



AMERI-CAN
MACHINERY LTD.

CC4



CE

Corner Cleaner

USE AND MAINTENANCE MANUAL

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1 TO OUR CUSTOMERS

1.1 CONGRATULATIONS FOR YOUR CHOICE

Your machine has been built with the most advanced technological system; this with the design strength is prerogative of precision and reliability.

The correct use and the adequate maintenance will maintain unchanged its functional and safety features, ensuring high-level performances.



The customer has the responsibility to make sure that if this document undergoes changes by the Manufacturer, only the updated versions of the Manual are actually present at the point of use.



THE OFFICIAL LANGUAGE CHOSEN BY THE MANUFACTURER IS THE ITALIAN LANGUAGE

No responsibility is assumed for translations in other languages that do not conform to the original meaning.

1.2 EXPLANATION

This manual is divided in three different sections:

- Commissioning: must be carried only by service and maintenance staff, after a careful reading of this manual.
- Use: must be carried out only by people who received adequate instructions by the service staff or a local representative.
- Maintenance: must be carried out only by the service and maintenance staff, adequately learned by the technicians or a local representative.

Damages due to the failure of following what written in the manual, or procedure conflicting with it, CANNOT BE ASCRIBED TO US.

Some maintenance and reparation interventions can prejudice the functional and/or safety features: these operations are deliberately omitted in this manual. The operations of maintenance, calibration, regulation, reparation that are not contemplated in this manual **must be carried out** by authorized personnel, or by a local representative.



The term QUALIFIED PERSONNEL covers personnel who as a result of education and professional experience has been expressly authorized to perform the installation, use and maintenance of the machine.

2.2.1 TO WHOM IT IS ADDRESSED

This manual is addressed to the user, to the leaders in charge of the shift, installation, operation, monitoring, maintenance and final dismantling of the machine.

2.2.2 PURPOSE OF THE MANUAL

The manual explains the proper use of the equipment, as required by the design assumptions and the specifications. It provides instructions for moving, proper and safe installation, adjustment and use; provides information to address maintenance, it facilitates ordering spare parts.

2.2.3 UTILIZATION RESTRICTIONS

This manual is valid for the machine code into it expressly referred; the information cannot be applied to other models of different series. All necessary information will be obtained from this manual without acquiring data from similar manuals of similar equipment or of other manufacturers.

TO OUR CUSTOMERS

2.2.4 SAFETY SIGNS

In order to draw attention in the manual some pictograms appear that will be divided as follows:



PROHIBITION



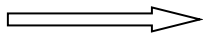
CAUTION



INFORMATION



**RESERVED TO
QUALIFIED PERSONELL**



DETAILS INDICATIONS

WARNING	Regarding features or technical requirements that, usually, must precede the operation.
ATTENTION	Regarding all the working and maintenance phases, must be observed scrupulously to avoid damages to person or to the machine.
DANGER	Usually used with the term that define the kind of the injury: ex. "Crashing danger"
DANGEROUS AREA	Define an area inside or near the machine where a person is exposed to risk.





Drawings, tables and pictures are not numbered singly.

Wire diagrams and layouts are not numbered with separately.



2.2.5 SAFETY SIGNS

The signs should be applied in areas where they are easily visible and legible by anyone who approaches and at a point such that the person can react promptly to take the necessary action to avoid the danger. The rule provides that the safety pictograms are regularly checked and cleaned to ensure good readability at a safe distance.


SIGNS RELATED TO HAZARDS

SIGN	DESCRIPTION
	Chips projection
	Electrical power
	Danger of crushing hands
	Moving mechanical parts

SIGNS RELATED TO PROHIBITIONS

SIGN	DESCRIPTION
	Do not remove the safety devices
	Prohibited to repair / grease during motion

SIGNS RELATED TO OBLIGATIONS

SIGN	DESCRIPTION
	Must wear safety glasses.
	Must wear protective gloves.
	Must wear ear protectors
	It is compulsory to wear protective shoes

2.2.6 COMPLIANCE WITH THE LAWS

Together with the rules of this manual the laws specific to the prevention of accidents at work must be respected by the customer.

2.2.7 MANUAL CONSERVATION

The manual is considered an integral part of the machine and must be kept in good condition until its final disposal. The manual should be kept in a protected, dry place, away from direct sunlight and should always be available and available for consultation in the workplace.

2.2.8 HOW TO ASK ANOTHER COPY OF THE MANUAL

In case of damage to the original, a copy can be requested at the expense of the applicant directly to the manufacturer.

2.2.9 INFORMATIONS TO THE USER

1. This manual reflects the state of the art at the time of commercialization of the machine.
2. The manufacturer reserves the right to change products and manuals, without any obligation to update preceding products or manuals.
3. The characteristics of the materials can be changed at any time in the light of technological change without notice.
4. On the sale of the unit please inform the manufacturer, the address of the new owner so the transmission of any additions to the manual.
5. For further information or clarification you can contact the Service Department

The manufacturer is relieved from any possible liability in the event that the machine will be:

- 1) Used improperly
- 2) Used by not qualified personell
- 3) Used against what written in the present manual
- 4) Used againt the current Laws and Legislation
- 5) Used with a wrong main power supply
- 6) Used exceeding its performance limits
- 7) Subject to excessive mechanical stresses

The user is committed to ensure that:

- 1) All work related to transportation, connection, operation, maintenance and repairs are performed by qualified personnel
- 2) Qualified means (according to IEC 364) personnel that for training, education, experience, as knowledge of standards, legislation, safety measures and conditions of use and service, is able to carry out any necessary steps avoiding any possible danger and / or damage.
- 3) These people have all the instructions and information necessary, including any local legislation, and that they adhere to these to carry out any operation
- 4) Any operation on machines and equipment also indirectly is forbidden to unqualified personnel

5) Must be repeated during installation, with additional security measures, any local or special requirements and / or at least all of the conditions of prevention not acquitted

2.2.10 MARKING DATA AND DELIVERY CHECKS

Make sure that the equipment for signs of damage and that the delivery is complete. In case of damage contact the insurance company or the supplier. If the supply does not conform to the order, contact the supplier immediately. Each item of equipment is a plate.

2.2.11 IDENTIFICATION PLATE AND CE MARKING

Each machine is identified by a CE plate on which are reported in indelible way the reference data of the same. The position of the plate on the machine can vary from machine to machine.

For any communication with the manufacturer or service always refer to this reference.



2.2.12 DECLARATIONS

The machine is made in accordance with the relevant and applicable EU directives at the time of its release on the market.

Standard	Name
UNI EN ISO 12100	Machine safety – General designing principles – Risk evaluation and reduction
UNI EN ISO 13857	Safety of machinery, safety distances to prevent danger zones reached by the upper limbs
UNI EN 349	Safety of machinery - minimum space to avoid crushing of parts of the body.
UNI EN 547 part 1 and part 2	Safety of machinery
UNI EN ISO 6385	Ergonomic principles in the design of work systems
CEI EN 60204-1	Safety of machinery - Electrical equipment of machines
UNI EN ISO 13850	Safety of machinery - Emergency stop - Principles for design.
UNI EN 953	Safety of machinery - Guards - General requirements for the design and construction of fixed and movable guards
UNI EN 1037	Safety of machinery - Prevention of unexpected start-up
UNI EN ISO 13849	Safety of machinery - parts of control systems related to safety - Part 1: General principles for design.
UNI EN ISO 4414	Pneumatic - General rules and safety requirements for systems and their components.
UNI 4598	Machine tools. Graphic signs
UNI 7543 parte 1	Colors and safety signs. General requirements
UNI 7543 parte 3	Colors and safety signs. Warning

PROHIBITION OF COMMISSIONING

The machine cannot be put into service, after constructive changes or additions of other components not covered by the ordinary and extraordinary maintenance without having again to comply with the requirements of the Directive 2006/42 / EC and of the applicable EC Directives.

2.3

MACHINE PACKAGING

The standard packaging of the machine provides:

- Machine accessories in a carton.
- Keys, this manual and possible other documents inside the electric cabinet.

The machine, with all the accessories, is shrink wrapped.

If requested, the machine can be packed in a wooden box.

3 PREPARATION

3.2 LIFT AND HANDLING

The lift of the machine for the transport, loading and unloading, is contemplated for the use of a forklift. For this purpose on the frontal side of the machine are placed appropriate locations for the forks of the forklift.

The machine rests on 4 adjustable feet, that allow the passing of the forklift.

Before starting with the lift operations, it is necessary to be sure that the forklift capacity is greater than the machine weight and the forks long enough to support correctly its weight.

PREPARATION

3.3 ADVICES FOR THE WORKING PLACE

Suitable choice of the place of work of the machine is very important in order to obtain a good quality of production and proper functioning of the machine itself.

The choice of the workplace must take into account, the overall dimensions of the machine and the movement of the material to be processed, both incoming and outgoing. The positioning to walls, or overall fixed dimensions in general, should be made, considering that it must be possible an easy access to all sides of the machine for normal operation of cleaning or maintenance.

The machine does not need foundations; however, it is appropriate that the bearing surface is sufficiently rigid and able to withstand localized pressures (in correspondence with the support feet) higher than 5 kg/cm² (corresponding to a concentrated load of 400 kg). If not it is necessary to increase bearing surface of the feet by means of steel plates, of round or square shape, with a thickness of at least 1/200 of the surface.

(Example: plate 200x200 mm, minimum thickness 20 mm ⇒ contact pressure 1 Kg/cm²).

GENERAL SAFETY WARNINGS

The machinery has been designed to be used from only one operator that must position himself in front of the machine where is possible to reach easily all machine commands including the emergency commands. Moreover the operator must have the complete control of the work cycle.

The operator must immediately stop the operations in progress if for every reason the blade does not go down in the rest position or if any anomaly is noted.

The operator must stop the operations in progress if other people approach the machine.

LIGHTING

Must be provided adequate lighting, natural or artificial in accordance with ISO 8995-89 on lighting at the workplace.

GROUNDUNG SYSTEM

Must be performed at CEI 64-8.

INTENDED USE

The cutting machine is adequate to cut PVC profiles using appropriate tools.

NOISINESS

weighted sound pressure level A in the work place 84.5 dB

maximum weighted sound pressure level in the work place C 97.2 dB

weighted sound power level A emitted by the machine 84.5 dB

It is advised the use of individual safety protection devices against noise in the case of prolonged use of the machine.

PREPARATION

PACKING

The machine is supplied with a shrink-wrapping.

LEVELLING

The machine has to be levelled transversely and longitudinally.

OPERATING TEMPERATURE

From 10 °C to 40 °C.

CLEANING

The machine should be cleaned with detergents, non-acids or non-aggressive to paints, we recommend specific industrial products.

Do not use acids, gasoline, paint thinner, turpentine or petroleum.

Use gloves and suitable clothing.

SAFETY DEVICES

Pressure switch of minimum pressure, if the pressure is not sufficient the blade will not start.

Valve of low and high pressure: when closing the clamps the pressure is about 2.5 bar only when pressing the two buttons and the work cycle begins then takes over a pressure of about 7 bar, to prevent crushing even if slight of the hands.

Fixed protective casing.

Blades casing with protective strips of plastic against-intrusion. Replace them immediately if they get worn.

RESIDUAL RISKS

Despite the barriers and safety devices, the machine has the residual risks caused by improper use of the machine or unpredictable situations. These risks are reported with safety signs.

Please be aware that in the electric panel even with main switch off there is electricity.

The pneumatic circuit even if disconnected remains under pressure. If in case of malfunction, the blade does not come down, do not put your hands near to the work area until the blade is fully back and stopped. The operator must use precautions and individual devices according to the current legislation: glasses, gloves, headsets and all that is necessary according to the residual risk analysis in the workplace.

The operator must necessarily turn off, lock the main switch and unplug the machine from the air by venting the pressure from the air system if:

-must clean or remove protective casing to make any type of operations, he must wait the time required for the stopping of the blades and their return to the rest position.

-to carry out maintenance work in the machine working areas.

-to carry on whatever operation in correspondence of the machine blade.

-to carry on whatever adjustment operation on the machine.

The machine is equipped with safety devices: it is prohibited any alteration, modification or partial removal of these devices.

Check at the beginning of each work shift their presence and efficiency, otherwise alert immediately the responsible person.

The use of compressed air to clean or to blow up the chips must be carried on only with adequate eyes protection (glass).

The electrical equipment can cause accidents.

The work areas should not be approached with the hands, being present in the machine components with sharp or high pressures and movements unwary can cause injury.

For every reason, do not let unauthorized personnel to operate on the machine.

Do not wear jewels, unfastened, loose-fitting and dangling clothes that could catch in the moving parts.

PREPARATION

It is advised the use of suitable clothing, safety shoes, safety glass, face masks.

Do not start the machine if there is any anomaly.

The working area must be always clean and dry.

During the assembly and disassembly of casing or other parts, do not align any holes with your fingers but with appropriate tools as there may be danger of crushing.

It is advised the use of suitable clothing, safety shoes, safety glass, face masks.

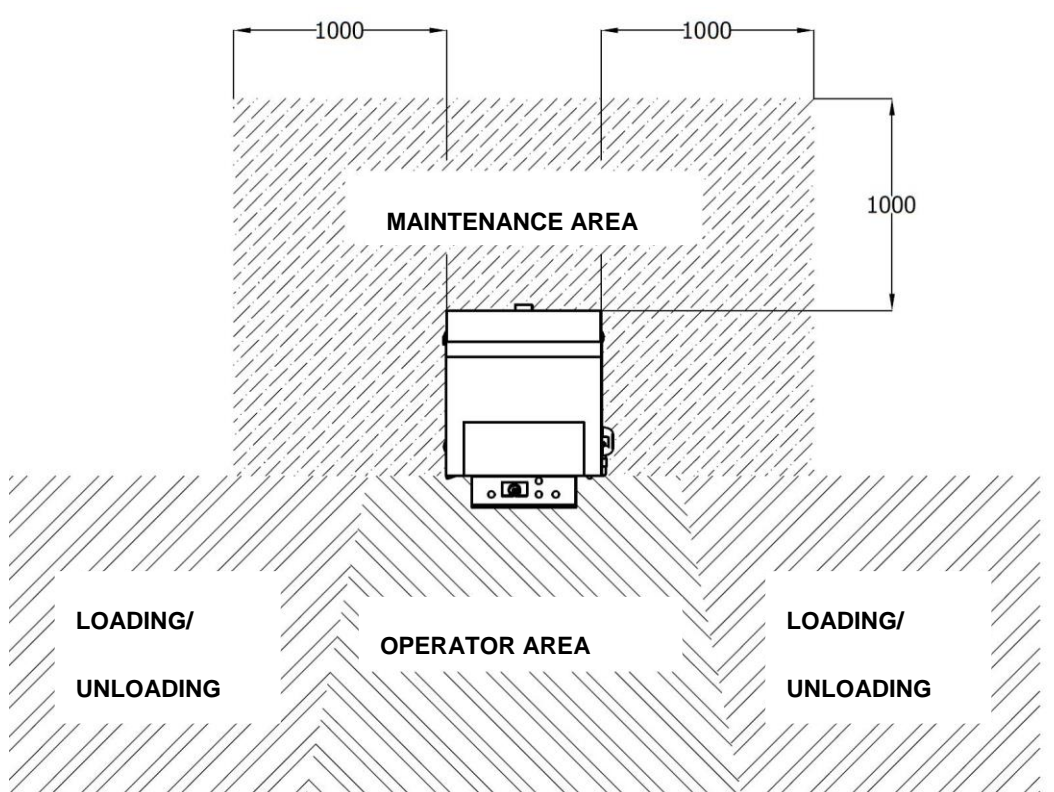
Do not start the machine if there is any anomaly.

During the assembly and disassembly of casing or other parts, do not align any holes with your fingers but with appropriate tools as there may be danger of crushing.

*The safe area is the area indicated as **operator area**, in the rear area indicated as **maintenance area** must not stay anyone, particularly if you do not equip the machine with a chips and fumes extractor, as there is a filler pipe from which chips and fumes can be expelled. It is therefore necessary to provide optionally a bag or a suitable container for the collection of any chips.*

It is forbidden to insert objects, tools or body parts inside the filler pipe for the suction of the chips: this action can cause damage to people and/or property.

*The lateral area indicated as **load area** must be used only for the eventual loading and unloading of profiles, only when the machine is off.*



PREPARATION

3.3.1 MORE ADVISES FOR THE WORKING PLACE:

- Absence of vibrations.
- Uniform heating or cooling of the machine to avoid localized deformation: it is not recommended, therefore, the installation of the machine in a place where sunlight or air currents, cold or hot, from one side only could invest it.
- Absence of dust in the environment.
- Operating temperature as constant as possible and in any event not less than 10°C (50° F) and not more than 35° C (95° F).
- Humidity of air not exceeding 80%
- Proper natural or artificial lighting.



The machine is not suitable for use in areas with explosive atmosphere, corrosive, with excessive amount of dust.

PREPARATION

3.4 SEPARATED PARTS ASSEMBLY

3.3.1 UNPACKING

Place the machine following the instructions in the previous paragraph.

Without the polyethylene cover, cut the straps that secure the boxes of accessories to the guide of the machine.

PREPARATION

3.5 CONNECTION TO ELECTRIC POWER

3.4.1 PNEUMATIC PARTS

The pneumatic supply of the machine is provided on the right side. The connection must be made at the entrance of the general shut-off valve, by means of rigid or flexible tubes such that, in the quantity required, allowing a pressure of at least 7 bar to the machine.

The machine is equipped with a filter with condensation separator and does not need air totally dehydrated, however, it is appropriate that the plant is made in order to limit the direct input of water and impurities.

If the connection between the machine and the distribution system of compressed air is carried out with flexible tubing it is appropriate to include an isolation valve also on the side of connection to a rigid plant.

ATTENTION: CRUSHING DANGER. When starting the pneumatic supply some unexpected movements will take place, for example, the lifting of protective screens and turning heads: before opening the compressed air supply, make sure there are not people in the immediate vicinity of the machine.



The machine control system pressure is made with the pressure regulator control knob: clockwise to increase and counterclockwise to decrease. The lowering of pressure takes place through the adjustment relieving of the regulator and, therefore, it is advisable to flow over the predetermined value, wait a few seconds for the stabilization and then go up slowly.

The adjustment the pneumatic system lubrication can be carried out on the lubricator on the side of the regulator: the operation must be done after completing all the tasks in this chapter. Dose adjustment for the fall of a drop of oil (transparent upper cylinder) every 4-6 complete cycles.

PREPARATION

3.4.2 ELECTRIC PARTS

The electrical supply of the machine is provided on the left side. The machine comes with a power cable 3 poles + ground (4x2.5 mm²) of 5 meters, with no plug.

Under the current regulations, the connection to the electrical line must be performed by qualified personnel.

The machine comes ready to run on 380 V - 50 Hz three-phase or if requested by the customer 220 V – 60 Hz three-phases .



3.6 SAFETY PROTECTIONS

The machine complies with European standards of safety prevention and protection of the operator. It is however necessary that access to certain areas of the machine, in particular the rear side, is protected against accidental intrusion by third parties, during normal operation. The access should be allowed and easy for cleaning and maintenance, when the machine is stopped, by the assigned personnel.

3.7 PRELIMINARY CLEANING

The machine, before being packed for shipment, is sprayed with protective antioxidant chemicals that must be removed before starting the machine.

Before proceeding make sure the switch is turned off.

Cleaning can be done with common detergents, non-acidic or non-aggressive to the paint: we recommend the specific products (according to the law) of industrial use or, without those, the normal household detergents. Use gloves and clothing suitable for the use of products used for cleaning.

Do not use acids, gasoline or petroleum derivatives, solvents, trichloroethylene and similar.

The cleaning of protective screens, control panel, pressure gauge and, in general, of all the plastic parts must be made only with water and soap or inert detergent.

3.8

LEVELING

The machine sits on the floor with adjustable feet (6 or 8, depending on the length of the basement) which allow the horizontal leveling of that. The leveling must not, necessarily, be made with sophisticated tools not being necessary to make it perfectly horizontal, but rather a good support that does not lead to torsional stresses to the basement. It is sufficient a level, at least 50 cm long and in good condition.

4 GENERAL DESCRIPTION

4.2 MACHINE



4.3 MACHINE INTRODUCTION

This machining center is designed for machining aluminum and light-steel profiles for the construction of fixtures, for building construction and architecture, or similar where it is necessary for high productivity, ease of use reliability, robustness and limited maintenance.

The main features of the machine, predetermined at the design stage and made in the construction phase, are the following

- High dimensional and geometric stability.
- Low maintenance costs.
- Ergonomics work.
- Ease of maintenance.
- Full access to all its components.
- High machining capacity.
- Easy to learn.
- High accuracy.
- Adaptability to the needs of the customer and operator

4.4

WORKING AREA

The working area of the machine has been designed to achieve the following characteristics:

- Wide visibility of the whole machine and of hazardous areas for third persons during the processing phases.
- Fall of the waste inside the basement, removable tanks for collection.
- Free fall of the chips, or, by external vacuum cleaners, conveying to the intake manifold.
- Good view of the working zones, with maximum security protection from flying chips, scraps and / or fragments

4.5 WARNINGS FOR THE OPERATOR

- The machine is designed for use by a single operator.
- In case of accidental approach by third persons, and in presence of potential source of danger, stop ongoing operations through the emergency stop buttons.
- The operator must ensure that the refrigerant liquid which is introduced using the tanks is non-toxic and UNDER THE LAW.

The operator has the duty to turn off the main switch before:

- Move away from the machine.
- Proceed with cleaning and / or removal of the waste-holding tanks.
- Make adjustments involving the opening of fixed guards.
- Intrude, in case of maintenance, in the areas of motion of the machine.

The operator has the duty of turning on the emergency switch before:

- Record the position of clamps.
- Perform any operation in correspondence with the heads.
- Place the stops for special angles.



The use of products / materials other than those specified by the manufacturer, which can cause damage and danger to the operator and / or those close to the machine, is considered incorrect and improper.

RESIDUAL RISKS

1. In any case, the operator must not carry out operations near the without making sure that the spindle itself is in still position and stopped;
2. In case of failure, the protection could stay open while working: stop the machine and call for service. Always avoid approaching the tool without first making sure that it has stopped.
3. During the movement of the mobile carriage, the operator must carefully check that nobody is in the working area or around the machine.
4. It is forbidden to remove the safety devices.

PREPARATION

The machine has low noise levels. Where the processing, because of the very nature of the material being processed, will cause discomfort to the operator, the operator, in the absence of barriers or other noise reduction systems, must wear the soundproof headphones.

The machine is equipped with devices set for the protection and safety of the operator. It is prohibited the tampering, removal or modification even partial of such devices and protection.

After installing the machinery, the employer will be required to make a risk assessment of the noisiness as required by the legislation

4.6

WARNINGS FOR THE MAINTENANCE

The maintenance staff of the machine must:

- Perform the proper operations ensuring that the movements of the machine cannot be a source of danger to third persons. It is necessary to immediately stop the ongoing operations whenever a third person is approaching parts moving or whose movement can be done by automated cycle.
- Verify that the liquid refrigerant which is introduced using the tanks is non-toxic and UNDER THE LAW.
- Turn off the main switch before:
 - Get away from the machine.
 - Remove casing and/or fixed protections.
 - Intrude, in any case, in the areas of motion of the machine.
- Perform the maintenance operations as stated in the relevant chapter.

The maintenance staff must not:

- Perform any modifications.
- Tamper, remove or modify even partially devices and safety guards.

4.7

MACHINE'S MOVEMENTS

The main movements of the machine are:

- Opening / closing clamps
- Cutters positioning
- Cutters movement
- Power on / off cutters motors

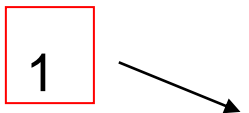
PREPARATION

4.8.1 CONTROL PANEL AND BUTTONS

The machine is equipped with a control panel with indication of the function of the individual buttons. There is a selector for setting the type of processing to be carried out.



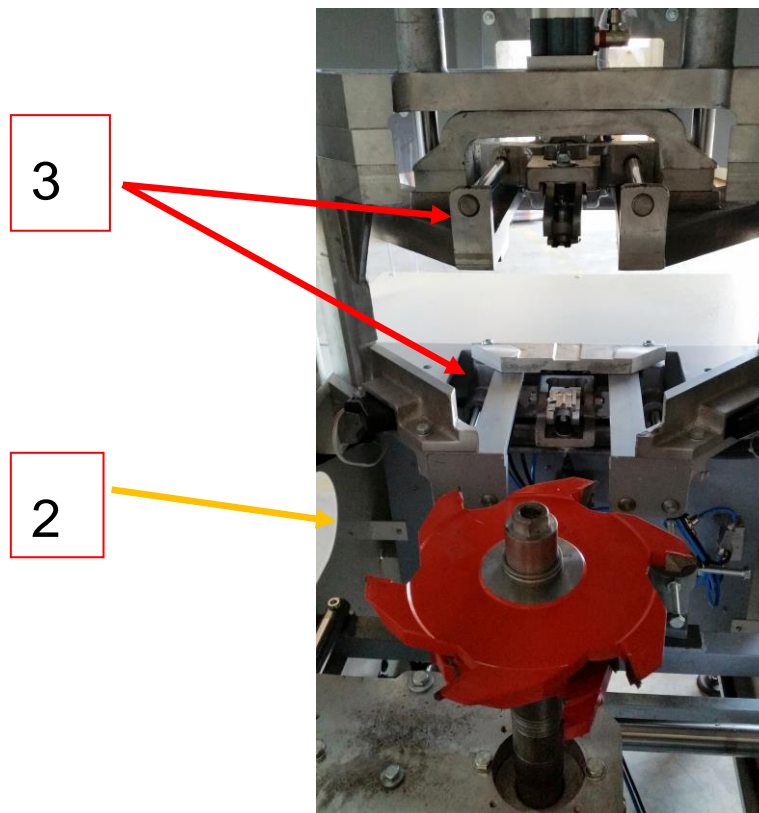
On the front panel is present the lockable main switch (1).



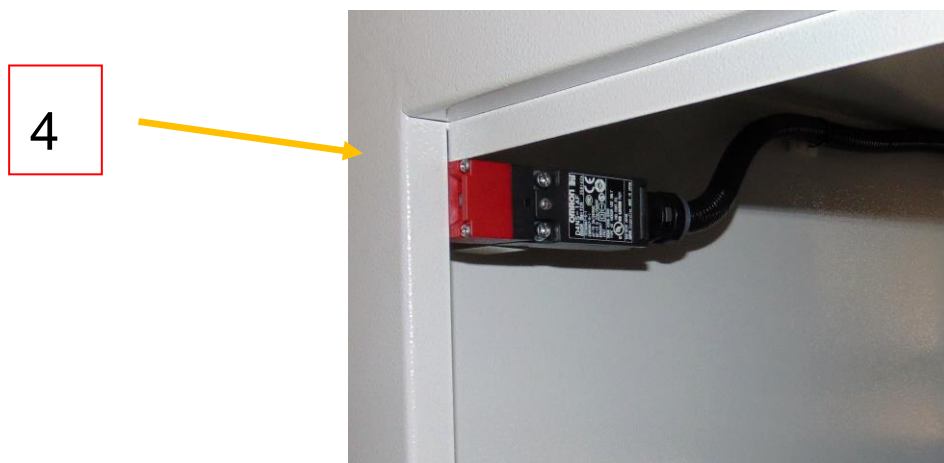
Opening it, you can access the electrical and pneumatic panel.

PREPARATION

Opening the rear panel, you can access the area where there is the presence of the tools. In particular there is the presence of cutter groups (2) and the knives (3).



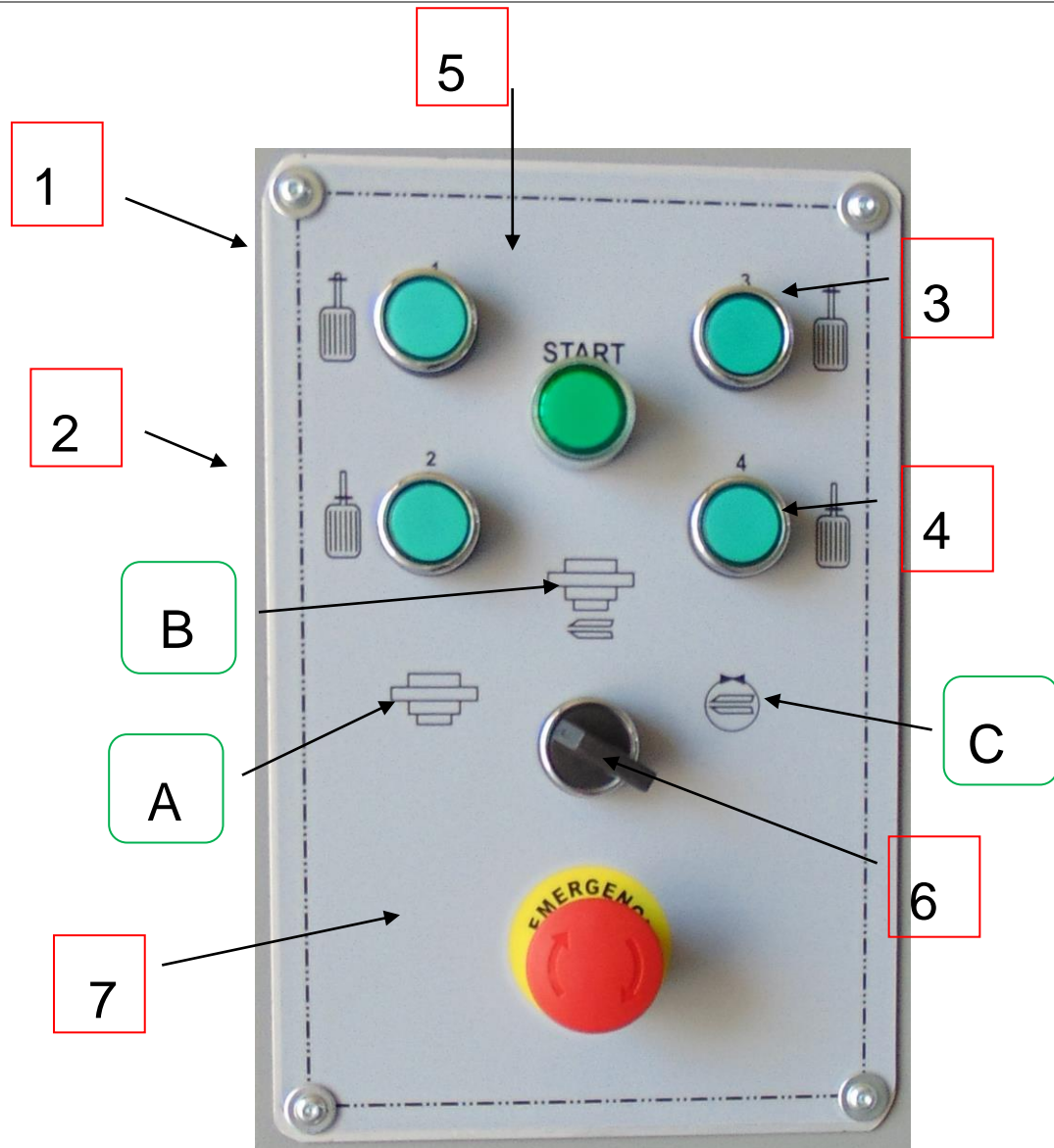
The door is equipped with safety microswitch (4) that intervenes with the opening of the door blocking the operation of the machine.



PREPARATION

4.8.2 MACHINE USE

1 COMMAND PANEL



1. **Cutter selector** to choose to cutter block 1.
2. **Cutter selector** to choose to cutter block 2.
3. **Cutter selector** to choose to cutter block 3.
4. **Cutter selector** to choose to cutter block 4.
5. **“START” button to enable** the machine after the switch on or in case of emergency stop.

6. **Working cycle selector** at 3 positions:

- A. Enable the cleaning cycle with only the chosen cutter block;
- B. Enable the contemporary cleaning with the chosen cutter block and with the knives;
- C. Enable only the cleaning of the upper and bottom faces of the profile with the knives.

7. **Emergency button**

2 START UP

After powered electrically and pneumatically the machine, perform accurate visual inspection of the entire machine and make sure that there is no objects inadvertently left on it, people or materials, which may be of dimensions for normal operation.

Check that all the safety devices of the machine are enabled; if necessary restore them, in particular:

- Emergency button unlocked;
- Proper operation of the safety barriers or guards removed.
- Protection guard.

After that you can operate the machine:

- Press the **reset button** to activate the machine. This operation must be performed at power up and after an emergency stop.

3 MACHINE USO – CLEANING

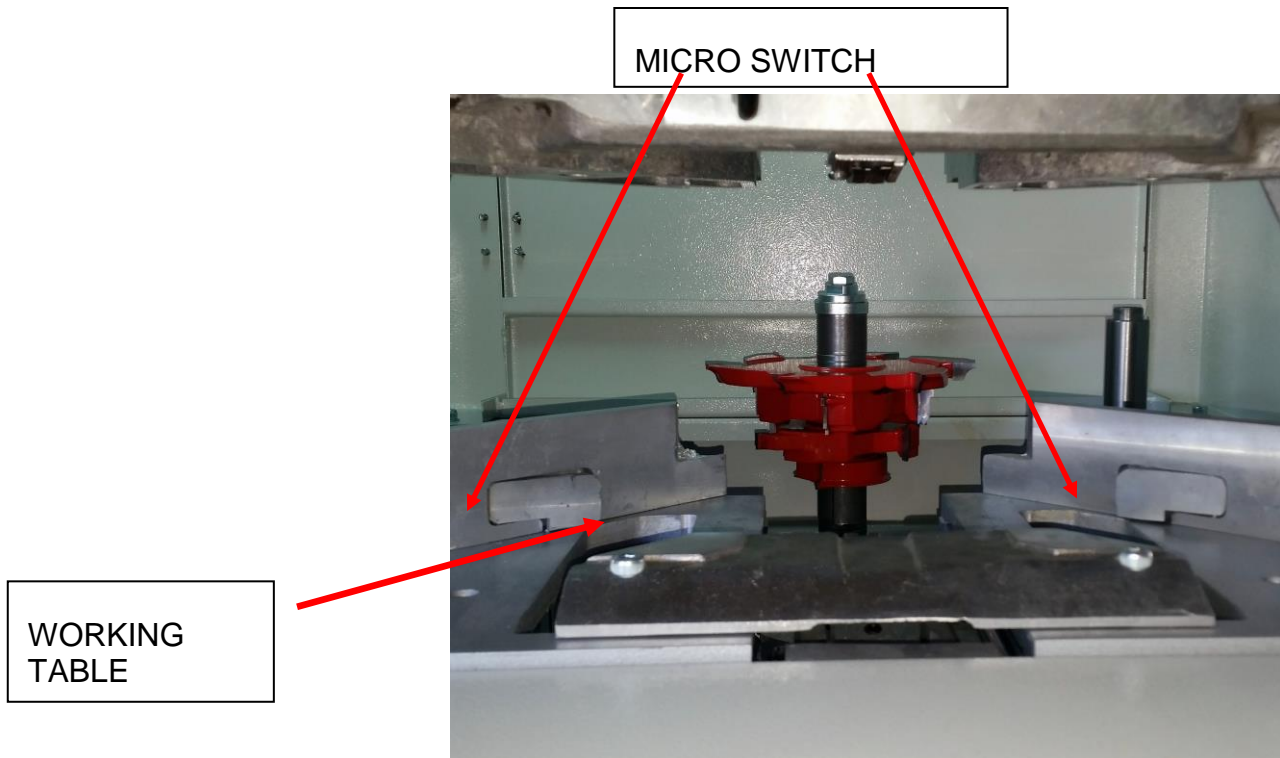
Data setting

- Set the type of work to be done by turning the **selector of the working cycle**.
- If the selector is set for the cycle with the knife only (position C), you can proceed to work as specified in the following paragraph;
- If the selector is set to operate with only the cutter block or the cutter block and the knife (A or B position), press the switch that activates the specific cutter block for the profile to be processed (1, 2, 3 or 4).

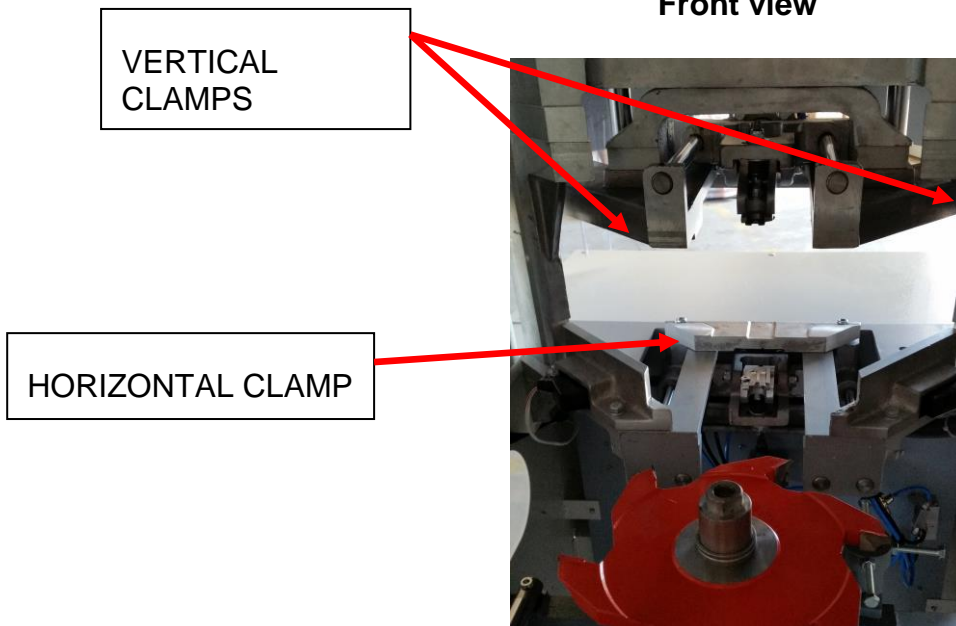
PREPARATION

Cleaning

- Place the piece to clean on the table;
- Push it against the micro-switches;
- Automatically the vertical clamps will come down, the horizontal clamps will lock the piece and activate the working cycle previously set. After the cycle, the clamps will automatically open again.



Front view

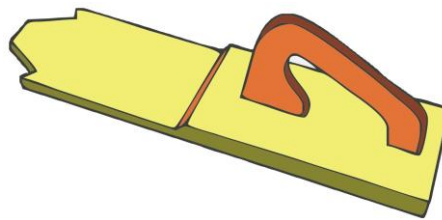


Rear view (from inside the machine)

PREPARATION

During the lowering of the vertical clamps and the movement of the horizontal clamp, the pneumatic circuit operates in low pressure in order to reduce the crushing and entanglement danger. After the work cycle has started, the pneumatic circuit automatically switches to high pressure.

To avoid the danger of crushing, the length of the profiles must be not less than 50 cm to allow the operator to position the piece out of the area of presence of the clamps. Should it be necessary to clean profiles with a length less than 50 cm, position the workpiece against the microswitches using pushers devices (not supplied).



Pusher device example



Warning: for cleaning profiles with a length less than 50 cm, use pushers devices.

The machine is equipped with a compressed air gun for cleaning the work table during normal work activities.

Ensure that there are not other people during these operations.



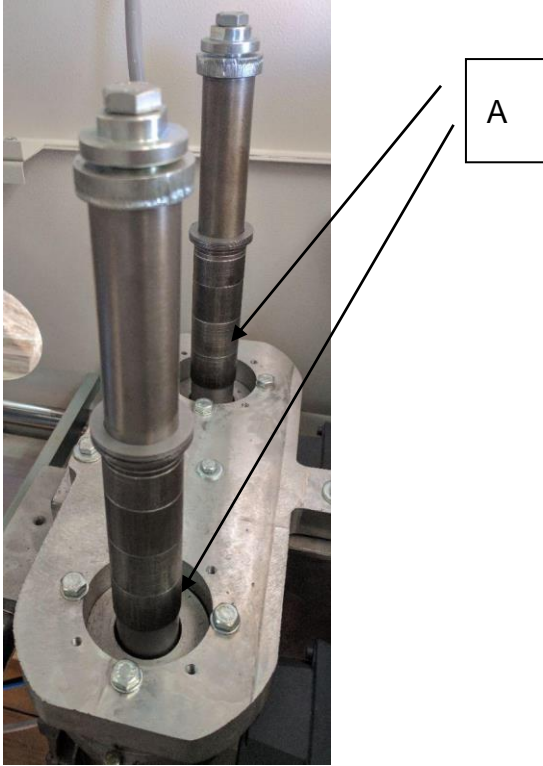
The use of compressed air for cleaning and removing chips require the use of appropriate eye protection.

PREPARATION

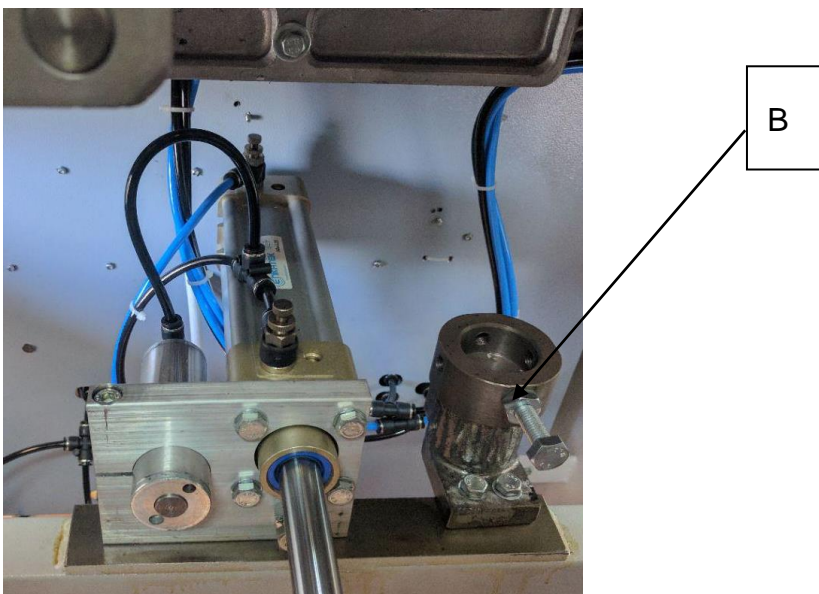
4.8.3 TOOL ADJUSTMENTS

It is possible to make two different adjustments to the cutter blocks positions:

1. using the shims (A) on the cutter blocks shaft it is possible to adjust the cutter block heights;



2. using the screws (B) in the photo to adjust the depth of the cut;



4.8 ELECTRIC CABINET

The electrical panel is contained in a separate compartment closed by a door on which the general switch is fixed.



**ERRORE. L'ORIGINE
RIFERIMENTO NON È STATA
TROVATA.**

4.9 PNEUMATIC PARTS

The pneumatic cabinet is placed in a special compartment on the front side of the machine. The pressure gauge can be seen indicating the air pressure can be seen on the right side.



ERRORE. L'ORIGINE RIFERIMENTO NON È STATA TROVATA.

7.1 COMMON PROBLEMS



PROBLEMS	CAUSE	SOLUTION
MACHINE DOES NOT WORK	Main switch off	Turn on the main switch
THE MACHINE STOPS WHILE WORKING	There is one missing phase	Check the phases
	Thermal overcurrent	Find and remove the cause
THE CLEANING HAS NOT BEEN MADE EFFICIENTLY	Worn tool	Replace the tool
	Uncorrect tool adjustments	
ABNORMAL WEAR OF THE PNEUMATIC PARTS	No pneumatic lubricant in the plant	Refill the lubricant
	Unpurified compressed air	Replace filter
	Water in the plant	Check and fix drain points

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RIFERIMENTO NON È STATA
TROVATA.**

7.2 ORDINARY MAINTENANCE



WARNING: All the maintenance operations must be carried out by personnel trained for the purpose.

Before performing any maintenance and / or repair, you must isolate the machine from the electric power supply and pneumatic power supply

7.2.1 GENERAL PRESCRIPTIONS

Maintenance includes regularly scheduled inspections, checks and interventions to prevent interruptions and breakdowns, to keep under systematic control the state of machine lubrication and the condition of wearing parts.

Such operations, although simple, must be performed by qualified personnel.

The machine has been designed to minimize routine maintenance, it is the operator judge the state and its suitability for use.

It is recommended, however, to arrest and to intervene with maintenance every time you hear an operation is not optimal, this will always have maximum efficiency.

Always use the necessary safety protection and clothing.

Visually check the conditions of the individual parts of the machine, making sure that there are no defects caused by failures or deformation.

For all maintenance that does not require voltage it is necessary to turn off the machine by sectioning the power from the main switch, locking it, with a suitable padlock, in a position "O" (OFF).

Check and try once a month the proper functioning and operation of the Emergency Stops of the electrical panel.

In case of malfunction entrust the search of the failure only a to service technician or contact the Service Department of the manufacturer of the electrical panel.

Check the grounding according to CEI EN 60207-1 p. 18.2.2 regulation.

**ERRORE. L'ORIGINE
RIFERIMENTO NON È STATA
TROVATA.**

7.2.2 SCHEDULED MAINTENANCE PROGRAM

<i>Type of work</i>	<i>Frequency</i>
Cleaning the work area	Daily
Check oil level of the lubricator	Daily
Check emergency stops	Weekly
Cleaning of the machine	Weekly
Visual inspection of the cutter blocks and knives	Weekly
Visual inspection of the Pneumatic hoses	Monthly
Clamps lubrication	Every 3 months
Pneumatic valves operation checks	Every 6 months (qualified personnel is required)

7.3 SERVICE

The network of services is developed nationally and internationally.

For specific problems, please contact the following numbers:



TEL.: 0541614454

WARNING: 

When you decide not to use this machine, because hopelessly outdated or fails, take the unit out of service by making it inoperative and free of danger. Disconnect the machine from the power supply, disconnect the air ducts, disassemble tools and all parts added. Close them inside enclosures securely closed. Seal the machine in a rugged packaging, and dispose of operating in accordance with current regulations addressing the local organizations responsible for such operations.

**ERRORE. L'ORIGINE
RIFERIMENTO NON È STATA
TROVATA.**

7.4 WARRANTY

The MEPAL ITALY ensures that the machine purchased, before being delivered to the buyer has been tested successfully. The warranty is 12 months and refers to the quality of the material and the lack of construction defects. In case of replacement of defective parts the customer is required to bear the costs of transport and between-packaging.

Damage due to tampering, falls, improper use of the machine are not covered.

It is recalled that modification interventions made by the user, without the express written consent of the manufacturer will void the warranty and relieves the manufacturer from any liability for damages caused by defective product.

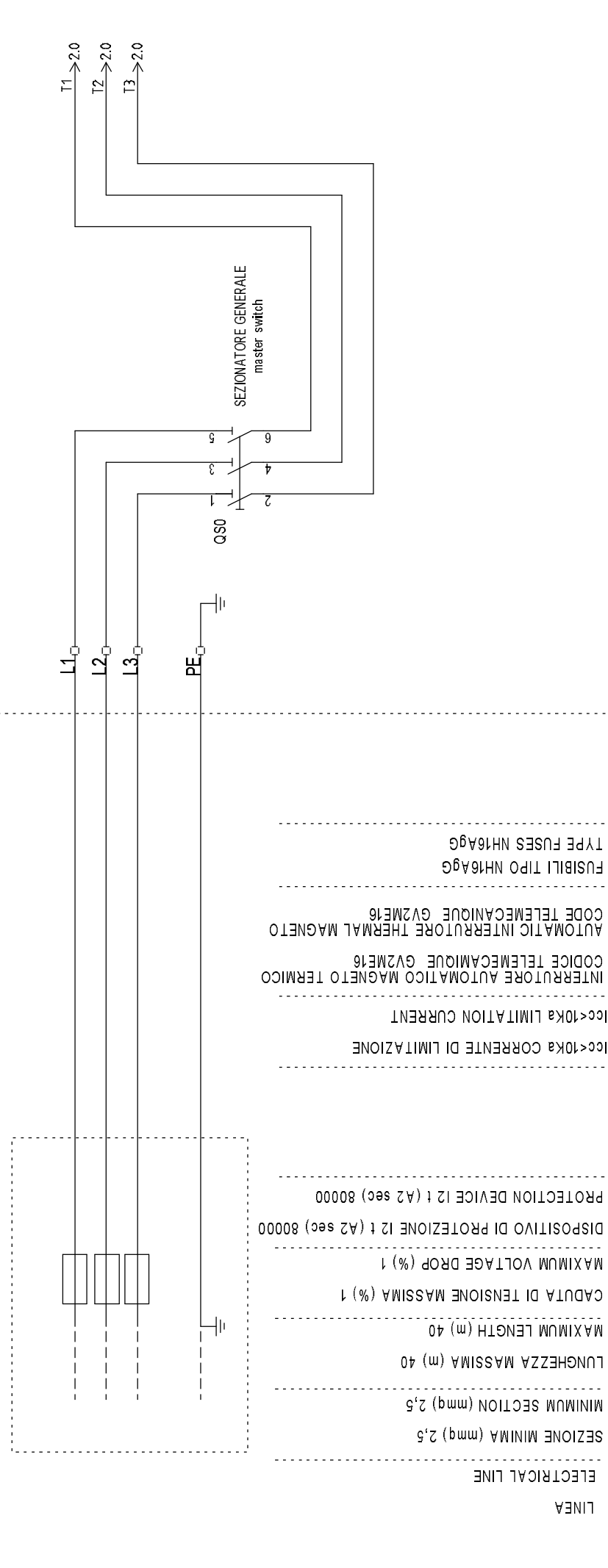
This is particularly true when these changes are made on security devices, degrading their effectiveness. The same considerations apply when using non-original spare parts or other than those explicitly specified by the manufacturer as "safety devices".

We recommend, therefore, our customers to contact our Customer Service, before making the above work on the machine.

Defects clearly and visibly present for the delivery of the product (cosmetic defects on visible parts, cracks, dents, malfunctions, missing parts etc.) Must be immediately reported to the company.

The guarantee does not apply if failure to comply with conditions of payment set of purchase. When servicing expenses, related to parts not covered by the warranty and other costs, they will be paid directly to the technician, who will issue a service card.

For such expenses will follow an invoice and will cost reported in the current price list.



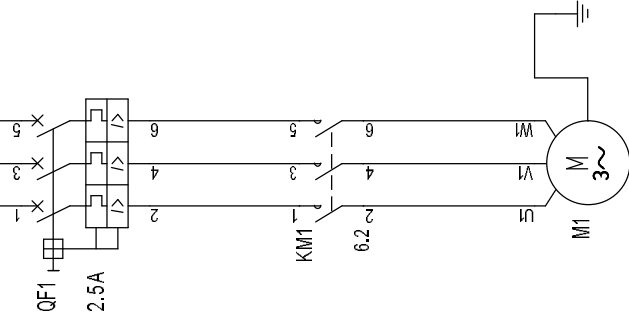
**DIMENSIONAMENTO
DISPOSITIVO DI PROTEZIONE**
PROTECTION
DEVICE DIMENSIONING

**DISPOSITIVO DI COLLEGAMENTO
RETE ELETTRICA MACCHINA**
LINK DEVICE
MACHINE ELECTRICITY GRID

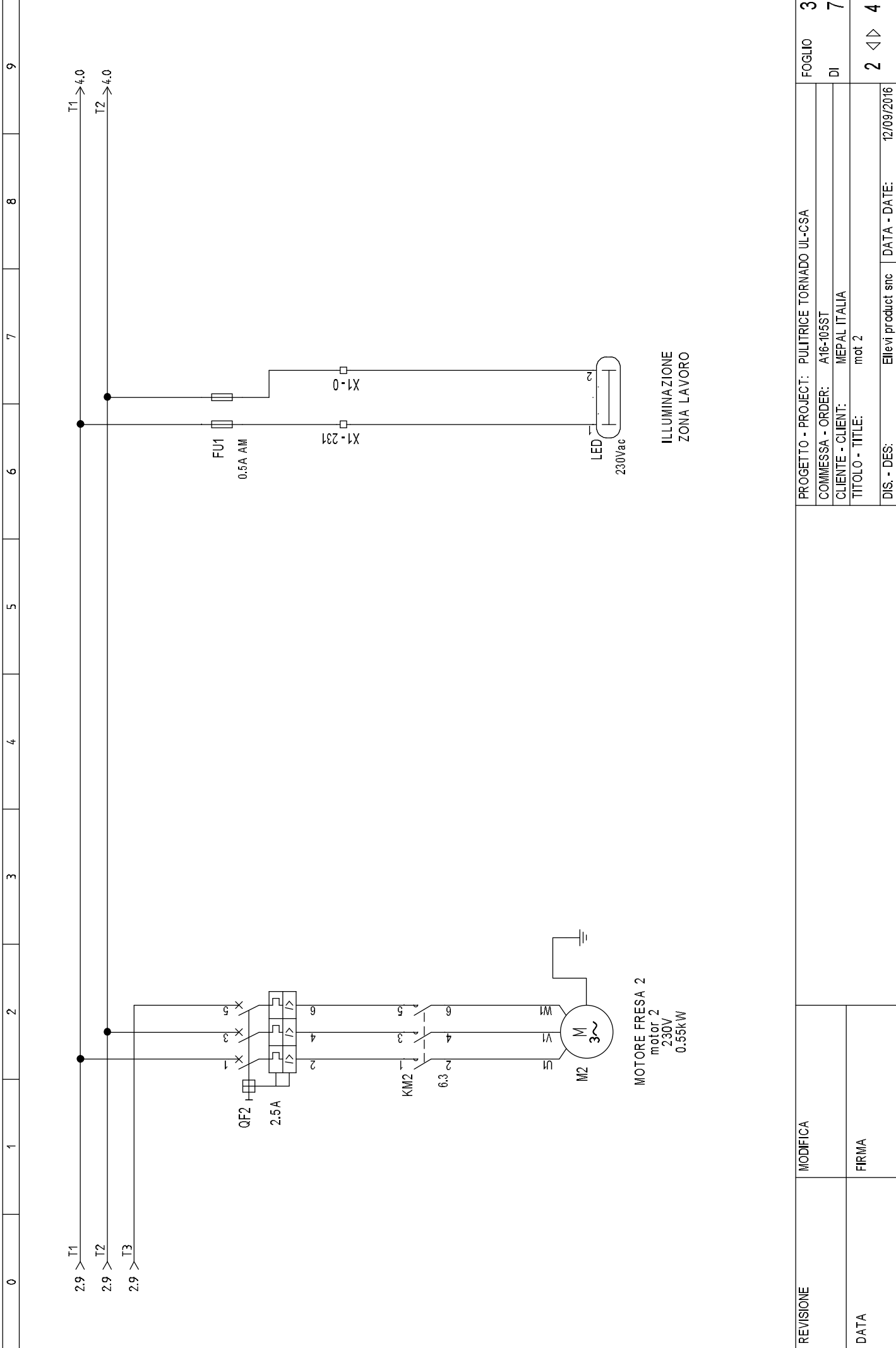
A CARICO DELL'UTENTE CHARGED TO THE USER

REVISIONE	MODIFICA	PROGETTO - PROJECT: PULTRICE TORNADO UL-CSA	FOGLIO	1
		COMMESSA - ORDER: A16-105ST	DI	7
DATA	FIRMA	CLIENTE - CLIENT: MEPAL ITALIA		
		TITOLO - TITLE: Istruzione a carico del cliente		
		DIS - DES: Ellevi product snc	DATA - DATE:	12/09/2016
			◀▶	2

1.9 > T1 → 3.0
 1.9 > T2 → 3.0
 1.9 > T3 → 3.0



REVISIONE	MODIFICA	PROGETTO - PROJECT: PULTRICE TORNADO UL-CSA	FOGLIO 2
		COMMESSA - ORDER: A16-105ST	DI 7
		CLIENTE - CLIENT: MEPAL ITALIA	
		TITOLO - TITLE: mot 1	
DATA	FIRMA	DIS. - DES: Ellevi product snc	1 < > 3
		DATA - DATE: 12/09/2016	



2.9 > T1
 2.9 > T2
 2.9 > T3

T1 → 4.0
 T2 → 4.0

FU1
 0.5A AM

X1-0
 X1-231

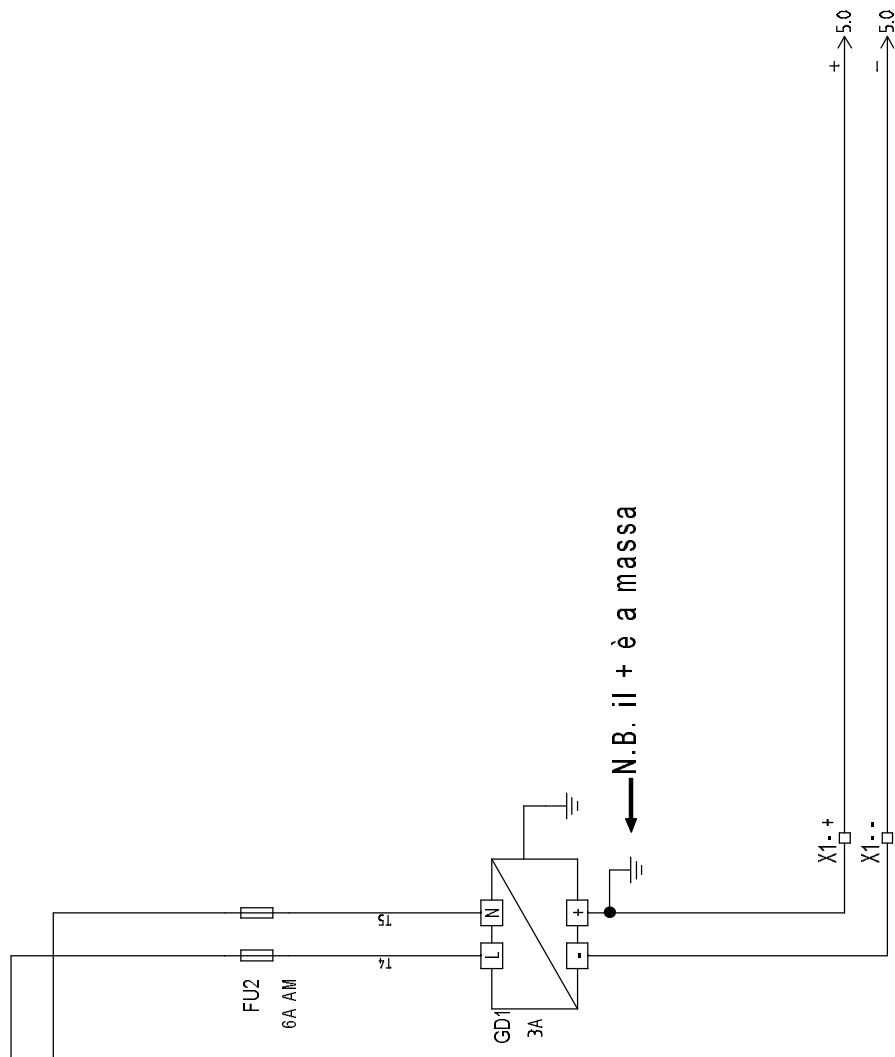
LED
 230Vac

ILLUMINAZIONE
 ZONA LAVORO

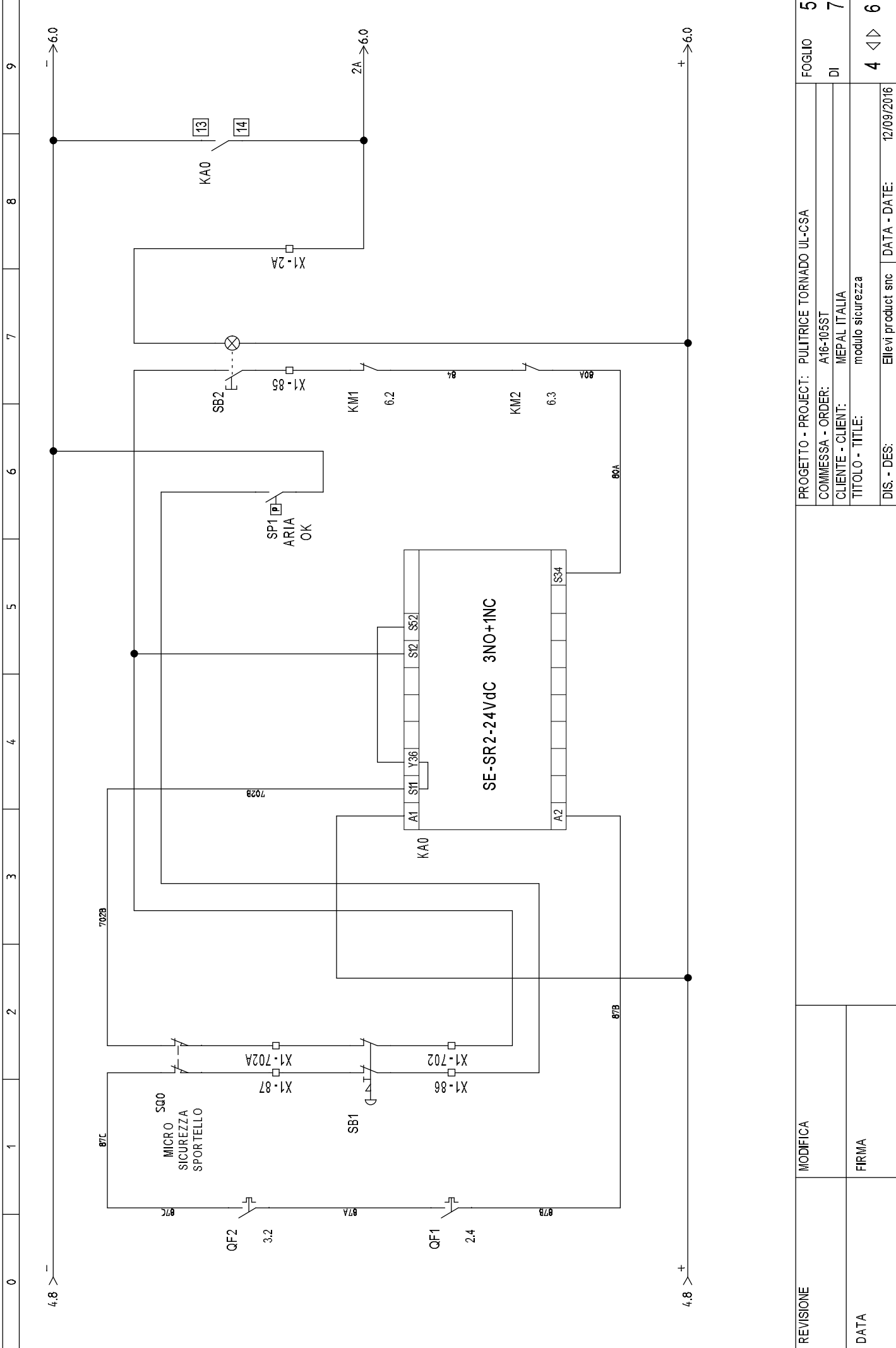
MOTORE FRESA 2
 motor 2
 230V
 0.55kW

REVISIONE	MODIFICA	PROGETTO - PROJECT:	PULTRICE TORNADO UL-CSA	FOGLIO	3
		COMMESSA - ORDER:	A16-105ST	DI	7
		CLIENTE - CLIENT:	MEPAL ITALIA		
		TITOLO - TITLE:	mot 2		
DATA	FIRMA	DIS. - DES:	Ellevi product snc	DATA - DATE:	12/09/2016
				2 < >	4

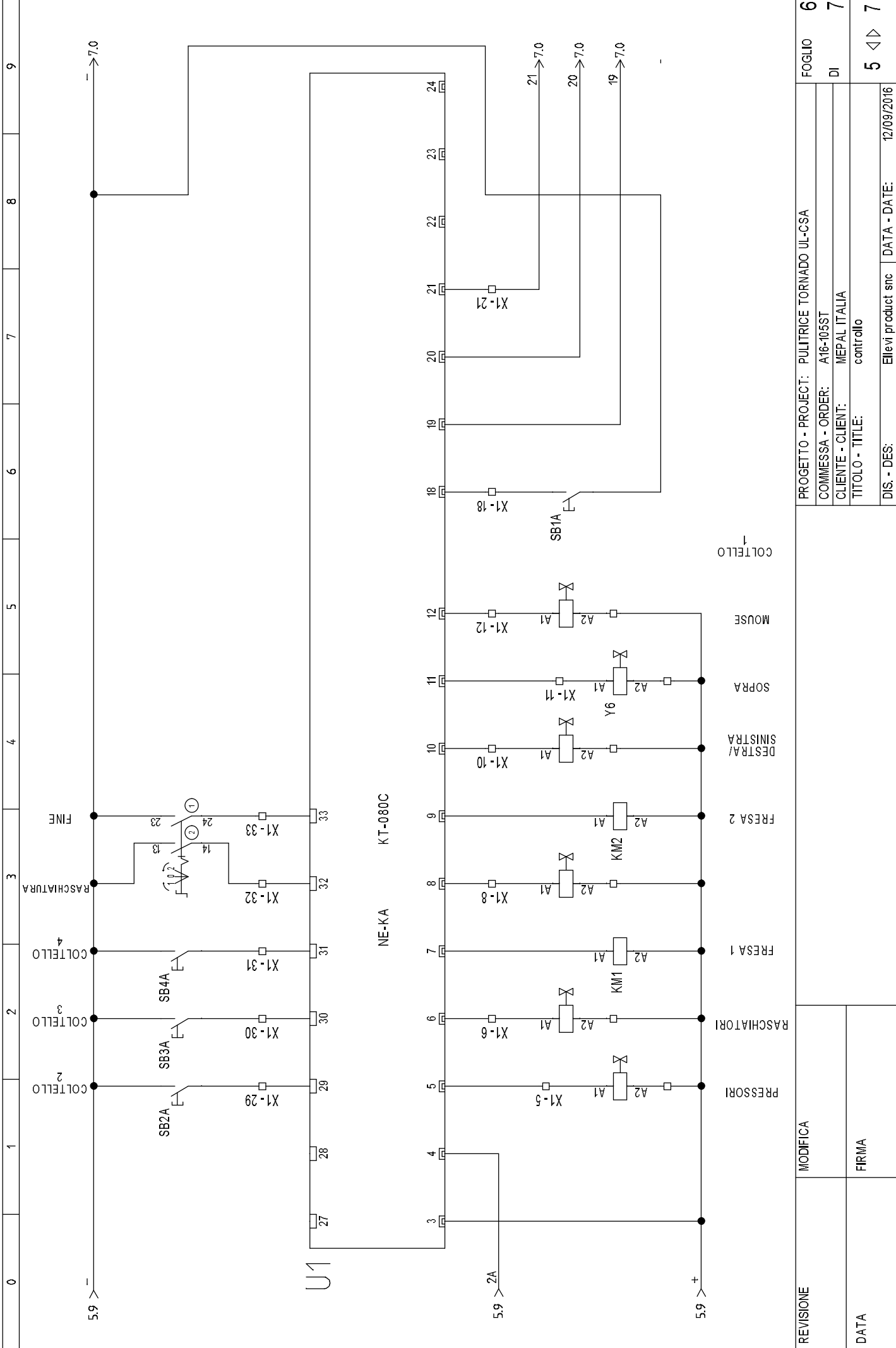
3.9 T1
3.9 T2



REVISIONE	MODIFICA	PROGETTO - PROJECT:	PULTRICE TORNADO UL-CSA	FOGLIO	4
DATA	FIRMA	COMMESSA - ORDER:	A16-105ST	DI	7
		CLIENTE - CLIENT:	MEPAL ITALIA		
		TITOLO - TITLE:	alimentazione		
		DIS. - DES:	Ellevi product snc	DATA - DATE:	12/09/2016
					3 < > 5



REVISIONE	MODIFICA	PROGETTO - PROJECT:	PULTRICE TORNAO UL-CSA	FOGLIO	5
DATA	FIRMA	COMMESSA - ORDER:	A16-105ST	DI	7
		CLIENTE - CLIENT:	MEPAL ITALIA		
		TITOLO - TITLE:	modulo sicurezza		
		DIS. - DES:	Ellevi product snc	DATA - DATE:	12/09/2016

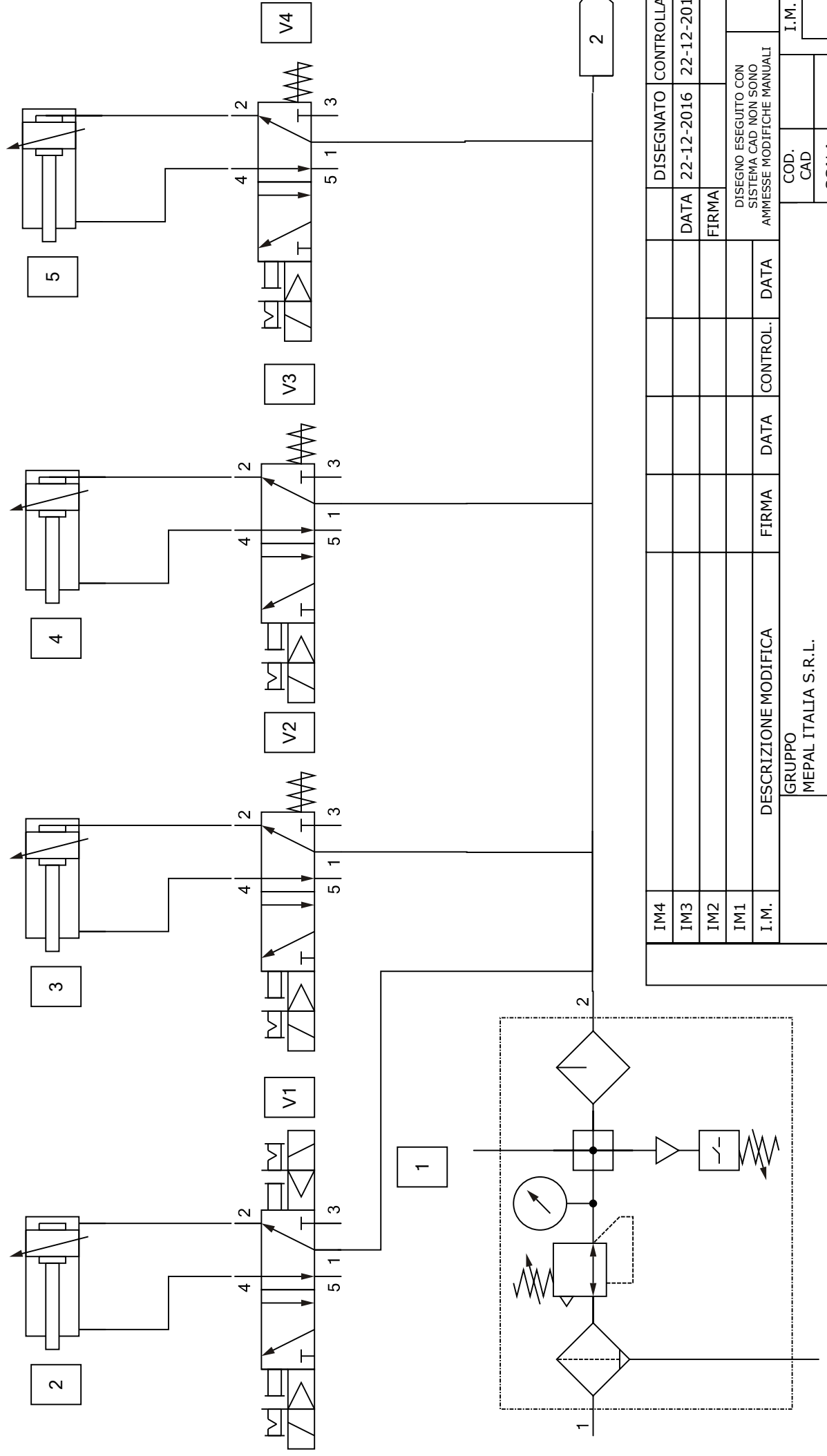


REVISIONE	MODIFICA	PROGETTO - PROJECT: PULTRICE TORNADO UL-CSA	FOGLIO	6
DATA	FIRMA	COMMESSA - ORDER: A16-105ST	DI	7
		CLIENTE - CLIENT: MEPAL ITALIA		
		TITOLO - TITLE: controllo		
		DIS. - DES: Ellevi product snc	DATA - DATE:	12/09/2016
			5 < >	7

0	1	2	3	4	5	6	7	8	9	
<p>The diagram shows a circuit with a main supply line at terminal 6.9. It branches into two paths. The left path contains a switch SQ2 (BLU) and a terminal X1-19A (MARRONE), leading to terminal 19. The right path contains a switch SQ1 (BLU) and a terminal X1-21A (MARRONE), leading to terminal 21. A second main supply line at terminal 6.9 branches into two paths. The left path contains a switch SQ4 and a terminal X1-21A, leading to terminal 20. The right path contains a switch SQ3 and a terminal X1-21A, leading to terminal 20. A component KAO is connected to terminals 23 and 24.</p>										
RASCHIATORI A RIPOSO					PRESENZA PROFILI					
REVISIONE	MODIFICA		PROGETTO - PROJECT: PULTRICE TORNAO UL-CSA							FOGLIO
DATA	FIRMA		COMMESSA - ORDER: A16-105ST							DI
			CLIENTE - CLIENT: MEPAL ITALIA							7
			TITOLO - TITLE:							6 < >
			DIS. - DES: Ellevi product snc							12/09/2016

PNEUMATIC DIAGRAM

CC4



		DISEGNATO	CONTROLLAT.
IM4		DATA	22-12-2016
IM3		FIRMA	22-12-2016
IM2		DISEGNO ESEGUITO CON SISTEMA CAD. NON SONO AMMESSE MODIFICHE MANUALI	
IM1		FIRMA	DATA
I.M.		FIRMA	DATA
DESCRIZIONE MODIFICA			
GRUPPO MEPAL ITALIA S.R.L.			
		COD. CAD	I.M.
		SCALA	<input type="checkbox"/>
DENOMINAZIONE IMPIANTO PNEUMATICO TORNADO F4 - PNEUMATIC SCHEMATIC TORNADO F4			N. DISEGNO 1

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