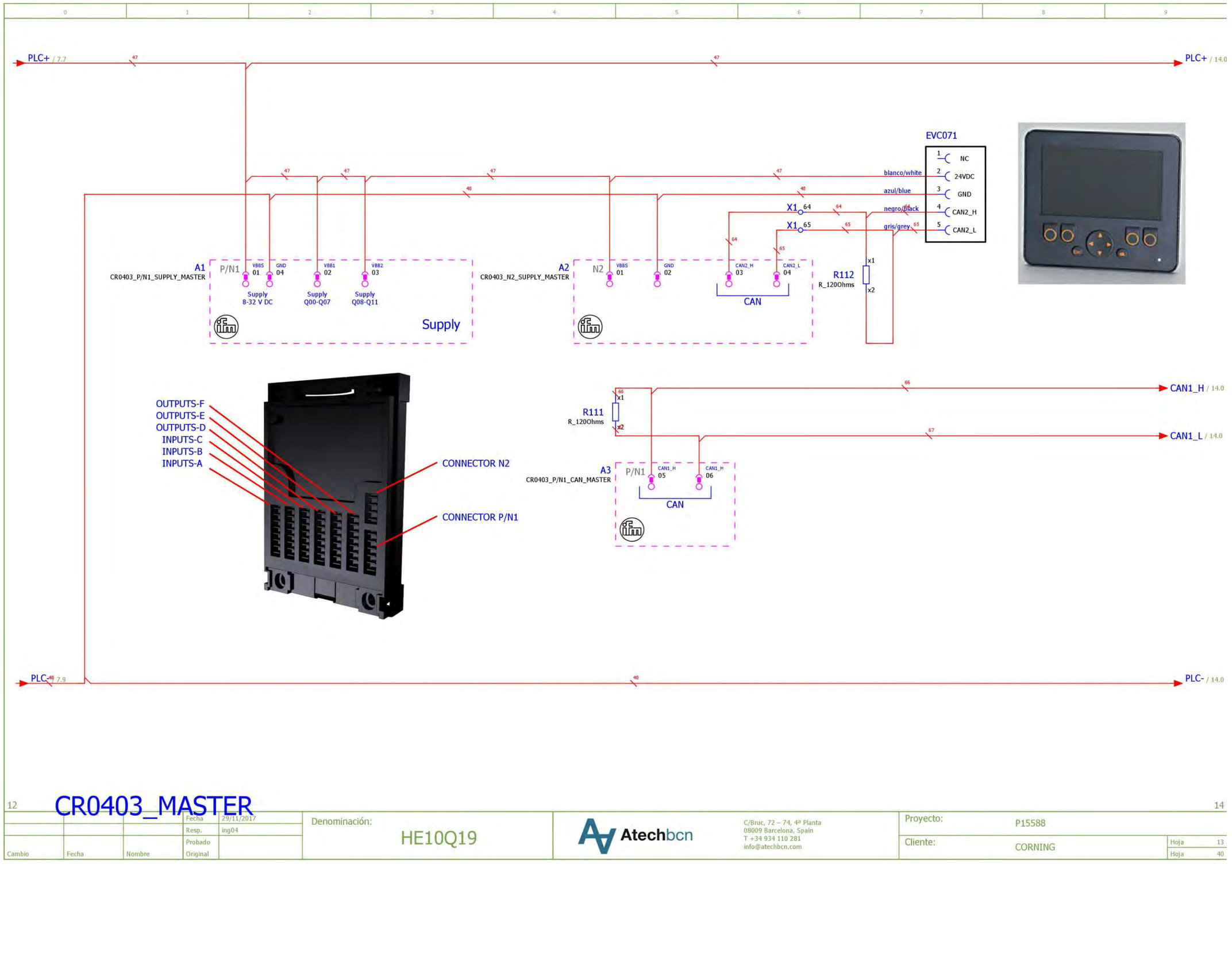
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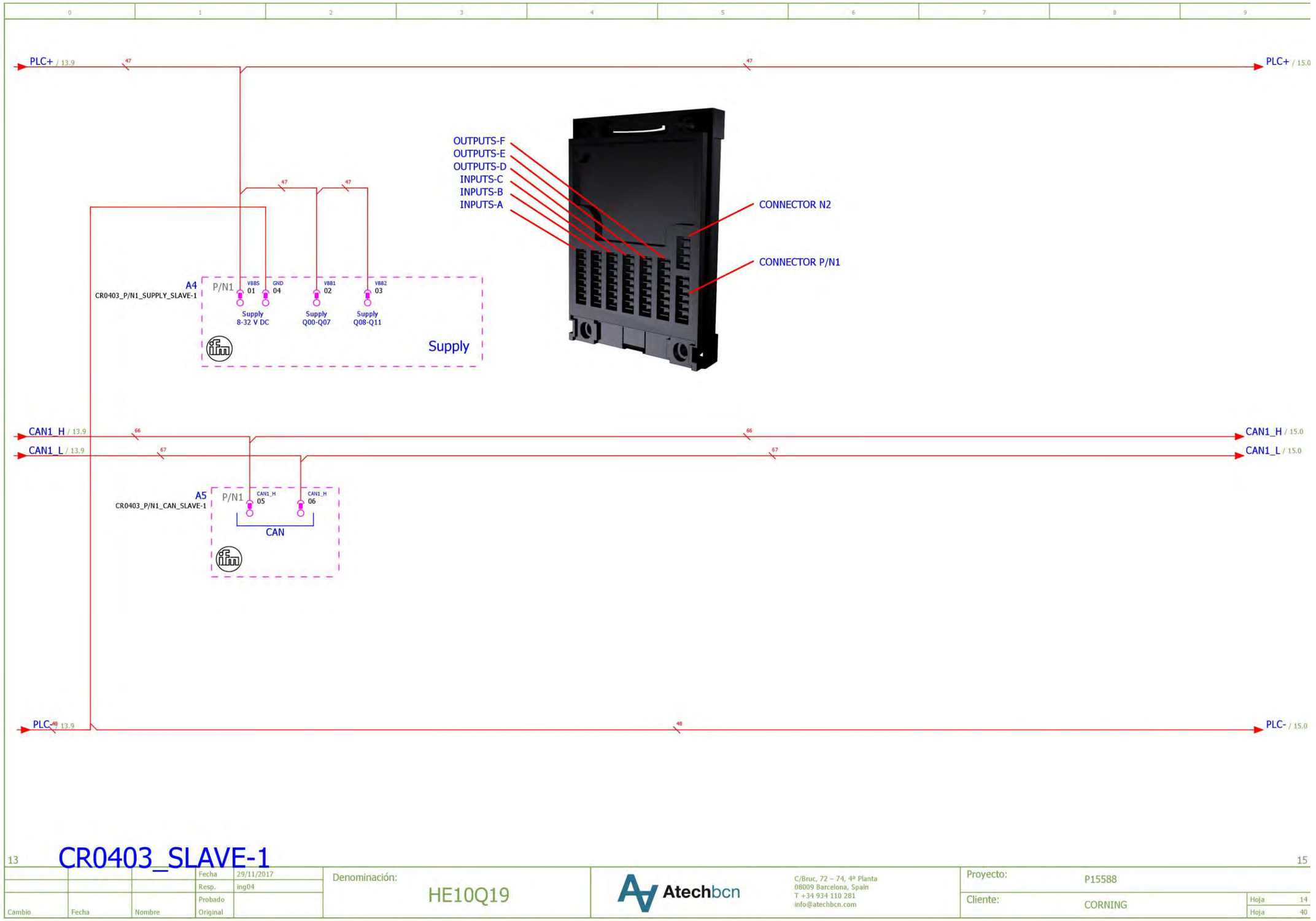
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Cambio	Fecha	Nombre	Probado Original	

Denominación: HE10Q19

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Proyecto: P15588
Cliente: CORNING
Hoja 12
Hoja 40


PLC+ / 7.7
PLC+ / 14.0
EVC071
1 NC
2 24VDC
3 GND
4 CAN2_H
5 CAN2_L
blanco/white
azul/blue
negro/black
gris/grey
X1 64
X1 65
A1
CR0403_P/N1_SUPPLY_MASTER
P/N1
VBBS 01
GND 04
VBB1 02
VBB2 03
Supply 8-32 V DC
Supply Q00-Q07
Supply Q08-Q11
Supply
A2
CR0403_N2_SUPPLY_MASTER
N2
VBBS 01
GND 02
CAN2_H 03
CAN2_L 04
CAN
R112
R_120Ohms
x1
x2
OUTPUTS-F
OUTPUTS-E
OUTPUTS-D
INPUTS-C
INPUTS-B
INPUTS-A
CONNECTOR N2
CONNECTOR P/N1
R111
R_120Ohms
CAN1_H / 14.0
CAN1_L / 14.0
A3
CR0403_P/N1_CAN_MASTER
P/N1
CAN1_H 05
CAN1_H 06
CAN
PLC- / 7.9
PLC- / 14.0
12
CR0403_MASTER
14
Fecha 29/11/2017
Resp. ing04
Probado
Original
Cambio
Fecha
Nombre
Denominación:
HE10Q19
Atechbcn
C/Bruc, 72 – 74, 4ª Planta
08009 Barcelona, Spain
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info@atechbcn.com
Proyecto:
P15588
Cliente:
CORNING
Hoja 13
Hoja 40



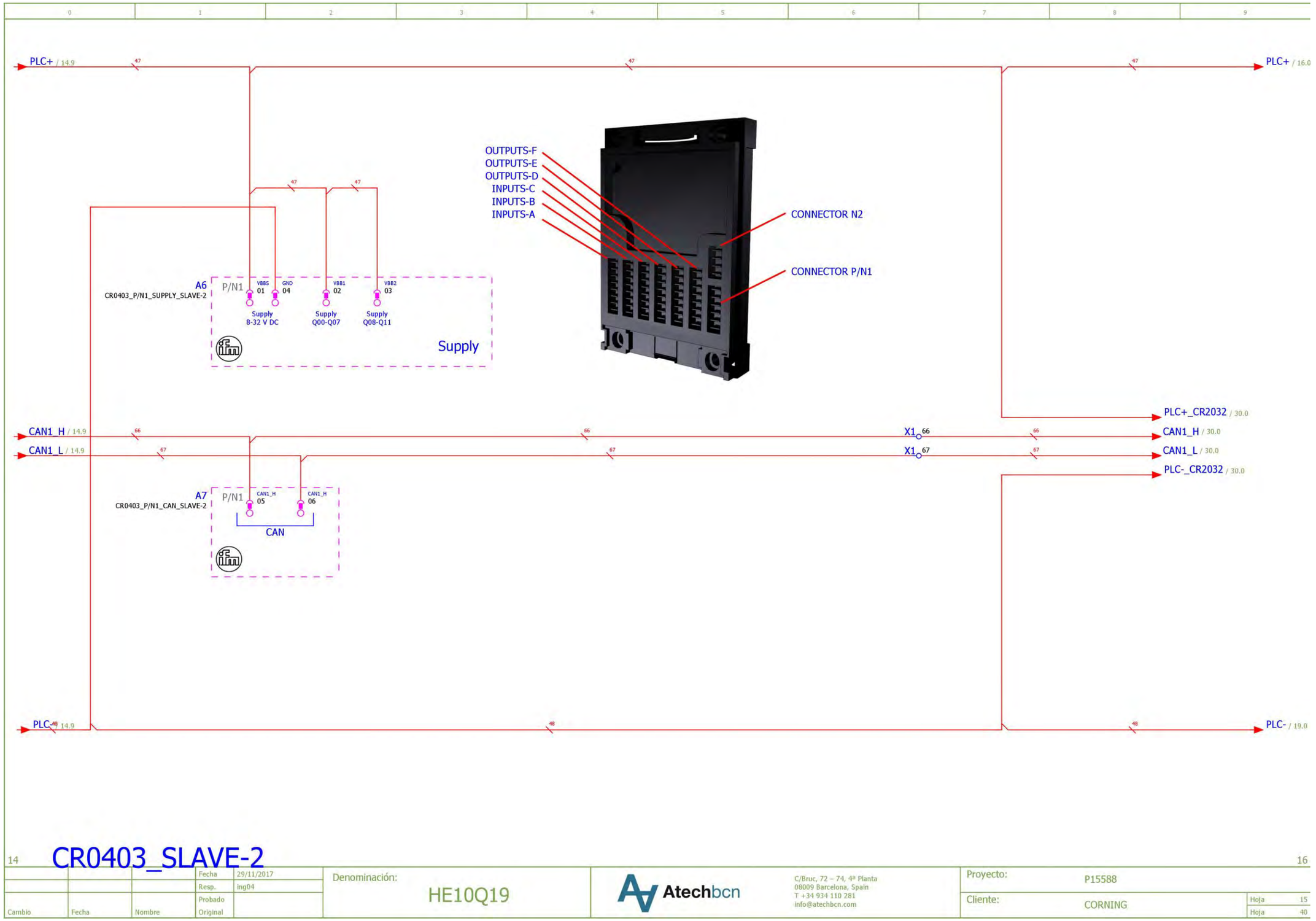
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Denominación: HE10Q19

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Proyecto: P15588
Cliente: CORNING
Hoja 14
Hoja 40



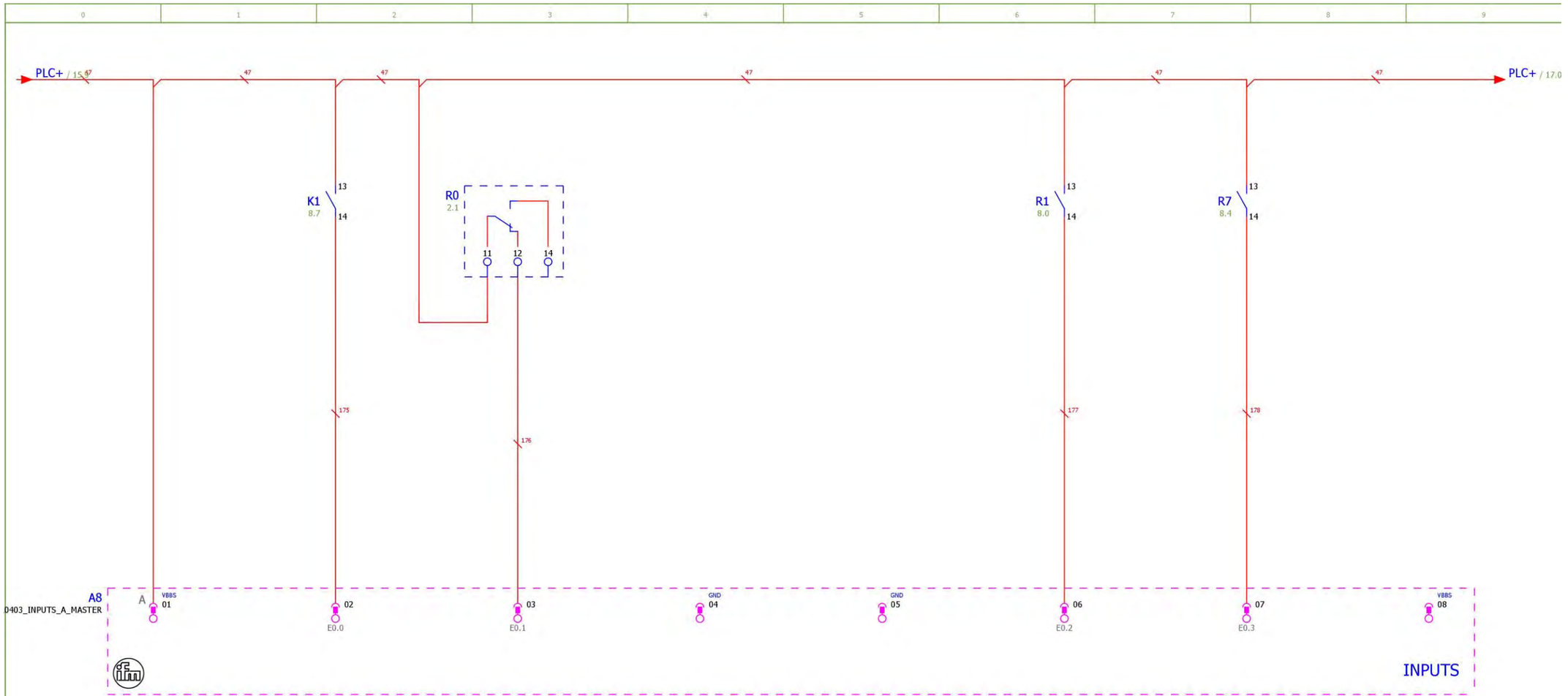
14 CR0403_SLAVE-2 16

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			Original	

Denominación: HE10Q19

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Proyecto:	P15588		
Cliente:	CORNING	Hoja	15
		Hoja	40



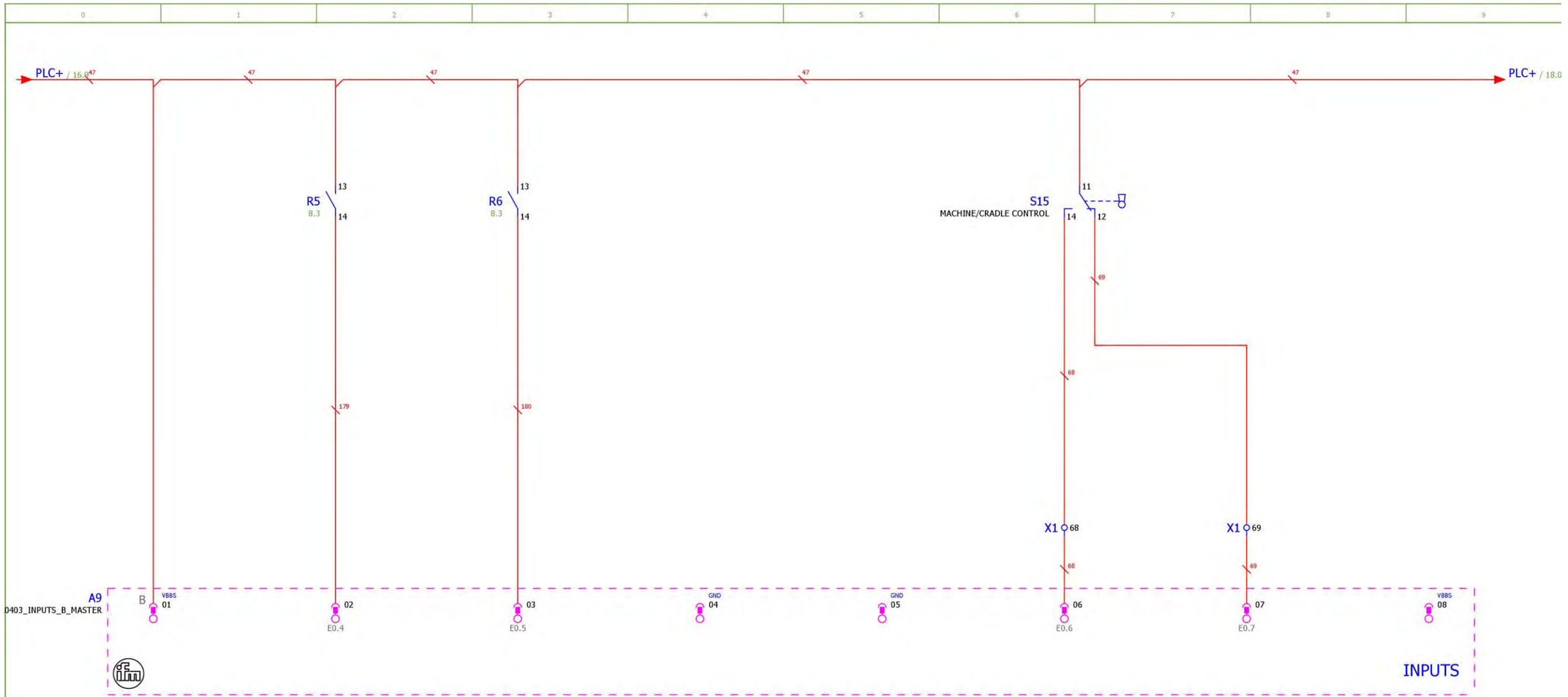
15 CR0403_MASTER 17

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Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q19

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Proyecto: P15588
Cliente: CORNING
Hoja 16
Hoja 40



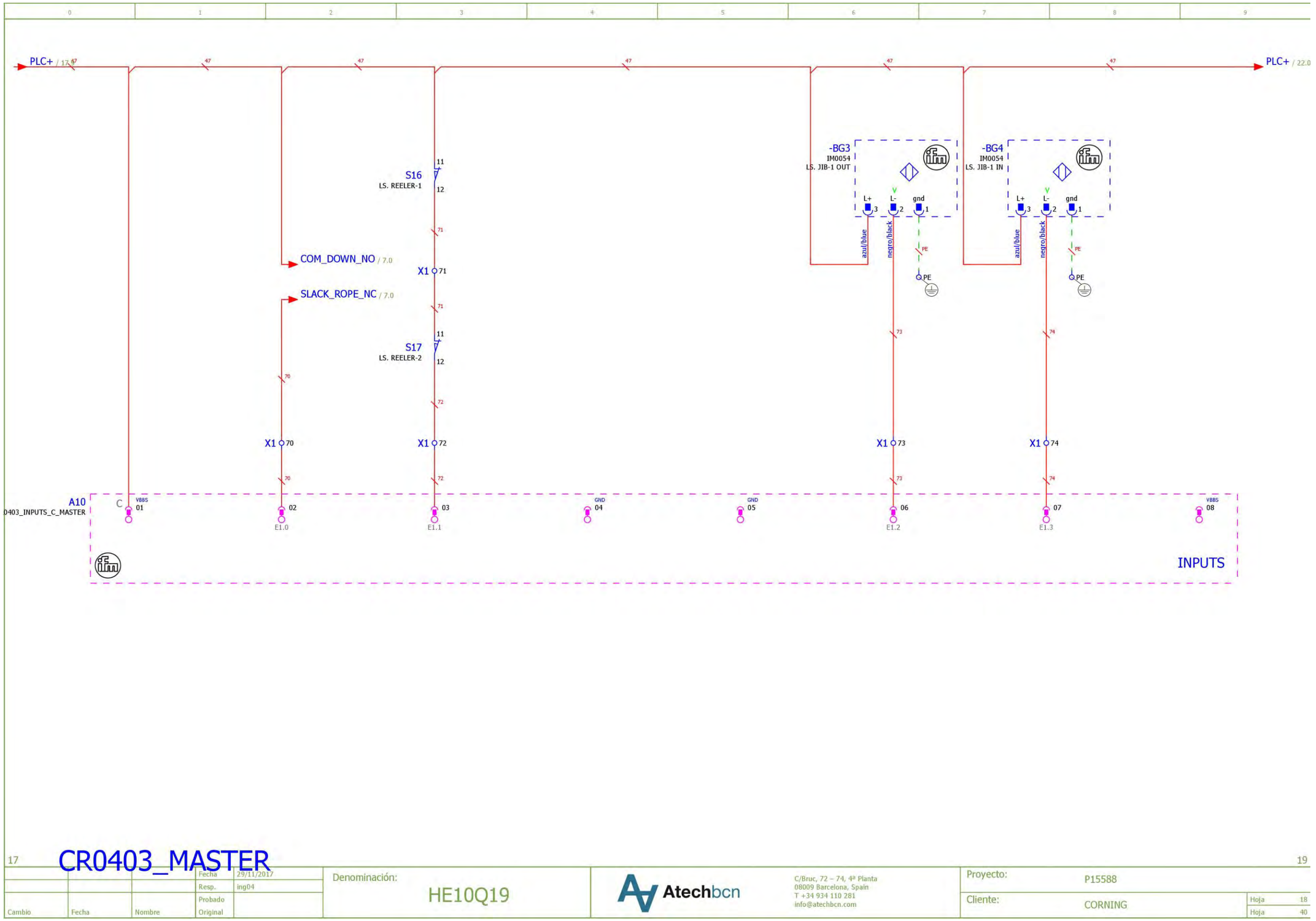
16 CR0403_MASTER 18

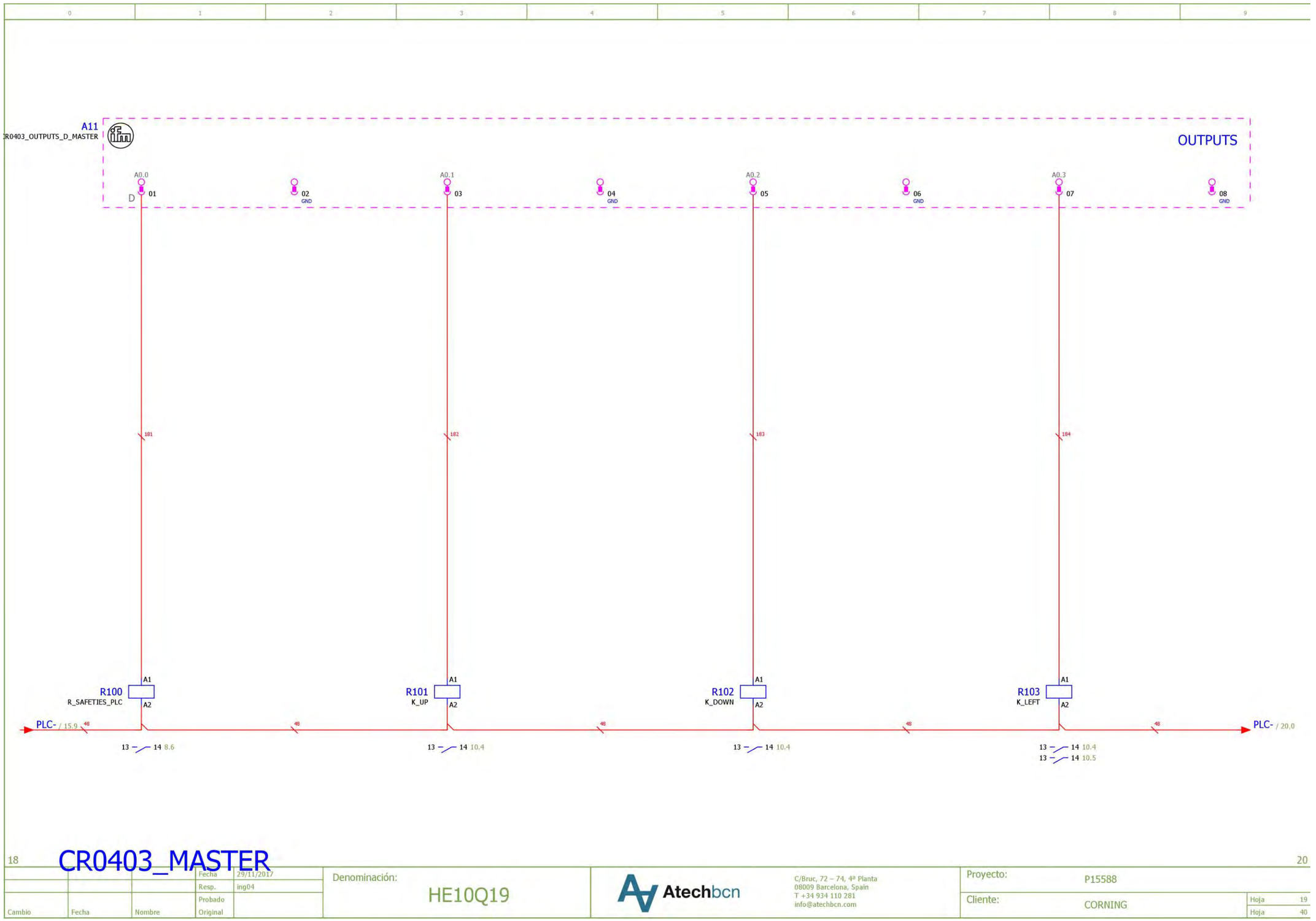
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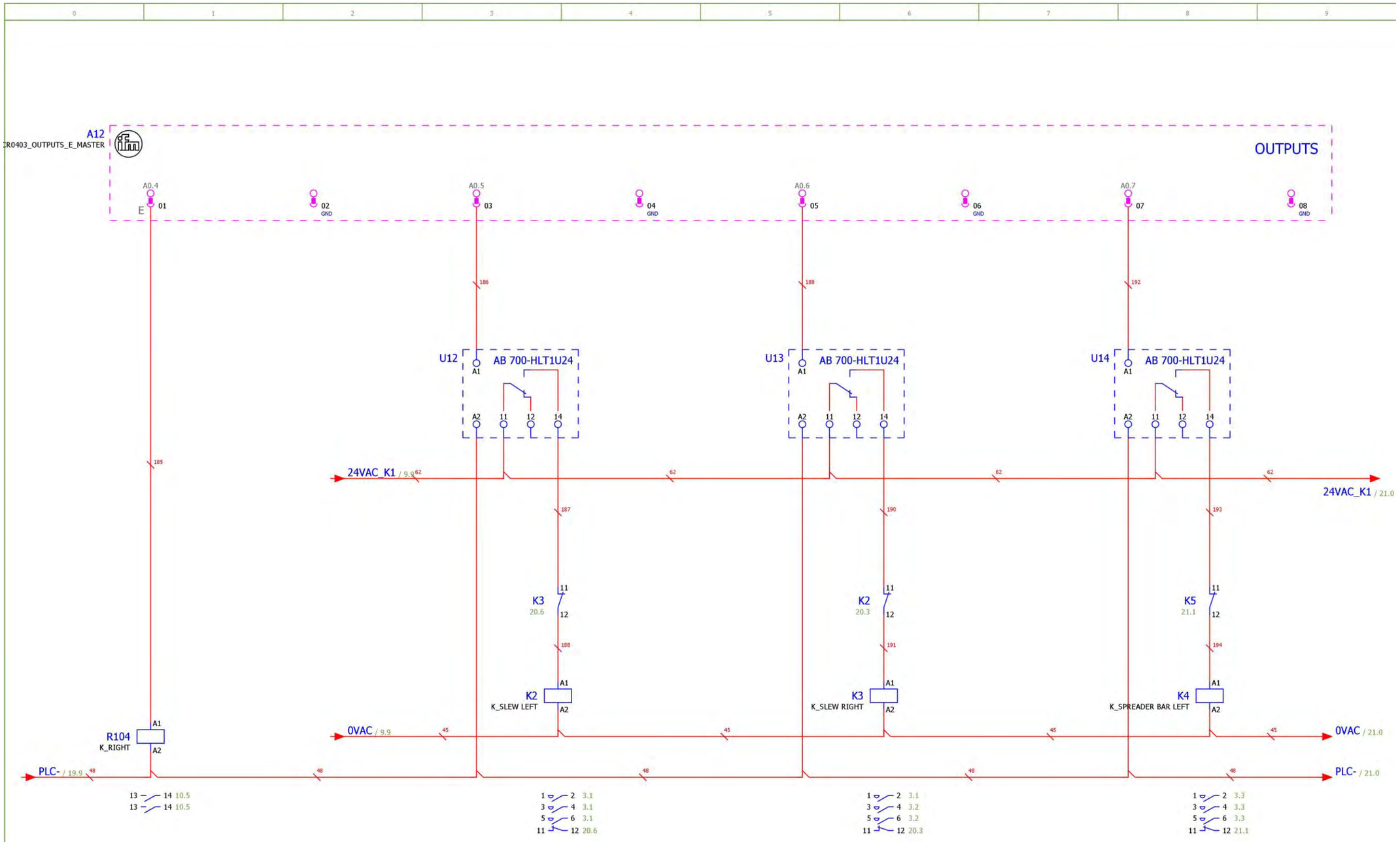
Denominación: HE10Q19

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08009 Barcelona, Spain
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info@atechbcn.com

Proyecto: P15588
Cliente: CORNING
Hoja 17
Hoja 40


PLC+ / 17.0
PLC+ / 22.0
S16
LS. REELER-1
S17
LS. REELER-2
COM_DOWN_NO / 7.0
SLACK_ROPE_NC / 7.0
-BG3
IM0054
LS. JIB-1 OUT
-BG4
IM0054
LS. JIB-1 IN
L+
L-
gnd
azul/blue
negro/black
PE
X1 70
X1 71
X1 72
X1 73
X1 74
A10
0403_INPUTS_C_MASTER
VBBS
GND
E1.0
E1.1
E1.2
E1.3
INPUTS
17
CR0403_MASTER
19
Denominación:
HE10Q19
Atechbcn
C/Bruc, 72 – 74, 4ª Planta
08009 Barcelona, Spain
T +34 934 110 281
info@atechbcn.com
Proyecto:
P15588
Cliente:
CORNING
Fecha 29/11/2017
Resp. ing04
Probado
Original
Cambio
Fecha
Nombre
Hoja 18
Hoja 40


0
1
2
3
4
5
6
7
8
9
A11
CR0403_OUTPUTS_D_MASTER
OUTPUTS
A0.0
A0.1
A0.2
A0.3
D
01
02
GND
03
04
GND
05
06
GND
07
08
GND
181
182
183
184
R100
R_SAFETIES_PLC
R101
K_UP
R102
K_DOWN
R103
K_LEFT
A1
A2
PLC- / 15.9
PLC- / 20.0
13 14 8.6
13 14 10.4
13 14 10.4
13 14 10.4
13 14 10.5
18
CR0403_MASTER
20
Fecha 29/11/2017
Resp. ing04
Probado
Original
Cambio
Fecha
Nombre
Denominación:
HE10Q19
Atechbcn
C/Bruc, 72 – 74, 4ª Planta
08009 Barcelona, Spain
T +34 934 110 281
info@atechbcn.com
Proyecto:
P15588
Cliente:
CORNING
Hoja 19
Hoja 40



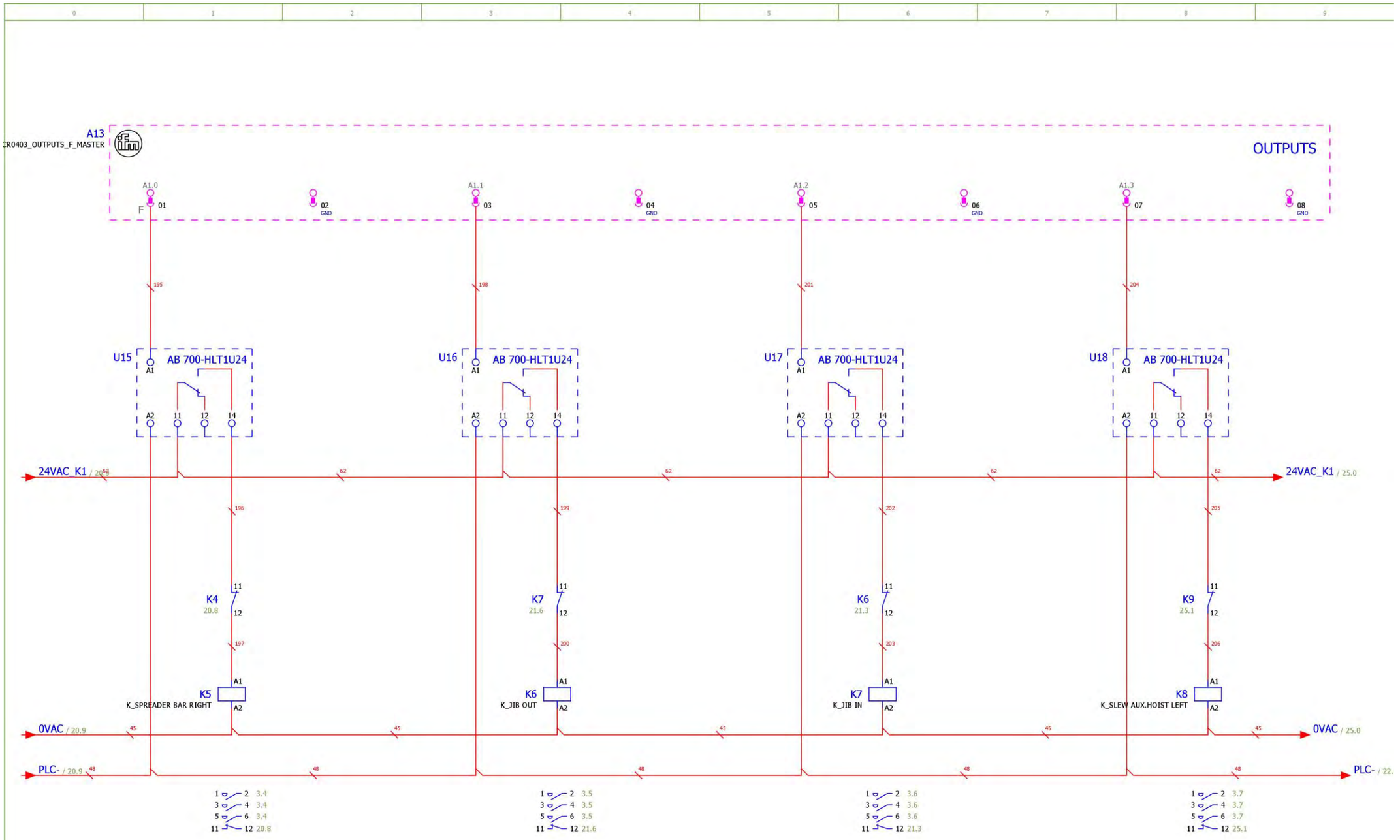
19 CR0403_MASTER 21

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado	
			Original	

Denominación: HE10Q19

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Proyecto: P15588
Cliente: CORNING
Hoja 20
Hoja 40



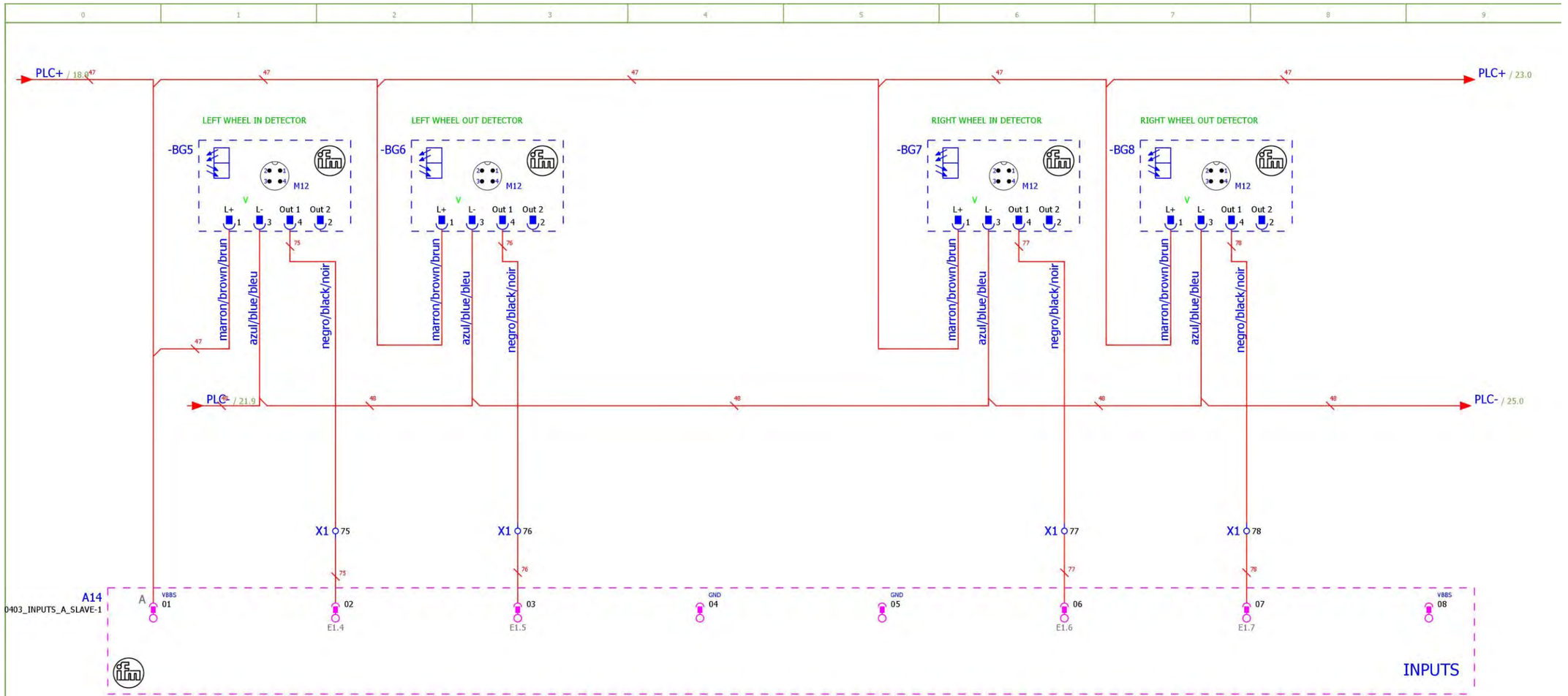
20 CR0403_MASTER 22

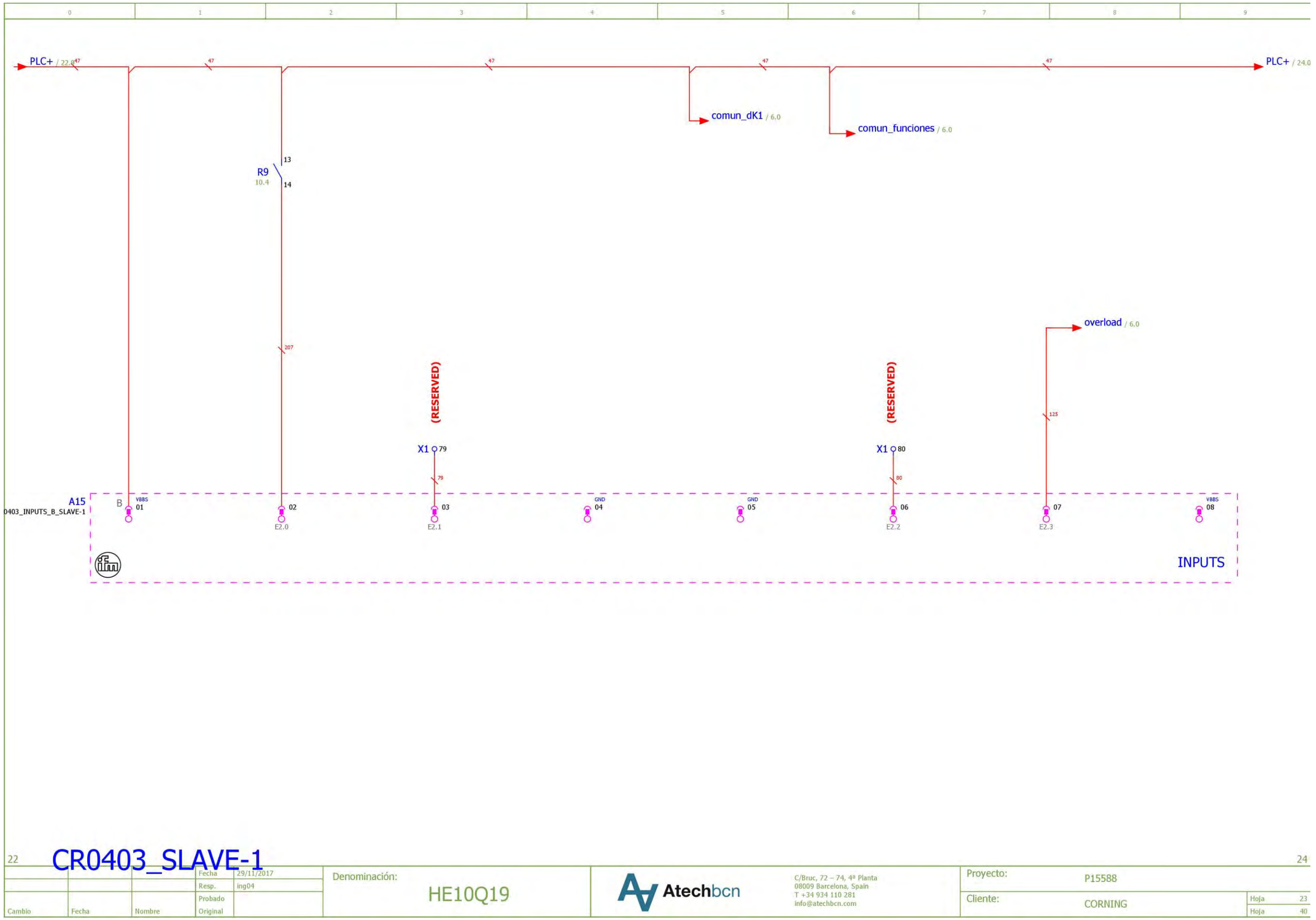
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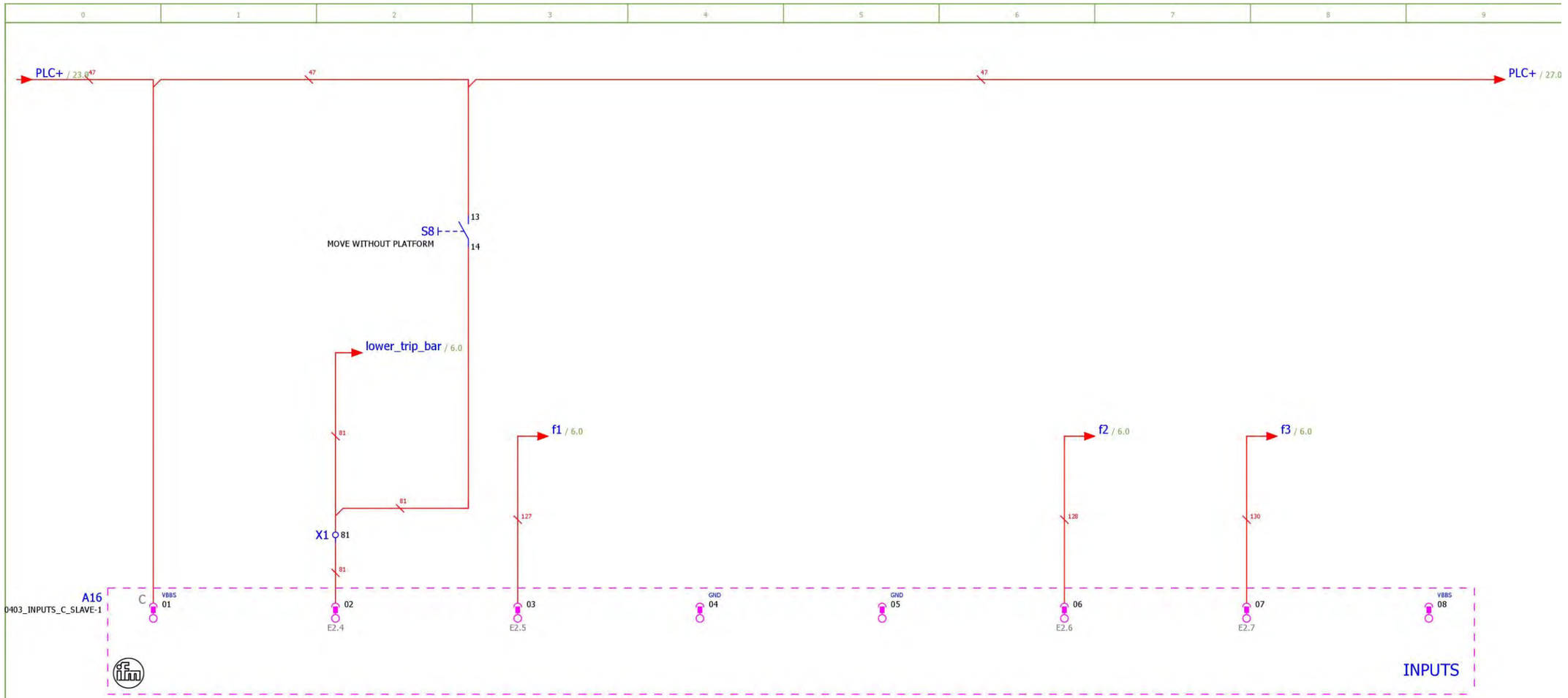
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Proyecto: P15588
Cliente: CORNING
Hoja 21
Hoja 40


PLC+ / 18.0
PLC+ / 23.0
PLC- / 21.9
PLC- / 25.0
LEFT WHEEL IN DETECTOR
LEFT WHEEL OUT DETECTOR
RIGHT WHEEL IN DETECTOR
RIGHT WHEEL OUT DETECTOR
-BG5
-BG6
-BG7
-BG8
M12
L+ L- Out 1 Out 2
marron/brown/brun
azul/blue/bleu
negro/black/noir
X1 75
X1 76
X1 77
X1 78
A14
0403_INPUTS_A_SLAVE-1
VBBS
GND
E1.4
E1.5
E1.6
E1.7
INPUTS
21
CR0403_SLAVE-1
23
Fecha 29/11/2017
Resp. ing04
Probado
Original
Cambio
Fecha
Nombre
Denominación:
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Proyecto:
P15588
Cliente:
CORNING
Hoja 22
Hoja 40


PLC+ / 22.0
PLC+ / 24.0
comun_dK1 / 6.0
comun_funciones / 6.0
R9
10.4
overload / 6.0
(RESERVED)
(RESERVED)
X1
X1
A15
0403_INPUTS_B_SLAVE-1
VBBS
GND
GND
VBBS
E2.0
E2.1
E2.2
E2.3
INPUTS
22
CR0403_SLAVE-1
24
Fecha 29/11/2017
Resp. ing04
Probado
Original
Cambio
Fecha
Nombre
Denominación:
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Proyecto:
P15588
Cliente:
CORNING
Hoja 23
Hoja 40



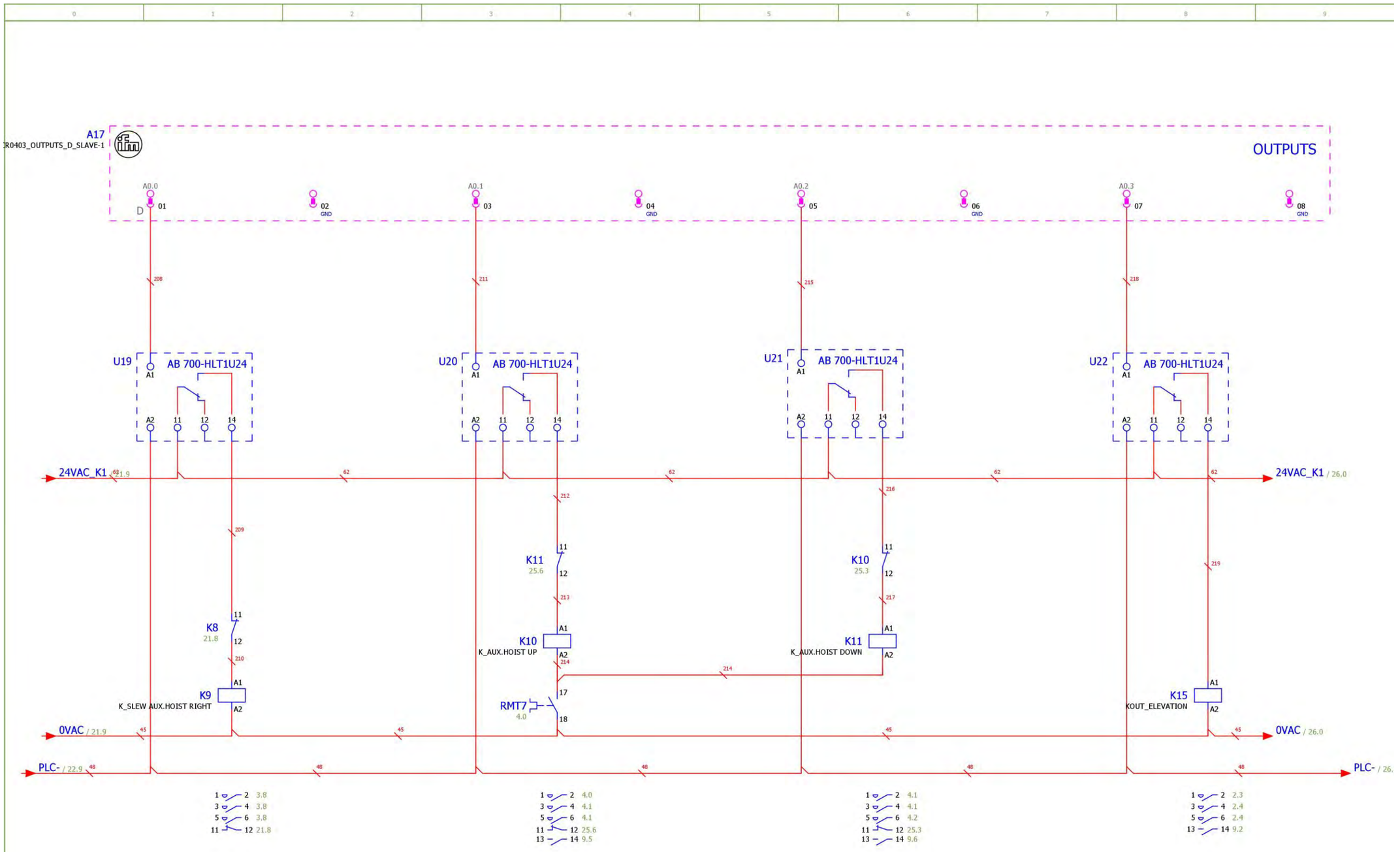
23 CR0403_SLAVE-1 25

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			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q19

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Proyecto: P15588
Cliente: CORNING
Hoja 24
Hoja 40



24 CR0403_SLAVE-1 26

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			Resp.	ing04
Cambio	Fecha	Nombre	Probado Original	

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Proyecto:	P15588		
Cliente:	CORNING	Hoja	25
		Hoja	40



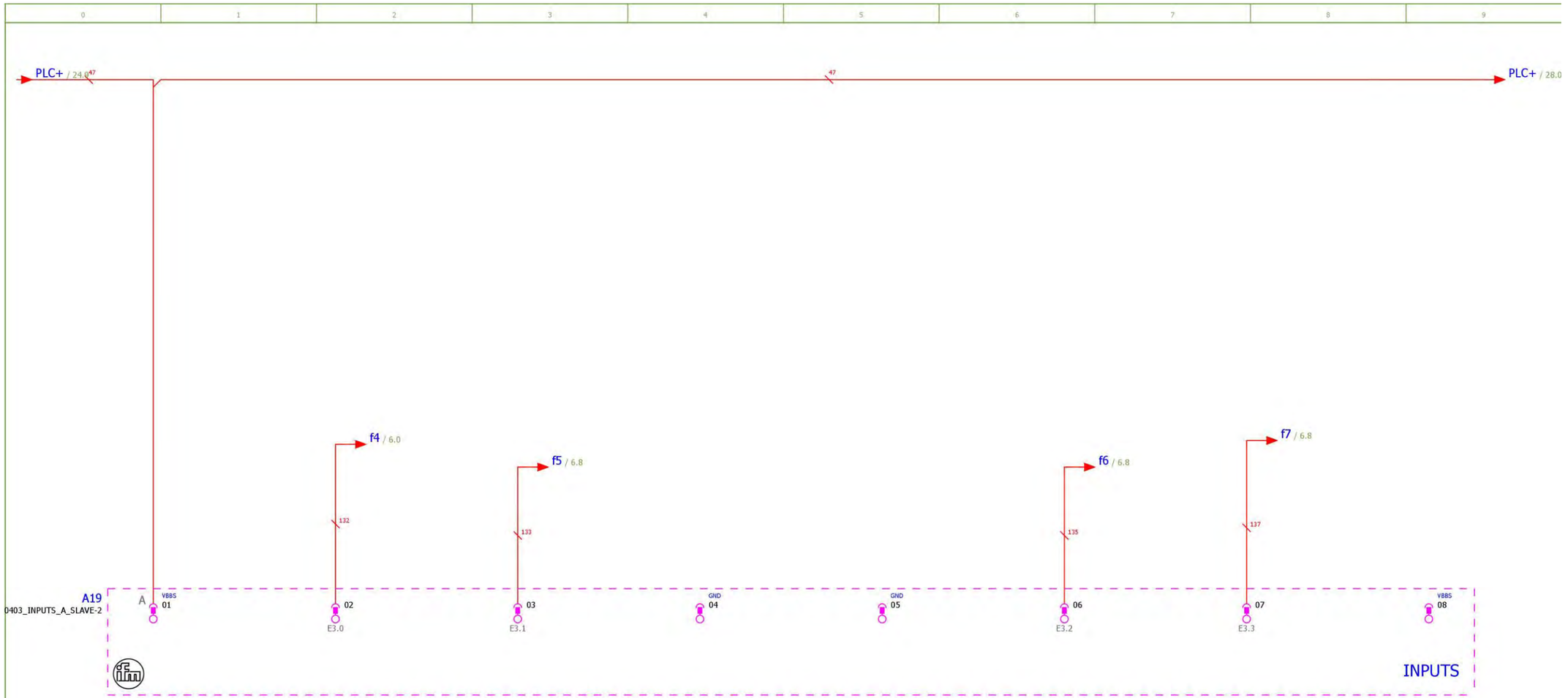
25 CR0403_SLAVE-1 27

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			Resp.	ing04
Cambio	Fecha	Nombre	Probado Original	

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Proyecto: P15588
Cliente: CORNING
Hoja 26
Hoja 40



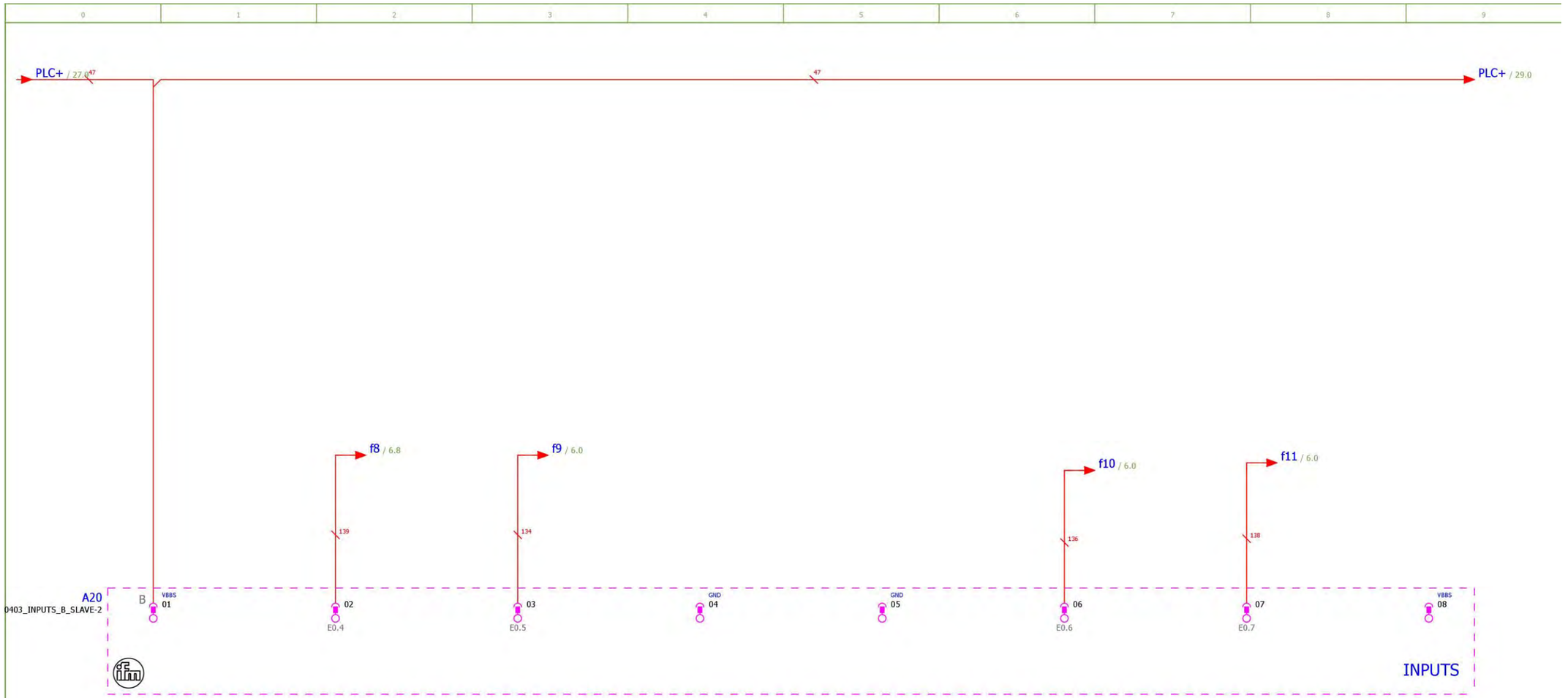
26 CR0403_SLAVE-2 28

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Cambio	Fecha	Nombre	Probado / Original	

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Proyecto: P15588
Cliente: CORNING
Hoja 27
Hoja 40



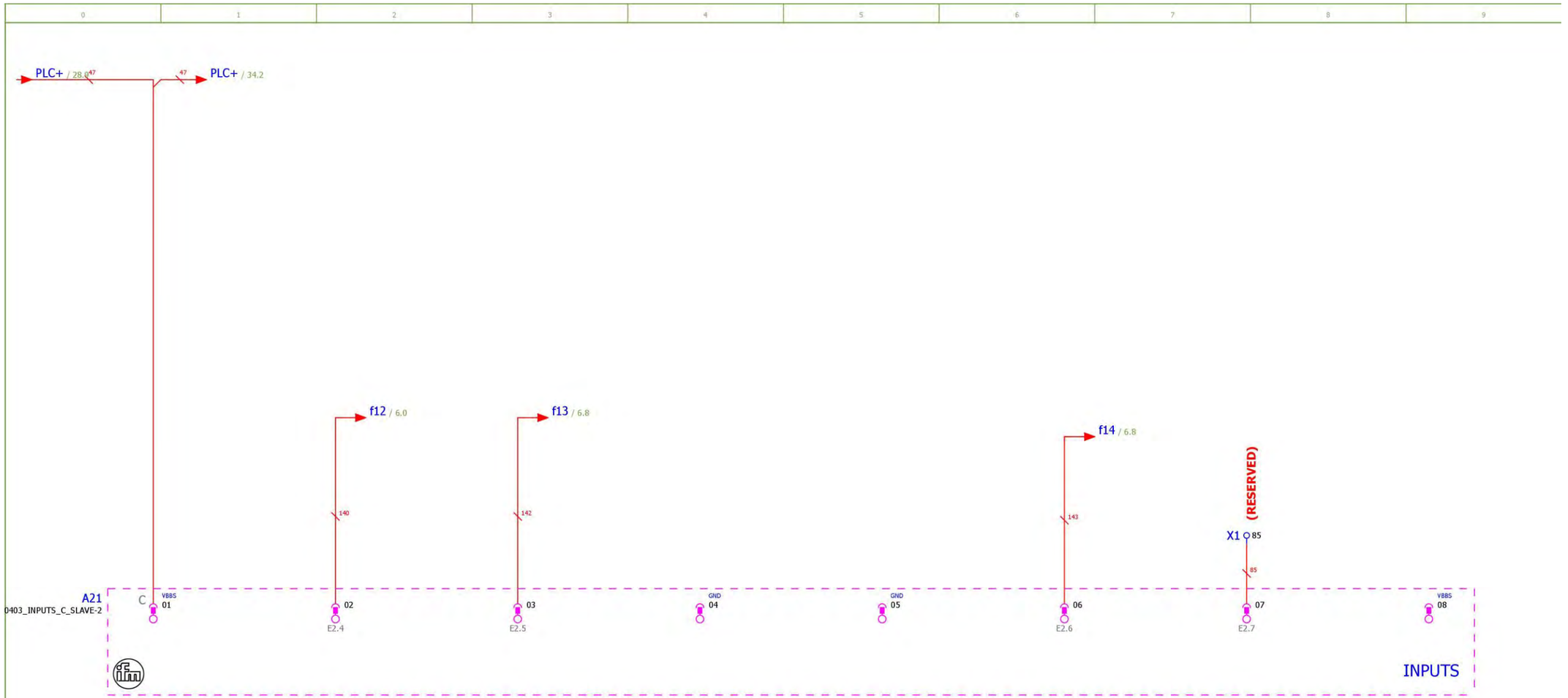
27 CR0403_SLAVE-2 29

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Cambio	Fecha	Nombre	Probado / Original	

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Proyecto:	P15588		
Cliente:	CORNING	Hoja	28
		Hoja	40



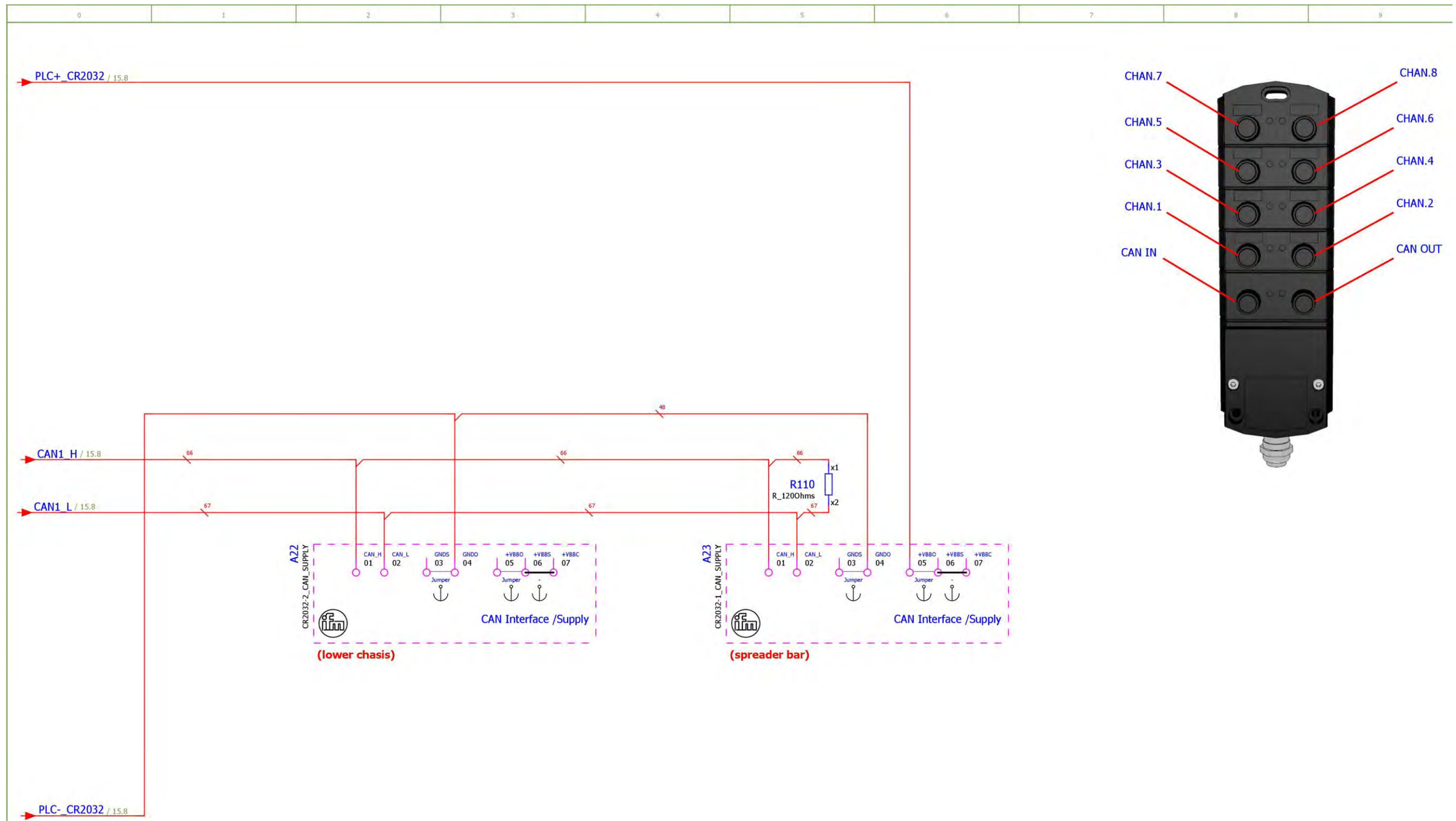
28 CR0403_SLAVE-2 30

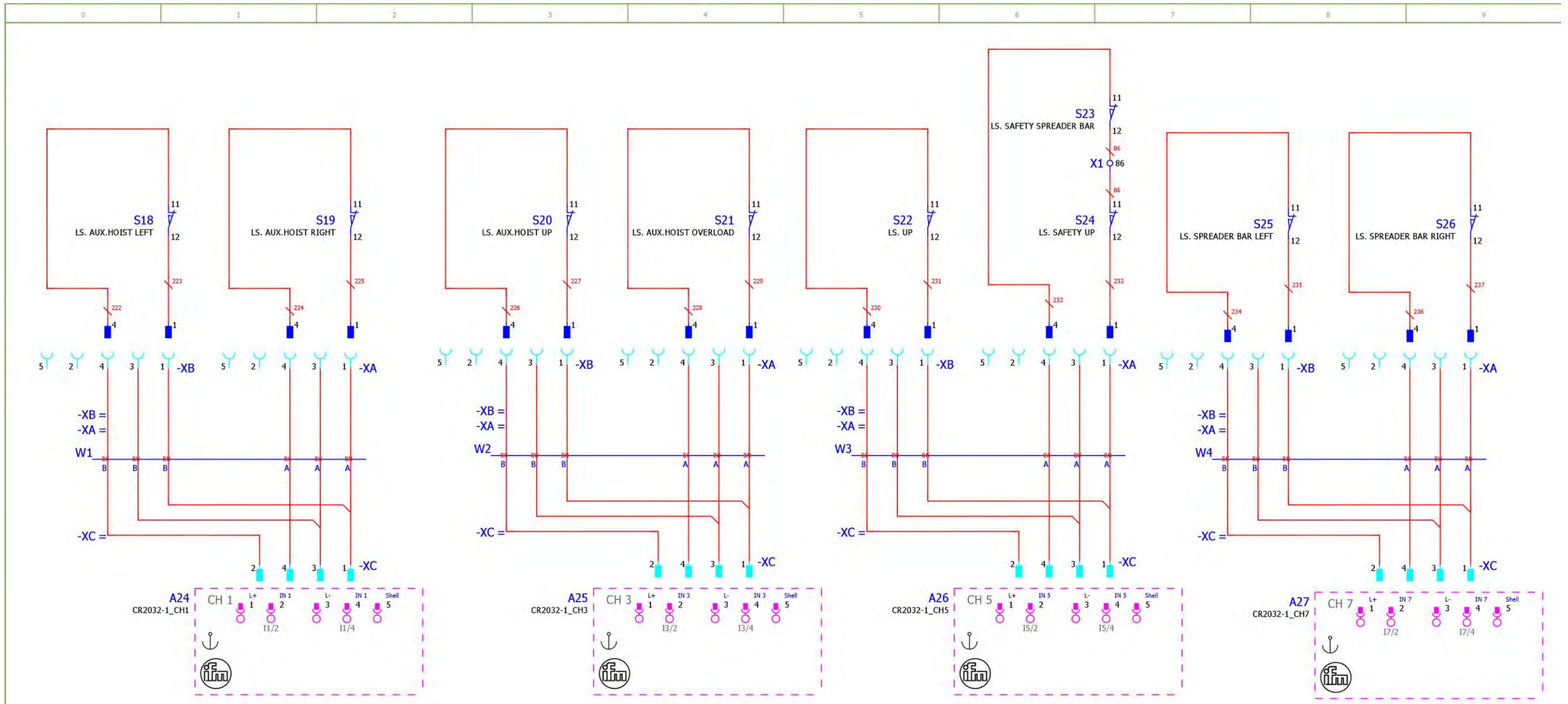
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Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q19

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Proyecto: P15588
Cliente: CORNING
Hoja 29
Hoja 40

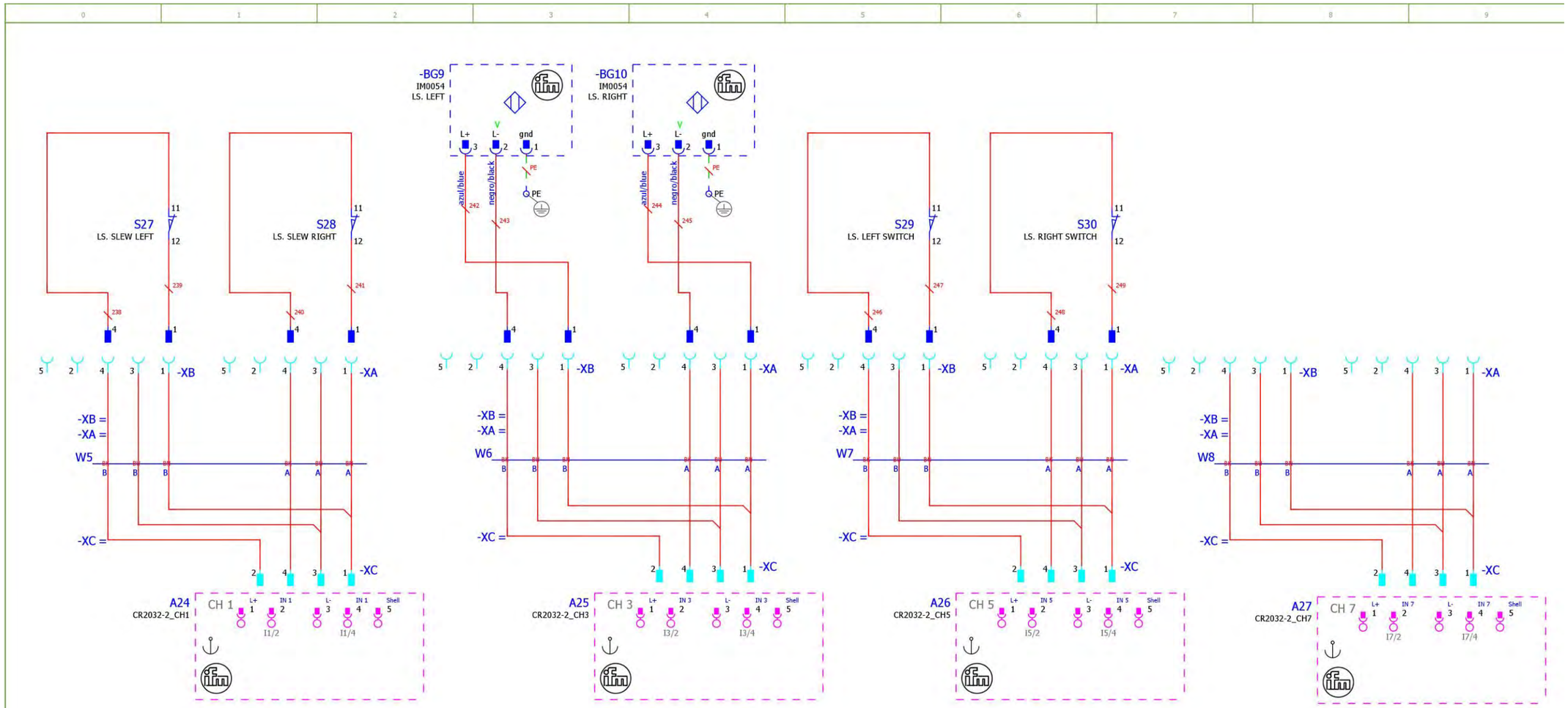

PLC+_CR2032 / 15.8
CAN1_H / 15.8
CAN1_L / 15.8
PLC-_CR2032 / 15.8
48
66
67
R110
R_120Ohms
x1
x2
A22
CR2032-2_CAN_SUPPLY
A23
CR2032-1_CAN_SUPPLY
CAN_H 01
CAN_L 02
GNDS 03
GNDO 04
+VBBO 05
+VBBS 06
+VBBC 07
Jumper
CAN Interface /Supply
(lower chasis)
(spreader bar)
CHAN.7
CHAN.8
CHAN.5
CHAN.6
CHAN.3
CHAN.4
CHAN.1
CHAN.2
CAN IN
CAN OUT
29
CR2032-1
31
Fecha 29/11/2017
Resp. ing04
Probado
Original
Cambio
Fecha
Nombre
Denominación:
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Hoja 30
Hoja 40



30 CR2032-1 32

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			Resp.	ing04			
Cambio	Fecha	Nombre	Probado			Cliente: CORNING	Hoja 31
			Original				Hoja 40

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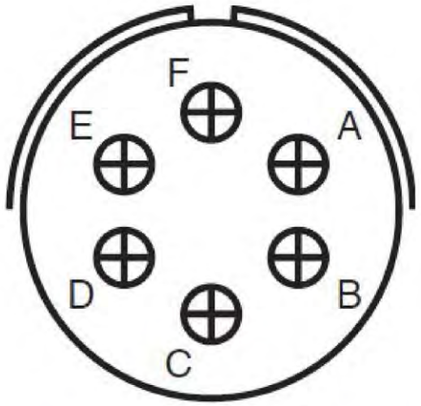
31 33

CR2032-2

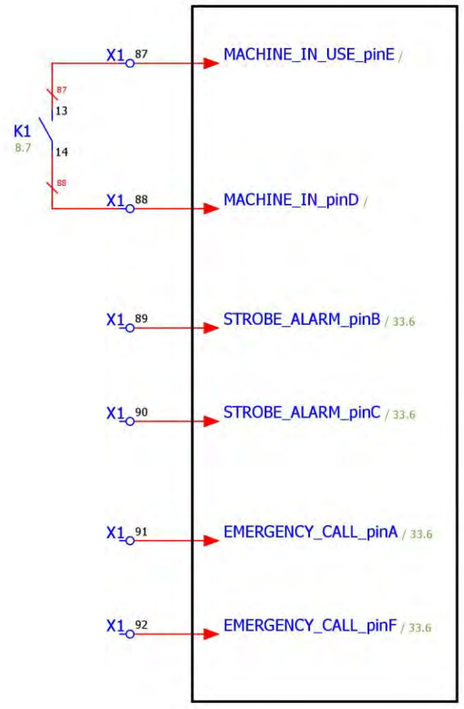
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		Resp.	ing04	
Cambio	Fecha	Nombre	Probado / Original	

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Proyecto: P15588
Cliente: CORNING
Hoja 32
Hoja 40



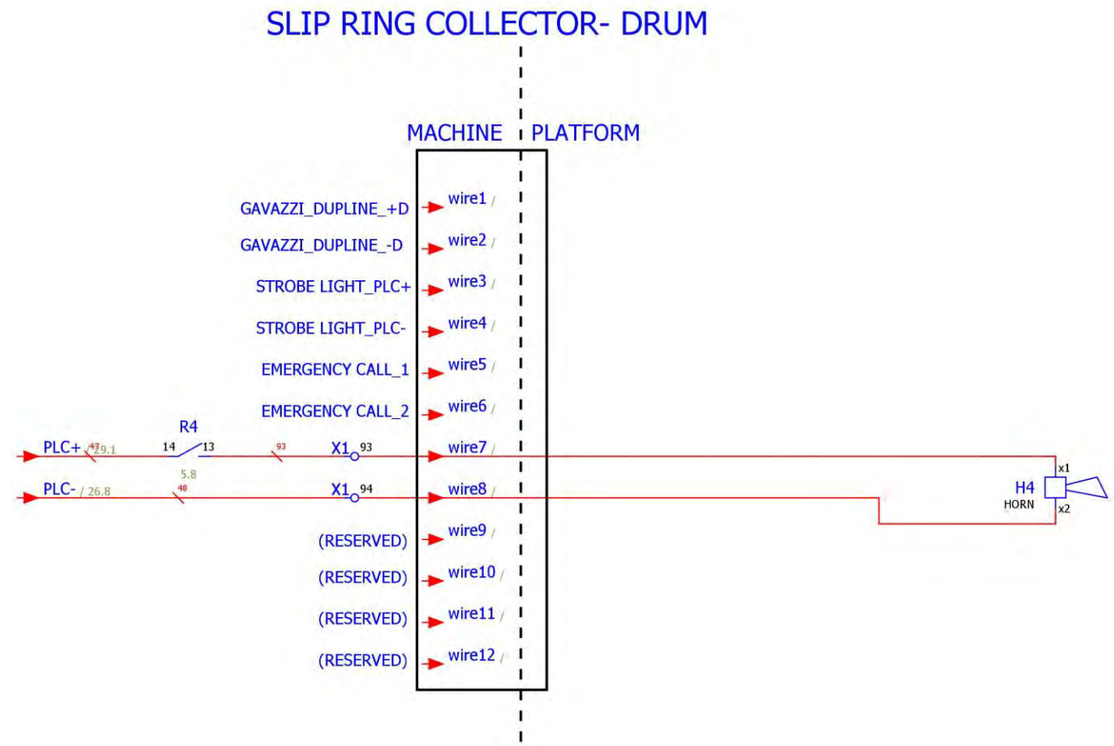
A-F: Contacts for Emergency call - INTERCOM
D-E Contacts for In use signal
B-C Contacts for fire alarm - STROBE LIGHT



32 34

			Fecha	29/11/2017	Denominación: HE10Q19	Proyecto: P15588	
			Resp.	ing04			
Cambio	Fecha	Nombre	Probado / Original			Cliente: CORNING	Hoja 33 / Hoja 40

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33 35

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			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

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Proyecto: P15588
Cliente: CORNING
Hoja 34
Hoja 40

BOX2-input:
W07y 7X1.5: SPREADER BAR MOTOR+AUX.HOIST SLEW MOTOR
W07y 4X2.5+(4X1): PLATFORM CABLE
W07y 7X1.5: TELESCOPIC MOTOR

W05w 5x1: CANBUS from CR2032
W05w 2x1: JIB IN DETECTOR
W05w 2x1: JIB OUT DETECTOR
W05w 2x1: SAFTY JIB DETECTOR

BOX2-output:
W07y 7X1.5: SPREADER BAR MOTOR+AUX.HOIST SLEW MOTOR
W07y 4X2.5+(4X1): PLATFORM CABLE
W07y 7X1.5: TELESCOPIC MOTOR

W05w 5x1: CANBUS from CR2032
W05w 5x1: JIB DETECTORS

BOX1-input:
W07y 7X1.5: SPREADER BAR MOTOR+AUX.HOIST SLEW MOTOR
W07y 4X2.5+(4X1): PLATFORM CABLE

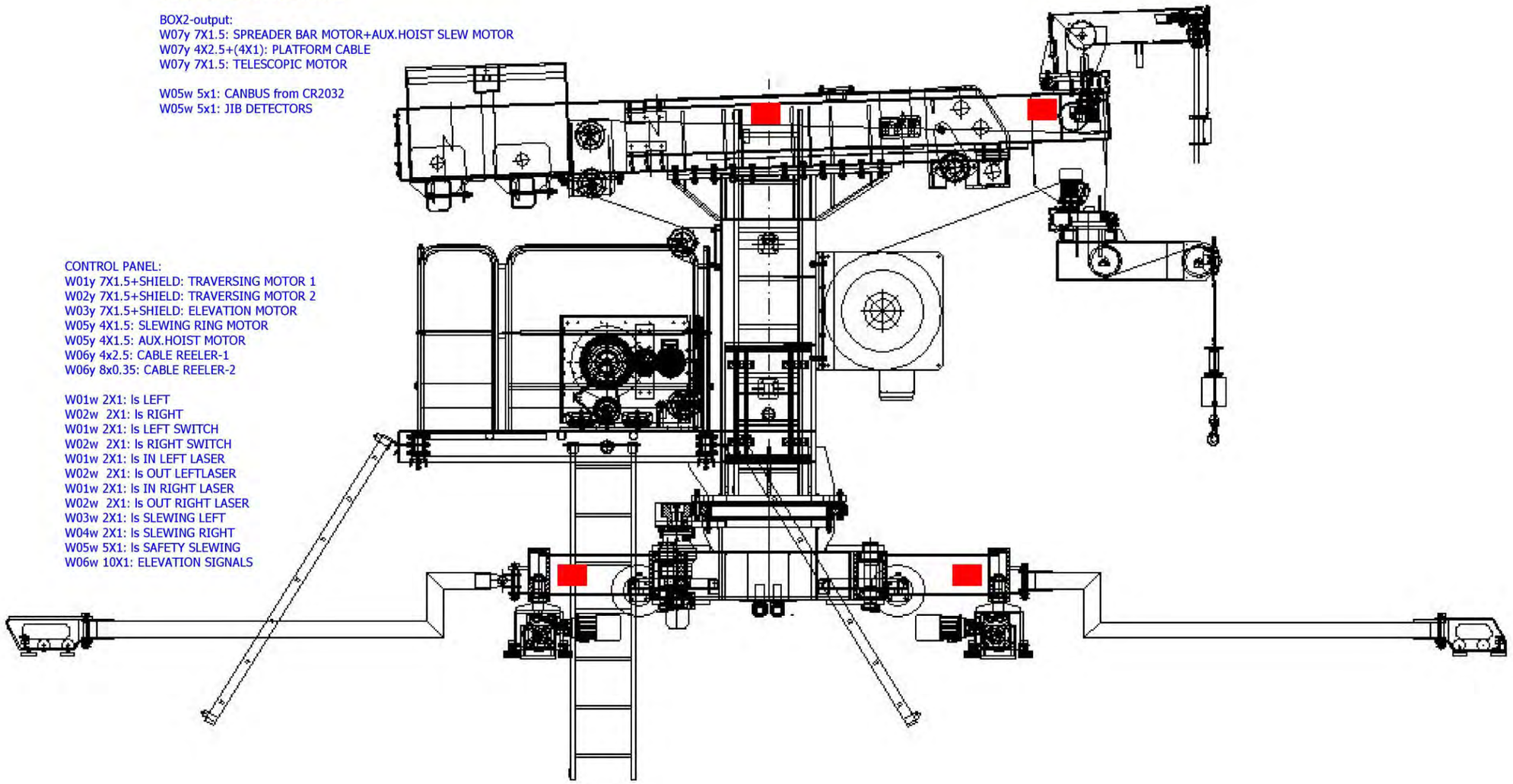
W05w 5x1: CANBUS from CR2032

BOX1-output:
W07y 7X1.5: SPREADER BAR MOTOR+AUX.HOIST SLEW MOTOR
W07y 4X2.5+(4X1): PLATFORM CABLE

W05w 5x1: CANBUS from CR2032

CONTROL PANEL:
W01y 7X1.5+SHIELD: TRAVERSING MOTOR 1
W02y 7X1.5+SHIELD: TRAVERSING MOTOR 2
W03y 7X1.5+SHIELD: ELEVATION MOTOR
W05y 4X1.5: SLEWING RING MOTOR
W05y 4X1.5: AUX.HOIST MOTOR
W06y 4x2.5: CABLE REELER-1
W06y 8x0.35: CABLE REELER-2

W01w 2X1: ls LEFT
W02w 2X1: ls RIGHT
W01w 2X1: ls LEFT SWITCH
W02w 2X1: ls RIGHT SWITCH
W01w 2X1: ls IN LEFT LASER
W02w 2X1: ls OUT LEFTLASER
W01w 2X1: ls IN RIGHT LASER
W02w 2X1: ls OUT RIGHT LASER
W03w 2X1: ls SLEWING LEFT
W04w 2X1: ls SLEWING RIGHT
W05w 5X1: ls SAFETY SLEWING
W06w 10X1: ELEVATION SIGNALS



34 36

		Fecha	29/11/2017	Denominación: HE10Q19
		Resp.	ing04	
Cambio	Fecha / Nombre	Probado / Original		

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Proyecto:	P15588		
Cliente:	CORNING	Hoja	35
		Hoja	40

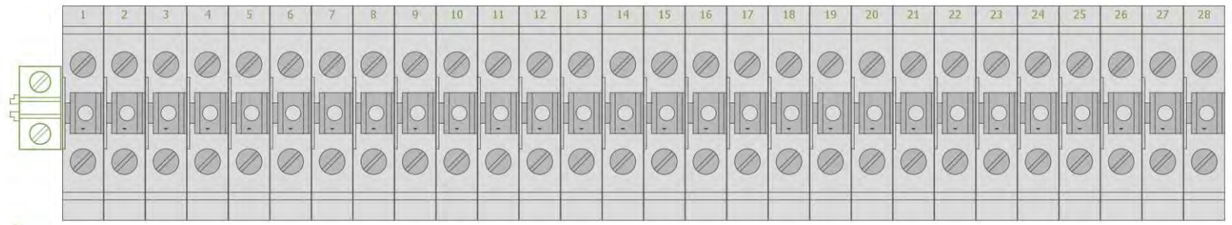
Plano de bornes

F13_005

Regleta X1

Página	2.0	2.0	2.1	2.2	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.6	2.6	2.6	2.7	2.7	2.8	2.8	2.8	2.9	3.1	3.1	3.1	3.3	3.3	3.3	3.5	3.5
Texto de función	MAIN KEY SWITCH	=	=	ELEVATION MOTOR	=	=	=	=	=			TRAVERSING MOTOR-1	=	=	TRAVERSING MOTOR-2	=	=	=	=	=	SLEWING MOTOR	=	=	SPREADER BAR MOTOR	=	=	TELESCOPIC JIB-1 MOTOR	=
Potencial																												
Destinos externos	QB01	QB01	QB01	M1	M1	M1	M1	M1	M1	RF1	RF1	M2	M2	M2	M3	M3	M3	M3	M3	M3	M4	M4	M4	M5	M5	M5	M6	M6
Cableado																												

Cableado																												
Destinos internos	Q1	Q1	Q1	K12	K12	K12	K15	K15	K15	U1	U1	RMT1	RMT1	RMT1	RMT2	RMT2	RMT2	K13	K13	K13	RMT3	RMT3	RMT3	RMT4	RMT4	RMT4	RMT5	RMT5
Texto de función				BRAKE			KOUT_ELEVATION											BRAKE										



35

37

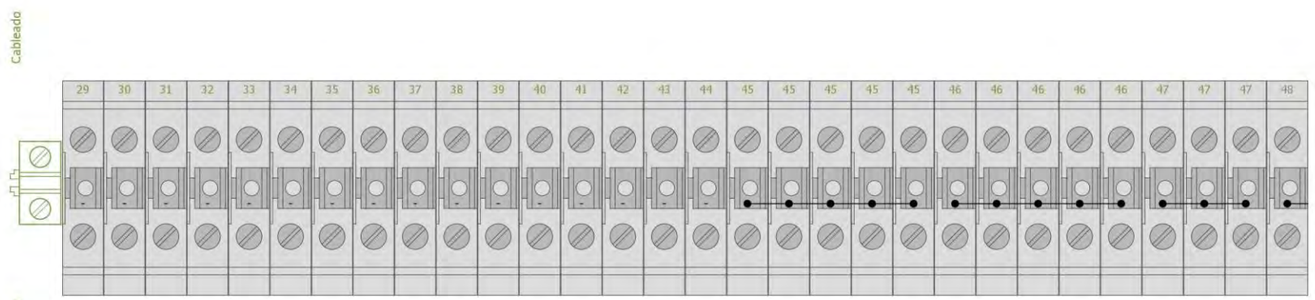
			Fecha	29/11/2017	Denominación: HE10Q19	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588	
			Resp.	ing04				
Cambio	Fecha	Nombre	Probado Original				Cliente: CORNING	Hoja 36 / Hoja 40

Plano de bornes

F13_005

Regleta X1

Página	Texto de función	Potencial	Destinos externos	Destinos internos	Texto de función	Cableado
3.5	TELESCOPIC JIB-1 MOTOR		M6	RMT5	BRAKE	
3.7	SLEW. AUX.HOIST MOTOR		M7	RMT6		
3.7	=		M7	RMT6		
3.7	=		M7	RMT6		
4.0	AUX.HOIST		M8	RMT7		
4.1	=		M8	RMT7		
4.1	=		M8	RMT7		
4.2	=		M8	K14		
4.3	=		M8	K14		
4.3	=		M8	K14		
4.5			U2	K14		
4.5			Q2	U2		
4.5				Q2		
4.5				K14		
4.5			U2	U2		
4.5			Q2	U3		
5.0	R_ANEMOMETER		R4			
5.0				F3		
5.1			U5			
5.1						
5.1						
5.1						
5.1						
5.2						
5.2						
5.2						
5.4			U5	F5		
5.4						
5.4						
5.4			U5	U4		



36 38

Cambio	Fecha	Nombre				
			Fecha	29/11/2017	Denominación: HE10Q19	
			Resp.	ing04		
			Probado			
			Original			

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Proyecto:	P15588		
Cliente:	CORNING	Hoja	37
		Hoja	40

Plano de bornes

F13_005

Regleta

X1

Página	Texto de función	Potencial	Destinos externos	Cableado	Destinos internos	Texto de función
5.4				48		
5.4				48		
5.8			U5	49	R4	R_ANEMOMETER
6.0			G_DUPLINE	50	X6	
6.0			G_DUPLINE	51	X6	
8.3	L.S.SAFETY SLEWING		S5	52	R5	R_ SAFETY SLEWING
8.3	L.S.CHAIN		S2	53	R6	R_ OVERSPEED
8.4			BG2	54	R7	R_ SAFETY JIB-1
8.6	LS.OVERSPEED		S1	55	R7	
8.6	LS. DOOR-1		S4	56	S2	L.S.CHAIN
8.6	LS.SAFETY SLEWING		S5	57	S4	LS. DOOR-1
8.7	MACHINE-PE		S6	58	S5	LS.SAFETY SLEWING
8.7	POWER-M		RX_DUPLINESAFE S7	59	S6	MACHINE-PE
8.7			K1	60	RX_DUPLINESAFE S7	POWER-M
8.7	MAIN_K		K1	61	K1 R9	
9.1	GREEN_LIGHT		H1	62	K1 K13	K_TRAVERSING BRAKE
9.4	HORN		H2	63	R4	R4
13.6			A2	64	R112	
13.6			A2	65	R112	
15.7			A22	66	A7	
15.7			A22	67	A7	
17.6	MACHINE/CRADLE CONTROL		S15	68	A9	MACHINE/CRADLE CONTROL
17.7	=		S15	69	A9	=
18.2			U11	70	A10	
18.3	LS. REELER-1		S16	71	S17	LS. REELER-2
18.3	LS. REELER-2		S17	72	A10	=
18.6			A10	73	BG1	
18.7			A10	74	BG1	
22.2			BG1	75	A14	
22.3			A14	76	BG1	
22.6			A14	77	BG1	
22.7			A14	78	BG1	
23.3				79	A15	
23.6				80	A15	
24.2	MOVE WITHOUT PLATFORM	S8	U7	81	A16	

Cambio | Fecha | Nombre

Fecha 29/11/2017
Resp. Ing04
Probado
Original

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Cliente: CORNING

Hoja 38
Hoja 40

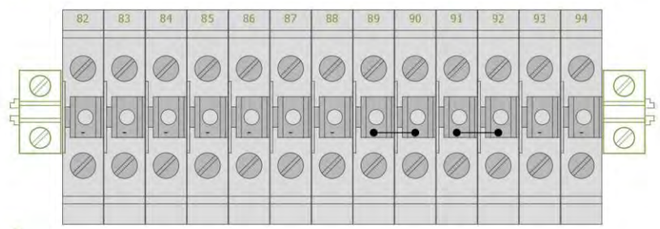
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0 1 2 3 4 5 6 7 8 9

F13_005

Plano de bornes

Regleta X1



Página	Texto de función	Potencial	Destinos externos	Cableado
26.3				
26.5				
26.8	RED_LIGHT		H3	
29.7				
31.7	LS. SAFETY SPREADER BAR		S23	
33.5				
33.5				
33.5				
33.5				
33.5				
33.5				
34.4				
34.4				

Destinos internos	Texto de función	Cableado
A18	RED_LIGHT	
A18		
A18		
A21		
S24	LS. SAFETY UP	
K1		
K1		
R4	RED_LIGHT	
H3		

38 40

Cambio	Fecha	Nombre		
			Fecha	29/11/2017
			Resp.	ing04
			Probado	
			Original	

Denominación: HE10Q19

Atechbcn
C/Bruc, 72 – 74, 4ª Planta
08009 Barcelona, Spain
T +34 934 110 281
info@atechbcn.com

Proyecto: P15588

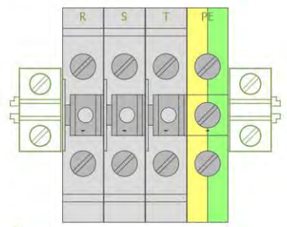
Cliente: CORNING

Hoja 39
Hoja 40

F13_005

Plano de bornes

Regleta X2



Página	Texto de función	Potencial	Destinos externos	Cableado
2.0			L1	
2.0			L2	
2.1			L3	
2.1			PE	

Texto de función	Destinos internos	Cableado
MAIN KEY SWITCH	QB01	
	QB01	
	QB01	

39

Cambio	Fecha	Nombre		
			Fecha	29/11/2017
			Resp.	ing04
			Probado	
			Original	

Denominación: HE10Q19

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Proyecto: P15588

Cliente: CORNING

Hoja 40

Hoja 40

P15588, CORNING TOWER
B.M.U. A-25, Series Number: M-3635
Use and maintenance manual

12/2017

Atechbcn

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CERTIFICATE OF COMPLIANCE

Certificate Number	20151216-SA32692
Report Reference	SA32692-20080422
Issue Date	2015-DECEMBER-16

Issued to: BCN GONDOLAS S L
Bruc
72-74
4th floor
08009 Barcelona SPAIN

This is to certify that representative samples of EQUIPMENT, SCAFFOLDING
Classified Scaffold Hoists
Model QT-2500

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 1322 -Fabricated Scaffold Planks and Stages
UL1323 - Scaffold Hoists

Additional Information: See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

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Bruce Mahrenholz, Director North American Certification Program

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CL BRUCH, 74, 4º, 08009, BARCELONA

Bureau Veritas Certification certifica que el Sistema de Gestión ha sido auditado y encontrado conforme con los requisitos de la norma:
Bureau Veritas certify that the Management System has been audited and found to be in accordance with the requirements of standard:

NORMA / STANDARD

ISO 9001:2008

El Sistema de Gestión se aplica a:
Scope of certification:

DISEÑO, MONTAJE, MANTENIMIENTO Y COMERCIALIZACIÓN DE EQUIPOS DE ELEVACIÓN Y ACCESO A FACHADAS PARA MANTENIMIENTO Y LIMPIEZA.

DESIGN, ASSEMBLY, MAINTENANCE AND SALES OF BUILDING MAINTENANCE UNITS.

Número del Certificado *Certificate Number*	**ES064311-1**
Aprobación original : *Original approval date :*	**25/05/2015**
Certificado en vigor: *Effective date:*	**25/05/2015**
Caducidad del certificado: *Certificate expiration date:*	***24/05/2018***

Directora de Certificación / Certification Manager

Este certificado está sujeto a los términos y condiciones generales y particulares de los servicios de certificación
This certificate is valid, subject to the general and specific terms and conditions of certification services

Entidad de Certificación / Certification Body: Bureau Veritas Iberia S.L.
C/ Valportillo Primera 22-24, Edificio Caoba, Pol. Ind. La granja, 28108 Alcobendas - Madrid, Spain



ENAC CERTIFICACIÓN Nº 04/C-SC004

BUREAU VERITAS
Certification

Certificación
Certification

Concedida a / Awarded to

Atechbcn, S.L.

SEDE CENTRAL / CL TOMÁS VILADOMIU 29-35, POLIGON INDUSTRIAL L'ILLA ,08650, SALLENT
CENTRO / CL TOMÁS VILADOMIU 29-35, POLIGON INDUSTRIAL L'ILLA, 08650, SALLENT
OFICINA / CL BRUCH, 74, 4º, 08009, BARCELONA

Bureau Veritas Certification certifica que el Sistema de Gestión ha sido auditado y encontrado conforme con los requisitos de la norma:

Bureau Veritas certify that the Management System has been audited and found to be in accordance with the requirements of standard:

NORMA / STANDARD

ISO 14001:2015

El Sistema de Gestión se aplica a:

Scope of certification:

DISEÑO, MONTAJE, MANTENIMIENTO Y COMERCIALIZACIÓN DE EQUIPOS DE ELEVACIÓN Y ACCESO A FACHADAS PARA MANTENIMIENTO Y LIMPIEZA.

DESIGN, ASSEMBLY, MAINTENANCE AND COMMERCIALIZATION OF LIFTING EQUIPMENT FOR BUILDING MAINTENANCE AND FACADES CLEANING

Número del Certificado *Certificate Number*	**ES074498-1**
Aprobación original : *Original approval date :*	**27/10/2016**
Certificado en vigor: *Effective date:*	**27/10/2016**
Caducidad del certificado: *Certificate expiration date:*	***26/10/2019***

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Entidad de Certificación / Certification Body: Bureau Veritas Iberia S.L.
C/ Valportillo Primera 22-24, Edificio Caoba, Pol. Ind. La granja, 28108 Alcobendas – Madrid, Spain

ENAC
CERTIFICACIÓN
Nº 03/C-MA007

Certificate of guarantee

Manufacturer: **ATECHBCN, S.L.**
C/Tomàs Viladomiu, 29-35
Pol. Ind. Illa
08650 Sallent, Barcelona, Spain

Hereby certifies that all our machines for cleaning and maintenance of facades are guaranteed for a period of two years from the date of installation or from the date despatched from the Factory if the installation is carried out by the Client.
This guarantee covers design and/or manufacturing defects under normal usage conditions.

The guarantee will be void under the following circumstances:

- Misuse or use by untrained personnel.

- Not following the instructions of Chapter 7 “Maintenance”.

- Absence of adequate maintenance operations as specified in this Manual.

- Maintenance by personnel not authorised by the manufacturer, as well as the use of spare parts or modifications nor authorised by the manufacturer.

Atechbcn, S.L.

- In general, non-compliance with the instructions given in this Manual.

This guarantee only applies to the following machine:

Model: **A25 Type**
Series number: **M-3635**
Year of manufacture: **2017**
Project: **P15588, CORNING TOWER**

ATECHBCN S.L.
Barcelona
1st of December 2017

1. General aspects and warnings

This machine is a building maintenance unit (BMU). BMU are platforms suspended at variable height (SAE) for planned routine inspections, cleaning and maintenance of the building.

Operators must read and perfectly understand the use and maintenance instructions for the machine. Not following the instructions could produce hazardous situations and accidents.

1.1. Indications for use

- The owner of the machine is responsible for ensuring that this machine is only used by authorised and adequately trained personnel.
- Before putting the machine into service, operators must have received training on its correct use and control by a competent person.
- In addition to the instructions given in this manual, all safety measures for working at heights must be strictly followed.
- **Atech** will not be held liable for any incident caused by inappropriate use or poor maintenance of the machine.
- This manual must be at the disposal of any worker requiring it, (which does not exempt the worker from receiving the necessary training). If this manual is lost, the person in charge of the machine must request a new copy from **Atech**.
- The instructions and warnings notices adhered to the machine must be kept in good conditions and the information they contain must be perfectly legible and understandable.
- The work of the BMU operator must be adequately planned and supervised so that in case of an emergency, aid can be given immediately.
- Verification and commissioning of the BMU must be carried out by a representative of **Atech**.
- It is the responsibility of the owner of the BMU to keep a Logbook, which should contain the following data:
    - Name of the person in charge of the machine.
    - Name of the operators and date of use.
    - Number of hours the machine is used.

- Specifications of the suspension cables.
- Number of hours the suspension cables are used.
- A record of incidents and corrective actions carried out.
- Dates of regular inspections.

The Logbook must be available for maintenance personnel.

- The data contained in the Logbook must be at the disposal of the competent labour authorities and must be kept during the entire service life of the machine.
- An organisation or competent person will be responsible for the technical maintenance of the whole installation, composed of the machine and its runway, which will be carried out **at least 6 months or every 100 hours of operation** (see maintenance instructions in chapter 7 of the manual).
- **Atech** only guarantees original spare parts.
- In case of any sign of malfunction, the machine must immediately be taken out of service and the person responsible for the installation notified.
- It is mandatory to wear personal protection equipment when using this machine.
- While using the machine, operators must have a means of communication with the exterior that is autonomous and fully operational in case of emergency (mobile phone, walkie-talkie or other).
- It is mandatory to use the facade retaining systems where applicable (according to UNE EN 1808:2016 standard). Under no circumstances will the BMU be used without connecting the retaining systems to the facade at the indicated levels.
- The electric cable winder should be used in a controlled manner, without jerking.

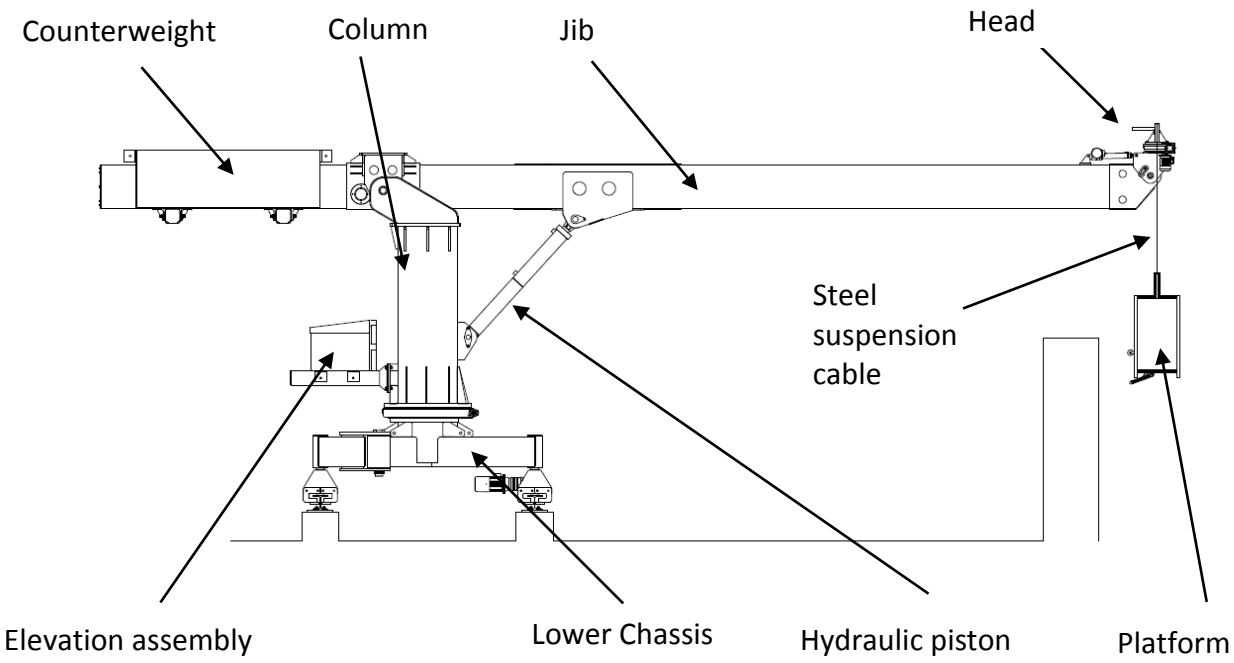
1.2. Usage prohibitions

- The perimeter of the work area must be duly signposted when accessed by the general public.
- The machine must not be used in conditions of insufficient lighting. It should only be used with natural sunlight.

- It is absolutely forbidden to use this machine under adverse weather conditions such as presence of plenty of snow or ice, storms, heavy rain, extreme temperatures below -10ºC and above 55ºC or with wind exceeding 51 km/h.
- The maximum number of operators allowed on the suspended platform simultaneously is indicated inside the platform and must not be exceeded.
- It is not allowed to carry out two movements simultaneously.
- Before accessing the suspended platform, always remove the key from the chassis control panel.
- The machine must be governed from the control panel of the main chassis only in emergency situations. In normal working conditions, the operator of the platform should always be in control of the BMU.
- The machine is supplied to safely carry out cleaning and light maintenance work on facades of buildings. The machine must not under any circumstance be used for any task not contemplated in the Instruction Manual.
- Never exceed the nominal load capacity indicated on the suspended platform and the specification sheet of the machine.
- The BMU should be used in a controlled manner, avoiding erratic, sudden or contradictory movements, such as ON/OFF, left/right, etc.
- It is absolutely forbidden to use the machine as a crane.
- It is not allowed to suspend loads above the platform.
- Use of the machine to transport passengers from one level to another is not allowed.
- Manipulation of dangerous loads is not allowed.

2. Description of the machine

2.1. Parts of the B.M.U.



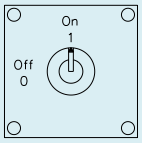
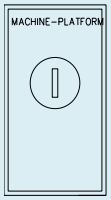
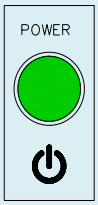
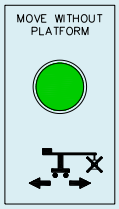
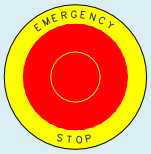
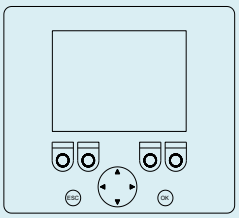
* This is a generic illustration of the parts, it is not a faithful depiction of the machine. Annexe I specifies the main elements of the BMU (Plan of the machine).

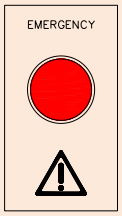
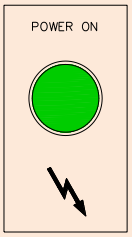
2.2. Description of manual controls

The controls on the main electrical panel and the suspended platform are comprised of switches, selectors and push buttons to execute the movements of the machine, as well as warning lights for incidents.

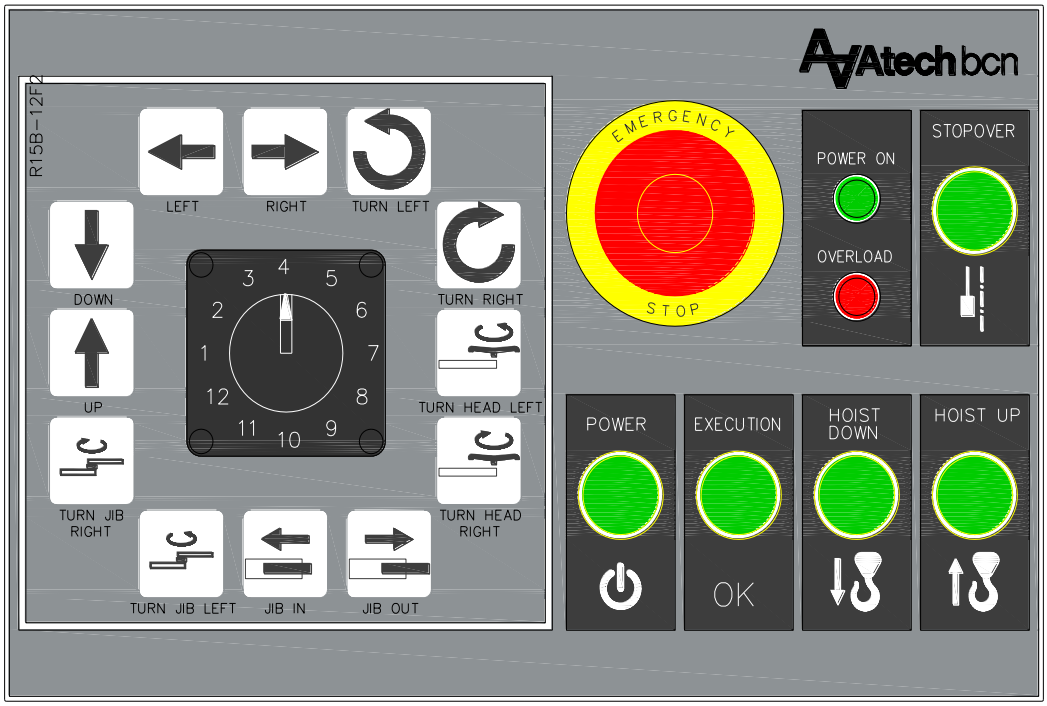
2.2.1. Control instruments on the main electrical panel

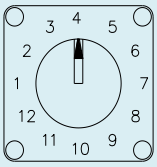
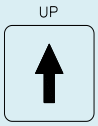
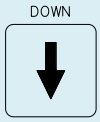


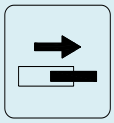
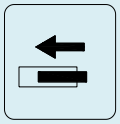
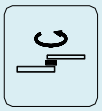
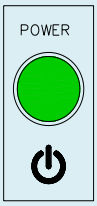
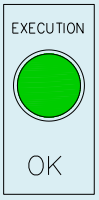
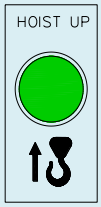
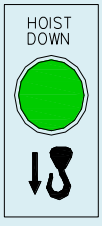
Switches and buttons of the machine main control			
Symbol	**Type**	**Description**	**Actions/Observations**
	Switch	General switch.	Switch used to power the machine.
	Switch	Checkpoint selector.	Left enables you to select the chassis control and right enables you to select the platform control.
	Button	Turn on machine.	Enables mains contactor.
	Button	Enable translation without platform.	Pulse to enable functionality without the suspended platform.
	Button	Emergency Stop.	Disable main contactor, the machine is blocked temporarily.
	Display	Control display.	To manage machine functions.

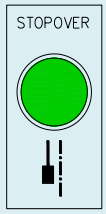
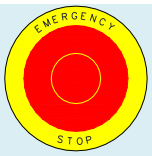
Alarm light of the machine main control			
Symbol	**Description**	**Cause**	**Actions/Observations**
	Emergency	Activation of some safety device.	The machine is locked. Contact to technical service.
	Power on	Enables mains contactor.	The machine is ready to perform movements.

2.2.2. Control instruments on the platform



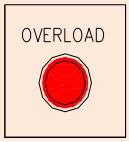
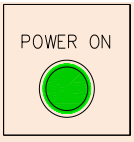
Selectors and buttons of the platform control			
Symbol	**Type**	**Description**	**Actions/Observations**
	Switch	Selection movement switch.	Select the movement you want to perform.
		Platform up.	
		Platform down.	
		Left translation.	
		Right translation.	
		Left slewing.	
		Right slewing.	
		Spreader bar left slewing.	
		Spreader bar right slewing.	

		Telescopic jib out.	
		Telescopic jib in.	
		Turn jib left.	
		Turn jib right.	
	Button	Turn on machine.	Enables mains contactor.
	Button	Movement execution.	Pulse to execute the selected movement.
	Button	Hoist up.*	
	Button	Hoist down.*	

	Button	Stopover.*	Pulse to carry on the drop after fix the lanyard in the building.
	Button	Emergency stop equipment.	Disable main contactor, the machine is blocked temporarily.

The orientation is being inside the platform and facing the machine.

**Auxiliary function available on case.*

Alarm lights of the platform control			
Symbol	**Type**	**Description**	**Actions/Observations**
	Overload	Platform or hoist rated load has been surpassed.	All the machine's movements are locked except down the platform, jib back (folding jib machines) and telescopic jib in.
	Power on	Enables mains contactor.	The machine is ready to perform movements.

**Auxiliary function available on case.*

3. Use of the machine

Warning!

Before using the machine, check it is in good conditions as well as ensuring that the weather and light conditions are adequate. If any anomaly is detected, immediately inform the person responsible for the machine.

3.1. Personal protection equipment

Operators must use the following personal protection equipment:

- Helmet.
- A safety harness that must be connected to the platform.
- Gloves.
- Safety boots.



Additionally, the operator must always have equipment for communicating with the outside, autonomous and fully operational in emergencies (mobile phone, walkie-talkie or other).

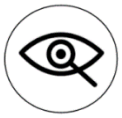
3.2. Checks before using the machine

Below is the procedure for starting up the machine before use:

- ☞ Check that the weather conditions are adequate.



- ☞ Visually inspect the machine and the platform.



- ☞ Fill in the Logbook correctly (see section 1).



- ☞ Ensure that the work area is free from obstacles that could impede free movement of the machine.
- ☞ Check that there are no projecting elements on the facade that the platform or the suspension cables could collide with.
- ☞ Check that there is no risk of trapping for people due to insufficient space between the machine and certain parts of the building. If this risk exists, the area must be signposted.
- ☞ Check that the power supply connection is correct.
- ☞ Check that the platform is in its highest position and it allows the machinery to make its movements.
- ☞ Check that the machine makes all the movements correctly from the main chassis:

- Make sure that the emergency button is NOT pressed.



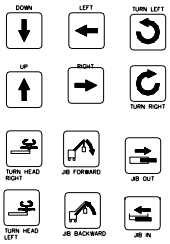
- Place the general switch in MACHINE position.



- Press the Power button.



- Check all the movements of the machine.



- Check the operation of the following devices:

1. Emergency stop.



2. Acoustic movement warning.



- Action of the stroke limit switches.



- Action of the platform anti-collision detector.



3. Electric cable winder.



- In case of any anomalies, contact the technical service.



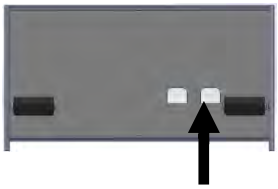
☞ Only enter or exit the platform in the defined parking positions or areas.

☞ Access the platform respecting the following safety measures:

Connect the safety harness to the platform.



1. Place your right foot in the left cut-out of the front bodywork and then access the inside placing the other foot in the right-hand cut-out.



2. ☞ Check that the machine makes all the movements correctly both from the suspended platform (PLATFORM position) and the main chassis (MACHINE position).



3.3. Procedure for using the machine

Once all the machine elements have been checked, you can begin the building maintenance work.

Below is the procedure for using the machine:

☞ Keep the machine connected to the power supply.



☞ Make sure that the emergency button is not pressed.



☞ Place the general switch selector in PLATFORM position.



☞ Press the power button.



☞ Carry out the facade maintenance operations following the instructions and prohibitions for use specified in the section: 1. *General aspects and Warnings* in this manual.



☞ When the maintenance work is finished, return the machine to the defined parking position.

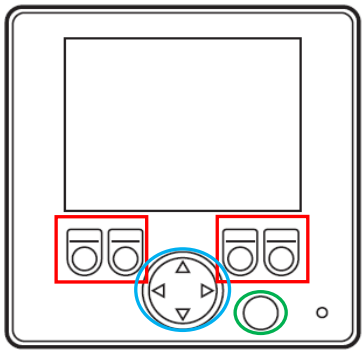


☞ Turn the main switch key selector to the central off position.

☞ Disconnect the machine from the power supply of the building.

☞ Use the systems for securing the machine to avoid damage caused by gusts of wind.

3.4. Functions of the machine



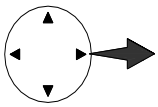
The display control is made up by the following elements:

- Display of 4,3''.
- In red, key to execute the movement in one direction or another.
- In blue, key to change the movement.
- In green, key not functional.

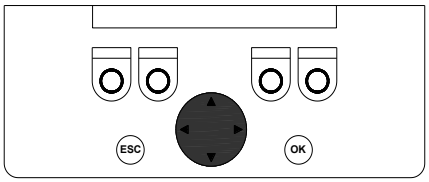
1. Client and project



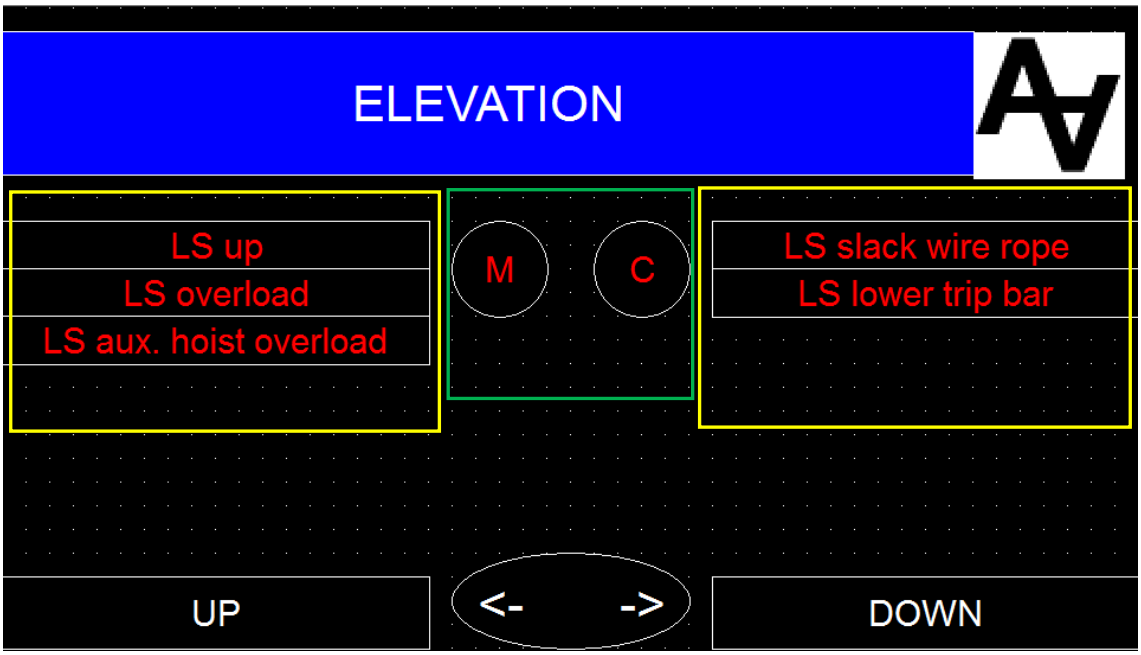
Starting page. The project name is shown.



Press the key to change to the next page.



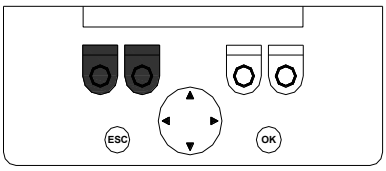
2. Platform elevation



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

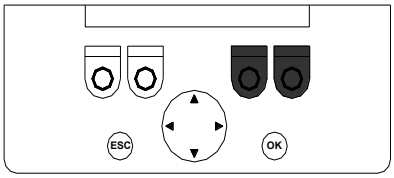


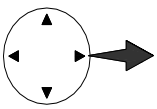
Press the key to go up the cradle.



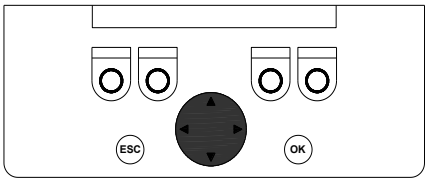


Press the key to go down the cradle.

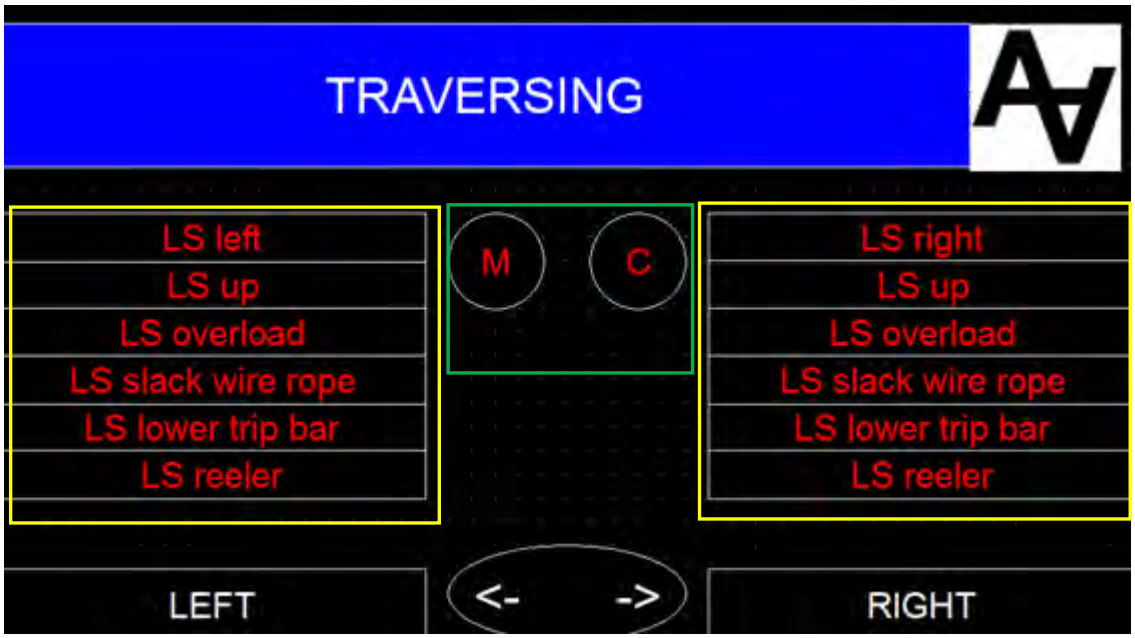




Press the key to change to the next page.



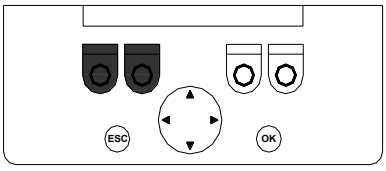
3. Traversing



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

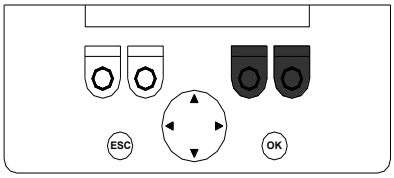


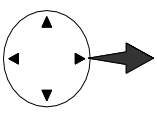
Press the key to move the machine to the left.



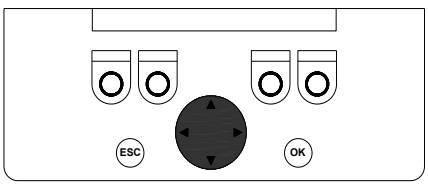


Press the key to move the machine to the right.

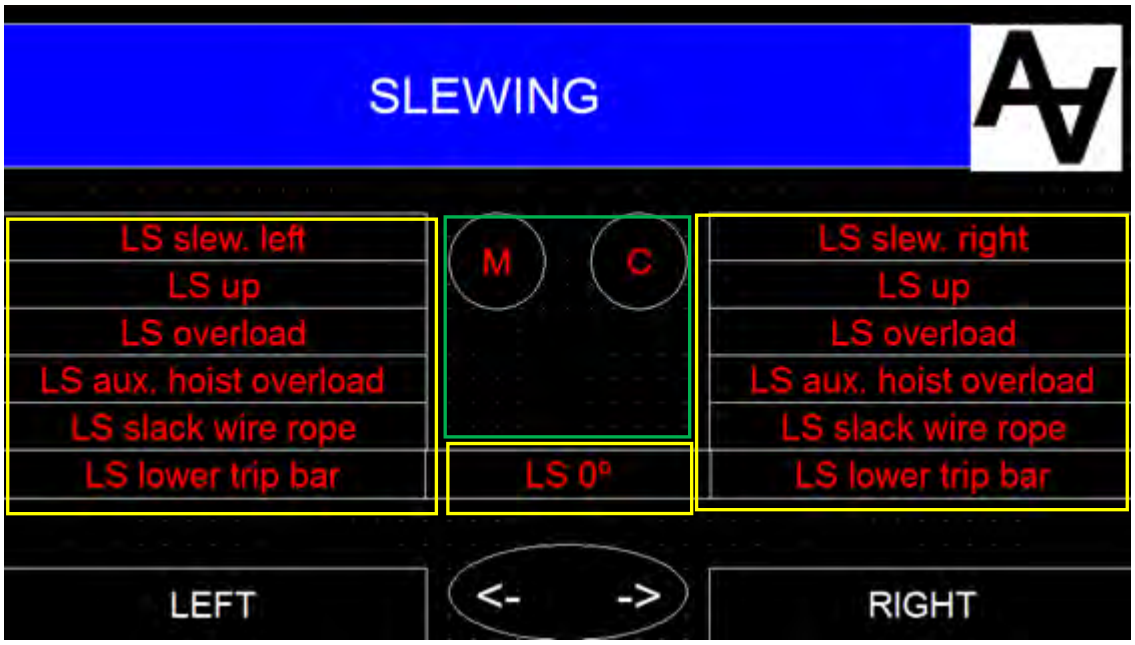




Press the key to change to the next page.



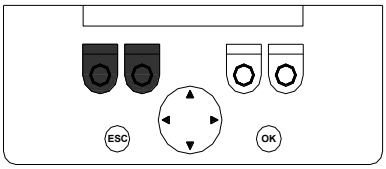
4. Slewing



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

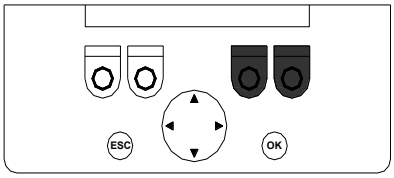


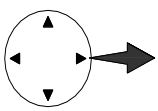
Press the key to slew the machine to the left.



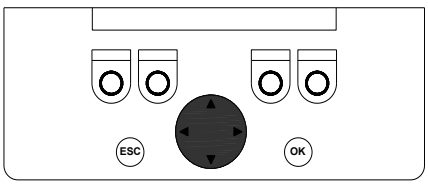


Press the key to slew the machine to the right.

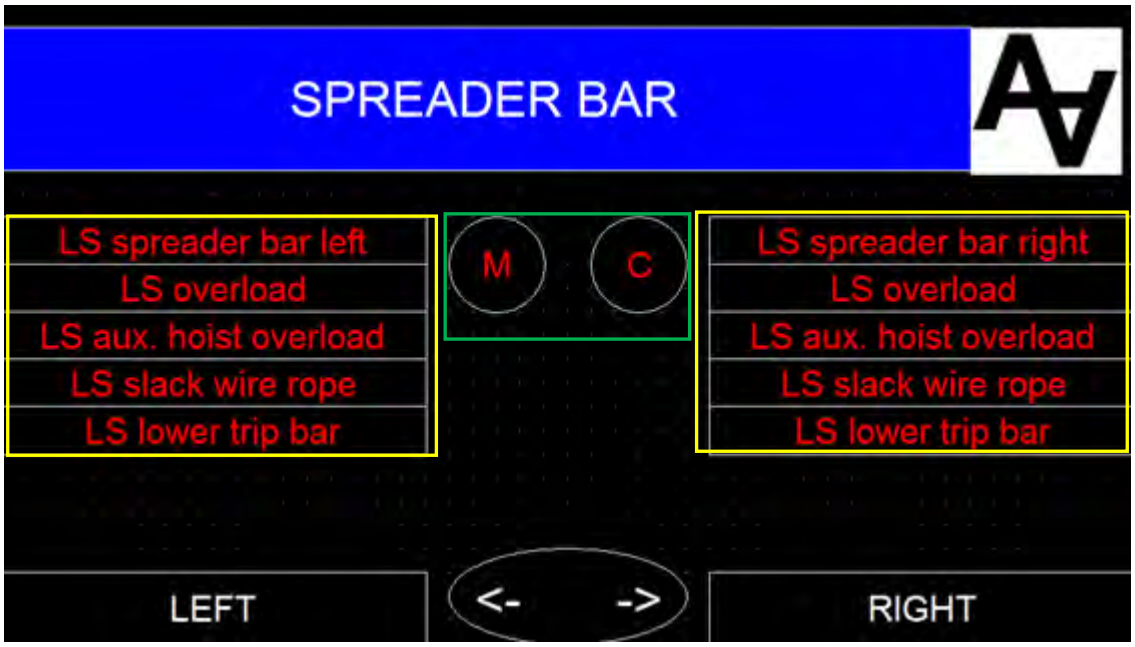




Press the key to change to the next page.



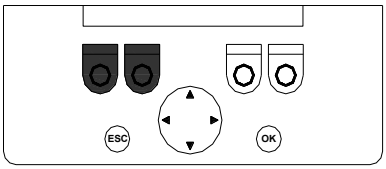
5. Spreader bar



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

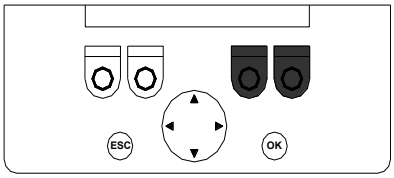


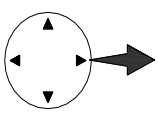
Press the key to slew the spreader bar to the left.



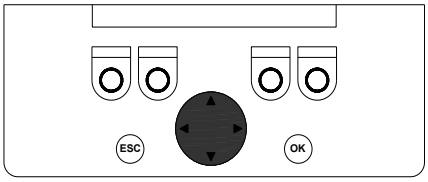


Press the key to slew the spreader bar to the right.





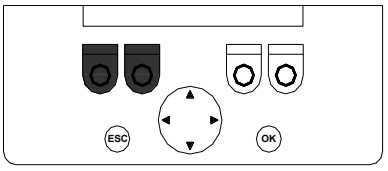
Press the key to change to the next page.



6. Hoist Jib

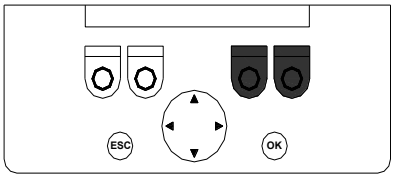


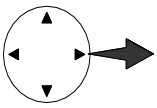
Press the key to slew the hoist jib to the left.



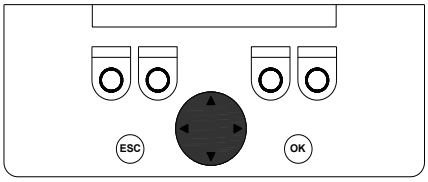


Press the key to slew the hoist jib to the right.

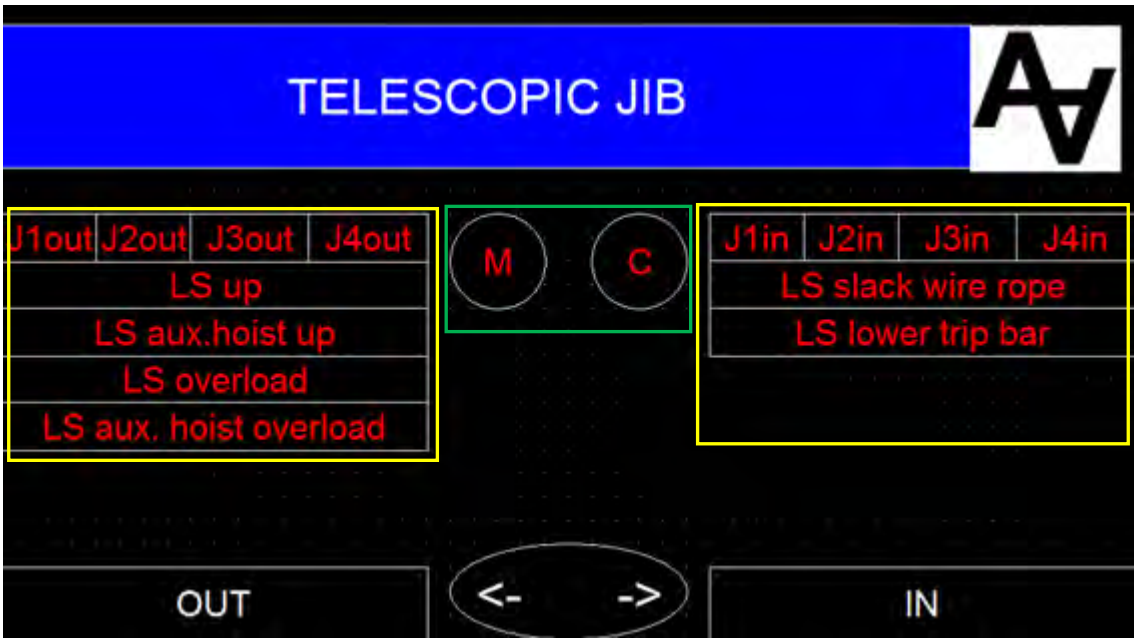




Press the key to change to the next page.



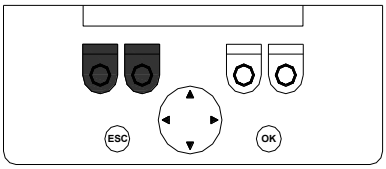
7. Telescopic jib



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

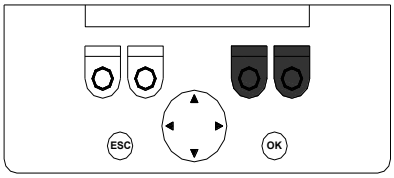


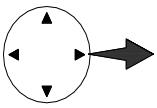
Press the key to open de telescopic jib.



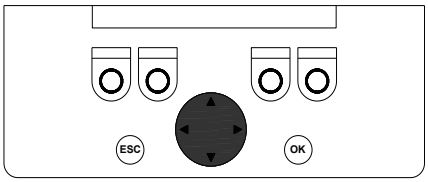


Press the key to close de telescopic jib.

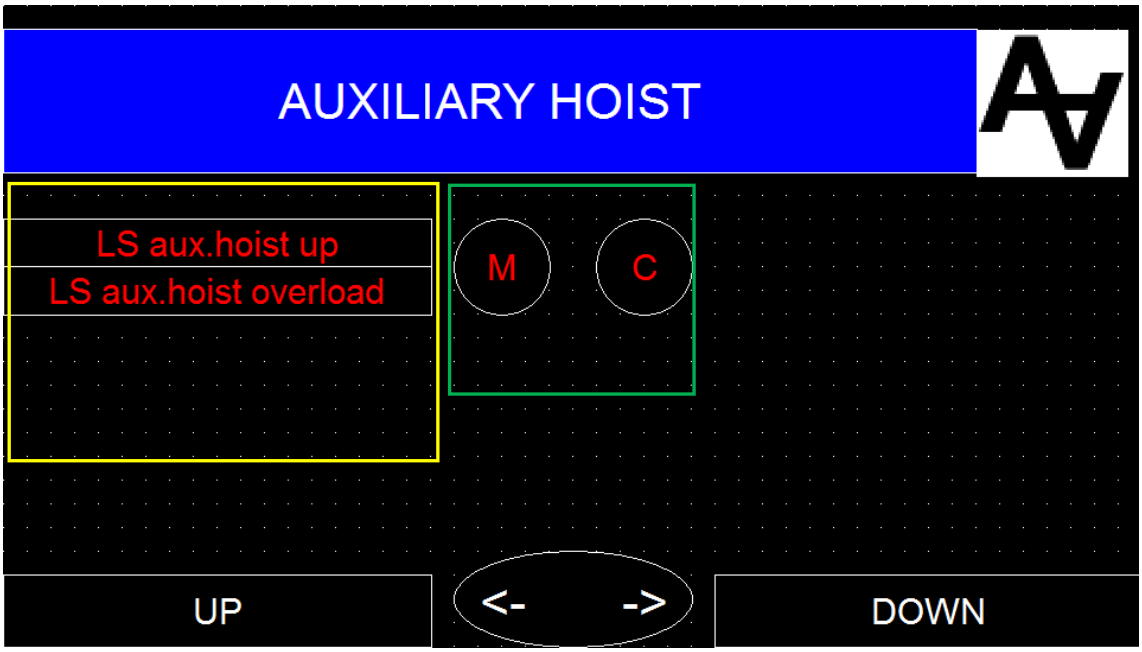




Press the key to change to the next page.



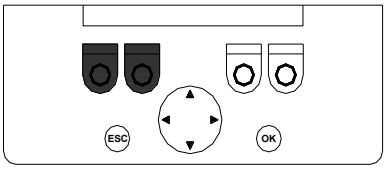
8. Auxiliary hoist



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

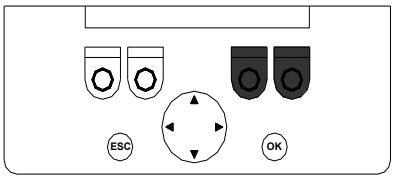


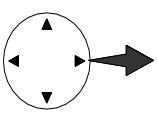
Press the key to go up the hoist.



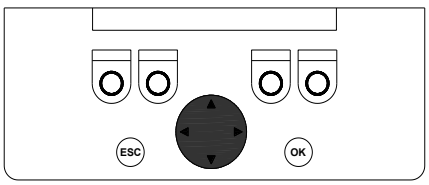


Press the key to go down the hoist.

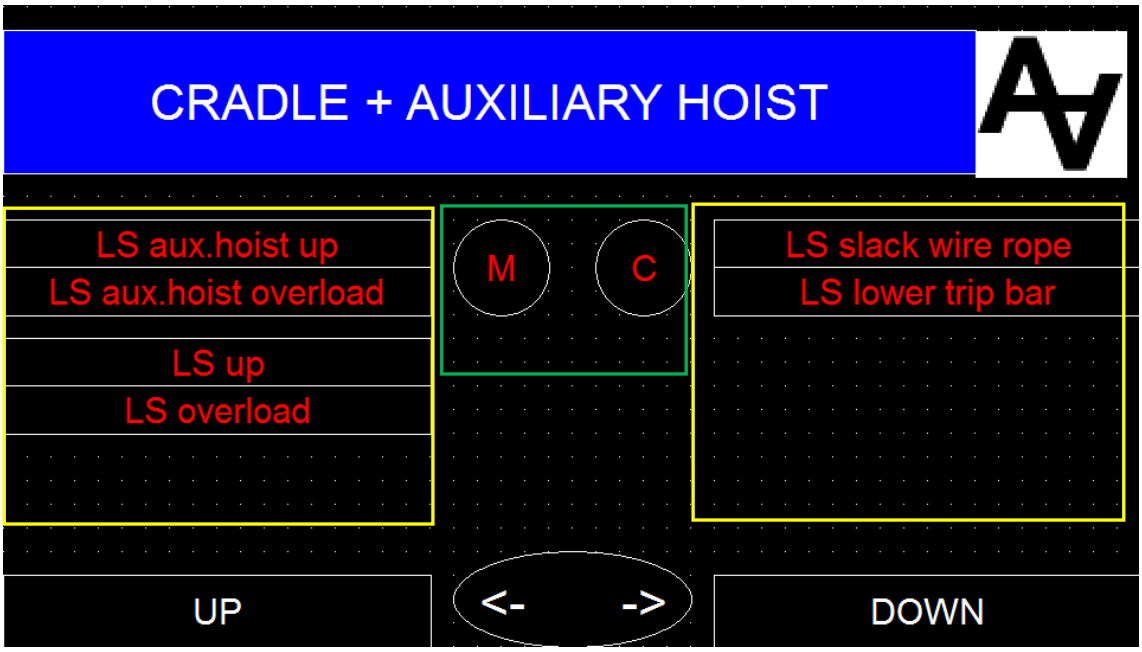




Press the key to change to the next page.



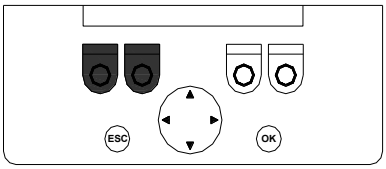
9. Cradle & Auxiliary hoist



- Yellow conditions of each function are indicated. **If conditions are green then function can be executed.**
- Green zone indicates whether the control is, cradle (C) or at the machine (M). General switch or checkpoint selector of the machine main control allows to change the control place.

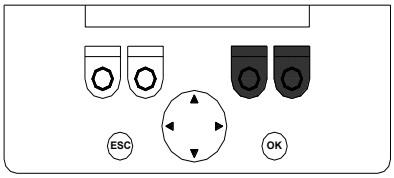


Press the key to go up the platform and the auxiliary hoist at the same time.

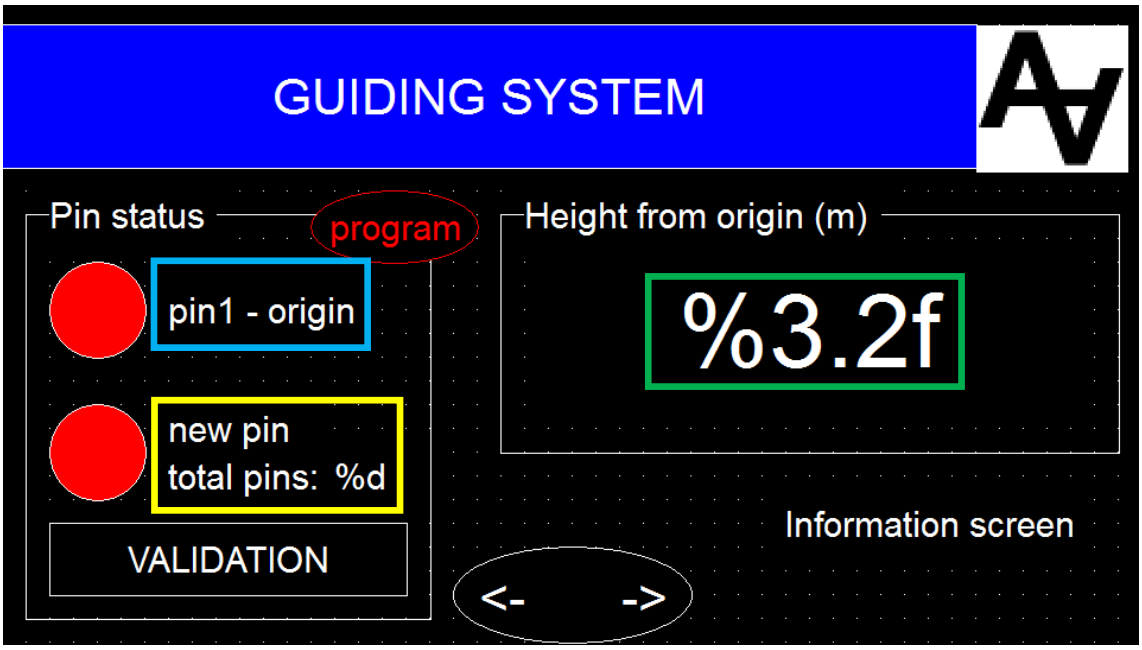




Press the key to go down the platform and the auxiliary hoist at the same time.



10.Restrain system

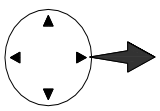


User can program the height of the pins by itself only in one drop and when it is done operator will see how many pins are set taking a look where yellow arrow shows. Two modes can be performed:

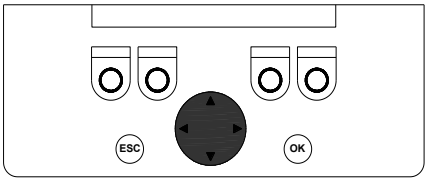
a) Pin programming mode.

b) Intermediate stops mode.

- When Origin/first pin is defined then *pin1 – origin* circle will be green. And *height from origin* will be set to 0m.
- When second pin or higher pins are set/validated then "new pin" circle will be green. *Total pins* shows the total defined pins in the facade in that moment.
- *Height from origin* shows the real height once Origin/first pin is defined when the operator had defined/validated *pin1-Origin.*

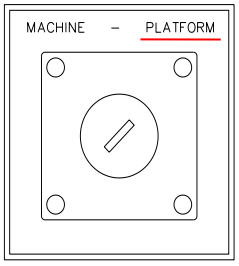


Press the key to change to the next page.

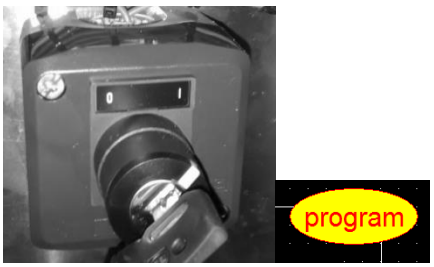


A. Pin programming mode

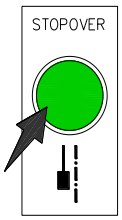
☞ Operator has to control the machine from the cradle control.



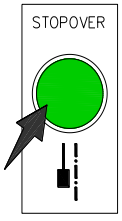
☞ Set the switch which is located inside the machine main control in 1 position. Thus, the program indicator will be flashing, indicating that pin programming mode is activated.



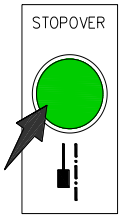
☞ Descend the platform to the first pin position and then press the *Stopover* Key to validate. At that time, *pin1-origin* will be green and the height from the origin will be 0 m. **The platform will never stop in this position.**



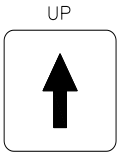
☞ Descend the platform to the second pin position and then press the *Stopover* Key again to validate. Then, *new pin* will be green.



☞ Repeat the last step for all pin locations. At the end of the drop, total pins will show the pins total number validated.



☞ Ascend the platform to the up limit switch, then system restarts the procedure to start a new drop, red circles will be flashing again.

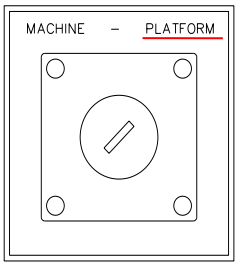


☞ Set the switch in 0 position.

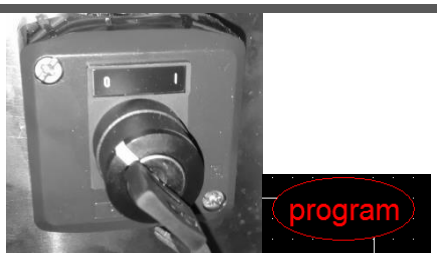


B. Intermediate stops mode

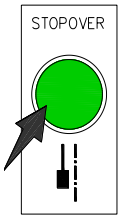
☞ Set the switch which is located inside the machine main control in 1 position. Thus, the program indicator will be flashing.



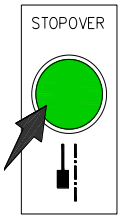
☞ Set the switch which is located inside the machine main control in 0 position. Thus, the program indicator will be red indicating that intermediate strops mode is activated.



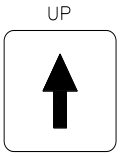
☞ Descend the platform to the first pin position and then press the *Stopover* Key to validate. At that time, *pin1-origin* will be green and the height from the origin will be 0 m. **The platform will never stop in this position.**



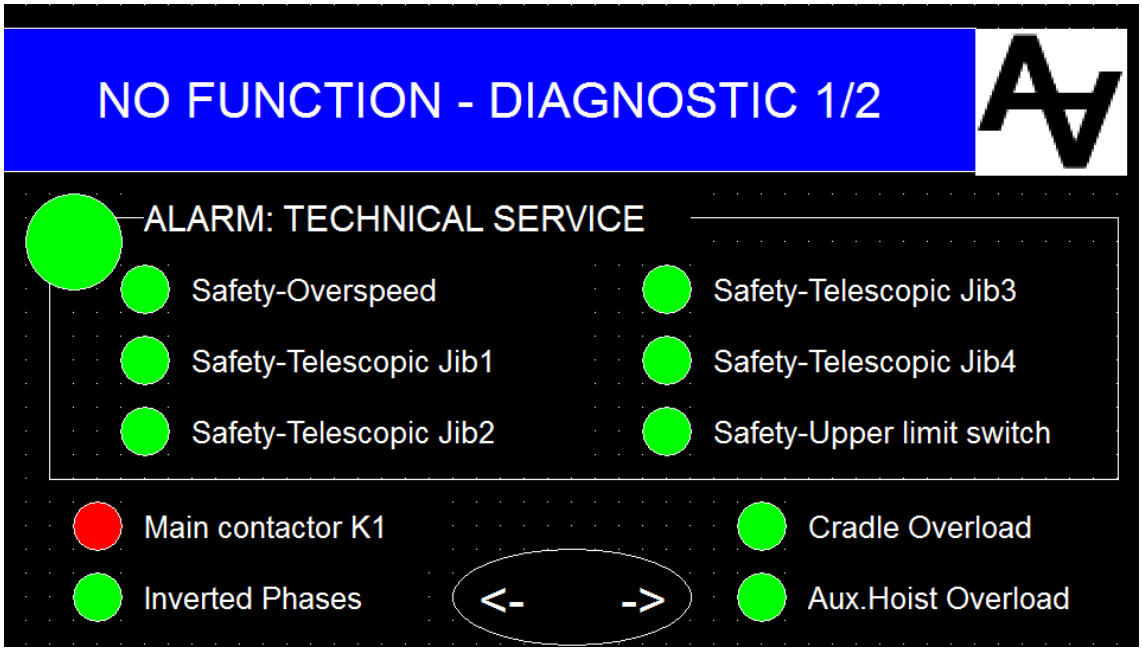
☞ Descend the platform to the second pin position and then press the *Stopover* Key again to back on track .



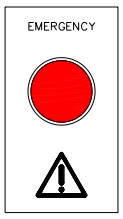
☞ Ascend the platform to the up limit switch, then system restarts the procedure to start a new drop.



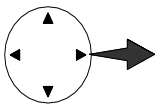
11.No function - Diagnostic 1/2.



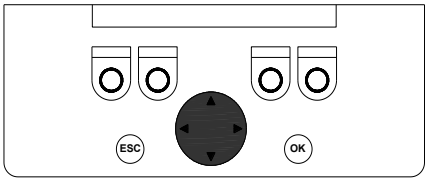
In case of breakdown, this page shows which safety device has tripped. Then, the main control emergency light will turn on or will be flashing, depending upon the breakdown case.



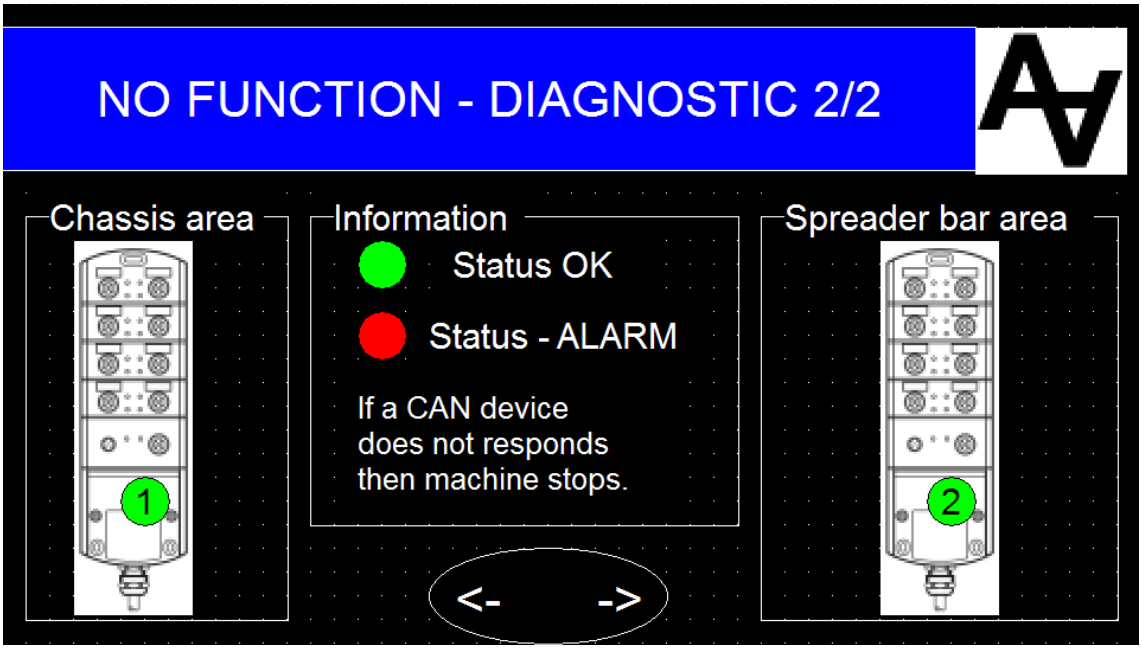
- **Fixed light:** Some safety device has been activated. Contact to technical service.
- **Flashing light of 1 second**: The building power phases are reversed or in bad conditions. Contact to technical service.
- **Flashing light of 3 second:** The rated load of the platform or of the hoist has been exceeded. All the machine's movements will be blocked except the descent of the platform, move the jib backward and close the telescopic jib.



Press the key to change to the next page.



12.No function - Diagnostic 2/2.



This page shows the Can devices status. In normal conditions indicator will be green and in case of breakdown will be red and besides the machine will stop.

3.5. Activation of the functions

Below, the conditions that must be complied **with to carry out each movement**, showing the stroke limit switches that must be activated or deactivated in each case are described.

Functions	Conditioning switches: Platform lose cable detector	Platform anti-collision detector	Platform overload	Platform lifting limit	Platform lowering limit	Left movement limit	Right movement limit	Left chassis turn limit	Right chassis turn limit	Left head turn limit	Right head turn limit	Forward folding down jib limit	Backward folding down jib limit	Telescopic jib retraction limit	Telescopic jib extension limit	Left middle gear turn limit	Right middle gear turn limit	Telescopic column lifting limit	Telescopic column lowering limit	Hoist lifting limit	Hoist overload	Winder travel limit	Parking turn limit
Lift platform			×	×																	×		
Lower platform	×	×			×																		
Left movement	×	×	×	✓	×	×														✓			×	×	
Right movement	×	×	×	✓	×		×													✓			×	×	
Left chassis turn	×	×	×	✓	×			×												✓			×		
Right chassis turn	×	×	×	✓	×				×											✓			×		
Left head turn	×	×	×		×					×										✓			×		
Right head turn	×	×	×		×						×									✓			×		
Forward folding down jib	×	×			×							×								✓					
Backward folding down jib			×										×							✓		×	×		
Retract telescopic job	×	×												×						✓					
Extend telescopic jib			×	×											×					✓		×	×		
Left middle gear turn	×	×	×		×											×				✓					
Right middle gear turn	×	×	×		×												×			✓					
Lift telescopic column			×	×																×			×		
Lower telescopic column	×	×			×							✓		✓							×				✓
Lift auxiliary hoist				×																		×	×		
Lower auxiliary hoist	×																								

✓ Stroke limit switch activated mechanically.

× Stroke limit switch deactivated mechanically.

3.6. Machine access points: ladders, platforms and safety anchor points



The operator must connect the snap hook of the safety harness to the anchor points located inside the platform before using it.



All the anchor points for the safety harness will be duly identified with pictograms.

If there are high points in the machine, they will have ladders and/or platforms for safe access.

3.7. Manual evacuation operation

3.7.1. Description of the service brake

The elevation assemblies of the machine will have a service brake. In service conditions, the brake is permanently supplied with electricity and kept open. The brake will come into action automatically in the following cases:

- Release of manual force applied to the motor lever of the elevation assembly.
- Loss of electrical supply to the power circuit.
- Loss of electrical power supply to the control operation circuit.

The service brake enables emergency evacuation operations, with controlled descent of the suspended platform, in a short period of time. The descent speed of the platform will be less than the activation speed of the secondary device (15 m/min).

The manual emergency evacuation operation may be necessary in the following cases:

- Loss of power supply to the machine.
- The operator does not feel well.
- Adverse weather conditions.

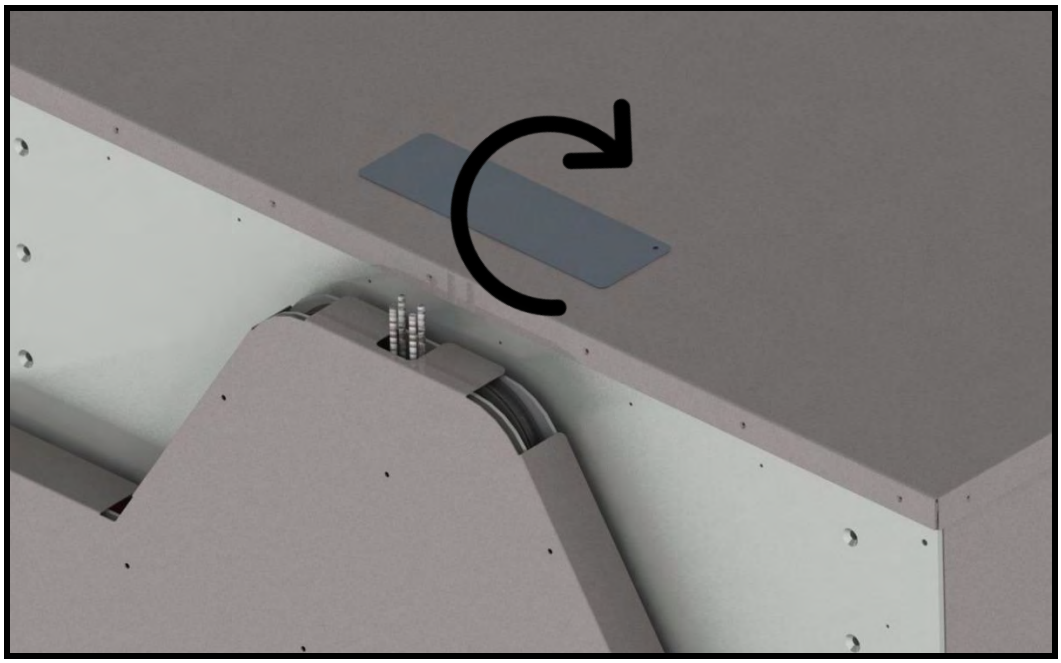
3.7.2. Manual evacuation operation

The evacuation operation will be carried out from the machine, when the workers are in the suspended platform, for this reason, it is indispensable to have a communication system between the person responsible for carrying out the operation and the operators in the suspended platform.

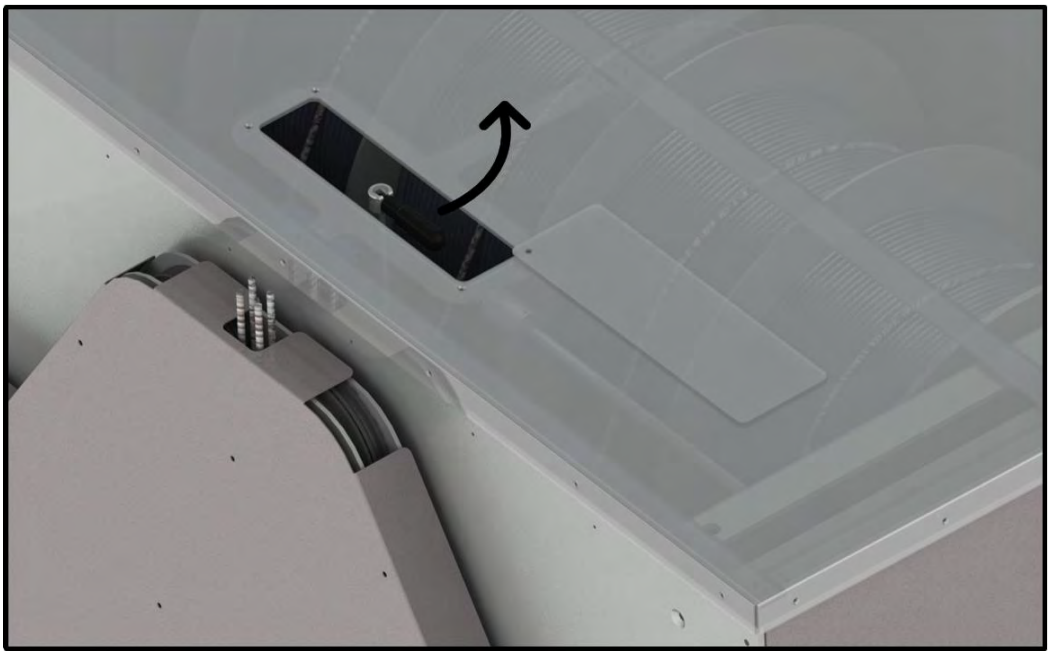
To evacuate the platform in the aforementioned cases, the following steps should be taken:

1. Disconnect the general power supply.
2. Locate the position of the elevation assembly on the machine.

3. Open the cover at the top of the elevation assembly, sliding it on its rotation point.

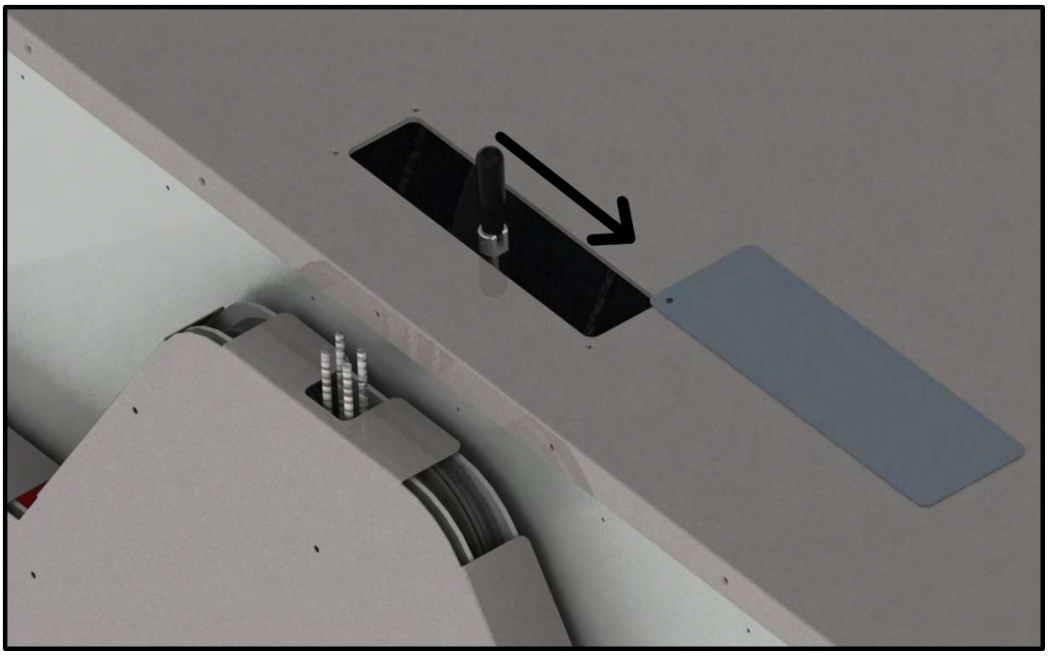


4. Move out the service brake handle.



Do not pull the service brake handle until the operators of the platform have been contacted.

5. Contact the operators.
6. Pull the handle to unlock the service brake.



On pulling the handle to activate the service brake, the platform will descend at a controlled speed. Before carrying out this operation, the operators of the platform must be contacted and they should evaluate if they have a close evacuation point and that there are no obstacles that could collide with the platform during the descent.

3.8. Residual risks

Cause	Effect	Measure
Movement of the machine.	Risk of collision for people.	Acoustic movement warning.
Movement of the machine.	Risk of trapping for people due to insufficient space between the machine and certain parts of the building.	Signpost the areas with risk of trapping.
Moving the platform without operators or maintenance personnel.	Risk of hitting the facade of the building with the suspended platform.	Carry out the movements of the machine with an operator or maintenance personnel inside the platform.

4. Safety

4.1. Safety regulations for using the machine

This machine should only be used by authorised competent personnel that have received training for using it safely.

It is absolutely forbidden to use the machine as a crane.

It is absolutely forbidden to use this machine in adverse weather conditions such as presence of snow or ice, electric storms, heavy rain, extreme temperatures (below -10ºC and above 55ºC) or with winds exceeding 51 km/h.

The work area must be duly signposted.

Check the conditions of the machine before every use.

If the machine has retaining systems for securing to the facade, they must be used.

The machine must not be used in conditions of insufficient lighting.

Never enter the platform without previously removing the key from the control panel of the machine chassis.

The platform operators must enter or exit it using the areas supplied for this purpose, the platform must be on a firm surface, in whatever location it is. Never do this with the platform suspended.

Do not exceed the number of simultaneous operators inside the platform, which is indicated on the specifications plate inside the platform and in section 8 of the manual.

When finishing the work with the machine, take the machine to its parking position. Place the operation key in “OFF” position and disconnect the machine from the power supply.

When the machine is parked, ensure it is immobilised. (In some models, there are additional securing systems).

The person responsible for the machine must ensure that it cannot be used improperly or by non-authorised personnel.

In case of an incident, notify the maintenance personnel and wait for them to arrive.

It is forbidden to control the machine form the control panel of the main chassis while there are people on the platform, except in cases of emergency evacuation andalways informing the people on the suspended platform.

Atech will accept no liability for damage, breakdowns or malfunction resulting from intervention, manipulation, modification or replacement of any component of the machine by personnel not authorised by **Atech**, and this will render the commitments in the and obligations in the guarantee void.

The machine is supplied to safely carry out cleaning and light maintenance work on facades of buildings. The machine must not under any circumstance be used for any task not contemplated in the Instruction Manual.

4.2. Safety devices: safety limit switches and mechanical stops

The control system of the **Atech** machine complies with ISO-13849-1 standard.

Emergency stop

The machine has an emergency button on each control point and in the locations where an emergency stop may be required. The emergency stop system is operational from any control point of the machine.



There are two types of end of travel safety switches:

- Elements limiting the function (see section 3 of the manual).

- Elements limiting maximum movement of the function.

4.2.1. Safety elements limiting the function

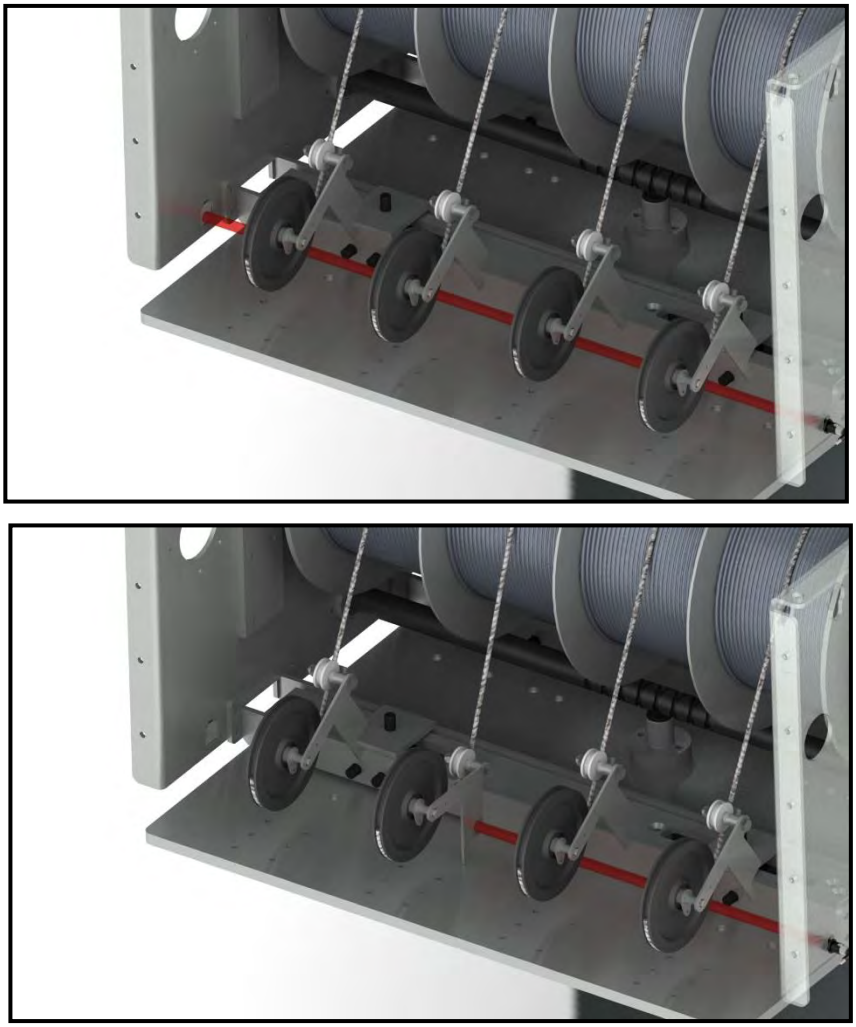
Stroke limit switch detecting suspended platform overload

The suspended platform is fitted with overload detectors set for the nominal admissible load of people, tools and materials. The limit of activation is defined in 1.25 RL of the platform. (See picture of the device in section 7.1. of the manual (4)).

Activation of “overload” will stop all movements of the machine except descent until the load is removed.

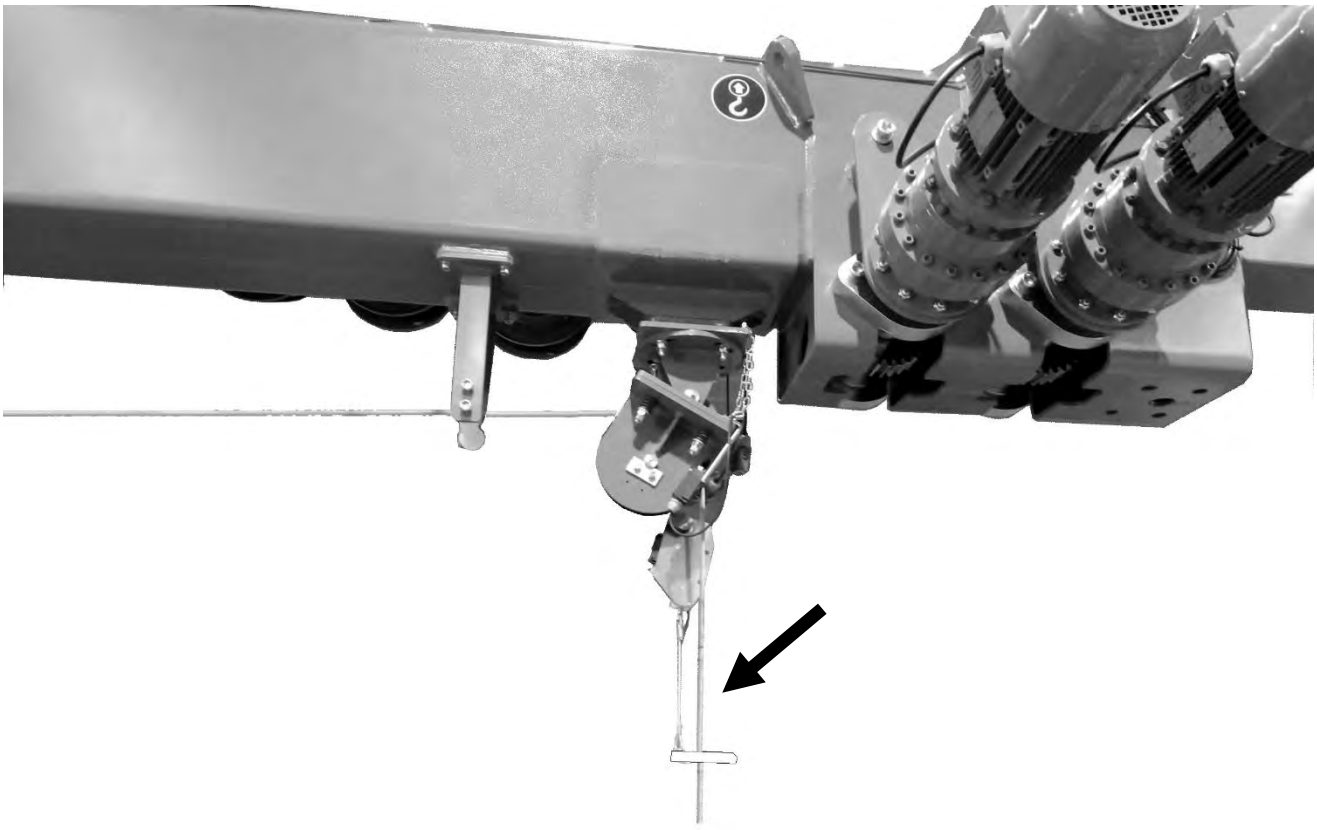
Stroke limit switch detecting slack cable

The elevation assembly has a lack of load detection system, that locks all the movements of the machine except lifting the platform.



Stroke limit switch detecting auxiliary hoist overload (optional in some machines)

The auxiliary hoist is equipped with an overload detector that impedes excessive load materials, stopping elevation and only allowing lowering.



Stroke limit switch detecting platform collision (descent)

If any obstacles are found in the descent of the platform, the anti-collision detector will stop the following movements: descent, movement forward of jib, travel, turning of machine, turning of head and folding of telescopic jib. This function enables maintenance of stability of the suspended platform. (See picture of the device in section 7.1. of this manual (2)).

Stroke limit switch detecting platform collision (ascent) (according to model)

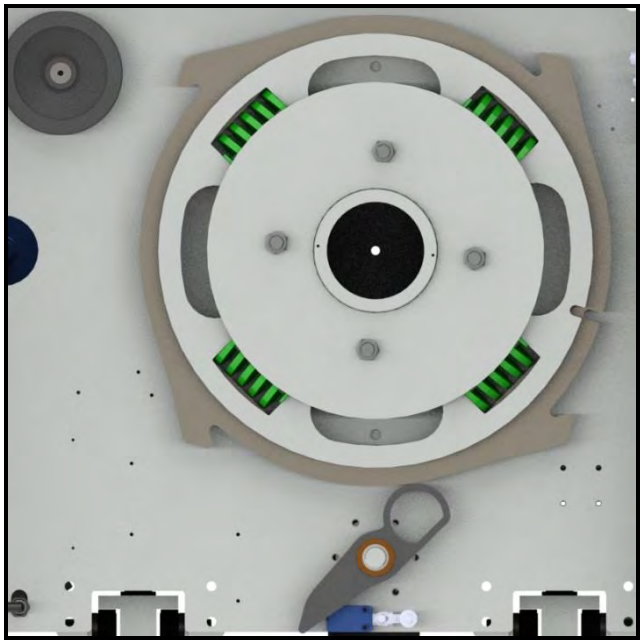
If any obstacles are found in the ascent of the platform, the anti-collision detector will stop the ascent movement of the platform.

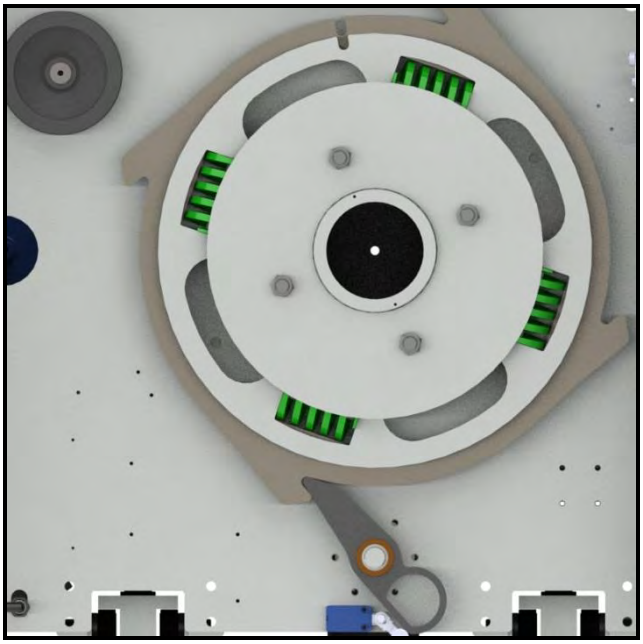
Stroke limit switch detecting synchronisation chain breakage

The elevation assembly includes a synchronisation chain for winding the suspension cables with a stroke limit switch that detects its detensioning or breakage, totally locking the machine. (See picture of the device in section 7.1. of the manual (13)).

Stroke limit switch detecting the secondary brake of the elevation assembly

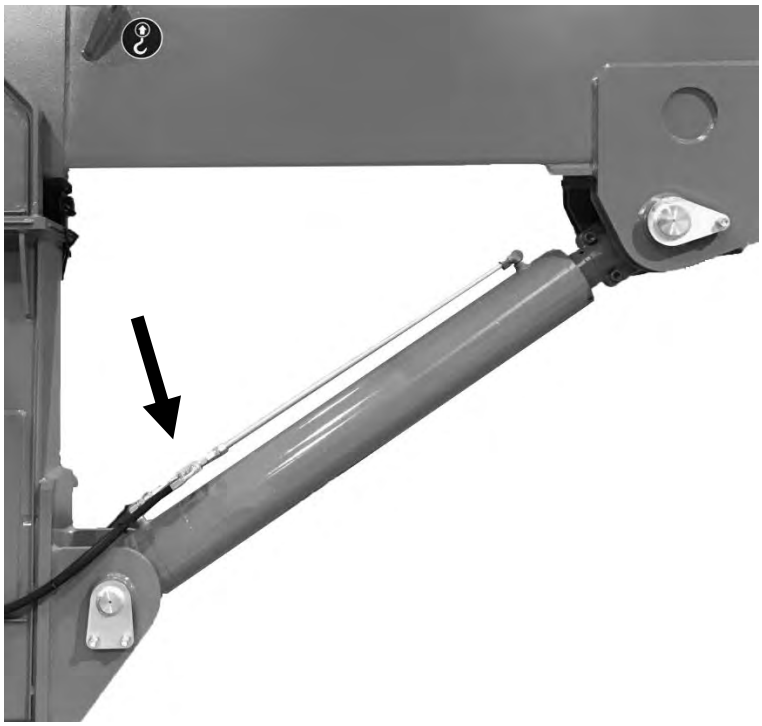
In case of excessive descent speed of the platform, the secondary emergency brake will come into action. Once activated, the machine will be locked mechanically as well as electrically.





Piloted valve/parachute in hydraulic cylinders (according to model)

In case of sudden loss of pressure, the hydraulic cylinders have a valve that immobilises the shaft until it is examined by a technician.



Stroke limit switch detecting the retaining points (facade guiding systems)

For buildings more than 40 m high, the machine has a retaining guide system to secure the platform to the facade and avoid swinging movements caused by the wind. (See picture of the device in section 7.1. of the manual (3)).

Stroke switch detecting limit of electric cable winding

The electric cable winder has a detector that limits the complete unwinding of the cable, stopping the movement of the machine. For reactivation, connect the machine to the closest power socket.



A competent person must guarantee the integrity of all the safety functions whenever the gondola is put into service.

4.2.2. Safety elements limiting movement of the function

Safety limit switch or mechanical stop

All movements are limited by a safety limit switch or a mechanical safety stop, that stops movement in case of failure of the service detector.

LIFTING: Lifting or lowering safety limit switch.

MOVEMENT: Mechanical safety stop in open circuit runways.

CHASSIS SLEWING: Safety limit switch turning left or right.

HEAD SLEWING: Safety limit switch turning left or right.

AUXILIARY GEAR SLEWING: Safety limit switch turning left or right.

TELESCOPIC JIB: Safety limit switch moving outwards and inwards. **Atech** additionally incorporates a mechanical stop that increases redundancy and safety of the system.

JIB FOLDING DOWN: A mechanical stop consisting of an exterior metal body of the hydraulic cylinder that limits the folding movement.

TELESCOPIC COLUMN: Upper and lower mechanical stop on the structure of the column plus the redundancy of the exterior metal body of the cylinders.

AUXILIARY LOAD HOIST: This device only has service limit switches.

4.3. Description of safety functions

Representation of safety functions of the gondola according to EN ISO 12100-1 standard:

CAUSE	EFFECT	SAFETY FUNCTION
UNCONTROLLED MOVEMENT DUE TO ELECTRICAL FAILURE.	MOVEMENT CONTINUES UNTIL CONTACT WITH THE SAFETY LIMIT SWITCH OR MECHANICAL STOP.	EMERGENCY STOP.
PLATFORM OVERLOAD.	MAXIMUM ADMISSIBLE LOAD ON THE PLATFORM HAS BEEN EXCEEDED.	STROKE LIMIT SWITCH DETECTING PLATFORM OVERLOAD.
UNLEVELLED SUSPENDED PLATFORM.	INCORRECT WINDING OF SUSPENSION CABLES ON ELEVATION SYSTEM DRUM.	STROKE LIMIT SWITCH DETECTING SLACK CABLE.
AUXILIARY LOAD HOIST OVERLOAD.	MAXIMUM ADMISSIBLE LOAD ON THE AUXILIARY LOAD HOIST HAS BEEN EXCEEDED.	STROKE LIMIT SWITCH DETECTING AUXILIARY LOAD HOIST OVERLOAD.
COLLISION WITH OBSTACLES DURING VERTICAL DESCENT OF SUSPENDED PLATFORM.	SUSPENDED PLATFORM NOT LEVEL RISKING OVERTURNING DUE TO AN OBSTACLE WHEN DESCENDING.	LOWER ANTI-COLLISION SAFETY LIMIT SWITCH ON THE SUSPENDED PLATFORM.
COLLISION WITH OBSTACLES DURING VERTICAL ASCENT OF SUSPENDED PLATFORM.	SUSPENDED PLATFORM NOT LEVEL RISKING OVERTURNING DUE TO AN OBSTACLE WHEN LIFTING.	UPPER ANTI-COLLISION SAFETY LIMIT SWITCH ON THE SUSPENDED PLATFORM.
FAILURE OF IN-SERVICE MOVEMENT LIMITER.	ACTIVATION OF SAFETY LIMIT SWITCH OR MECHANICAL STOP.	SAFETY LIMIT SWITCH.
BREAKDOWN OF ELEVATION SYSTEM	PLATFORM STOPS ON THE FACADE.	MANUAL OPENING OF THE SERVICE BRAKE AND

GEARED MOTOR.		CONTROLLED DESCENT OF THE PLATFORM.
FLUID LEAK IN HYDRAULIC CIRCUIT.	MOVEMENT OF HYDRAULIC CYLINDER LOCKED.	AUTOMATIC ACTIVATION OF SAFETY PILOTED VALVE.
NON-DISCONNECTION OF RETAINING SYSTEM DURING ASCENT OF PLATFORM.	PLATFORM NOT LEVEL DUE TO RESISTANCE OF THE RETAINING SYSTEM THAT IMPEDES REGULAR ASCENT.	STROKE LIMIT SWITCH DETECTING THE RETAINING POINTS OF THE FACADE GUIDING SYSTEM.
INTERRUPTION OF ELECTRICAL POWER SUPPLY TO MACHINE.	MACHINE STOPPED OUT OF SERVICE.	END STROKE SWITCH DETECTING LIMIT FOR POWER SUPPLY CABLE WINDER.
PHASE REVERSAL IN POWER SUPPLY CABLE.	WRONG DIRECTION OF ROTATION OF MOTORS OR STOPPAGE.	CONTROLLER OF THREE-PHASE POWER SUPPLY SYSTEM.
SYNCHRONISATION CHAIN BROKEN.	MALADJUSTMENT OF SYSTEM FOR WINDING SUSPENSION CABLES ON DRUM.	STROKE LIMIT SWITCH DETECTING SYNCHRONISATION CHAIN BREAKAGE.

5. Secondary brake

5.1. Description of the secondary brake

The elevation assembly of the drum has an anti-fall mechanical device. The system is activated automatically in case of excessive speed in the descent of the platform (more than 15 m/min). If the safety brake is activated it should only be reset by authorised technical personnel. It will be necessary to study the cause for activation of the device and check the conditions of all the components of the elevation assembly before using the machine again.

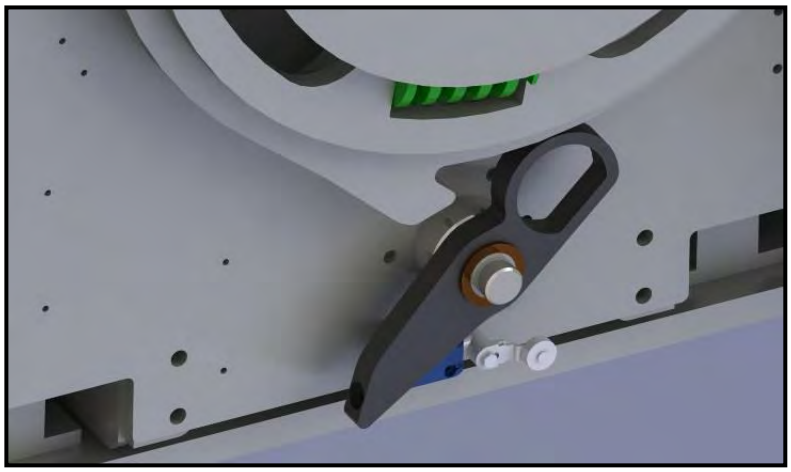
The anti-fall device is composed of a brake disk and an interlocking cam.

- Brake disk:



The brake disk is attached to the cable winding drum, from which the platform is suspended.

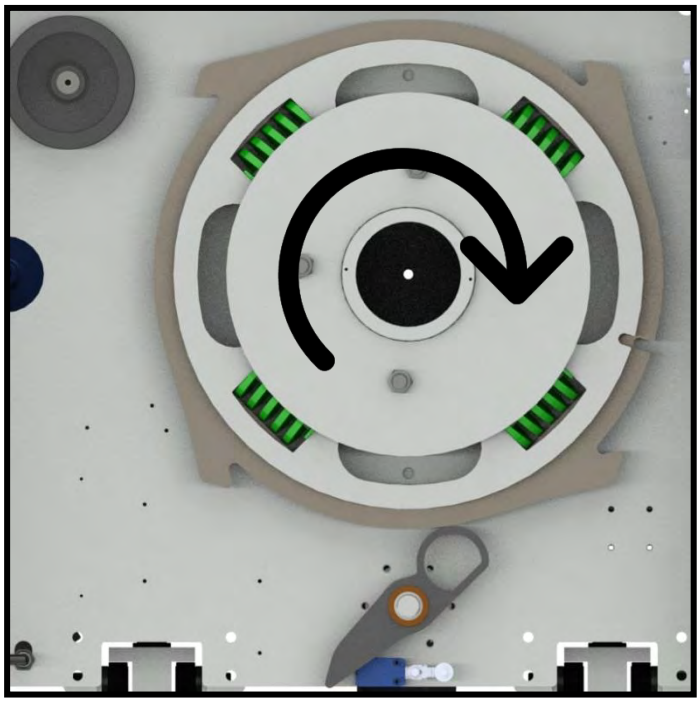
- Interlocking cam:



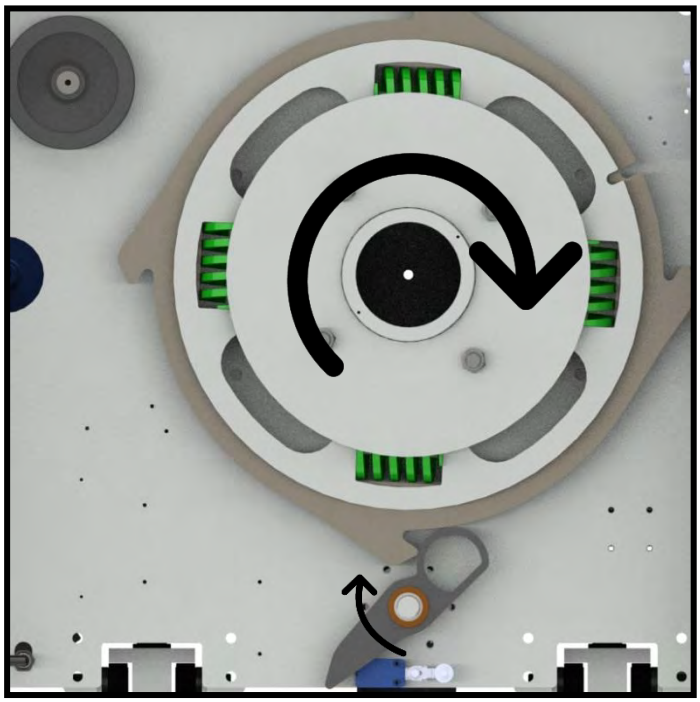
By means of a calibrated monitoring system, the interlocking cam detects an increased nominal speed and locks the brake disk on the cable winding drum occurring immediate stoppage of the suspended platform.

Operation of the device in case of excessive speed:

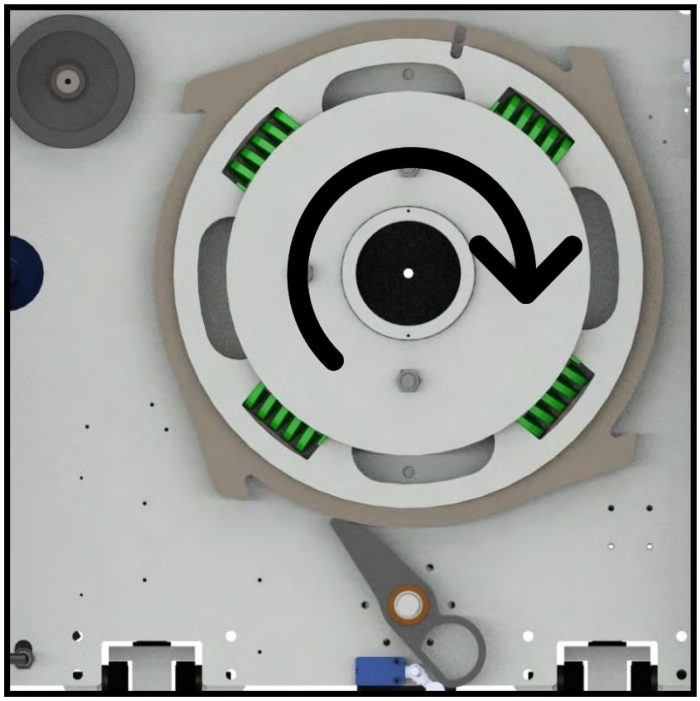
1. The interlocking cam follows the perimeter of the brake disk, oscillating regularly due to the geometry of the component.



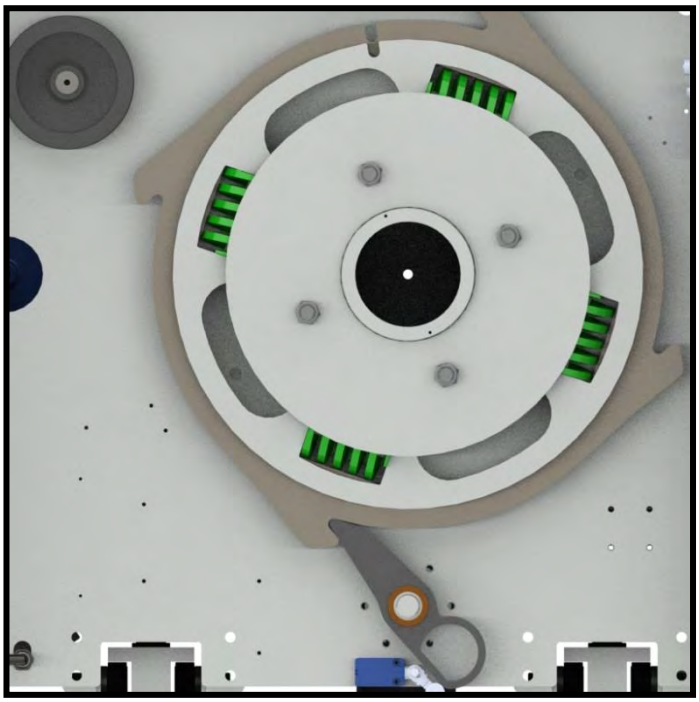
2. An increased speed of the drum, causes a variation of oscillation speed of the interlock cam.



3. The cam will enter one of the interlock points of the brake disk.



4. The interlock of the cam onto the brake disk impedes its rotation and completely locks the cable winding drum for the suspended platform.



The secondary brake will be activated automatically in a situation of excessive speed, even without electrical power. When, on platform descent, the drum rotates faster than 15 m/min, there is an increased inertia of rotation of the brake disk and the cam will lock.

The brake disk has four springs that will produce progressive deceleration as well as protecting the components of the power transmission and motor assembly.

Once the secondary brake has been activated, the electrical detector of the emergency brake, power supply is cut and the machine is completely out of service. All personnel must evacuate the platform using means apart from the machine.

The secondary brake cannot be reset manually if there is a suspended load.

The secondary brake device has been designed to avoid damage to the elevation assembly, allowing its reactivation after being triggered due to excessive speed, and maintaining the elevation system completely operational for a new service.

Reactivation of the brake must always be done by trained technical personnel authorised by the manufacturer, who will study the possible cause of the automatic activation of the brake and correct conditions of the components of the elevation assembly.

5.2. Causes of activation of the secondary brake

Warning!

These instructions must only be carried out by technical personnel trained and authorised by **Atech**.

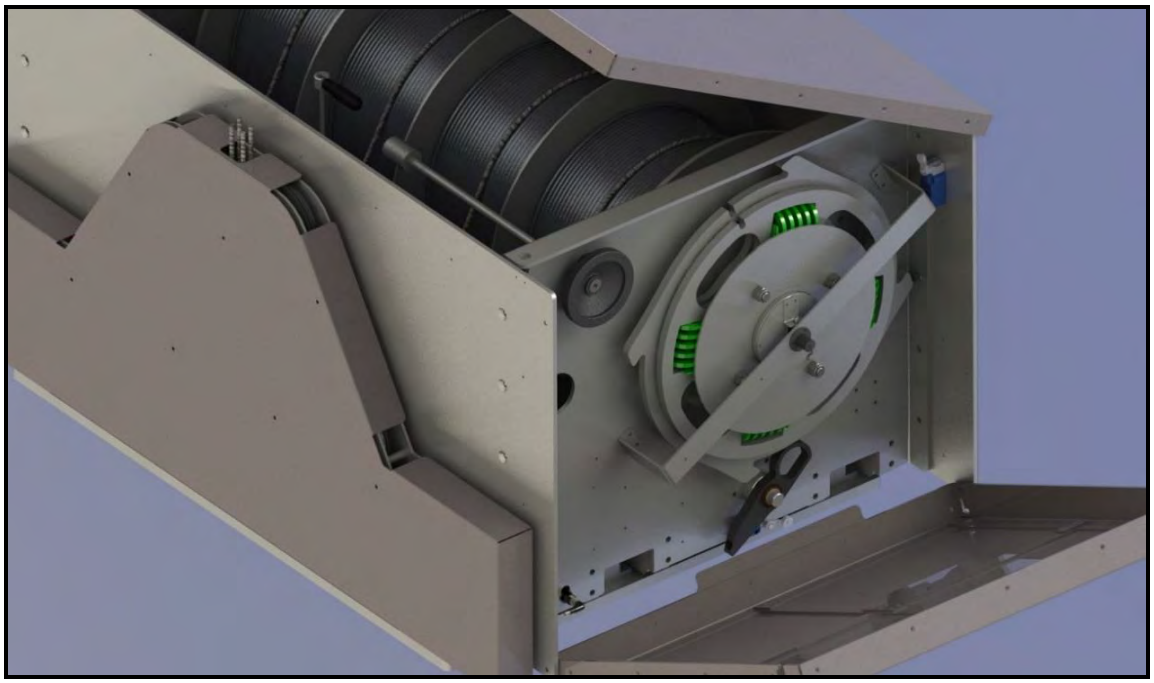
Under normal working conditions, the secondary brake should not be activated during the service life of the machine, if there is an activation, its causes must be carefully analysed before putting the machine back into service.

In case of activation of the secondary brake, the machine will be out of service and the technical service signal will be displayed on the control panel.

Then you should disconnect the machine from the electrical power supply, switching it off from the control panel and disconnecting it from the building power socket.

To check that the secondary brake has been activated, locate the elevation assembly in the machine and check the position of the interlocking cam on the brake disk.

The secondary brake device is on one of the sides of the elevation assembly, to access it, lift the upper cover and fold down the side panel.



Possible causes of activation of the secondary brake:

1- A problem in the transmission system.

A failure in the transmission system, due to breakage of a component or mishandling. The transmission components are in the elevation assembly, on the opposite side to the secondary brake. To check the conditions of the transmission system, fold down the side panel that protects it and check:

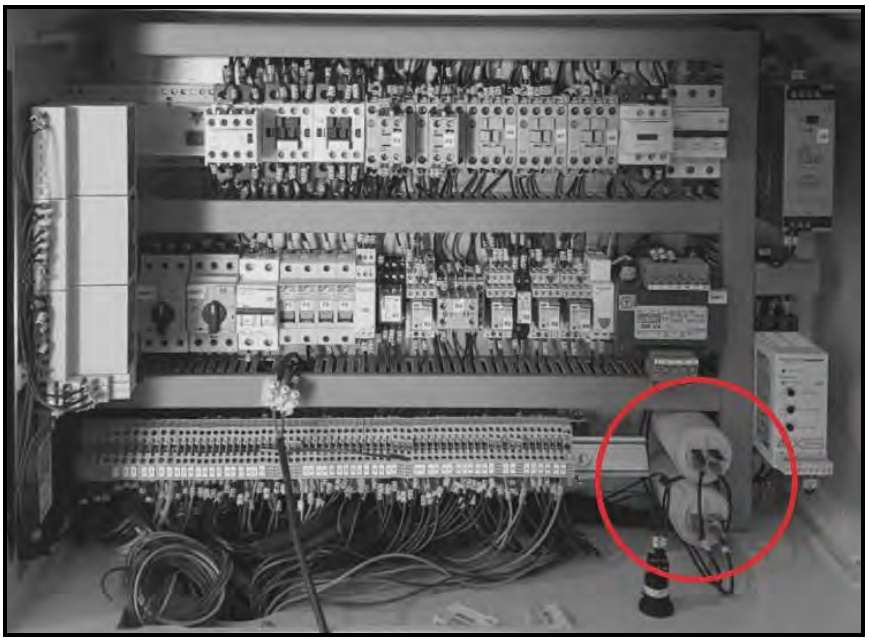
- That the motor and the gearbox are perfectly fitted and the transmission shaft joining them is not damaged.

- That the shafts and fasteners securing the transmission gears are in good conditions.

- That the transmission gears are in good conditions and properly adjusted.

2- Problem in the service brake and controlled lowering device.

On the main electrical panel, the machine incorporates a device for controlled descent in case of unlocking of the service brake.



This device enables the platform to descend at a moderate speed if it is necessary to evacuate, using the service brake. The platform will descend at a speed of less than 15 m/min, avoiding the action of the secondary brake. If, on unlocking the service brake manually or if it stops working due to breakdown, the secondary brake is triggered, there may be a failure in the controlled descent device.

The controlled descent device comprises a group of condensers located inside the main electrical panel of the machine. The wiring and connections to the group of condensers indicated on the picture should be checked.

Activation of the secondary brake implies the existence of a failed component. The machine must not be used or the system reactivated without first having evacuated the operators from the suspended platform.

Activation of the secondary brake means that all the components related to the possible cause of the brake and any components that could have been damaged after the activation of the device must be carefully checked. This check-up should be carried out taking all necessary precautions. Never manipulate the components of the elevation assembly to the control panel without having disconnected the machine.

Especially avoid manipulating the transmission system and the brake system with a suspended load without having the necessary tools, so as to avoid possible entrapments.

5.3. Operation for resetting the secondary brake

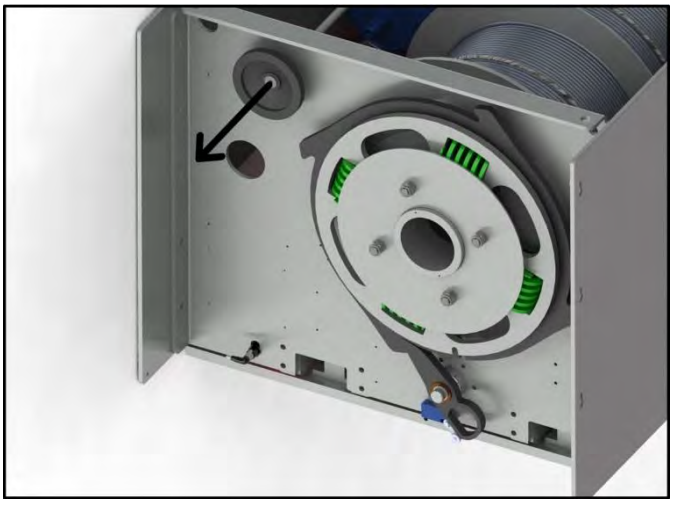
Warning!

These instructions must only be performed by technical personnel trained and authorised by the manufacturer.

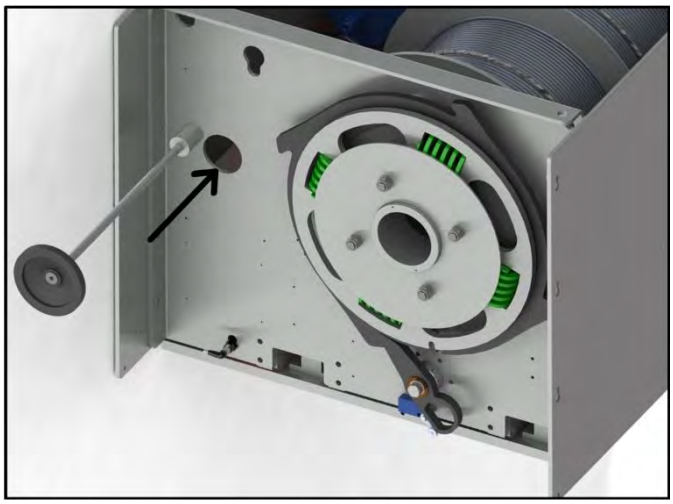
Before reactivating the secondary brake and complementing the revision of the elements described in section 5.2 that could be directly involved in the activation of the device, it is necessary to carry out a visual inspection of all the other elements of the elevation assembly, paying special attention to the transmission chain, shafts and fasteners of the drum cable winding synchronisation system, the intermediate stops of the platform and the horizontal movement of the elevation assembly.

Once all the components have been checked, reactivate emergency the brake following the steps given below:

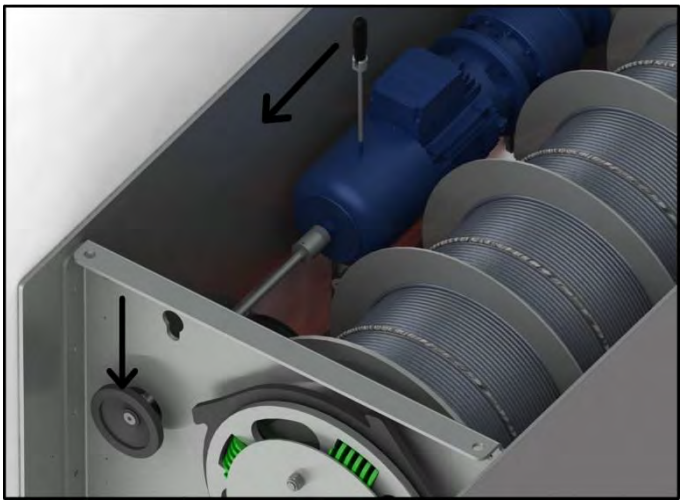
1- Remove the emergency wheel, located beside the secondary brake, by lifting and pulling it out.



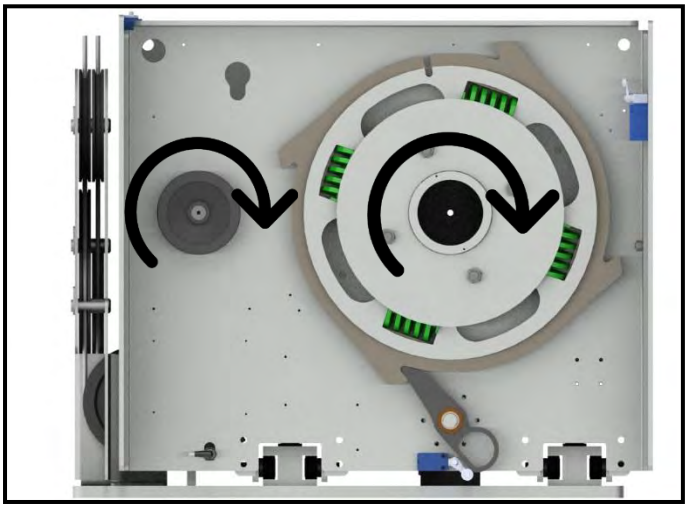
2- Fit the emergency wheel to the motor output shaft through the orifice on the chassis of the elevation assembly.



3- While holding the emergency wheel, pull the motor lever, to unlock the service brake. Whenever you wish to carry out any action with the emergency wheel, it is necessary to pull the motor lever and keep it pulled, otherwise, the service brake will impede the manual rotation of the wheel.



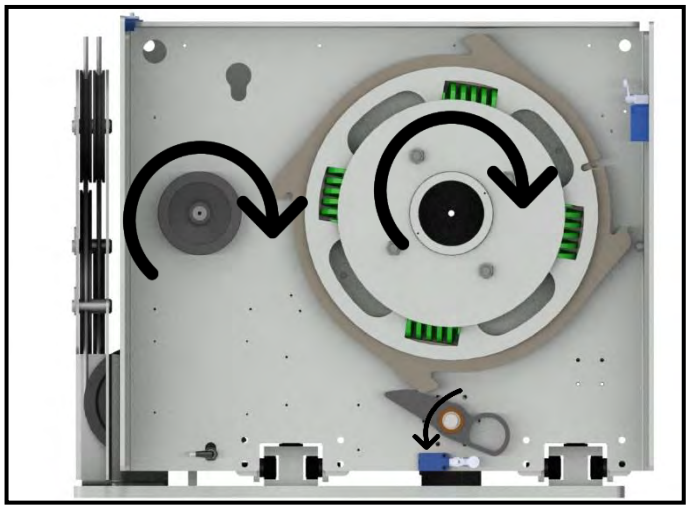
4- With the service brake unlocked, turn the emergency wheel clockwise to turn the brake disk. When you do this, the platform will also rise.



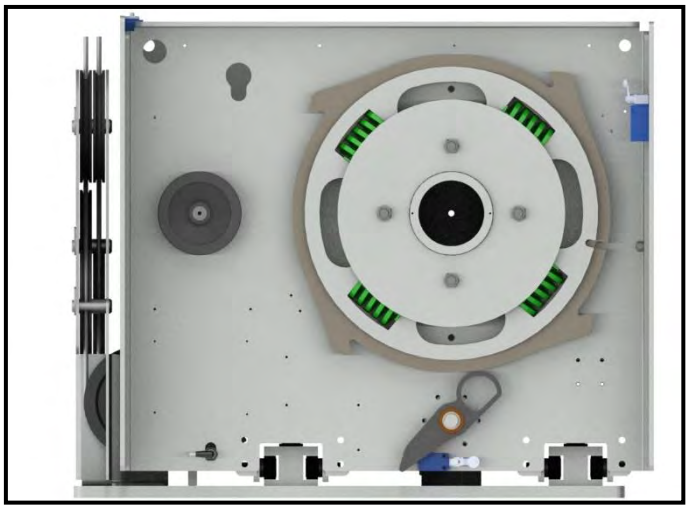
If at any time you release the wheel, it is necessary to stop pulling the lever, so that the suspended load does not make the drum turn in the undesired direction, in this case, carry out the previous action again.

The end of the cam contains a magnet that stops it from returning to its working position. Under no circumstances should this action be forced manually, as there is a high risk of trapping. To release it, continue turning the wheel to the right until the cam returns to its working position expelled by the projection in the brake disk.

5- Turning the emergency wheel until the brake disk makes a quarter of a turn, the cam will meet the next projection of the disk that will return it to its normal working position and will deactivate the safety limit switch.



6- Once the cam is in its working position, stop pulling the motor brake lever and return the emergency wheel to its original support.



To put the machine into service again, it is necessary to refit the side covers and the upper cover. Finally, reconnect the machine to the electrical power and put it into action using the main control panel.

6. Installation and assembly

Before using the machine for the first time, the dimensions should be checked using the approval plans (see annexe 1) and correct installation of the machine components verified.

- ✓ The dimensions of the parapet of the building correspond to those on the approval plan.
- ✓ The type of profile, distance between the rail tracks and rail supports correspond to the approval plan.
- ✓ The type of element securing the rail to the building is correctly fitted and corresponds to the approval plan.
- ✓ The position, number and conditions of the power sockets in the building coincide with those indicated on the approval plan.
- ✓ The electrical voltage and frequency coincide with those indicated in section 8.5 of the machine manual.
- ✓ The minimum and maximum range positions and parking coincide with those described on the approval plan.
- ✓ The steel cable is correctly wound through the pulleys.
- ✓ The torque tightness of the slewing gear and structural elements is compliant with indications in the machine manual.
- ✓ The type and number of facade guides (lanyards) have been checked.
- ✓ There is a wheel for emergency manual evacuation.
- ✓ Check alignment and tension of the steel cables of the elevation assembly and the hoist, descending to the lower level, ensuring the necessary length safeguard and levelling of the cables that will ensure stability of the suspended platform.
- ✓ Carry out the horizontal movement of the machine along the whole runway, checking that there are no obstacles in any critical point of the circuit.

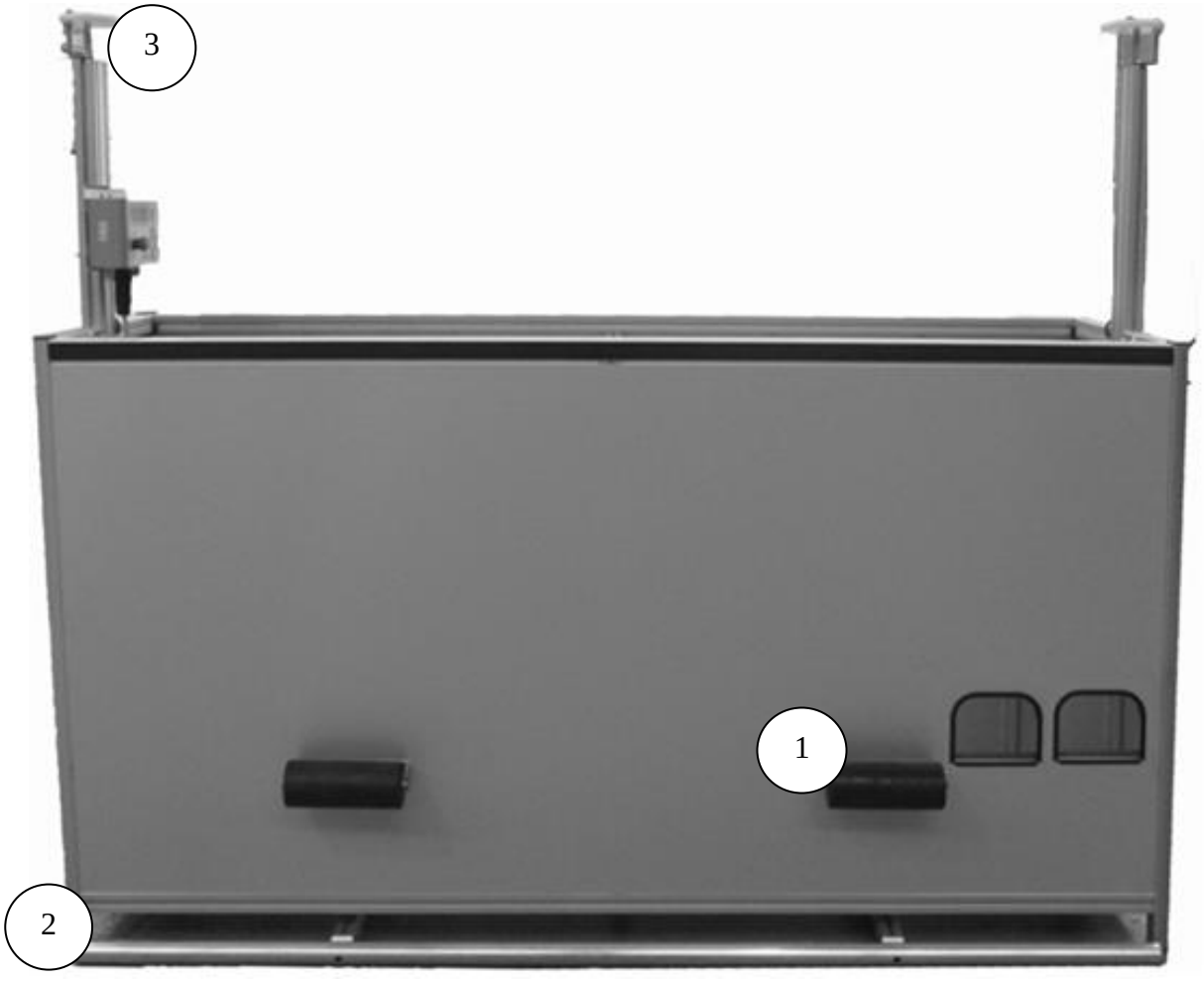
7. Maintenance

The preventive maintenance operations must be carried out before each use, or once a year if the machine is used infrequently. **Atech's** maintenance programme recommends carrying out maintenance of the installation every three months in the case of machines in regular use.

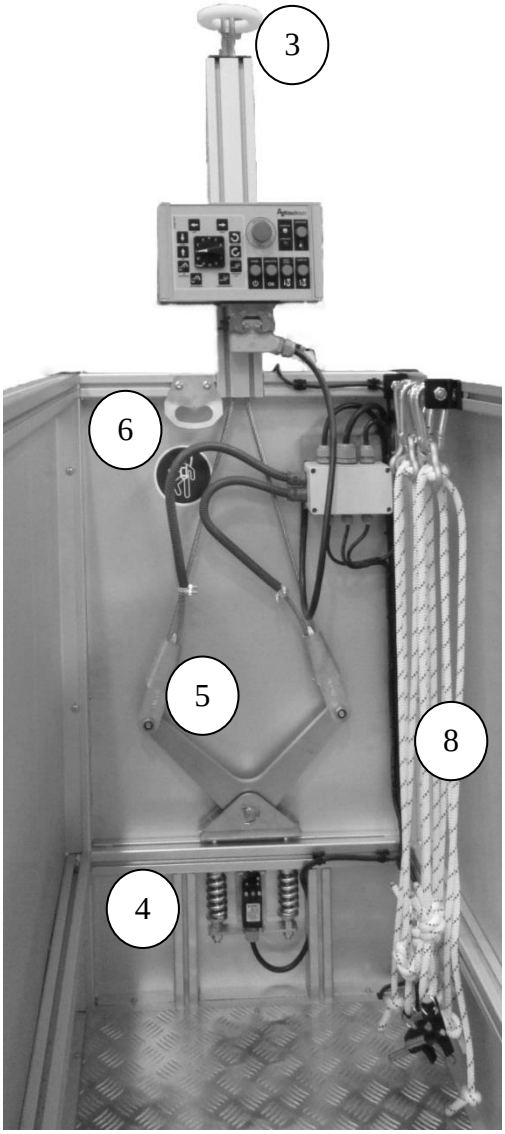
Maintenance operations on the parts and components of the machine:

7.1. Suspended platform

- 1.1. Check the general conditions of the platform. Check welds, coatings and mechanisms.
- 1.2. Check the conditions of the rollers protecting the facade. (1)
- 1.3. Check the general conditions and operation of the anti-collision device. (2)
- 1.4. Clean and grease the joints of moving points: upper anti-collision device, lower anti-collision device and platform levelling device.
- 1.5. General cleanliness of the platform.



- 1.6. Check the general conditions and operation of the overload system. (4)
- 1.7. Check the anchoring points of the suspension cables (supports, wedge terminals and thimbles). (5)
- 1.8. Check the general conditions of the warning and safety notices. (6)
- 1.9. Check the general conditions and operation of the continuous guide system on the facade (softrope). (7)
- 1.10. Check that the drainage holes are not obstructed.
- 1.11. Check the general conditions and operation of the guides securing to the facade (lanyards). (8)
- 1.12. Check the conditions of the anchor points of the safety harness. (6)

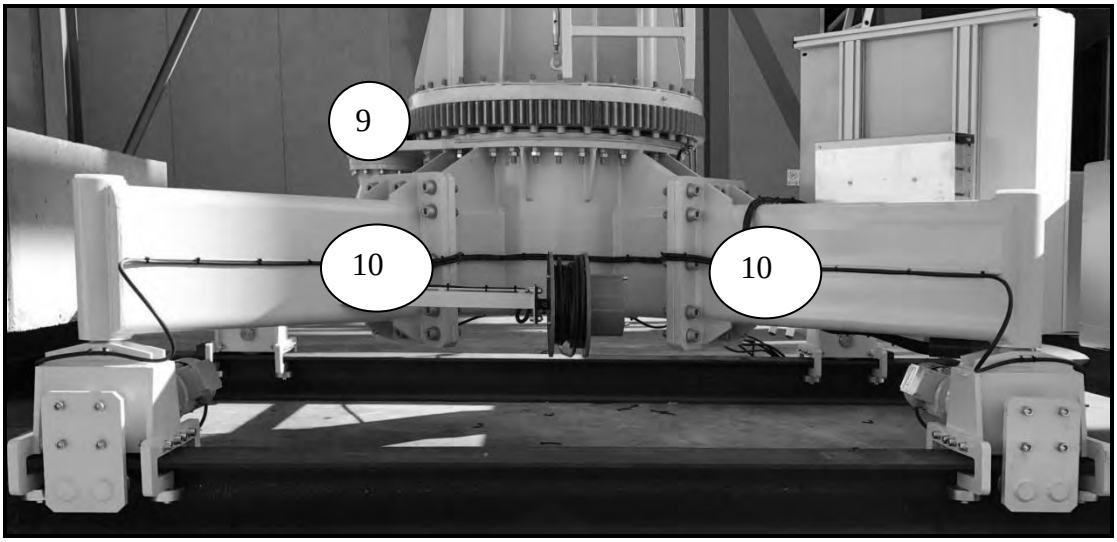




7.2. Metallic structure

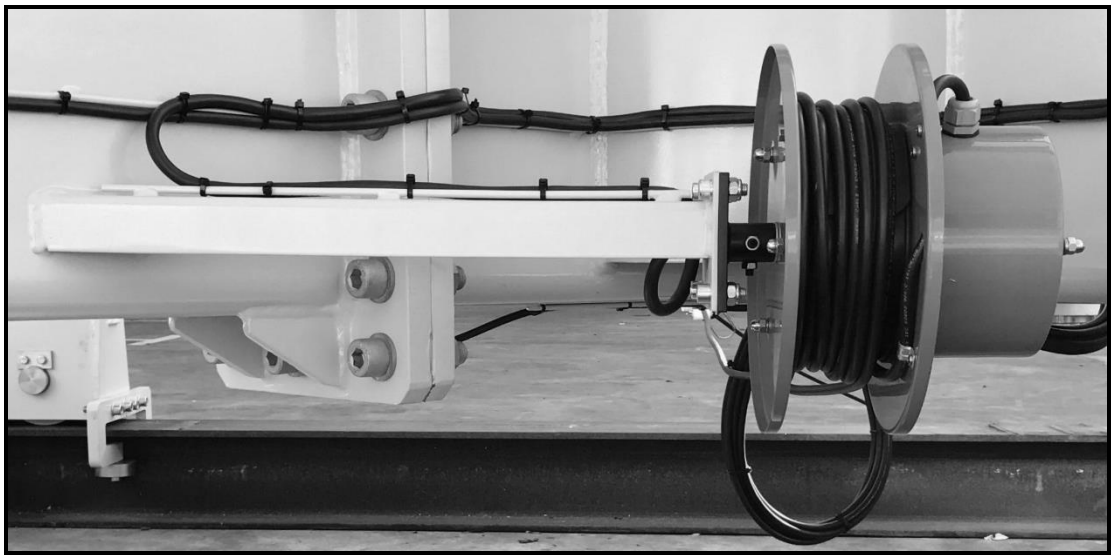
7.2.1. Lower chassis

- 2.1.1. Check the general conditions of chassis. Check welds, coatings and mechanisms.
- 2.1.2. Check that the torque tightness of the slewing gear and the joints with the legs is adequate. (See table below).
- 2.1.3. Check the conditions and tightness of fasteners.
- 2.1.4. Clean and grease bearings and joints of moving points.
- 2.1.5. General cleanliness of chassis.

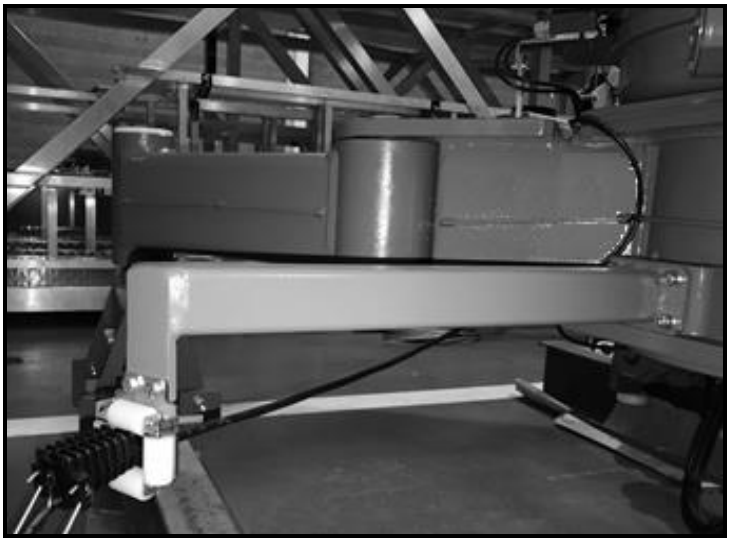


	Fasteners	Torque tightness (Nm)
Slewing gear of the head (12)	M16 CAL.8.8	193
Slewing gear of the lower chassis (9)	M20 CAL.12.9	648
Leg joints of the lower chassis (10)	M27 CAL.8.8	990
Column joint with jib	M24 CAL.12.9	1116

- 2.1.6. Check the general conditions of the power supply cable winder support.



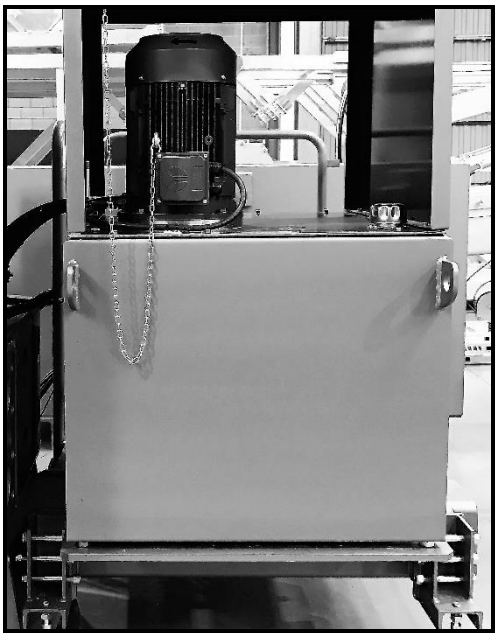
- 2.1.7. Check the general conditions and operation of the guide support of the power cable.
- 2.1.8. Check the general conditions of the power supply cable.



- 2.1.9. Check the general conditions of the electrical panel support.



- 2.1.10. Check the general conditions of the hydraulic assembly support.



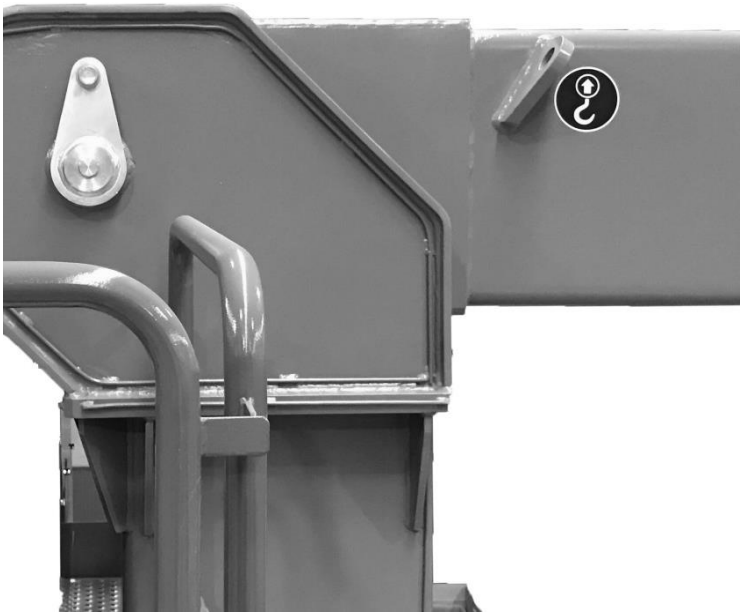
7.2.2. Column

- 2.2.1. Check the general conditions of the column. Check welds, coatings and mechanisms.
- 2.2.2. Check that the torque tightness of the column joint with the jib is adequate. (See table in section 7.2.1 of the manual).
- 2.2.3. Check the conditions and tightness of fasteners.
- 2.2.4. Clean and grease the joints of moving points.
- 2.2.5. General cleanliness of the column.
- 2.2.6. Check the general conditions of the lifeline support.

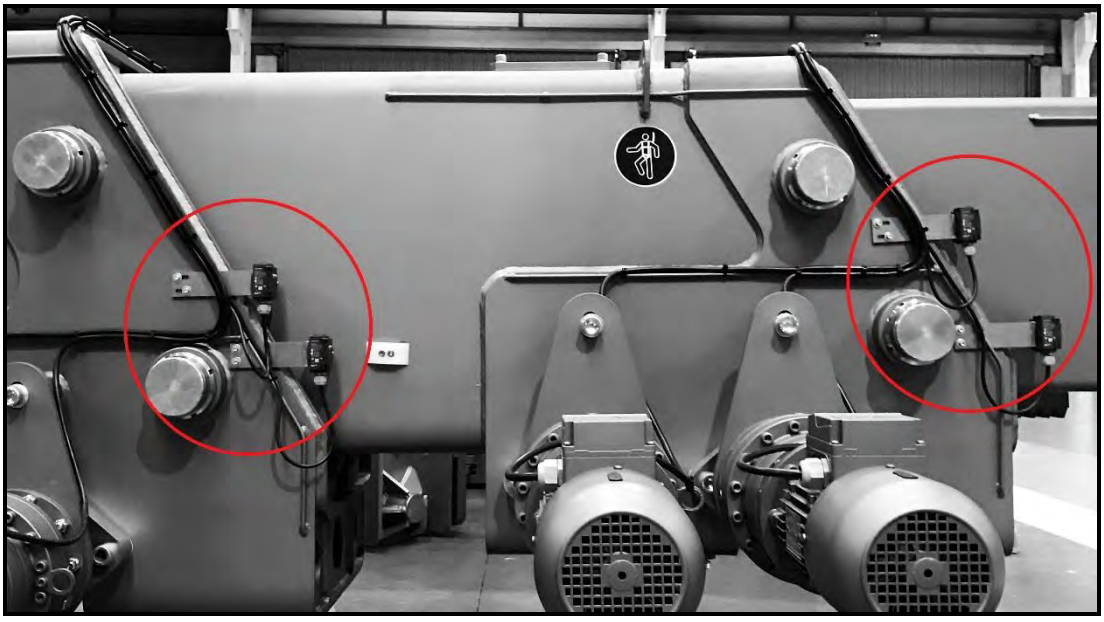


7.2.3. Jibs

- 2.3.1. Check the general conditions of jibs and pulleys support.
- 2.3.2. Check welds, coatings and mechanisms.
- 2.3.3. Check the conditions and tightness of fasteners.
- 2.3.4. clean and grease bearings and joints of moving points.
- 2.3.5. General cleanliness of jibs and pulleys support.

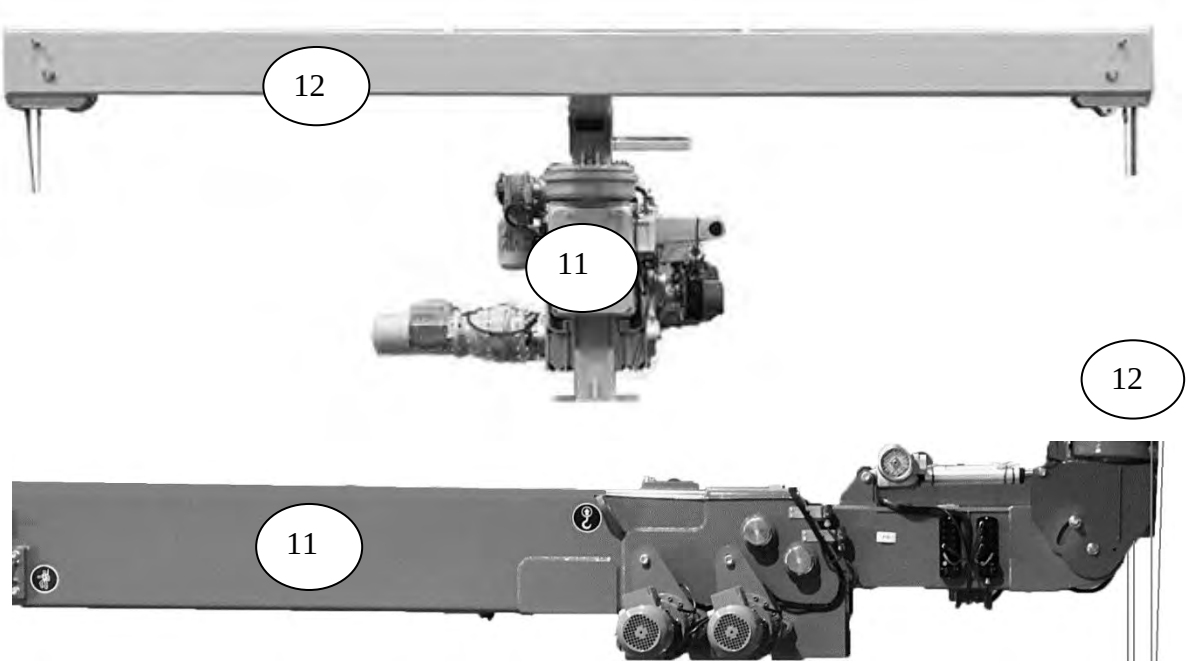


- 2.3.6. Check the general conditions of limit switches supports.



7.2.4. Head

- 2.4.1. Check the general conditions of jibs (11) and head (12). Check welds, coatings and mechanisms.
- 2.4.2. Check that the torque tightness of the slewing gear of the head is adequate. (See table in section 7.2.1 of the manual).
- 2.4.3. Check the conditions and tightness of fasteners.
- 2.4.4. Clean and grease bearings and joints of moving points.
- 2.4.5. General cleanliness of jibs and bells.



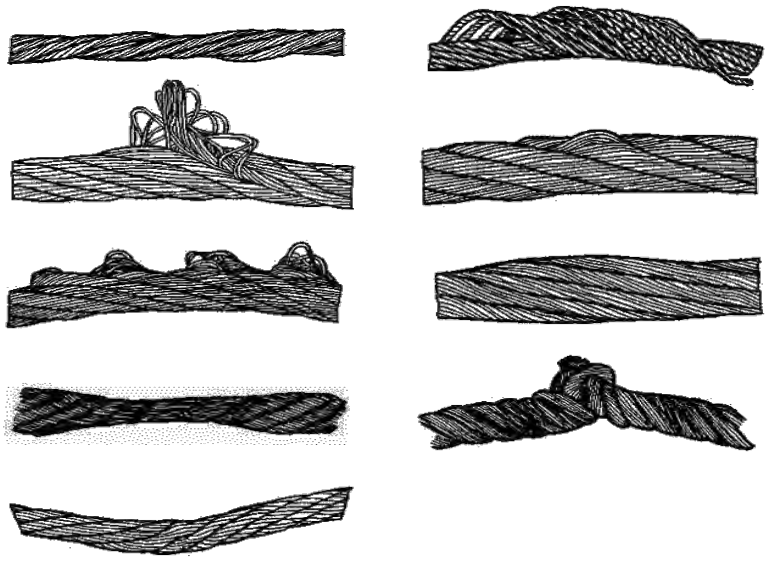
7.2.5. Pantograph device

- 2.5.1. Check the general conditions and operation of the pantograph device. Check welds, coatings and mechanisms.
- 2.5.2. Clean and grease the bearings and moving points joints of the pantograph device.
- 2.5.3. Check the anchoring points of the suspension cables (supports, wedge terminals and thimbles). (5)

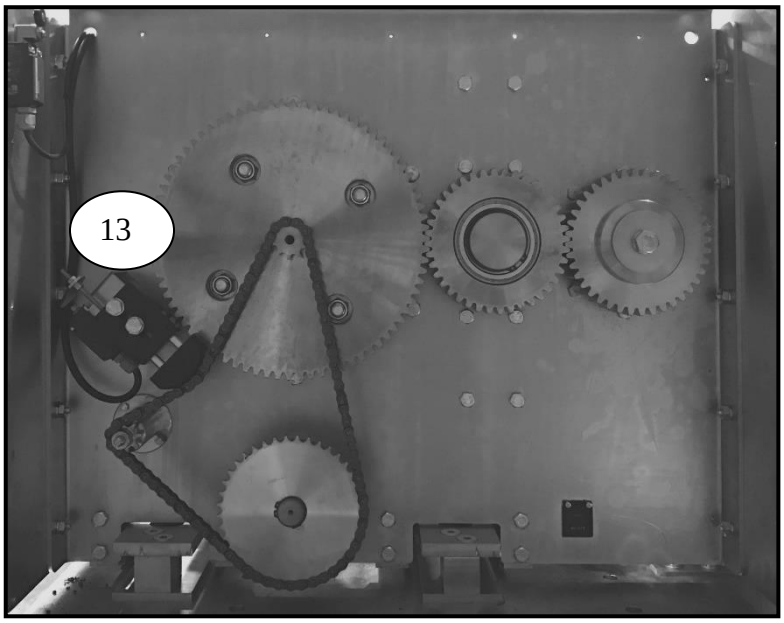


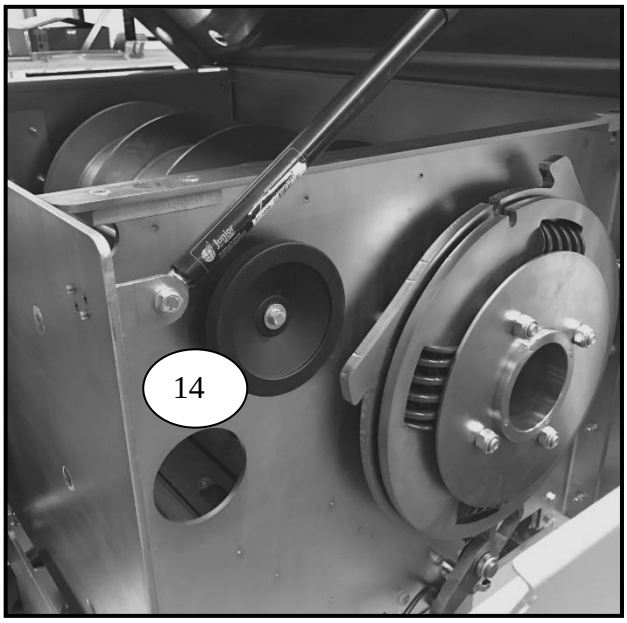
7.3. Elevation assembly

- 3.1. Check the general conditions of the elevation assembly. Check welds, coatings and mechanisms.
- 3.2. Clean and grease bearings and joints of moving points.
- 3.3. Clean and grease the transmission chain and the synchronisation chain.
- 3.4. Clean and grease the transmission gears.
- 3.5. Check the general conditions of elevation drum steel cables. It must not have more than 10% of untangled cable. If damage similar to that shown below is observed, do not use the machine and notify the authorised technical service.

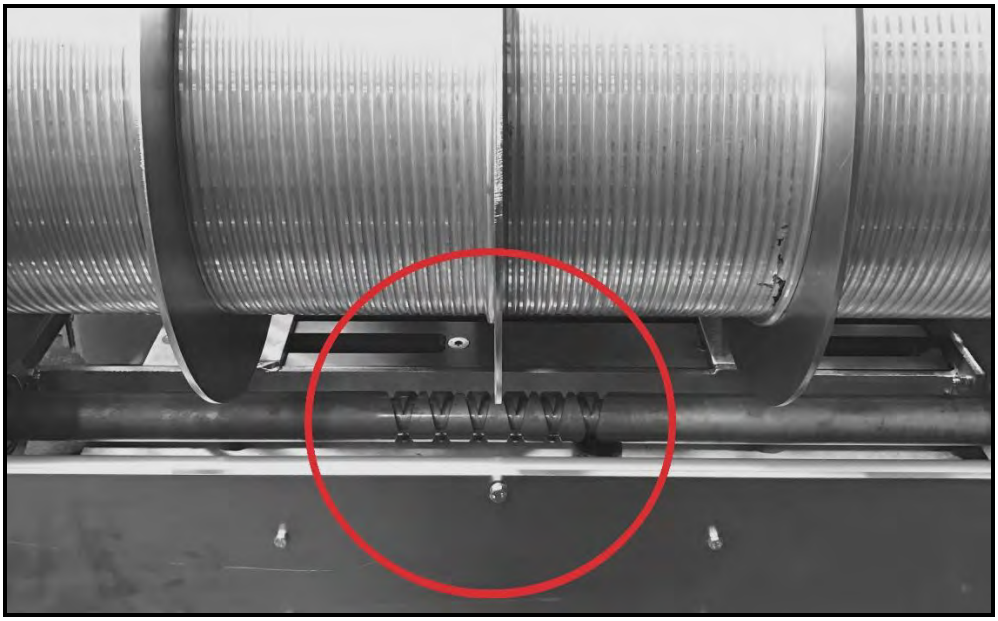


- 3.6. Check the general conditions of the ropes, weights, thimbles, wedge terminals and clamps of the steel cables.
- 3.7. Check the presence and fitting of the emergency wheel. (14)

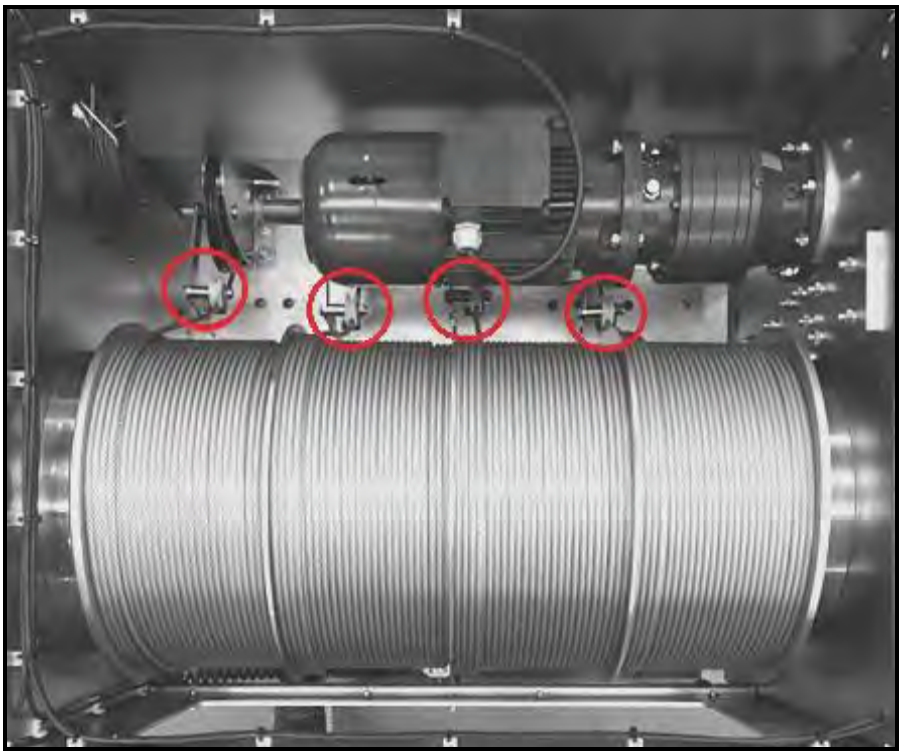




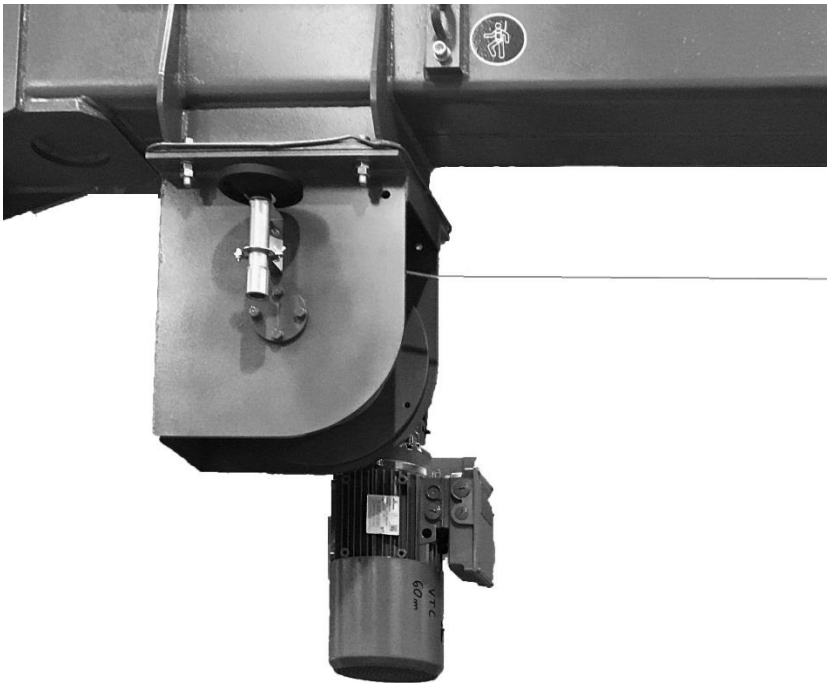
- 3.8. Clean and grease the synchronization shaft.



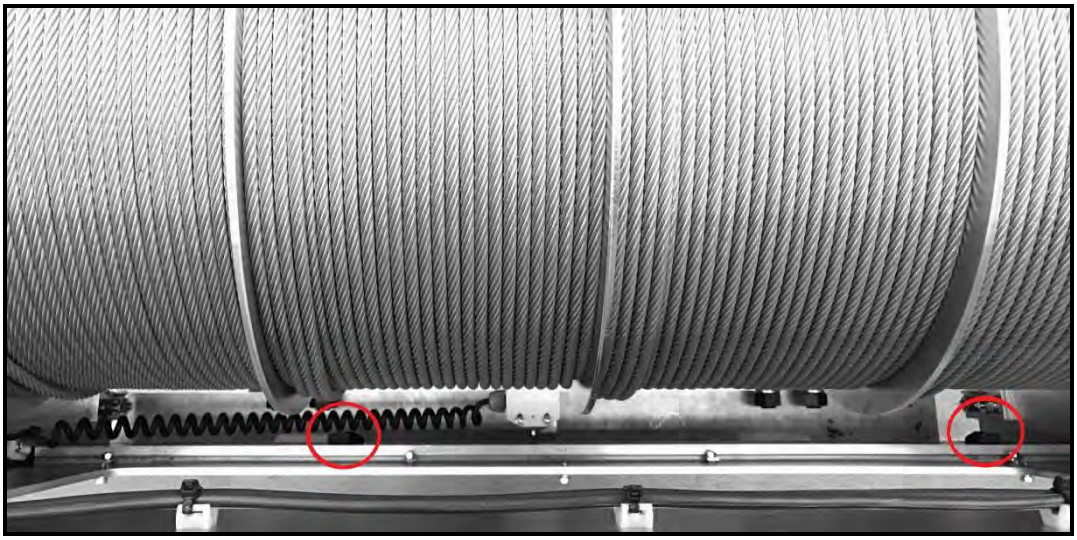
- 3.9. Check the general conditions of the slack cable system. Check welds, coatings and mechanisms.



- 3.10. Check the general conditions and presence of the components of the secondary brake. (See section 5 of the manual).
- 3.11. Check that the secondary brake has not been manipulated.
- 3.12. Check the general conditions of the auxiliary hoist steel cable. (See the previous picture of damaged steel cable).
- 3.13. Clean and grease the auxiliary hoist steel cable.



- 3.14. Check the general conditions and operation of the intermediate stops and vertical movement limiters.



7.4. Hydraulic, electric and electronic systems

- 4.1. Check the general conditions of the electrical cabinet and all its components.
- 4.2. Check the correct operation of the control panel.
- 4.3. Check the general conditions of the platform control keypad.
- 4.4. Check the correct operation of the platform control keypad.
- 4.5. Check the general conditions of the connection boxes and all their components.
- 4.6. Clean the inside of the electrical cabinet and the platform control keypad.
- 4.7. Check that the platform control keypad and connection boxes are correctly sealed.
- 4.8. Retighten all connections of the electrical cabinet, the platform control keypad and the connection boxes.
- 4.9. Check the general conditions and operation of the service limit switches.
- 4.10. Check the general conditions and operation of the safety limit switches.
- 4.11. Check the general conditions of the electric operation cable.
- 4.12. Check the general conditions of sockets and connectors.
- 4.13. Check the general conditions and operation of the remote-control system (antennas, chargers, batteries, etc.)
- 4.14. Check the general conditions and operation of the electric rail.
- 4.15. Check the general conditions and operation of the hydraulic cylinders.
- 4.16. Check the general conditions of the flexible hoses.
- 4.17. Check the general conditions and operation of the hydraulic circuit.
- 4.18. Check the sealing of hydraulic hose couplings.
- 4.19. Check that the maximum pressure of the hydraulic system does not exceed 120 bar.

7.5. Motors and slewing gears

Warning!

Motors must be protected and insulated from extreme temperatures (-10 °C and 50 °C).

- 5.1. Check the general conditions and operation of the motor/gears for elevation.
- 5.2. Check the general conditions and operation of the motor/gears for movement.
- 5.3. Check the general conditions and operation of the motor/gear for folding down.
- 5.4. Check the general conditions and operation of the hydraulic motor.
- 5.5. Check the general conditions and operation of the head motor/gear.
- 5.6. Check the general conditions and operation of the auxiliary hoist motor/gear.
- 5.7. Check the general conditions and operation of the motor/gear for turning the chassis.
- 5.8. Check the sealing of the terminal boxes of all motors.
- 5.9. Check the tightness of fasteners securing all motors/gears.
- 5.10. Check the general conditions and operation of the chassis slewing gear.

- 5.11. Check the general conditions and operation of the head slewing gear.
- 5.12. Clean and grease the chassis slewing gear.
- 5.13. Clean and grease the head slewing gear.
- 5.14. Check the general conditions of fasteners securing the chassis slewing gear.
- 5.15. Check the conditions of fasteners securing the head slewing gear.

7.6. Wheels

- 6.1. Check the general conditions and operation of wheels.
- 6.2. Check the general conditions and operation of guide wheels.
- 6.3. Clean and grease bearings and joints of wheels and moving points.
- 6.4. Clean and grease the guide wheels.
- 6.5. Clean and grease bearings and joints of movement carriages and moving points.



7.7. Runway

- 7.1. Check the general conditions of the movement rail track. Check welds, coatings and mechanisms.
- 7.2. Check the general conditions of rail tracks.
- 7.3. Check the general conditions of the anchoring points, fasteners.
- 7.4. Check the torque tightness of anchoring points, fasteners.
- 7.5. Check the general conditions of base plate, cross-members, struts, etc.
- 7.6. Check the general conditions of base plates supports, rubber bases, concrete slabs, etc.
- 7.7. Check the general conditions and correct operation of expansion joints.
- 7.8. Clean and grease bearings and articulated expansion joints.
- 7.9. Check the general conditions and correct operation of rail sidings.
- 7.10. Clean and grease bearings and joints of rail sidings.
- 7.11. Check the general conditions of rail track mechanical stops.

7.8. Maintenance program

	Maintenance operations / Periods (quarters of the year)	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1	**Suspended platform**				
1.1	Check the general conditions of the platform.	■			
1.2	Check the conditions of the rollers protecting the facade.				
1.3	Check the general conditions and operation of the anti-collision detector.				
1.4	Clean and grease the joints of moving points.				
1.5	General cleanliness of the platform.	■			
1.6	Check the general conditions and operation of the overload system.				
1.7	Check the anchor points of the suspension cables.				
1.8	Check the general conditions of the warning and safety notices.				
1.9	Check the general conditions and operation of the continuous guide system on the façade.				
1.10	Check that the drainage holes are not obstructed.	■			
1.11	Check the general conditions and operation of the guides securing to the facade.				
1.12	Check the conditions of the anchor points of the safety harness.	■			
2	**Metallic structure**				
2.1	**Lower chassis**				
2.1.1	Check the general conditions of chassis.	■			
2.1.2	Check the torque tightness of the slewing gear and the joints with the legs of the lower chassis.	■			
2.1.3	Check the conditions and tightness of fasteners.	■			
2.1.4	Clean and grease bearings and joints of moving points.				
2.1.5	General cleanliness of chassis.	■			
2.1.6	Check the general conditions of the power supply cable winder support.	■			
2.1.7	Check the general conditions and operation of the guide support of the power cable.				
2.1.8	Check the general conditions of the power supply cable.				
2.1.9	Check the general conditions of the electrical panel support.	■			
2.1.10	Check the general conditions of the hydraulic assembly support.	■			
2.2	**Column**				
2.2.1	Check the general conditions of the column.	■			
2.2.2	Check that the torque tightness of the column joint with the jib is adequate.	■			
2.2.3	Check the conditions and tightness of all fasteners.	■			
2.2.4	Clean and grease the joints of moving points.				
2.2.5	General cleanliness of the column.	■			
2.2.6	Check the general conditions of the lifeline support.	■			
2.3	**Jibs**				
2.3.1	Check the general conditions of jibs and pulleys support.	■			
2.3.2	Check welds, coatings and mechanisms.	■			
2.3.3	Check the conditions and tightness of fasteners.	■			
2.3.4	Clean and grease bearings and joints of moving points.				
2.3.5	General cleanliness of jibs and pulleys support.	■			
2.3.6	Check the general conditions of limit switches supports.	■			
2.4	**Head**				
2.4.1	Check the general conditions of jibs and head.	■			
2.4.2	Check the torque tightness of the slewing gear of the head.	■			
2.4.3	Check the conditions and tightness of fasteners.	■			
2.4.4	Clean and grease bearings and joints of moving points.				
2.4.5	General cleanliness of jibs and bells.	■			
2.5	**Pantograph device**				
2.5.1	Check the general conditions and operation of the pantograph device.	■			
2.5.2	Clean and grease the bearings and moving points joints of the pantograph device.				
2.5.3	Check the anchor points of the suspension cables.	■			

Quarterly inspection

Quarterly inspections of the machine.
Check the points marked on the programme.

Annual inspection

Annual inspections of the machine.

	Maintenance operations / Periods (quarters of the year)	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
3	**Elevation assembly**				
3.1	Check the general conditions of the elevation assembly.	■			
3.2	Clean and grease bearings and joints of moving points.	■	■	■	■
3.3	Clean and grease the transmission chain and the synchronisation chain.	■	■	■	■
3.4	Clean and grease the transmission gears.	■	■	■	■
3.5	Check the general conditions of elevation drum steel cables.	■	■	■	■
3.6	Check the general conditions of the ropes, weights, thimbles, wedge terminals and clamps.	■	■	■	■
3.7	Check the presence and fitting of the emergency wheel.	■	■	■	■
3.8	Clean and grease the synchronization shaft.	■	■	■	■
3.9	Check the general conditions of the slack cable system.	■	■	■	■
3.10	Check the general conditions and presence of the components of the secondary brake.	■			
3.11	Check that the secondary brake has not been manipulated.	■	■	■	■
3.12	Check the general conditions of the auxiliary hoist steel cable.	■	■	■	■
3.13	Clean and grease the auxiliary hoist steel cable.	■			
3.14	Check the general conditions and operation of the intermediate stops and vertical movement limiters.	■	■	■	■
4	**Hydraulic, electric and electronic systems**				
4.1	Check the general conditions of the electrical cabinet and all its components.	■			
4.2	Check the correct operation of the control panel.	■	■	■	■
4.3	Check the general conditions of the platform control keypad.	■			
4.4	Check the correct operation of the platform control keypad.	■	■	■	■
4.5	Check the general conditions of the connection boxes and all their components.	■			
4.6	Clean the inside of the electrical cabinet and the platform control keypad.	■			
4.7	Check that the platform control keypad and connection boxes are correctly sealed.	■			
4.8	Retighten all connections of the electrical cabinet, the control keypad and the connection boxes.	■			
4.9	Check the general conditions and operation of the service limit switches.	■	■	■	■
4.10	Check the general conditions and operation of the safety limit switches.	■	■	■	■
4.11	Check the general conditions of the electric operation cable.	■	■	■	■
4.12	Check the general conditions of sockets and connectors.	■			
4.13	Check the general conditions and operation of the remote-control system.	■	■	■	■
4.14	Check the general conditions and operation of the electric rail.	■	■	■	■
4.15	Check the general conditions and operation of the hydraulic cylinders.	■	■	■	■
4.16	Check the general conditions of the flexible hoses.	■			
4.17	Check the general conditions and operation of the hydraulic circuit.	■			
4.18	Check the sealing of hydraulic hose couplings.	■			
4.19	Check that the maximum pressure of the hydraulic system does not exceed 120 bar.	■			

■ **Quarterly inspection**

Quarterly inspections of the machine.
Check the points marked on the programme.

■ **Annual inspection**

Annual inspections of the machine.
Check the points marked on the programme.

	Maintenance operations / Periods (quarters of the year)	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
5	**Motors and slewing gears**				
5.1	Check the general conditions and operation of the motor/gears for elevation.				
5.2	Check the general conditions and operation of the motor/gears for movement.				
5.3	Check the general conditions and operation of the motor/gear for folding down.				
5.4	Check the general conditions and operation of the hydraulic motor.				
5.5	Check the general conditions and operation of the head motor/gear.				
5.6	Check the general conditions and operation of the auxiliary hoist motor/gear.				
5.7	Check the general conditions and operation of the motor/gear for turning the chassis.				
5.8	Check the sealing of the terminal boxes of the motors.				
5.9	Check the tightness of fasteners securing the motors/gears.				
5.10	Check the general conditions and operation of the chassis slewing gear.				
5.11	Check the general conditions and operation of the head slewing gear.				
5.12	Clean and grease the chassis slewing gear.				
5.13	Clean and grease the head slewing gear.				
5.14	Check the general conditions of fasteners securing the chassis slewing gear.				
5.15	Check the conditions of fasteners securing the head slewing gear.				
6	**Wheels**				
6.1	Check the general conditions and operation of wheels.				
6.2	Check the general conditions and operation of guide wheels.				
6.3	Clean and grease bearings and joints of wheels and moving points.				
6.4	Clean and grease the guide wheels.				
6.5	Clean and grease bearings and joints of movement carriages and moving points.				
7	**Runway**				
7.1	Check the general conditions of the movement rail track. Check welds, coatings and mechanisms.				
7.2	Check the general conditions of rail tracks.				
7.3	Check the general conditions of the anchoring points, fasteners.				
7.4	Check the torque tightness of anchoring points, fasteners.				
7.5	Check the general conditions of base plate, cross-members, struts, etc.				
7.6	Check the general conditions of base plates supports, rubber bases, etc.				
7.7	Check the general conditions and correct operation of expansion joints.				
7.8	Clean and grease bearings and articulated expansion joints.				
7.9	Check the general conditions and correct operation of rail sidings.				
7.10	Clean and grease bearings and joints of rail sidings.				
7.11	Check the general conditions of rail track mechanical stops.				

Quarterly inspection

Quarterly inspections of the machine.
Check the points marked on the programme.

Annual inspection

Annual inspections of the machine.
Check the points marked on the programme.

7.9. Lubrication

Motors-gearboxes

The motors-gearboxes installed by **Atech** need no maintenance. It is not necessary to replace the lubricant of the gearboxes of the motors. Never open the gearbox. In case of leakage of hydraulic fluid, disassemble the complete assembly and send it to **Atech**.

Hydraulic system

If the machine contains hydraulic components, the oil used is as indicated below:

SIL POWER HLP-46 ISO 6743/4 HM

Gears, bearings and racks

The grease used in bearings, racks and slewing gears of the lower chassis and the head is as follows:

CEPSA ARGA EP-2 ESPECIAL

Joints of the machine

In joints, use the following grease:

CONSISTENT SPRAY GREASE - WURTH

8. Technical factsheet of the machine

8.1. B.M.U.

Model	A25 Type
Series number	M-3635
Nominal load of the suspended platform	748 lbs (2 people + tools)
Load capacity of the auxiliary hoist	1648 lb
Total weight of the machine	20416lbs
Year of manufacture	2017
Project	P15588, CORNING TOWER, USA

8.2. Elevation assembly

Size of the elevation assembly (feet)	**Load (lbs)**	**Engine power (kW)**
590	-	3
Material	**ERP Code**	**Series Number**
STEEL	EG 11 02 A03 02	P15588, CORNING TOWER, USA

8.3. Runway

Fitting of rail to the building	Anchored
Type of beam	W 10x12
Distance between rails	1824 mm

Annex I - Certificates

Steel cable certificate

GUSTAV WOLF

Drahtseilwerk GmbH

ISO 9001:2008

CE

Atechbcn
C/ Tomás Viladomiu 29-35
08650 Sallent Barcelona
Spanien

Gustav Wolf
Drahtseilwerk GmbH
Sundernstr. 40

33332 Gütersloh
Germany
+49 5241/876-0
+49 5241/876-160
info@gustav-wolf.de

GW-Auftrag: 10563792
GW-commission:

Kunden-Nr.: 301635
Customer No.:

Datum: **08.08.16**
date:

zugelassen von: Germanischer Lloyd,
authorized by: Lloyd's Register
RINA

Werksbescheinigung / Herstellererklärung gem. DIN EN 10204-2.1

Works certificate / EC manufacturing declaration acc. to DIN EN 10204-2.1

Ihr Auftrag / Datum / Ihre Referenz MZ 350 / 27.06.16 / Ernest Chaure Moix
your order / date / your reference:
Kommission / Auftrag-Referenzen: /
commission / order references:

Pos. *pos.*	Artikel-Nr. *article-no.*	Beschreibung *description*	Menge *quantity*	Einheit *unit*
1	**775308032**	**8 mm PAWO F5e+1x0,96 E-Leiter** 6 x 19S 114Dr.1770 B (nozn) sZ	4.000	m
		Längenaufteilung / *length break-up* 4 X 1.000 m		

Art der Einlage	/ *type of core:*		DC	
Schlagart-Schlagrichtung	/ *type and direction of lay:*		Kr. rechtsg. mit SE	
Nennfestigkeit	/ *tensile grade:*		1770	N/mm²
Oberfläche	/ *finish:*		verzinkt	
Metall. Seilquerschnitt	/ *metallic cross section:*		25,080	mm²
Längengewicht	/ *rope weight:*		0,234	kg/m
rechn. Bruchkraft	/ *calculated breaking load:*		44,40	kN
Mindestbruchkraft	/ *minimum breaking load:*		38,20	kN
Max. Tragkraft bei	/ *max. load at:*			
Sicherheitsfaktor	/ *safety factor:*	5	7,64	kN
Sicherheitsfaktor	/ *safety factor:*	12	3,18	kN

Annex II – Plans and electrical diagrams

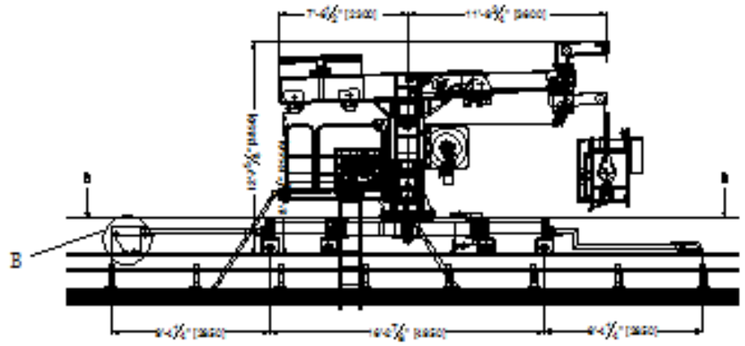
1. Approval plan

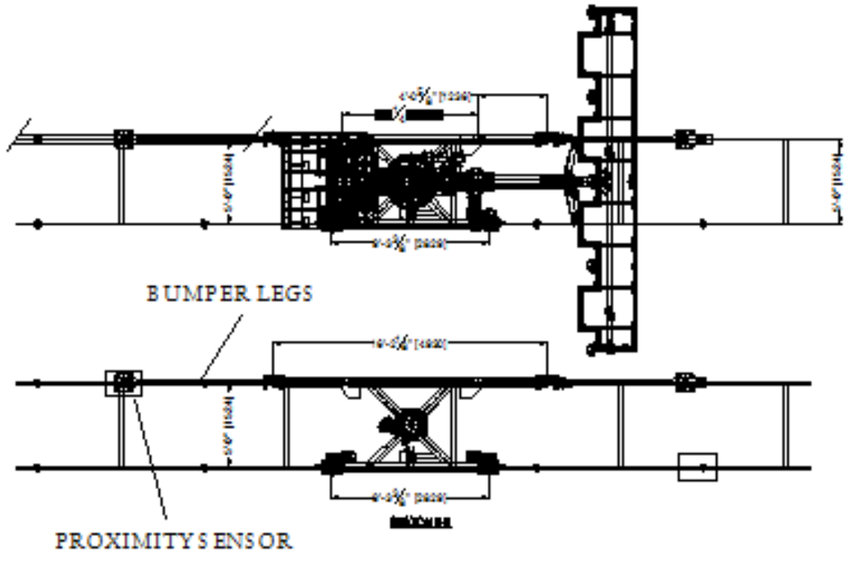
2. Machine plan

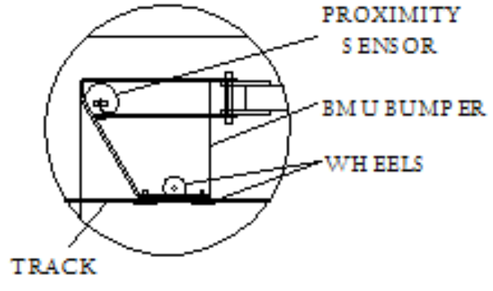
3. Transport plan

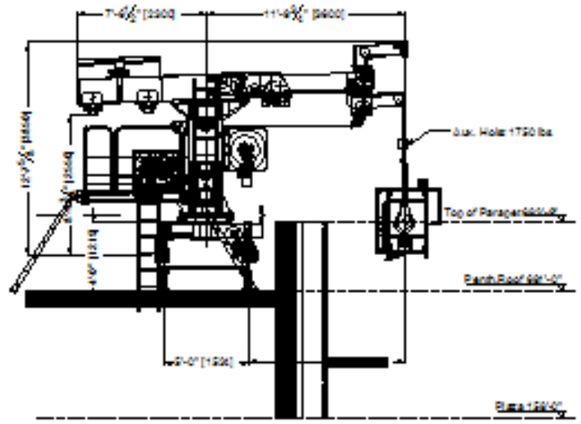
4. Electrical diagram

LOWER FLOOR BMU2.2

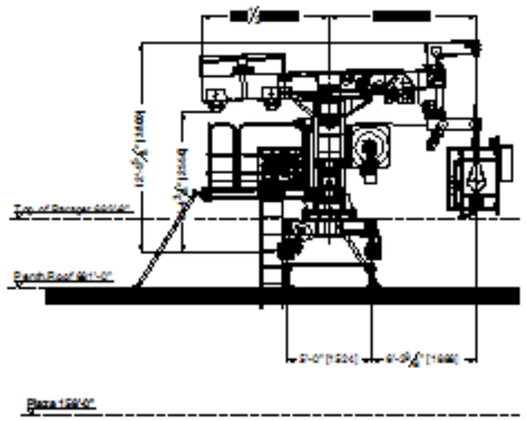




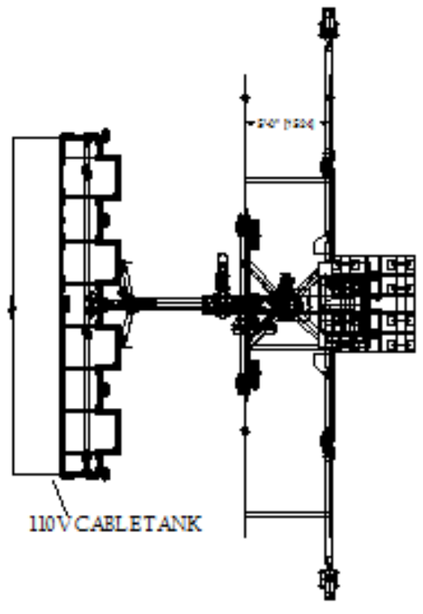


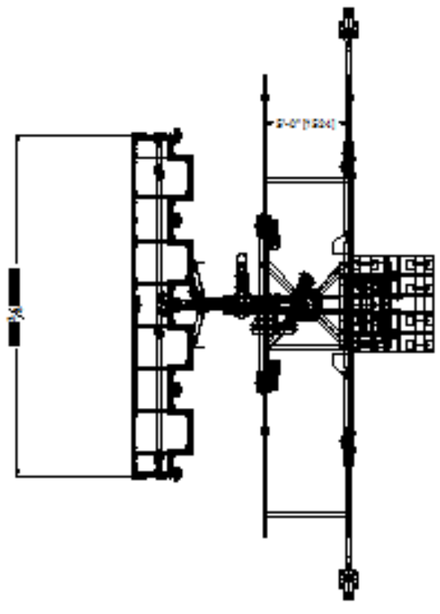


BMU GENERAL VIEW:
MAX REACH



BMU GENERAL VIEW:
MIN REACH

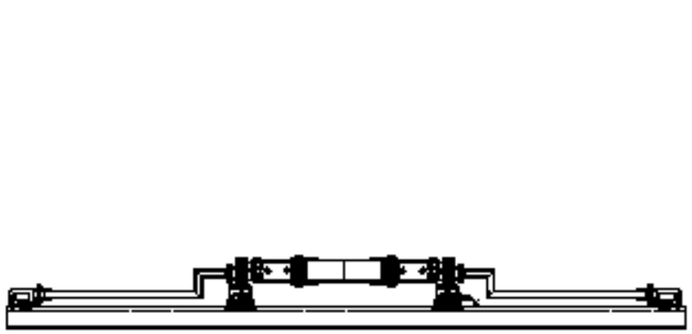


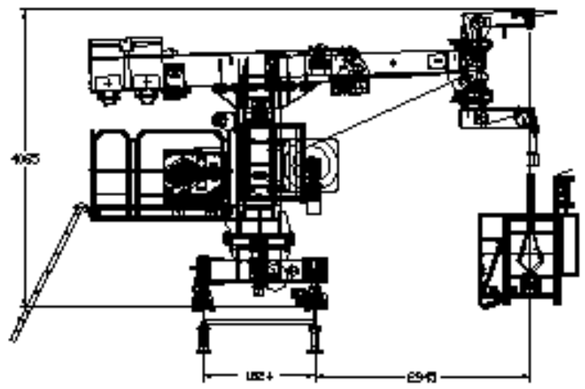


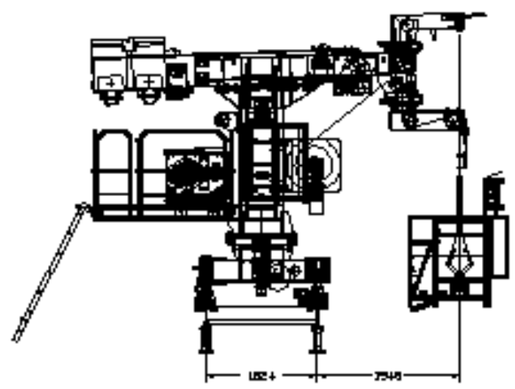
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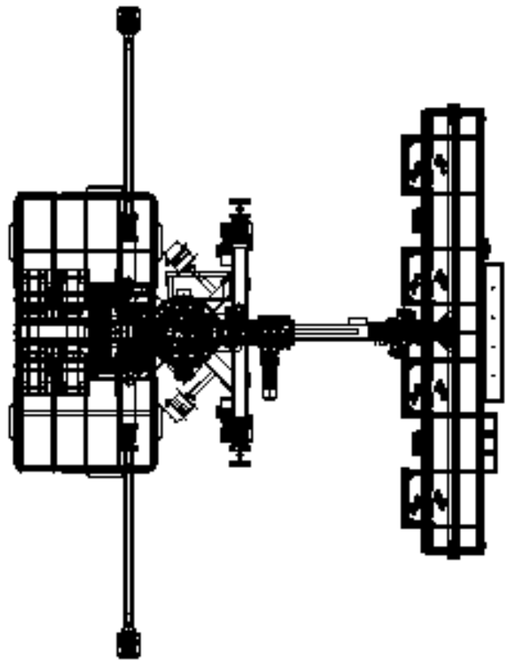
GLOBALBMU

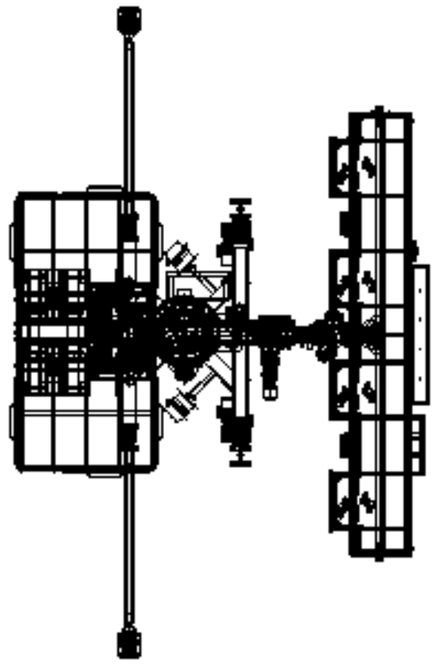
Corning Tower Albany, N.Y., U.S.A.	~~	~~
B.M.U. 2.2	12.09.2017	1/2500
P15588-02-10_APP		02/18





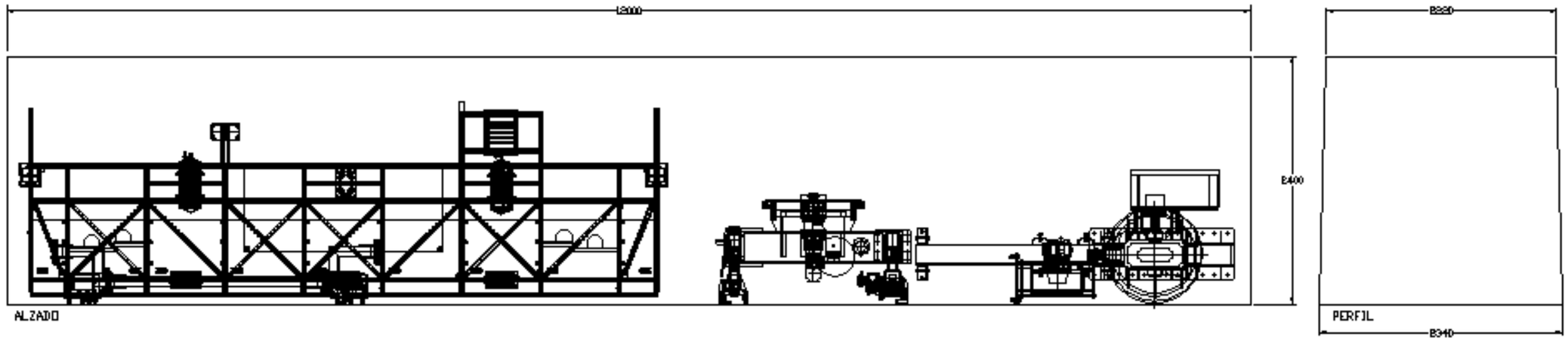


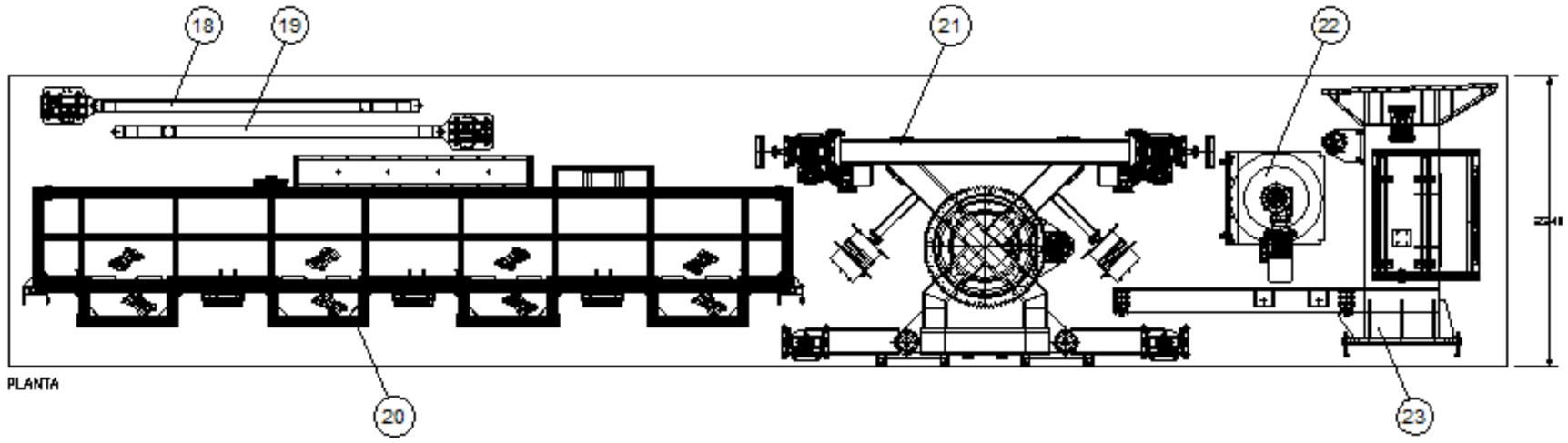




Atechbcn

Escala:	CORNING TOWER	Nº Plano: N-3635
1/75	A-25 P15588-03	Fecha: 12-12-17 Creation





ITEM	DESCRIPTION	DIMENSIONS			WEIGHT (Kg)	WEIGHT (lg)
18	BUMPER 1 (M-3635)	3000	300	300	100	220
19	BUMPER 2 (M-3635)	3000	300	300	100	220
20	CRADLE (M-3635)	6300	1400	1800	600	1.322
21	LOWER CHASSIS (M-3635)	3700	1800	1050	1.740	3.836
22	HOIST (M-3635)	800	800	500	500	1.102
23	COLUMN (M-3634)	2900	1400	1300	820	1.807
TOTAL		LENGHT (mm)	WIDTH (mm)	HEIGHT (mm)	3.860.00000	8.509

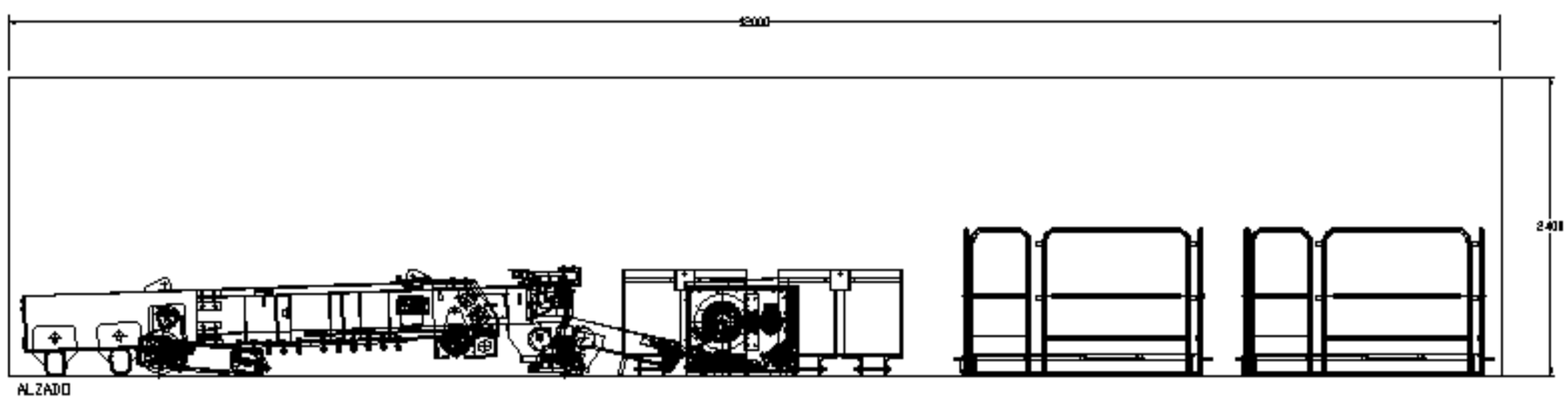
TRANSPORT-3

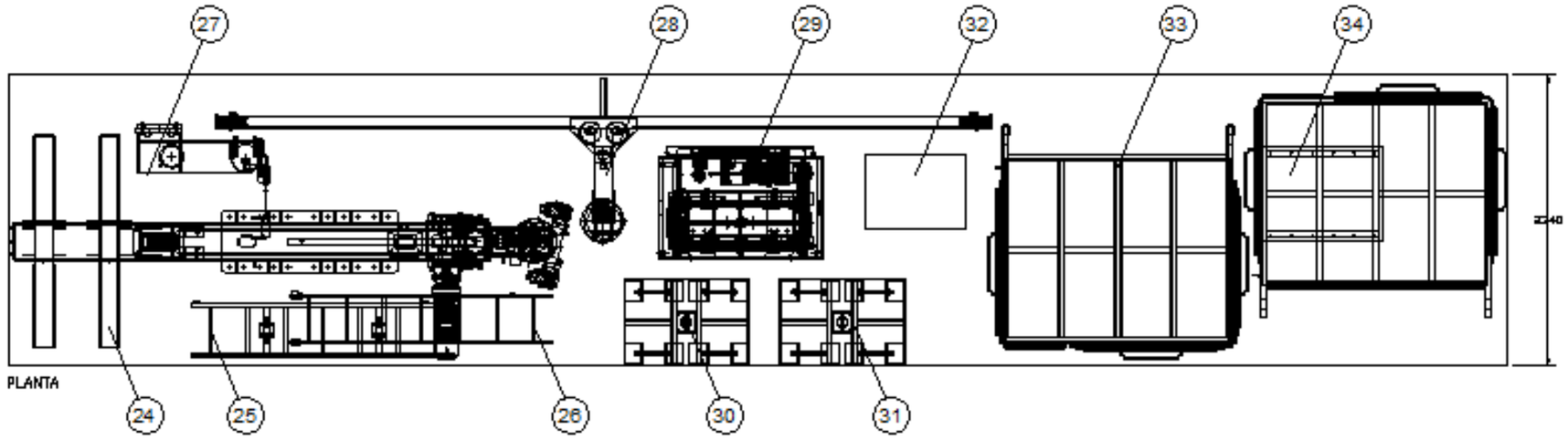
CRANE: 7500 lb (3402 kg.)

Abechbcn

OPEN TOP 40'
CORNING TOWER 3

Drawing: T-3635
Date: 01/12/2017





ITEM	DESCRIPTION	DIMENSIONS			WEIGHT (Kg)	WEIGHT (lg)
24	JIB (M-3635)	4500	1700	850	1.350	2.976
25	LADDER 1 (M-3635)	2100	450	200	50	75
26	LADDER 2 (M-3635)	2100	400	100	10	22
27	HOIST SPREADER BAR (M-3635)	1000	500	400	70	154
28	SPREADER BAR (M-3635)	6200	1400	500	250	551
29	DRUM (M-3635)	1400	1000	500	650	1.433
30	COUNTERWEIGHT 1 (M-3635)	1000	700	850	1.100	2.425
31	COUNTERWEIGHT 2 (M-3635)	1000	700	850	1.100	2.425
32	ACCESSORIES (M-3635)	800	600	300	50	110
33	GATEWAY 1 (M-3635)	2000	2000	1200	160	352
34	GATEWAY 2 (M-3635)	2000	2000	1200	160	352
TOTAL		LENGHT (mm)	WIDTH (mm)	HEIGHT (mm)	4.860.00000	10.912

TRANSPORT-4

CRANE: 7500 lb (3402 kg.)

Atechbcn

OPEN TOP 40'
CORNING TOWER 3

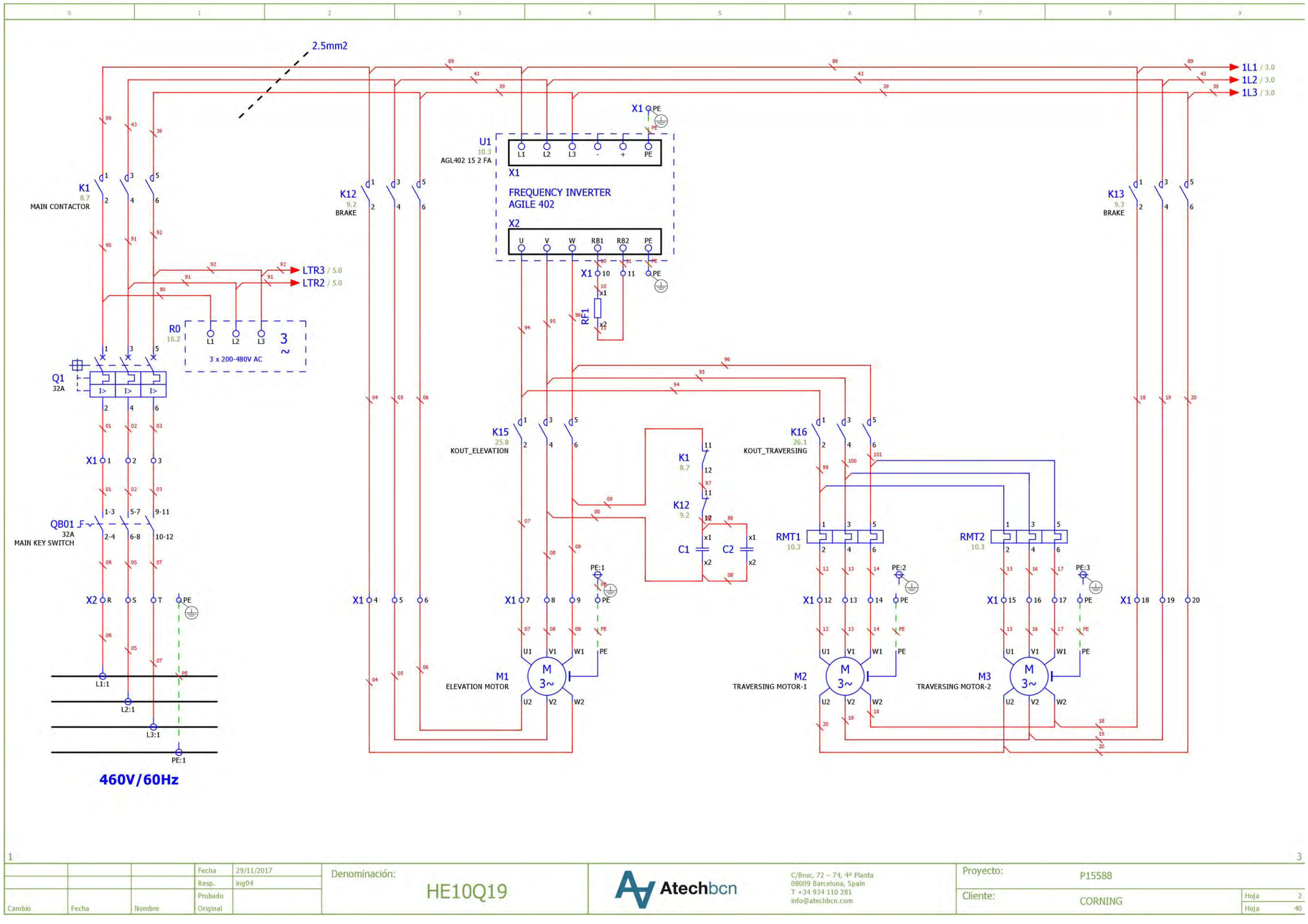
Drawing: T-3635
Date: 01/12/2017

Atech
C/Bruc, 72-74, 4ª Planta
08009, Barcelona (Spain)
T. +34 934 110 281
info@atechbcn.com

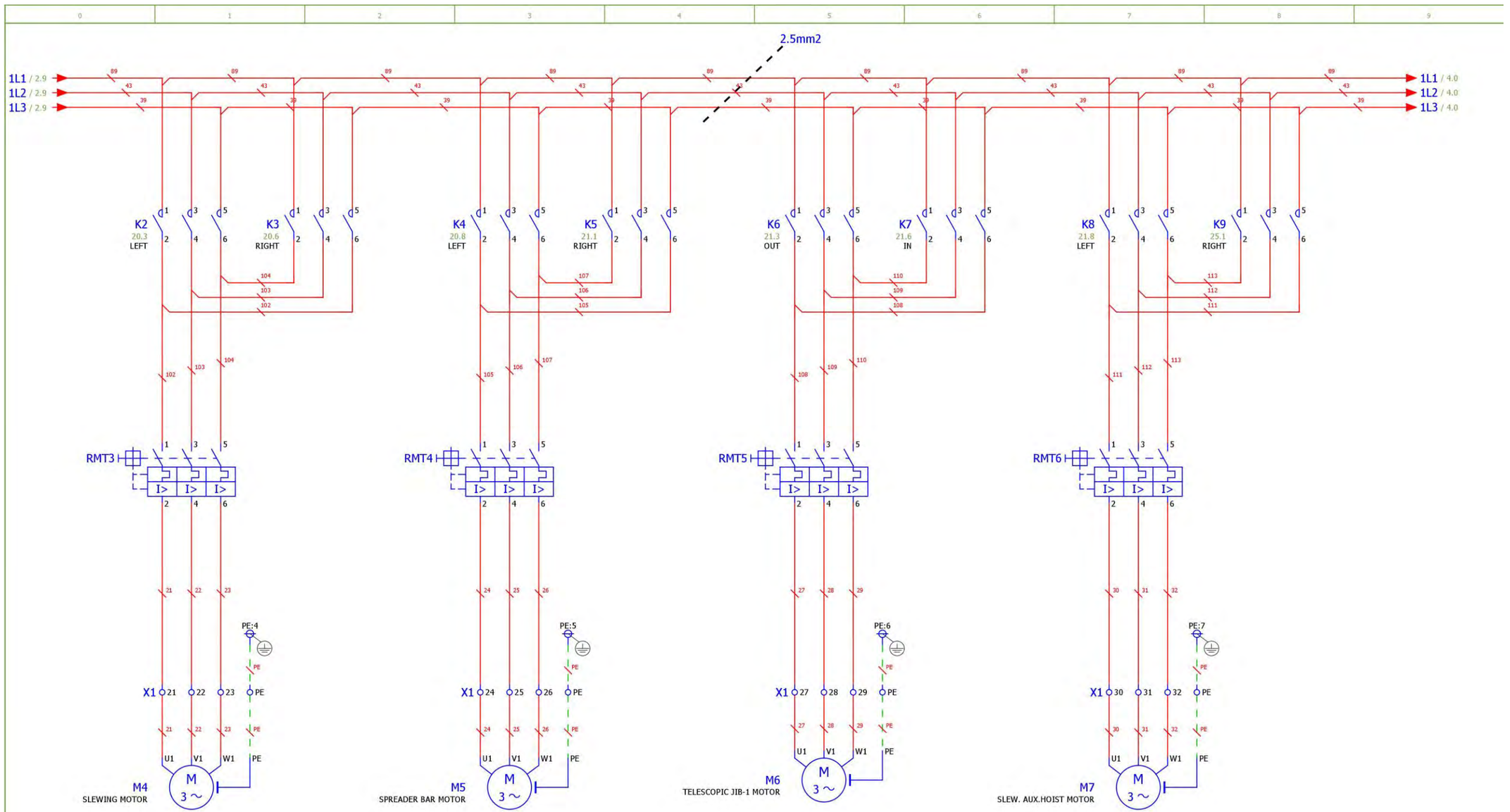
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Project:	P15588
Serial Number:	M3635/M3634
City:	USA
Country:	USA

Modification: 29/11/2017

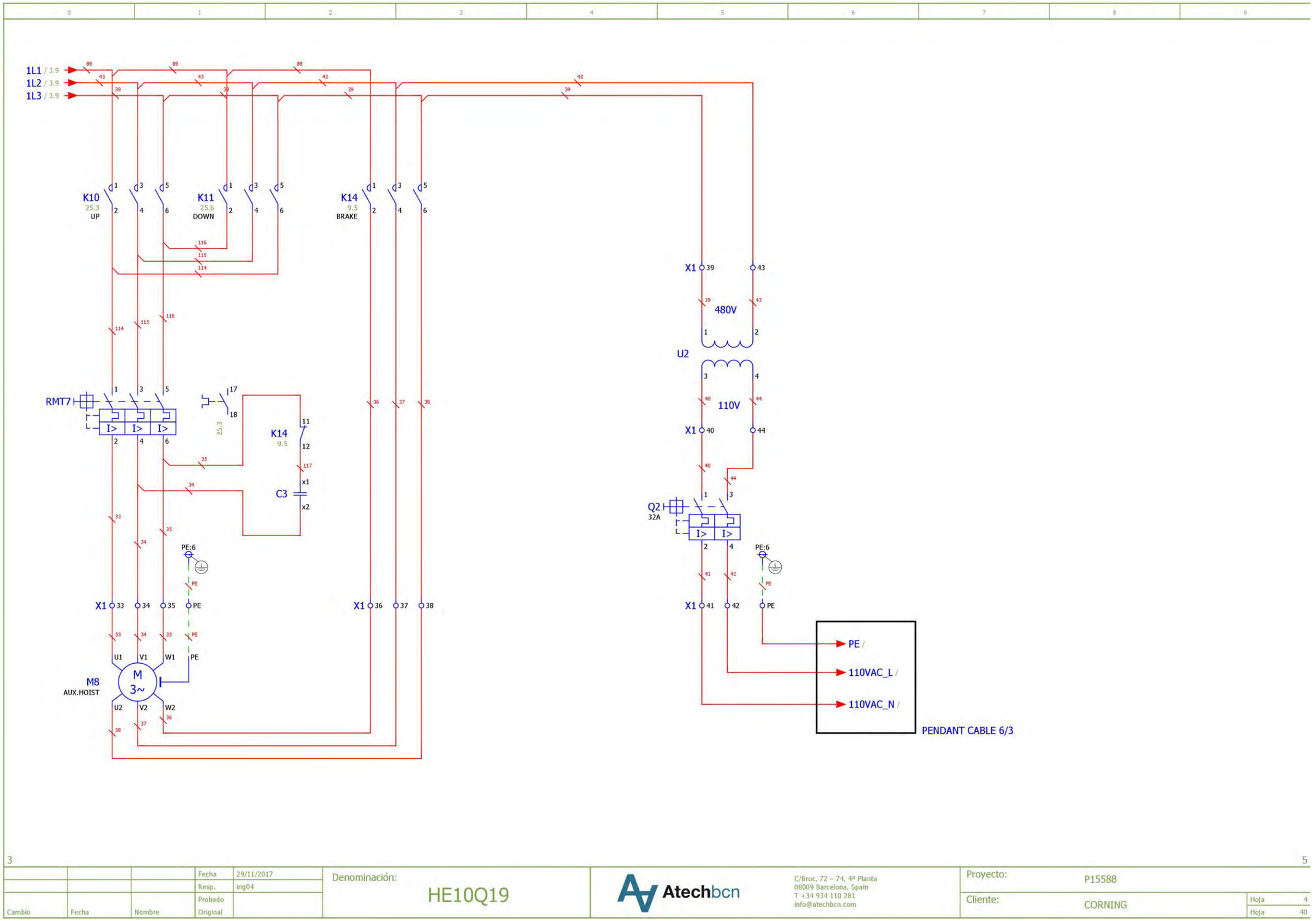
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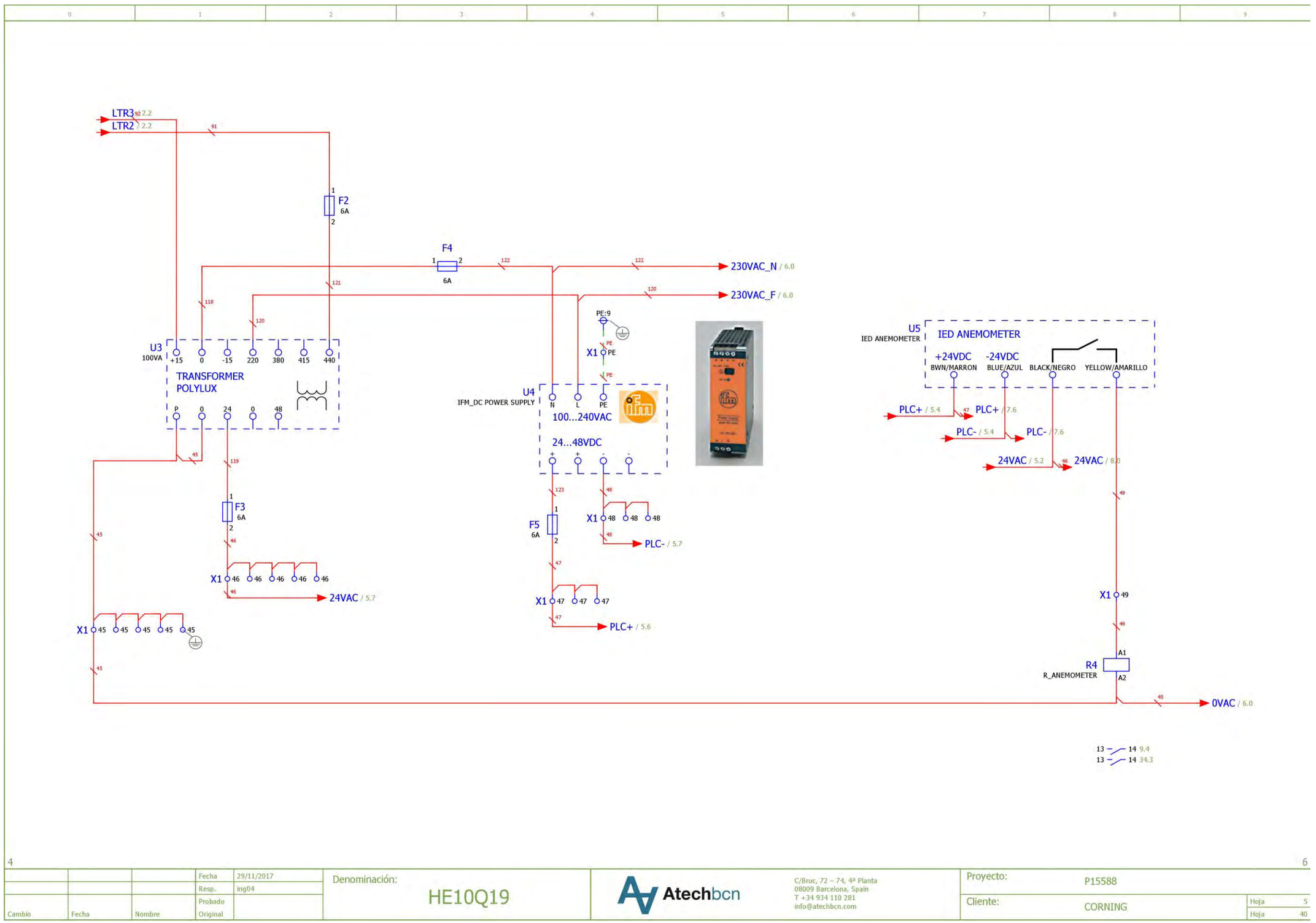
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			Resp.	ing04			Cliente: CORNING Hoja 2
Cambio	Fecha	Nombre	Probado Original				Hoja 40



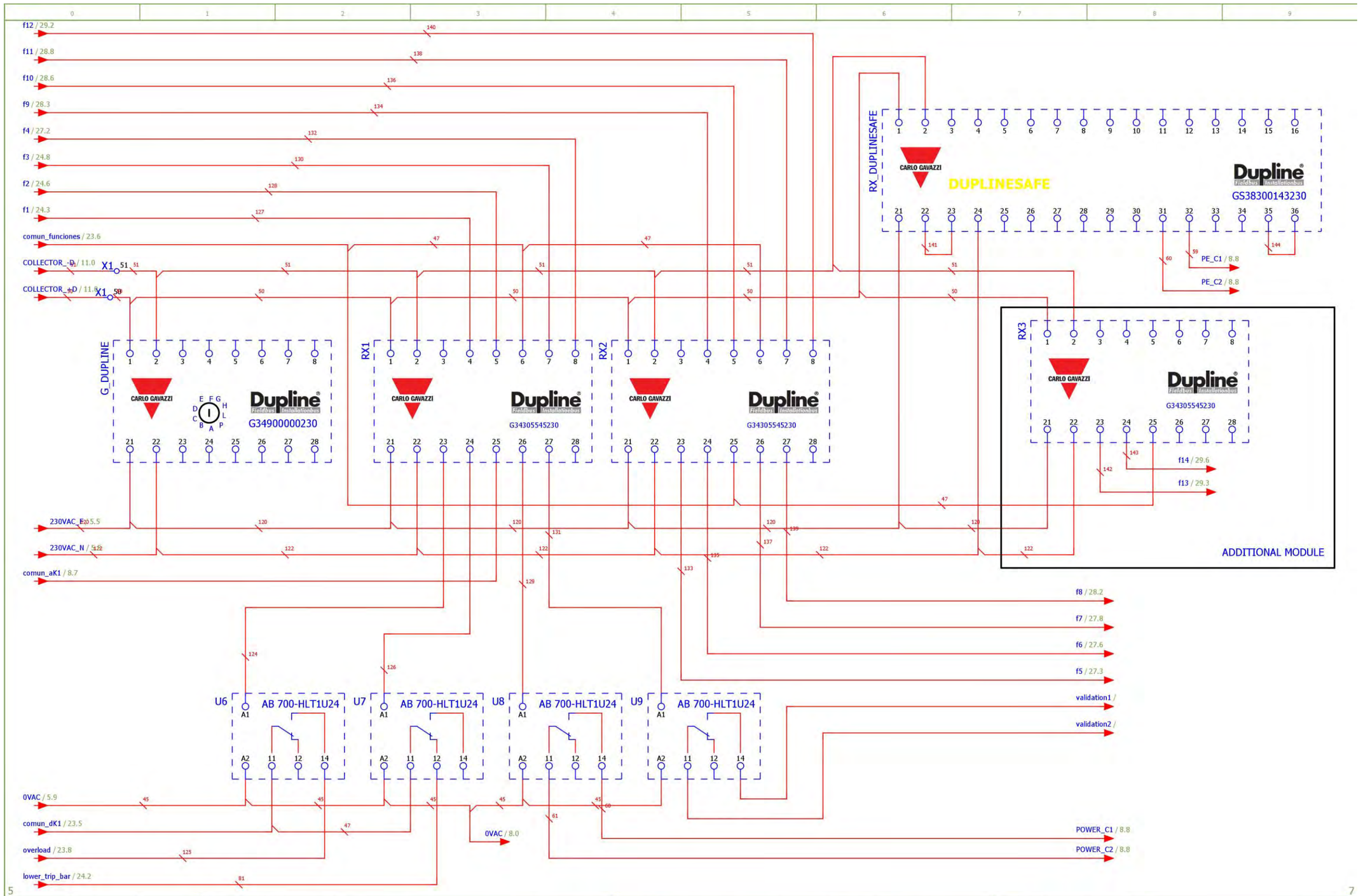
			Fecha	29/11/2017	Denominación: HE10Q19	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588
			Resp.	ing04			Cliente: CORNING Hoja 3
Cambio	Fecha	Nombre	Probado Original				Hoja 40



			Fecha	29/11/2017	Denominación: HE10Q19	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588
			Resp.	ing04			Cliente: CORNING
Cambio	Fecha	Nombre	Probado / Original				Hoja 4 / Hoja 40



			Fecha	29/11/2017	Denominación: HE10Q19	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588
			Resp.	ing04			
Cambio	Fecha	Nombre	Probado Original				Cliente: CORNING Hoja 5 Hoja 40

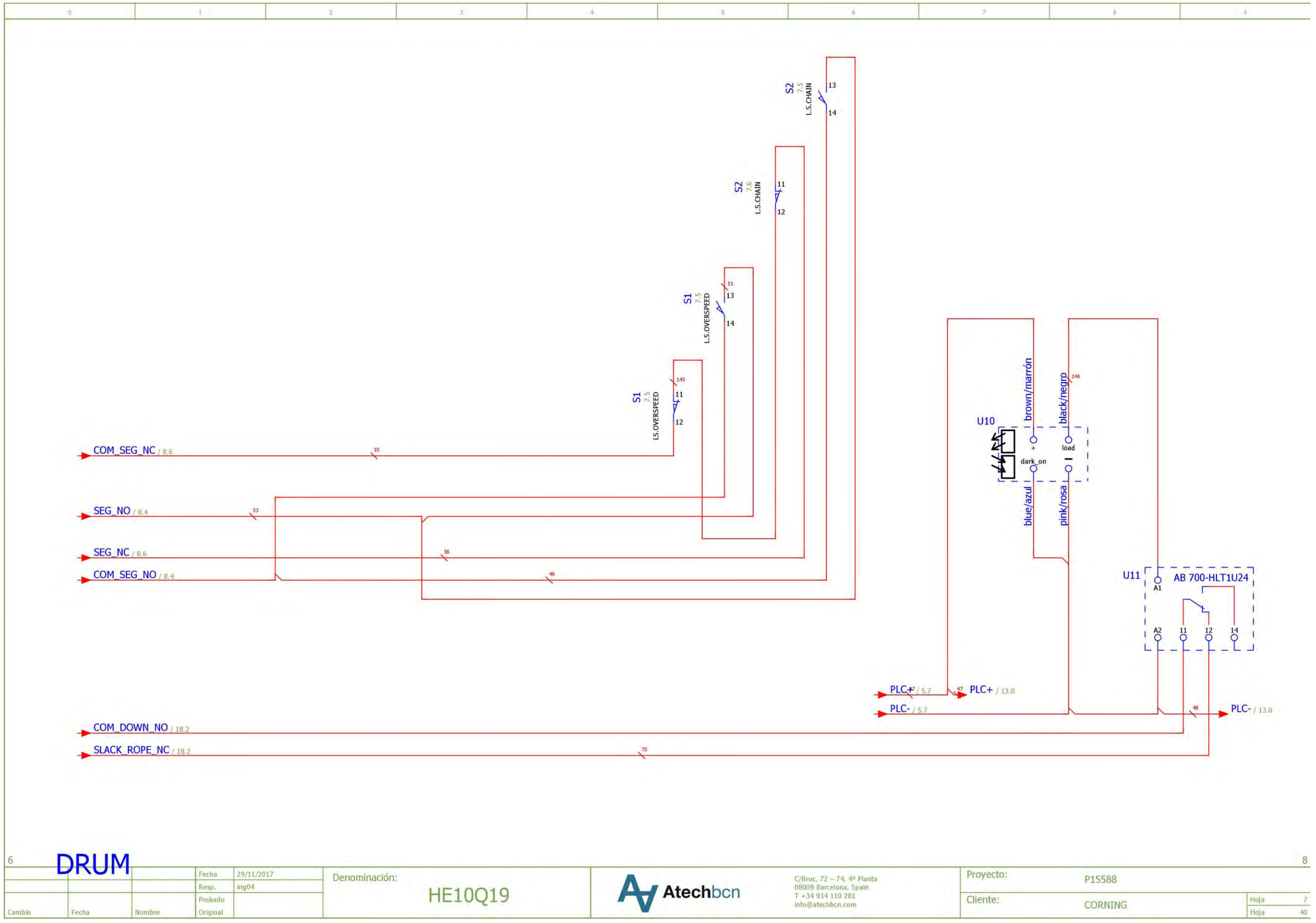


			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q19

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Proyecto:	P15588		
Cliente:	CORNING	Hoja	6
		Hoja	40



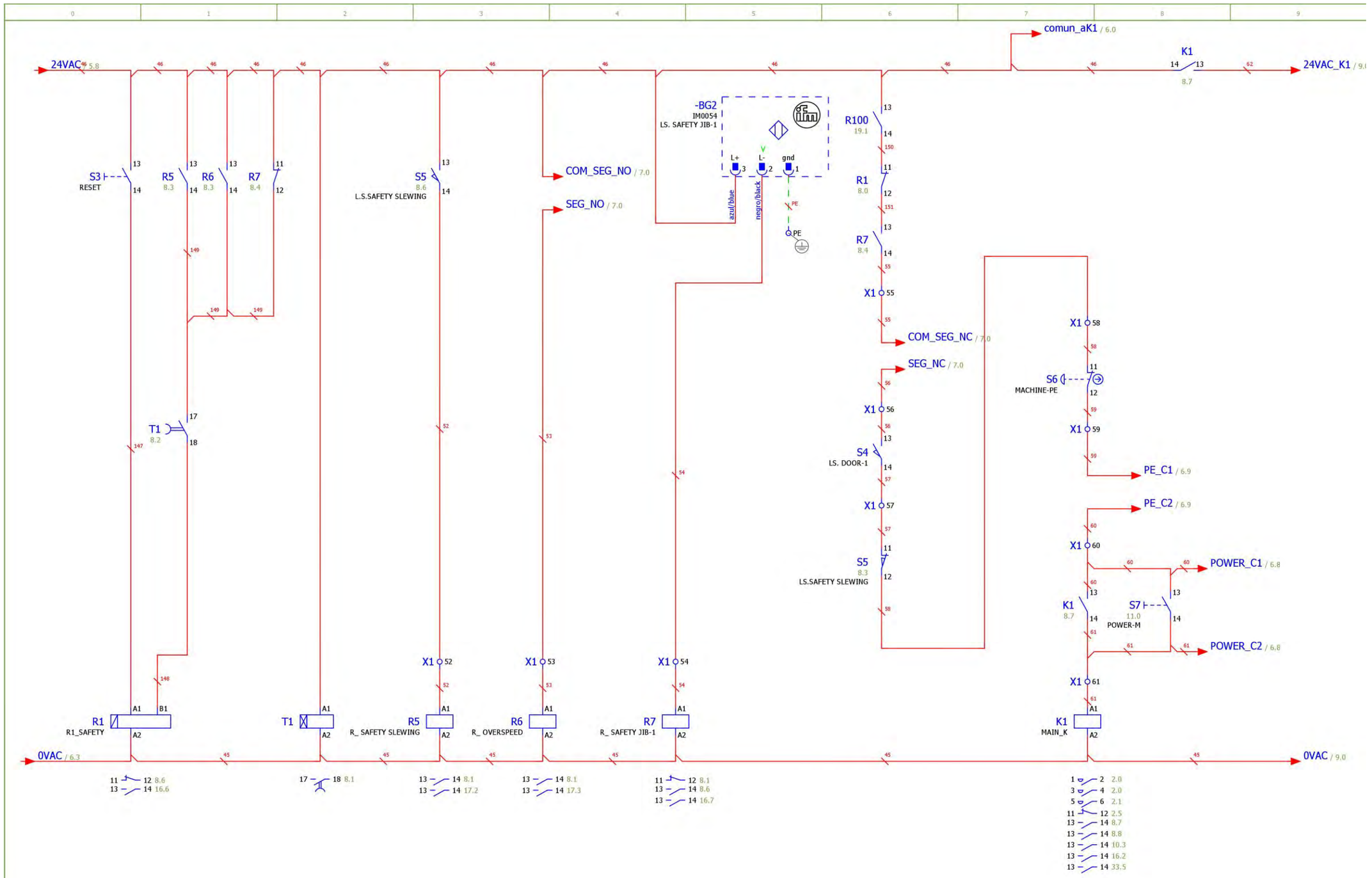
6 DRUM 8

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q19

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Proyecto: P15588
Cliente: CORNING
Hoja 7
Hoja 40

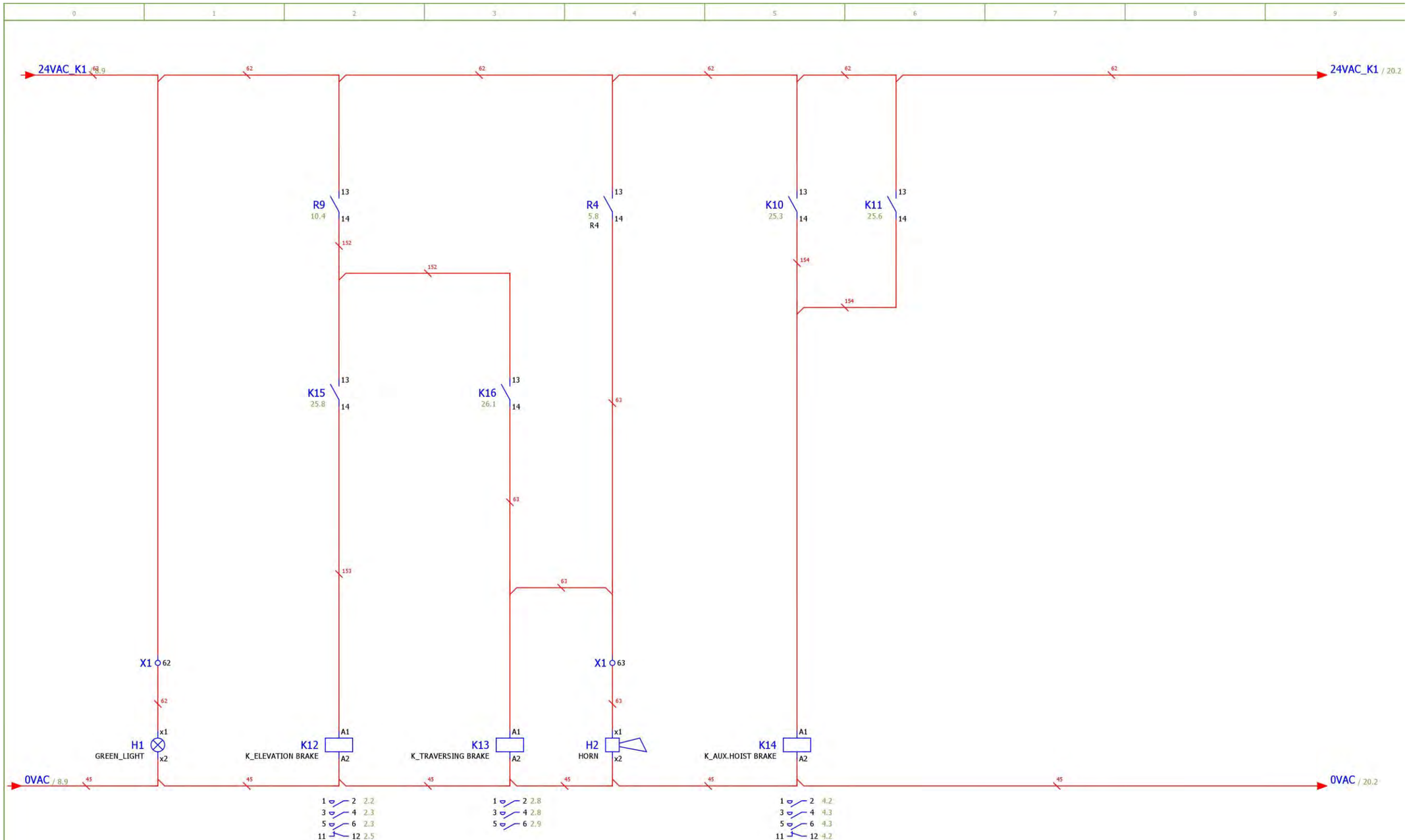


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			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

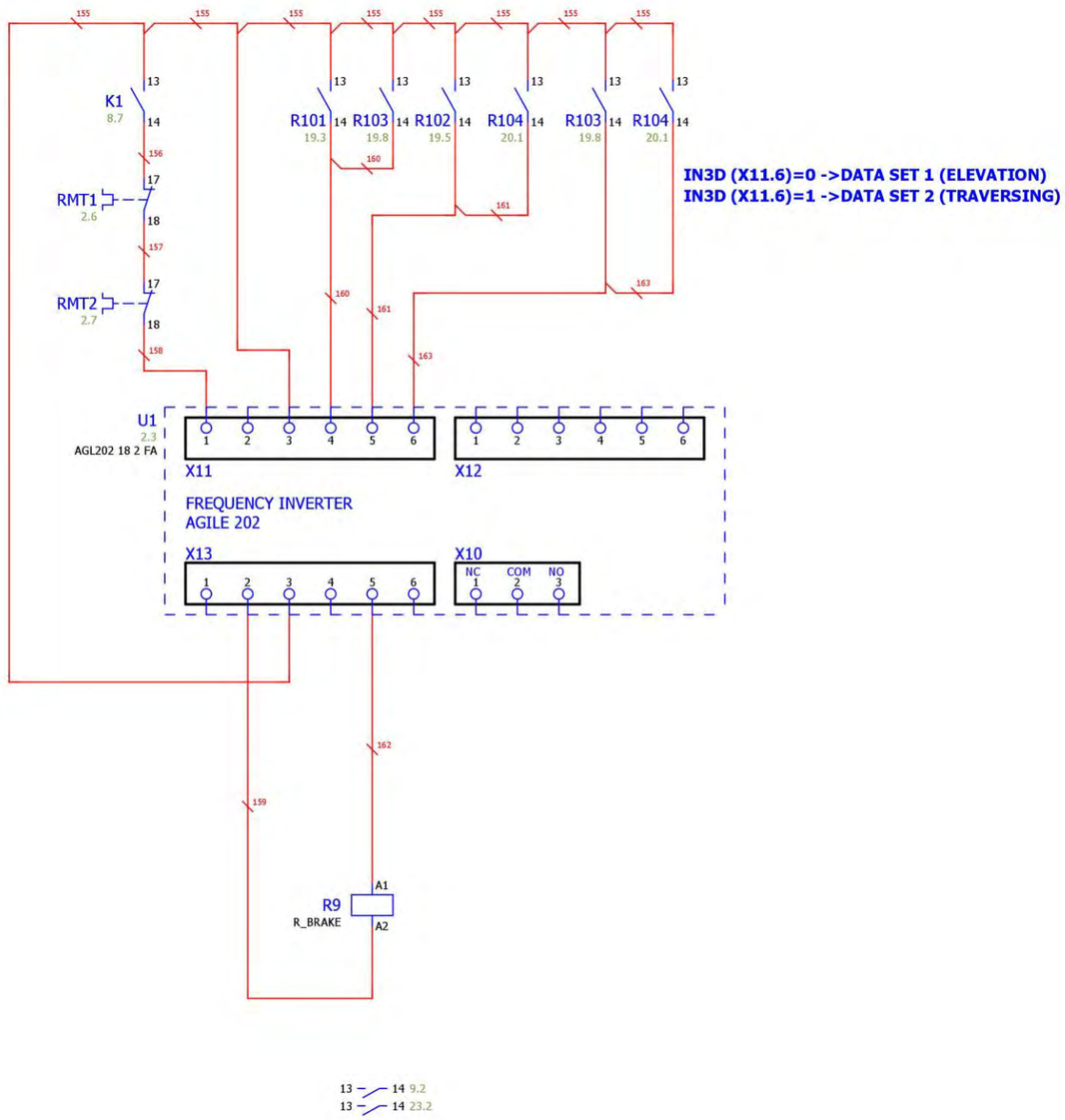
Denominación: HE10Q19

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Proyecto: P15588
Cliente: CORNING
Hoja 8
Hoja 40

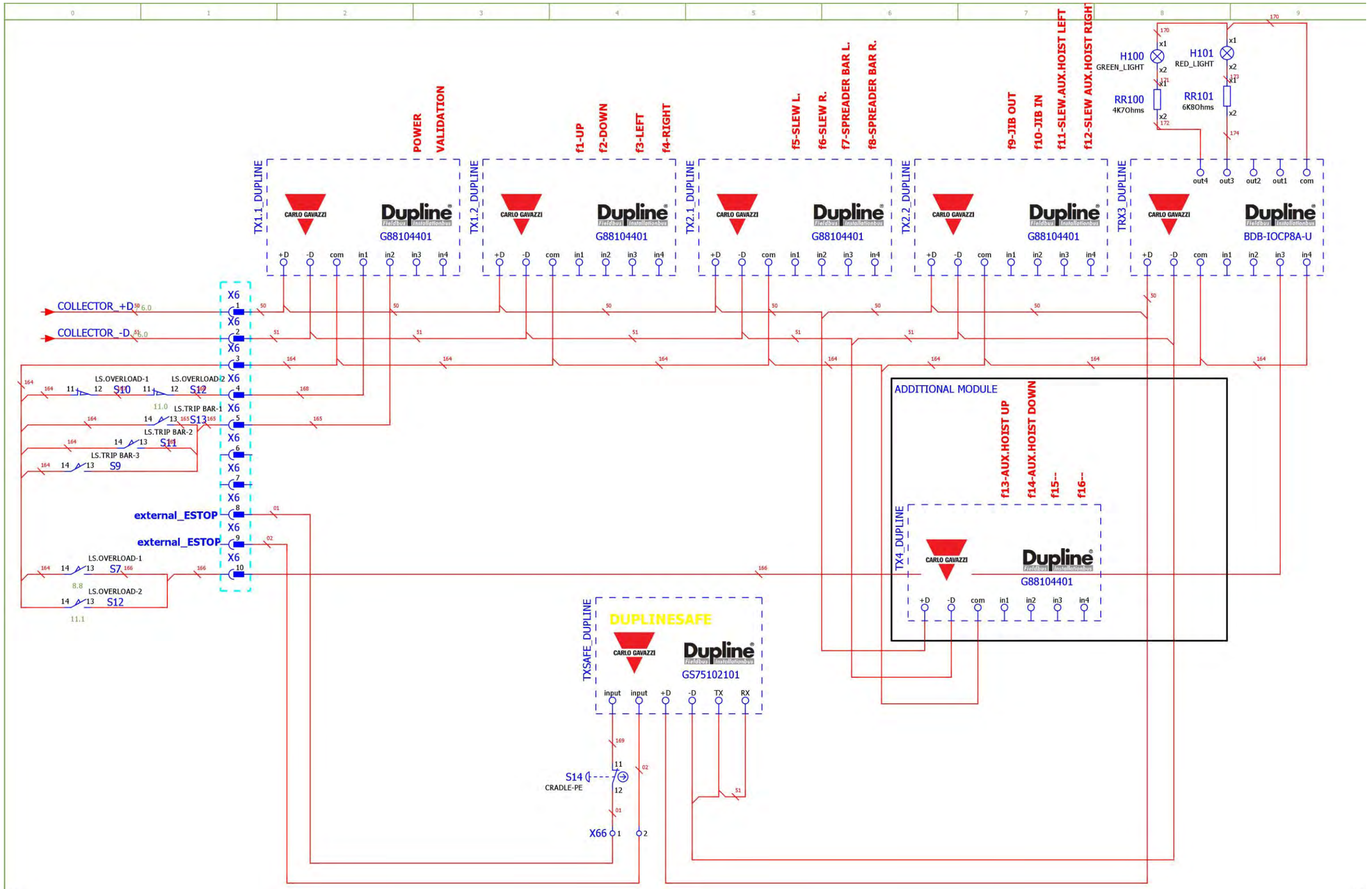


			Fecha	29/11/2017	Denominación: HE10Q19	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588
			Resp.	ing04			Cliente: CORNING Hoja 9
Cambio	Fecha	Nombre	Probado / Original				Hoja 40





			Fecha	29/11/2017	Denominación: HE10Q19	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588	
			Resp.	ing04				
Cambio	Fecha	Nombre	Probado / Original				Cliente: CORNING	Hoja 10 / Hoja 40



10 12

			Fecha	29/11/2017	Denominación: HE10Q19	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588
			Resp.	ing04			Cliente: CORNING
Cambio	Fecha	Nombre	Probado				Hoja 11
			Original				Hoja 40



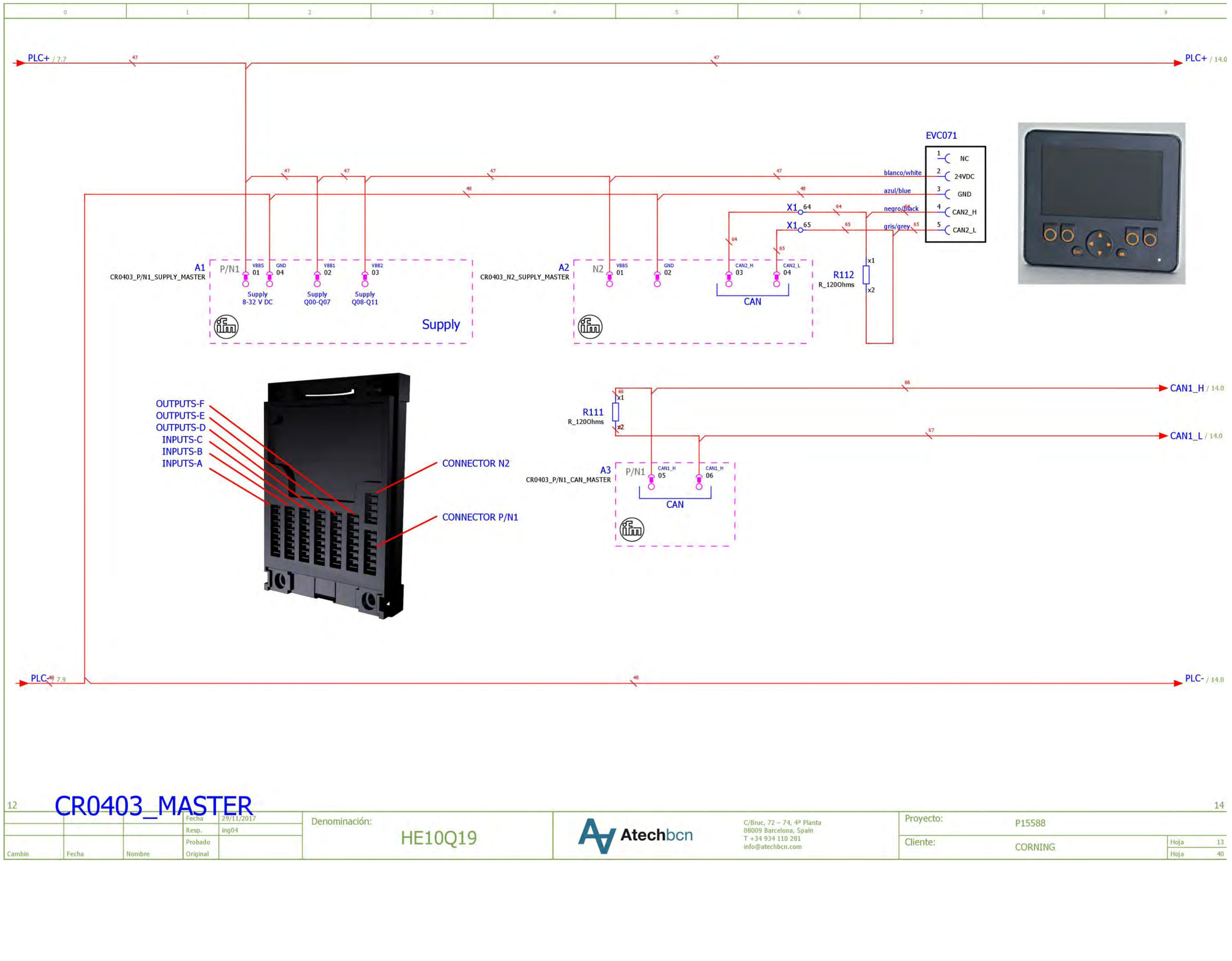
11 13

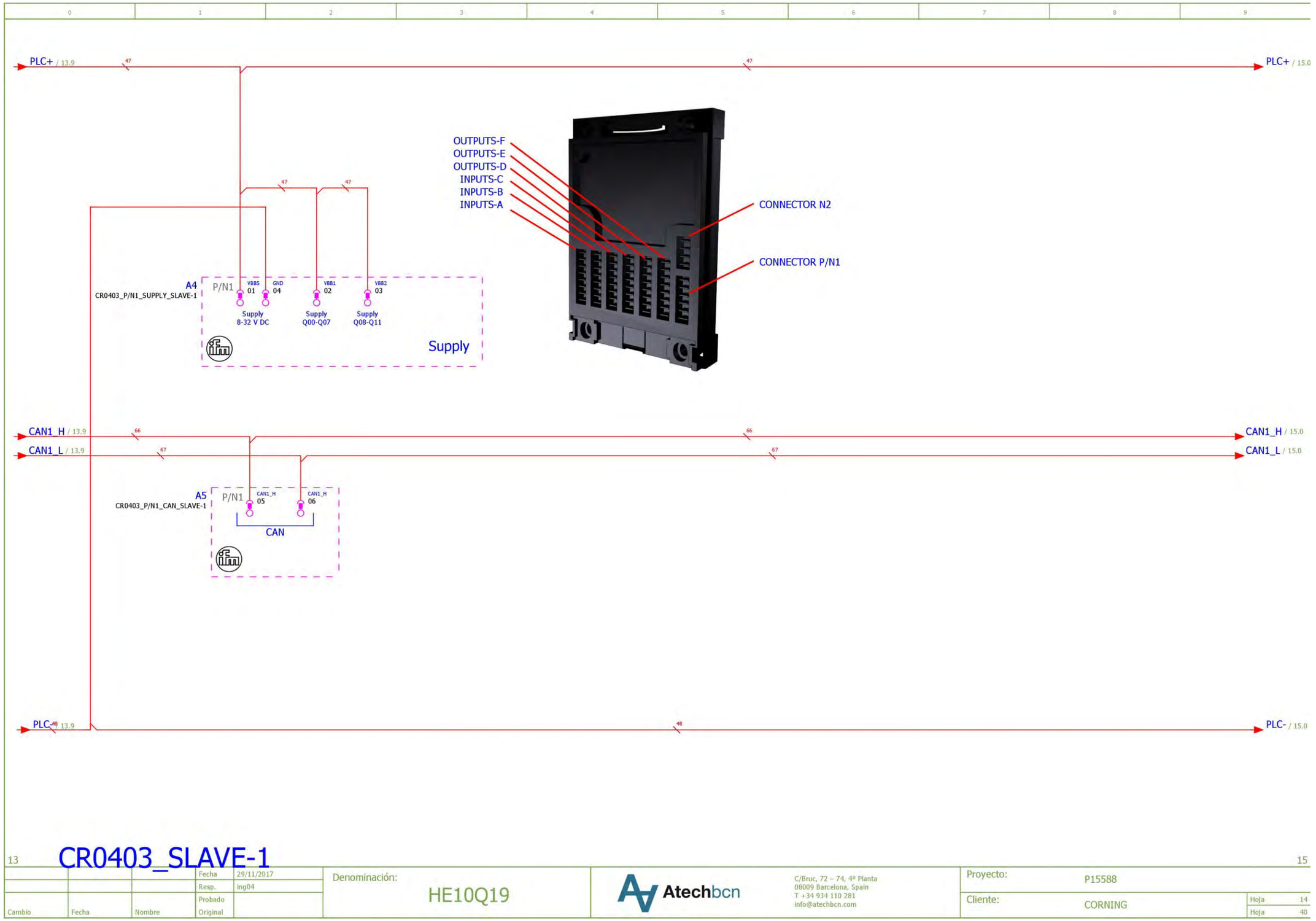
			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q19

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Proyecto: P15588
Cliente: CORNING
Hoja 12
Hoja 40

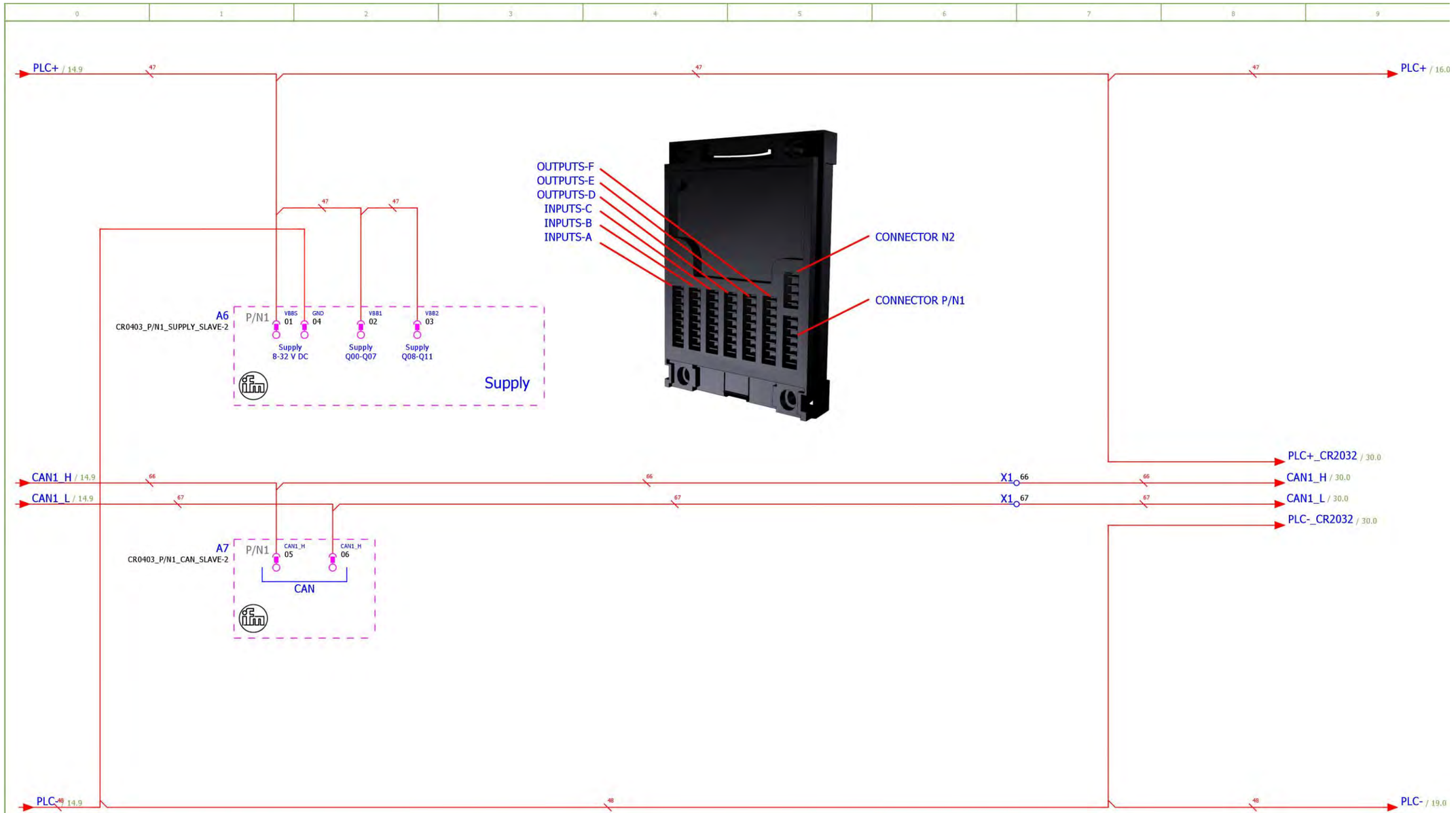

PLC+ / 7.7
PLC+ / 14.0
EVC071
1 NC
2 24VDC
3 GND
4 CAN2_H
5 CAN2_L
blanco/white
azul/blue
negro/black
gris/grey
X1 64
X1 65
A1
CR0403_P/N1_SUPPLY_MASTER
P/N1
VBBS 01
GND 04
VBB1 02
VBB2 03
Supply 8-32 V DC
Supply Q00-Q07
Supply Q08-Q11
Supply
A2
CR0403_N2_SUPPLY_MASTER
N2
VBBS 01
GND 02
CAN2_H 03
CAN2_L 04
CAN
R112
R_120Ohms
x1
x2
OUTPUTS-F
OUTPUTS-E
OUTPUTS-D
INPUTS-C
INPUTS-B
INPUTS-A
CONNECTOR N2
CONNECTOR P/N1
R111
R_120Ohms
CAN1_H / 14.0
CAN1_L / 14.0
A3
CR0403_P/N1_CAN_MASTER
P/N1
CAN1_H 05
CAN1_H 06
CAN
PLC- / 7.9
PLC- / 14.0
12
CR0403_MASTER
14
Fecha 29/11/2017
Resp. ing04
Probado
Original
Cambio
Fecha
Nombre
Denominación:
HE10Q19
Atechbcn
C/Bruc, 72 – 74, 4ª Planta
08009 Barcelona, Spain
T +34 934 110 281
info@atechbcn.com
Proyecto:
P15588
Cliente:
CORNING
Hoja 13
Hoja 40



13 CR0403_SLAVE-1 15

			Fecha	29/11/2017	Denominación: HE10Q19	Proyecto: P15588
			Resp.	ing04		
Cambio	Fecha	Nombre	Probado / Original			Cliente: CORNING — Hoja 14 / Hoja 40

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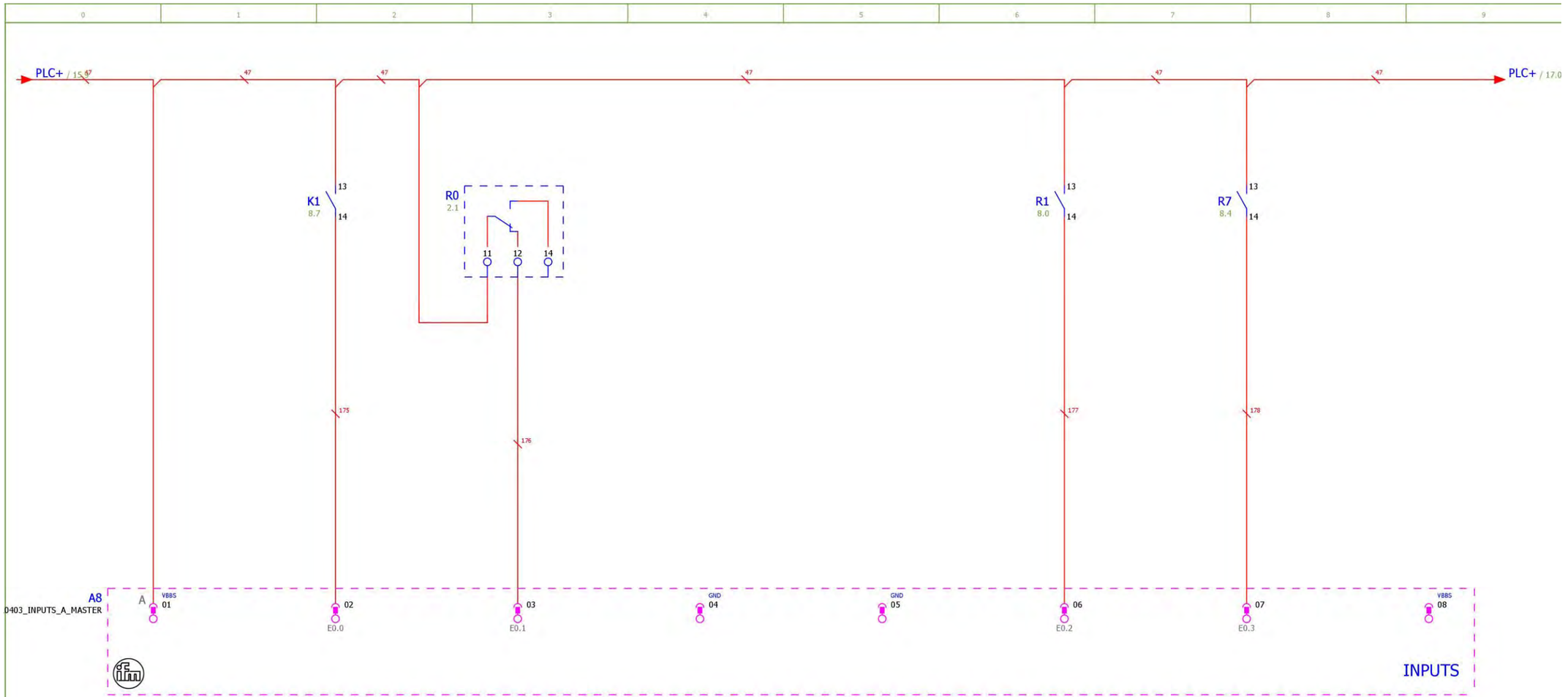
14 CR0403_SLAVE-2 16

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado	
			Original	

Denominación: HE10Q19

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Proyecto:	P15588		
Cliente:	CORNING	Hoja	15
		Hoja	40



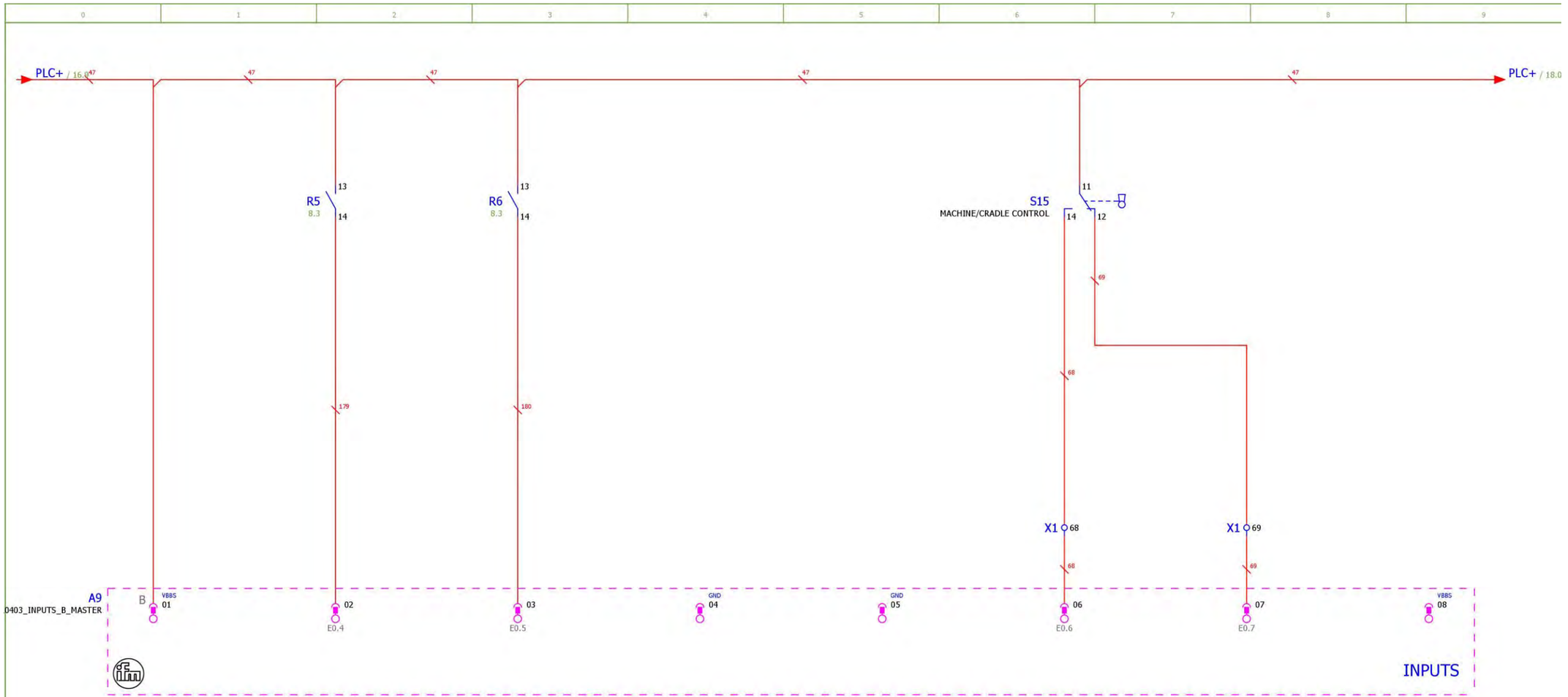
15 CR0403_MASTER 17

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q19

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Proyecto: P15588
Cliente: CORNING
Hoja 16
Hoja 40



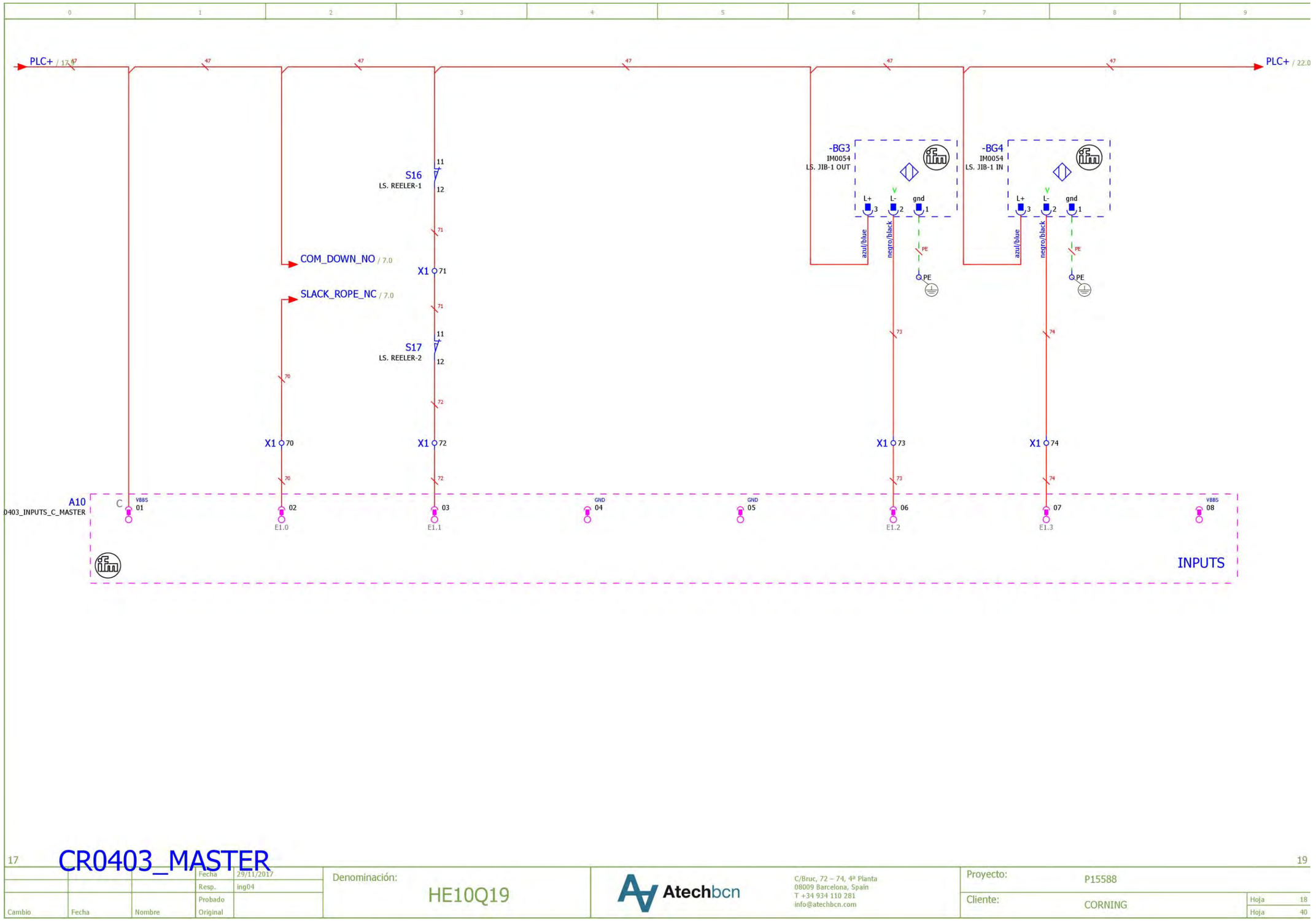
16 CR0403_MASTER 18

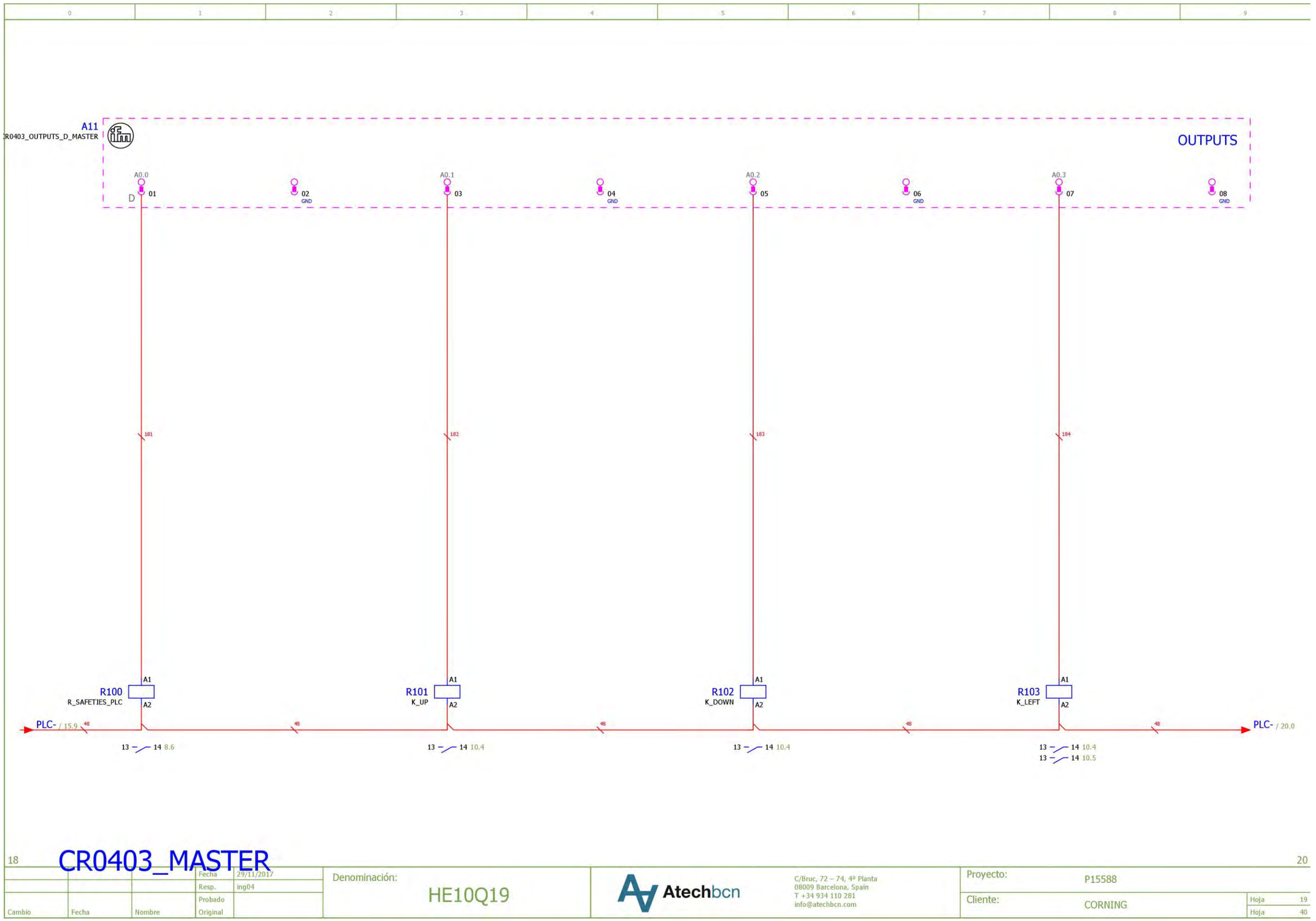
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			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q19

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Proyecto: P15588
Cliente: CORNING
Hoja 17
Hoja 40


PLC+ / 17.0
PLC+ / 22.0
S16
LS. REELER-1
S17
LS. REELER-2
COM_DOWN_NO / 7.0
SLACK_ROPE_NC / 7.0
-BG3
IM0054
LS. JIB-1 OUT
-BG4
IM0054
LS. JIB-1 IN
L+
L-
gnd
azul/blue
negro/black
PE
X1 70
X1 71
X1 72
X1 73
X1 74
A10
0403_INPUTS_C_MASTER
VBBS
GND
E1.0
E1.1
E1.2
E1.3
INPUTS
17
CR0403_MASTER
19
Denominación:
HE10Q19
Atechbcn
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08009 Barcelona, Spain
T +34 934 110 281
info@atechbcn.com
Proyecto:
P15588
Cliente:
CORNING
Fecha 29/11/2017
Resp. ing04
Probado
Original
Cambio
Fecha
Nombre
Hoja 18
Hoja 40



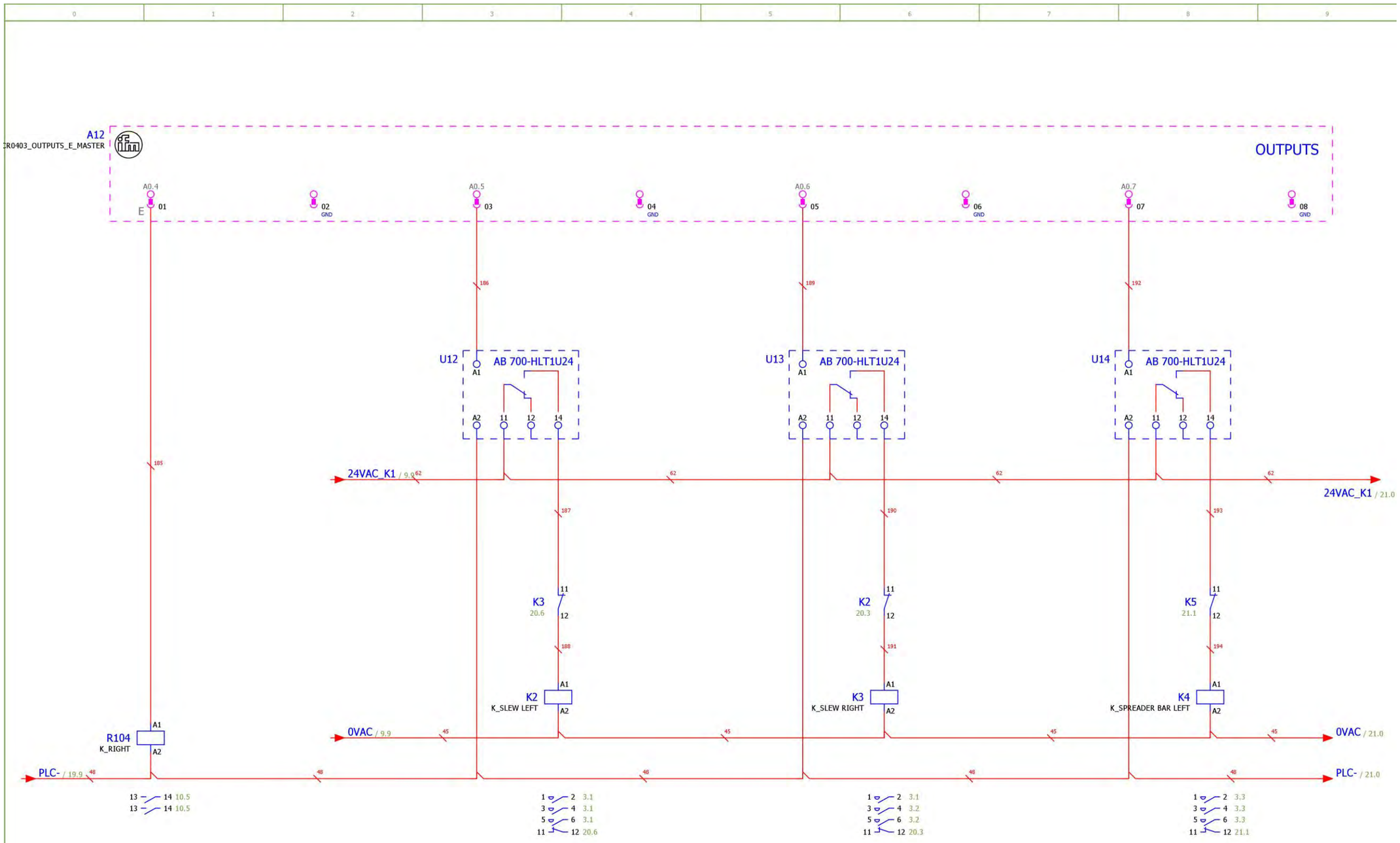
18 CR0403_MASTER 20

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q19

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Proyecto: P15588
Cliente: CORNING
Hoja 19
Hoja 40



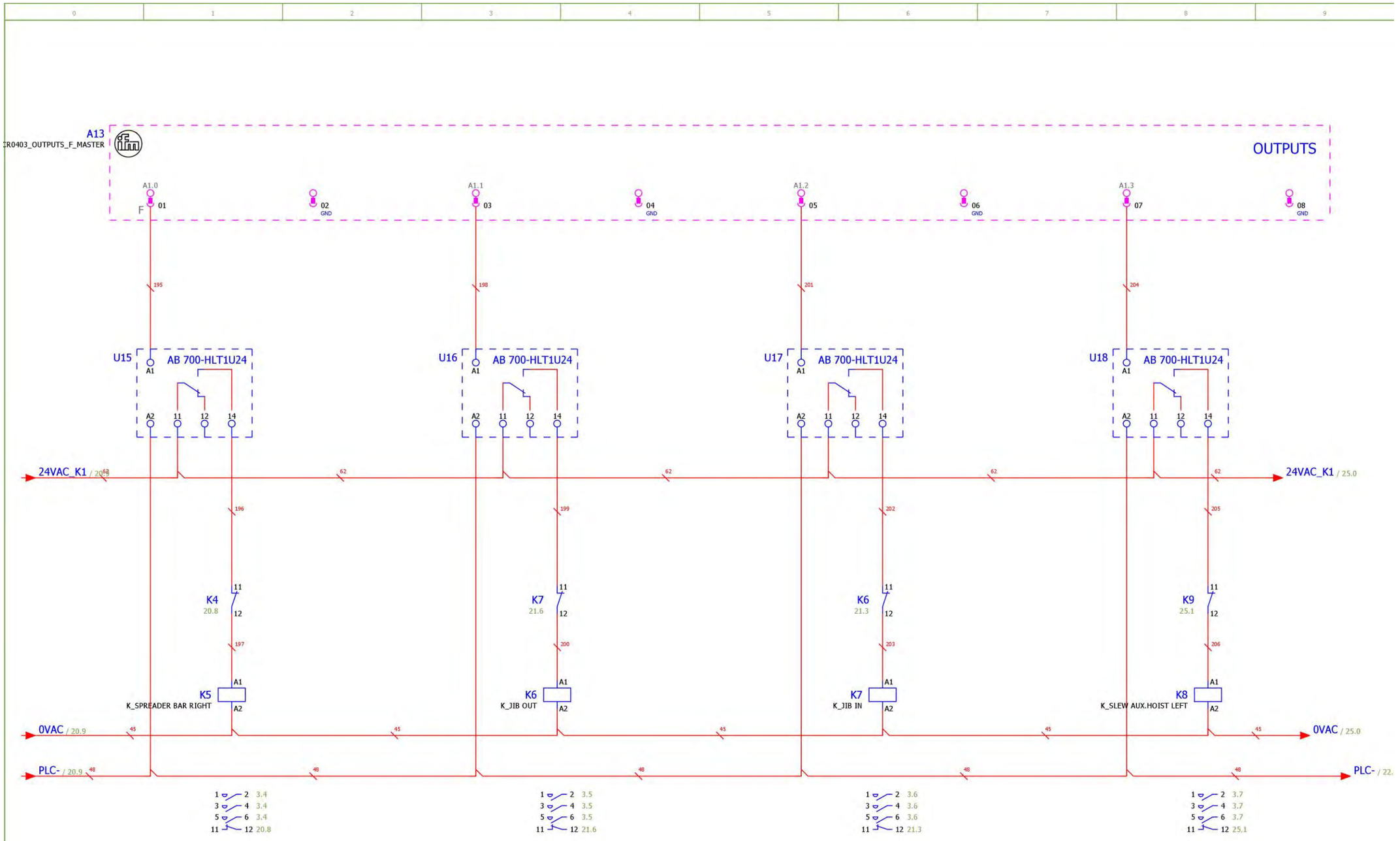
19 CR0403_MASTER 21

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			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q19

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Proyecto: P15588
Cliente: CORNING
Hoja 20
Hoja 40



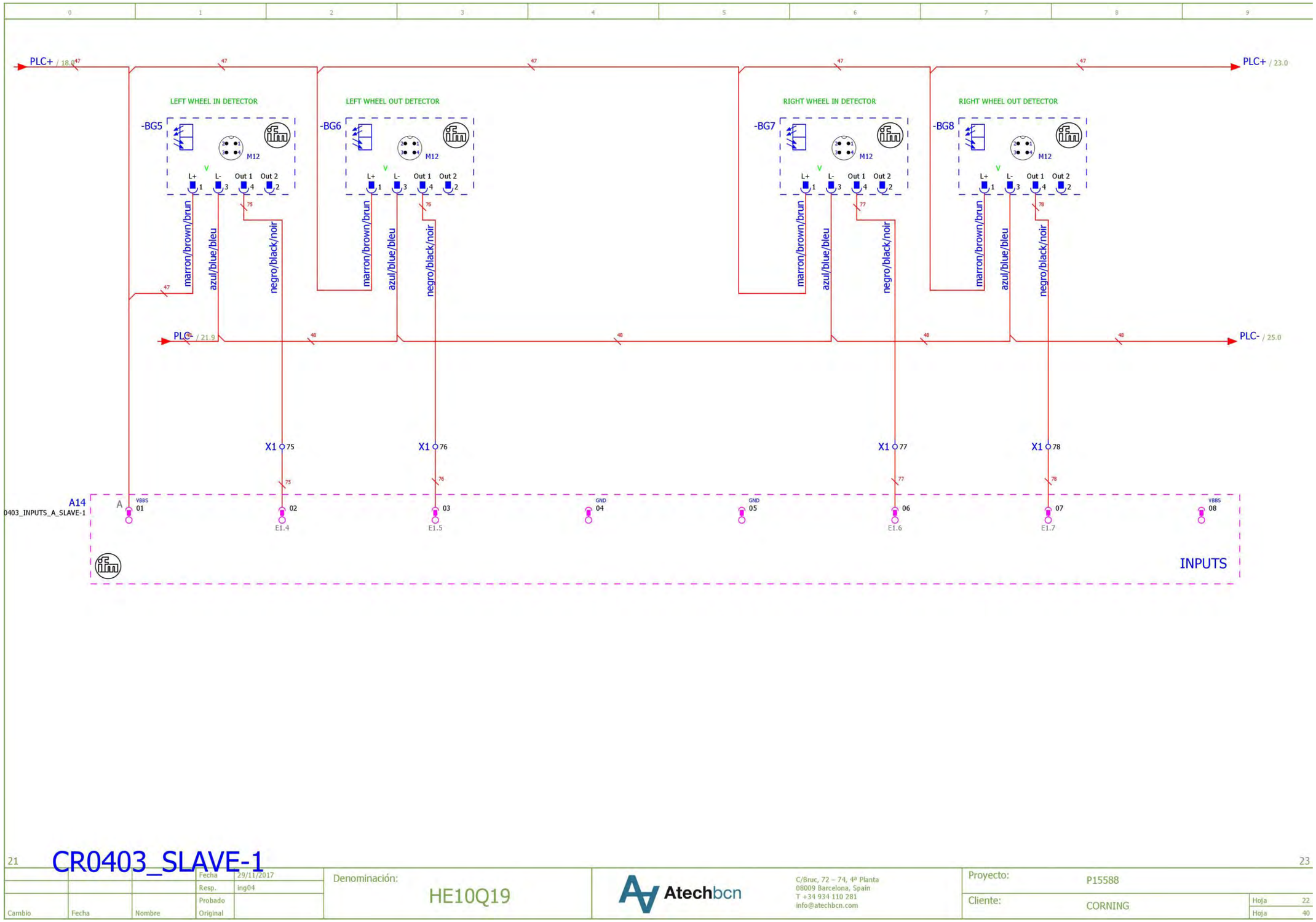
20 CR0403_MASTER 22

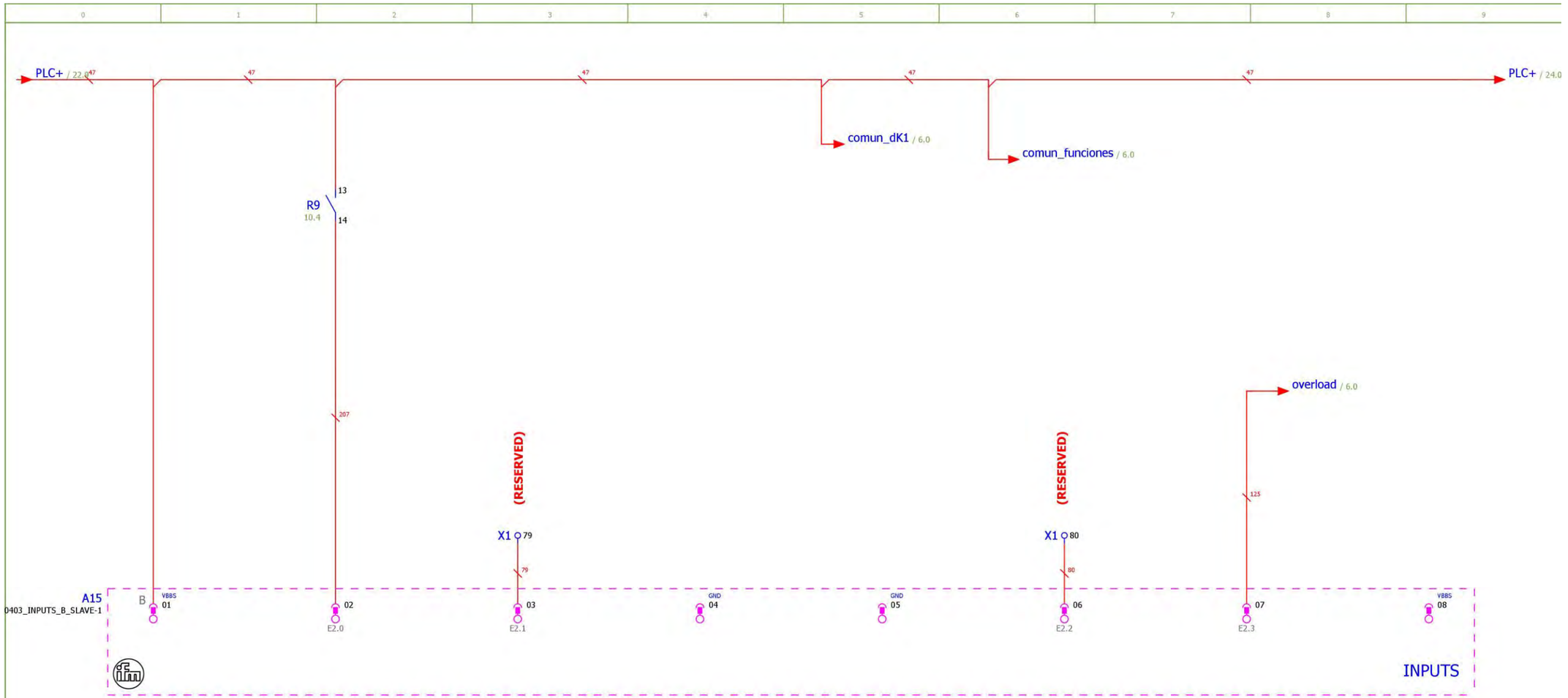
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			Resp.	ing04
Cambio	Fecha	Nombre	Probado Original	

Denominación: HE10Q19

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Proyecto: P15588
Cliente: CORNING
Hoja 21
Hoja 40


PLC+ / 18.0
PLC+ / 23.0
PLC- / 21.9
PLC- / 25.0
LEFT WHEEL IN DETECTOR
LEFT WHEEL OUT DETECTOR
RIGHT WHEEL IN DETECTOR
RIGHT WHEEL OUT DETECTOR
-BG5
-BG6
-BG7
-BG8
M12
V
L+ L- Out 1 Out 2
1 3 4 2
marron/brown/brun
azul/blue/bleu
negro/black/noir
X1 75
X1 76
X1 77
X1 78
A14
0403_INPUTS_A_SLAVE-1
A
VBBS 01
02 E1.4
03 E1.5
GND 04
GND 05
06 E1.6
07 E1.7
VBBS 08
INPUTS
21
CR0403_SLAVE-1
23
Fecha 29/11/2017
Resp. ing04
Probado
Original
Cambio Fecha Nombre
Denominación:
HE10Q19
Atechbcn
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info@atechbcn.com
Proyecto: P15588
Cliente: CORNING
Hoja 22
Hoja 40



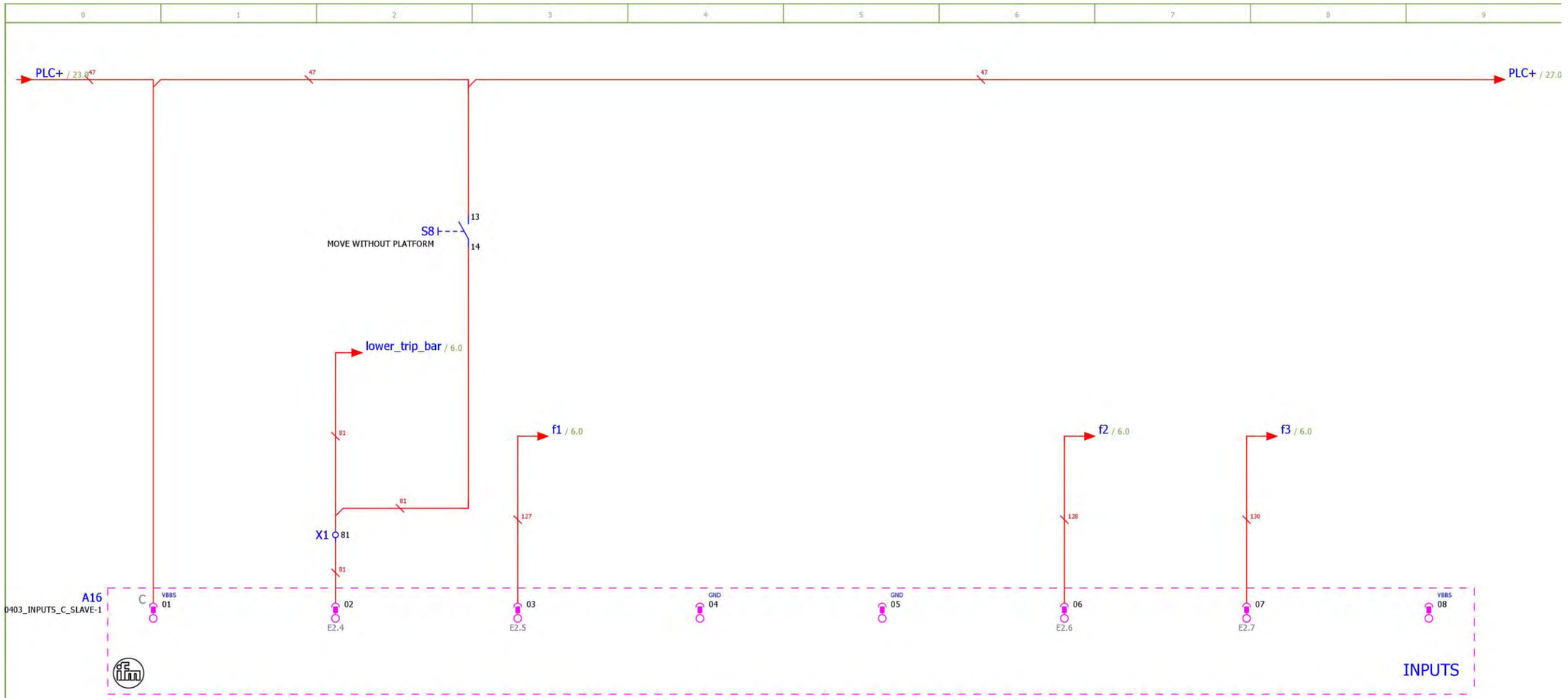
22 CR0403_SLAVE-1 24

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q19

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Proyecto: P15588
Cliente: CORNING
Hoja 23
Hoja 40



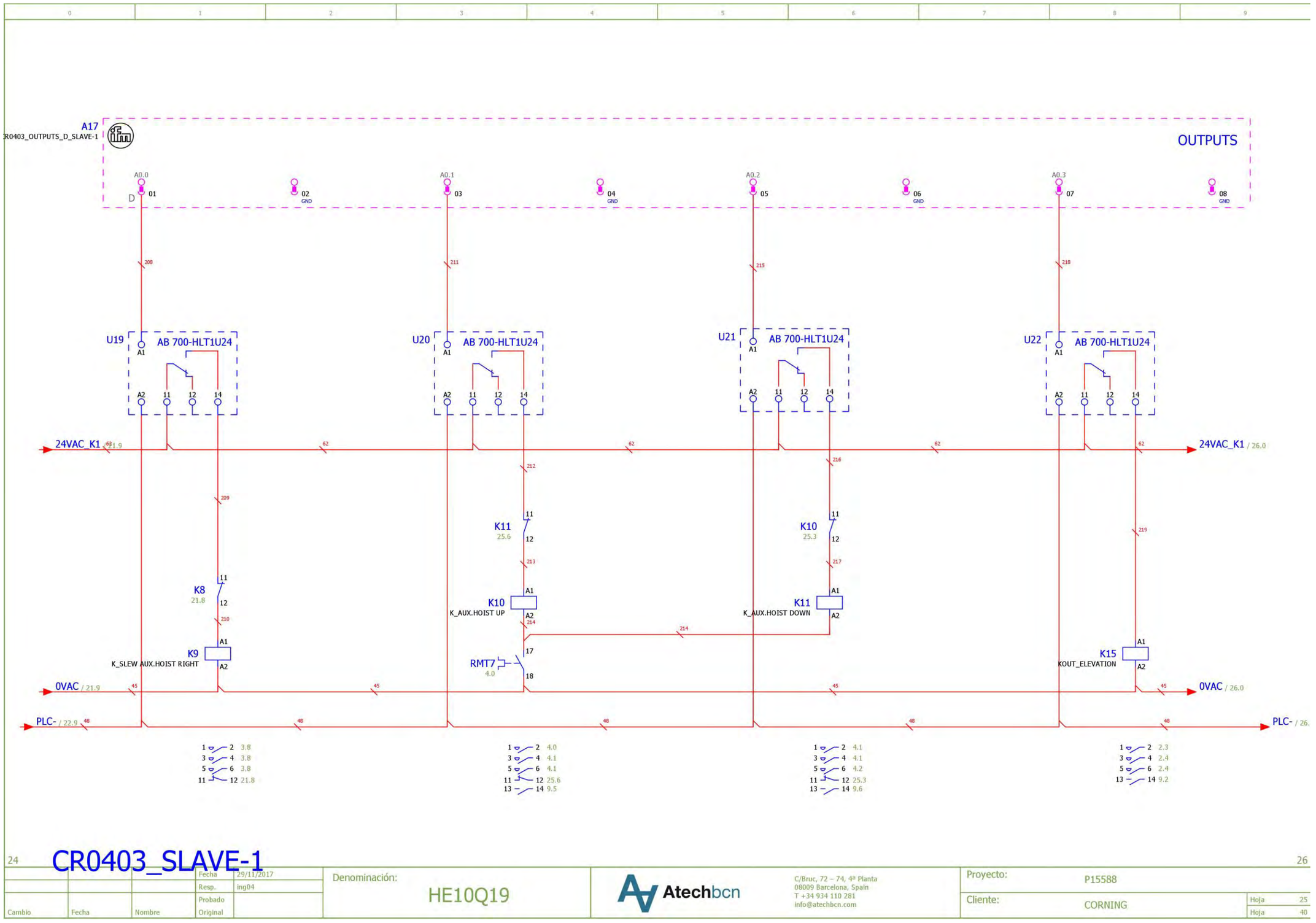
23 CR0403_SLAVE-1 25

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q19

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Proyecto: P15588
Cliente: CORNING
Hoja 24
Hoja 40



24 CR0403_SLAVE-1 26

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado Original	

Denominación: HE10Q19

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Proyecto: P15588
Cliente: CORNING
Hoja 25
Hoja 40



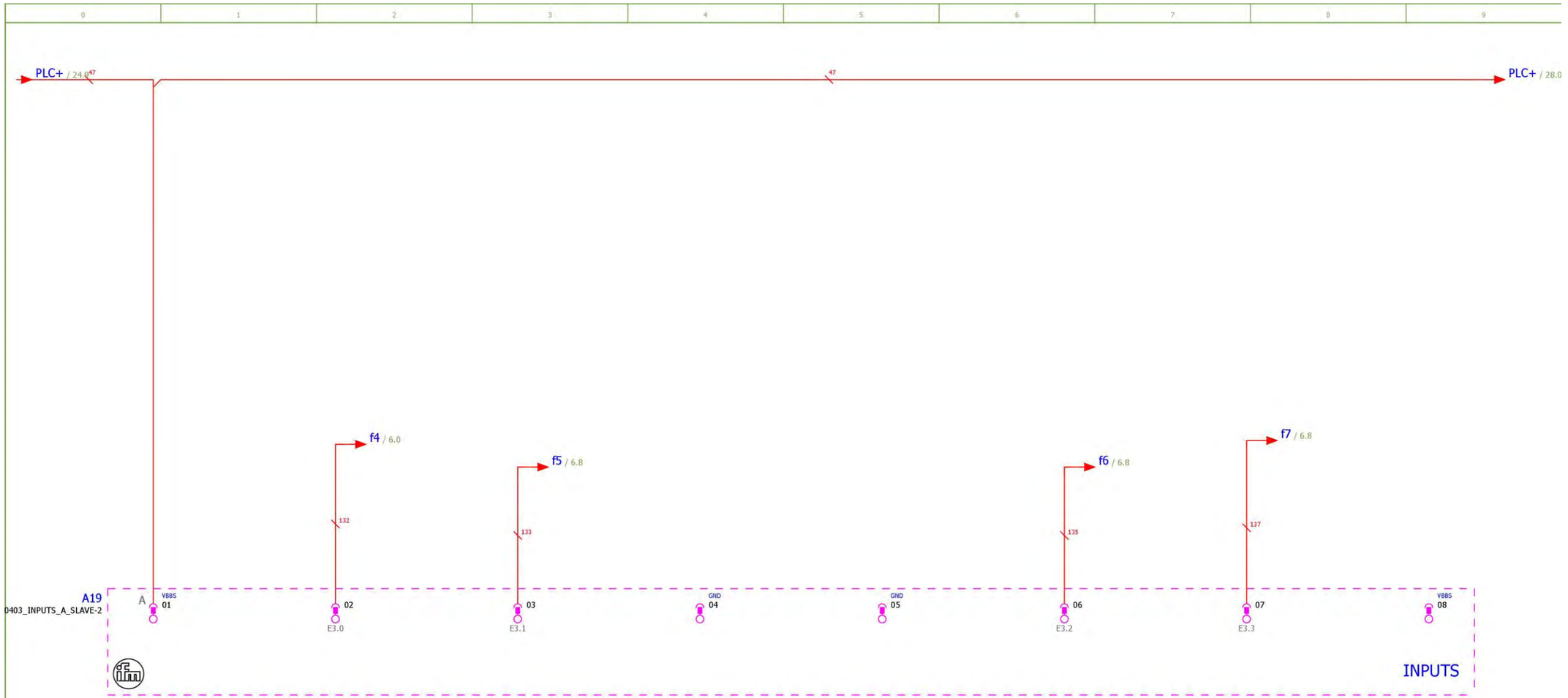
25 CR0403_SLAVE-1 27

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado Original	

Denominación: HE10Q19

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Proyecto:	P15588		
Cliente:	CORNING	Hoja	26
		Hoja	40



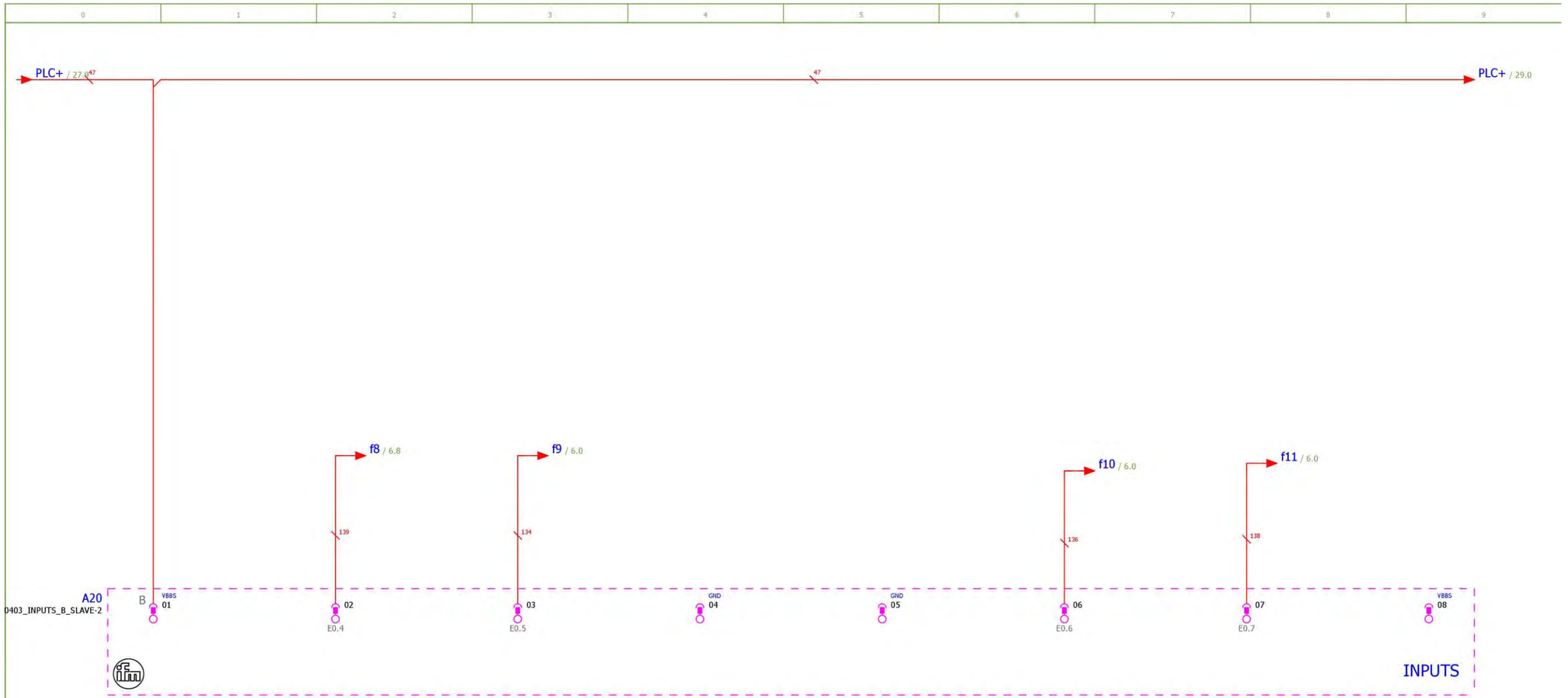
26 CR0403_SLAVE-2 28

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q19

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Proyecto: P15588
Cliente: CORNING
Hoja 27
Hoja 40



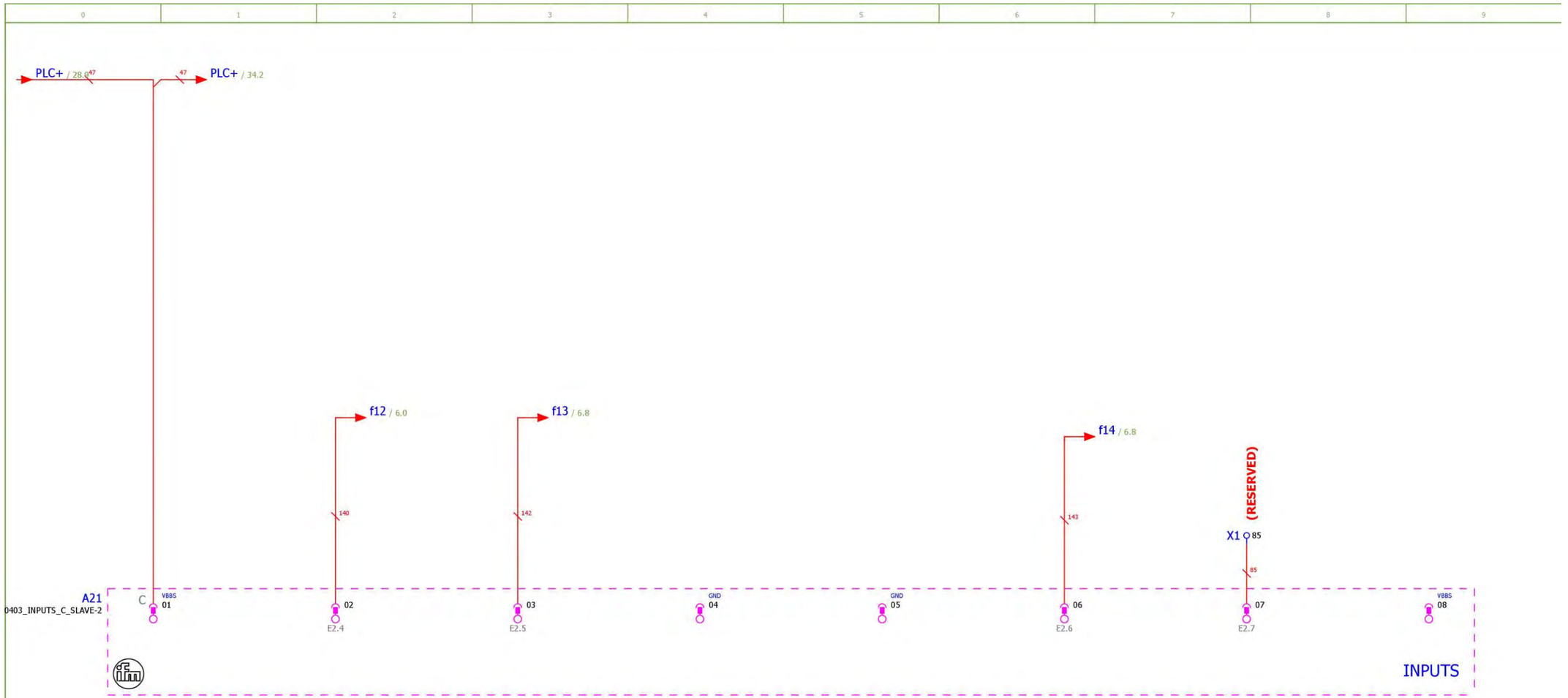
27 CR0403_SLAVE-2 29

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q19

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Proyecto:	P15588		
Cliente:	CORNING	Hoja	28
		Hoja	40



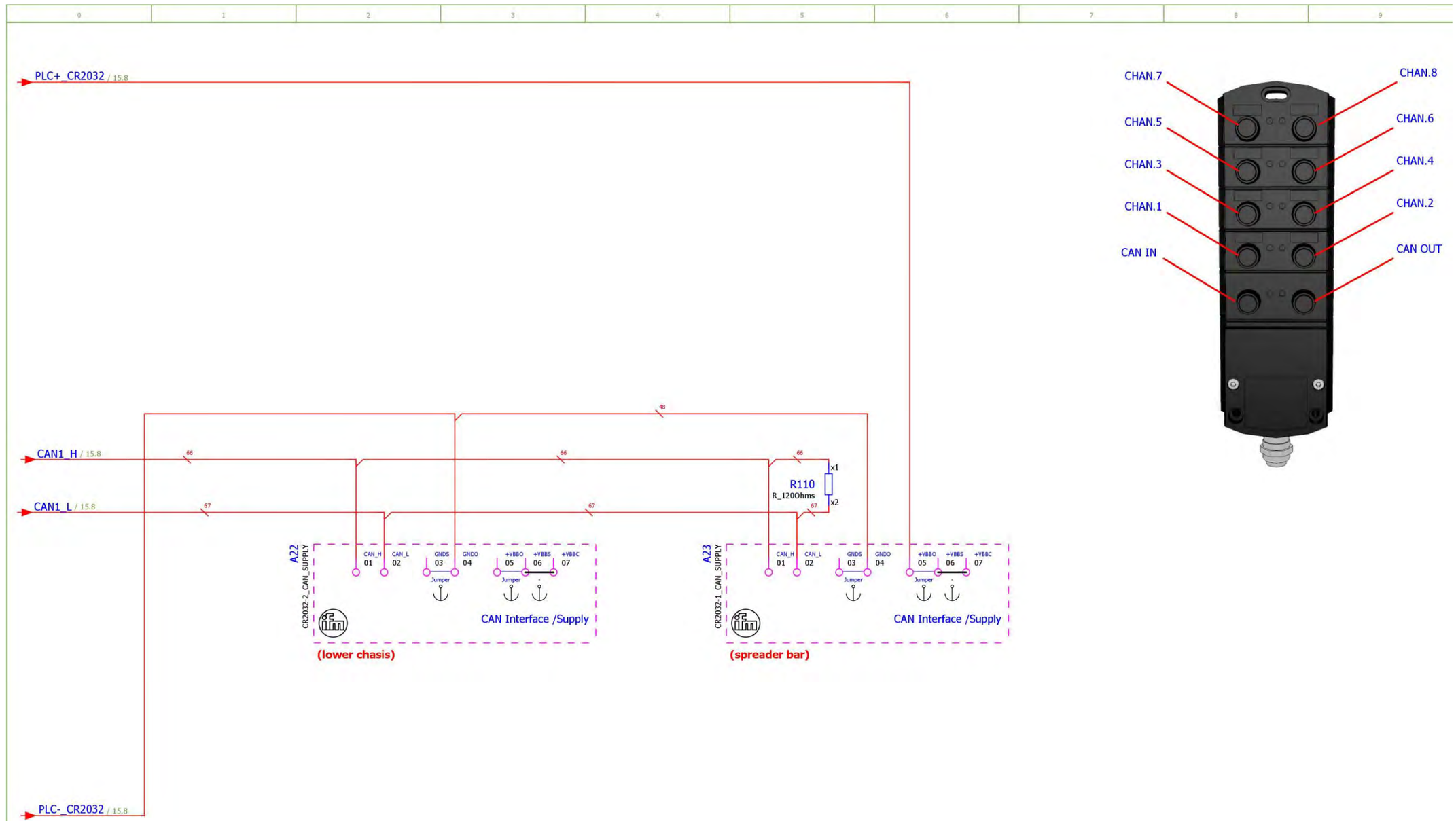
28 CR0403_SLAVE-2 30

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q19

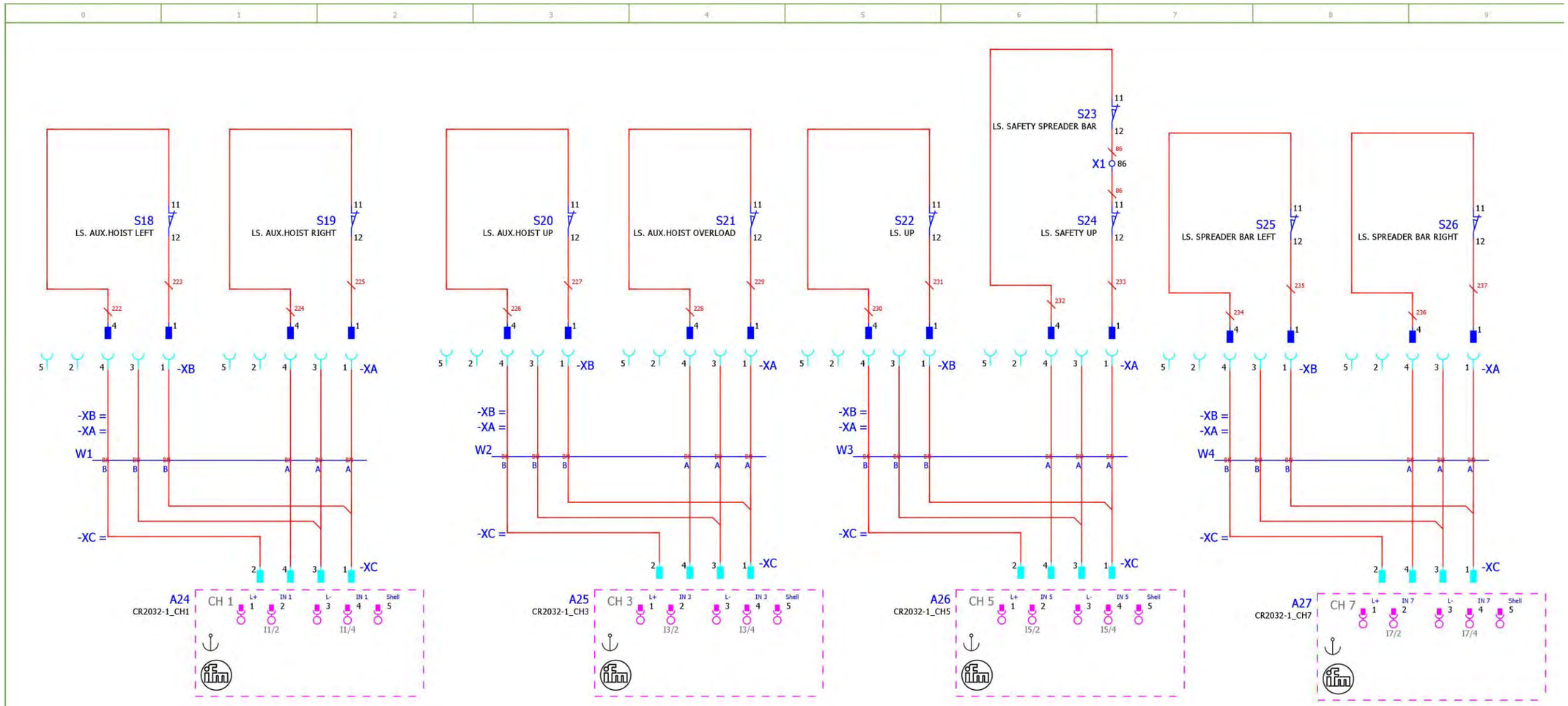
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08009 Barcelona, Spain
T +34 934 110 281
info@atechbcn.com

Proyecto: P15588
Cliente: CORNING
Hoja 29
Hoja 40



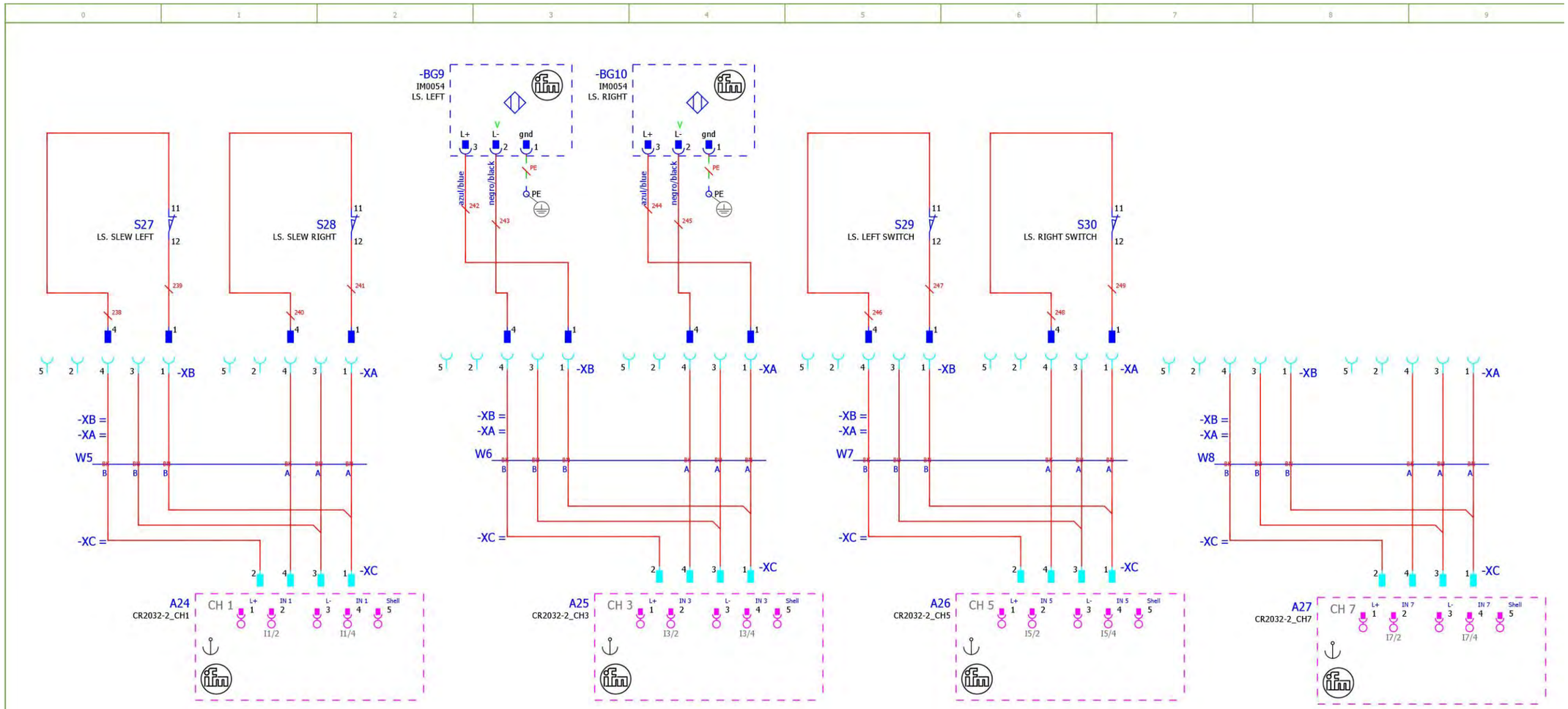
29 CR2032-1 31

			Fecha	29/11/2017	Denominación: HE10Q19	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588
			Resp.	ing04			Cliente: CORNING Hoja 30
Cambio	Fecha	Nombre	Probado Original				Hoja 40



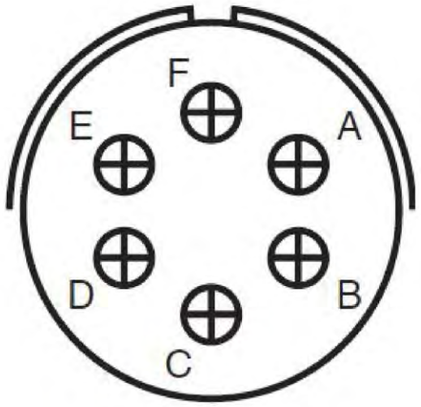
30 CR2032-1 32

			Fecha	29/11/2017	Denominación: HE10Q19	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588
			Resp.	ing04			
Cambio	Fecha	Nombre	Probado				Cliente: CORNING Hoja 31
			Original				Hoja 40

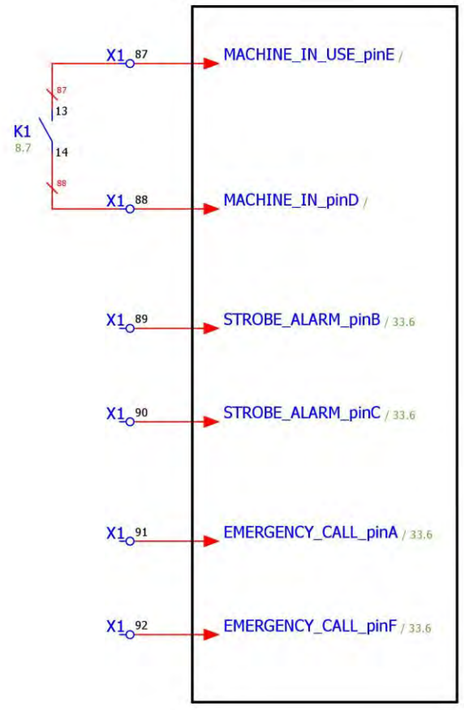


31 CR2032-2 33

			Fecha	29/11/2017	Denominación: HE10Q19	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588
			Resp.	ing04			Cliente: CORNING Hoja 32
Cambio	Fecha	Nombre	Probado				Hoja 40
			Original				

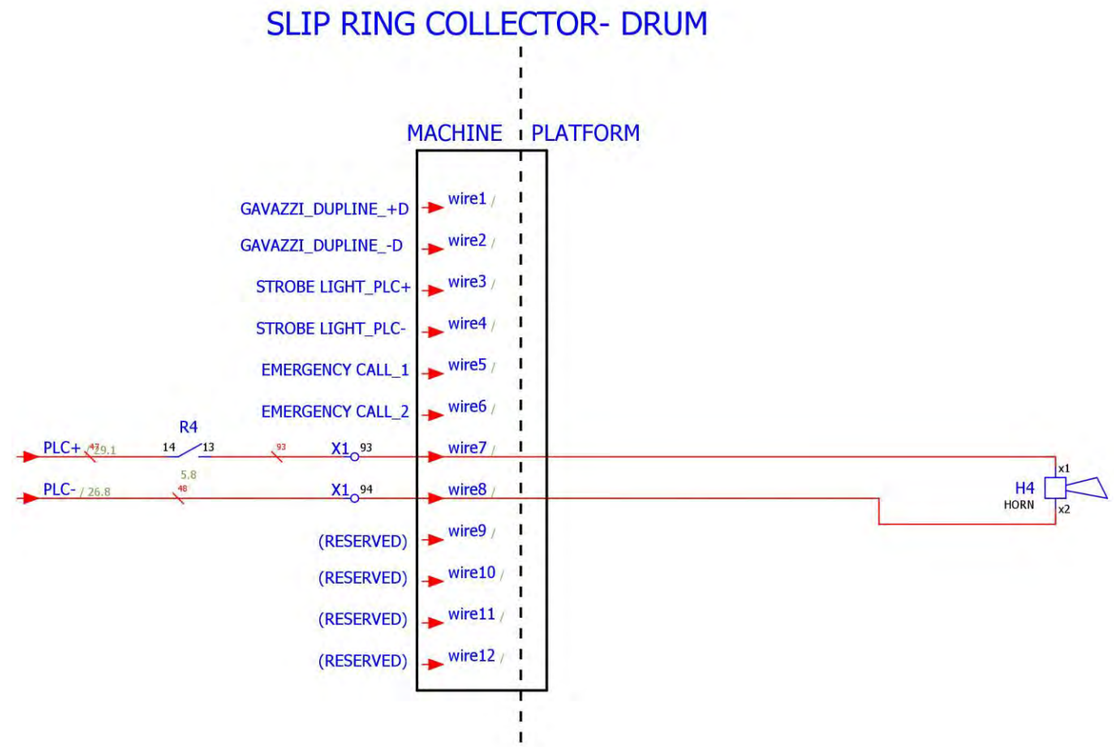


A-F: Contacts for Emergency call - INTERCOM
D-E Contacts for In use signal
B-C Contacts for fire alarm - STROBE LIGHT



32 34

			Fecha	29/11/2017	Denominación: HE10Q19	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588	
			Resp.	ing04				
Cambio	Fecha	Nombre	Probado Original				Cliente: CORNING	Hoja 33 Hoja 40



33 35

			Fecha	29/11/2017	Denominación: HE10Q19	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588
			Resp.	ing04			Cliente: CORNING Hoja 34
Cambio	Fecha	Nombre	Probado Original				Hoja 40

BOX2-input:
W07y 7X1.5: SPREADER BAR MOTOR+AUX.HOIST SLEW MOTOR
W07y 4X2.5+(4X1): PLATFORM CABLE
W07y 7X1.5: TELESCOPIC MOTOR

W05w 5x1: CANBUS from CR2032
W05w 2x1: JIB IN DETECTOR
W05w 2x1: JIB OUT DETECTOR
W05w 2x1: SAFTY JIB DETECTOR

BOX2-output:
W07y 7X1.5: SPREADER BAR MOTOR+AUX.HOIST SLEW MOTOR
W07y 4X2.5+(4X1): PLATFORM CABLE
W07y 7X1.5: TELESCOPIC MOTOR

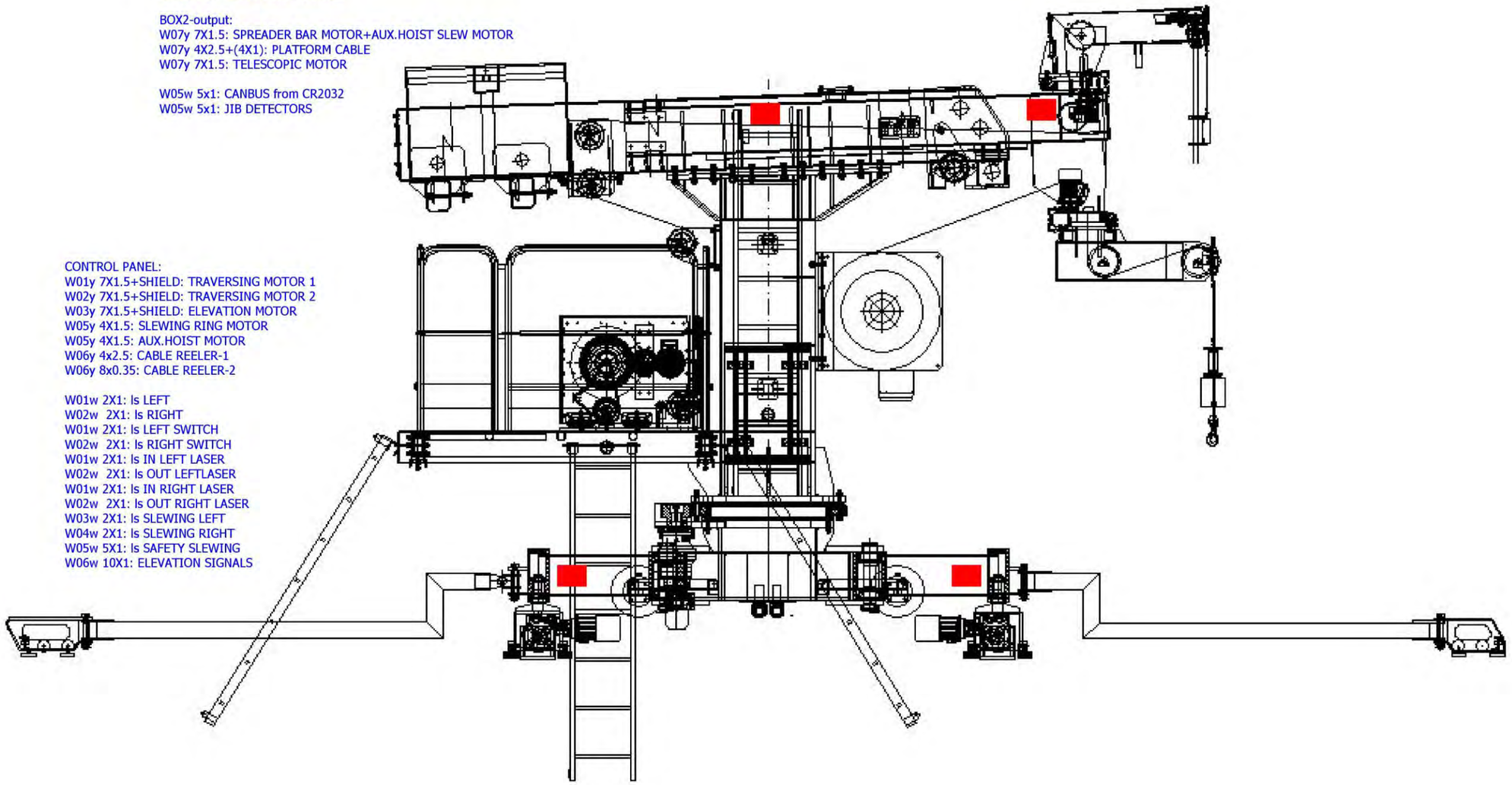
W05w 5x1: CANBUS from CR2032
W05w 5x1: JIB DETECTORS

BOX1-input:
W07y 7X1.5: SPREADER BAR MOTOR+AUX.HOIST SLEW MOTOR
W07y 4X2.5+(4X1): PLATFORM CABLE

W05w 5x1: CANBUS from CR2032

BOX1-output:
W07y 7X1.5: SPREADER BAR MOTOR+AUX.HOIST SLEW MOTOR
W07y 4X2.5+(4X1): PLATFORM CABLE

W05w 5x1: CANBUS from CR2032



CONTROL PANEL:
W01y 7X1.5+SHIELD: TRAVERSING MOTOR 1
W02y 7X1.5+SHIELD: TRAVERSING MOTOR 2
W03y 7X1.5+SHIELD: ELEVATION MOTOR
W05y 4X1.5: SLEWING RING MOTOR
W05y 4X1.5: AUX.HOIST MOTOR
W06y 4x2.5: CABLE REELER-1
W06y 8x0.35: CABLE REELER-2

W01w 2X1: Is LEFT
W02w 2X1: Is RIGHT
W01w 2X1: Is LEFT SWITCH
W02w 2X1: Is RIGHT SWITCH
W01w 2X1: Is IN LEFT LASER
W02w 2X1: Is OUT LEFTLASER
W01w 2X1: Is IN RIGHT LASER
W02w 2X1: Is OUT RIGHT LASER
W03w 2X1: Is SLEWING LEFT
W04w 2X1: Is SLEWING RIGHT
W05w 5X1: Is SAFETY SLEWING
W06w 10X1: ELEVATION SIGNALS

34 36

			Fecha	29/11/2017	Denominación: HE10Q19	Atechbcn C/Bruc, 72 – 74, 4ª Planta 08009 Barcelona, Spain T +34 934 110 281 info@atechbcn.com	Proyecto: P15588
			Resp.	ing04			Cliente: CORNING Hoja 35
Cambio	Fecha	Nombre	Probado / Original				Hoja 40

Plano de bornes

F13_005

Regleta X1

	Página	Texto de función	Potencial	Destinos externos
1	2.0			QB01
2	2.0	MAIN KEY SWITCH		QB01
3	2.1	=		QB01
4	2.2	ELEVATION MOTOR		M1
5	2.3	=		M1
6	2.3	=		M1
7	2.3	=		M1
8	2.4	=		M1
9	2.4	=		M1
10	2.4			RF1
11	2.4			RF1
12	2.6	TRAVERSING MOTOR-1		M2
13	2.6	=		M2
14	2.6	=		M2
15	2.7	TRAVERSING MOTOR-2		M3
16	2.7	=		M3
17	2.8	=		M3
18	2.8	=		M3
19	2.8	=		M3
20	2.9	=		M3
21	3.1	SLEWING MOTOR		M4
22	3.1	=		M4
23	3.1	=		M4
24	3.3	SPREADER BAR MOTOR		M5
25	3.3	=		M5
26	3.3	=		M5
27	3.5	TELESCOPIC JIB-1 MOTOR		M6
28	3.5	=		M6

Cableado

	Destinos internos	Texto de función
1	Q1	
2	Q1	
3	Q1	
4	K12	BRAKE
5	K12	
6	K12	
7	K15	KOUT_ELEVATION
8	K15	
9	K15	
10	U1	
11	U1	
12	RMT1	
13	RMT1	
14	RMT1	
15	RMT2	
16	RMT2	
17	RMT2	
18	K13	BRAKE
19	K13	
20	K13	
21	RMT3	
22	RMT3	
23	RMT3	
24	RMT4	
25	RMT4	
26	RMT4	
27	RMT5	
28	RMT5	

Cableado

35 37

Cambio	Fecha	Nombre				
			Fecha	29/11/2017	Denominación: HE10Q19	
			Resp.	ing04		
			Probado			
			Original			

Atechbcn
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08009 Barcelona, Spain
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info@atechbcn.com

Proyecto:	P15588		
Cliente:	CORNING	Hoja	36
		Hoja	40

Plano de bornes

F13_005

Regleta X1

Página	Texto de función	Potencial	Destinos externos
3.5	TELESCOPIC JIB-1 MOTOR		M6
3.7	SLEW. AUX.HOIST MOTOR		M7
3.7	=		M7
3.7	=		M7
4.0	AUX.HOIST		M8
4.1	=		M8
4.1	=		M8
4.2	=		M8
4.3	=		M8
4.3	=		M8
4.5			U2
4.5			Q2
4.5			
4.5			
4.5			U2
4.5			Q2
5.0	R_ANEMOMETER		R4
5.0			
5.1			
5.1			
5.1			
5.1			U5
5.1			
5.2			
5.2			
5.2			
5.4			U5
5.4			
5.4			
5.4			U5

Destinos internos

Cableado	Destinos internos
29	RMT5
30	RMT6
31	RMT6
32	RMT6
33	RMT7
34	RMT7
35	RMT7
36	K14
37	K14
38	K14
39	K14
40	U2
41	Q2
42	Q2
43	K14
44	U2
45	U3
45	
45	
45	
45	F3
46	
46	
46	
46	
46	
47	F5
47	
47	
48	U4

Cableado

Texto de función: BRAKE

36 38

Cambio	Fecha	Nombre		
			Fecha	29/11/2017
			Resp.	ing04
			Probado	
			Original	

Denominación: HE10Q19

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08009 Barcelona, Spain
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info@atechbcn.com

Proyecto: P15588

Cliente: CORNING

Hoja 37
Hoja 40

Plano de bornes

F13_005

Regleta

X1

Página	Texto de función	Potencial	Destinos externos	Cableado		Cableado	Destinos internos	Texto de función
5.4					48			
5.4					48			
5.8			U5		49		R4	R_ANEMOMETER
6.0			G_DUPLINE		50		X6	
6.0			G_DUPLINE		51		X6	
8.3	L.S.SAFETY SLEWING		S5		52		R5	R_ SAFETY SLEWING
8.3	L.S.CHAIN		S2		53		R6	R_ OVERSPEED
8.4			BG2		54		R7	R_ SAFETY JIB-1
8.6	LS.OVERSPEED		S1		55		R7	
8.6	LS. DOOR-1		S4		56		S2	L.S.CHAIN
8.6	LS.SAFETY SLEWING		S5		57		S4	LS. DOOR-1
8.7	MACHINE-PE		S6		58		S5	LS.SAFETY SLEWING
8.7	POWER-M		RX_DUPLINESAFE S7		59		S6	MACHINE-PE
8.7			K1		60		RX_DUPLINESAFE S7	POWER-M
8.7	MAIN_K		K1		61		K1 R9	
9.1	GREEN_LIGHT		H1		62		K1 K13	K_TRAVERSING BRAKE
9.4	HORN		H2		63		R4	R4
13.6			A2		64		R112	
13.6			A2		65		R112	
15.7			A22		66		A7	
15.7			A22		67		A7	
17.6	MACHINE/CRADLE CONTROL		S15		68		A9	MACHINE/CRADLE CONTROL
17.7	=		S15		69		A9	=
18.2			U11		70		A10	
18.3	LS. REELER-1		S16		71		S17	LS. REELER-2
18.3	LS. REELER-2		S17		72		A10	=
18.6			A10		73		BG1	
18.7			A10		74		BG1	
22.2			BG1		75		A14	
22.3			A14		76		BG1	
22.6			A14		77		BG1	
22.7			A14		78		BG1	
23.3					79		A15	
23.6					80		A15	
24.2	MOVE WITHOUT PLATFORM		S8 U7		81		A16	

Cambio	Fecha	Nombre		Fecha
			Resp.	29/11/2017
			Probado	ing04
			Original	

Denominación: HE10Q19

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Proyecto: P15588

Cliente: CORNING

Hoja 38

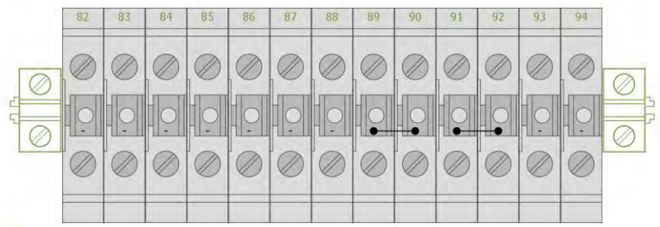
Hoja 40

Corning Tower -3 - Operation and Maintenance Manual - M3635.pdf

F13_005

Plano de bornes

Regleta X1



Página	Texto de función	Potencial	Destinos externos
			Cableado
			A18
			A18
			A18
			A21
			S24
			K1
			K1
			R4
			H3
			Cableado
26.3			
26.5			
26.8	RED_LIGHT		H3
29.7			
31.7	LS. SAFETY SPREADER BAR		S23
33.5			
33.5			
33.5			
33.5			
33.5			
33.5			
34.4			
34.4			

38 40

			Fecha	29/11/2017
			Resp.	ing04
Cambio	Fecha	Nombre	Probado / Original	

Denominación: HE10Q19

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Proyecto: P15588

Cliente: CORNING

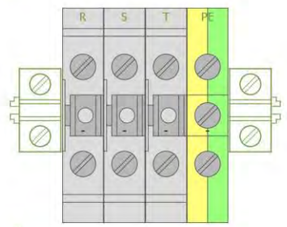
Hoja 39
Hoja 40

0 1 2 3 4 5 6 7 8 9

F13_005

Plano de bornes

Regleta X2



Página	Texto de función	Potencial	Destinos externos	Cableado
2.0			L1	
2.0			L2	
2.1			L3	
2.1			PE	

Destinos internos	Cableado	Texto de función
QB01		MAIN KEY SWITCH
QB01		
QB01		

39

Cambio	Fecha	Nombre		
			Fecha	29/11/2017
			Resp.	ing04
			Probado	
			Original	

Denominación: HE10Q19

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08009 Barcelona, Spain
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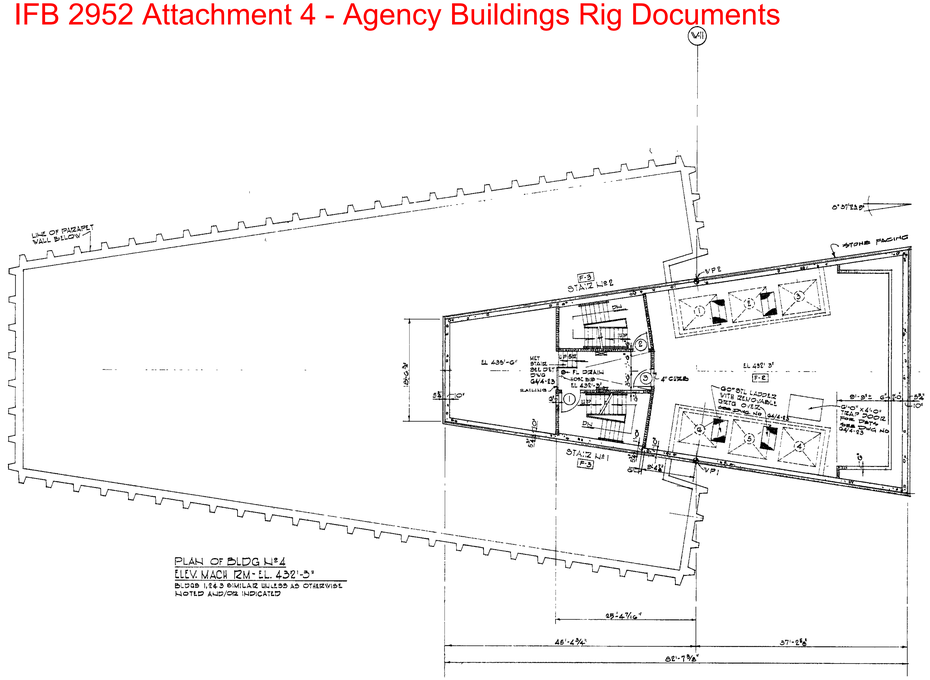
Proyecto: P15588

Cliente: CORNING

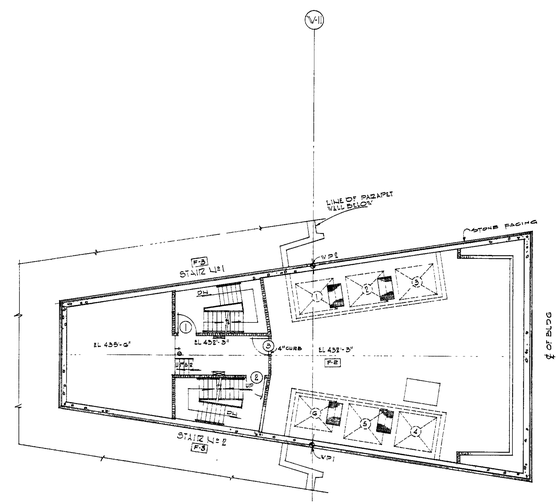
Hoja 40

Hoja 40

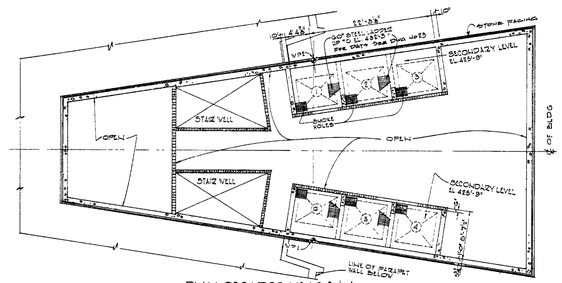
IFB Attachment 4
Agency Buildings Rig Documents



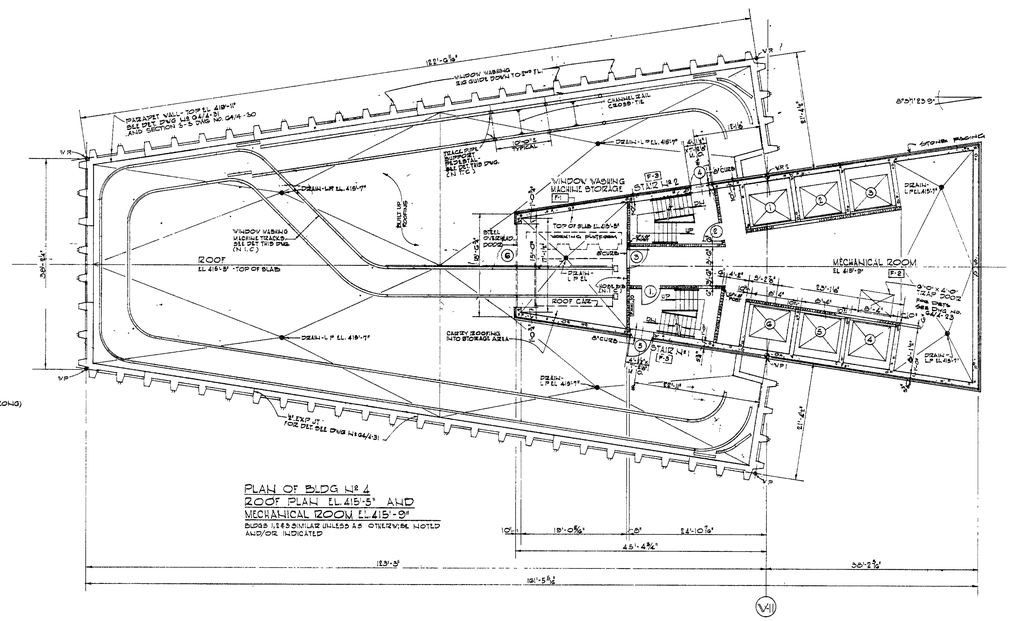
PLAN OF BLDG N° 4
ELEV. MACH. RM. - EL. 432'-3"
BLDGS. 1,2 & 3 SIMILAR UNLESS AS OTHERWISE NOTED AND/OR INDICATED



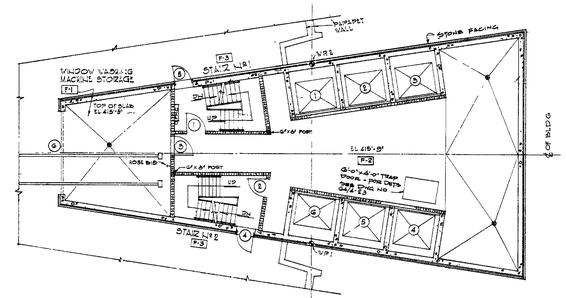
PLAN OF BLDGS N° 1 & 2
ELEV. MACH. RM. - EL. 432'-3



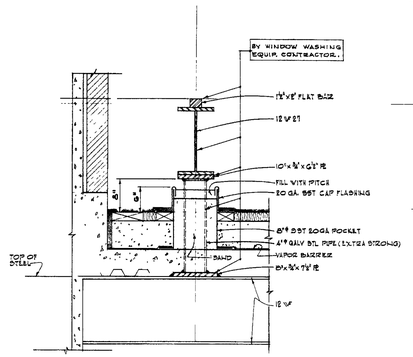
PLAN OF BLDGS N° 1, 2, 3 & 4
SECONDARY LEVEL - PH EL 425'-9"



PLAN OF BLDG N° 4
ROOF PLAN EL 415'-5" AND
MECHANICAL ROOM EL 415'-9"
BLDGS. 1,2 & 3 SIMILAR UNLESS AS OTHERWISE NOTED AND/OR INDICATED



PLAN OF BLDGS N° 1 & 2
ROOF PLAN EL 415'-5" AND
MECHANICAL ROOM EL 415'-9"



TYPICAL DETAIL FOR WINDOW WASHING MACHINE TRACK SUPPORTS
SCALE: 1" = 1'-0"

H. H. ROBERTSON
DWG ED1, ED2, ED3, ED4 } STEEL ROOF DECKING

AS-BUILT

REV	DATE	ISSUED TO
1	10-1-64	AS BUILT

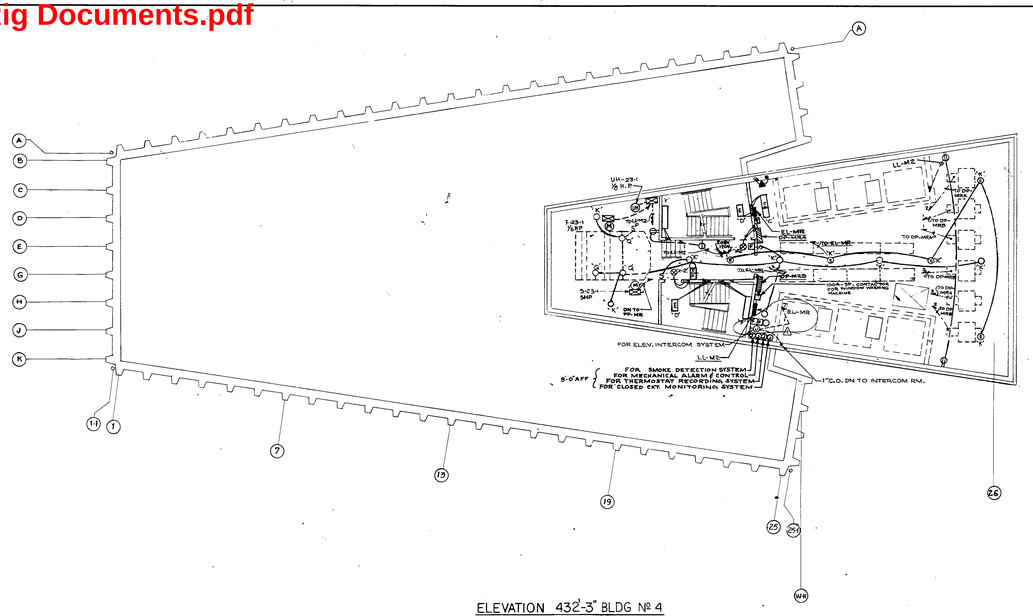
HARRISON & ABRAMOVITZ
ARCHITECTS
630 FIFTH AVENUE NEW YORK 20, N. Y.

ALBANY, NEW YORK
ALBANY SOUTH MALL PROJECT
AGENCY BUILDINGS 1, 2, 3 & 4

DRAWN BY	ARCHITECTURAL
CHECKED BY G.B.R.(A.)	PLAN OF MAIN ROOF & PENTHOUSE LEVEL EL + 432'-0"
SCALE 1/8"=1'-0"	DATE JULY 28, 1966
APPROVED BY G.B.R.	DRAWING NO 64/4-10
R.P.W.	PROJECT NO 2018.3
	SPECIFICATION NO 6018.3-G

STATE OF NEW YORK
OFFICE OF GENERAL SERVICES
CYRIL ROHOLEN - COMMISSIONER
DEPARTMENT OF PUBLIC WORKS - J. R. McMORRAN, SUPERINTENDENT
DIVISION OF ARCHITECTURE - S. R. KANIGEL, STATE ARCHITECT

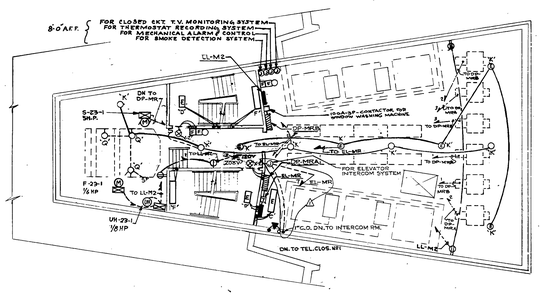
Agency Rig Documents.pdf



ELEVATION 432'-3" BLDG Nº 4
LIGHT & POWER
BLDG Nº3 SAME

NOTE:
1. ELEVATOR EQUIPMENT SHOWN IN DASHED LINES UNDER ELEVATOR CONTRACT.

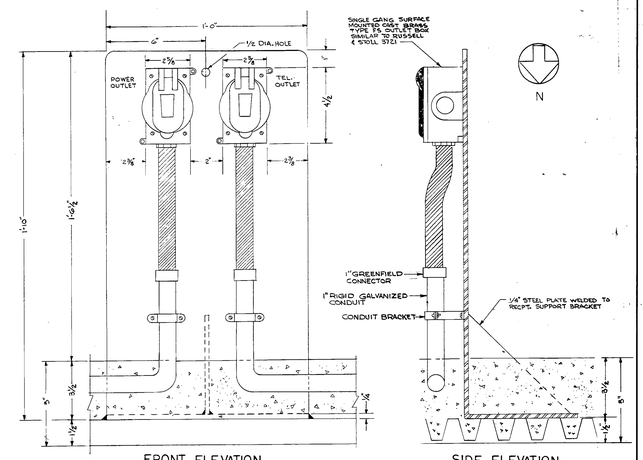
BLDG. 3-4 EQUIPMENT LAYOUT - ARC DWG. 23 REV. 2- 8-5-69



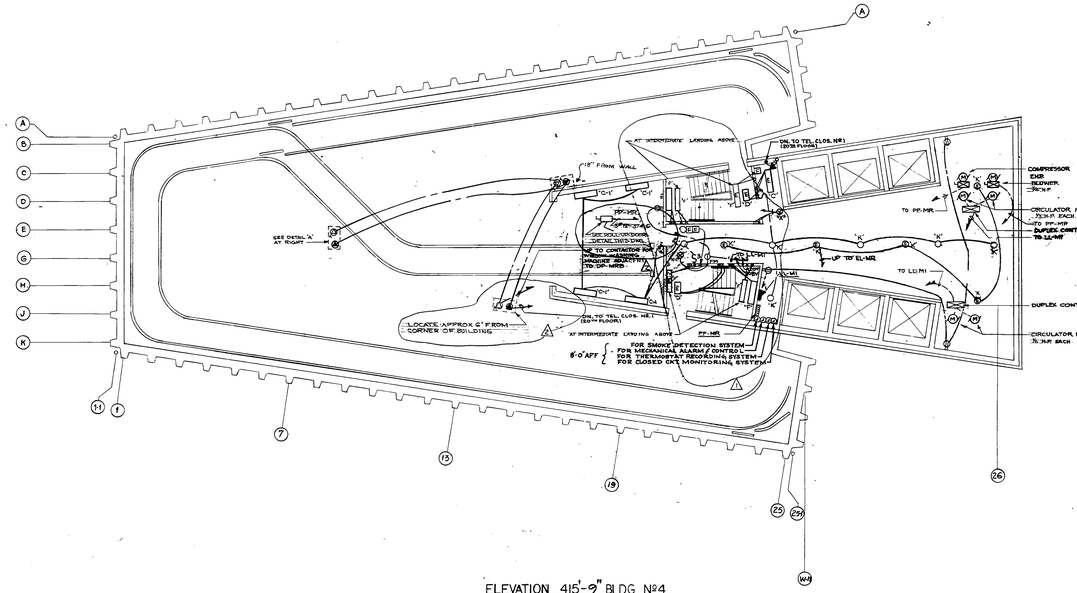
PART PLAN
ELEVATION 432'-3" BLDG Nº 2
LIGHT & POWER
BLDG Nº1 SAME

NOTE:
1. FOR CONTINUATION OF PART PLAN, SEE PLAN AT LEFT.

BLDG. 1-2- EQUIPMENT LAYOUT - ARC DWG. 23A REV. 2 - 8-5-69

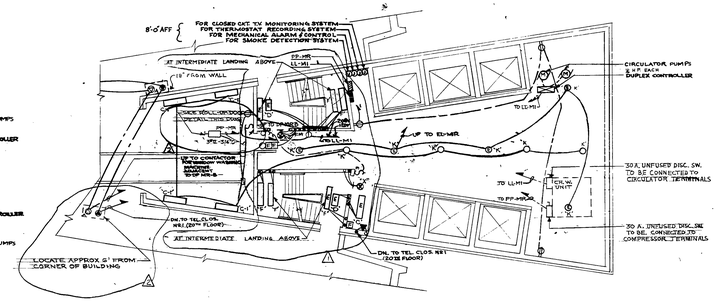


DETAIL 'A'
SCALE 3/8"=1'



ELEVATION 415'-9" BLDG Nº4
LIGHT & POWER
BLDG Nº3 SAME

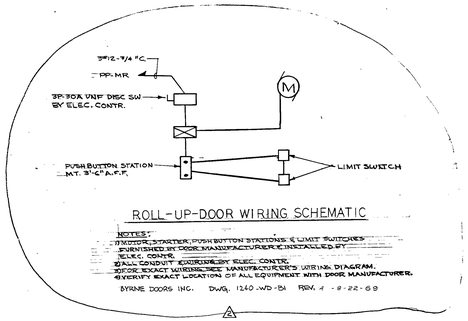
BLDG. 3- EQUIPMENT LAYOUT - ARC DWG. 22A - REV. 1- 10-4-68
BLDG. 4 EQUIPMENT LAYOUT - ARC DWG. 22 - REV. 1- 10-4-68



PART PLAN
ELEVATION 415'-9" BLDG Nº2
LIGHT & POWER
BLDG Nº1 SAME

NOTE:
1) FOR CONTINUATION OF PART PLAN, SEE PLAN AT LEFT.

BLDG. 1-2. EQUIPMENT LAYOUT - ARC DWG. 22 - REV. 1 - 10-4-68



ROLL-UP-DOOR WIRING SCHEMATIC

NOTES:
1. MOTOR, STARTER, PUSH BUTTON STATIONS & LIMIT SWITCHES FURNISHED BY DOOR MANUFACTURER & INSTALLED BY ELEC. CONTR.
2. ALL CONDUIT & WIRING BY ELEC. CONTR.
3. FOR EXACT WIRING SEE MANUFACTURER'S WIRING DIAGRAM.
4. VERIFY EXACT LOCATIONS OF ALL EQUIPMENT WITH DOOR MANUFACTURER.

BYRNE DOORS INC. DWG. 1240-WD-BA REV. 4 - 8-22-68

ABC ELECTRICAL CONSTRUCTION CO., INC.
939 SECOND AVE.
NEW YORK 16, N. Y.

CERTIFIED AS - BUILT DWG.
DATE 1-6-71 SIGNATURE [signature] TITLE VP

SYSKA & HENNESSY
MECHANICAL ENGINEERS
144 EAST 39th STREET NEW YORK 16, N. Y.

HARRISON & ABRAMOVITZ
ARCHITECTS
630 FIFTH AVENUE NEW YORK 20, N. Y.

REV	DATE	ISSUED TO
2	2-2-68	REVISED STAIR LIGHTING CONFORMED TO ID"AG-E-4 & ID"AG-E-6
1	2-7-68	ADDED POWER REQUIREMENTS & DETAILS FOR ROLL-UP DOOR & REVISED WINDOW/VENTER OUTLETS

ALBANY, NEW YORK
ALBANY SOUTH MALL PROJECT
AGENCY BLDGS. 1,2,3 & 4

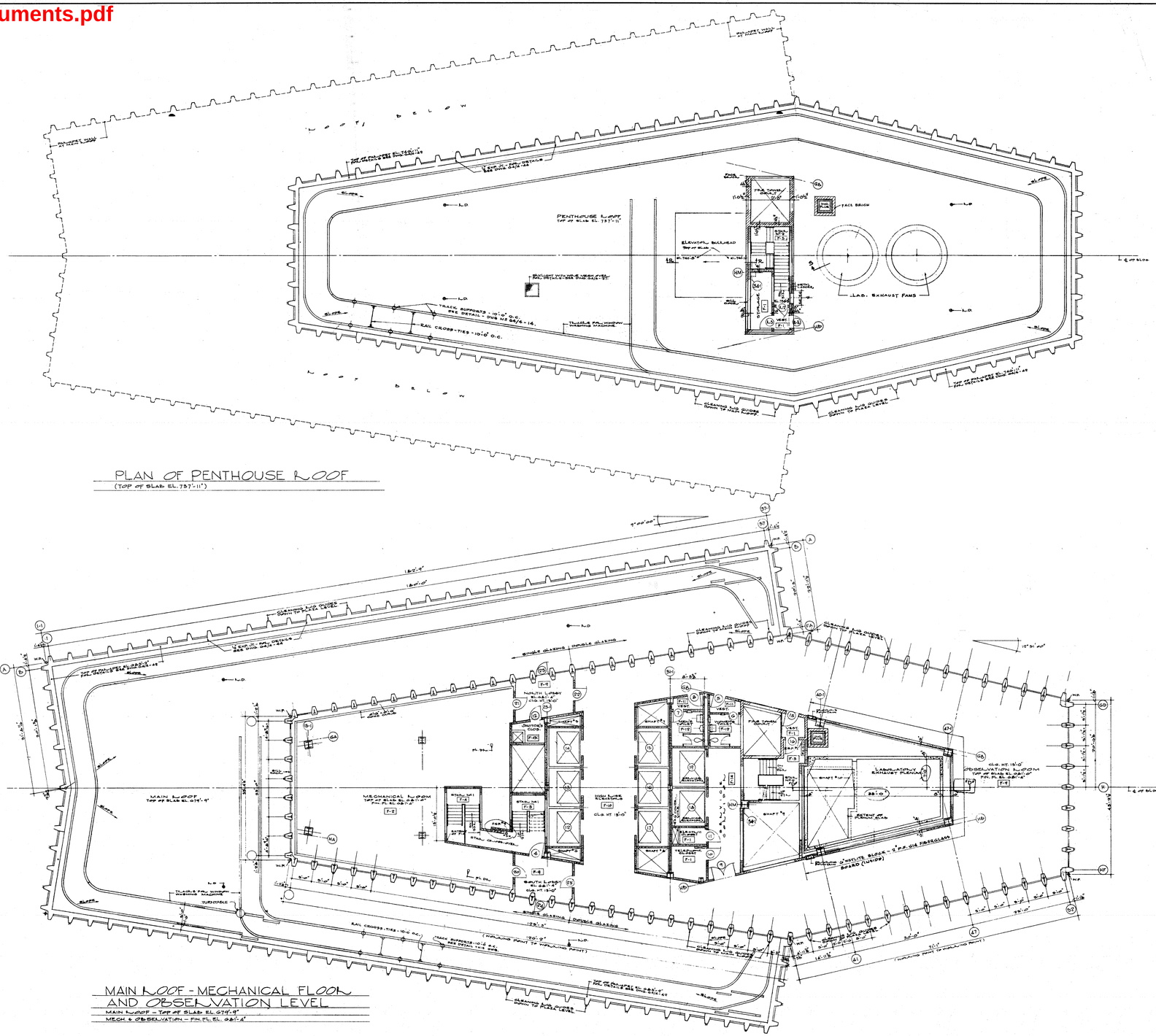
DRAWN BY	JWF
CHECKED BY	LB
SCALE	1/8"=1'-0"
APPR.	

ELECTRICAL
EL 415'-0" & EL 431'-10"
LIGHT & POWER

STATE OF NEW YORK
OFFICE OF GENERAL SERVICES
CYRIL SCHUYLER - COMMISSIONER
DEPARTMENT OF PUBLIC WORKS — D. B. WINDSOR, SUPERINTENDENT
DIVISION OF ARCHITECTURE — D. S. KAMICKI, STATE ARCHITECT

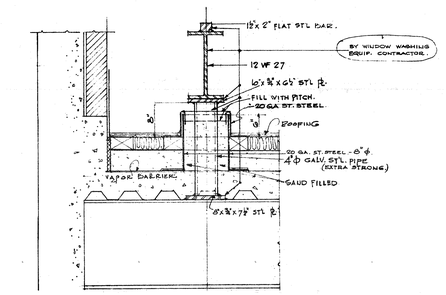
PROJECT NO.	20183
SPECIFICATION NO.	20183
DATE	7-28-66
DRAWING NO.	64/8-9

Agency Rig Documents.pdf



PLAN OF PENTHOUSE ROOF

(TOP OF SLAB EL. 757'-11")



TYP. DETAIL OF PITCH POCKET FOR WINDOW WASHING MACHINE TRACK SUPPORTS

SCALE: 1½" = 1'-0"

MAIN ROOF - MECHANICAL FLOOR AND OBSERVATION LEVEL

MAIN ROOF - TOP OF SLAB EL. 679'-9"

MECH. & OBSERVATION - FIN. FL. EL. 698'-6"

REFERENCE SHOP DWG'S

MANDINGS & LEVIS

EV-E7205 - ROOF TRACK LAYOUTS WINDOW WASHING MACHINE

AS-BUILT

N

HARRISON & ABRAMOVITZ

ARCHITECTS

630 FIFTH AVENUE NEW YORK 20, N. Y.

REV	DATE	ISSUED TO
1	6-1-74	AS BUILT

ALBANY, NEW YORK

ALBANY SOUTH MALL PROJECT

OFFICE TOWER

DRAWN BY	B.M.
CHECKED BY	J.C.B.
SCALE	1/8", 1/4", 1/2", 1"=1'-0"
APPROVED BY	O.G.S.
R.P.M.	

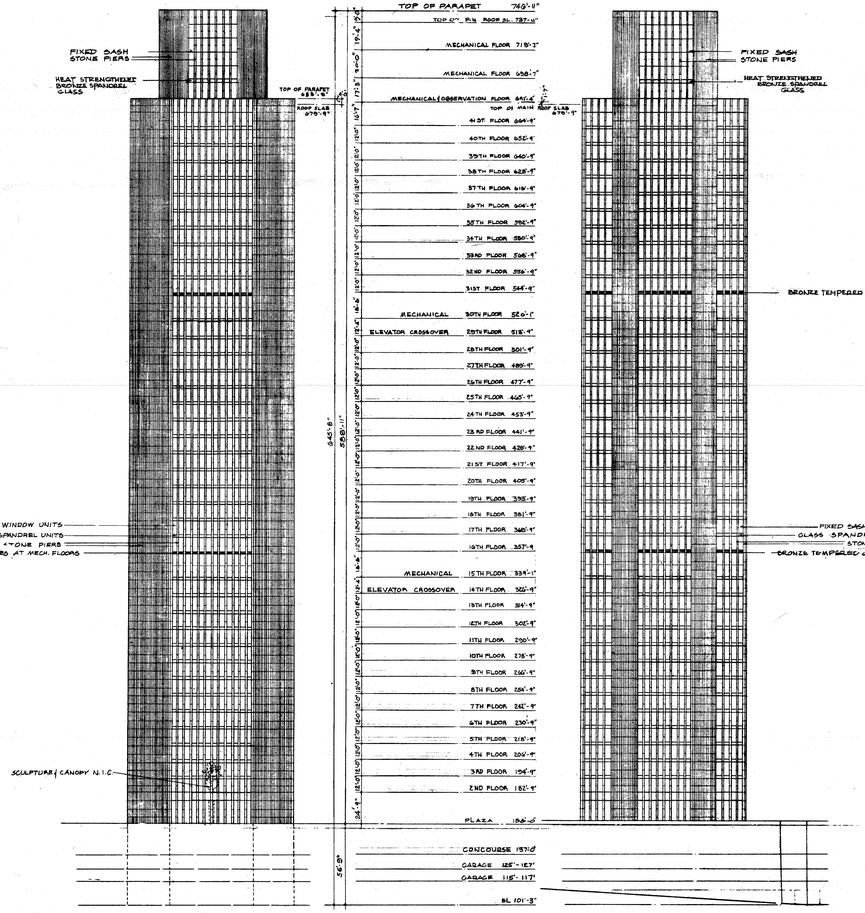
POWER OPERATED PLATFORMS

SCHEMATIC OF WINDOW WASHING MACHINE TRACK LAYOUT

STATE OF NEW YORK
OFFICE OF GENERAL SERVICES
C.W.A. SCHUYLER - COMMISSIONER
DEPARTMENT OF PUBLIC WORKS — J. D. McGRAHAN, SUPERINTENDENT
DIVISION OF ARCHITECTURE — C. T. KAMPERS, STATE AR...ITECT

PROJECT NO.	20703
SPECIFICATION NO.	20703
DATE	JULY 22, 1966
DRAWING NO.	64/14-1

Agency Rig Documents.pdf



AS-BUILT

HARRISON & ABRAMOVITZ
ARCHITECTS
630 FIFTH AVENUE NEW YORK 20, N. Y.

REV	DATE	ISSUED TO
1	5/9/66	REVISED TO SHOW THE INTRODUCTION OF ADDENDUM DWG. STR-6A1A - 5/A & DWG. DWG. 6A-4A & 6A1A-4A.
2	6-1-74	AS BUILT

ALBANY, NEW YORK

ALBANY SOUTH MALL PROJECT

OFFICE TOWER

DRAWN BY	B.M.
CHECKED BY	J.O'B.
SCALE	1/32"=1'-0"
APPROVED BY	S.R.K.

POWER OPERATED PLATFORMS

TYPICAL ELEVATIONS

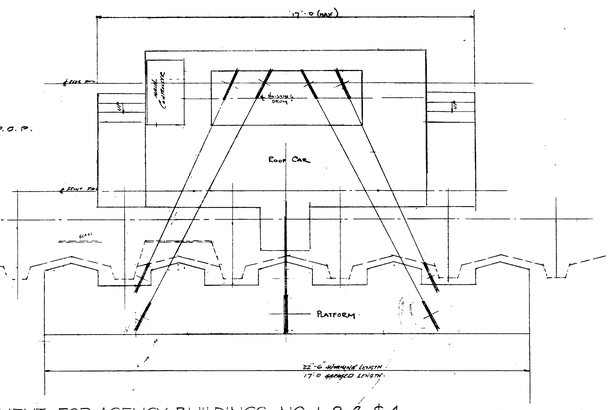
STATE OF NEW YORK
OFFICE OF GENERAL SERVICES
C.V.R. SCHUYLER - COMMISSIONER
DEPARTMENT OF PUBLIC WORKS - J. B. McMORRAN, SUPERINTENDENT
DIVISION OF ARCHITECTURE - C. S. KAMEDAI, STATE ARCHITECT

PROJECT NO.	20706
SPECIFICATION NO.	20706.C
DATE	JULY 12, 1966
DRAWING NO.	64/14-2

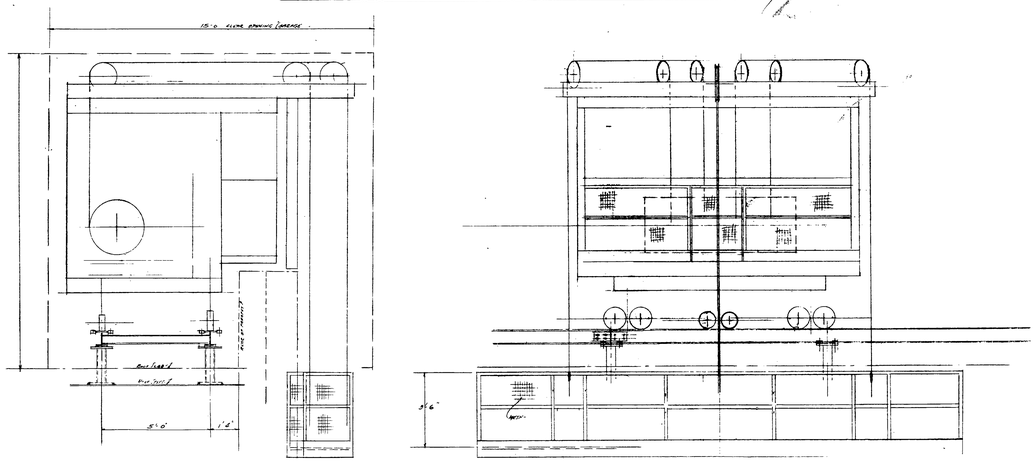
Agency Rig Documents.pdf

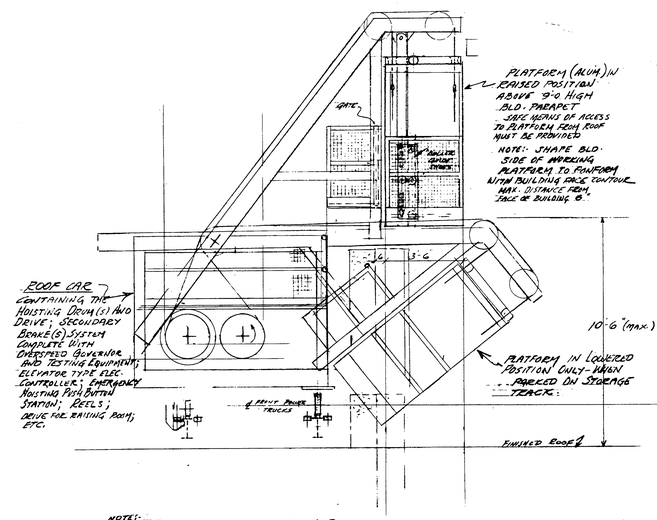
REFERENCE SHOP DWG'S
MANNING & LEWIS

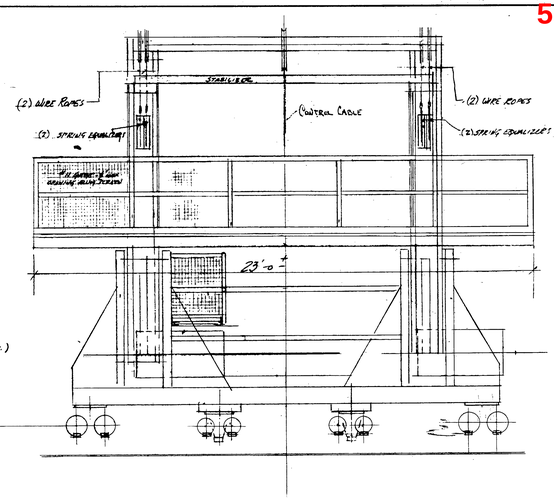
CV-27332	GUIDE SHOE ROLLERS
DW-27343	MULLION POSITIONING PAN
EW-27308	FRONT TRUCK ASSEMBLY
EV-27309	GENERAL ASSEMBLY
EW-27310	WORKING PLATFORM
EV-27311	DRUM TRUCK ASSEMBLY
EV-27313	REAR TRUCK ASSEMBLY
EV-27332	ROOF CAR STRUCTURE
DW-220681	SINGLE WHEEL FRONT TRUCK
CV-220671	DOUBLE WHEEL FRONT TRUCK
DW-27333	ROLLER ARRANGEMENT - PLATFORM GUIDE SHOES - P.O.P.
CV-27332	GUIDE SHOE ROLLERS
EW-27398	WIRING DIAGRAM



SCHEMATIC EQUIPMENT FOR AGENCY BUILDINGS NO. 1, 2, 3 & 4

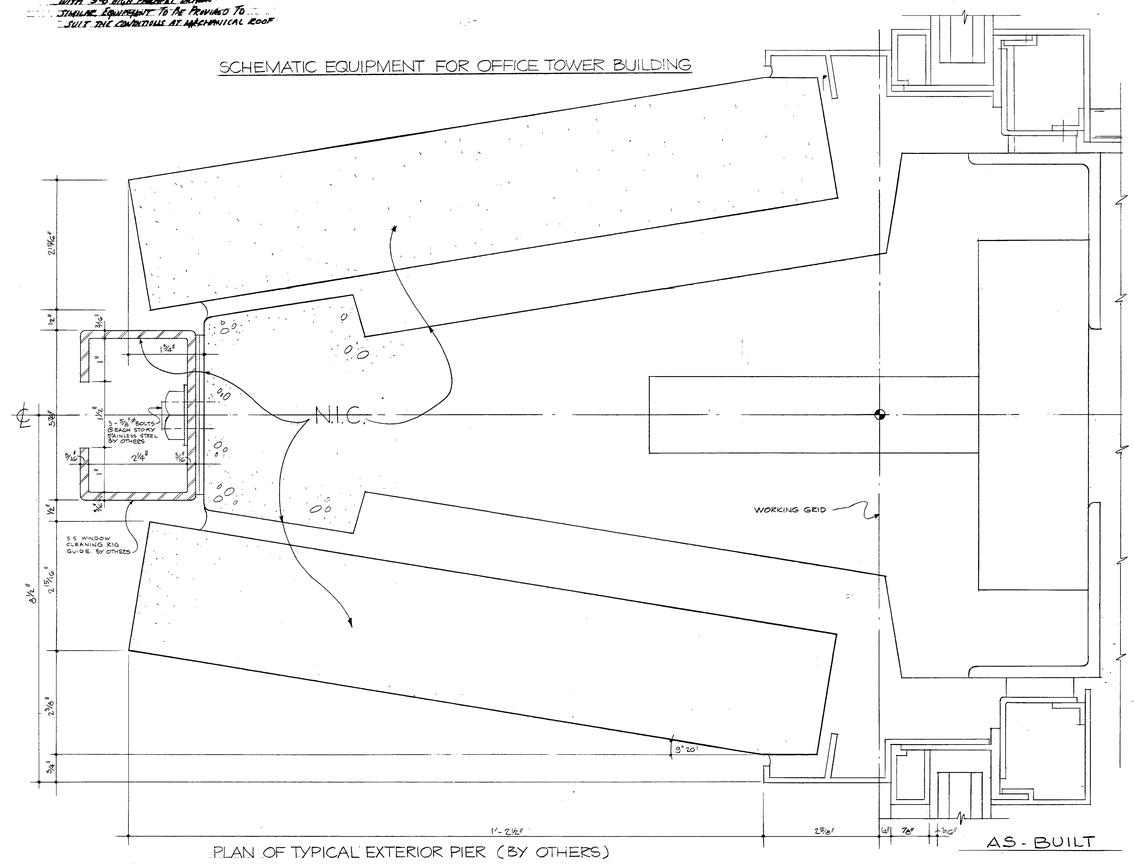






NOTE:
SCHEMATIC EQUIPMENT FOR TOWER ROOF WITH 3'-0 HIGH PARAPET SHOWN - SIMILAR EQUIPMENT TO BE PROVIDED TO SUIT THE CONDITIONS AT MECHANICAL ROOF

SCHEMATIC EQUIPMENT FOR OFFICE TOWER BUILDING



PLAN OF TYPICAL EXTERIOR PIER (BY OTHERS)

AS-BUILT

HARRISON & ABRAMOVITZ
ARCHITECTS
630 FIFTH AVENUE NEW YORK 20, N. Y.

REV	DATE	ISSUED TO
1	6-1-74	AS BUILT

ALBANY, NEW YORK

ALBANY SOUTH MALL PROJECT

OFFICE TOWER & AGENCY BUILDINGS NO. 1, 2, 3 & 4

DRAWN BY	E. M.
CHECKED BY	J. O'B.
SCALE	NO SCALE
APPROVED BY G.E.S.	
A.P.M.	

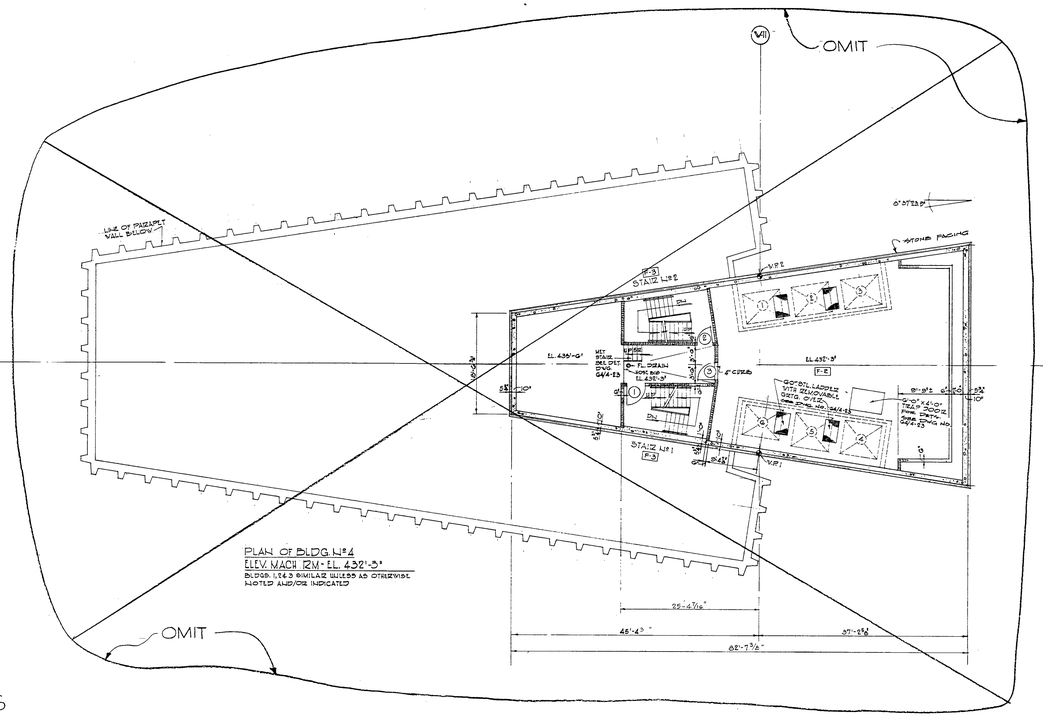
POWER OPERATED PLATFORMS

SCHEMATIC WINDOW WASHING EQUIPMENT

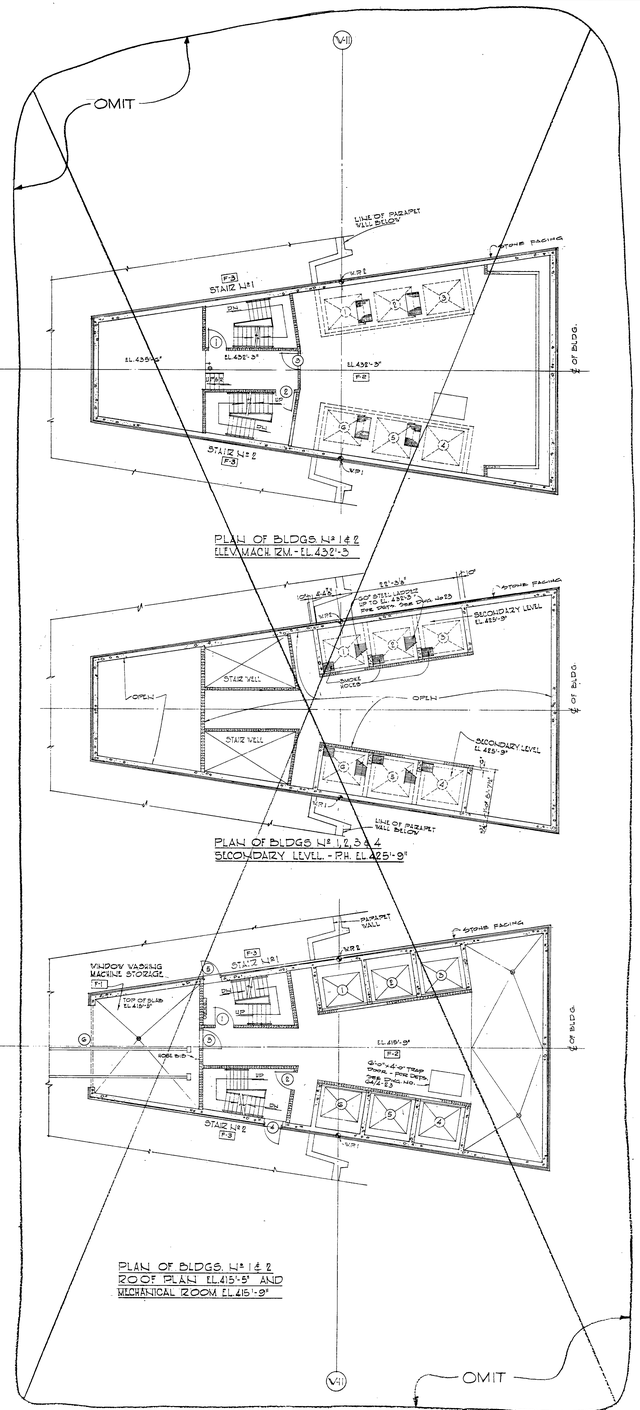
STATE OF NEW YORK
OFFICE OF GENERAL SERVICES
DAVA. WINGFIELD - COMMISSIONER
DEPARTMENT OF PUBLIC WORKS - J. S. ROSS, SUPERINTENDENT
DIVISION OF ARCHITECTURE - G. D. HAWKINS, STATE ARCHITECT

PROJECT NO.	20703
SPECIFICATION NO.	20703 C
DATE	JULY 22, 1966
DRAWING NO.	C4/14-5

Agency Rig Documents.pdf



PLAN OF BLDG. Nº 4
ELEV. MACH. RM - EL 432'-3"
BLDGS. 1, 2 & 3 SIMILAR UNLESS AS OTHERWISE NOTED AND/OR INDICATED



PLAN OF BLDGS Nº 1 & 2
ELEV. MACH. RM. - EL 432'-3"

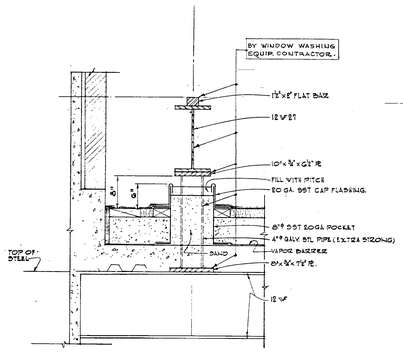
PLAN OF BLDGS Nº 1, 2, 3 & 4
SECONDARY LEVEL - PH. EL 425'-9"

PLAN OF BLDGS. Nº 1 & 2
ROOF PLAN EL 415'-5" AND
MECHANICAL ROOM EL 415'-9"

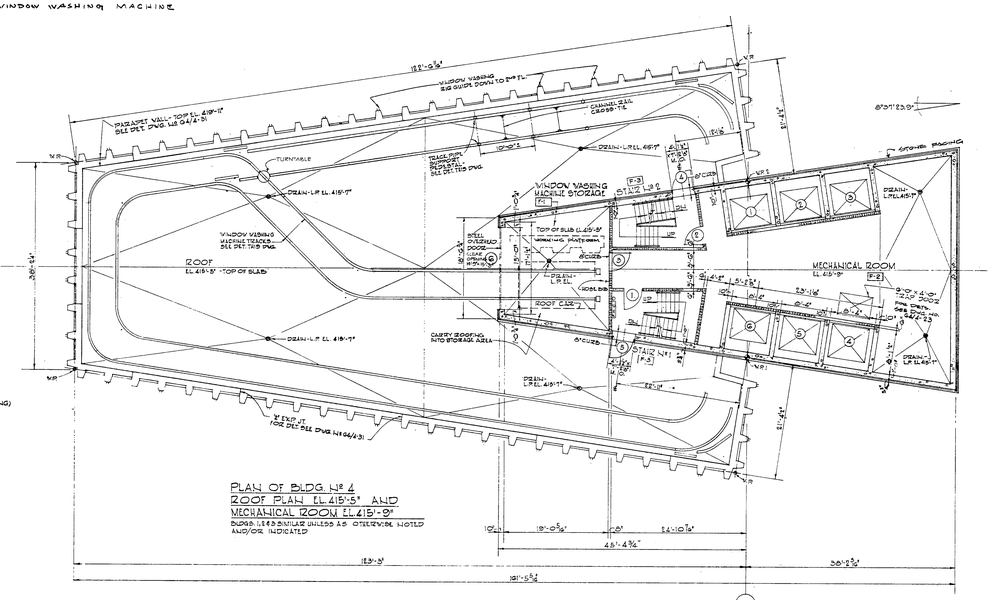
REFERENCE SHOP DWG'S

MANNING & LEWIS

EV-27303 ROOF TRACK PARKING AREA
DW-27302-1 ROOF TRACK LAYOUT WINDOW WASHING MACHINE
DW-27305-1 ROOF TRACK CORNERS WEST WALL WINDOW WASHING MACHINE



TYPICAL DETAIL FOR WINDOW WASHING MACHINE TRACK SUPPORTS
SCALE: 1"=1'-0"



PLAN OF BLDG. Nº 4
ROOF PLAN EL 415'-5" AND
MECHANICAL ROOM EL 415'-9"
BLDGS. 1, 2 & 3 SIMILAR UNLESS AS OTHERWISE NOTED AND/OR INDICATED

AS - BUILT

1	10/74	AS BUILT									
REV	DATE	ISSUED TO	REV	DATE	ISSUED TO	REV	DATE	ISSUED TO	REV	DATE	ISSUED TO

HARRISON & ABRAMOVITZ
ARCHITECTS
630 FIFTH AVENUE NEW YORK 20, N. Y.

ALBANY, NEW YORK
ALBANY SOUTH MALL PROJECT
AGENCY BUILDINGS 1, 2, 3 & 4

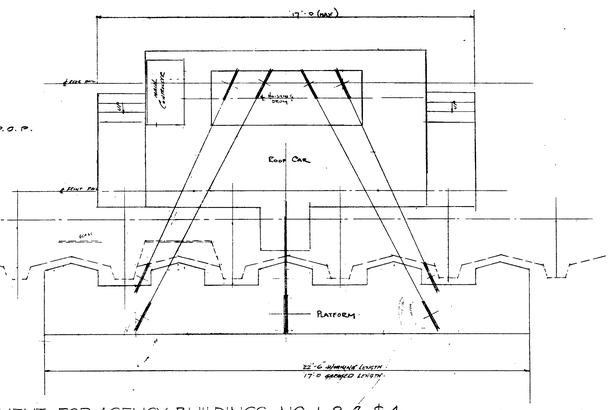
DRAWN BY: B.M.	POWER OPERATED PLATFORMS	PROJECT NO: 20703.
CHECKED BY: J.D.S.	SCHEMATIC OF WINDOW WASHING MACHINE TRACK LAYOUT	SPECIFICATION NO: 20703 C
SCALE: 1/8"=1'-0"		DATE: JULY 22, 1966
APPROVED BY D.G.S.	STATE OF NEW YORK OFFICE OF GENERAL SERVICES C.V.K. BOWSTEAD - COMMISSIONER	
R.P.M.	DEPARTMENT OF PUBLIC WORKS J. D. McMORRAN, SUPERINTENDENT DIVISION OF ARCHITECTURE C. I. KAMENOS, STATE ARCHITECT	DRAWING NO: G4/4-3

Agency Rig Documents.pdf

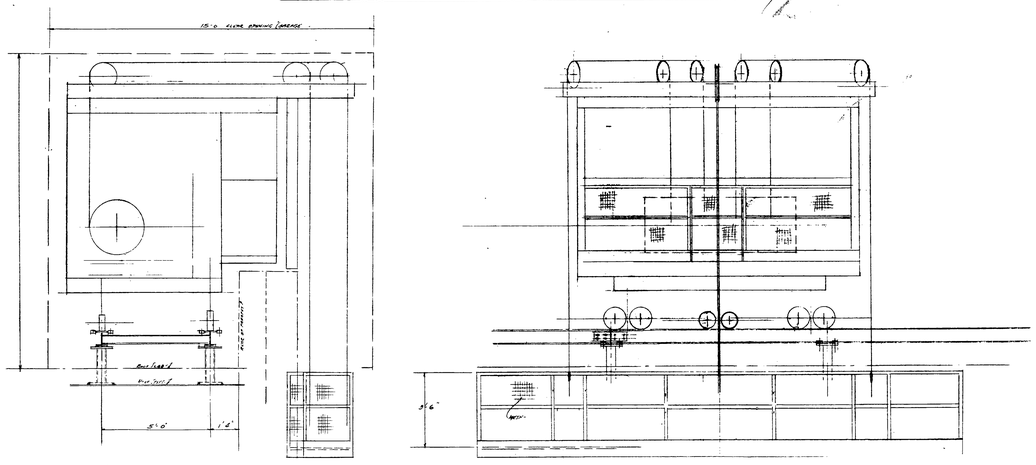
REFERENCE SHOP DWG'S

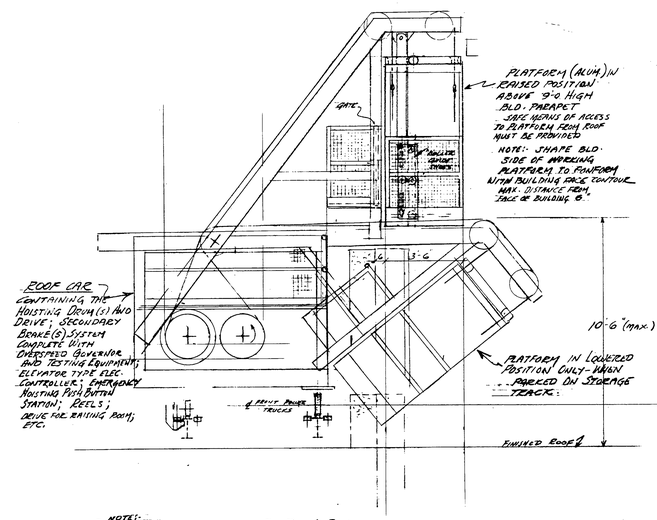
MANNING & LEWIS

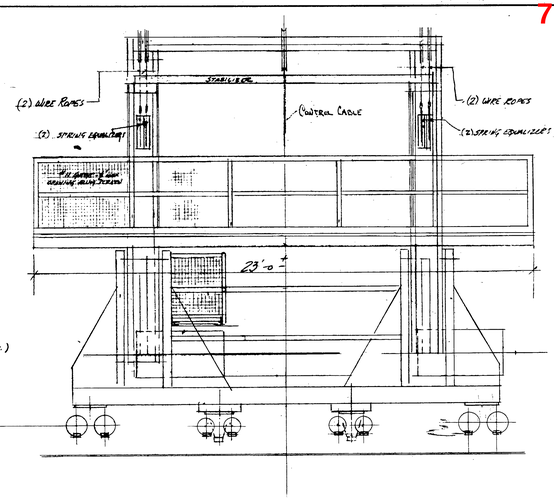
CV-27332	GUIDE SHOE ROLLERS
DW-27343	MULLION POSITIONING PAN
EW-27308	FRONT TRUCK ASSEMBLY
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EW-27310	WORKING PLATFORM
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DW-27333	ROLLER ARRANGEMENT - PLATFORM GUIDE SHOES - P.O.P.
CV-27332	GUIDE SHOE ROLLERS
EW-27398	WIRING DIAGRAM



SCHEMATIC EQUIPMENT FOR AGENCY BUILDINGS NO. 1, 2, 3 & 4

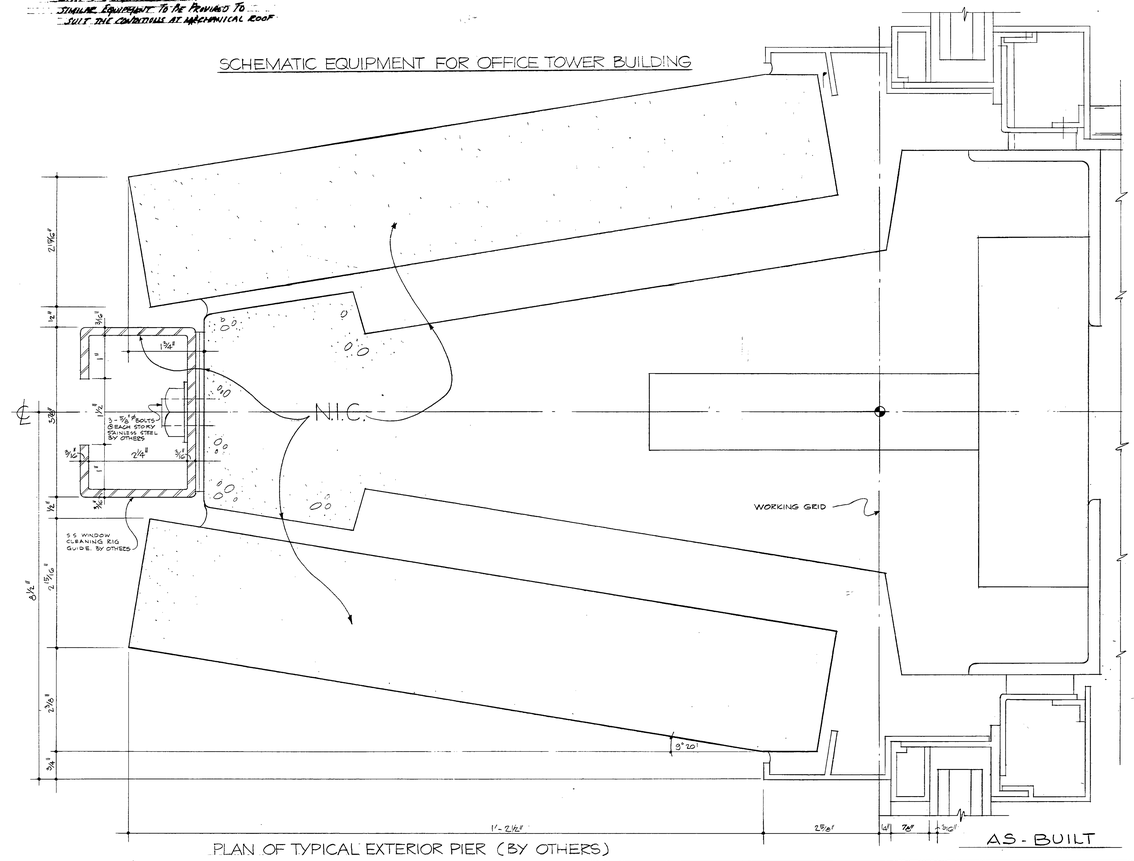






NOTE:-
SCHEMATIC EQUIPMENT FOR TOWER ROOF WITH 3'-0 HIGH PARAPET SHOWN - SIMILAR EQUIPMENT TO BE PROVIDED TO SUIT THE CONDITIONS AT MECHANICAL ROOF

SCHEMATIC EQUIPMENT FOR OFFICE TOWER BUILDING



PLAN OF TYPICAL EXTERIOR PIER (BY OTHERS)

AS-BUILT

HARRISON & ABRAMOVITZ
ARCHITECTS
630 FIFTH AVENUE NEW YORK 20, N. Y.

REV	DATE	ISSUED TO
1	6-1-74	AS BUILT

ALBANY, NEW YORK

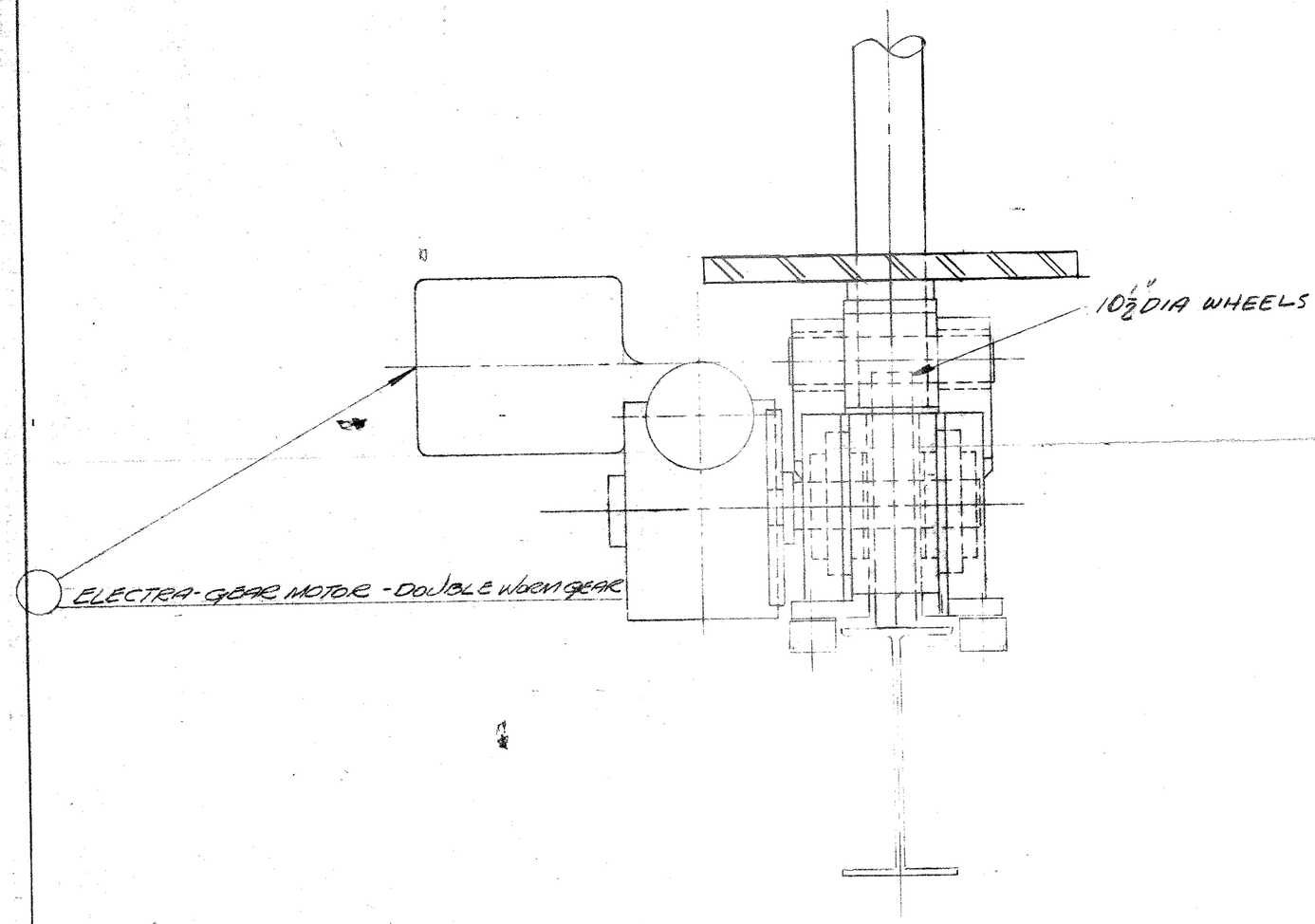
ALBANY SOUTH MALL PROJECT

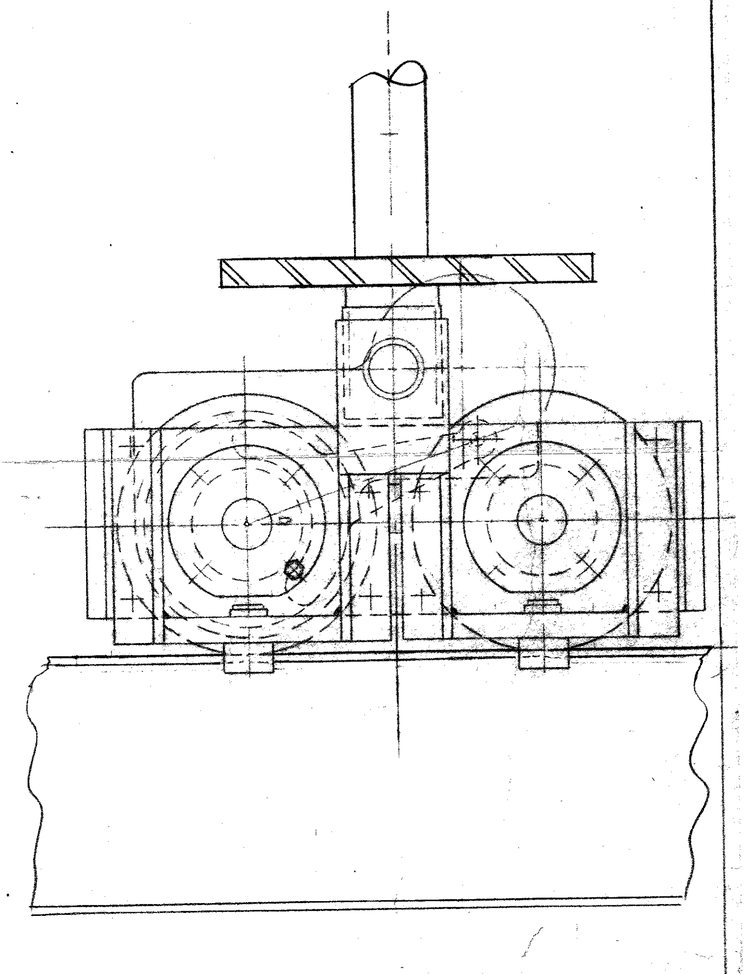
OFFICE TOWER & AGENCY BUILDINGS NO. 1, 2, 3 & 4

DRAWN BY: E. M.	POWER OPERATED PLATFORMS
CHECKED BY: J. O'B.	SCHEMATIC WINDOW WASHING EQUIPMENT
SCALE: NO SCALE	DATE: JULY 22, 1966
APPROVED BY: G.E.S.	
A.P.W.	

STATE OF NEW YORK
OFFICE OF GENERAL SERVICES
DAVA. WOMPLER - COMMISSIONER
DEPARTMENT OF PUBLIC WORKS - E.S. BOOR, SUPERINTENDENT
DIVISION OF ARCHITECTURE - G. D. RAWCROS, STATE ARCHITECT

PROJECT NO.	20703
SPECIFICATION NO.	20703 C
DRAWING NO.	C4/14-5

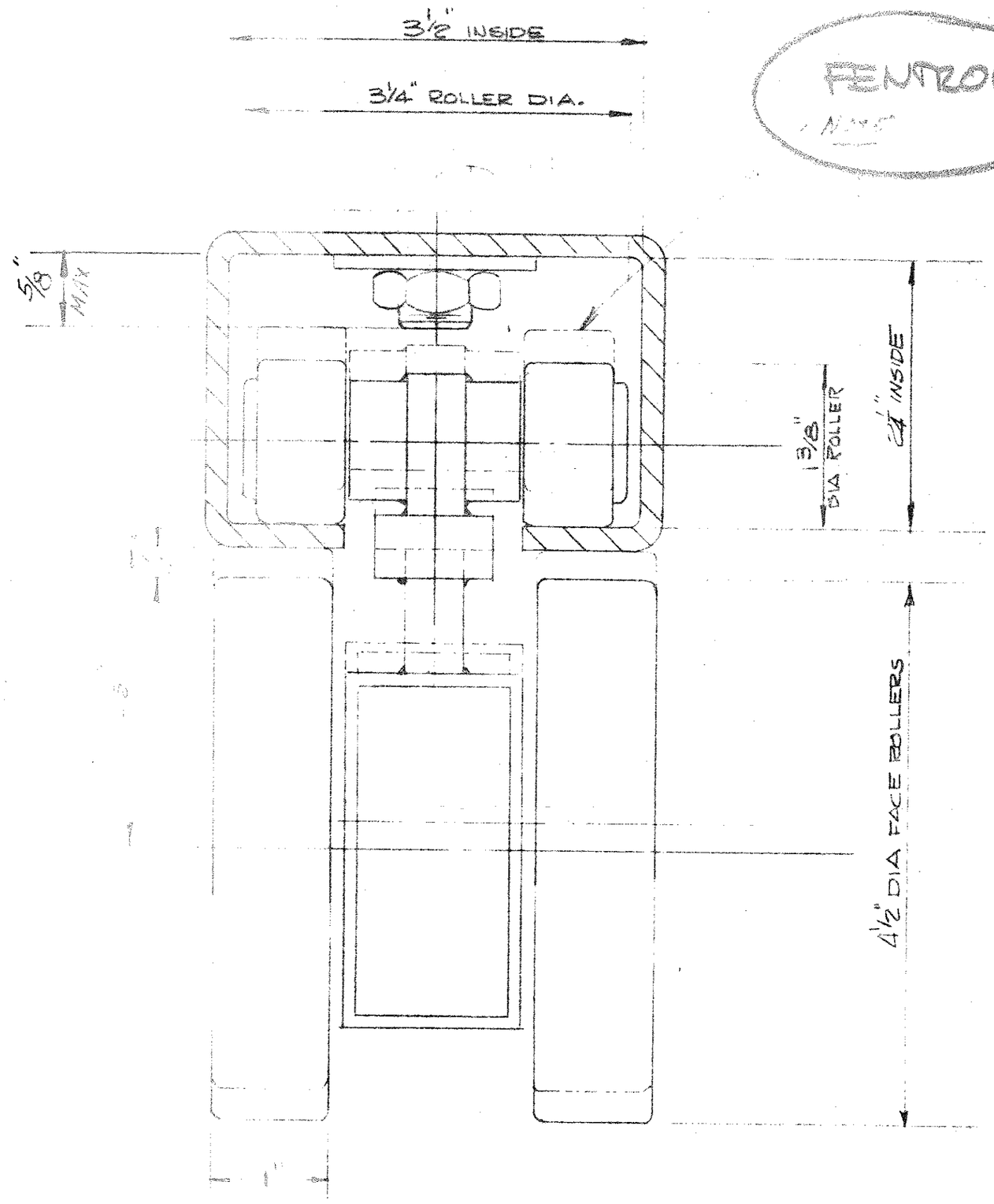




MANNING & LEWIS ENG. CO.
Union, N. J.

DOUBLE WHEEL FRONT TRUCK
STANDARD
WINDOW WASHING MACHINE

SCALE	MADE	DATE		DRAWING No.
3"=1Ft.	VEI	2-3-67		CW-22067



FENTRON

RECEIVED
OCT 23 1967
HARRISON & ABRAMOVITZ

OCT 31 1967

TO BE COORDINATED WORK BY OTHERS

FIRST SUBMISSION -10-19-67

CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD.

THIS DRAWING HAS BEEN CHECKED FOR ARCHITECTURAL DIMENSIONS AND DESIGN ONLY, NOT RESPONSIBLE FOR CONSTRUCTION AND QUANTITIES,
DISAPPROVED AS NOTED
RESUBMIT
APPROVED
APPROVED AS NOTED 10/30/67

HARRISON AND ABRAMOVITZ
ARCHITECTS
630 FIFTH AVE. NEW YORK 20

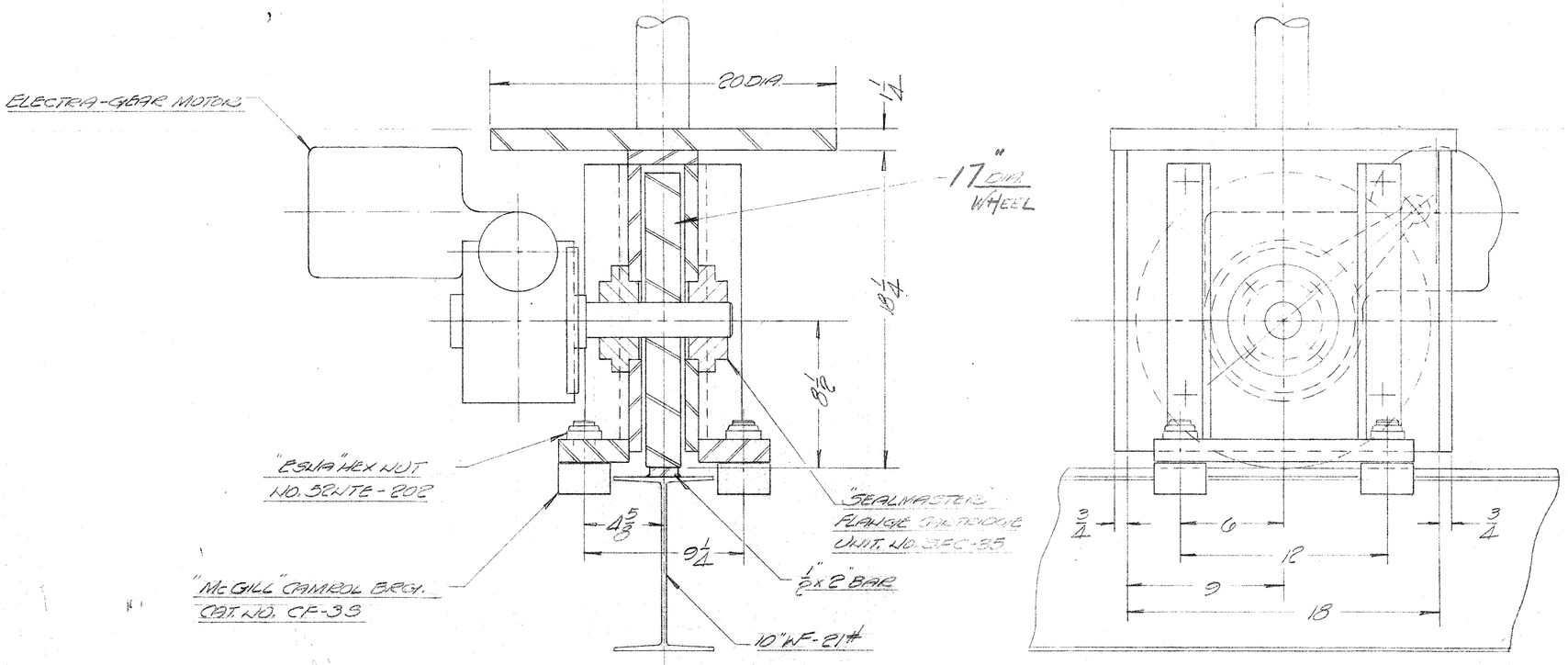
REV.		BY	DATE

MANNING & LEWIS ENGINEERING CO.
675 RAHWAY AVE.
UNION, N. J.

GUIDE SHOE ROLLERS
WINDOW WASHING MACHINE
ALBANY MALL - AGENCY BUILDINGS

SCALE	MADE	DATE	CKD.	APPD.	DRAWING NO.
—	VEJ	10-18-67			CW-27332

JOB No. 16415
SUB. No.



DW-22066.

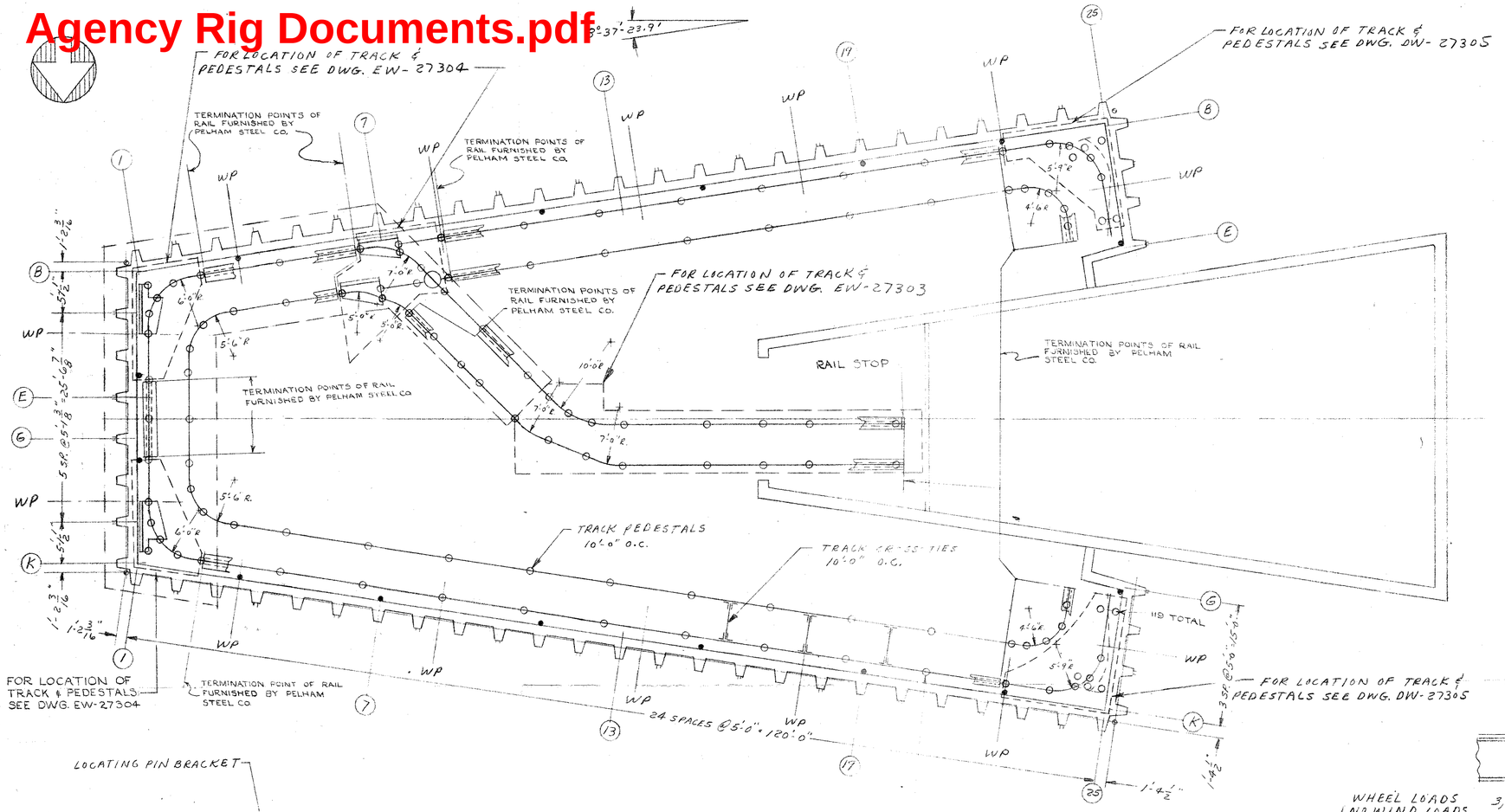
REV.		BY	DATE

MANNING & LEWIS ENGINEERING CO.
UNION, N. J.

SINGLE WHEEL FRONT TRUCK
STANDARD
WINDOW WASHING MACHINE

SCALE	MADE	DATE	CKD.	APPD.	DRAWING NO.
3" / FT	VEI	2-3-67			DW-22066

Agency Rig Documents.pdf



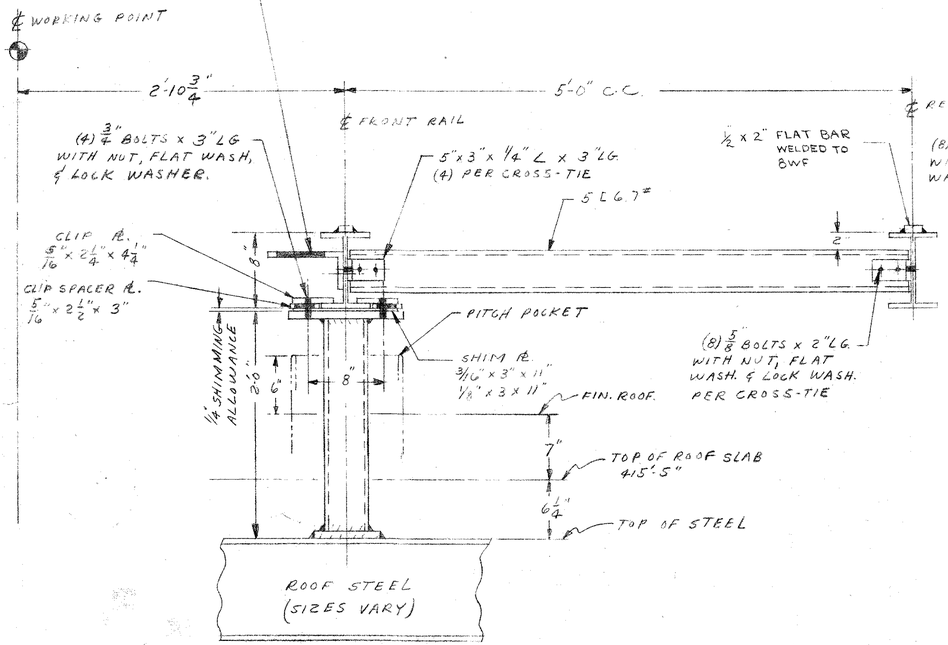
GENERAL NOTES

TRACK SUB-CONTRACTOR TO FURNISH ALL COMPONENTS & LABOR REQUIRED TO INSTALL THE FOUR COMPLETE TRACK SYSTEM SHOWN ON THIS DRAWING.

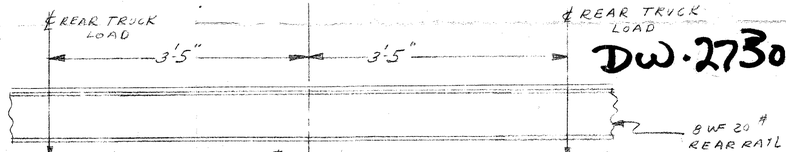
1. RAILS TO BE LEVELED BY SHIMMING SO THAT TOP OF EACH RAIL IS AT A COMMON ELEVATION WITH A TOLERANCE OF ± 1/4" IN 20'-0".
2. CENTERLINE OF FRONT RAIL TO BE PARALLEL WITH BUILDING FACE - TOLERANCE ± 1/4" IN 20'-0".
3. APPLY ONE SHOP COAT OF PAINT. FINISH COAT BY OTHERS.
4. TRACK SPLICES TO CONFORM TO STANDARDS INCLUDED IN A.I.S.C. MANUAL.
5. LOCATE ALL RAIL SPLICES OVER ℄ OF RAIL SUPPORT.

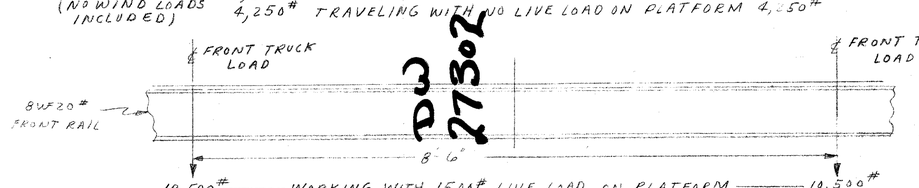
M&L ENG. CO. WILL FURNISH ALL TRACK SWITCHES TO THE SUB-CONTRACTOR FOR INSTALLATION.

M&L ENG. CO. WILL FURNISH APPROX. 480 TRACK PEDESTALS TO SUB-CONTRACTOR FOR INSTALLATION BY WELDING TO ROOF MEMBER. (APPROX. 120 PER ROOF).



119 TRACK SUPPORTS





ESTIMATED LOADS FOR DESIGN PURPOSES

NOTE: MAX. WHEEL LOADS ARE NOT CONCURRENT.

DW-27302

DW-27302

REFERENCE DRAWINGS

STRUCTURAL DRAWINGS - 64/3-5A
ARCHITECTURAL DRAWINGS 64/4-10
MANNING & LEWIS ENG. CO. DRAWINGS
EW-27303, EW-27304, & DW-27305

JOB NO. 16715
SUB NO. 983

REV.		BY	DATE
	1ST SUBMISSION 6-9-67		
1	ADDED ADDITIONAL INFORMATION FOR TRACK SUB CONTRACTORS		4-18-67

MANNING & LEWIS ENGINEERING CO.
UNION, N. J.

ROOF TRACK LAYOUT
WINDOW WASHING MACHINE
ALBANY MALL - AGENCY BLDGS. 1, 2, 3 & 4.

SCALE	MADE	DATE	CKD.	APPD.	DRAWING NO.
1/8"-1'-0"	R.P.S.	1-31-67			DW-27302-1



SPECIAL SWITCH UNIT, AND RAIL, FROM TERMINATION POINT SHOWN ENCLOSED, FURNISHED BY M&L ENG. CO. TO PELHAM STEEL CO. FOR INSTALLATION. (OPPOSITE BLD. CORNER OPPOSITE HAND)
LOCATION OF TRACK PEDESTALS TO BE DETERMINED AT A LATER DATE.

BUILDING CORNER (25)-(K) DRAWN DW-27305-

BUILDING CORNER (25)-(B) OPPOSITE HAND

REFERENCE DRAWING
ROOF TRACK LAYOUT - DW-27302
AMMANN & WHITNEY STRUCTURAL STEEL DWG. 6413-5A

OFFICE COPY

RECEIVED
AUG 11 1967
HARRISON & ABRAMOVITZ

JOB NO. 16415
SUB. NO. 983

REV.		BY	DATE
	FIRST SUBMISSION 5/29/67		
1	FINAL LOCATION OF ROOF MEMBERS AS SHOWN ADDED TRACK LOCATION & INFORMATION	RPS	6/6/67

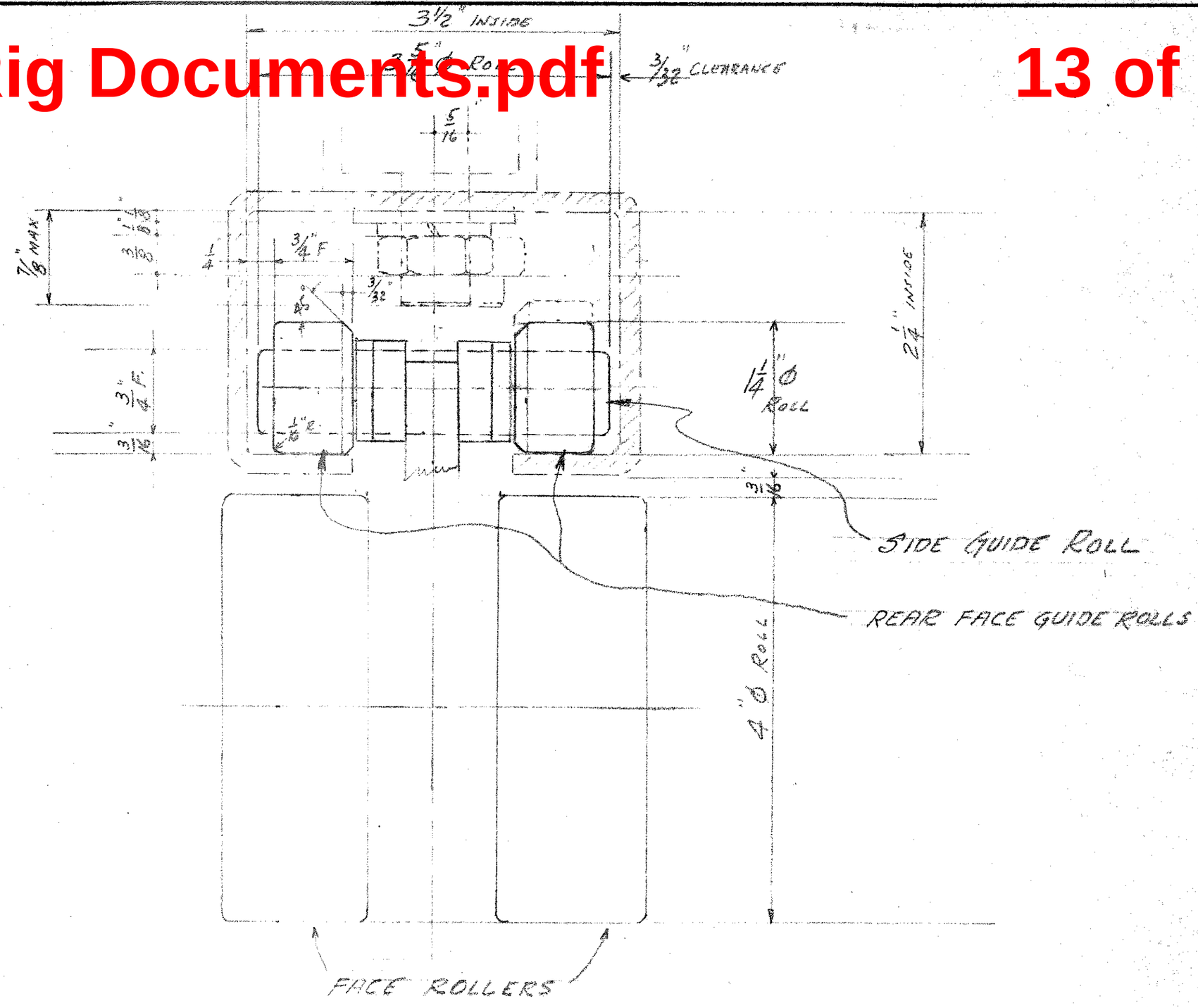
MANNING & LEWIS ENGINEERING CO.
UNION, N. J.

ROOF TRACK - CORNERS WEST WALL WINDOW WASHING MACHINE
ALBANY MALL - AGENCY BLDGS. 1, 2, 3 & 4

SCALE	MADE	DATE	CKD.	APPD.	DRAWING NO.
3/4"=1'-0"	R.P.S.	1-30-67			DW-27305-1

DEFIANCE NO. 167H 405

Agency Rig Documents.pdf



REFERENCE SKETCH ONLY

REPLACES & VOIDS DWG-EW-27237-1

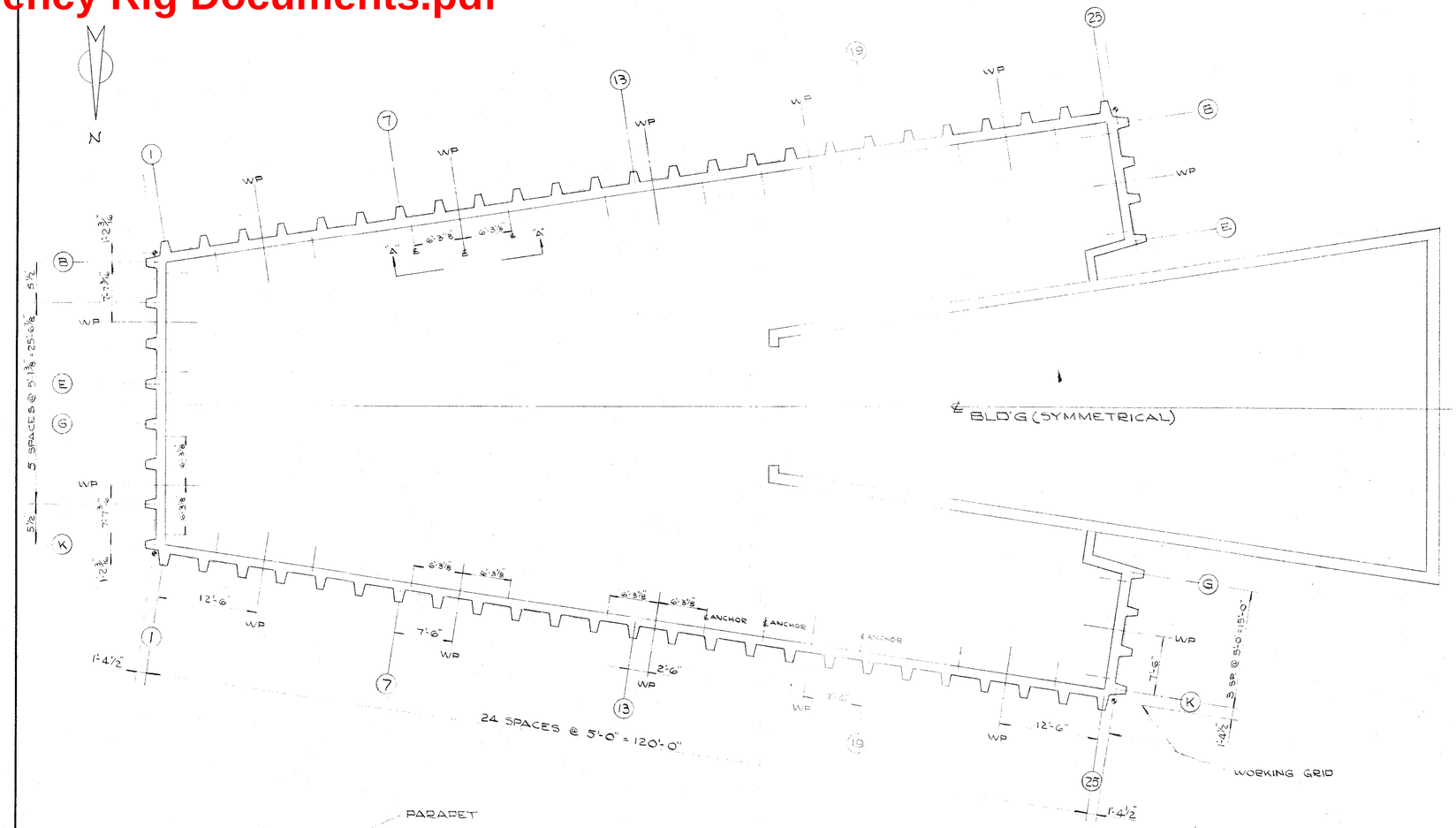
REV.		BY	DATE

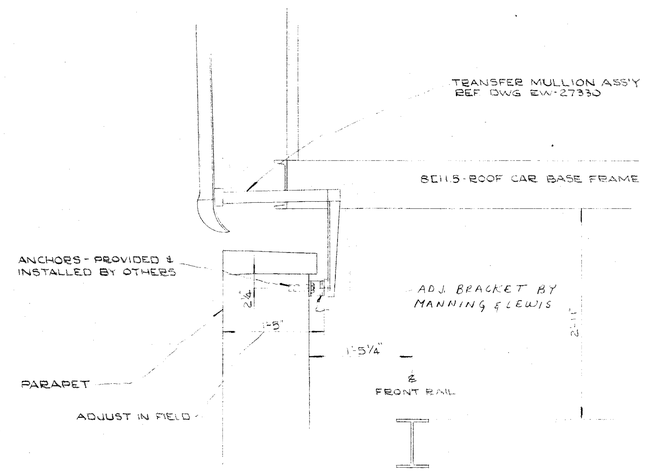
MANNING & LEWIS ENGINEERING CO.
UNION, N. J.

ROLLER ARRANGEMENT- PLATFORM GUIDE SHOES- POWER OPERATED PLATFORM ALBANY MALL- AGENCY & TOWER BLDGS

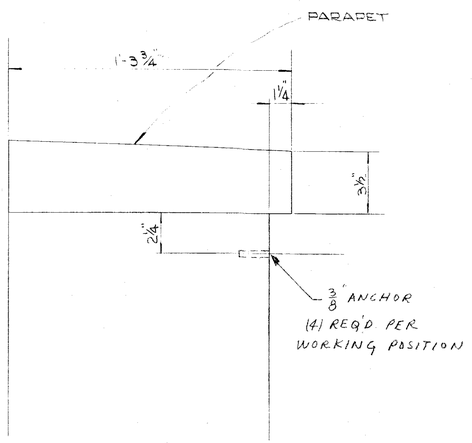
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FULL	R	11/26/67			DW-27333

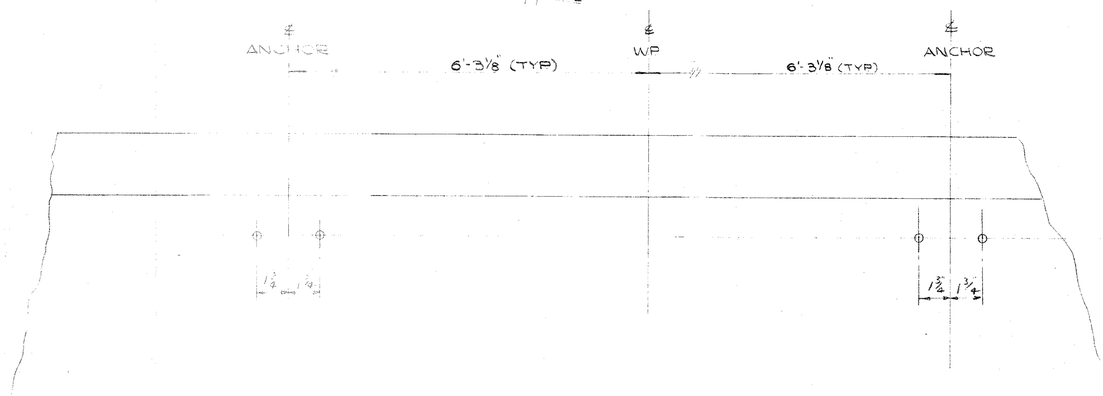
Agency Rig Documents.pdf





END ELEVATION SHOWING TRANSFER MULLION & ADJUSTABLE STOPS





SECTION "A-A"

ANCHOR BOLT LOCATION - (56) PLACES PER BLD'G (4 ANCHORS/WP
(224) TOTAL REQ'D FOR [illegible] BLD'GS.

3"=1'-0"

GEORGE A. FULLER CO. INC.
RECEIVED AT FIELD OFFICE OF
G. F. LODGE-PROJECT MGR.
MAR 03 '69

REFERRED TO
SOUTH MALL PROJECTS

JOB# 16415
5-1097

REV.		BY	DATE

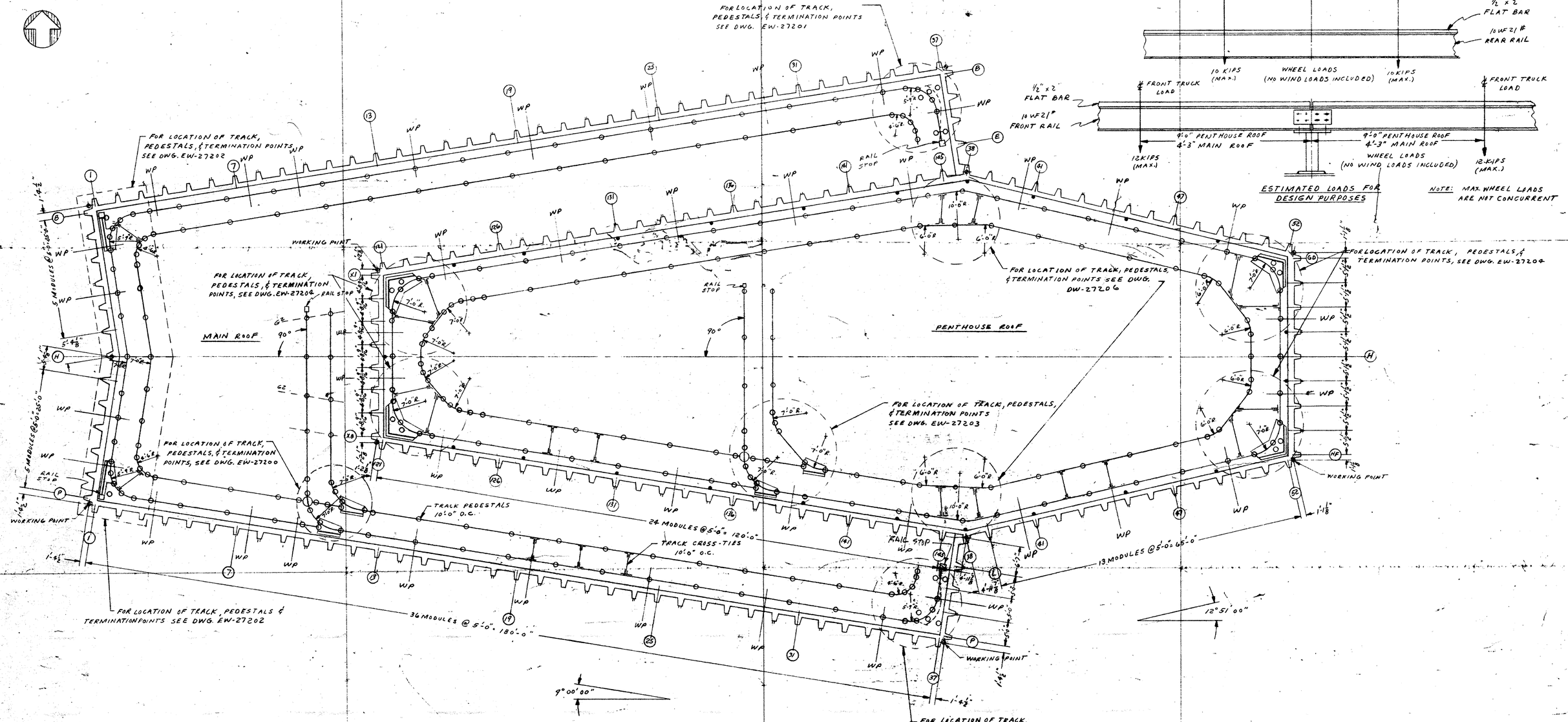
MANNING & LEWIS ENGINEERING CO.
UNION, N. J.

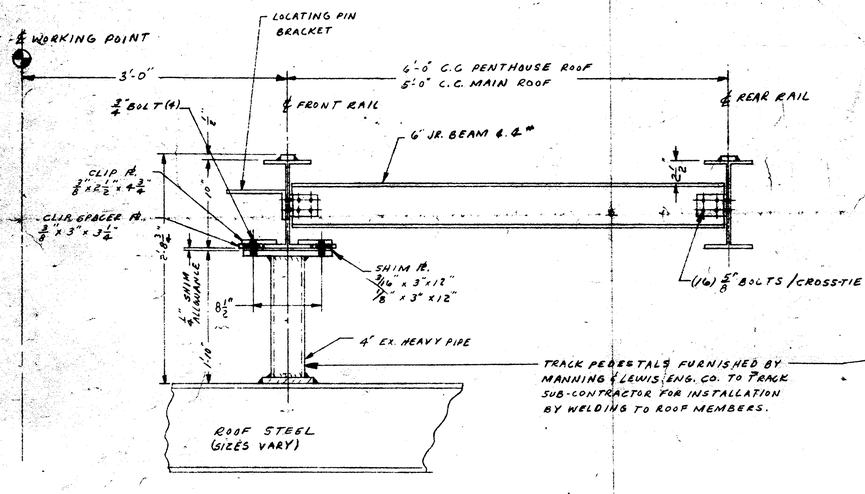
MULLION POSITIONING PAD
WINDOW WASHING MACHINE
ALBANY MALL AGENCY BLDGS

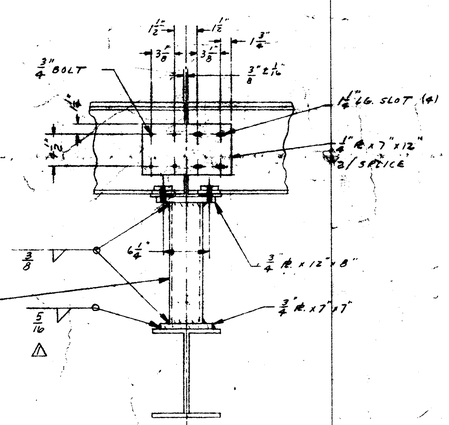
SCALE	MADE	DATE	CK'D.	APP'D.	DRAWING NO.
⅛"=1'-0"	JFS	10/15/68			D-W 27343

DEFIANCE NO. 1000H 893

Agency Rig Documents.pdf







GENERAL NOTES

TRACK SUBCONTRACTOR, TO FURNISH, ALL COMPONENTS AND LABOR REQUIRED TO INSTALL THE TWO COMPLETE TRACK SYSTEMS SHOWN ON THIS DRAWING.

1. RAILS TO BE LEVELED BY SHIMMING SO THAT TOP OF EACH RAIL IS AT A COMMON ELEVATION WITH A TOLERANCE OF ± 1/4 IN 20'.
2. CENTER LINE OF FRONT RAIL TO BE PARALLEL WITH BUILDING FACE - TOLERANCE ± 1/4" IN 20'
3. APPLY ONE SHOP COAT OF PAINT. FINISH COAT BY OTHERS
4. TRACK SPLICES TO CONFORM TO STANDARDS INCLUDED IN A.I.S.C. MANUAL.
5. LOCATE ALL RAIL SPLICES OVER ℄ OF RAIL SUPPORTS.

M&L ENG. CO. WILL FURNISH ALL TRACK SWITCHES TO SUB CONTRACTOR FOR INSTALLATION.
M&L ENG. CO. WILL FURNISH APPROX. 300 TRACK PEDESTALS TO SUB CONTRACTOR FOR INSTALLATION BY WELDING TO ROOF MEMBERS.

REFERENCE DRAWINGS

STRUCTURAL DRAWINGS - 64/3-11A, 64/3-9A
⚠ ARCHITECTURAL DRAWING - 64/4-14, 64/4-15
MANNING & LEWIS ENG. CO. DRAWINGS
EW-27200, EW-27201, EW-27202,
EW-27203, EW-27204, & EW-27206

CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD.
THIS DRAWING HAS BEEN CHECKED FOR ARCHITECTURAL DIMENSIONS AND DESIGN ONLY, NOT RESPONSIBLE FOR CONSTRUCTION AND QUANTITIES.
DISAPPROVED AS NOTED
RESUBMIT
APPROVED 6-20-67
APPROVED AS NOTED
HARRISON AND ABRAMOVITZ ARCHITECTS 730 FIFTH AVE. NEW YORK 19

APPROVED FOR ARCHITECTURAL DIMENSIONS ONLY

RECEIVED JUN 16 1967 HARRISON & ABRAMOVITZ

RECEIVED AT OFFICE OF GEORGE A. FULLER COMPANY INC. JUN 16 1967 REFERRED TO

RECEIVED AT OFFICE OF GEORGE A. FULLER COMPANY INC. JUN 21 1967 REFERRED TO

REV.		BY	DATE
	2ND SUBMISSION 6/15/67		
1	S.C. WELD WAS 1/2 ARCH. REF. DWG. WAS 64/4-1 1ST SUBMISSION 4/18/67	P.P.S.	6/21/67

MANNING & LEWIS ENGINEERING CO.
675 RAHWAY AVE.
UNION, N. J.

ROOF TRACK LAYOUTS
WINDOW WASHING MACHINE
ALBANY MALL - TOWER BLDG.

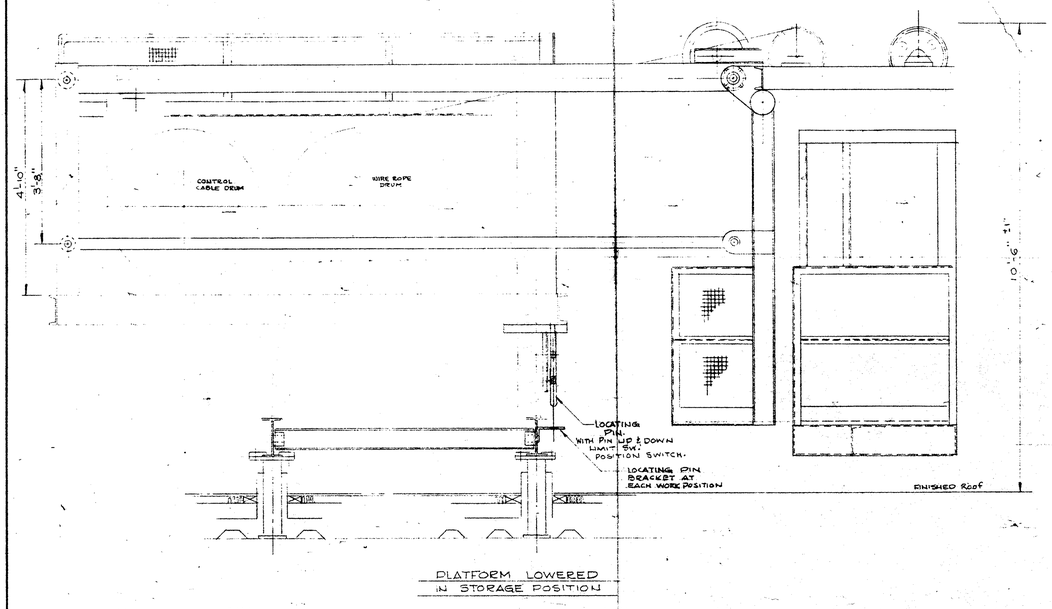
SCALE	MADE	DATE	CKD.	APPD.	DRAWING NO.
1/8"=1'-0"	P.P.S.	1-1967			EW-27205 / 1

JOB No. 16345
SUB. No. 965

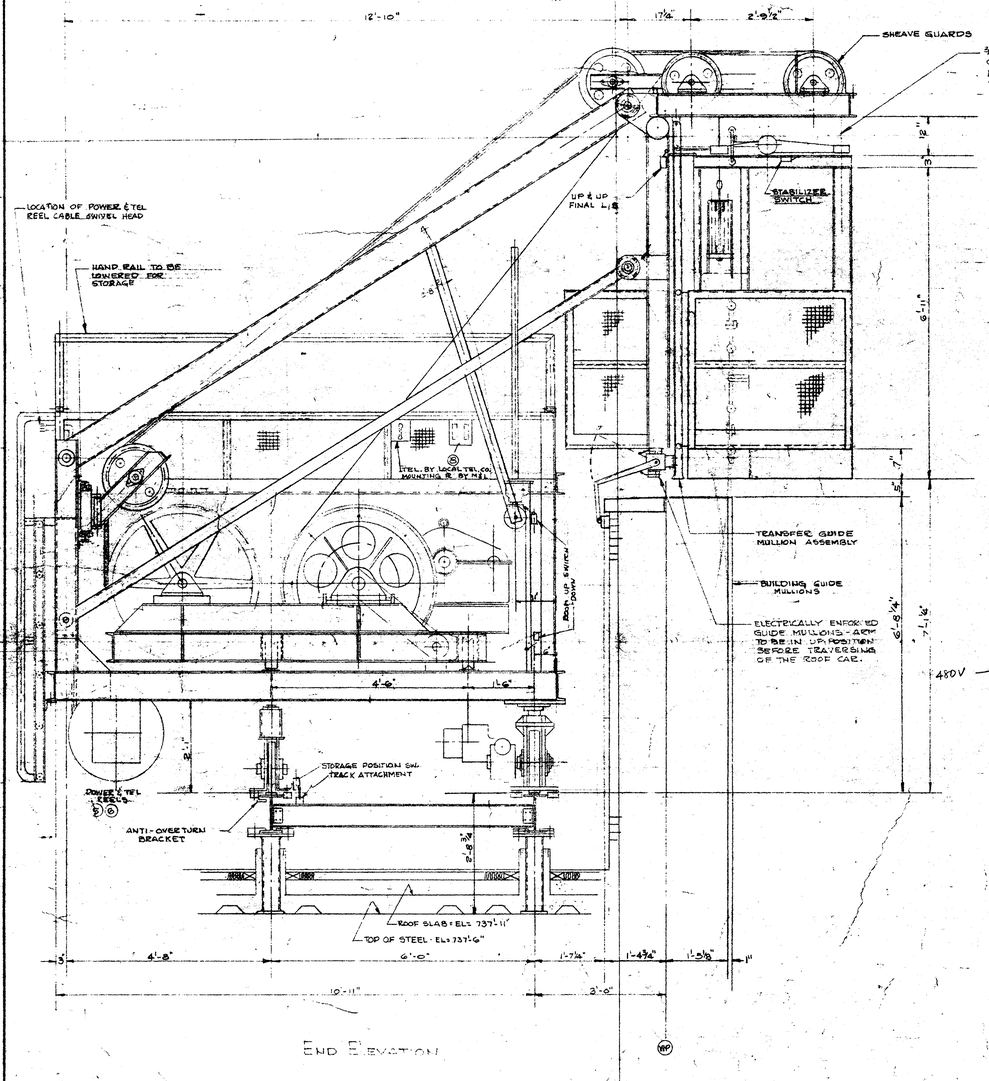
Agency Rig Documents.pdf

- NOTES -

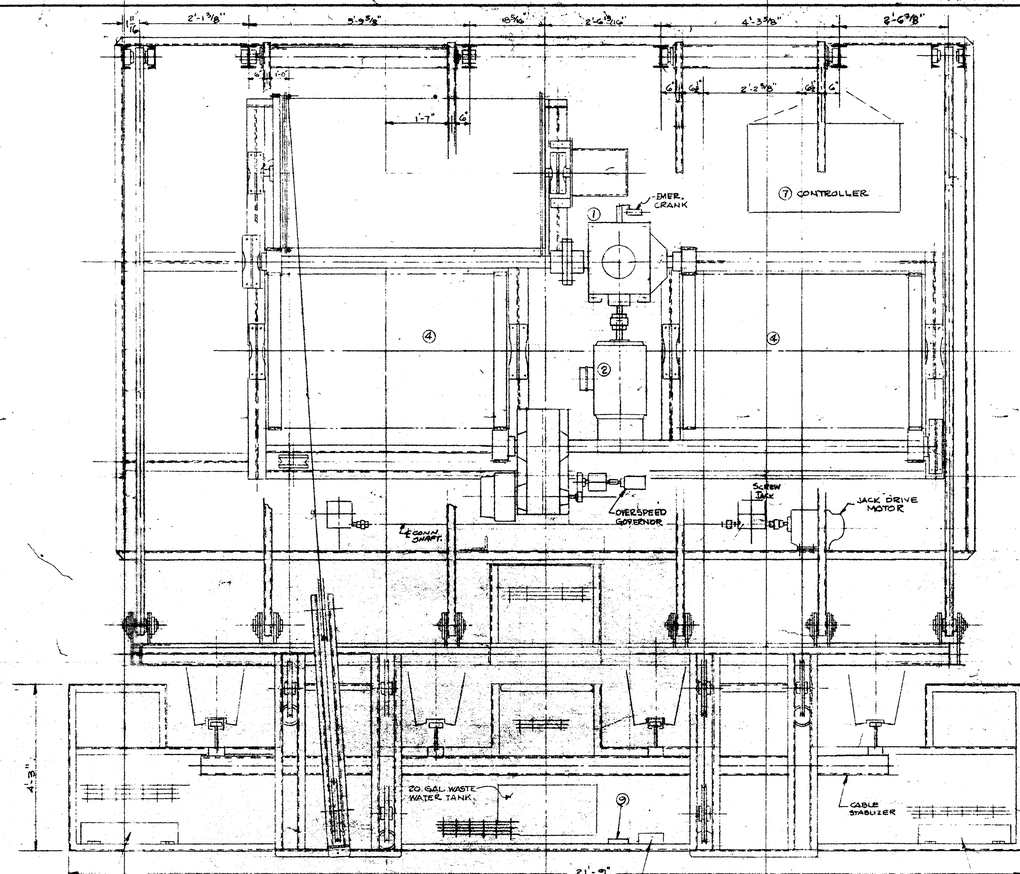
1. Reducer "Cone Drive" 5" C.D. 80:1 STEEL HOUSING INSPECTION PORTS
2. MOTOR "RELIANCE" CRANE & HOIST 5 AND 7½ H.P. 1850-775 RPM FRAME 286-U
3. SECONDARY BRAKE REDUCER - D.O. JAMES Nº S932 1395:1 RATIO - BRAKE -
4. DRUM- 42" DIA. ⅜" WIRE ROPE
5. POWER REEL- GLEASON Nº 5-100C WITH PULLOUT ½ PROTECTION
6. TEL. REEL GLEASON Nº 5-62C
7. CONTROLLER- K.M.WHITE IN WEATHER PROOF STEEL CABINET
8. ROOF CAR PUSH BUTTON STATION NAT'L ACME-CO. RIGHT TRAVERSE -LEFT TRAVERSE EMER STOP & RESET - EMER UP & DOWN OUTRIGGER UP & DOWN
9. PLATFORM PUSH BUTTON STATION NAT'L ACME CO. - UP DOWN - INCH - STOP -RESET
10. OUTRIGGER LIFTING SCREW- DUFF NORTON 5 TON JACK SCREW - MOTOR DRIVEN



PLATFORM LOWERED IN STORAGE POSITION

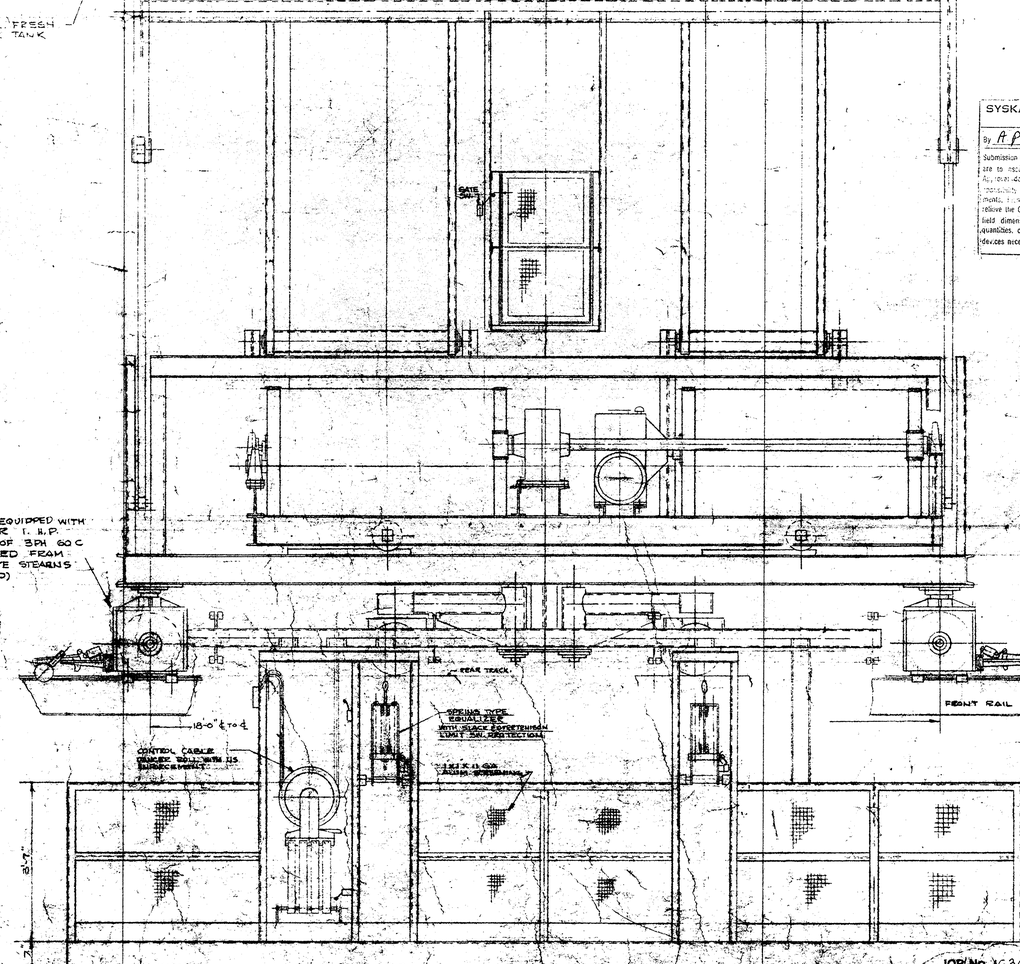


END ELEVATION



PLAN VIEW

15 GAL. FRESH WATER TANK



FRONT ELEVATION

SYSKA & HENNESSY, INC. ENGINEERS

ACTION

By AP Date AUG 8 1967

Approved
Approved as Noted
Resubmit
Disapproved

Submission has been checked for design only. Notes are to require adherence to design requirements. Approval does not relieve the Contractor from responsibility for full compliance with Contract Documents, Laws and Safety Codes. Approval does not relieve the Contractor from responsibility for incorrect field dimensions, elevations and piping heights, quantities, or from responsibility for furnishing all devices necessary for safe operation.

RECEIVED
AUG 10 1967
HARRISON & ABRAMOVITZ

VERIFY ALL DIMENSIONS IN THE FIELD
THIS DRAWING HAS BEEN CHECKED FOR ARCHITECTURAL DIMENSIONS AND IS ONLY NOT RESPONSIBLE FOR ELEVATION AND QUANTITIES.
APPROVED AS NOTED
HARRISON AND ABRAMOVITZ ARCHITECTS
7/31/67

GEORGE A. FULLER CO., INC. RECEIVED FOR FILING BY THE CITY OF ROCHESTER PROJECT MGR.
JUL 7 1969
REFERRED TO SOUTH WALL PROJECT

SECOND SUBMISSION 7/19/67
FIRST SUBMISSION 5/12/67

NO.	REVISION	BY	DATE
1	ADDED APPROX LOCATION OF PLATFORM WATER TANKS	VEZ	7/19/67

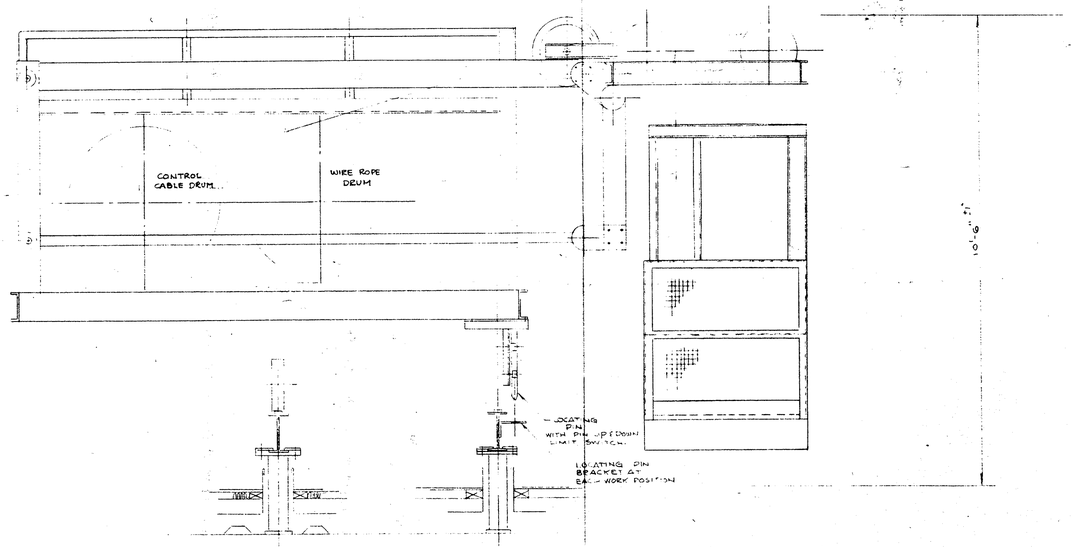
MANNING & LEWIS ENGINEERING CO.
675 RAHWAY AVE.
UNION, N. J.

GENERAL ASSEMBLY
WINDOW WASHING MACHINE
ALBANY MALL TOWER
PENTHOUSE

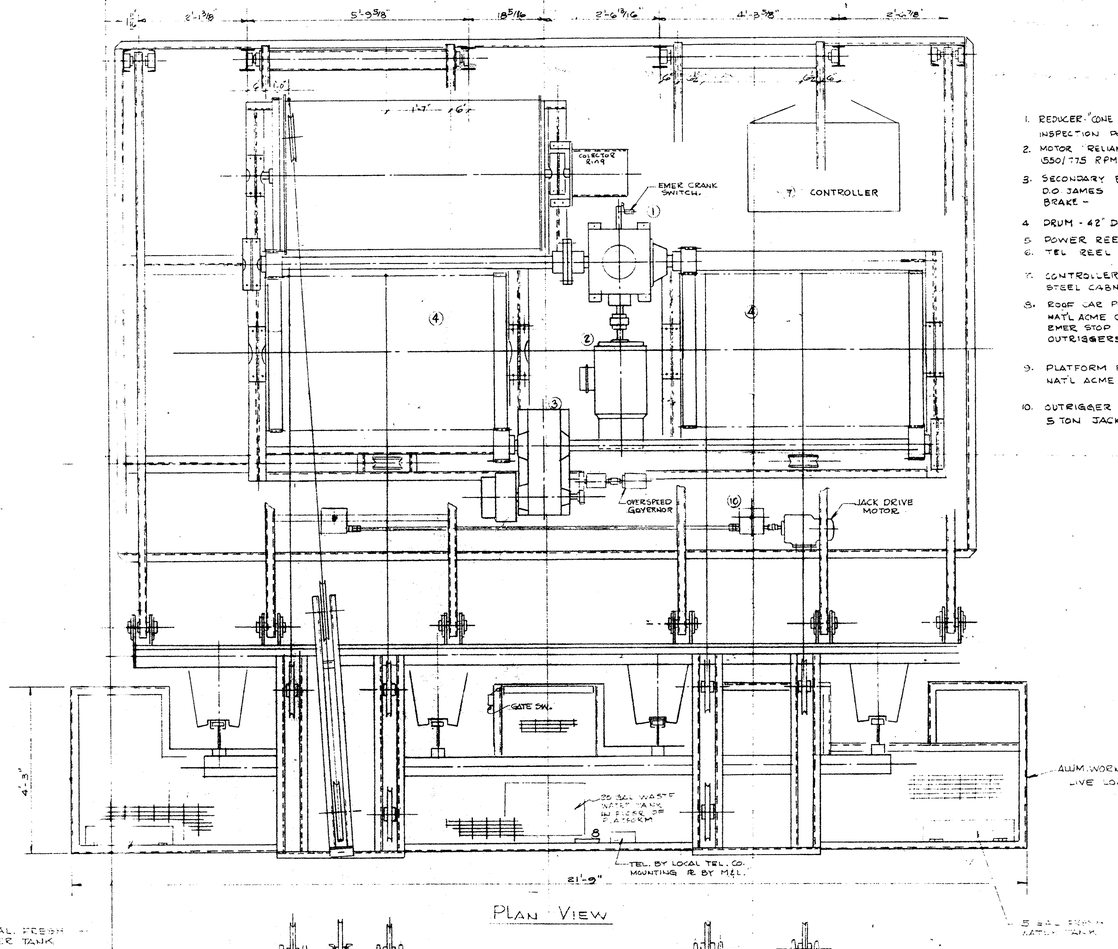
SCALE	DRAWN	DATE	CHK'D	APP'D	DRAWING NO.
¾"=1'-0"	VEZ	3-2-67			EW-2.7.2.2

JOB NO. 16345
SUB. NO.

Agency Rig Documents.pdf



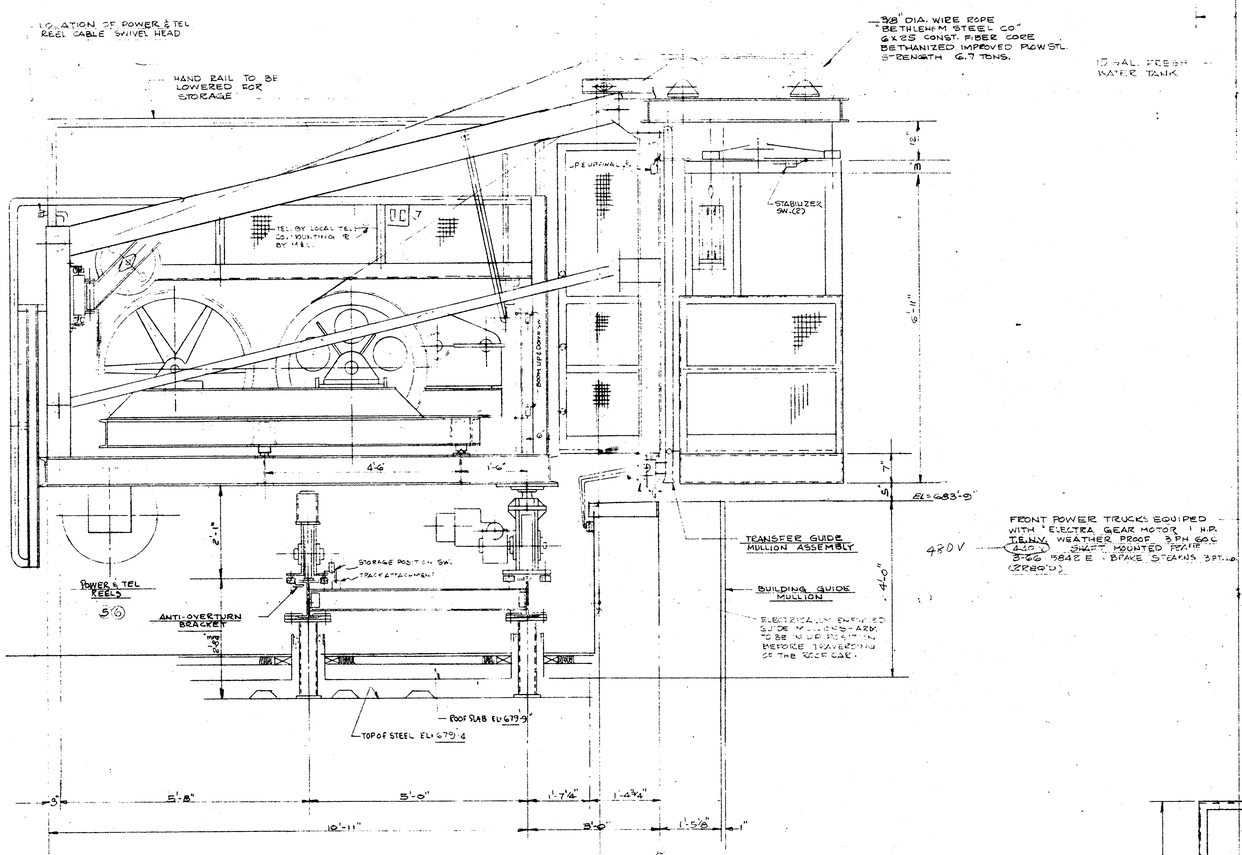
PLATFORM LOWERED IN STORAGE POSITION



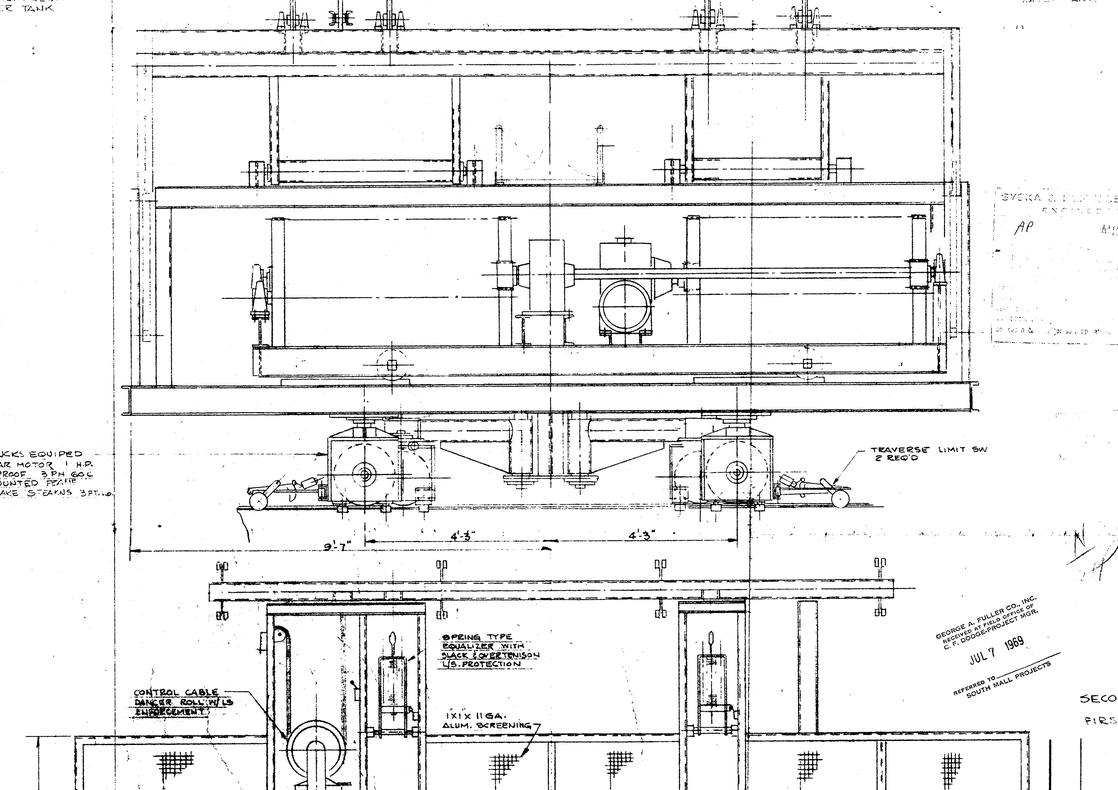
PLAN VIEW

- NOTES -

1. REDUCER - "CONE DRIVE" B.C.D. 30:1 STEEL HOUSING INSPECTION PORTS
2. MOTOR - RELIANCE CRANE & HOIST 15 and 7½ H.P. 1550/775 RPM FRAME 286-J
3. SECONDARY BRAKE REDUCER D.O. JAMES Nº 5-92 1895:1 RATIO BRAKE -
4. DRUM - 42" DIA. 3/8" WIRE ROPE
5. POWER REEL - GLEASON Nº 5-100C WITH PULL OUT I/S PROTECTION
6. TEL REEL - GLEASON Nº 5-61C
7. CONTROLLER - K.M. WHITE IN A WEATHER PROOF STEEL CABINET
8. ROOF JAC PUSH BUTTON STATION NAT'L ACME CO. RIGHT TRAVERS - LEFT TRAVERSE EMER STOP & RESET - EMER UP & DOWN OUTRIGGERS UP & DOWN
9. PLATFORM PUSH BUTTON STATION NAT'L ACME CO. UP - DOWN - INCH - STOP & RESET
10. OUTRIGGER LIFTING SCREW - DUFF NORTON 5 TON JACK SCREW - MOTOR DRIVER



END ELEVATION



FRONT ELEVATION

SYSKA & HENNESSY, INC. ENGINEERS
AP AUG 1967

RECEIVED
AUG 10 1967
HARRISON & ABRAMOVITZ

GEORGE A. FULLER CO. INC. RECEIVED AT FIELD OFFICE OF C.F. SODGE-PROJECT MGR.
JUL 7 1969
REFERED TO SOUTH MALL PROJECTS

...G HAS BEEN OFFICIALLY ...CHITECTS APPROVED AND SIGN ONLY, NOT RESPONSIBLE FOR ...TRUCTION AND QUANTITIES, ...PTED AS NOTED
APPROVED AS NOTED 7-5-67
HARRISON AND ABRAMOVITZ ARCHITECTS
33 FIFTH AVE. NEW YORK 20

SECOND SUBMISSION - 7/13/67
FIRST SUBMISSION 5/11/67

REV.		BY	DATE
1	ADDED APPROX LOCATION OF PLATFORM WATER TANK	VSI	7/14/67

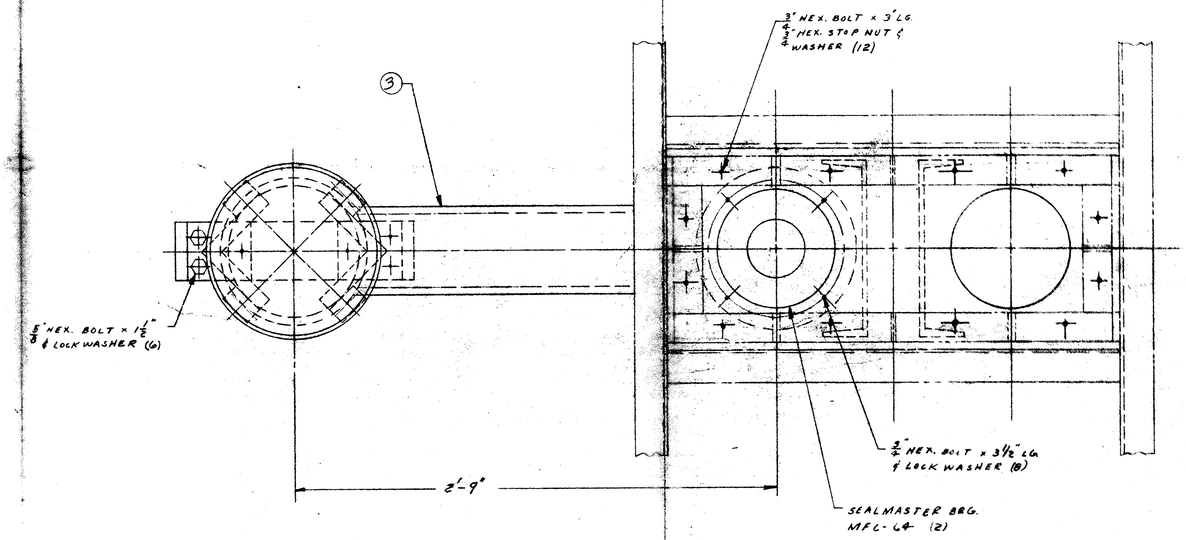
MANNING & LEWIS ENGINEERING CO.
675 RAHWAY AVE.
UNION, N. J.

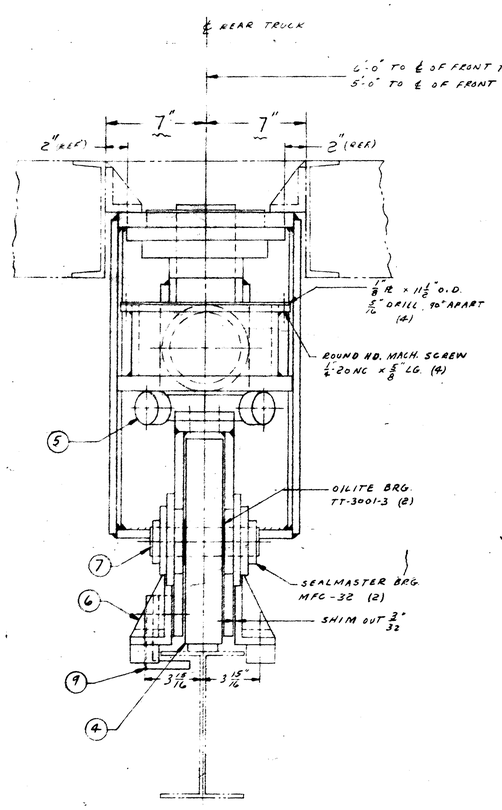
GENERAL ASSEMBLY
WINDOW WASHING MACHINE
ALBANY MALL TOWER
- MAIN ROOF -

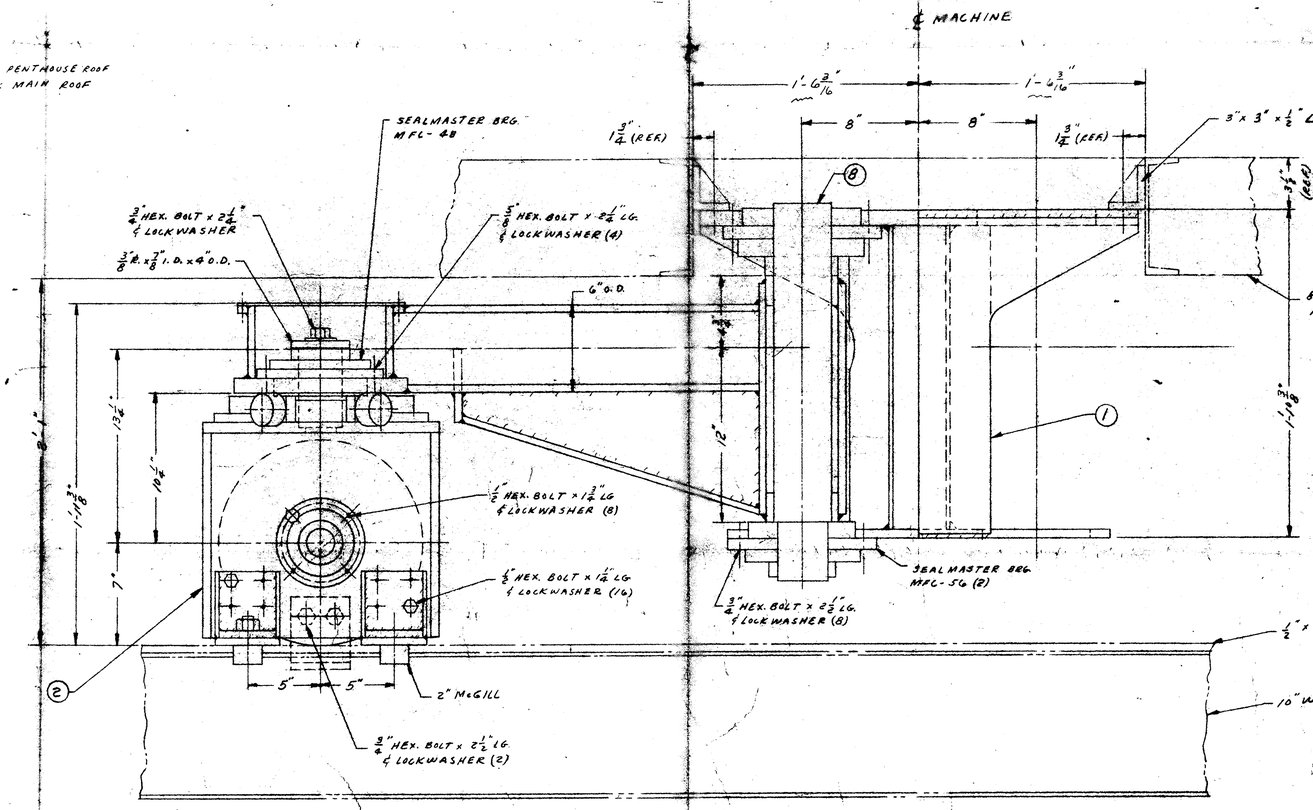
SCALE	MADE	DATE	CHD.	APPD.	DRAWING NO.
3/4" = 1'-0	VSI	4-1-67			EW-27224

JOB No. 16345
SUB. No.

Agency Rig Documents.pdf







SYSKA & HENNESSY, INC. ENGINEERS — ACTION — JUN 1 1967 — NO ACTION

RECEIVED MAY 15 1967 HARRISON & ABRAMOVITZ

RECEIVED JUN 5 - 1967 HARRISON & ABRAMOVITZ

RECEIVED MAY 29 1967 SYSKA & HENNESSY, INC. CONSULTING ENGINEERS

CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD.

THIS DRAWING HAS BEEN CHECKED BY ARCHITECTURAL DRAWINGS AND DESIGN ONLY. NOT RESPONSIBLE FOR CONSTRUCTION AND QUANTITIES.
DISAPPROVED AS NOTED
RESUBMIT
APPROVED
APPROVED AS NOTED

HARRISON AND ABRAMOVITZ ARCHITECTS 630 FIFTH AVE. NEW YORK

NO COMMENT
Harrison & Abramovitz
By [signature] 6-19-67

EXAMINED DATE 5/29/67 BY [signature] AMMANN AND WHITNEY CONSULTING ENGINEERS

GEORGE A. FULLER CO., INC. ARCHITECT-ENGINEER-CONSTRUCTOR EXPO DODGE-PROJECTS ROOM JUL 7 1969 APPROVED FOR SOUTH MALL PROJECTS

FIRST SUBMISSION 5/12/67

REV.	BY	DATE

MANNING & LEWIS ENGINEERING CO.
675 RAHWAY AVE.
UNION, N. J.

REAR TRUCK ASSEMBLY
WINDOW WASHING MACHINE
ALBANY MALL - TOWER BLD'G.

SCALE	MADE	DATE	CKD.	APPD.	DRAWING NO.
3"=1'-0"	A.A.S.	4/19/67			EW-27228

B.M. Pg. 5
JOB No. 16345
SUB No. 964

Agency Rig Documents.pdf

Combo	Roller setting	Travel	Position switches
1	A	Full	1-PS, 2-PS, 3-PS
2	A	Part	1-PS, 3-PS
3	B	Part	1-PS, 2-PS
4	C	Full	2-PS, 3-PS

18 Road T.C.
16 Mill Rig.

3.4	1-LZL	(IZM)	
12"	2-LZL	(SIM SEM SAM)	
15.2"	3-LZL	(SIM SEM SAM)	
21.2	4-LZL	(MAM DAM)	

2	Added 3-15, 4-15, 1-DFL, 2-DFL	1/	1/
1			2/58
REV.		BY	DATE

MANNING & LEWIS ENGINEERING CO.
675 RAHWAY AVE.
UNION, N. J.

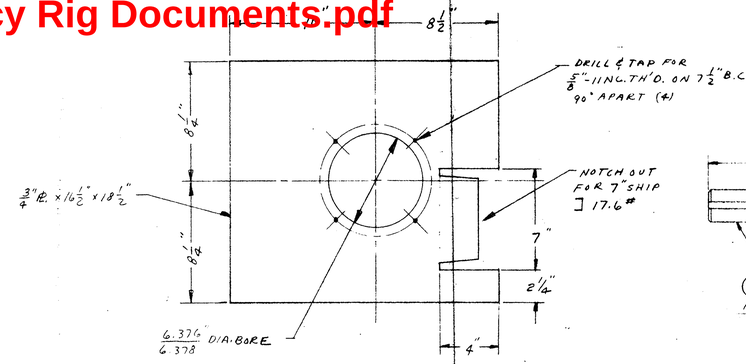
ALBANY MALL TOWER,
PENTHOUSE WALL GLIDER
WIRING DIAGRAM

JOB No. 15345
SUB. No.

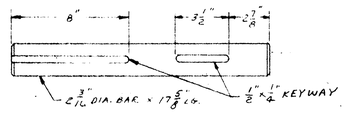
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	M	7/2/58			EW-27268 2

Manning & Lewis Manning & Lewis

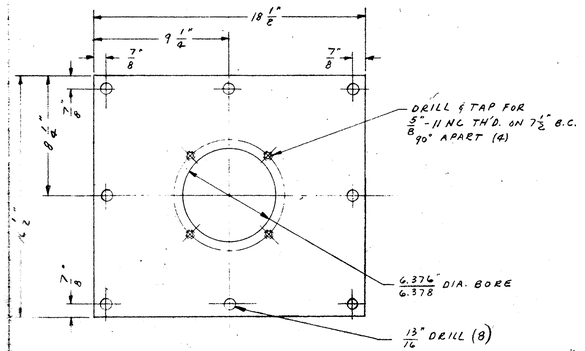
Agency Rig Documents.pdf



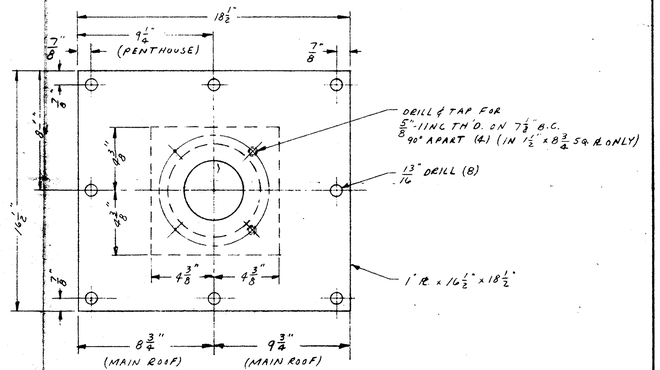
④ BEARING MOUNTING PLATE
MAT'L. H.R.S. (1) REQ'D.
MAIN ROOF

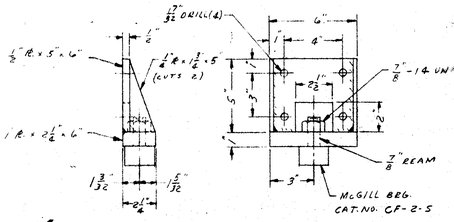


⑥ SHAFT
MAT'L. C.R.S. C-1040 (1) REQ'D.

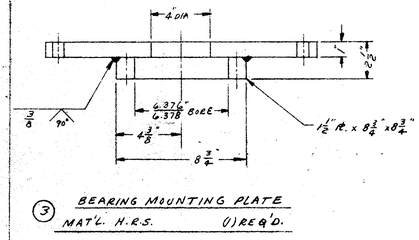


④ BEARING MOUNTING PLATE
MAT'L. H.R.S. (1) REQ'D.
PENTHOUSE

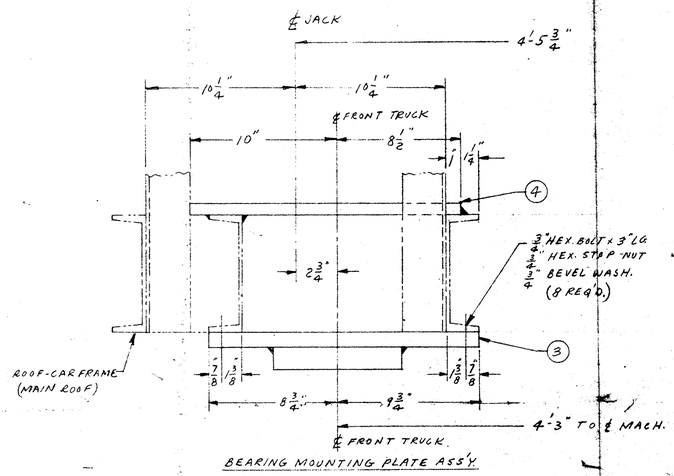




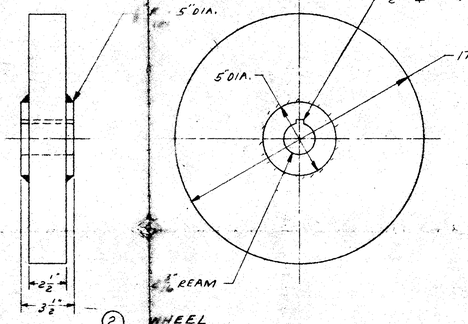
⑤ GUIDE ROLL BRACKET
MAT'L. H.R.S. (4) REQ'D.



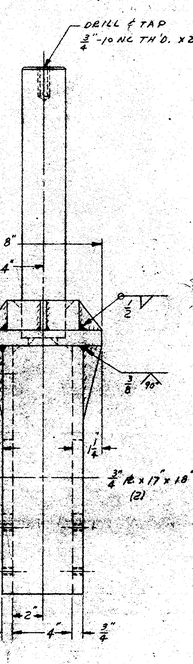
③ BEARING MOUNTING PLATE
MAT'L. H.R.S. (1) REQ'D.

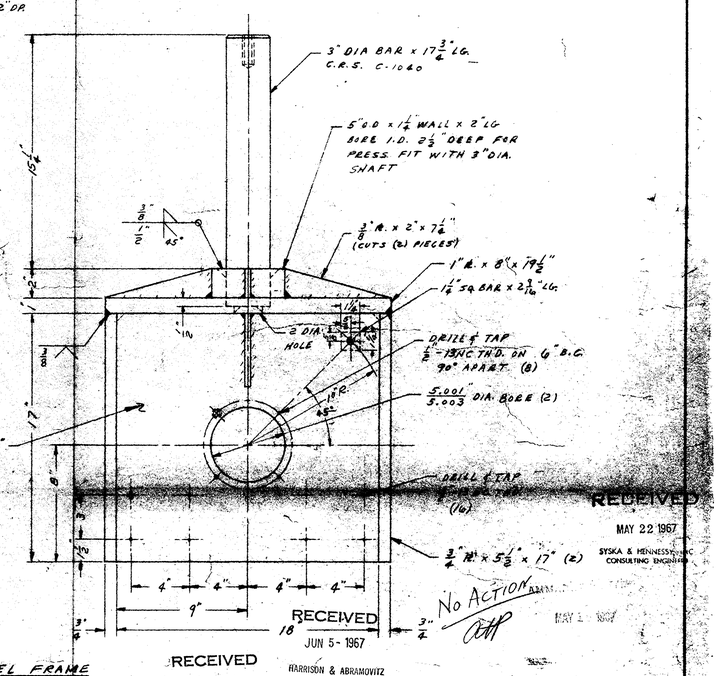


BEARING MOUNTING PLATE ASS'Y
FOR MAIN ROOF

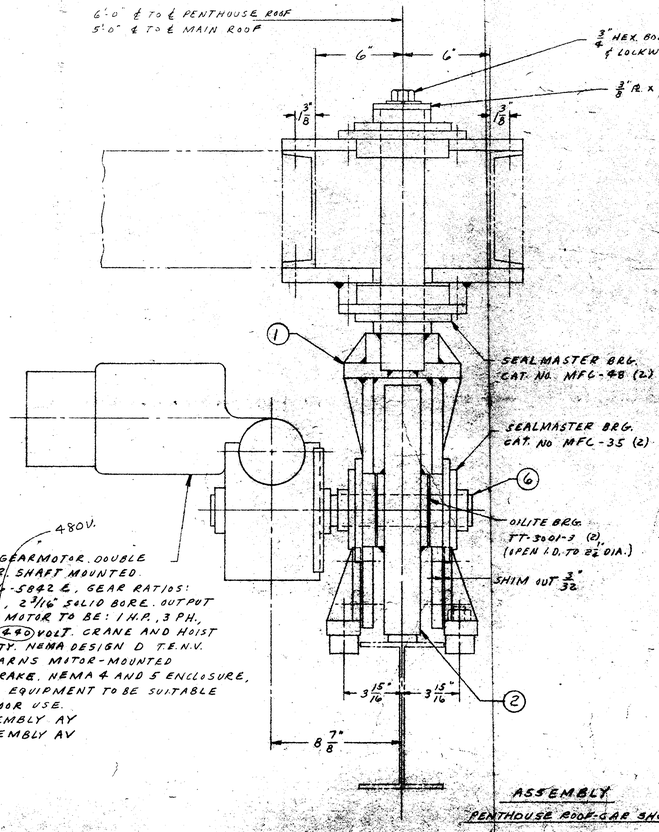


② WHEEL
MAT'L. H.R.S. C-1020 (1) REQ'D.

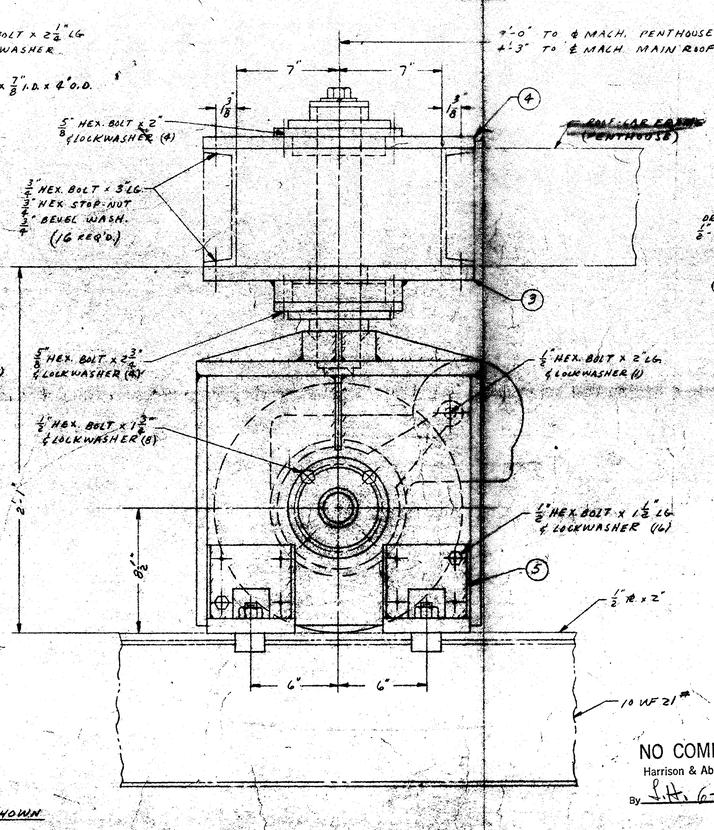




⑦ WHEEL FRAME
MAT'L. H.R.S. (1) REQ'D.



ASSEMBLY
PENTHOUSE ROOF-CAR SHOWN



NO COMMENT.
Harrison & Abramovitz
By P.A. 6-19-67

SYSKA & HENNESSY, INC. ENGINEERS
By JUN 1 1967
ACTION: Approved / Approved as Noted / Disapproved / No Action

GEORGE A. FULLER CO., INC. 57th FLOOR, PAN AM BLDG. REFERRED TO SOUTH MALL PROJECTS JUL 7 1969

EXAMINED
DATE 5/19/67
BY
AMMANN AND WHITNEY CONSULTING ENGINEERS

RECEIVED
MAY 22 1967
SYSKA & HENNESSY, INC. CONSULTING ENGINEERS

RECEIVED
JUN 5 - 1967
HARRISON & ABRAMOVITZ

No Action
Harrison & Abramovitz
By P.A. 6-19-67

RECEIVED
MAY 15 1967
HARRISON & ABRAMOVITZ

CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD.

THIS DRAWING HAS BEEN CHECKED FOR ARCHITECTURAL DIMENSIONS AND DESIGN ONLY, NOT RESPONSIBLE FOR CONSTRUCTION AND QUANTITIES.
DISAPPROVED AS NOTED
RESUBMIT
APPROVED
APPROVED AS NOTED

HARRISON AND ABRAMOVITZ ARCHITECTS FIFTH AVE. NEW YORK

A.M. PG. 1,42

JOB No. 66365
SUB. No. 663

FIRST SUBMISSION 5/12/67

REV.		BY	DATE
1	ADDED DETAIL #6 & ASS'Y FOR MAIN ROOF CHANGE DETAIL #5 TO FIT MAIN ROOF ASS'Y	R.F.S.	5/19/67

MANNING & LEWIS ENGINEERING CO.
675 RAHWAY AVE.
UNION, N. J.

FRONT TRUCK ASSEMBLY
WINDOW WASHING MACHINE
ALBANY MALL - TOWER BLDG.
MAIN ROOF & PENTHOUSE

SCALE	WORK	DATE	DES.	APPD.	DRAWING NO.
3"=1'-0"	R.F.S.	5/12/67			EW-272/2

Agency Rig Documents.pdf

G-303 (16 WF 40)

B-309 (12 WF 40)

B-308 (12 WF 27)

B-307

B-313 (12 B 16.5)

B-313 (12 WF 40)

B-314 (8 JR 6.5)

B-314 (8 WR 6.5)

B-306 (8 B 13)

G-302 (21 WF 96)

21 WF 96 G-302

SUPPORTS (TYP.)

THE A DIM. OF THESE POINTS IS REQUIRED IN B 13 & 16.5 REMARKS SEE DWG. EW-27312-1

℄ BLD'G.

℄ OF CB-120

℄ OF CB-119

℄ OF CB118

℄ OF CB-118

℄ OF BLD'G

CB-119

CB 120

CB118

* 19'-0 5/16"

* 14'-9" CLEAR DOOR OPENING

RAIL STOP (DETAILS TO FOLLOW)

TERMINATION PUNTS TO BE FURNISHED BY MECHANI STEEL CO

SPECIAL PEDESTALS - 6 REQ'D. SECURED TO ROOF SLAB WITH 5/8" DIA HOOK ANCHOR BOLTS. FURNISHED BY M & L ENG. CO. TO GENERAL CONTRACTOR FOR LETTING WHEN POURING FINISHED ROOF SLAB.

SUPPORTS (TYP.)

M1

8'-1"

4'-0½"

4'-9"

5'-10⅞"

2'-6"

7'-0" R.

10'-0" R.

9'-9"

5'-0"

3"

4'-4"

7'-7½"

7'-1½"

5'-7"

10'-6"

NOTE

NUMBERS APPEARING IN CONCENTRIC CIRCLES DENOTE TRACK PEDESTAL DETAIL # ON DWG EW-27312-1.
THE 'A' DIM. OF A TYPICAL PEDESTAL IS 22½ UNLESS OTHERWISE SPECIFIED

B-305 12 WF 53

B-305 12 WF 53

B-305 (12 WF 53)

B-310 (12 WF 53)

TO VERIFY ROOF ELEVATIONS & DIMENSIONS SHOWN.

* 14'-9" CLEAR DOOR OPENING

* 15'-10" CLEAR DOOR OPENING

13'-8"

2'-2"

NOTE: TYP. PITCH POCKET & FLASHING

EL. 417'-7" TO TOP OF BEAM FLG.

12" x 8" x 3/4"

FRONT RAIL CB-118

REAR RAIL CB-118

℄ OF BLDG

TOP OF FINISH FLR.

TOP OF ROOF SLAB 415'-5"

7" MIN. SLOPE

6¼"

TOP OF STEEL

SECTION A-A

NOTE:
DIMENSIONS MARKED * TO BE VERIFIED BY ARCHITECTS.

REF. DWG - ROOF TRACK LAYOUT DWG. 27302

ARMANN & WHITNEY STRUCTURAL STEEL DWG. 62/3-5A

FIRST SUBMISSION 5-28-67

JOB No. 16415
SUB No. 983

REV.		BY	DATE
2	SEE NOTE ABOVE.	FS	7/3/67
1	FINAL LOCATION OF ROOF MEMBERS AS SHOWN - ADDED TRACK & PEDESTAL LOCATIONS & INFORMATION	RPL	6/1/67

MANNING & LEWIS ENGINEERING CO.
675 RAHWAY AVE.
UNION, N. J.

ROOF TRACK - PARKING AREA
WINDOW WASHING-MACHINE
ALBANY MALL - AGENCY BLDGS. 1, 2, 3 & 4

SCALE	DESIGN	DATE	CKD.	APPD.	DRAWING NO.	
1/4"=1'-0"	RAS	5/31/67			EW-27303	3

DEFIANCE NO. 1000 P-3 22-100

Agency Rig Documents.pdf

(1) SWITCH UNIT & RAIL TO (2) TERMINATION POINTS, SHOWN ENCLOSED, FURNISHED TO PELHAM STEEL CO. BY M & L ENG. CO. FOR INSTALLATION (OPPOSITE BLD. CORNER OPPOSITE HAND.)
LOCATION OF TRACK PEDESTALS TO BE DETERMINED AT A LATER DATE.

(3) SWITCH UNITS & RAIL TO (6) TERMINATION POINTS, SHOWN ENCLOSED, FURNISHED TO PELHAM STEEL CO. BY M & L ENG. CO. FOR INSTALLATION.
LOCATION OF TRACK PEDESTALS TO BE DETERMINED AT A LATER DATE.

8°-37'-23.9"

5'-0" (TYP.)

℄ W.P.

WORKING GRID.

B-316 (12 WF 26.7)

B-305 (12 WF 53)

SUPPORTS (TYP.)

TERMINATION POINTS OF RAIL FURNISHED BY PELHAM STEEL CO.

TERMINATION POINT OF RAIL FURNISHED BY PELHAM STEEL CO.

M1

6'-0" R.

7'-0" R.

5'-0" R.

B-315 (12 B 14)

B-316 (12 WF 26.7)

B-301 (12 WF 31)

B-301A (12 WF 27)

B-302 (12 WF 31)

B-302A (21 WF 73)

G-301 (16 WF 78)

G-302 (21 WF 76)

B-303 (12 B 22)

B-305A (12 WF 58)

B-314 (8 JR. C. S)

B-313 (12 B 16.5)

B-306 (8 B 13)

BUILDING CORNER Ⓑ-① DRAWN

BUILDING CORNER Ⓚ-① OPPOSITE HAND

℄ BLD'G.

WORKING GRID

45°

EW-27304

REFERENCE DRAWING
ROOF TRACK LAYOUT - DW-27302
AMMANN & WHITNEY STRUCTURAL STEEL DWG. 64/3-5A

FIRST SUBMISSION 5/29/67

RECEIVED
AUG 11 1967
HARRISON & ABRAMOVITZ

OFFICE COPY

REV.		BY	DATE
1	FINAL LOCATION OF ROOF MEMBERS AS SHOWN. ADDED TRACK & PEDESTAL LOCATION & INFORMATION	RPS	9/11/67

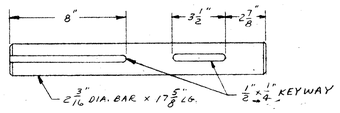
MANNING & LEWIS ENGINEERING CO.
675 RAHWAY AVE.
UNION, N. J.

ROOF TRACK - CORNERS EAST WALL & PARKING AREA
WINDOW WASHING MACHINE
ALBANY MALL AGENCY BLDGS. 1, 2, 3 & 4

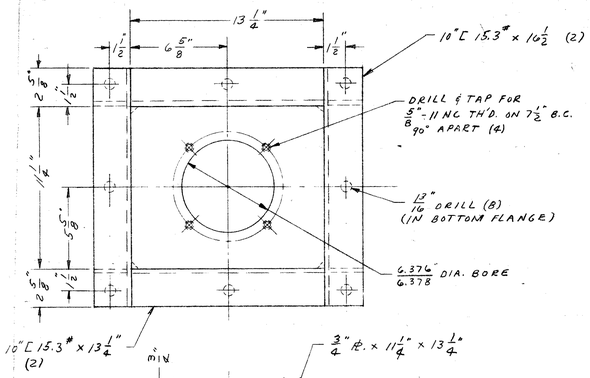
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1/4"-1'-0"	RPS	1/30/67			EW-27304 1

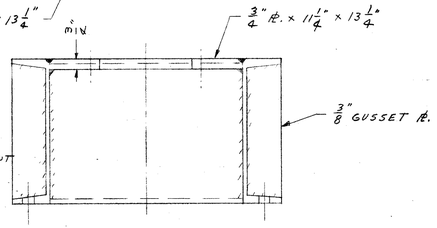
JOB No. 16415
SUB No. 983

Agency Rig Documents.pdf

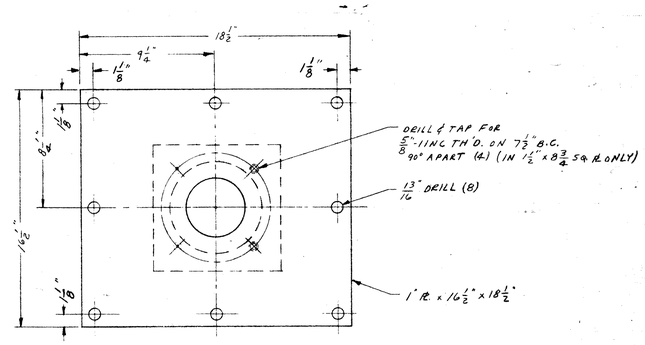


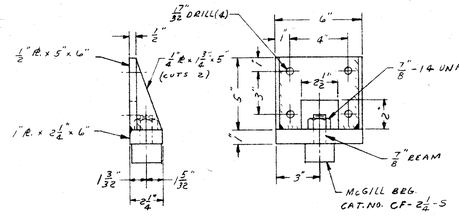
⑥ SHAFT
MAT'L. C.R.S. C-1040 (1) REQ'D.



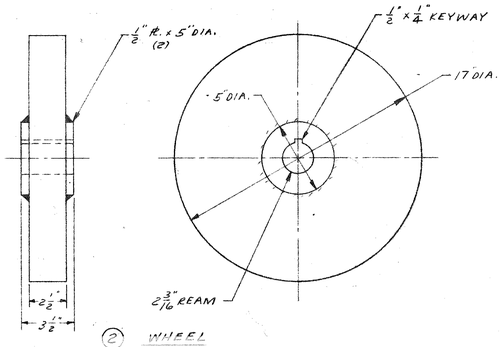


④ BEARING MOUNTING FRAME
MAT'L. H.R.S. (1) REQ'D.

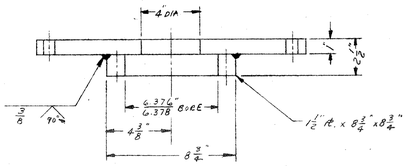




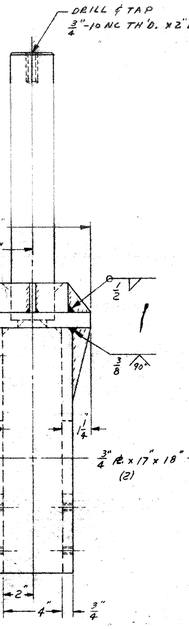
⑤ GUIDE ROLL BRACKET
MAT'L. H.R.S. (4) REQ'D.

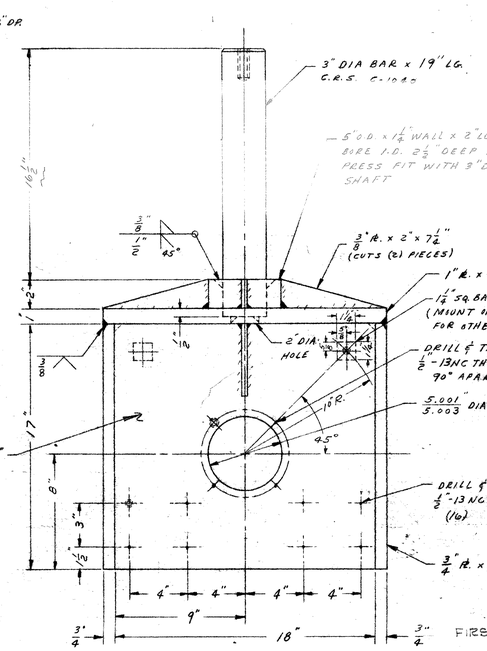


② WHEEL
MAT'L. H.R.S. C-1020 (1) REQ'D.

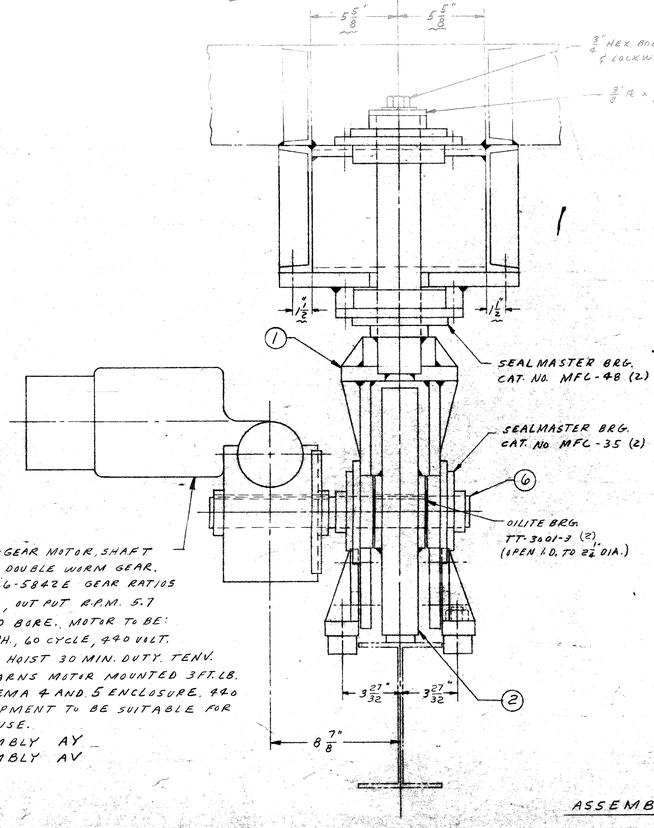


③ BEARING MOUNTING PLATE
MAT'L. H.R.S. (1) REQ'D.

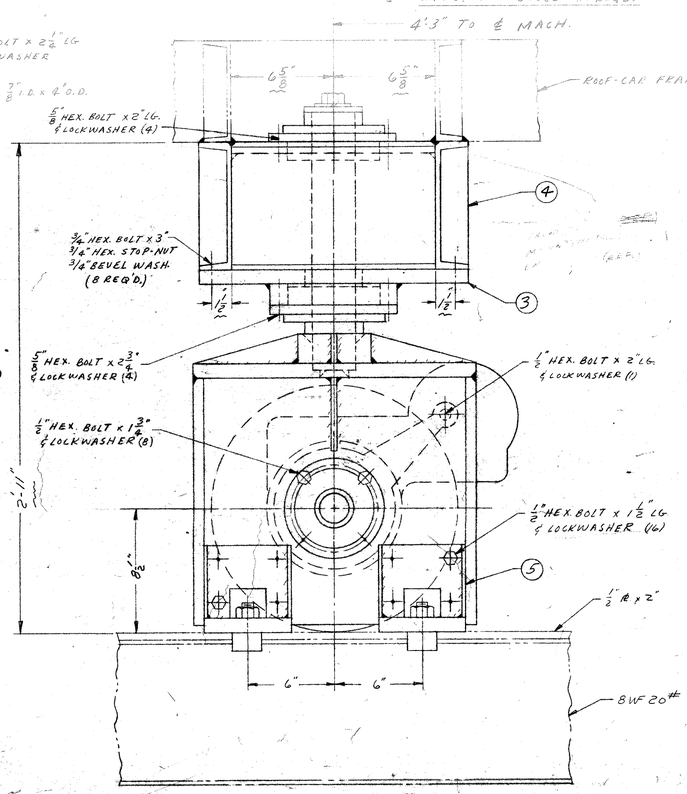




① WHEEL FRAME
MAT'L. H.R.S. (1) REQ'D.



ELECTRA-GEAR MOTOR, SHAFT MOUNTED, DOUBLE WORM GEAR, FRAME B66-5842E GEAR RATIOS 30/1 - 10/1, OUT PUT R.P.M. 5.7 2 3/16" SOLID BORE. MOTOR TO BE: 3/4 H.P., 3 PH., 60 CYCLE, 440 VOLT. CRANE AND HOIST 30 MIN. DUTY. TENV. WITH STEARNS MOTOR MOUNTED 3 FT. LB. BRAKE NEMA 4 AND 5 ENCLOSURE. 440 VOLT. EQUIPMENT TO BE SUITABLE FOR OUTDOOR USE.
1- ASSEMBLY AY
1- ASSEMBLY AV



ASSEMBLY

RECEIVED AT OFFICE OF GEORGE A. FULLER COMPANY INC.
JUN 12 1967
REFERRED TO

REV.		BY	DATE

MANNING & LEWIS ENGINEERING CO.
675 RAHWAY AVE.
UNION. N. J.

FRONT TRUCK ASSEMBLY
WINDOW WASHING MACHINE
ALBANY MALL - AGENCY BLD'G

SCALE	MADE	DATE	CKD.	APPD.	DRAWING NO.
3"=1'-0"	R.P.S.	3/22/67			EW-27308

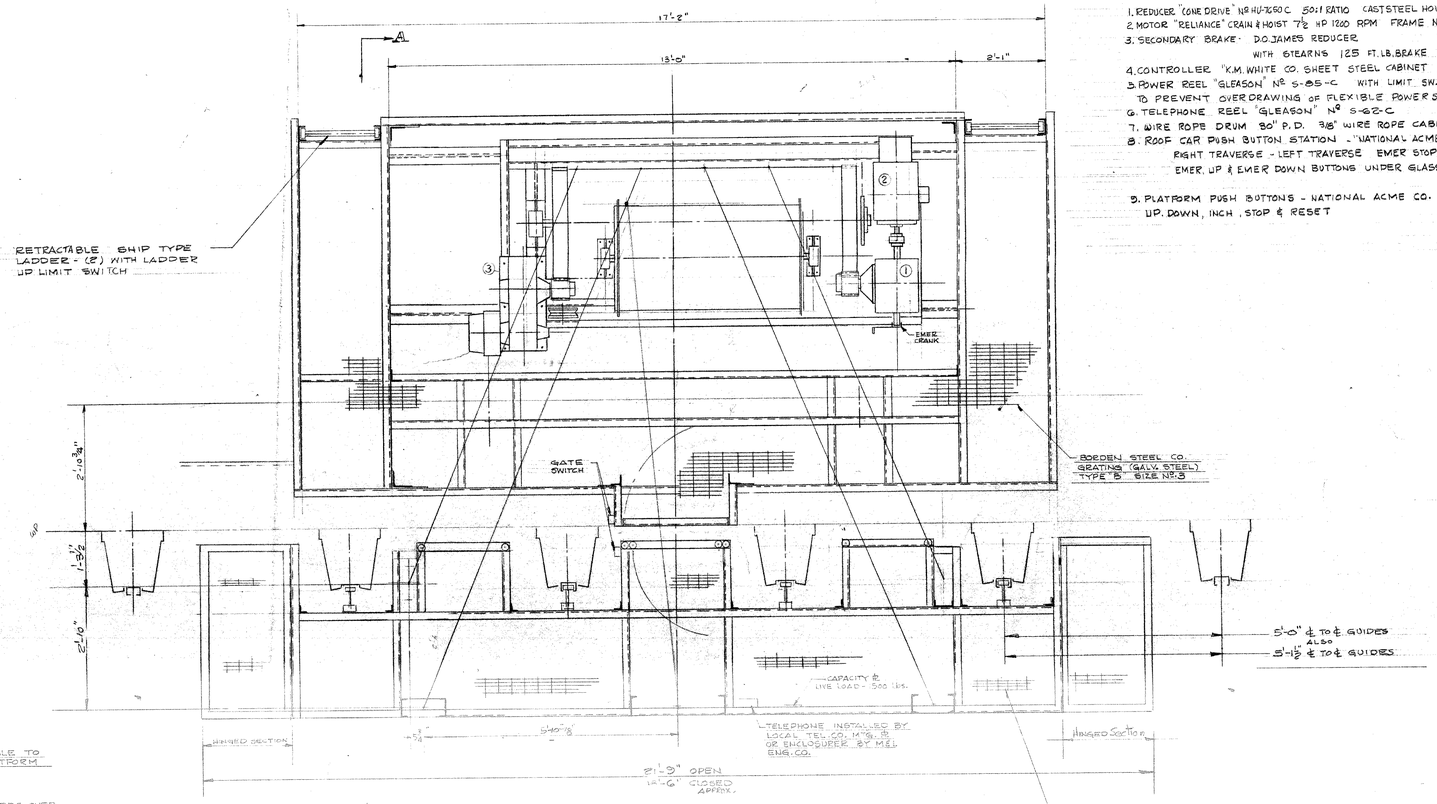
B.M. PG. 1, 62
JOB No. 16415
SUB. No. 981

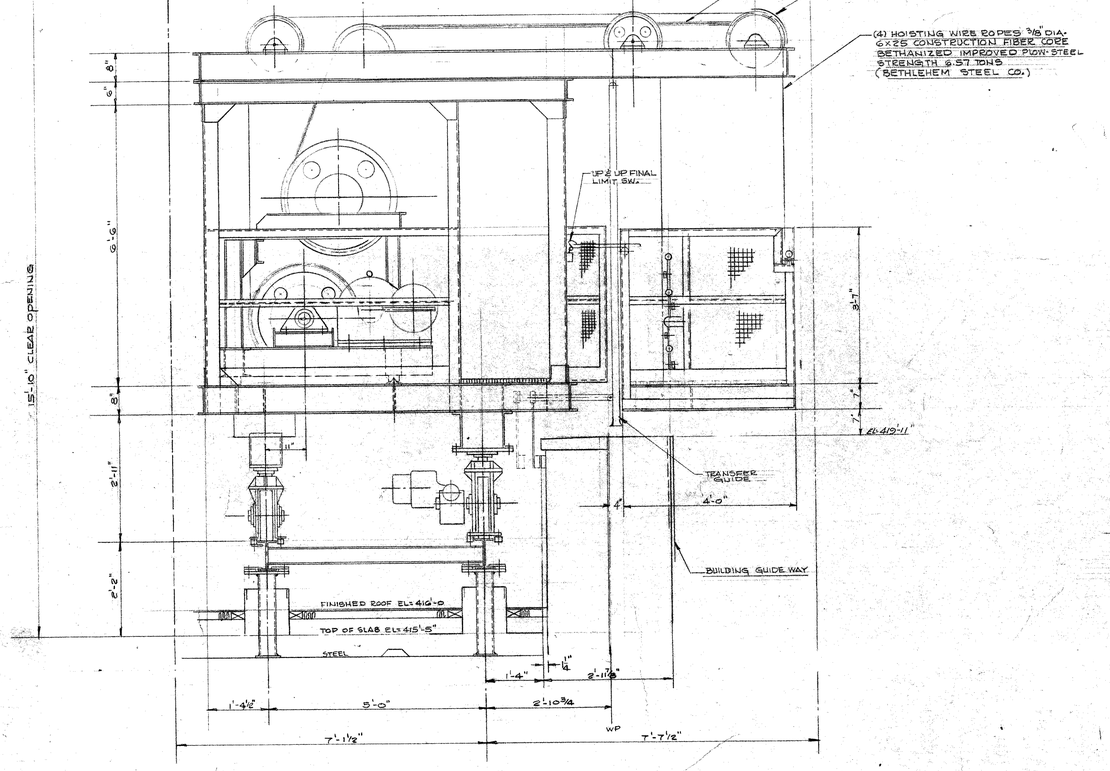
FIRST SUBMISSION - 6-9-67

Agency Rig Documents.pdf

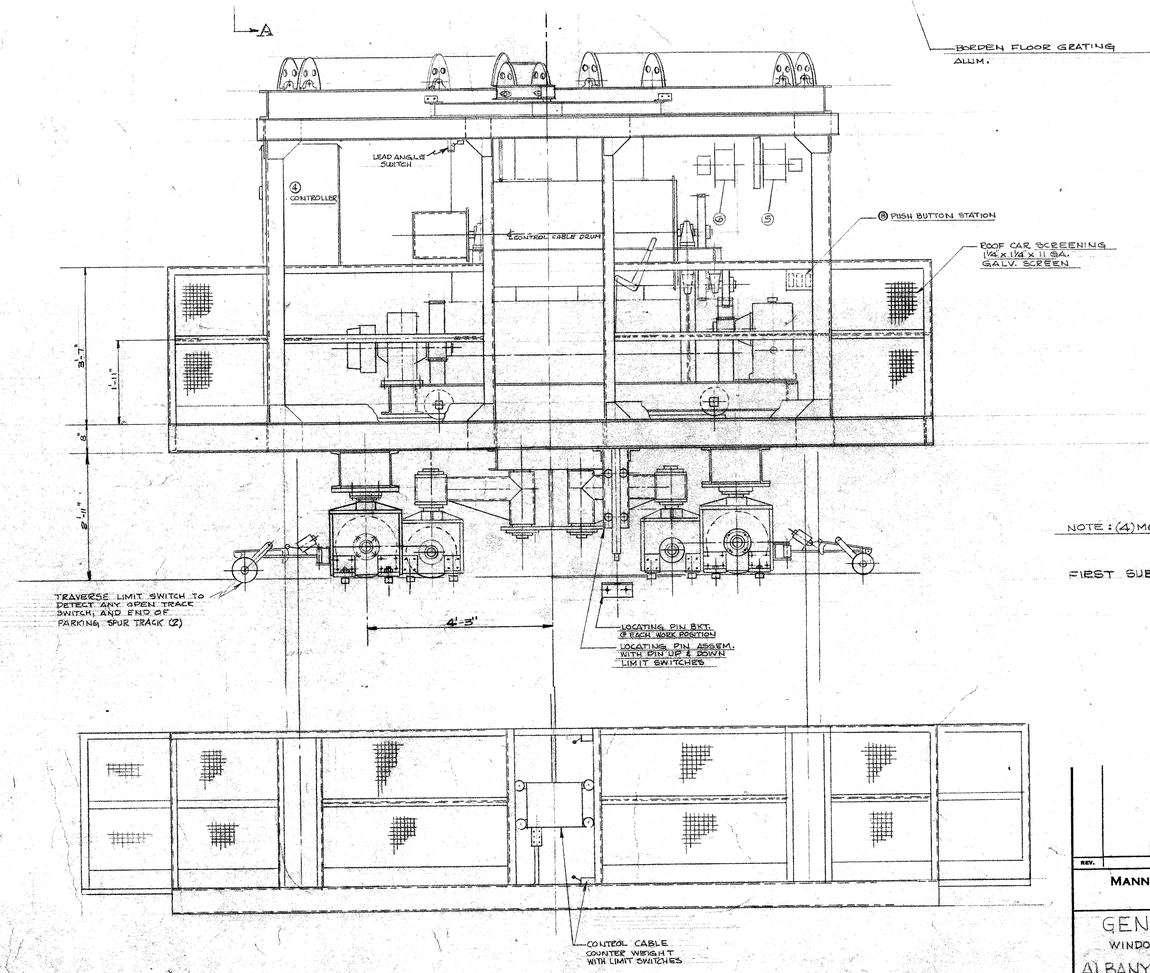
NOTES

1. REDUCER "CONE DRIVE" Nº HU-7250 C 50:1 RATIO CAST STEEL HOUSING
2. MOTOR "RELIANCE" CRANE & HOIST 7½ HP 1200 RPM FRAME Nº 256U
3. SECONDARY BRAKE - D.O. JAMES REDUCER WITH 6 TEARNS 125 FT. LB. BRAKE
4. CONTROLLER "K.M. WHITE CO. SHEET STEEL CABINET CYL. LOCK
5. POWER REEL "GLEASON" Nº S-85-C WITH LIMIT SW. PROTECTION TO PREVENT OVERDRAWING OF FLEXIBLE POWER SUPPLY CABLE
6. TELEPHONE REEL "GLEASON" Nº S-82-C
7. WIRE ROPE DRUM 30" P.D. 3/8" WIRE ROPE CABLE
8. ROOF CAR PUSH BUTTON STATION - "NATIONAL ACME CO" RIGHT TRAVERSE - LEFT TRAVERSE EMER STOP & RESET EMER. UP & EMER DOWN BUTTONS UNDER GLASS
9. PLATFORM PUSH BUTTONS - NATIONAL ACME CO. UP. DOWN, INCH, STOP & RESET





Section "A-A"



NOTE: (4) MACHINES REQ'D

FIRST SUBMISSION — 6-9-67

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JUN 12 1967
REFERRED TO

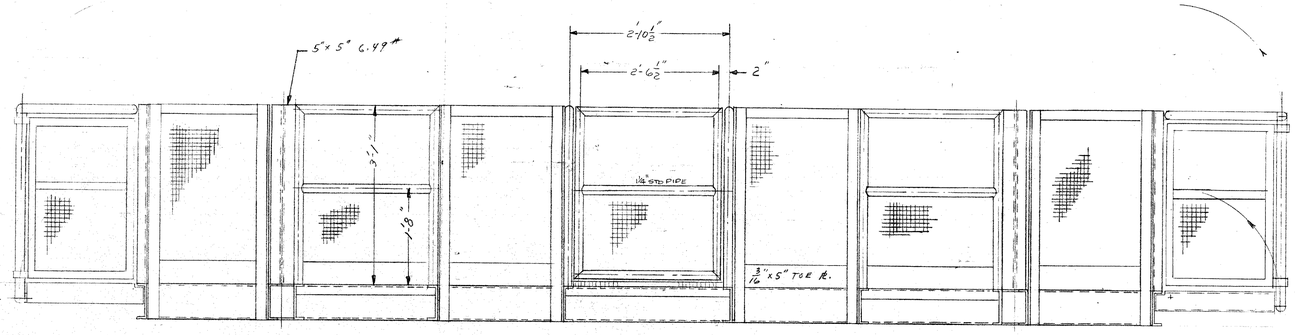
REV.		BY	DATE

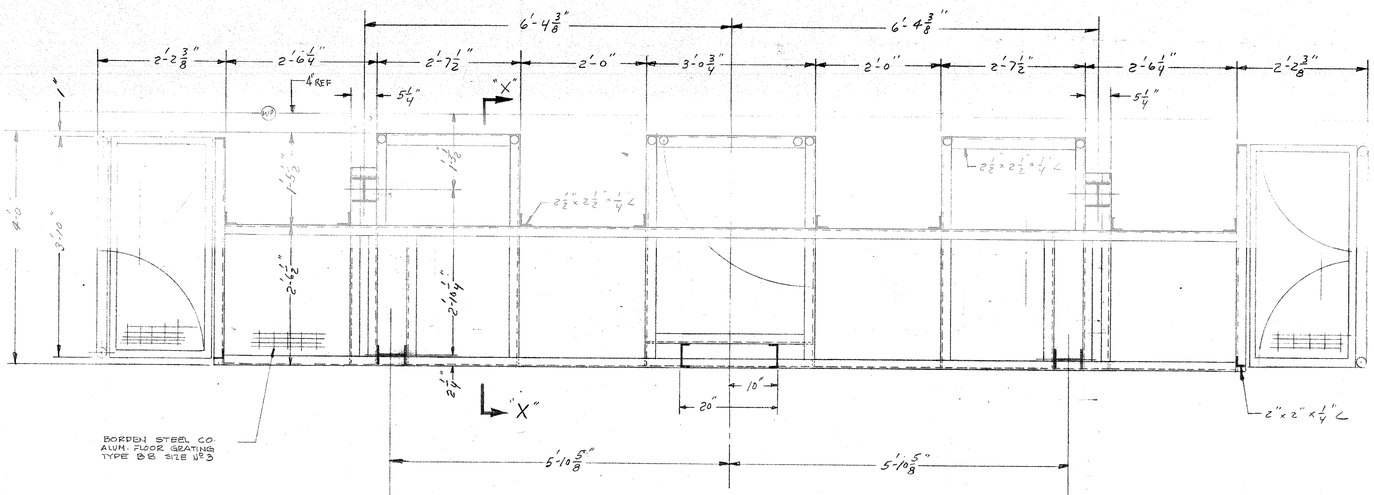
MANNING & LEWIS ENGINEERING CO.
675 RAHWAY AVE.
UNION, N. J.

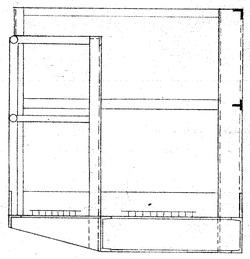
GENERAL ASSEMBLY
WINDOW WASHING MACHINE
ALBANY MALL - AGENCY BLDG'S

SCALE	MADE	DATE	CKD.	APPD.	DRAWING NO.
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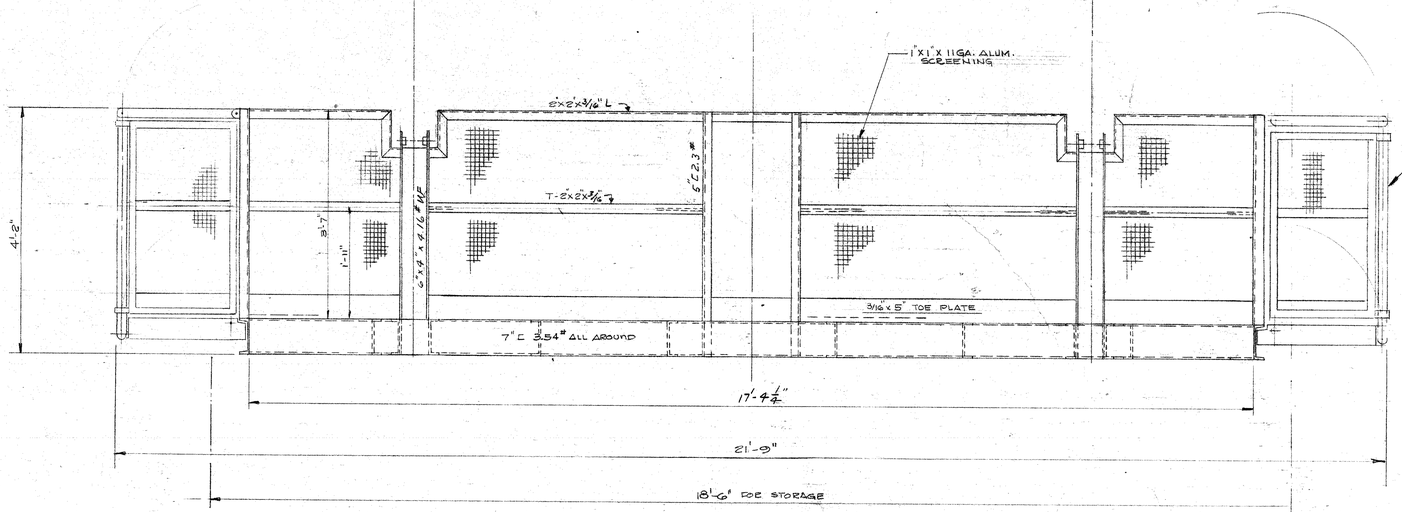
JOB No. 16415
SUB. No.







SECTION "X-X"



FIRST SUBMISSION- 6-9-67

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JUN 12 1967
REFERRED TO

REV.		BY	DATE

MANNING & LEWIS ENGINEERING CO.
675 RAHWAY AVE.
UNION, N. J.

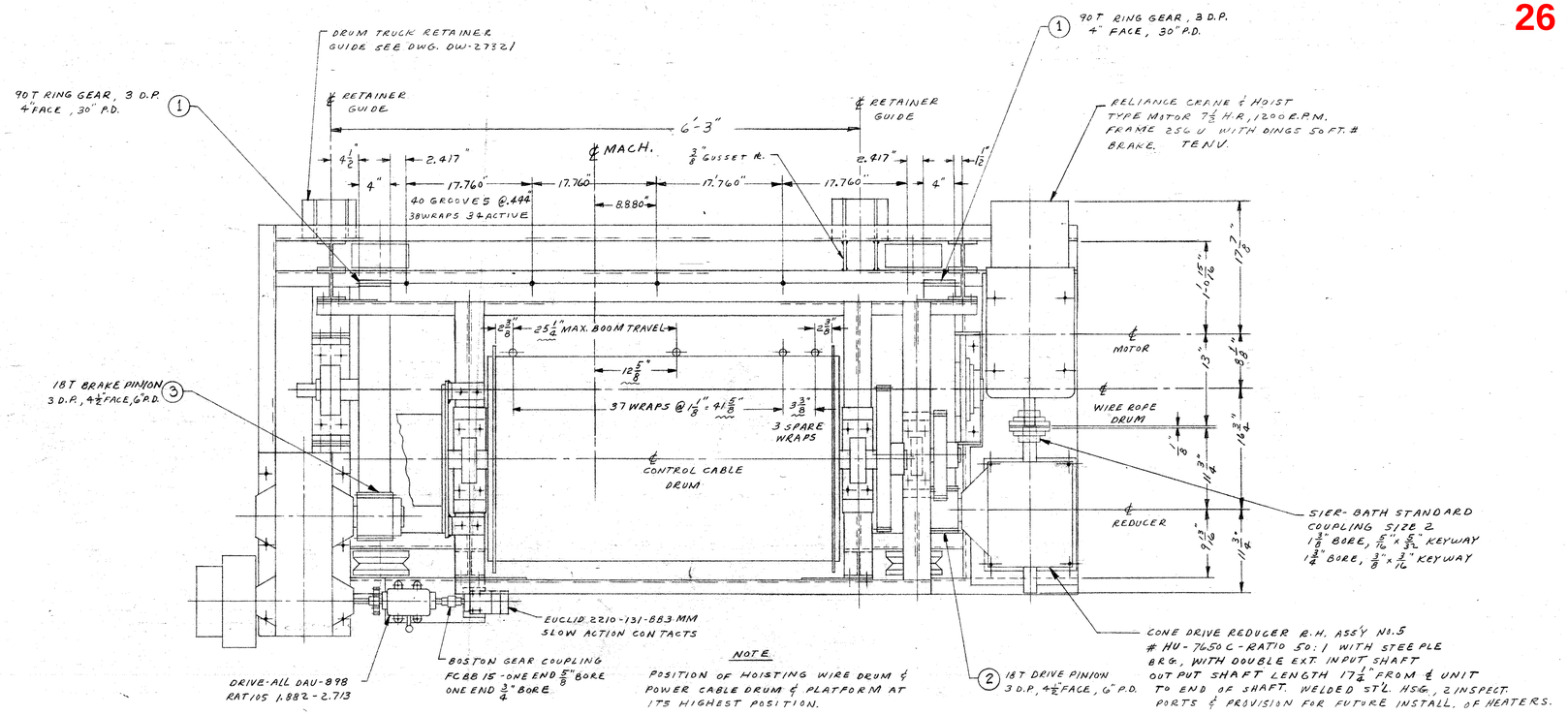
WORKING PLATFORM
WINDOW WASHING MACHINE
ALBANY MALL
AGENCY BUILDINGS

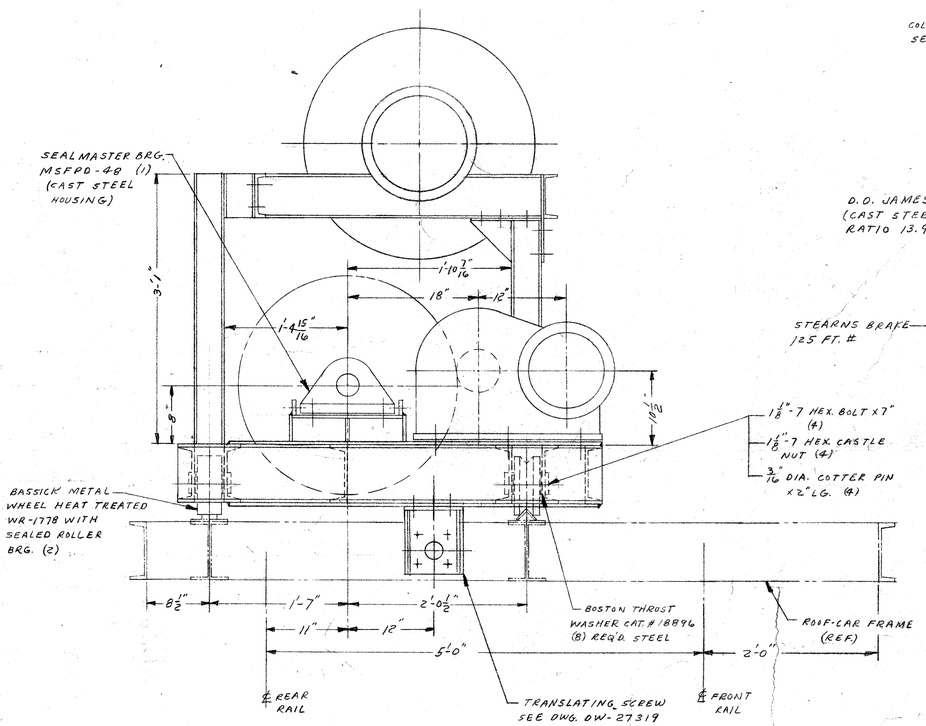
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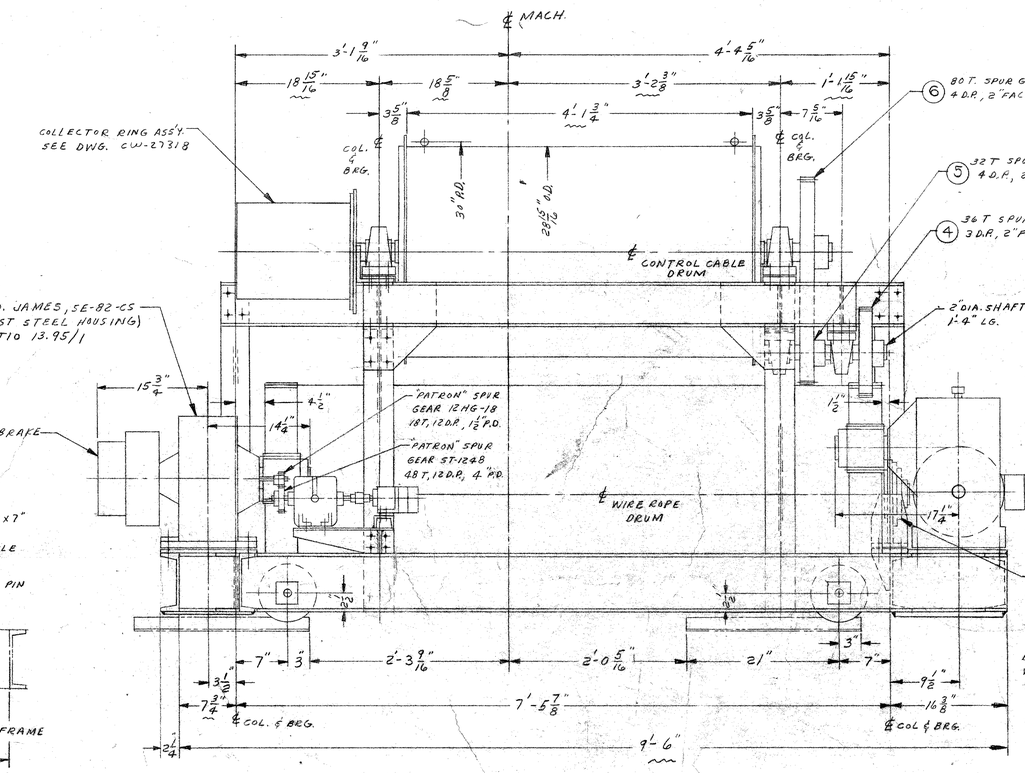
JOB No. 16415
SUB. No.

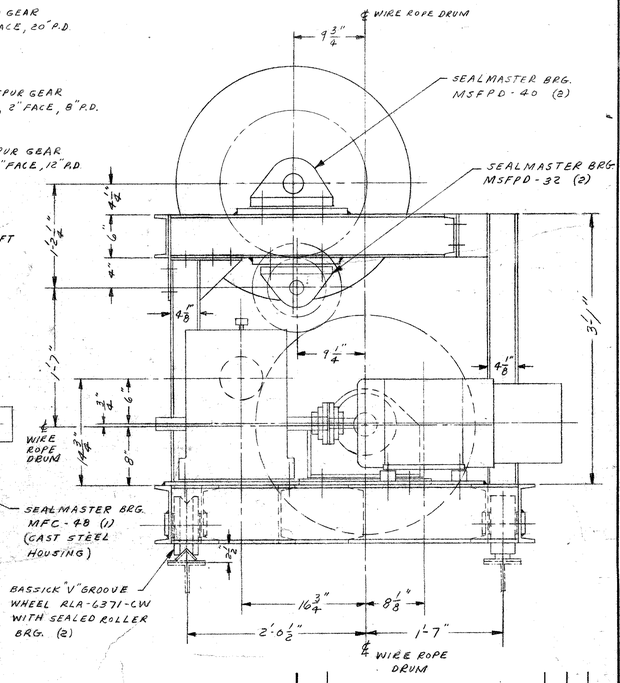
DEFIANCE NO. 1020 F-3 28108

Agency Rig Documents.pdf









FIRST SUBMISSION- 6-9-67

RECEIVED AT OFFICE OF GEORGE A. FULLER COMPANY INC. JUN 12 1967 REFERRED TO

REV.		BY	DATE

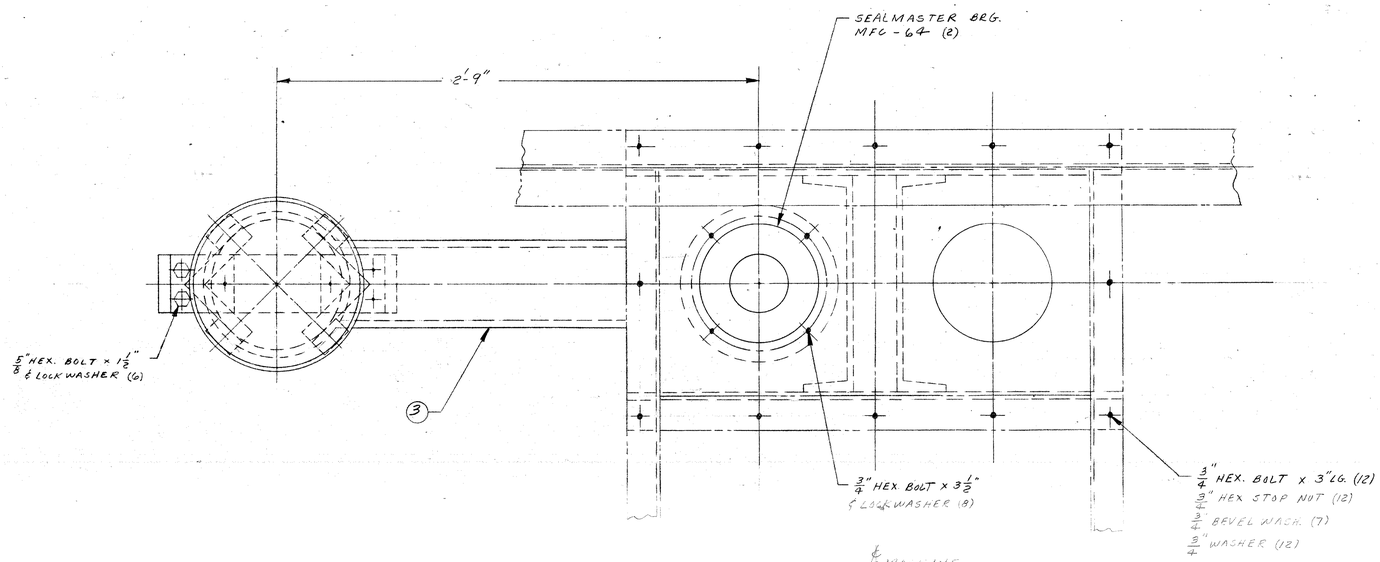
MANNING & LEWIS ENGINEERING CO.
675 RAHWAY AVE.
UNION. N. J.

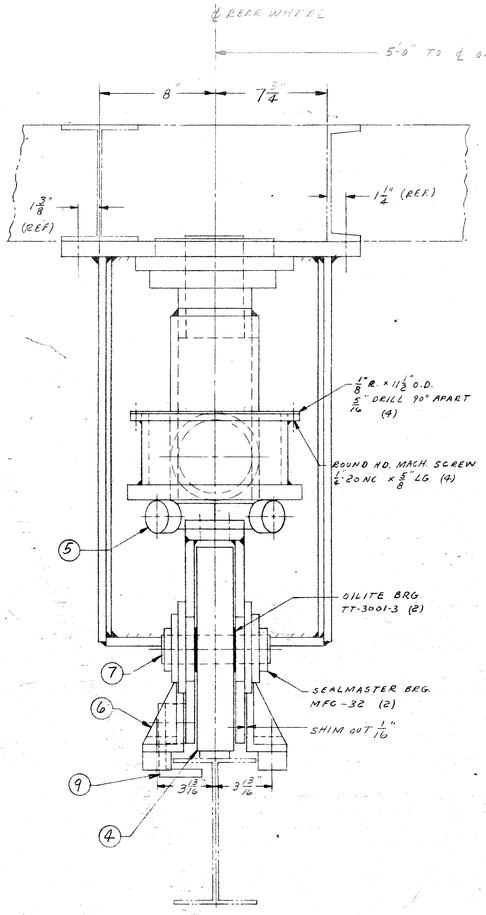
DRUM TRUCK ASSEMBLY
WINDOW WASHING MACHINE
ALBANY MALL - AGENCY BLDGS 1, 2, 3 & 4

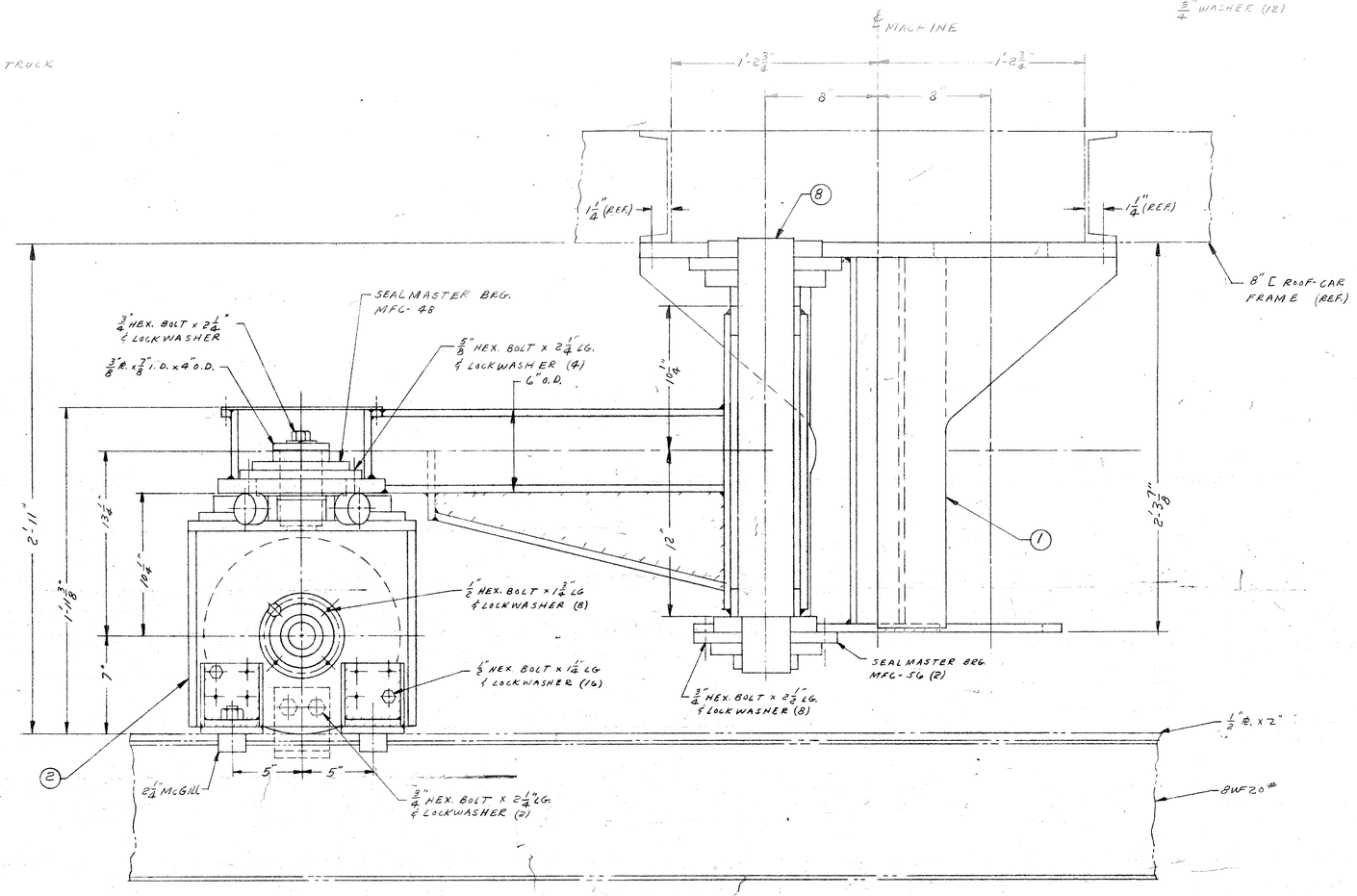
B.M. PG. 8, 9
JOB No. 16415
SUB. No. 985

SCALE	MADE	DATE	CKD.	APPD.	DRAWING NO.
1 1/2"=1'-0	R.P.S.	4/13/67			EW-27311

DEFIANCE NO. 1000 P-3 23108







FIRST SUBMISSION - 6-9-67

RECEIVED AT OFFICE OF GEORGE A. FULLER COMPANY INC.
JUN 12 1967
REFERRED TO

REV.	BY	DATE

MANNING & LEWIS ENGINEERING CO.
675 RAHWAY AVE.
UNION, N. J.

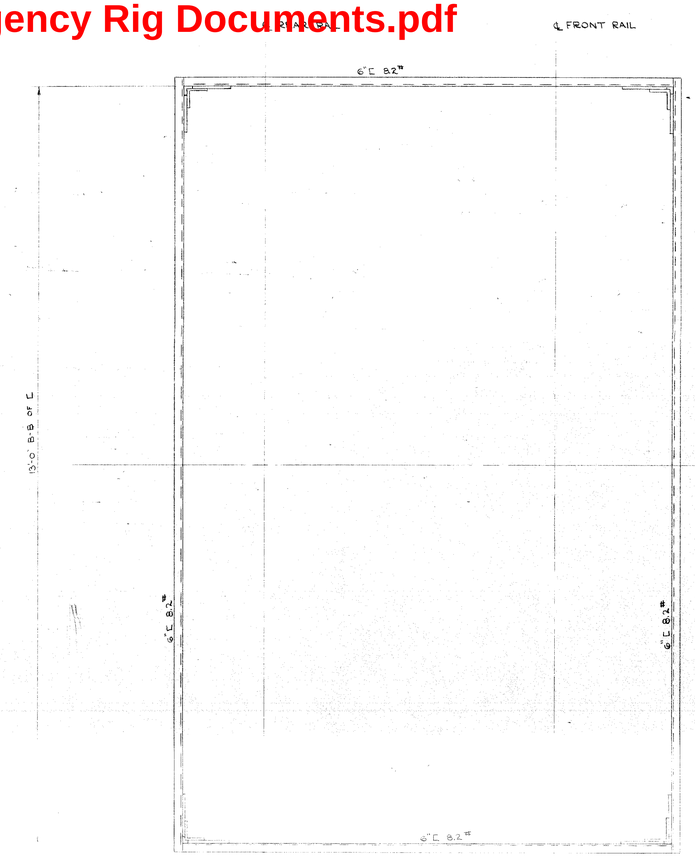
REAR TRUCK ASSEMBLY
WINDOW WASHING MACHINE
ALBANY MALL - AGENCY BLDGS., 12, 3 & 4

SCALE	MADE	DATE	CKD.	APPD.	DRAWING NO.
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B.M. PG 4,5
JOB No. 16415
SUB. No. 982

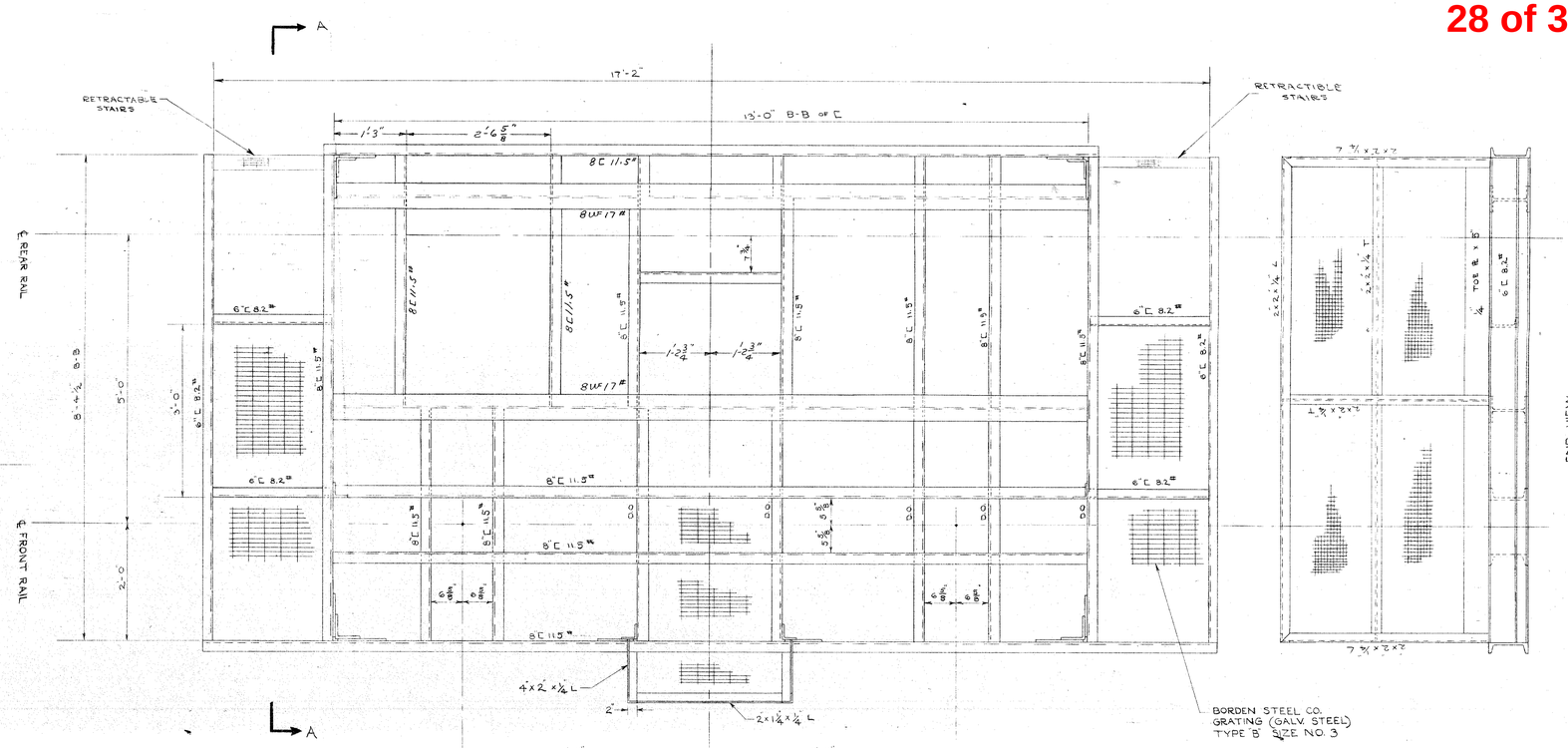
DIETZGEN NO. 1003 P.O. 89106

Agency Rig Documents.pdf

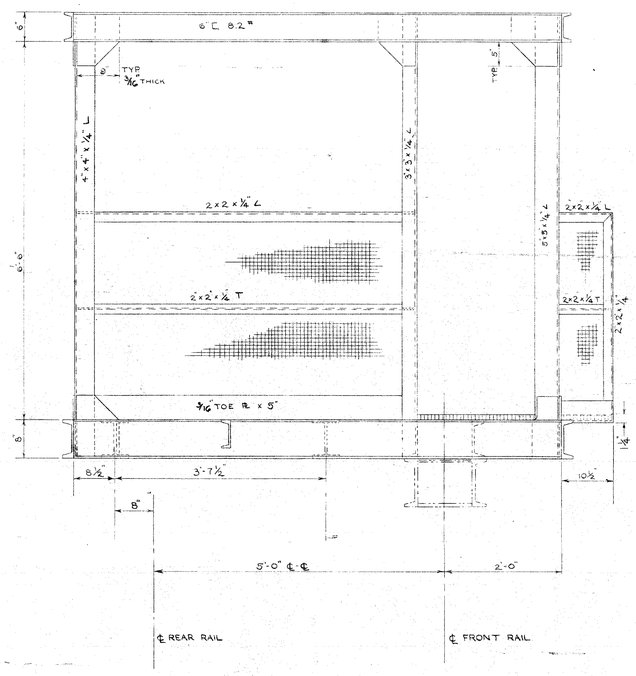


PLAN VIEW OF UPPER FRAME

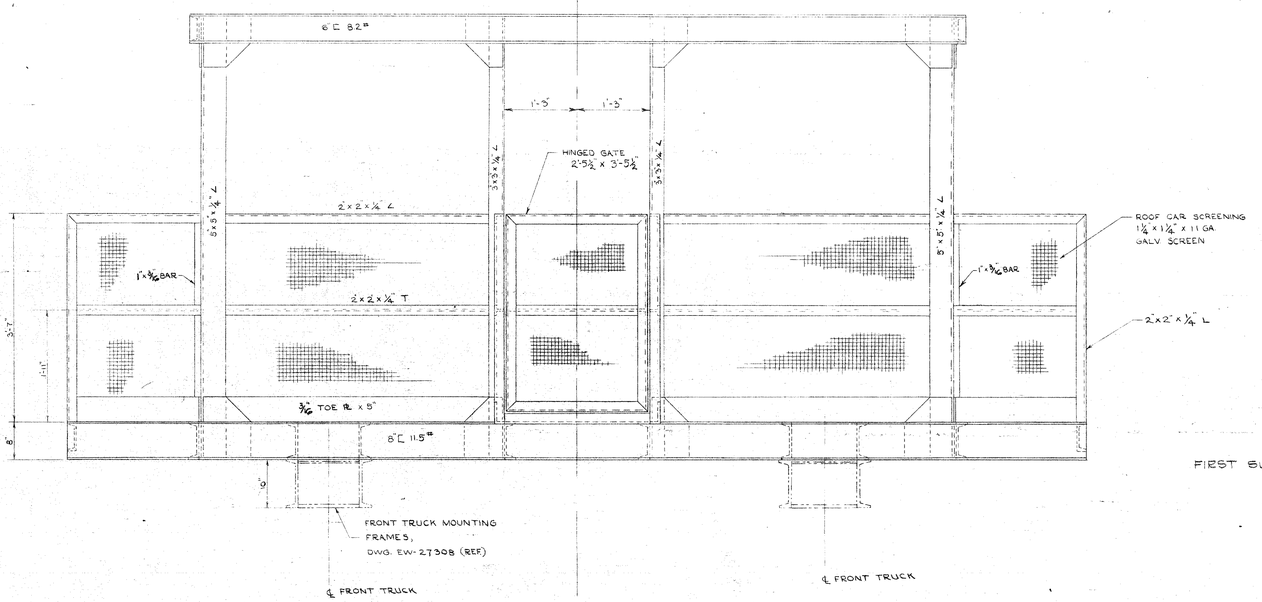
8'-4½" B-B



PLAN VIEW OF LOWER FRAME



END ELEVATION SECTION "A-A"



FIRST SUBMISSION - 6-9-67

RECEIVED AT OFFICE OF GEORGE A. FULLER COMPANY INC.
JUN 12 1967
REFERRED TO

REV.		BY	DATE

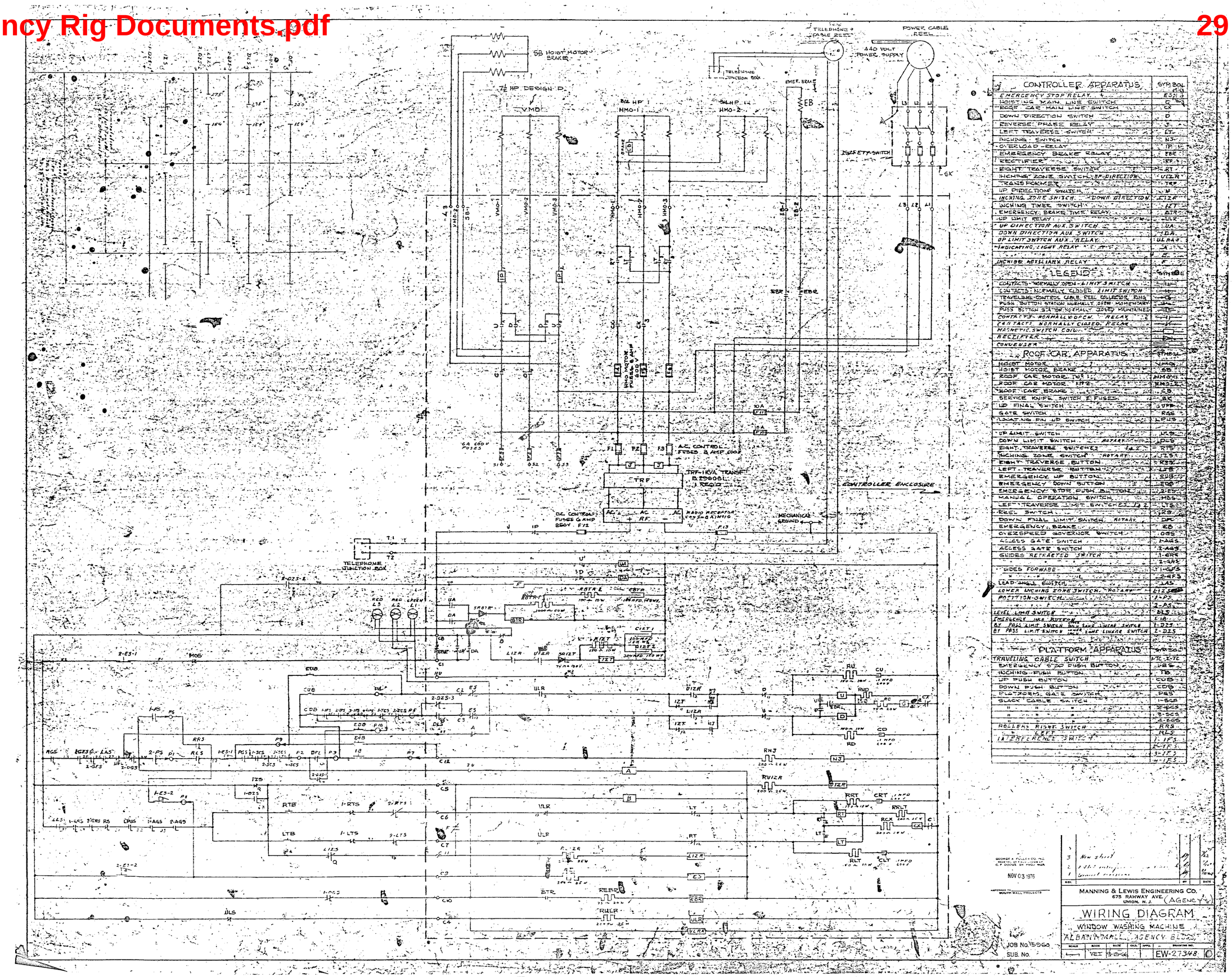
MANNING & LEWIS ENGINEERING CO.
675 RAHWAY AVE.
UNION, N. J.

ROOF CAR STRUCTURE
WINDOW WASHING MACHINE
ALBANY MALL - AGENCY BLD'G

JOB No. 16415
SUB. No.

SCALE	MADE	DATE	CKD.	APPD.	DRAWING NO.
1" = 1'	JFS	4/24/67			EW-27322

DEFIANCE NO. 1020 P-S 83108



CONTROLLER APPARATUS	SYMBOL
EMERGENCY STOP RELAY	ESR
HOISTING MAIN LINE SWITCH	K
ROOF CAR MAIN LINE SWITCH	R
DOWN DIRECTION SWITCH	D
REVERSE PHASE RELAY	J
LEFT TRAVERSE SWITCH	LT
INCHING SWITCH	NJ
OVERLOAD RELAY	OL
EMERGENCY BRAKE RELAY	EBR
RECTIFIER	RF
RIGHT TRAVERSE SWITCH	RT
INCHING ZONE SWITCH UP DIRECTION	UIZR
TRANSFORMER	TRF
UP DIRECTION SWITCH	U
INCHING ZONE SWITCH DOWN DIRECTION	DIZR
INCHING TIMER SWITCH	IZT
EMERGENCY BRAKE TIME RELAY	EBTR
UP LIMIT RELAY	ULR
UP DIRECTION AUX SWITCH	UA
DOWN DIRECTION AUX SWITCH	DA
UP LIMIT SWITCH AUX RELAY	ULRAX
*INDICATING LIGHT RELAY	A
	B
INCHING AUXILIARY RELAY	F

LEGEND	SYMBOL
CONTACTS-NORMALLY OPEN-LIMIT SWITCH	
CONTACTS-NORMALLY CLOSED LIMIT SWITCH	
TRAVELING CONTROL CABLE REEL COLLECTOR RING	
PUSH BUTTON STATION NORMALLY OPEN MOMENTARY	
PUSH BUTTON STATION NORMALLY CLOSED MAINTAINED	
CONTACTS NORMALLY OPEN RELAY	
CONTACTS NORMALLY CLOSED RELAY	
MAGNETIC SWITCH COIL	
RECTIFIER	
CONVERTER	

ROOF CAR APPARATUS	SYMBOL
HOIST MOTOR	VMO
HOIST MOTOR BRAKE	SB
ROOF CAR MOTOR NO 1	RMO-1
ROOF CAR MOTOR NO 2	RMO-2
ROOF CAR BRAKE	CB
SERVICE KNIFE SWITCH & FUSES	SK
UP FINAL SWITCH	UFS
GATE SWITCH	RGS
FLOATING PIN UP SWITCH	LPUS
UP LIMIT SWITCH	ULS
DOWN LIMIT SWITCH ROTARY	DLS
RIGHT TRAVERSE SWITCHES No 1 & 2	RTS
INCHING ZONE SWITCH ROTARY	ITS1
RIGHT TRAVERSE BUTTON	RTB
LEFT TRAVERSE BUTTON	LTB
EMERGENCY UP BUTTON	EUB
EMERGENCY DOWN BUTTON	EDB
EMERGENCY STOP PUSH BUTTON	2-ES
MANUAL OPERATION SWITCH	MOS
LEFT TRAVERSE LIMIT SWITCHES No 1 & 2	LTS
REEL SWITCH	RSS
DOWN FINAL LIMIT SWITCH ROTARY	DFC
EMERGENCY BRAKE	EB
OVERSPEED GOVERNOR SWITCH	OGS
ACCESS GATE SWITCH	1-AGS
ACCESS GATE SWITCH	2-AGS
GUIDES RETRACTED SWITCH	1-GRS
" " "	2-GRS
GUIDES FORWARD "	1-GFS
" " "	2-GFS
LEAD ANGLE SWITCH	LAS
LOWER INCHING ZONE SWITCH ROTARY	LIZS
POSITION SWITCH	1-PS
" "	2-PS
LEVEL LIMIT SWITCH	RLS
EMERGENCY HOIST OVERTRAVEL	EHL
BY PASS LIMIT SWITCH INNER TRAVEL ZONE LINEAR SWITCH	1-DZS
BY PASS LIMIT SWITCH INNER TRAVEL ZONE LINEAR SWITCH	2-DZS

PLATFORM APPARATUS	SYMBOL
TRAVELING CABLE SWITCH	MTC 1-TC
EMERGENCY STOP PUSH BUTTON	PES
INCHING PUSH BUTTON	TB
UP PUSH BUTTON	CUB
DOWN PUSH BUTTON	CDB
PLATFORM GATE SWITCH	PGS
SLACK CABLE SWITCH	1-SCS
" " "	2-SCS
" " "	3-SCS
" " "	4-SCS
ROLLER RIGHT SWITCH	RRS
" LEFT	RLS
INTERFERENCE SWITCH	1-IFS
"	2-IFS
"	3-IFS
"	4-IFS

GEORGE A. FULLER CO. INC. ARCHITECTS AND ENGINEERS C.P. DONGE SR. PROJ. MGR.

NOV 03 1976

APPROVED FOR SOUTH MALL PROJECTS

REV.		BY	DATE
3	New sheet		
2	Title entry		
1	General revisions		

MANNING & LEWIS ENGINEERING CO.
675 RAHWAY AVE. UNION, N.J.

WIRING DIAGRAM

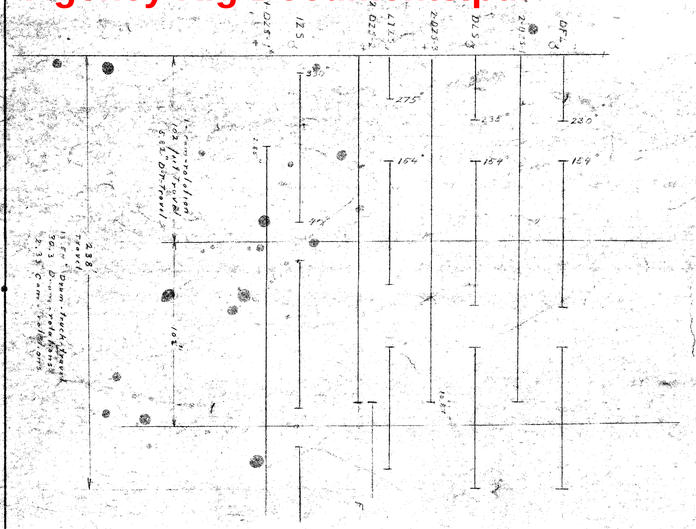
WINDOW WASHING MACHINE

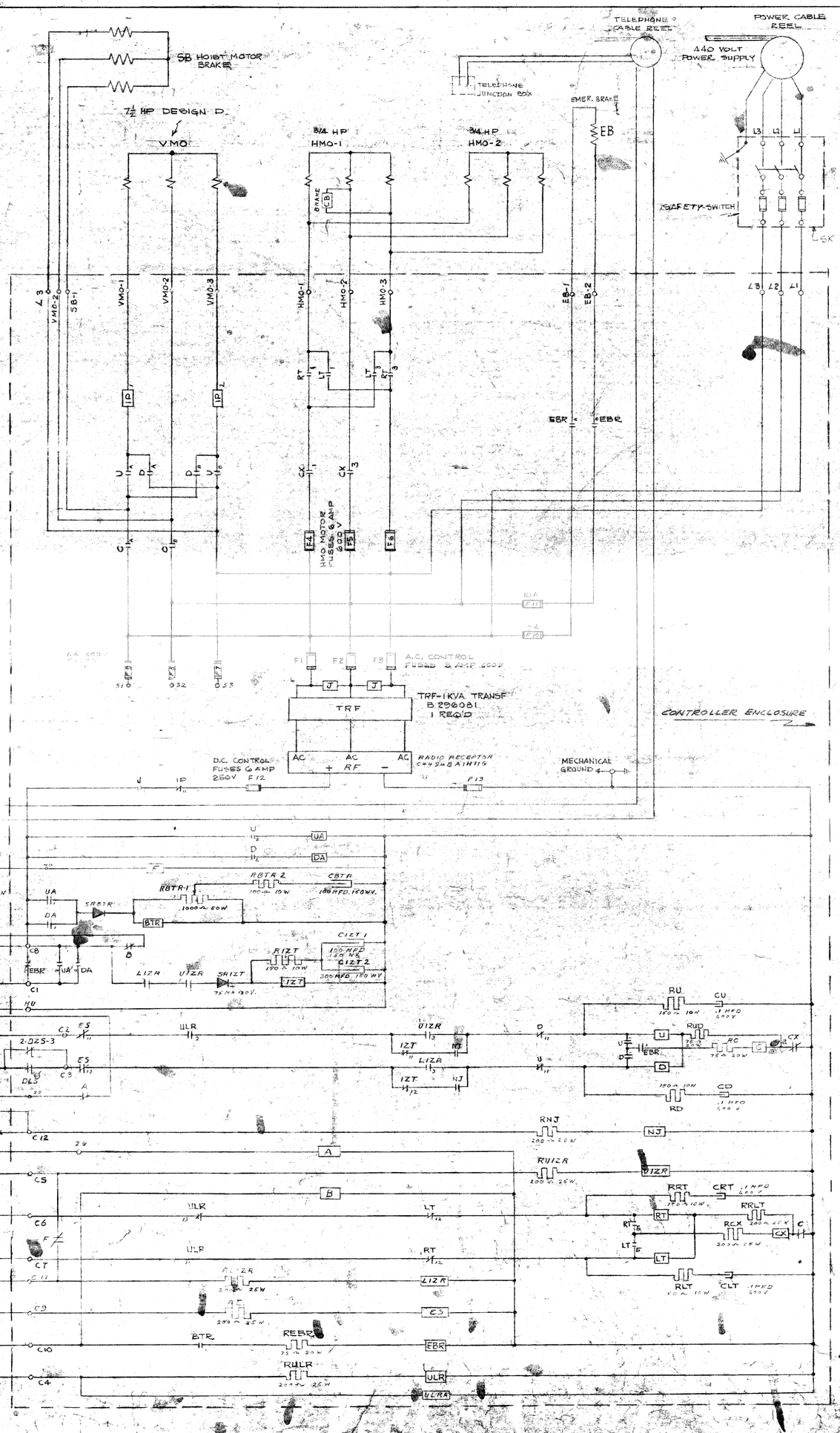
ALBANY MALL AGENCY BLDG.

JOB No. 1560
SUB. No.

SCALE	BASE	DATE	DES.	APPD.	DRAWING NO.
—	YEI	8-15-74			EW-27348

Agency Rig Documents.pdf





CONTROLLER APPARATUS	SYMBOL
EMERGENCY STOP RELAY	ES
HOISTING MAIN LINE SWITCH	C
ROOF CAR MAIN LINE SWITCH	CX
DOWN DIRECTION SWITCH	D
REVERSE PHASE RELAY	J
LEFT TRAVERSE SWITCH	LT
INCHING SWITCH	NJ
OVERLOAD RELAY	OP
EMERGENCY BRAKE RELAY	EBR
RECTIFIER	RF
RIGHT TRAVERSE SWITCH	RT
INCHING ZONE SWITCH UP-DIRECTION	UIZR
TRANSFORMER	TRF
UP DIRECTION SWITCH	U
INCHING ZONE SWITCH DOWN DIRECTION	LIZR
INCHING TIMER SWITCH	IZT
EMERGENCY BRAKE TIME RELAY	BTR
UP LIMIT RELAY	ULR
UP DIRECTION AUX SWITCH	UA
DOWN DIRECTION AUX SWITCH	DA
UP LIMIT SWITCH AUX. RELAY	ULRA
INDICATING LIGHT RELAY	A
	B
INCHING AUXILIARY RELAY	F

LEGEND	SYMBOL
CONTACTS-NORMALLY OPEN-LIMIT SWITCH	
CONTACTS-NORMALLY CLOSED LIMIT SWITCH	
TRAVELING CONTROL CABLE REEL COLLECTOR RING	
PUSH BUTTON STATION NORMALLY OPEN MOMENTARY	
PUSH BUTTON STATION NORMALLY CLOSED MAINTAINED	
CONTACTS-NORMALLY OPEN-RELAY	
CONTACTS-NORMALLY CLOSED-RELAY	
MAGNETIC SWITCH COIL	
RECTIFIER	
CONDENSER	

ROOF CAR APPARATUS	SYMBOL
HOIST MOTOR	VMO
HOIST MOTOR BRAKE	SB
ROOF CAR MOTOR NO 1	HMO-1
ROOF CAR MOTOR NO 2	HMO-2
ROOF CAR BRAKE	S
EMERGENCY STOP RELAY	ES
HOISTING MAIN LINE SWITCH	C
ROOF CAR MAIN LINE SWITCH	CX
DOWN DIRECTION SWITCH	D
REVERSE PHASE RELAY	J
LEFT TRAVERSE SWITCH	LT
INCHING SWITCH	NJ
OVERLOAD RELAY	OP
EMERGENCY BRAKE RELAY	EBR
RECTIFIER	RF
RIGHT TRAVERSE SWITCH	RT
INCHING ZONE SWITCH UP-DIRECTION	UIZR
TRANSFORMER	TRF
UP DIRECTION SWITCH	U
INCHING ZONE SWITCH DOWN DIRECTION	LIZR
INCHING TIMER SWITCH	IZT
EMERGENCY BRAKE TIME RELAY	BTR
UP LIMIT RELAY	ULR
UP DIRECTION AUX SWITCH	UA
DOWN DIRECTION AUX SWITCH	DA
UP LIMIT SWITCH AUX. RELAY	ULRA
INDICATING LIGHT RELAY	A
	B
INCHING AUXILIARY RELAY	F
UP LIMIT SW. ROTARY	ULS
DOWN LIMIT SW. ROTARY	DLS
RIGHT TRAVERSE SWITCH ES 1 & 2	RTS
INCHING ZONE SWITCH ROTARY	IZS
RIGHT TRAVERSE BUTTON	RTB
LEFT TRAVERSE BUTTON	LTB
EMERGENCY UP BUTTON	EUB
EMERGENCY DOWN BUTTON	EDB
EMERGENCY STOP PUSH BUTTON	2-ES
MANUAL OPERATION SWITCH	MOS
LEFT TRAVERSE LIMIT SWITCHES 1 & 2	- LTS
REEL SWITCH	RS
DOWN FINAL LIMIT SWITCH ROTARY	DFL
EMERGENCY BRAKE	EB
OVERSPEED GOVERNOR SWITCH	OGS
INNER GATE SWITCH	1-AGS
ACCESS GATE SWITCH	2-AGS
GUIDES RETRACTED SWITCH	1-GRS
" " "	2-GRS
GUIDES FORWARD "	1-GFS
" " "	2-GFS
LEAD ANGLE SWITCH	LAS
LOWER INCHING ZONE SWITCH ROTARY	LIZS
POSITION SWITCH	1-PS
"	2-PS
LEVEL LIMIT SWITCH	LLS
EMERGENCY INCH BUTTON	EIB
BY PASS LIMIT SWITCH UPPER INCH ZONE LINEAR SWITCH	1-DZS
BY PASS LIMIT SWITCH LOWER INCH ZONE LINEAR SWITCH	2-DZS

PLATFORM APPARATUS	SYMBOL
TRAVELING CABLE SWITCH	1-TC, 2-TC
EMERGENCY STOP PUSH BUTTON	IES
INCHING PUSH BUTTON	IB
UP PUSH BUTTON	CUB
DOWN PUSH BUTTON	CDB
PLATFORM GATE SWITCH	PGS
SLACK CABLE SWITCH	1-SCS
" " "	2-SCS
" " "	3-SCS
" " "	4-SCS
ROLLER RIGHT SWITCH	RRS
" LEFT "	RLS
INTERFERENCE SWITCH	1-IFS
" " "	2-IFS
" " "	3-IFS
" " "	4-IFS

GEORGE A. FULLER CO. INC.
RECEIVED AT FIELD OFFICE OF
C. P. DOONE GR. PROJ. MGR.
NOV 03 1976
REFERRED TO SOUTH MALL PROJECTS

REV.		BY	DATE
3	New Sheet		7/22
2	[illegible]		4/26/77
1	General Revisions		3/10/77

MANNING & LEWIS ENGINEERING CO.
675 RAHWAY AVE. (AGENCY)
UNION, N. J.

WIRING DIAGRAM
WINDOW WASHING MACHINE
ALBANY MALL, AGENCY BLDG.

SCALE	MADE	DATE	CKD.	APPD.	DRAWING NO.
	VEI	8-15-66			EW-27348

JOB No. 15960
SUB. No.

IFB Attachment 5
625 Broadway Rig Documents

NEW YORK STATE OF OPPORTUNITY. Office of General Services

Design and Construction
AN ISO 9001:2015 CERTIFIED ORGANIZATION
Division of Construction, 34th Floor, Corning Tower
The Governor Nelson A. Rockefeller Empire State Plaza
Albany, New York 12242
Phone: (518) 474-0331

To:

From: Lerch Bates, Inc.

Contract No.: 45983

Facility:

Reviewed By: Jeff Polizzi

Contractor: AKROS MGMT INC

Submittal No.: 118123 C-001-3

EIC: Mark Rice

Submittal Desc: Resubmittal of Resubmittal of Resubmittal of 1.07A Shop Drawings-Shop Drawings: Show complete layout and configuration of complete window cleaning and suspended maintenance system, including all components and accessories.

Disposition: Approved as Noted

Remarks:

In response to your letter of transmittal dated 11/4/2022, the below listed submittal items are marked Approved as Noted. With the understanding that all contract requirements shall be met.

No.	Date of Action	Action	Spec Section	Supplier/Mfr	No. of Dwgs	Drawing No's
1	9/5/2023	AAN	118123 C	TRACTEL Inc		

Item Description:

Remarks:

2

Item Description:

Remarks:

3

Item Description:

Remarks:

NEW YORK STATE OF OPPORTUNITY. Office of General Services

Design and Construction
AN ISO 9001:2015 CERTIFIED ORGANIZATION
Division of Construction, 34th Floor, Corning Tower
The Governor Nelson A. Rockefeller Empire State Plaza
Albany, New York 12242
Phone: (518) 474-0331

SUBMITTAL TRANSMITTAL

Project No.: 45983

NOTE: A Transmittal is required for each Specification Section. DO NOT bind together separate submittals from different Specification Sections.

This form is to be used *only* if there are no deviations from the Contract Documents. If there are ANY deviations from the Contract Documents, you must submit the Contract Document Deviation Request Form (BDC 49).

Project Description: *(Project Title, Facility Name and Address)*

45983 - 625 Broadway - Provide Building Façade Access Equipment

OGS

Albany, NY

Date: 11/4/2022

TO:

Mark Rice

NYS OGS Design & Construction..

c/o Troop F HQ, 55 Crystal Run Rd.

Middletown, NY 10940, NY 10940

FROM:

Andres Mercado

AKROS MGMT INC

44 Tivoli Street

Albany, NY 12207

SUBMITTAL TYPE:

☐ Re-Submittal	☐ Information (Waiver)	
☐ Product Data	☑ Shop Drawings	☐ Quality Control/Assurance
☐ Test Reports	☐ Certificate	☐ Contract Closeout
☐ Design Data	☐ Samples	☐ Other

Comply with all submittal requirements in the Project Manual as per Section 013300 and the particular Specification Section for which you are transmitting material.

Specification Number and Title: 118123 C 118123 C-001-3 Façade Access Equipment

Part	Type	Description
		Shop drawings updated as per last set of comments from LB on informal review. Calculations already provided.

Contractor's Certification:

We have verified that all material or equipment contained in this submittal meets all the requirements specified or shown **(no exceptions)**.

We acknowledge that in accordance with Article 4.7 of the General Conditions a re-evaluation fee can be assessed against our contract if this submittal requires re-submission and review, if the submittal requirements have not been met.

Andres Mercado
Contractor/Contractor's Representative *(Print Name)*

Andres Mercado
Signature

EQUIPMENT LIST

ROOF				
LEVEL	REFERENCE DWG.	EQUIPMENT SUPPLIED	SYMBOL	QTY.
MAIN ROOF (FLOOR 16) EL. 231'-0"	8R04011 8R04012	PERMANENT HD DAVIT BASE, BOLT TO EXISTING PEDESTAL 5000 SERIES, OFF-SET TYPE 1 (103 & 107) TO BE DESIGNED AND FABRICATED TO SUIT EXISTING PEDESTALS; FOR FULL ACCOUNT (TYPE DESIGNATION, QTY) SEE DETAIL 08/30	107 103	8
		PERMANENT HD DAVIT BASE, BOLT TO EXISTING PEDESTAL 5000 SERIES, OFF-SET TYPE 2 (203 & 207) TO BE DESIGNED AND FABRICATED TO SUIT EXISTING PEDESTALS; FOR FULL ACCOUNT (TYPE DESIGNATION, QTY) SEE DETAIL 08/30	207 203	8
		PORTABLE HD DAVIT ARM ASSEMBLY 5000 SERIES (BOOM REACH/MAST HEIGHT AS SHOWN)	6'-0" 15'	2
		PORTABLE DAVIT RAISING WINCH C/W LIFTING BRACKET		1
		POWERED PLATFORM, 30 FT NOMINAL LENGTH RR = ROOF RIGGED; TR = TRANSFERRED GR = GROUND RIGGED	STAGE RR/TR/GR	1
		ISA (INTERMEDIATE STABILIZATION ANCHOR) REFER TO ELEVATIONS FOR QUANTITY – SUPPLY ONLY –		114
		STAINLESS STEEL STRAIN RELIEF EYEBOLT (AT ELECTRICAL RECEPTACLE) SUPPLIED – BY TRACTEL; INSTALLED – BY OTHERS		2
FLOOR 14 ROOF TERRACE EL. 209'-0"	8R04011 8R04012	PERMANENT HD DAVIT BASE, BOLT TO EXISTING PEDESTAL 5000 SERIES, OFF-SET TYPE 1 (103 & 107) TO BE DESIGNED AND FABRICATED TO SUIT EXISTING PEDESTALS; FOR FULL ACCOUNT (TYPE DESIGNATION, QTY) SEE DETAIL 08/30	107 103	12
		PERMANENT HD DAVIT BASE, BOLT TO EXISTING PEDESTAL 5000 SERIES, OFF-SET TYPE 2 (203 & 207) TO BE DESIGNED AND FABRICATED TO SUIT EXISTING PEDESTALS; FOR FULL ACCOUNT (TYPE DESIGNATION, QTY) SEE DETAIL 08/30	207 203	4
		PERMANENT HD DAVIT BASE, BOLT TO EXISTING PEDESTAL 5000 SERIES, OFF-SET TYPE 3 (303 & 307) TO BE DESIGNED AND FABRICATED TO SUIT EXISTING PEDESTALS; FOR FULL ACCOUNT (TYPE DESIGNATION, QTY) SEE DETAIL 08/30	307 303	8
		PERMANENT HD DAVIT BASE, BOLT TO EXISTING PEDESTAL 5000 SERIES, OFF-SET TYPE 4 (403 & 407) TO BE DESIGNED AND FABRICATED TO SUIT EXISTING PEDESTALS; FOR FULL ACCOUNT (TYPE DESIGNATION, QTY) SEE DETAIL 08/30	407 403	4
		PORTABLE HD DAVIT ARM ASSEMBLY 5000 SERIES (BOOM REACH/MAST HEIGHT AS SHOWN)	6'-0" 15'	2
		PORTABLE DAVIT RAISING WINCH C/W LIFTING BRACKET		1
		STAINLESS STEEL STRAIN RELIEF EYEBOLT (AT ELECTRICAL RECEPTACLE) SUPPLIED – BY TRACTEL; INSTALLED – BY OTHERS		6

GENERAL NOTES

1. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ALL DIMENSIONS AND DETAILS.
2. ALL LIGHTNING RODS ON ROOF SHALL BE OF THE TIP-OVER TYPE.
3. EVERY MAIN OR WORKING ROOF LEVEL MUST HAVE DIRECT ACCESS TO THE INTERIOR OF THE BUILDING (BY OTHERS).
4. PLATFORM ACCESSIBILITY TO ALL DESIGNATED SERVICE DROPS ARE BY OTHERS.
5. O.S.H.A. REQUIRES A PARAPET AND/OR HANDRAIL HEIGHT OF 42" MINIMUM AT ALL ROOF OR TERRACE LEVELS (BY OTHERS).
6. AREA FROM WHERE STAGE IS GROUND RIGGED MUST BE FREE OF ANY OBSTRUCTION AND LEVELED (MIN. 6'-0" FROM BUILDING PERIMETER).
7. PROVIDE CONCRETE PAVERS FOR EASE OF EQUIPMENT TRANSPORTATION AND OPERATORS (BY OTHERS).
8. AREA DIRECTLY BELOW EACH DEPICTED PLATFORM DROP TO BE CLEAR OF OBSTRUCTIONS AND LEVELED FOR PLATFORM EMERGENCY LANDING (BY OTHERS).
9. ALL FLASHING AND SEALING BY OTHERS.
10. ALL ELECTRICAL RECEPTACLES AND WATER SUPPLY HOSE BIBS ARE BY OTHERS.

STRUCTURAL NOTES

1. ALL STRUCTURAL STEEL INCLUDING STEEL SHAPES, PLATES, ETC. SHALL CONFORM TO CSA G40.21-44W / ASTM A-572 GRADE 42.
2. ALL STRUCTURAL HSS SECTIONS SHALL CONFORM TO CSA G40.21-50W / ASTM A500 GRADE C.
3. ALL STRUCTURAL ALUMINUM TO BE 6061-T6 OR 6531-T6 UNLESS OTHERWISE NOTED.
4. ALL WELDING ELECTRODES TO BE E70XX.
5. ALL EXPOSED STRUCTURAL STEEL TO BE HOT DIP GALVANIZED.
6. ALL STRUCTURAL ALUMINUM TO BE MILL FINISH.
7. ALL STRUCTURE SUPPORTING WINDOW WASHING EQUIPMENT MUST WITHSTAND THE APPLIED LOADING WITH A SAFETY FACTOR OF 4 AGAINST FAILURE, UNLESS OTHERWISE NOTED.

INSTALLATION NOTES

1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY.
2. REFER TO STRUCTURAL NOTE #5.
3. ALL DIMENSIONS AND FINISH CONDITIONS OF EXISTING STRUCTURES WILL BE "FIELD VERIFY" BEFORE PROCEEDING WITH ANY WORK.
4. NOTIFY THE PROJECT ENGINEER OF ANY AND ALL DISCREPANCIES BETWEEN EXISTING CONDITION AND SHOP DRAWINGS.

DEPT	ASSESSMENTS	BY	CHK	DATE
A	[illegible]	N		SEP 22/22
B	[illegible]	N		OCT 06/22
C	[illegible]	N		OCT 28/22
D	[illegible]	N		NOV 04/22

LEGEND

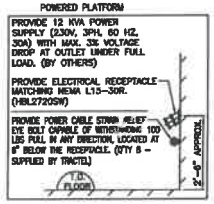
- XX — SECTION OR DETAIL MARK.
- XX — DRAWING FROM WHERE SECTION IS TAKEN OR SHOWN
- X — SECTION OR DETAIL MARK
- X — SECTION OR DETAIL TAKEN OR SHOWN ON SAME DRAWING.
- –TH/FL– / EL.–VARIOUS — ROOF LEVEL; TOP OF ELEVATION IN FT – IN.
- EQUIPMENT LOCATION NUMBER
- PLATFORM DROP NUMBER
- NEMA L15–30R ELECTRICAL TWIST LOCK RECEPTACLE IN LAYOUT – BY OTHERS
- FROST PROOF HOSE BIB, OR MARKER TO MARK ACCESS TO WATER SOURCE INSIDE BUILDING (BY OTHERS). HOSE BIB LOCATION ARE APPROXIMATE. FINAL LOCATIONS TO BE DETERMINED BY OWNER.
- DAVIT ARM IN LAYOUT. CIRCLE INDICATES MAX. REACH
- XX'-0" RR — XX'-0" NOMINAL LENGTH POWERED PLATFORM, ROOF RIGGED
- XX'-0" NOMINAL LENGTH POWERED PLATFORM IN LAUNCHING/PICK-UP POSITION

POWERED PLATFORM

PROVIDE 12 KVA POWER SUPPLY (230V, 3PH, 60 HZ, 30A) WITH MAX. 3% VOLTAGE DROP AT OUTLET UNDER FULL LOAD. (BY OTHERS)

PROVIDE ELECTRICAL RECEPTACLE MATCHING NEMA L15–30R. (HBL2720SW)

PROVIDE POWER CABLE STRAIN RELIEF EYE BOLT CAPABLE OF WITHSTANDING 100 LBS PULL IN ANY DIRECTION, LOCATED AT 6" BELOW THE RECEPTACLE. (QTY 6 – SUPPLIED BY TRACTEL)



TRACTEL LTD.–STRINGFIELD BRYDON ISSUE STAMP

Transmittal emailed to: [redacted] 2023-11-24

Released 2023-11-28

SD 8R04 rev 3.pdf

PROJECT NAME: 625 BROADWAY – ALBANY

CUSTOMER: AKROS MANAGEMENT, INC.

LOCATION: ALBANY, NY

ENGINEER'S STAMP

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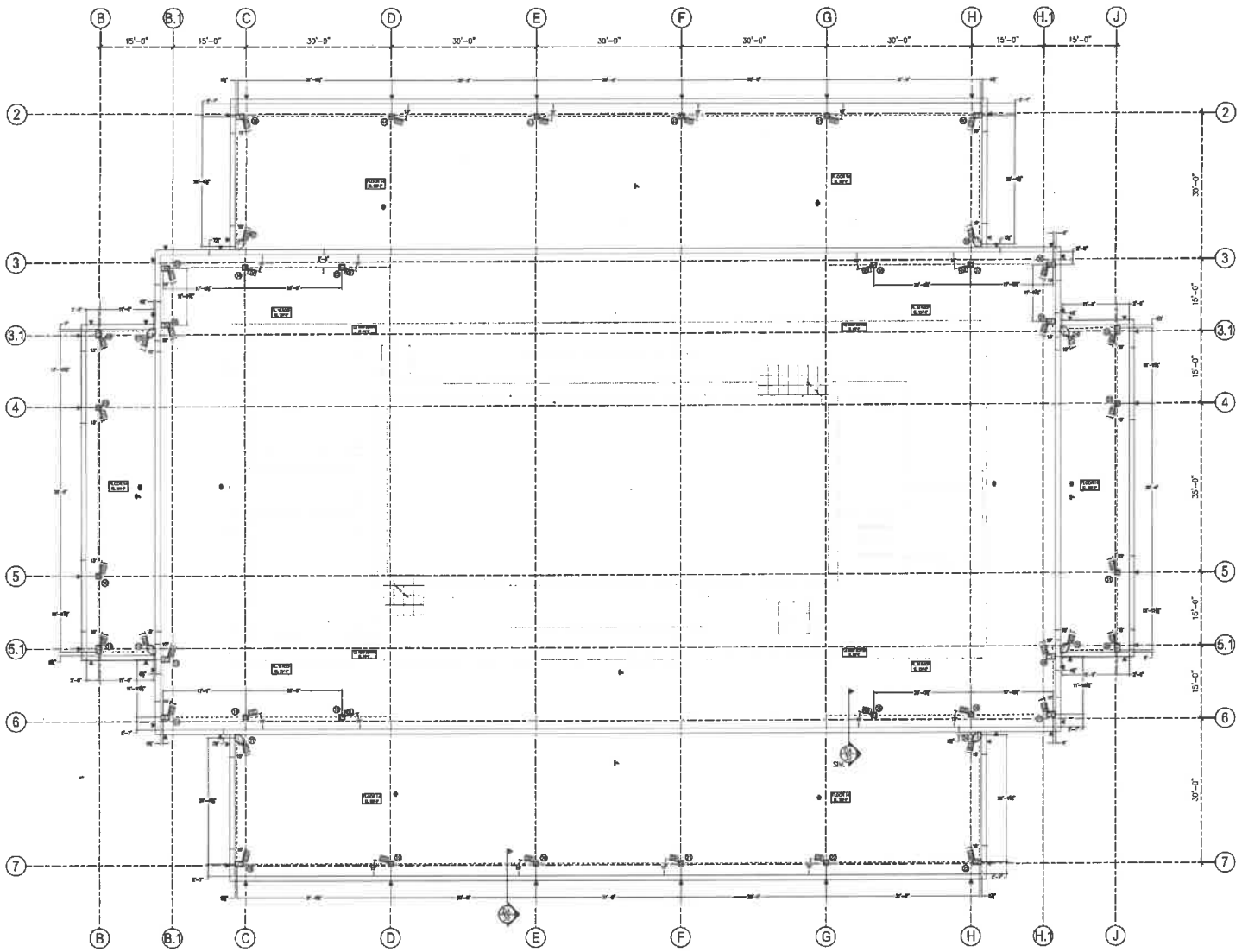
APPROVALS	DATE
DRAWN BY: Nam	AUG 15, 2023
CHECKED BY:	
APPROVED BY:	

Tractel Ltd. Stringfellow Division

TITLE: EQUIPMENT LIST & LOCATIONS

DRAWING NO.	REV.
8R04010	D

SHEET 8R04000 PROJECT NO. 8R04 SCALE



A COMPOSITE ROOF PLAN
SCALE 3/32" = 1'-0"

TRACTEL LTD.-SWINGSTAGE DIVISION
ISSUE STAMP

PROJECT NAME: 625 BROADWAY – ALBANY

CUSTOMER: AKROS MANAGEMENT, INC.

LOCATION: ALBANY, NY

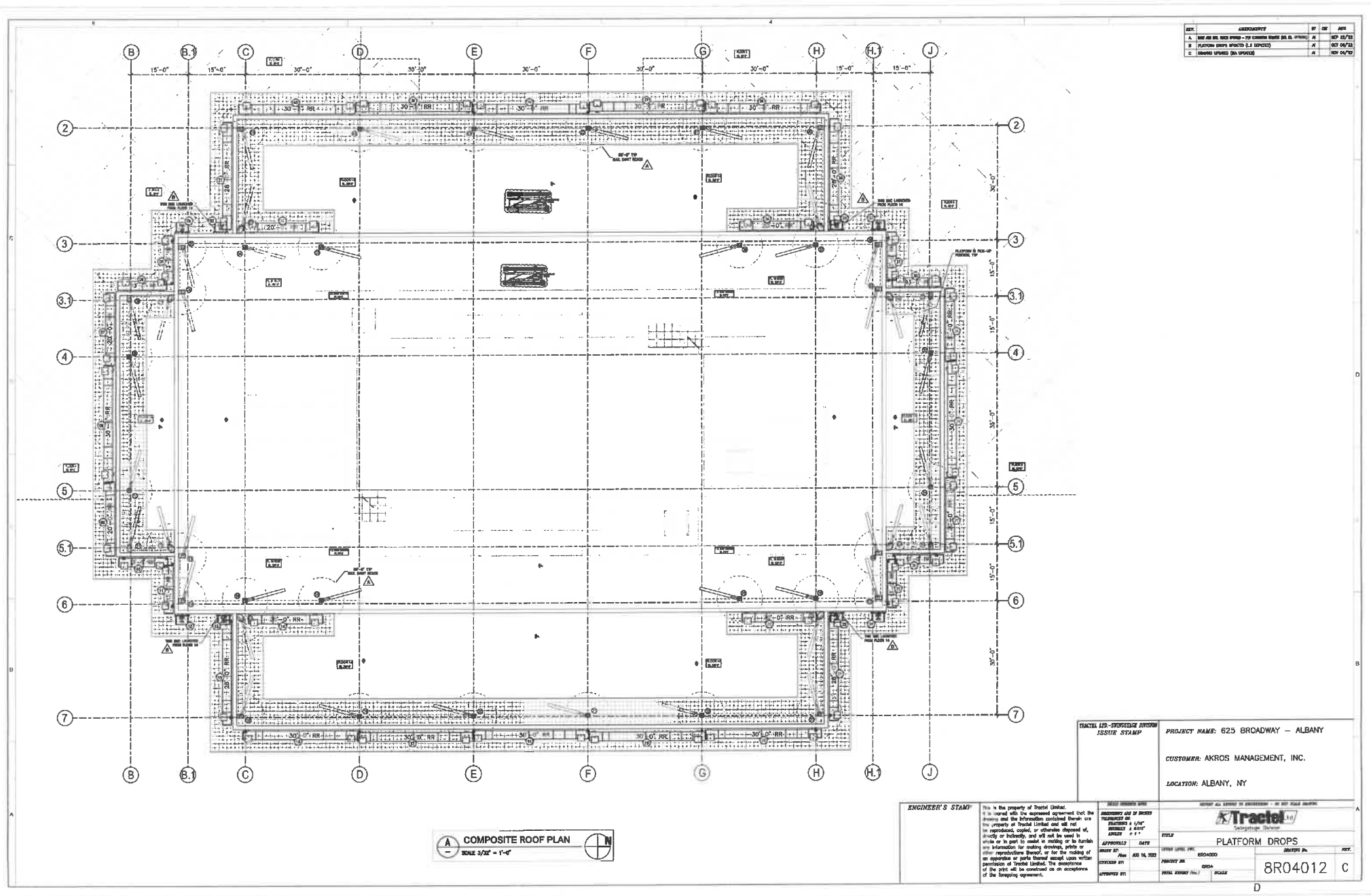
ENGINEER'S STAMP

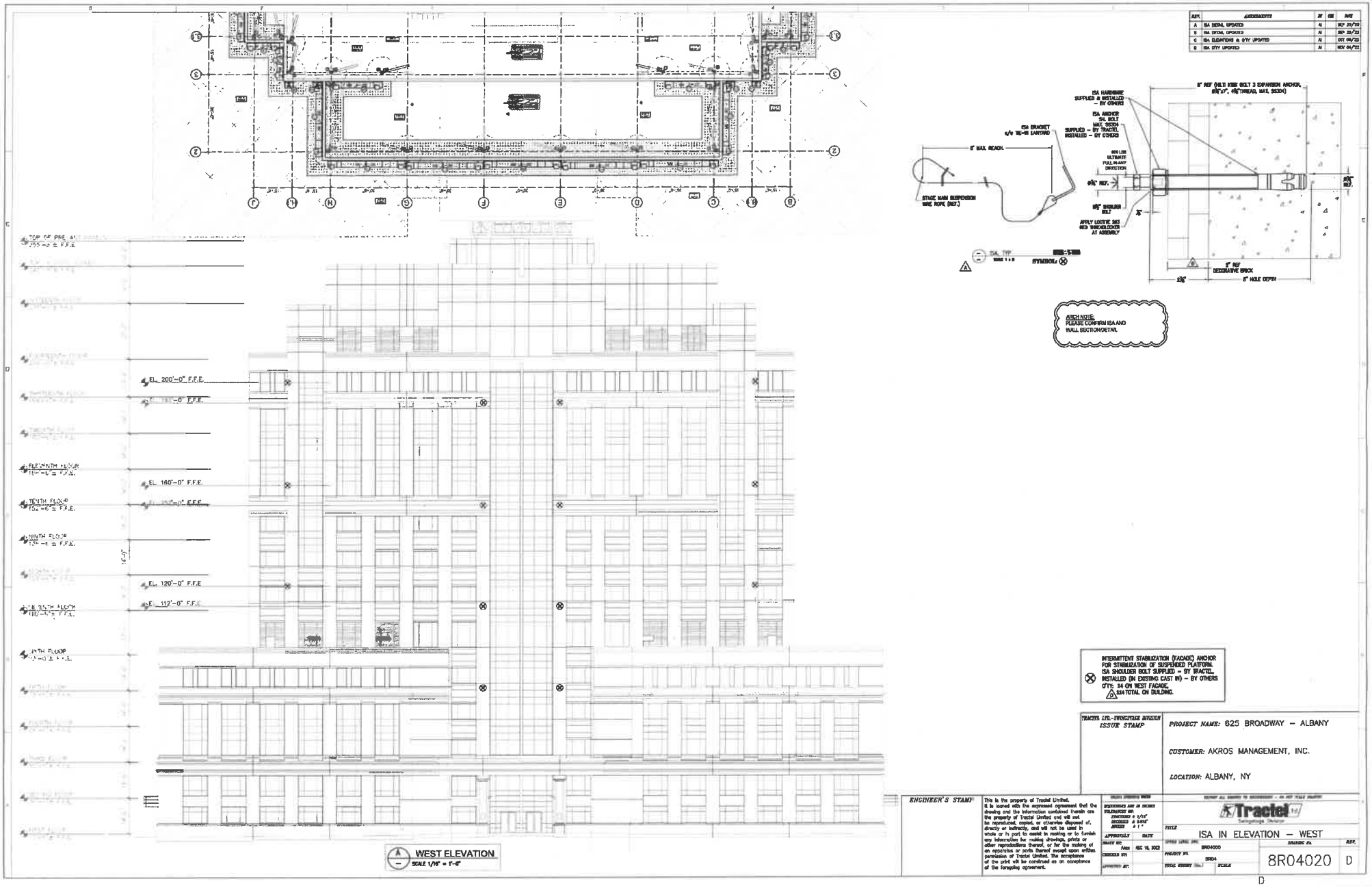
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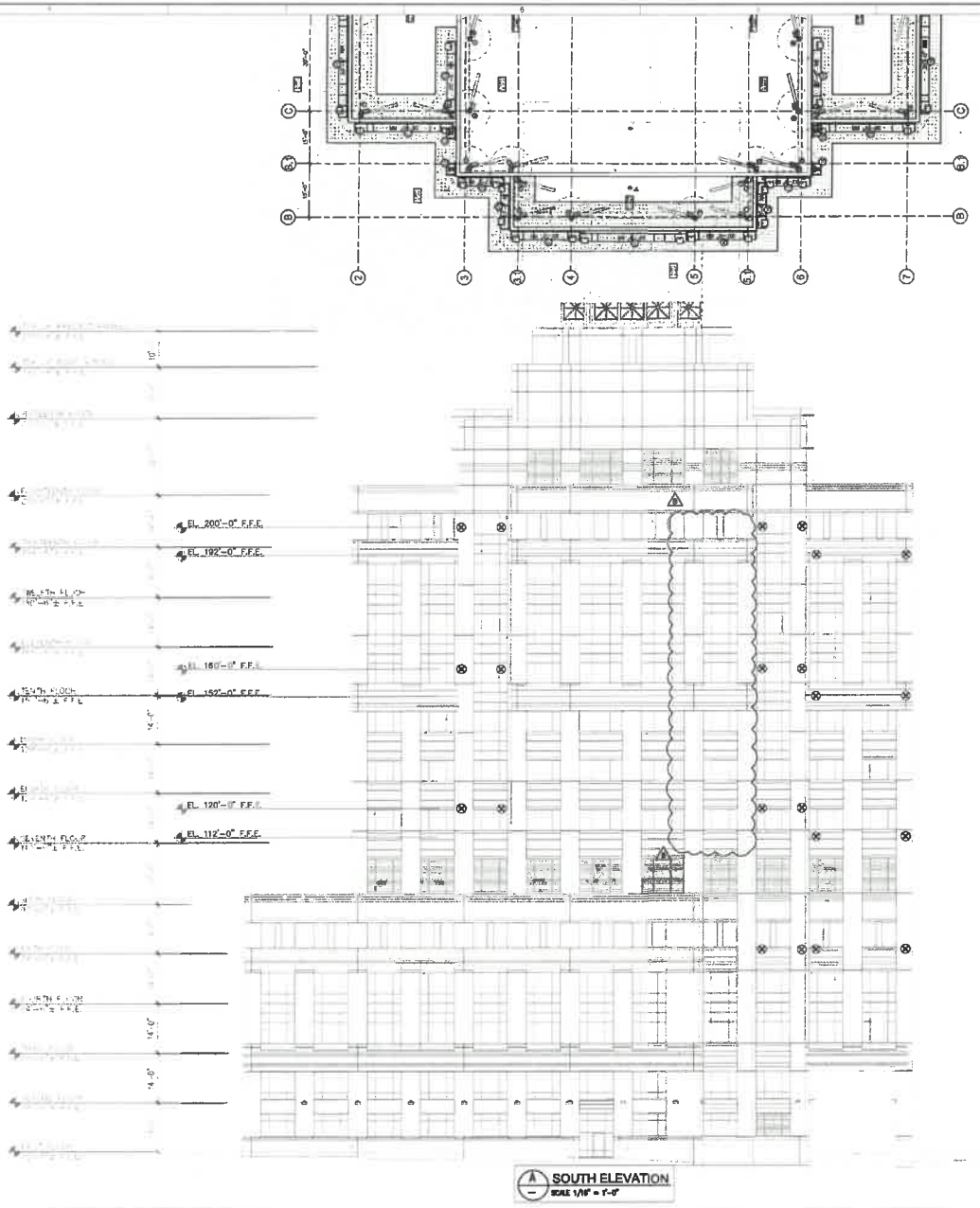
Tractel

TITLE: EQUIPMENT LAYOUT

DRAWING No. 8R04011


COMPOSITE ROOF PLAN
SCALE 3/32" = 1'-0"
PROJECT NAME: 625 BROADWAY – ALBANY
CUSTOMER: AKROS MANAGEMENT, INC.
LOCATION: ALBANY, NY
ENGINEER'S STAMP
PLATFORM DROPS
8R04012
C


WEST ELEVATION
SCALE 1/16" = 1'-0"
EL. 200'-0" F.F.E.
EL. 160'-0" F.F.E.
EL. 120'-0" F.F.E.
EL. 112'-0" F.F.E.
ISA BRACKET
5' MAX. REACH
STAGE MAIN SUSPENSION WIRE ROPE (REF.)
ISA HARDWARE SUPPLIED & INSTALLED — BY OTHERS
ISA ANCHOR SH. BOLT MAX. SIZE3/4 SUPPLIED — BY TRACTEL INSTALLED — BY OTHERS
800 LBS ULTIMATE PULL IN ANY DIRECTION
5/8" SHOULDER BOLT
APPLY LOCTITE 263 RED THREADLOCKER AT ASSEMBLY
5" MIN (MLS KBK BOLT 3 EXPANSION ANCHOR, 5/8"x7", 4½"THREAD, MAX. 35324)
3" REF DECORATIVE BRICK
5" HOLE DEPTH
ARCHAUS: PLEASE CONFIRM ISA AND WALL SECTION/DETAIL
INTERMITTENT STABILIZATION (FACADE) ANCHOR FOR STABILIZATION OF SUSPENDED PLATFORM. ISA SHOULDER BOLT SUPPLIED — BY TRACTEL. INSTALLED (IN EXISTING CAST IN) — BY OTHERS QTY'S: 24 ON WEST FACADE. 224 TOTAL ON BUILDING.
PROJECT NAME: 625 BROADWAY — ALBANY
CUSTOMER: AKROS MANAGEMENT, INC.
LOCATION: ALBANY, NY
ISA IN ELEVATION — WEST
8R04020
D



SOUTH ELEVATION
SCALE 1/16" = 1'-0"

REV.	AMENDMENTS	BY	CHK	DATE
A	ISA ELEVATIONS & QTY UPDATED	N		OCT 05/22
B	ISA REMOVED PER CUSTOMER'S REQUEST, QTY UPDATED	N		NOV 04/22

INTERMITTENT STABILIZATION (FACADE) ANCHOR FOR STABILIZATION OF SUSPENDED PLATFORM. ISA SHOULDER BOLT SUPPLIED – BY TRACTEL, INSTALLED ON EXISTING CAST I/O – BY OTHERS
QTY: 22 ON SOUTH FACADE,
114 TOTAL ON BUILDING.

TRACTEL LTD.–SWINGSTAGE DIVISION
ISSUE STAMP

PROJECT NAME: 625 BROADWAY – ALBANY

CUSTOMER: AKROS MANAGEMENT, INC.

LOCATION: ALBANY, NY

ENGINEER'S STAMP

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE
FRACTIONS ± 1/16"
DECIMALS ± 0.005"
ANGLES ± 1°

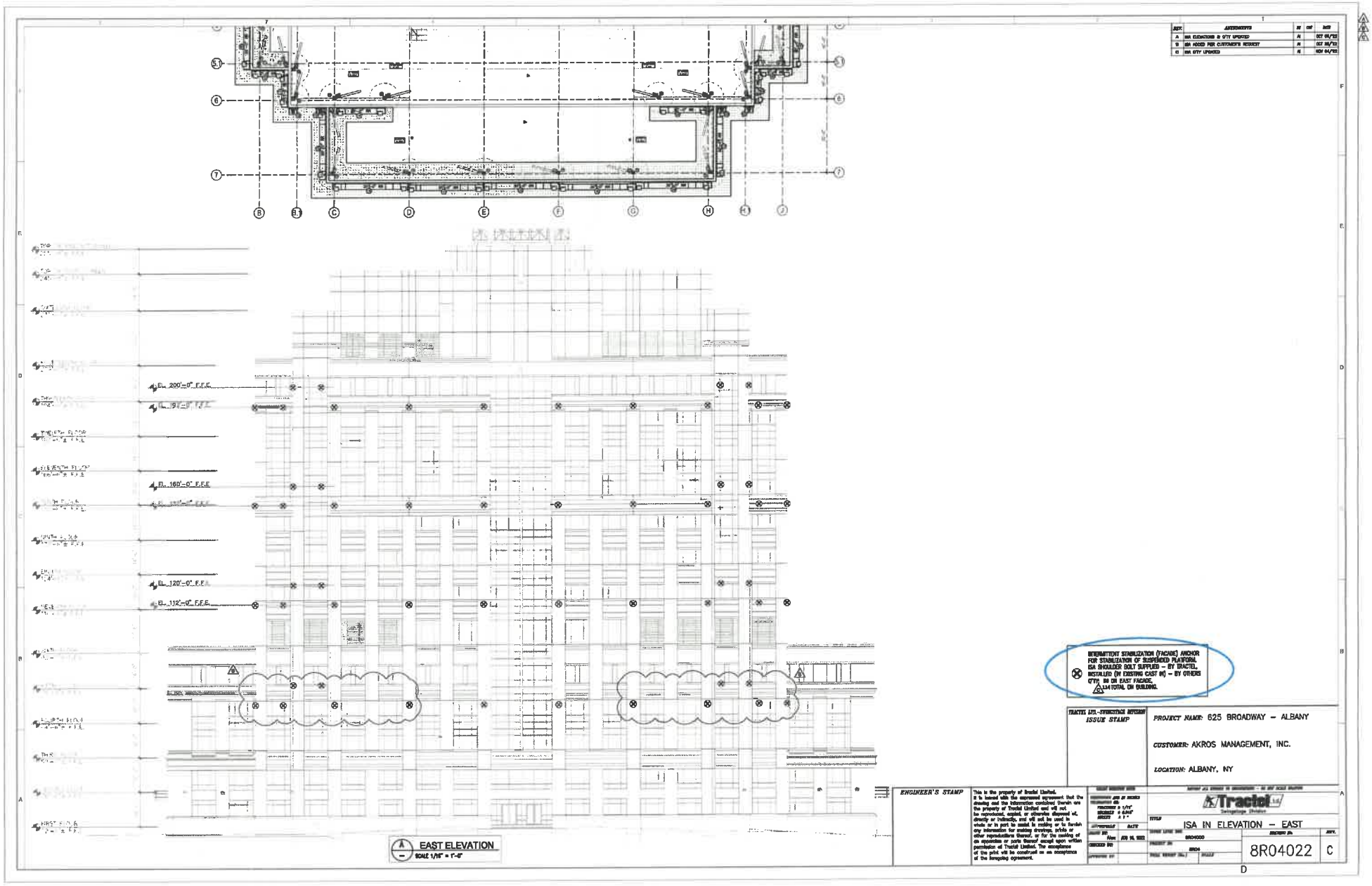
APPROVALS	DATE
DRAWN BY: Akros	AUG 18, 2022
CHECKED BY:	
APPROVED BY:	

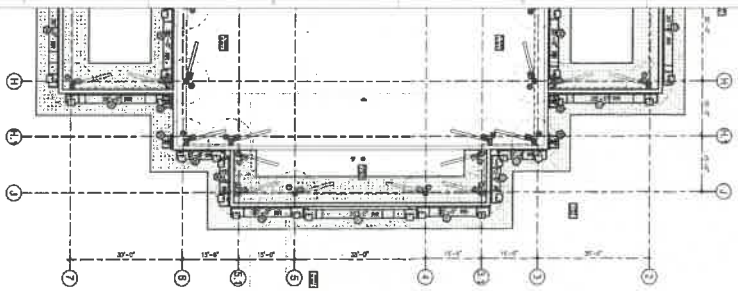
Tractel Swingstage Division

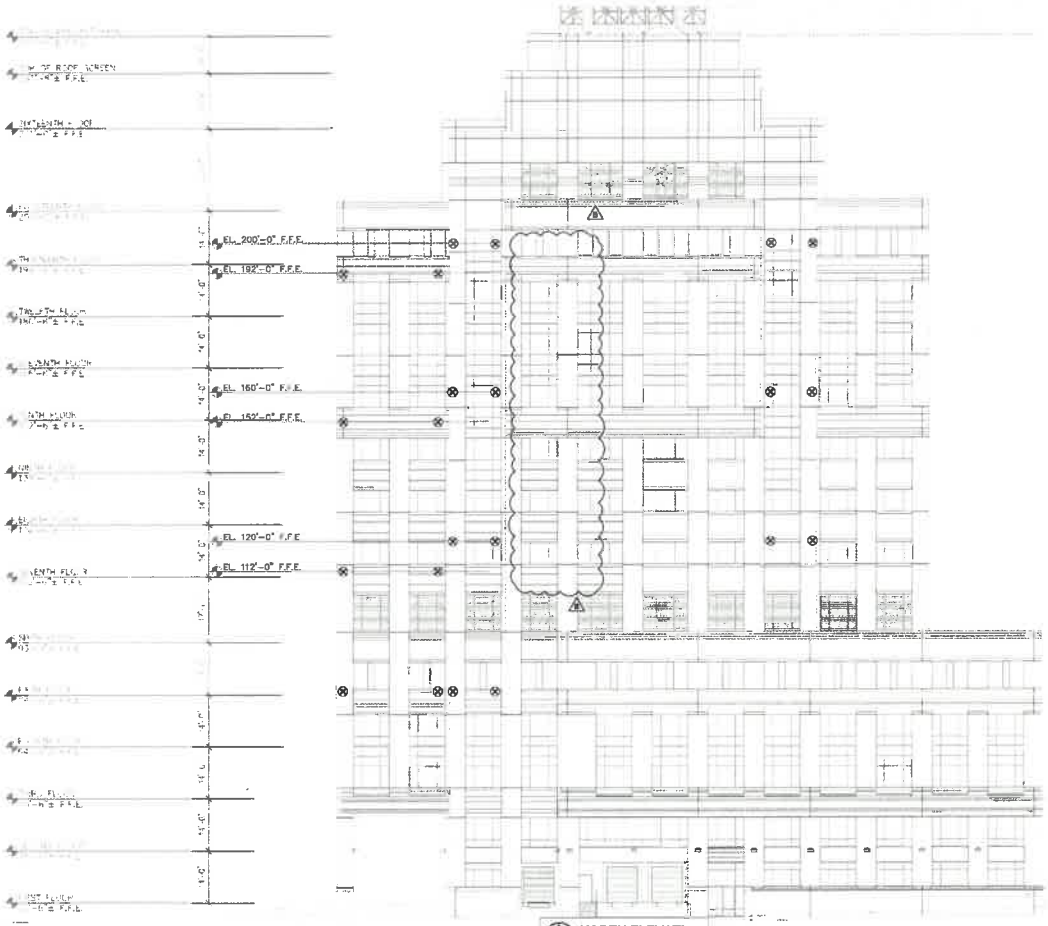
TITLE: ISA IN ELEVATION – SOUTH

SHEET SIZE	SCALE	DRAWING No.	REV.
D	1/16" = 1'-0"	8R04021	B

WORK LEVEL NO: 8R04000
PROJECT NO.: 8R04
TOTAL SHEET No.: 1


EL. 200'-0" F.F.E.
EL. 160'-0" F.F.E.
EL. 120'-0" F.F.E.
EL. 112'-0" F.F.E.
EAST ELEVATION
SCALE 1/16" = 1'-0"
INTERMITTENT STABILIZATION (FACADE) ANCHOR FOR STABILIZATION OF SUSPENDED PLATFORM. ISA SHOULDER BOLT SUPPLIED – BY TRACTEL. INSTALLED (IN EXISTING CAST IN) – BY OTHERS
134 TOTAL ON BUILDING.
ISSUE STAMP
PROJECT NAME: 625 BROADWAY – ALBANY
CUSTOMER: AKROS MANAGEMENT, INC.
LOCATION: ALBANY, NY
ENGINEER'S STAMP
ISA IN ELEVATION – EAST
8R04022
C





A NORTH ELEVATION
SCALE 1/16" = 1'-0"

REV.	AMENDMENTS	BY	CHK	DATE
A	ISA ELEVATIONS & QTY UPDATED	M		OCT 05/22
B	ISA REMOVED PER CUSTOMER'S REQUEST, QTY UPDATED	M		NOV 04/22

INTERMITTENT STABILIZATION (FACADE) ANCHOR FOR STABILIZATION OF SUSPENDED PLATFORM. ISA SHOULDER BOLT SUPPLIED – BY TRACTEL, INSTALLED ON EXISTING CAST IN) – BY OTHERS QTY: 22 ON NORTH FACADE, 44 TOTAL ON BUILDING.

TRACTEL LTD - STRUCTURAL DIVISION
ISSUE STAMP

PROJECT NAME: 625 BROADWAY – ALBANY

CUSTOMER: AKROS MANAGEMENT, INC.

LOCATION: ALBANY, NY

ENGINEER'S STAMP

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DRAWING ARE IN INCHES
TOLERANCES ON:
FRACTIONS ± 1/16"
DECIMALS ± .XX"
ANGLES ± 1°

APPROVALS DATE
DRAWN BY: Rev. AUG 16, 2022
CHECKED BY:
APPROVED BY:

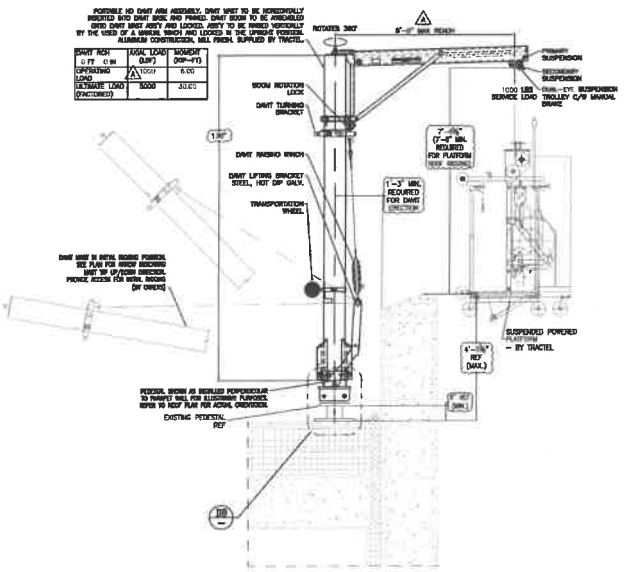
TITLE ISA IN ELEVATION – NORTH

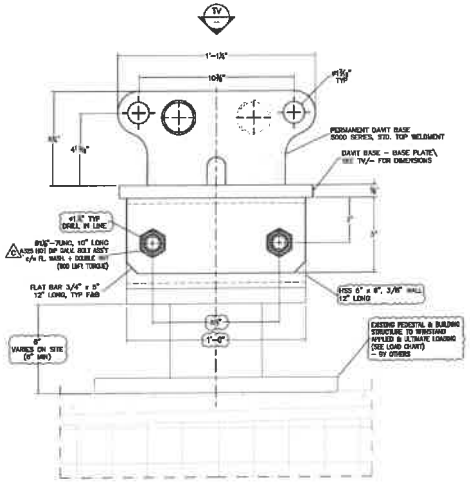
DRAWING No. 8R04023 REV. B

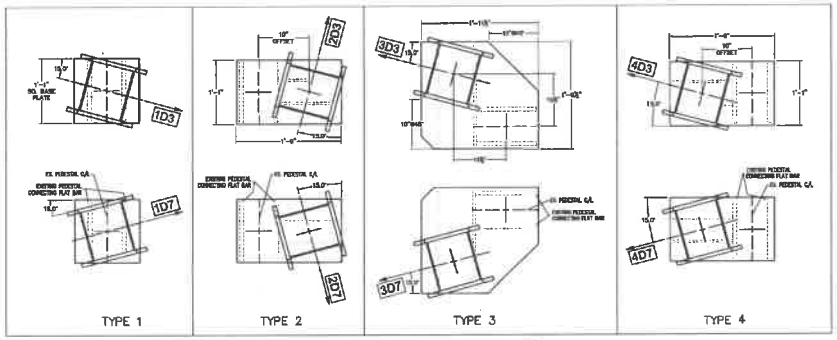
PROJECT No. 8R04

SCALE

D







CUSTOM DAVIT BASE TOP VIEW
SCALE 0"-1"=1'-0"

DAVIT BASE TYPE/QUANTITY				
TYPE	ORIENTATION	ECCENTRICITY	MARK	Q'TY
1	3 (+15°)	0"	1D3	14
1	7 (–15°)	0"	1D7	6
2	3 (+15°)	10"	2D3	8
2	7 (–15°)	10"	2D7	6
3	3 (+15°)	10½"x10½"	3D3	4
3	7 (–15°)	10½"x10½"	3D7	4
4	3 (+15°)	10"	4D3	2
4	7 (–15°)	10"	4D7	2

ARCHITECT: PLEASE CONFIRM ALL DIMENSIONS IN CLOUDS

REV.	AMENDMENTS	BY	CHK	DATE
A	[illegible]	N		SEP 22/22
B	DAVIT ARM, REACH @ 6'0"RCH, 20'/- UPDATED	N		SEP 30/22
C	BOOM, 70/- UPDATED PER CHECK; HARDWARE ADD, UPDATED	N		OCT 20/22
D	MINOR REVISION	N		OCT 25/22

TRACTEL LTD.-STRUCTURAL DIVISION ISSUE STAMP

PROJECT NAME: 625 BROADWAY – ALBANY

CUSTOMER: AKROS MANAGEMENT, INC.

LOCATION: ALBANY, NY

ENGINEER'S STAMP:

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DRAWN BY: Marc AUG 14, 2022
CHECKED BY:
APPROVED BY:

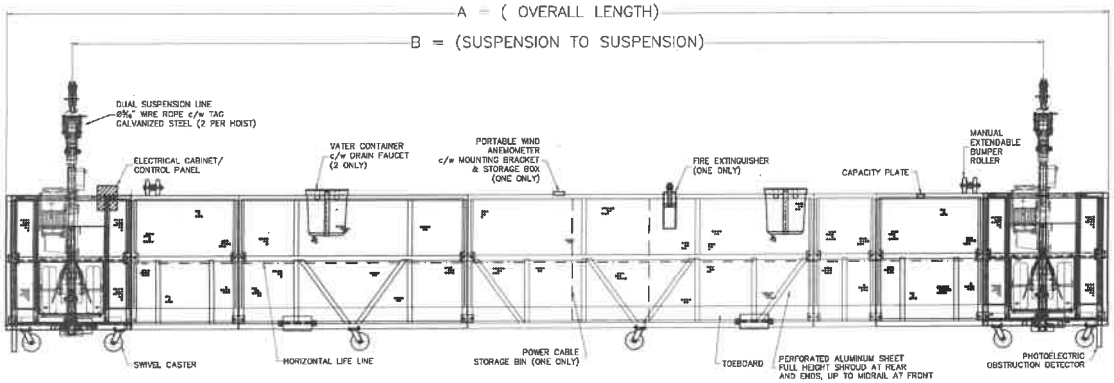
Tractel Ltd. Swingstage Division

TITLE: SECTIONS & DETAILS

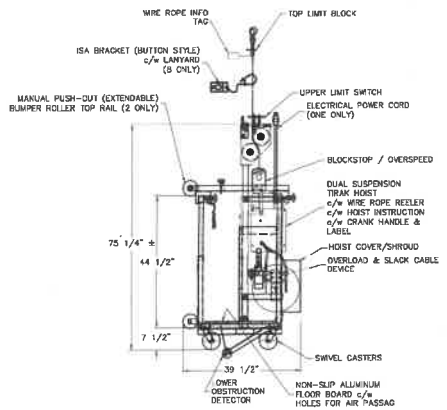
8R04000
8R04
SCALE

DRAWING No. 8R04030 REV. D

D



POWERED PLATFORM 30'-0" (NOM)



SECTION / SIDE VIEW

UNIT SPECIFICATION No. :	–
EQUIPMENT SUPPORT LAYOUTS :	– 8R04012
MAX. SUSPENSION HEIGHT :	– 250 FT
HOIST TYPE :	– TRACTION
STAGE LOAD CAPACITY :	– 500 LBS.
WORKING SPEED :	– 35 FT/MIN.
PLATFORM WEIGHT:	– 1500 Lb MAX. (FOR 30Ft STAGE)
No. OF OPERATORS REQ'D :	– 2
POWER SUPPLY :	– 230V, 3 PHASE, 60 Hz, 30 A.
MALE PLUG ON STAGE WILL BE HUBBELL CATALOGUE # 2721	

THIS UNIT WILL BE EQUIPPED WITH ALL THE REQUIRED SAFETY DEVICES AS SPECIFIED BY THE CURRENT SAFETY CODE. REFER TO THE SPECIFICATION FOR FURTHER DATA.

COMPONENT SAFETY FACTORS WILL MEET OR EXCEED THE FOLLOWING: – WIRE ROPE 10 : 1; – STRUCTURE 4 : 1

MATERIAL SPECIFICATION

STRUCTURAL STEEL :	–	C40.21 44W/300W
SHAFTS AND PINS:	–	COLD ROLLED STEE/ 316 STAINLESS STEEL
STRUCTURAL ALUMINUM :	–	6351 – T6
ALUMINUM SHEETS AND ROUNDS:	–	6061 – T6

FINISHES

STEEL COMPONENTS:	–	HOT DIP GALVANIZED
	–	(EXCEPT SHAFTS AND PINS)
ALUMINUM COMPONENTS:	–	MILL FINISH.

NOMINAL STAGE DIMENSION

STAGE (NOM.)	A	B	STAGE CONFIGURATION	REMARKS
30'-0"	30'-8 5/8"	27'-1 1/8"	1 x 3 m (1 x 115 7/8") 1 x 2 m (1 x 78 5/8") 2 x 1 m (2 x 39 7/8") 1 x 625 m (1 x 20 7/8") 2 x 40" POWER SECTION 2 END PANELS	
28'-0"	27'-8 3/8"	24'-1 1/8"	1 x 3 m (1 x 115 7/8") 1 x 2 m (1 x 78 5/8") 1 x 1 m (1 x 39 7/8") 1 x 625 m (1 x 20 7/8") 2 x 40" POWER SECTION 2 END PANELS	
20'-0"	19'-7 1/4"	17'-10 3/4"	1 x 3 m (1 x 115 7/8") 1 x 1 m (1 x 39 7/8") 2 x 40" POWER SECTION 2 END PANELS	
13'-0"	12'-11 1/4"	9'-3 3/4"	2 x 1 m (2 x 39 7/8") 2 x 40" POWER SECTION 2 END PANELS	
SINGLE MAN CAGE	3'-7 5/8"	–	1 x 40" POWER SECTION 2 END PANELS	BOTH ENDS TO BE USED AS SMC

RELATED EQUIPMENT

A) PORTABLE WIND ANEMOMETER (ONE ONLY)

TRACTEL LTD.–SWINGSTAGE DIVISION ISSUE STAMP

PROJECT NAME: 625 BROADWAY – ALBANY

CUSTOMER: AKROS MANAGEMENT, INC.

LOCATION: ALBANY, NY

ENGINEER'S STAMP

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APPROVALS: DRAWN BY: Mmc AUG 16, 2022; CHECKED BY:; APPROVED BY:

REPORT ALL ERRORS TO ENGINEERING – DO NOT SCALE DRAWING

Tractel Ltd. Swingstage Division

TITLE: 30 Ft (NOM.) POWERED PLATFORM

UPPER LEVEL DWG: 8R04000

PROJECT NO.: 8R04

TYPE: DRAWING ONLY; SCALE: 1/8"

DRAWING NO.: 8R04050; REV.: B

D

technical sheet	davit systems general information	ref.: T4751 rev. no.: 1 date: 06/01 page: 1/2

DAVIT SYSTEMS

Davit Systems are a traditional and effective method to provide permanent access to exterior building facades

The basic system is comprised of:

- ***fixed davit bases,***
- ***portable davit arms (mast & boom assemblies)***
- ***powered work platform***
- ***dual-line suspension system***
- ***horizontal life-lines***

Other davit system equipment available:

- ***TIRFOR manual davit lifting hoists***
- ***davit arm lifting brackets***
- ***davit boom turning handles***
- ***material lifting hoists***

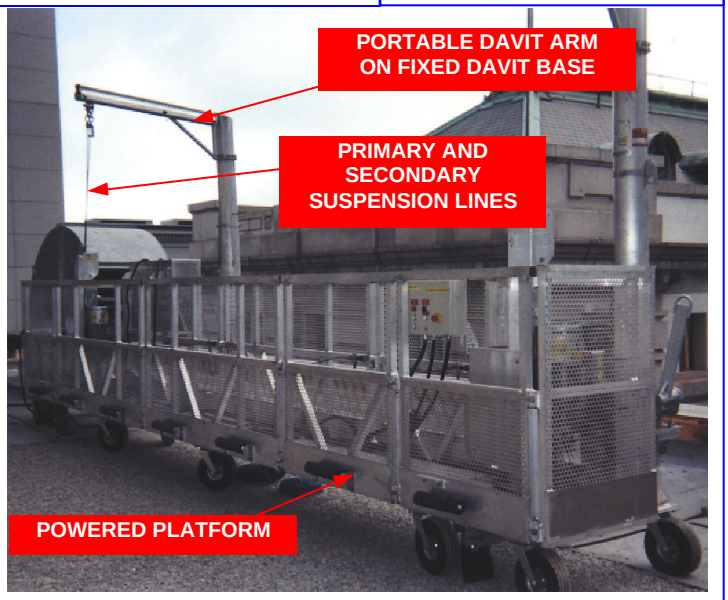
Special conditions can incorporate:

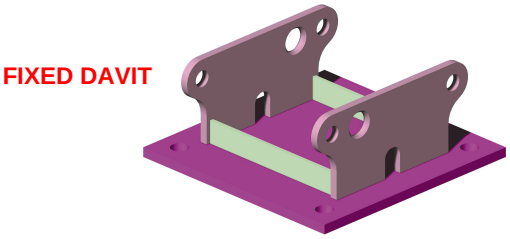
- ***portable davit bases***
- ***flush mounted pedestals***

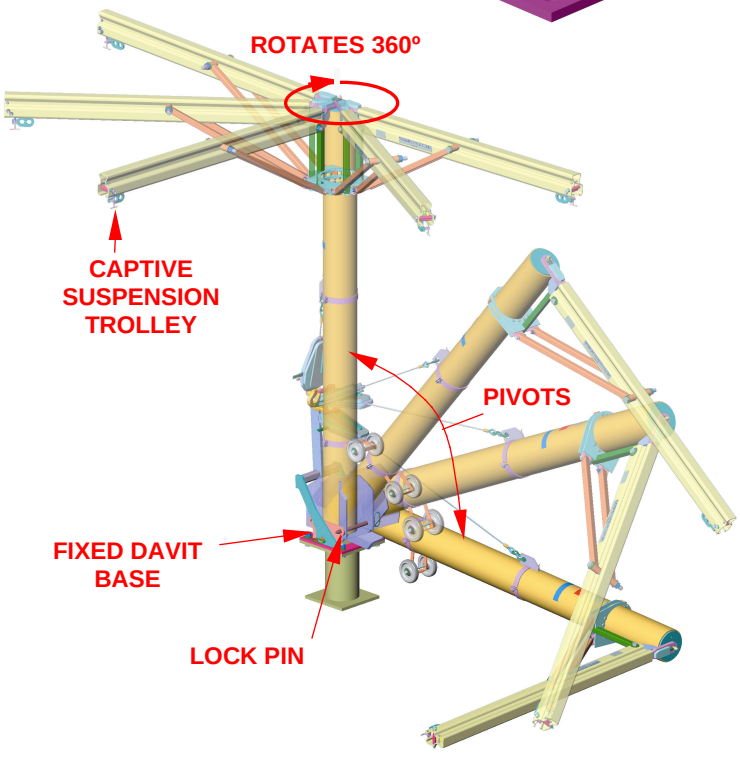
Davit arms are typically used to suspend 20 to 30 foot (6m to 9m) long work platforms. This length is based on the spacing of the fixed bases – located at the structural elements of the building.

The davit boom rotates on a special rolling collar to allow the platform to be maneuvered over the parapet. The platform is suspended from a captive trolley allowing movement along the davit boom (see Davit Booms, T4756).

Single-user work cages and bosun's chairs may also be suspended from individual davits.





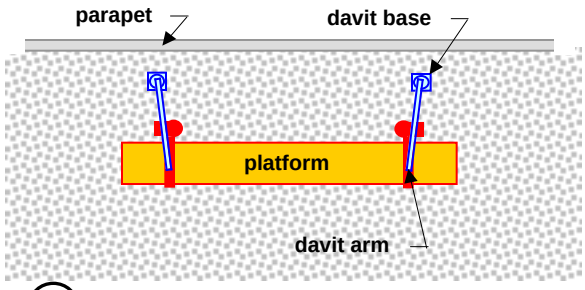


Tractel Ltd.
Swingstage® Division

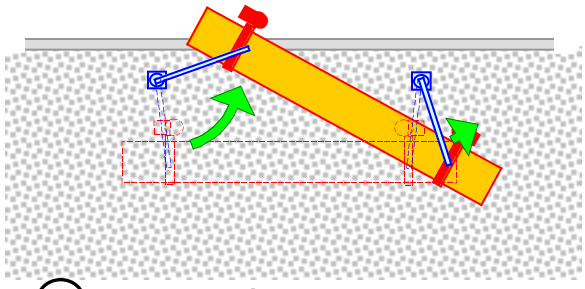
technical sheet

davit systems
general information

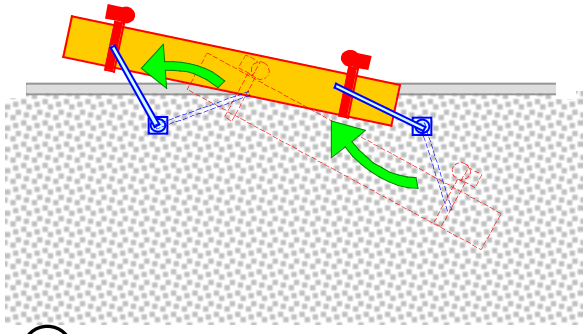
ref.: T4751
rev. no.: 1
date: 06/01
page: 2/2



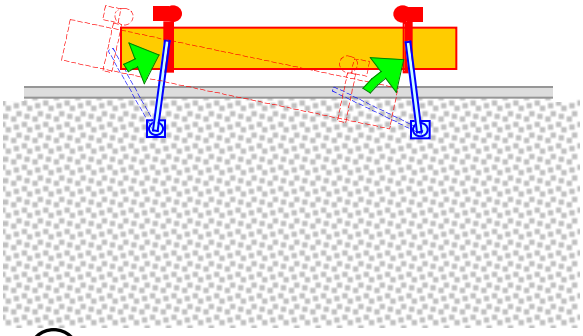
1. platform over roof



2. step A: rotation



3. step B: rotation



4. platform outboard

Boom Rotation To Move Platform Over A Parapet

The davit arms are hoisted into position and secured with pins provided. When the work is complete, the davit arms are relocated to the next work area.

Davit bases are the permanently fixed elements of a *Davit System*. Transportable davit arms are fitted to these bases.

Tractel standard davit bases are designed to accommodate typical applied loads, which vary according to mast height and boom reach (see Davit Bases T4752).

During installation, the leveling of these components is critical to allow ease of boom rotation when under load.

The Tractel **davit arm** is comprised of a separate boom & mast. This two-piece construction is easier to transport, and simplifies boom rotation.

Lower masts can also be used so that the boom height is just above the building's parapet. These **ground rigged systems** require a clear path of travel at ground level. With mast heights of 5'-6" (1.68m) or less, suspension arms are easy to handle. (see Davit Masts, T4755 and Davit Booms, T4756).

Standard **TRACMOD powered platforms** are supplied with suitable **TIRAK traction hoists**, complete with wire rope collection reelers. *Many* other standard features and options are also provided. (see TRACMOD Powered Platforms, T4763).

Standard Tractel davit systems are rigged with a primary suspension and secondary safety wire rope. This **dual-line suspension system** incorporates fixed horizontal life-lines along the length of the platform, to which each operator's body harness is connected.

U.S. Federal OSHA and CAN3 Canadian National Standards require that all davit systems must be designed by a Registered Professional Engineer, experienced with such systems.

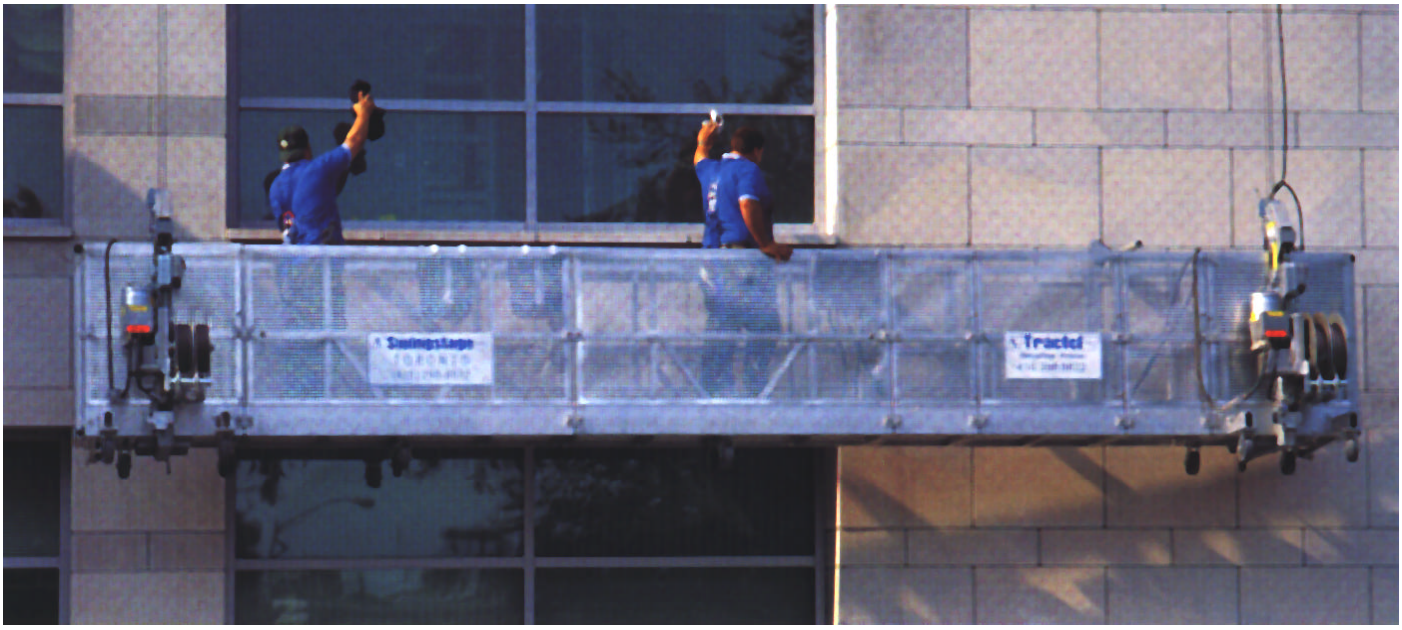
tracmod

permanent powered platform



Tractel Ltd.
Swingstage Division

tracmod *permanent powered platforms*

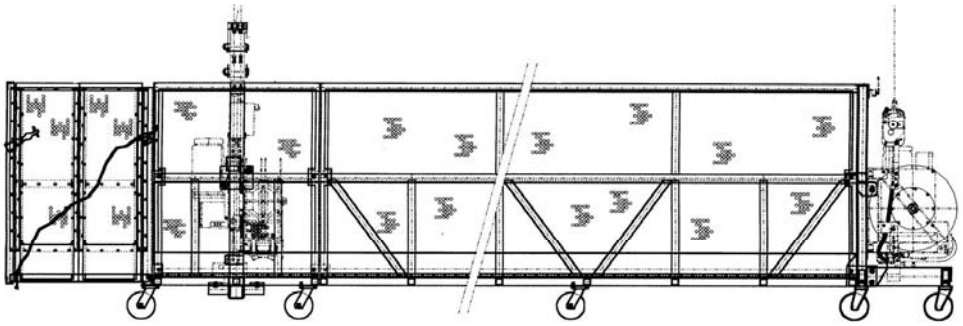


Powered platforms are the most popular solution for exterior building access in North America.

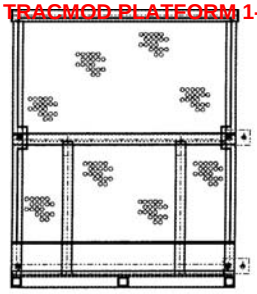
SWINGSTAGE® has been the leader in the design and provision of these systems for many years. Our extensive experience is reflected in the advanced features incorporated into our products.

The **TRACMOD** powered platform is fitted with the latest in **TIRAK**® hoisting systems, with all code-required safety features fully integrated. Extensive use of corrosion-resistant materials and robust construction ensures reliability and long life. Systems are available with 2-wire suspension or 4-wire suspension. The use of our patented modular platform concept allows the platform length to be adapted to suit various building modules.

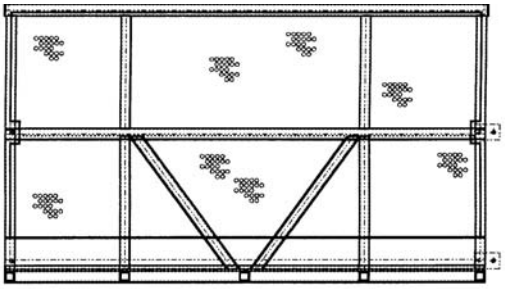
tracmod *assembly with fold-out end*



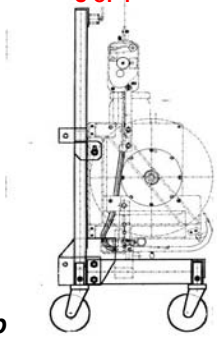
Tractel Ltd.
Swingstage Division



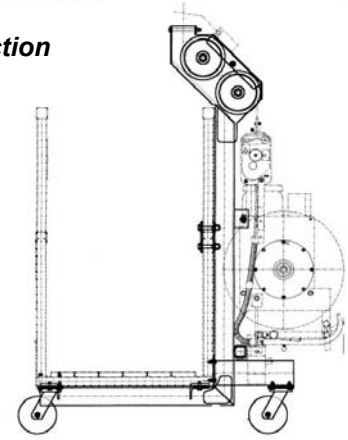
1m (3') section



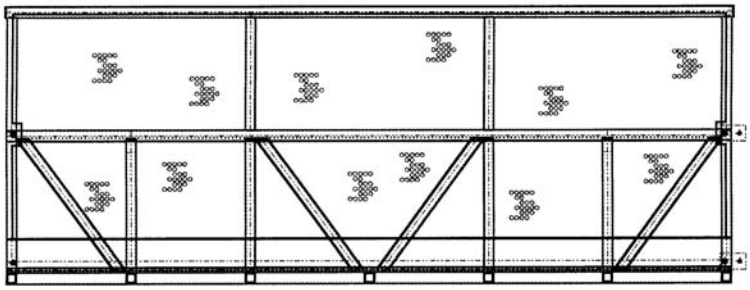
2m (6'-6") section



end stirrup



Intermediate stirrup



3m (10') section

		Single Module				ASSEMBLY	Min. R/R = 0.5 O/A		Distance between ropes……R/R Platform Overall Length……O/A Platform Total Weight……WT					
	Nom. Lg. m	0.5	1.0	2.0	3.0				C- STIRRUP			END STIRRUP		
	Nom. Lg. ft	1'-9"	3'-0"	6'-5"	9'-8"		Lift Ht.	1 x 1 x	1 x 150 1 x 429	2 x 110 2 x 360	2 x 200 2 x 656	1 x 150 1 x 429	2 x 110 2 x 360	2 x 200 2 x 656
	Weight lb.	13.5	50.5	97	142									
PLATFORM NOMINAL LENGTH	**2.0m** (6'-6")			X		2	R/R	Ft	3'-4"			7'-8"		
							O/A	Ft	6'-5"			10 – 11"		
							WT	LB	942	1032	1465	748	838	1274
	3.0m (10'-0")				X	3	R/R	Ft	6'-8"			11'-0"		
							O/A	Ft	9'-8"			13'-3"		
							WT	LB	982	1074	1508	793	883	1319
	4.0m (13'-0")			XX		2 +2	R/R	Ft	10'-0"			14'-0"		
							O/A	Ft	13'-0"			16'-4"		
							WT	LB	1039	1129	1565	845	935	1372
	5.0m (16'-0")			X	X	3 + 2	R/R	Ft	13'-4"			16'-1"		
							O/A	Ft	16'-4"			18'-4"		
							WT	LB	1084	1171	1607	890	980	1416
	6.0m (19'-6")				XX	3 + 3	R/R	Ft	16'-7"			19'-4"		
							O/A	Ft	19'-7"			21'-7"		
							WT	LB	1129	1219	1652	935	1025	1461
	7.0m (23'-0")		X		XX	3 + 1 + 3	R/R	Ft	19'-7"			22'-4"		
							O/A	Ft	22'-7"			24'-7"		
							WT	LB	1179	1269	1704	985	1075	1511
	8.0m (26'-0")			X	XX	3 + 2 + 3	R/R	Ft	23'-0"			25'-1"		
							O/A	Ft	26'-0"			27-2"		
							WT	LB	1226	1316	1752	1032	1122	1558
	9.0m (29'-6")				XXX	3 + 3 + 3	R/R	Ft	26'-3"			30'-3"		
							O/A	Ft	29'-3"			32'-6"		
							WT	LB	1271	1361	1791	1077	1134	1603
	10.0m (33'-0")		X		XXX	3 + 1 + 3 + 3	R/R	Ft	29'-3"			7'-8"		
							O/A	Ft	32'-3"			10 – 11"		
							WT	LB	1321	1411	1845	1122	1185	1654
	11.0m (36'-0")			X	XXX	3 + 2 + 3 + 3	R/R	Ft	32'-7"			35'-4"		
							O/A	Ft	35'-8"			37'-7"		
							WT	LB	1368	1458	1889	1168	1232	1700
	12.0m (39'-0")				XXXX	3 + 3 + 3 + 3	R/R	Ft	35'-11"			39'-11"		
							O/A	Ft	38'-11"			42'-2"		
							WT	LB	1413	1503	1934	1213	1277	1745
						TOTAL:	**WT**	**LB**	**425**	**521**	**931**	**425**	**521**	**931**

All weights include wire ropes & power cord

Tractel Ltd.
Swingstage Division

tracmod *permanent powered platforms*

tracmod *features:*

- **Tirak** *hoists*
- *With reelers*
- *Key controls*
- *Emergency stop at each hoist.*
- *Upper travel limit*
- *Stage tilt switch*
- *Slack cable & overload protection*
- *Fire extinguisher*
- *Guides & rollers*
- *5/16" wire ropes*
- *Optional communication*
- *Optional water tanks*
- *Operating & maintenance manual*
- *110v. power receptacles*
- *Safety harnesses & rope grabs*
- *Manual winches*



TRACTEL's North American SWINGSTAGE Division is a member of the international TRACTEL Group, the world leader in Building Maintenance Systems.

*Single-source responsibility is the **TRACTEL** difference: in-house design, fabrication and installation by experienced professionals assures long-term system performance.*

*The **tracmo**d powered platform is suitable for any type of suspension system - from traditional davits and sockets to monorail track with manual or powered trolleys.*

Tractel Ltd.'s Swingstage Division *has an office near you:*

TRACTEL Ltd., Swingstage Division
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Tel: 416 522-8923
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IFB Attachment 6
DOSH-115 Maintenance Form

IFB 2952 Attachment 6 - DOSH-115 Maintenance Form

DIVISION OF SAFETY AND HEALTH
State office Building Campus
Albany, New York 12240

STATE OF NEW YORK
DEPARTMENT OF LABOR

MAINTENANCE SCHEDULE AND LOG SHEET

ISPECTION AND SERVICE RECORD OF POWERED SCAFFOLD

INSTRUCTIONS: At least two designated persons shall conduct the periodic maintenance inspections and servicing cooperatively. Upon the discovery of any substantial defect or abnormal condition in the scaffold or any part thereof , the Commissioner shall be notified immediately, and the scaffold shall be placed out of operation until such time as the abnormality has been corrected and the scaffold restored to its normal condition and has been reinspected by the Commissioner and found in apparent good repair.

1. A NEW POSTING MUST BE MADE ON THE NEXT AVAILABLE LINE FOR EACH INSPECTION AND/OR SERVICING OF THE SCAFFOLD
2. A COPY OF THE MAINTENANCE SCHEDULE MUST BE ATTACHED TO THIS FORM.
3. THIS FORM SHALL BE AVAILAVLE AT THE SITE WHERE A SCAFFOLD IS PERMANENTLY RETAINED OR AT THE LOCATION WHERE THE EQUIPMENT IS MAINTAINED AND SERVICED AND AVAILABLE TO THE COMMISSIONER FOR AT LEAST SIX YEARS FROM DATE OF LAST ENTRY.
4. A SEPERATE FORM SHALL BE MAINTAINED FOR EACH SCAFFOLD.

1. ADDRESS OF ESTABLISHMENT OR BUILDING WHERE SCAFFOLD IS USED		4. BSA APPROVAL NO. NYS APPROVAL NO.	5. DATE OF APPROVAL	6. POWER HOIST SERIAL NO.(S)
2. NAME OF BLDG. OWNER-AGENT-TENET-ETC.	3. ADDRESS OF BLDG. OWNER-AGENT-TENET-ETC.	7. NAME OF DEVICE, AND TYPE, PERM. ☐ TEMP. OR PORT. ☐ (Check one)		8. LOCATION OF PERM. SCAFFOLD ON BLDG.

LINE	A. Date	B. TYPE OF ACTIVITY: Inspection (Daily Weekly Monthly Quarterly Etc.)	B. TYPE OF ACTIVITY: Maintenance (Daily Weekly Monthly Quarterly Etc.)	C. Structural As-sembly. (Roof car, rails, out riggers, scaffold, tieback devices, etc.)	D. Cables	E. Drums	F. Speed Limiting Devices (Governors, slow-down switches)	G. Brakes (Main, auxiliary)	H. Electrical Equipment & Controls (Power cables, rails, relays, switches, con- trollers, etc.)	I. Transmission Equipment (Gears, shafts, chains, sprock-ets, etc.	J. Machine Guarding	K. Communica-tions (Tele-phone, horn, etc.)	L. Routine Maintenance & Lubrication (See attached schedule)	M. Substantial Defects, Abnor- malities or Major Repairs (Major repairs include replacing hoisting cables, gear boxes, governors, etc.)	N. Corrective Action & Remarks, Note: Whether items were rebuilt, new units substituted, whether repaired, whether Commissioner was notified.	O. Signature & Title of Each Designated Person Making Inspection & Service. *
				ENTER "Yes" if satisfactory; "No" if unsatisfactory; "Dash" if not applicable										Continue entries for columns M, N & O on reverse where needed. Refer to line and column designations.		
1																
2																
3																
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* The signatures of both designated persons must appear on this form. Use additional space for column "O" on reverse if required. Identify line number to which signature applies.

Line	M. Substantial Defects, Abnormalities or Major Repairs (Major repairs include replacing hoisting cables, gear boxes, governors, etc.)	N. Corrective Action & Remarks, Note: Whether items were rebuilt, new units substituted, whether repaired, whether Commissioner was notified.	O. Signature & Title of Each Designated Person Making Inspection & Service.

IFB Attachment 7

Authorization and Receipt of Additional Services Under Contract

NEW YORK STATE | **Office of General Services**
Division of Real Estate

Authorization and Receipt

of *Additional Services* under Contract

This form authorizes the Contractor's performance of contractually defined **Additional Services** which may be necessary to satisfy the below scope of work in conjunction with the ***attached*** cost proposal. It may also confirm receipt of goods and/or services by the Authorized User.

Contract	Cost Proposal
Description: _____	Location: _____
Contract No.: _____	Proposal No.: _____
Mini-Bid No.: _____	Proposal Date: _____

Scope of Work: _____

_____

_____

_____

Justification for Additional Services: _____

_____

Authorization for Additional Services

The Contractor is hereby authorized to render the above services. This authorization is not a determination of the appropriateness or approval of the proposed costs for invoicing, as **Additional Services** or otherwise, in a manner inconsistent with the terms of the Contract.

Name: _____ Title: _____

Phone: _____ E-mail: _____

Signature: _____ **Date:** _____

The **Authorized User** is the designated representative of the Office of General Services who, pursuant to the terms of the contract, may authorize the performance of **Additional Services**.

Confirmation of Receipt

Upon satisfactory completion of the **Scope of Work** authorized above, the below signature serves as confirmation of receipt. It is the Contractor's responsibility to ensure the **Additional Services** are invoiced in accordance with the terms and conditions of the contract.

Name: _____ Title: _____

Phone: _____ E-mail: _____

Signature: _____ **Date:** _____

This form does not replace or negate any other documentation necessary to meet proper invoicing requirements, such as proof of actual, fair, and reasonable cost or pricing. Invoices submitted without proper documentation will be denied.

IFB Attachment 8
Use of State Tools and Equipment

IFB #2952 Attachment 8

State Tools and Equipment Use Request

Vendor/Contractor:_____

Date of Request	Description of Tool/Equipment	Tool/Equipment Identification # (if applicable)	OGS Approved (Yes/No)	Any OGS Imposed Limitations

Request Date:_____

Vendor Signature:_____

OGS Signature:_____ Date:_____

Changes to Initial Request

Request Date:_____

Contractor Signature:_____

OGS Signature:_____ Date:_____

Request Date:_____

Contractor Signature:_____

OGS Signature:_____ Date:_____

Request Date:_____

Contractor Signature:_____

OGS Signature:_____ Date:_____

IFB Attachment 9
Invoice Checklist

WHAT TO INCLUDE ON YOUR INVOICE TO NEW YORK STATE

Please ensure your invoices include the following information. If information is missing, your invoice may be returned unpaid or payment may be delayed.

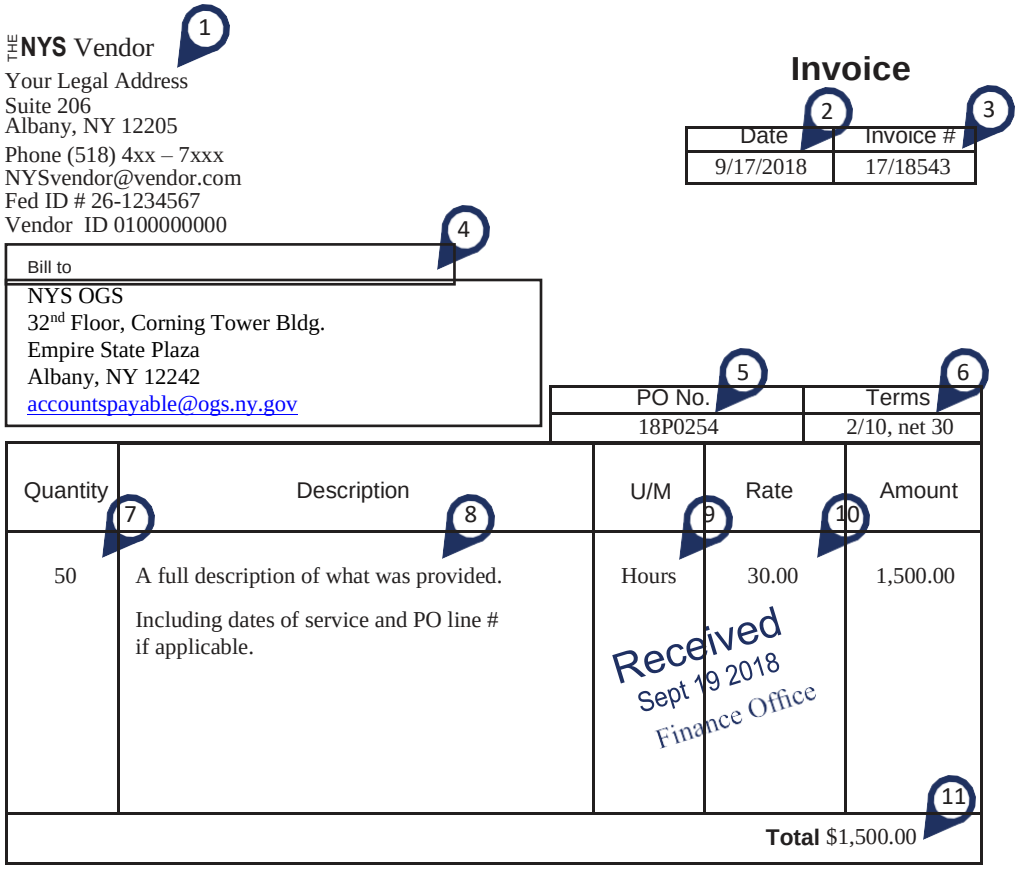
1 **Vendor Identification –** your legal business name, remit-to address, NYS Vendor ID#, and contact information in case there are questions.

2 **Invoice Date –** the date the invoice was created. The invoice date must be later than the date the goods or services were delivered or rendered.

3 **Unique Invoice Number –** you create your own invoice number. Use this number to obtain information about the status of your invoice in the SFS Vendor Self Service Portal.

4 **Bill to –** the name of the NYS agency that ordered the goods or services. Please also provide the delivery address and/or name of your agency's contact to help us if there are questions.

5 **Purchase Order (PO) Number –** if you received a PO, include the PO number.



THE NYS Vendor (1)
Your Legal Address
Suite 206
Albany, NY 12205
Phone (518) 4xx – 7xxx
NYSvendor@vendor.com
Fed ID # 26-1234567
Vendor ID 0100000000

Invoice

Date (2)	Invoice # (3)
9/17/2018	17/18543

Bill to (4)
NYS OGS
32nd Floor, Corning Tower Bldg.
Empire State Plaza
Albany, NY 12242
accountspayable@ogs.ny.gov

PO No. (5)	Terms (6)
18P0254	2/10, net 30

Quantity (7)	Description (8)	U/M (9)	Rate (10)	Amount
50	A full description of what was provided. Including dates of service and PO line # if applicable.	Hours	30.00	1,500.00

Received
Sept 19 2018
Finance Office

Total $1,500.00 (11)

The invoice must be delivered to the designated payment office specified in your agreement or on the PO you received. NYS will not accept invoices for items or quantities not delivered.

6 **Payment Term –** the payment discount you are offering. If no other term is provided, NYS pays all invoices NET 30 days from the date the invoice is received by the designated payment office as indicated on the PO or agreement. NYS will make every effort to pay invoices within a vendor's designated discount period, if provided. Invoices not paid in 30 days will have interest added to the invoice as required by law.

7 **Quantity –** of goods, property, or services delivered for each invoice line item.

8 **Description –** of the item being billed including PO line #, item #, contract #, and/or dates of service if applicable and available.

9 **Unit of Measure –** if you received a PO, the unit of measure for each item being invoiced must be consistent with the PO and PO line number.

10 **Rate –** the unit price as authorized in the PO or agreement.

11 **Total –** the payment amount being requested for the invoice.

Thank you for your help. NYS is committed to paying your invoices timely upon receipt of an invoice containing the information above.