

Taal: Engels



Handleiding

CAV
CA CMP

MSH equipment
Appelmarkt 7
1681 PE Zwaagdijk-Oost
Tel: 0228-561100
Fax: 0228-561112
Mail: info@msh-equipment.nl

Website: www.msh-equipment.nl



CONTENTS

1 GENERAL INFORMATION	3	<i>5.4 OPERATING MODES</i>	16
1.1 MANUFACTURER	3	<i>5.5 JOB END</i>	18
1.2 POINTS OF SALE AND SERVICE CENTRES	3	<i>5.6 DECOMMISSIONING</i>	18
1.3 CERTIFICATES	3	6 MAINTENANCE	18
1.4 WARRANTY	3	<i>6.1 CONTROL UNIT CUT-OFF</i>	18
1.5 CUSTOMER'S OBLIGATIONS	3	<i>6.2 SPECIAL PRECAUTIONS</i>	18
1.6 MANUAL LAYOUT	4	<i>6.3 PARTS SUBJECT TO MAINTENANCE</i>	19
1.6.1 PURPOSE AND CONTENTS	4	<i>6.4 CLEANING</i>	21
1.6.2 MANUAL ADDRESSEES	4	<i>6.5 ROUTINE MAINTENANCE</i>	21
1.6.3 MANUAL STORAGE	4	<i>6.6 EXTRAORDINARY MAINTENANCE</i>	21
1.6.4 SYMBOLS	4	7 DIAGNOSTICS	22
2 MACHINE DESCRIPTION (CONTROL UNIT)	5	<i>7.1 TROUBLESHOOTING</i>	22
2.1 PRINCIPLE OF OPERATION	5	<i>7.2 AFTER-SALES SERVICE</i>	23
2.2 MAIN COMPONENTS	5	8 SPARE PARTS	23
2.3 CONTROL UNIT STRUCTURE	5	<i>8.1 SPARE PARTS LIST</i>	23
2.4 DIMENSIONS	5	<i>8.2 ORDERING SPARE PARTS</i>	24
2.5 AMBIENT CONDITIONS	5	9 SCRAPPING	24
2.6 LIGHTING	5	<i>9.1 DISPOSING OF WASTE</i>	24
2.7 VIBRATIONS	5	<i>9.2 CONTROL UNIT SCRAPPING</i>	24
2.8 NOISE EMISSIONS	5	10 ANNEXES	24
2.9 SPECIFICATIONS	6	<i>10.1 DECLARATIONS</i>	27
2.10 OUTFIT	6	<i>10.2 DIAGRAMS</i>	25-26
2.10.1 STANDARD	6	<i>10.3 WARRANTY FORM</i>	28
2.10.2 OPTION EQUIPMENT ON REQUEST	6	<i>10.4 MAINTENANCE LOG BOOK</i>	29
2.11 ELECTROMAGNETIC ENVIRONMENT	6		
3 SAFETY RULES	7		
3.1 GENERAL WARNINGS	7		
3.2 INTENDED USE	7		
3.3 UNSUITABLE USE	7		
3.4 DANGEROUS AREAS	7		
3.5 SAFETY DEVICES	7		
3.6 STOP CONTROLS	8		
3.7 SAFE WORKING PROCEDURES	8		
3.8 RESIDUAL RISKS	8		
3.9 NAMEPLATES	8		
4 INSTALLATION	9		
4.1 TRANSPORT AND HANDLING	9		
4.2 STORAGE	9		
4.3 ARRANGEMENTS BEFORE INSTALLATION	9		
4.4 ASSEMBLY	10		
4.5 SET-UP	10		
4.6 CONNECTIONS	12		
4.6.1 PNEUMATIC CONNECTIONS	12		
4.6.2 ELECTRIC CONNECTIONS	13		
4.6.3 SUCTION	14		
4.7 PRELIMINARY INSPECTION	14		
4.8 ADJUSTMENTS AND CHECKS	14		
5 OPERATION	15		
5.1 PERSONNEL	15		
5.2 CONTROL PANEL	15		
5.3 COMMISSIONING AND USE	15		



1 GENERAL INFORMATION

1.1 MANUFACTURER

CAV S.r.l. has been manufacturing Service control units for industrial use for more than thirty years; this experience has led to a considerable technological Know-how based on many years of R&D activities carried out in tight connection with the product manufacturing and trading on the international market, and this is the best quality guarantee that CAV can offer to users.

1.2 POINTS OF SALE AND SERVICE CENTRES

CAV directly offers after-sales service for its products sold in Italy or in Europe.
(Sales, After-sales, Spare parts)

CAV S.r.l.,
Via Morandi, 90 - Toscanella di Dozza (Bologna), Italy
Postal Code 40060
Phone +39 (0)542 673488
E-mail: sales@cavitaly.com

Customers are kindly requested to contact the above-indicated central After-sales Service for any doubt or clarification about use, maintenance or request for spare parts. Please remember to specify the Machine identification details that can be found on the nameplates:
See Nameplate A, paragraph 3.9

1.3 CERTIFICATION

The Machine complies with the prevailing European Union Directives applicable at the moment of its release on the market, as detailed in the declaration of conformity.

1.4 WARRANTY

Control unit components are covered by a 12-month (twelve month) warranty: this period starts from the date indicated on the purchase document (invoice). **Warranty does not cover electrical and electronic parts.**

Warranty only covers faulty parts, no labour costs and service call fee.

Warranty excludes any control unit damage due to:

- transport and/or handling;
- wrong or improper use of the Control Unit;
- failed compliance with maintenance specifications given in this Manual; (see paragraph 6.5)
- failures and/or faults not ascribable to faulty parts.

1.5 CUSTOMER'S OBLIGATIONS

The Customer shall, within the time frame agreed upon with the Manufacturer, fulfil its obligations indicated in the Documents attached to the sales contract. Unless otherwise agreed, the Customer normally shall take care of:

- Preparing the rooms, including any required building works and/or channels.
- Air supply with compressed air (see paragraph 4.6.1).
- Control unit Power Supply, complying with the prevailing rules in the Country of use (see paragraph 4.6.2).



1.6 MANUAL LAYOUT

The Customer is required to carefully read this manual since correct pre-setting, installation and use of the Control unit are basic requirements for its trouble-free and safe operation.

1.6. 1 PURPOSE AND CONTENTS

This manual shall give all necessary information for correct and safe use of the product. It deals with technical information, operation and maintenance details, as well as instructions for spare parts and safety warnings. Before attempting any operation on the machine, operators and qualified technicians are required to carefully read the instructions given herein.

Manual content derives from an ongoing and methodical job of data processing and technical tests filed and approved by C.A.V., complying with the internal safety procedures and data quality rules.

Data herein indicated are **EXCLUSIVELY** for specialised personnel, that could interface with the product under safety conditions for any person, the machine and the environment, carry out a simple troubleshooting and understand strange/faulty operating conditions, carry out simple inspections and maintenance, still fully complying with the instructions given in the following pages and prevailing health and safety regulations.

All details about installation, assembly, removal, extraordinary maintenance, repair and installation procedures for any accessories, devices and equipment, are mentioned and can only be performed by specialised personnel or by the **AUTHORISED AFTER-SALES SERVICE**, fully complying with the manufacturer's recommendations and the prevailing health and safety rules.

It is important to keep this manual in a known place and ensure it is legible, for possible future reference. In case of damage or for further technical and operation details, please contact directly our **AUTHORISED AFTER-SALES SERVICE**.






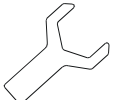
1. 6. 2 MANUAL ADDRESSEES

This Manual addresses both the operator and the technicians allowed to carry out maintenance operations on the control unit. Operators shall not carry out any operation reserved to Maintainers or Qualified Technicians. Failure to do so, the Manufacturer will not be liable for any resulting damage.

1.6.3 MANUAL STORAGE

This Manual shall be kept next to the Control unit and in such a position protected from any fluid or any other condition that could compromise its readability.

1.6.4 SYMBOLS

	DANGER	Indicates a hazard resulting in a (serious) risk for user or any other person.
	WARNING	Pay utmost attention to the paragraphs highlighted by this symbol.
	DANGER OF ELECTROCUTION	Indicates a hazard resulting in a (serious) risk for user or any other person.
	SPECIALISED PERSONNEL	Specialised personnel is required for special operations.
	SEE MANUAL	It is necessary to refer to the User's Manual before attempting a certain operation.
	ADJUST	Mechanical adjustment and/or electric set-up could be necessary.



2 MACHINE DESCRIPTION (CONTROL UNIT)

2.1 PRINCIPLE OF OPERATION

The CMP service control units are utility organs making available all utilities required for factory works: suction, power supply and compressed air. They are terminals able to meet the most diverse needs of the final user.

The CMP control unit is equipped with a 230 V power socket and can support one operator.

The installation can be carried out through embedding in work areas or fastening to the wall.

2.2 MAIN COMPONENTS

The control unit main components are the following:

- air regulator
- Pressure gauge
- safety quick cock for direct compressed air
- safety quick cock for regulated compressed air
- manual air lock

2.3 CONTROL UNIT STRUCTURE

Unit bedplate and main parts are made of a stiff metal structure, the connection for compressed air supply is placed at the back. The control unit is completely protected by a rear metal cover. A panel with air lock manual operation controls, safety quick cocks for compressed air feed and pressure regulator are installed at the front.

Furthermore, a 230V power socket is installed.

Power supply connections are realised by means of a simplified connector system. Drillings allow the wall fastening (for further details see installation and commissioning chapters).

2.4 DIMENSIONS

Overall dimensions are specified under paragraph 2.9 -Specifications.

2.5 AMBIENT CONDITIONS

The Control unit does not require any special ambient conditions. Nevertheless, it shall be installed in a well-lit, ventilated industrial building, provided with a firm and level supporting wall.

Ambient temperature for correct unit operation shall be in the range +5°C to +40° C.

2.6 LIGHTING

Room lighting shall comply with the prevailing rules in the country where the Control unit is installed and shall at any rate ensure good visibility through the whole work area. Minimum recommended illumination: 400 lux.

2.7 VIBRATIONS

If unit is used according to the instructions for correct use, vibrations shall not create any dangerous situation.

2.8 NOISE EMISSIONS

The Control unit is designed and manufactured to limit noise emissions at the source.

The product is not noisy per se.

Noise emissions shall be measured according to used equipment.



2.9 SPECIFICATIONS

This section indicates Control Unit technical features and specifications user shall refer to in case of contact with the Manufacturer After-sales Service.

TABLE 2. 9A - Technical Features and Specifications

Description	Features
Power socket	CMP 1: interlocked 230V 16A CMP 8: 230V 15A CMP 9: 230V 15A CMP 10: 240V 10A CMP 11: 230V 15A
Compressed air regulator	0-8 bar 1/4"
Suction opening	Ø45mm
Dimensions (mm)	767x367x225 (mm)
Weight (kg)	10

2.10 OUTFIT

The following equipment refers to the standard production Control Unit. Any special one could hence require parts different than the listed ones.

2.10.1 STANDARD

The Control Unit comes with:

- User's Manual
- Declaration of conformity

2.10.2 OPTION EQUIPMENT ON REQUEST

No options are set with respect to the standard outfit.

Any change and/or addition of any accessory whatsoever must be explicitly approved and made by the Manufacturer.

2.11 ELECTROMAGNETIC ENVIRONMENT

The Control Unit is designed to operate correctly within an electromagnetic or industrial environment. Design conforms to the principles of the product Harmonised Technical Standards:

HARMONISED EUROPEAN STANDARD EN 60439-1(third edition)
February (1995) ref. CENELEC EN 60439-1:1994-01

HARMONISED EUROPEAN STANDARD EN 60439-1/A1/A11
September (1997) ref. CENELEC EN 60439-1/A1:1995-12+ EN 60439-1/A11:1996-02
In particular, manufacturer used proven components and principles, as required by 7.10 of EN 60439-1/A1:1995-12+ EN 60439-1/A11:1996-02

Built-in electronic equipment was installed as indicated in the instructions that come with the equipment itself and considering the general criteria for **EMC** specified in **EN 60204-1**.



3 SAFETY RULES

3.1 GENERAL WARNINGS

The Operator shall carefully read the information given in this Manual, especially the Safety rules and precautions specified in this section.

Moreover, it is fundamental that the Operator follows these warnings:

- keep the **CMP** Control Unit and the work area clean and in order;
- use the Control Unit in normal psychophysical conditions;
- wear appropriate clothes and personal protection gear suitable for products in use;
- do not remove or tamper with the Manufacturer nameplates on Control Unit;
- do not remove or make inoperative any of the Control Unit Safety systems.
- **Do not use this unit in rooms subject to risk of explosion.**

3.2 INTENDED USE

The Control Unit is designed for removing non-explosive dust in general or similar material.

3.3 UNSUITABLE USE

The Control Unit shall not be used:

- for different purposes than those indicated in 3.2;
- to take in substances that could result in a flammable and/or explosive environment;
- in environments featuring explosive, aggressive atmosphere or with high dust or oily content;
- in environments with a serious fire hazard;
- outdoors, exposed to any weather condition;
- to take in red-hot parts and/or parts on fire;
- in a different way than stated in safety installation rules given herein.

3.4 DANGEROUS AREAS

Although the Control Unit does not involve any particular danger for exposed persons, it shall be used taking some precautions, considering that:

- the operator can come into contact with dangerous chemical products by accident and without being aware of the resulting danger.
- Before use, the person in charge of production shall evaluate unit use conditions according to the danger possibly caused by products and take suitable protections such as: work in a room featuring a guaranteed minimum ventilation or change of air.

3.5 SAFETY DEVICES

The Control Unit comes complete with suitable guards to protect the persons exposed to risks due to moving organs, bursting of pressurised air hoses, risks connected to power supply, and so on.

The unit fits the following safety devices:

- disconnecting lever on power socket to release socket only once cut-out has tripped (where available).

The User is requested to install the following safety devices:

- **Electrical equipment with TT system:** automatic circuit breaker with differential protection against direct and indirect contacts on machine power control panel (if activated, it causes uncontrolled stop of all actuators and power cut-off);
- **Electrical equipment with TN or IT system:** refer to sockets specifications to install the suitable protections.



3.6 STOP CONTROLS

The Control Unit stop controls are:

- Main Switch (to set unit out of service, located on control panel installed by the Customer);

3.7 SAFE WORKING PROCEDURES

The Control Unit design features aim at eliminating all risks connected to its use.

The residual risks involved in manual operating mode are:

- risks connected with the use of pneumatic energy;
- risks connected with the use of electric energy;
- risks of possible contact with product removed by suction.

To limit the consequences of such dangers as much as possible, it is important to comply with the following rules:

- Ensure that air supply pressure is available and set to specified value: **max. 10 bars**;
- Do not start the Control Unit before checking the correct installation and operation of set parameters; this can be done by running a cycle with no product to be taken in by exhauster;
- Wear the personal protection gear suitable for the product in use;
- Wear clothes with close-fitting sleeves.

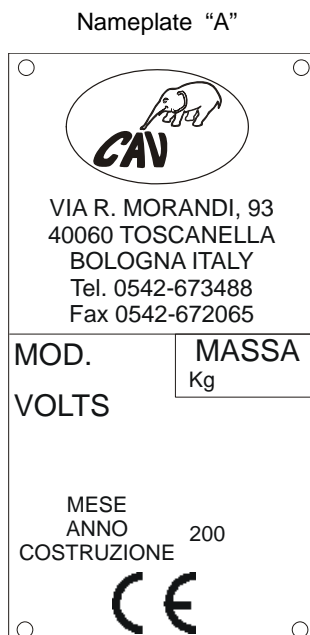
3.8 RESIDUAL RISKS

During the normal suction cycle and during maintenance, the Operators can run some residual risks that can not be completely avoided, due to the type of operation being performed, such as danger of electrocution.

3.9 NAMEPLATES

Table 3. 9A - Types of Nameplates

Nameplates on the Control unit - fig.3.9.A



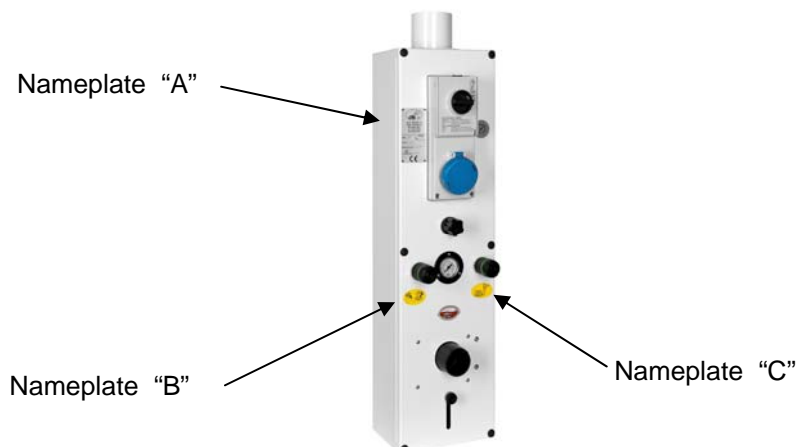
Nameplate "B"



Nameplate "C"



Figure 3. 9 B - Nameplates position



	WARNING! THE SAFETY WARNING NAMEPLATES SHALL NOT BE REMOVED, COVERED OR DAMAGED.
---	--


4 INSTALLATION

4. 1 TRANSPORT AND HANDLING

Have unit transported by qualified and trained Personnel. The Control unit shall be handled in a suitable way so as to avoid damages. All protections, electric circuits, control equipment, shall be suitably closed and fastened.

The Control unit is packed wrapped in plastic and covered with cardboard. Packed machine dimensions and weight are indicated on the package. Check for transport damages together with the carrier.

N.B.: The Manufacturer will not be liable for damages due to improper lifting and handling of the packed unit.

	WARRANTY does not cover any damage to the Control unit due to transport and handling. Any repair or replacement of damaged parts is at the Customer's charge.
---	--

4. 2 STORAGE

For any long period of inactivity, store the Control unit in a suitable place, considering storage environment and time. In particular, consider allowed temperature range, humidity and pollution.

- Store the Control unit indoors;
- Protect the Control unit from any shock and stress;
- Protect the Control unit from humidity and extremely wide temperature ranges +0° C + 60 °C;
- Avoid contact with corrosive substances.

4.3 ARRANGEMENTS BEFORE INSTALLATION

Before installation, it is necessary to prepare a suitable operating area, limiting any interference with other activities as much as possible.



4.4 ASSEMBLY

Control unit can be assembled either by the technicians authorised by the manufacturer or directly by the customer, following these steps:

Unpacking.

Remove all packing material from the machine, using suitable tools and setting it in a suitable place. Dispose of the packing material according to the prevailing environment protection regulations.

(Visually) **check** machine external parts for damage, carefully ensure that there are no scratches, denting or damaged parts.

Report any fault, failure or missing parts found within five days from machine arrival. Beyond this term the Manufacturer is no longer liable for the machine supplied.

WARNINGS AND PRECAUTIONS for installation

Always start by checking correct operation, assembly and efficiency of controls and safety systems. **In case** you find operating faults, immediately stop the machine and contact the AUTHORISED AFTER-SALES SERVICE. **Pay attention** to the adhesive nameplates on the control unit. Should they become damaged or illegible, promptly change them. For this operation contact the AUTHORISED AFTER-SALES SERVICE or the Manufacturer. Have **any maintenance intervention** -as per the definition of "user" given in the foreword section- performed by qualified personnel. **Using spare parts** that do not comply with the following specifications, any change or tampering (though small as they may be) relieve the Manufacturer of any liability concerning the correct use, operation and safety of persons and/or property. **It is strictly forbidden** to tamper with equipment, control organs and safety devices. **Dispose of waste** as required by the prevailing laws. **If the machine** is used by many operators, all of them shall read the instructions for use and indicate any maintenance intervention or parts replaced, or just suspected faults, on the servicing data sheet.

4.5 SET-UP

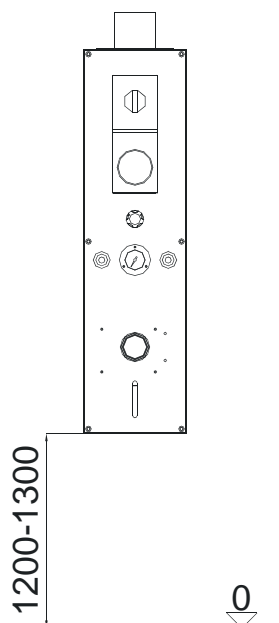
Set the Control unit on a flat and clean surface and ensure that the equipment and tools for control unit mechanical set-up are in place. Two kinds of installation are possible: embedded or to the wall.

NOTE: In case of embedded installation, always work behind the panel during maintenance. Ensure there is enough room in this area upon installation.

Embedded installation:

It is necessary to cut the panel on which the CMP control unit has to be installed.

To be stiff enough, this panel shall be ≥ 40 mm thick.

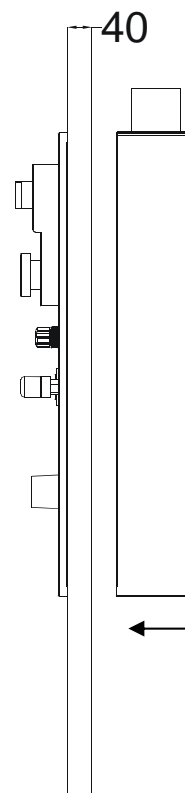




After having cut the panel, set the control unit in place and fasten using screws suitable for the panel.

Once the electrical, pneumatic and suction connections are completed, fix the rear guard. Use screws suitable for the type of panel to fit the rear guard.

Fix to the wall/panel the ties supporting the protection for hoses and power cables.

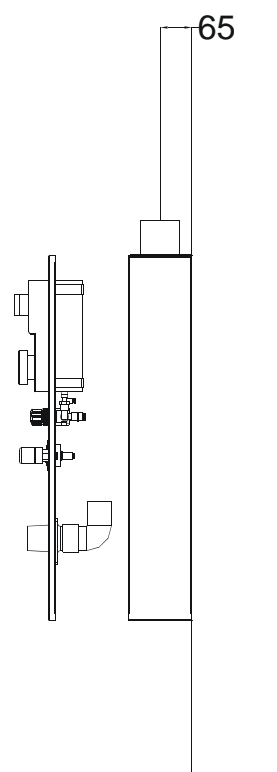


Wall mounting:

Remove the rear guard cover. Fix the frame to the wall/panel by using screws suitable for the support.

Once the electrical, pneumatic and suction connections are completed, fix the operator panel to the frame through the supplied screws.

Fix to the wall/panel the ties supporting the power cable protection.





4.6 CONNECTIONS

To avoid any problem upon control unit start-up, follow the instructions below.

4.6.1 PNEUMATIC CONNECTIONS

Figure 4. 6. 1A- Pneumatic System Layout

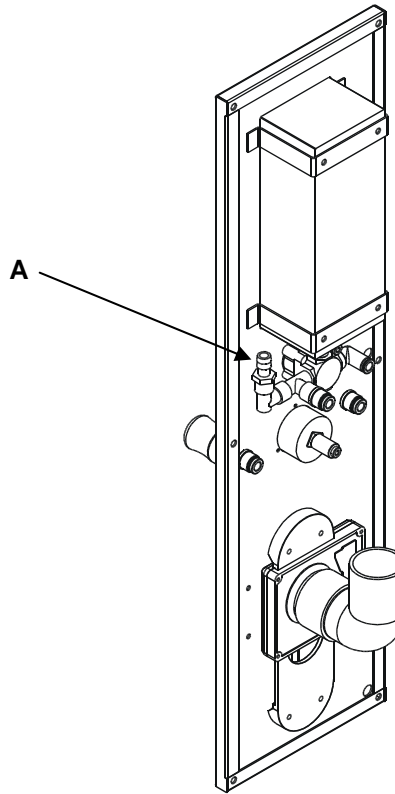
Connection to the **air supply ("A")** is ensured by a **flexible hose having an inner diameter of 8mm.**

The mobile connection is supplied together with the Control unit.

Air supply requirements:

- Operating pressure: 6 bars
- Maximum pressure: 10 bars

Connect compressed air supply to the regulator (pos.A), by inserting a gate valve (to be supplied by Customer) on the pre-set line so that the supply can be cut off during maintenance. It is strongly recommended to feed the machine with dry compressed air. Compressed air of the supply line must be completely dry, i.e. treated upstream of the exhauster. It is recommended to install a 5 micron air filter upstream.





4.6.2 ELECTRIC CONNECTIONS

Figure 4. 6. 3A- Electric System Layout

POWER SUPPLY

Control unit electrical connections are at the Customer's charge, under its own responsibility.

The electrical connections of the Control unit shall consider:

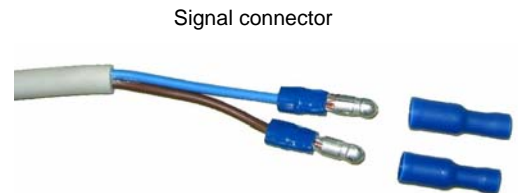
<> the Laws and Technical standards applicable at the time of installation in the place of installation

<> data indicated on " Nameplate A "

Make the electrical connections. Supply power to the power socket electrical connector-disconnect device with a separate line of suitable cross-section, also providing suitable protections against direct and indirect contact. **This line and the relevant protections are at the Customer's charge.**

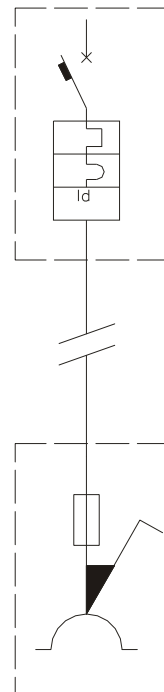
The two wires marked with numbers **3 and 4** shall be connected to the signal line input to exhauster (at the Customer's charge).

The electrical system design and components ensure utmost dependability and safety of use. The attached wiring diagrams will allow identification of all connections and components. Only make the required electrical connections; do not modify any circuits, calibrations, components, etc. Failure to follow this warning will be considered as tampering. Before connecting to the mains, ensure that power voltage and frequency correspond to the specifications indicated on the nameplate. Perform ground connections as required by the prevailing laws of the country.



Signal connector

Emergency cutout switch

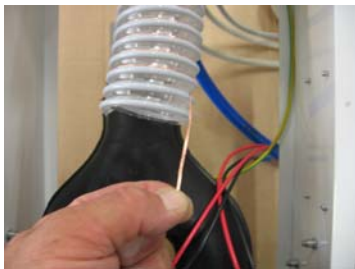
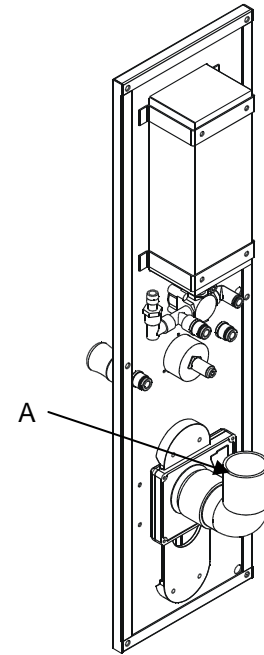


CMP power socket



4.6.3 SUCTION

Connect the suction fitting (A) to an antistatic flexible hose deriving from the main suction line. "Peel" the copper wire of the inlet hose and fold it inward, before connecting it to the suction connection. **In case of non metal suction connection, connect the copper wire to a ground terminal.** Fasten the hose with its metal clamp.



4.7 PRELIMINARY INSPECTION

Power supply, Compressed Air supply and Control unit preparation stages for Commissioning do not require any special knowledge apart from that acquired after reading this manual.

Before starting up the Control unit it is necessary to perform some inspections and checks in order to avoid errors or accidents:

- ensure that the Control unit did not suffer any damage during assembly;
- pay special attention when checking electrical parts, control panels, cables and air lines;
- check that all external supplies connections are correct;
- ensure that all mobile parts can move freely.

4.8 ADJUSTMENTS AND CHECKS

The Control unit is tested at the Manufacturer's premises, before shipment. No further adjustment is necessary.

When starting the Control unit for the first time, proceed as follows:

- set the Main switch QSI lever to ON (switch is installed by the Customer);
- open compressed air supply cock.



5 OPERATION

5.1 PERSONNEL

The Control unit is designed for use by one Operator.

Personnel allowed to work on the Control unit shall have the following knowledge (or acquire it after suitable training) and be familiar with the contents of this Manual as well as all Safety-related concerns:

- General and technical knowledge of suitable level to understand Manual contents;
- Knowledge of the main health and safety and accident prevention rules;
- Knowledge of how to behave in an emergency situation, where to find personal protection gear and how to use it correctly.
- Maintainers, apart from the above, shall also have suitable electrical, pneumatic and mechanical Technical knowledge.

5.2 CONTROL PANEL

Control unit controls are on the front control panel.

Figure 5.2 a - controls on front panel

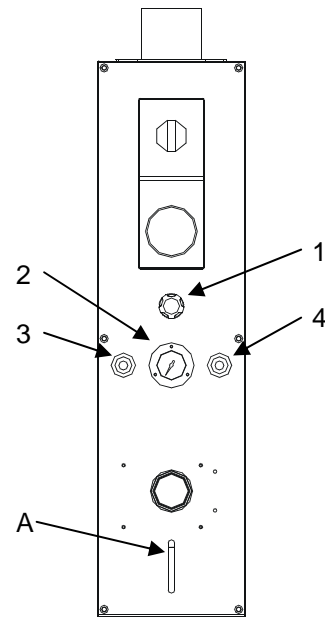
KEY:

- The knob "A" enables the gate valve voluntary and stable opening;

Figure 5. 2.B - Controls and Pneumatic inspections

Pneumatic sys.key:

1. Pressure regulator.
2. Pressure gauge.
3. Quick cock for regulated compressed air.
4. Quick cock for direct compressed air.



5.3 COMMISSIONING AND USE

To power on the control unit, proceed as follows:

1. set the Main Switch to ON
2. open compressed air supply cock.



5.4 OPERATING MODES

After commissioning, it is possible to use the Control unit for lapping dust suction, through control panel selector:

Fit the supplied union in the suction opening.

Off Mode

Using this operating mode, the system can supply power while suction stays off.

Manual mode

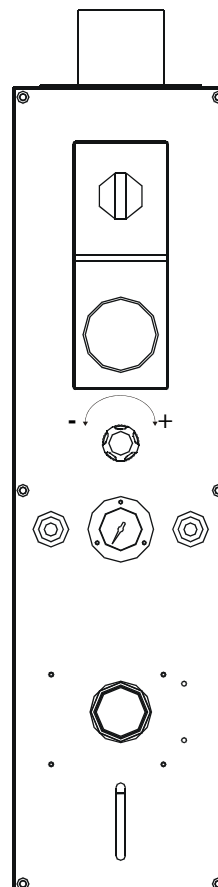
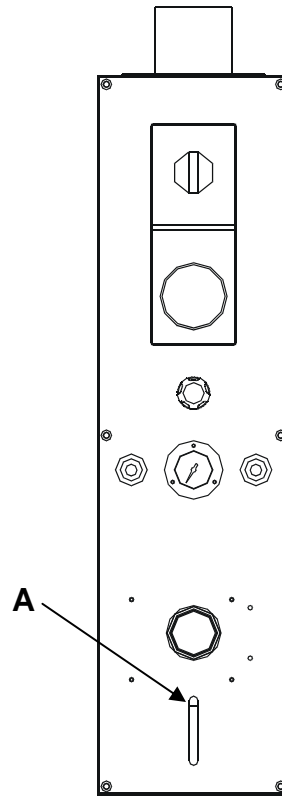
By working knob "A" operator can open the mouthpiece and this outputs a remote contact to switch suction on.

The user can perform required suction work using the sleeve.

To switch suction off, just work knob "A" .

Pressure adjustment

If you try to work the knob and it does not turn (stuck), you shall pull it. Now it is free to turn both ways to increase or decrease pressure output to the sander/spray gun fitting. It is recommended to first set pressure to a value lower than required, then slowly increase it up to required value.





Connecting and disconnecting the compressed air fittings

Connection

Install the fitting inside the safety quick cock until it locks in place. Now you can use compressed air.

Disconnection

It requires two steps:

1st step: Grab cock ring nut and push cock until fitting is released.

2nd step: now, any air present in the tool hose will discharge and you can remove the fitting by pulling the ring nut. With this operation, you release the quick cock mechanical lock and you can withdraw the fitting.

Connection



Disconnection - step 1



Disconnection - step 2





5.5 JOB END

The procedure for a voluntary Stop is as follows:

1. Open the main switch contact on control panel (OFF position);
2. Close compressed air supply cock.

5.6 DECOMMISSIONING

In case of long periods of inactivity or **in case of maintenance, user shall compulsorily:**

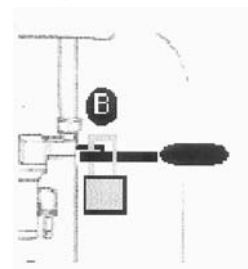
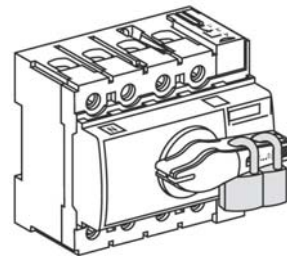
- Open and padlock the main switch on main control panel (see Figure 6.1 A);
- Close and lock compressed air inlet valve (see Figure 6.1.B);
- Release circuit air by inserting a fitting in the direct air quick cock
- Put out a panel reading "CONTROL UNIT BEING SERVICED".

6 MAINTENANCE

6.1 CONTROL UNIT CUT-OFF

Before attempting any Maintenance or Repair job, user must cut all Control unit supplies, proceeding as follows:

1. Open and padlock the main switch on main control panel.
2. Close and padlock or disconnect the quick-release coupling to cut off the compressed air supply.



6.2 SPECIAL PRECAUTIONS

When carrying out maintenance or repair jobs, it is recommended to proceed as follows:

- Before starting, put out a panel reading "CONTROL UNIT BEING SERVICED" in a visible position.
- Do not use solvents and flammable materials.
- Do not release lubricants into the environment.
- Control unit parts are not designed to bear a person's weight; do not stand on them or they could break.
- When job is completed, restore and correctly fasten all protections and guards previously removed or opened, as well as any safety device, if previously removed.



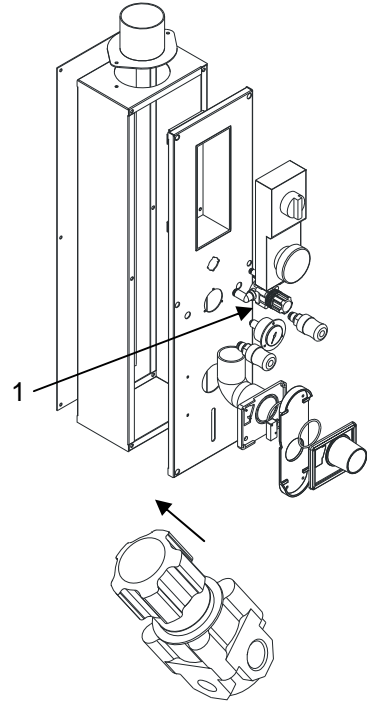
6.3 PARTS SUBJECT TO MAINTENANCE

Maintenance shall be carried out with the Control unit set out of service for replacement of damaged or worn parts. The Control unit does not require frequent maintenance. If compressed air does not meet indicated requirements, the following could get damaged:

Pressure regulator

1) Remove the regulator:

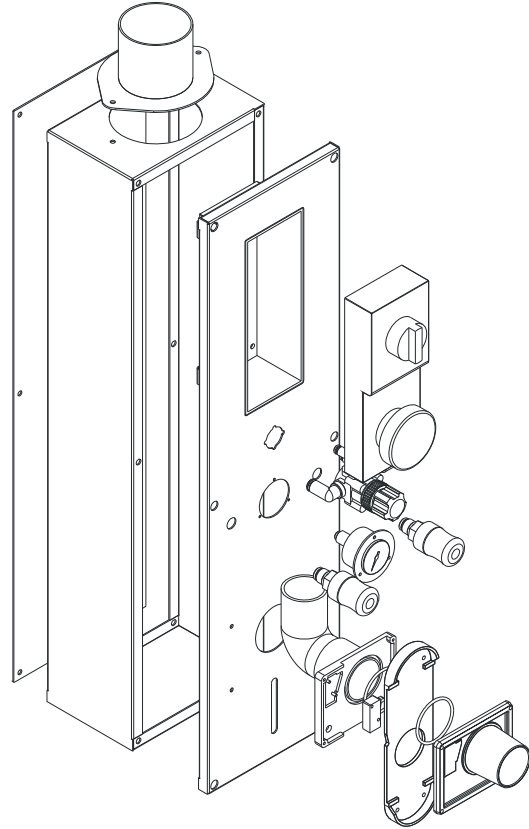
- Close air feed;
- Discharge any residual air;
- Insert a fitting in the quick cock and allow all air to discharge;
- Reset the regulator by turning the knob anticlockwise until it stops, then unscrew the utility panel from the frame or the panel (according to the kind of installation) and disconnect all hoses connected to the regulator (take note of the connections)
- Remove the adjuster knob by pulling it;
- Unscrew the ring nut and remove the panel regulator;
- Open the regulator by loosening the 4 M4 cross-headed screws;
- Clean or change the membrane then reassemble the unit proceeding in the reverse order.





2) Changing the air lock assembly

- Close air feed;
- Discharge any residual air;
- Insert a fitting in the quick cock and allow all air to discharge;
- Unscrew the utility panel from the frame or the panel (according to the kind of installation)
- Remove the gate valve control knob;
- remove the suction hose;
- remove the whole air lock assembly by loosening the four bolts retaining it to the panel;
- on a bench, change any broken or worn parts;
- reassemble the whole unit proceeding in the reverse order.





6.4 CLEANING

It is recommended to frequently clean the whole Control unit (intervals depend on type and frequency of use). Use a soft rag. Do not use water and/or solvents.

6.5 ROUTINE MAINTENANCE

The following operations shall be performed at the indicated time intervals. Failure to comply with this schedule will relieve the Manufacturer of any liability or warranty obligation.

These operations, though simple as they may be, shall be carried out by **suitably trained and expert Personnel**.

Scheduled routine maintenance includes inspections, tests and interventions aiming at preventing system stoppage due to faults or potentially dangerous situations.

It is suggested to Clean the equipment weekly in order to guarantee trouble-free operation and long life.

MAINTENANCE	DESCRIPTION	INTERVENTION
Pneumatic System	Hoses	No scheduled maintenance required
Electrical System	Panel and sockets	No scheduled maintenance required
Suction System	Air lock	Change, when required

6.6 EXTRAORDINARY MAINTENANCE

Extraordinary maintenance is an activity reserved to personnel appointed by the manufacturer or the manufacturer itself. Please contact the centres specified under paragraph 1.2 in case of need. **Considering the machine yearly maintenance, the intervention of a technician for extraordinary maintenance is highly unlikely, unless for special cases or when expressly requested.**



7 DIAGNOSTICS

7.1 TROUBLESHOOTING

Table 7.1 A

TROUBLE	CAUSE	INSPECTION AND/OR FIX
The power tool is not working.	<ul style="list-style-type: none">No power supply from the mains.Socket fuses blown.	<ul style="list-style-type: none">Restore power supply from the mains.Change the fuses.
Exhauster does not turn on	<ul style="list-style-type: none">Microswitch failureWiring connection error.	<ul style="list-style-type: none">Replace microswitch.Restore remote contact connection.
The pressure regulator puffs.	<ul style="list-style-type: none">Poor quality compressed air.	<ul style="list-style-type: none">Remove and clean the regulator.Install an air filter at inlet.
The air lock baffle plate moves very slowly.	<ul style="list-style-type: none">Gate baffle plate worn out/damaged.	<ul style="list-style-type: none">Disassemble the air lock unit and change any worn/damaged parts.



7.2 AFTER-SALES SERVICE

The Manufacturer is always willing to answer Customer's questions and give information on use, maintenance or installation and so on. Please follow the instructions given under paragraph 1.2 on how to request our assistance.

8 SPARE PARTS

8.1 SPARE PARTS LIST

Control unit use does not involve any expendable parts. Following is the list of available spare parts.

Table 8.1- A

POS.	DESCRIPTION	PART NO.
1	Flanged pressure gauge Ø40 1/8"	35-59
2	Single-phase power socket	CMP 1: 7571 CMP 8: 7537 CMP 9: 7544 CMP 10: 7546 CMP 11: 7545
3	Pressure regulator 1/4"	PCX-0003
4	Ø50 PVC 90° elbow	6604
5	Safety quick cock 1/4" male	6303-1/4 green tag 6303-1/4S blue tag
6	Microswitch carrier box	35-6-1008-ANT
7	O-ring	8111
8	Gate valve	35-6-1003-ANT
9	Cover	35-6-1009-ANT
10	Microswitch	9082
11		
12		



8.2 ORDERING SPARE PARTS

We remind you that the Control unit can only be repaired by a qualified technician.

It is hence recommended to contact the Manufacturer After-sales Service that will make available Qualified Personnel, suitable tools and original spare parts.

To order above-listed spare parts, please refer to paragraph 1. 2

9 SCRAPPING

9.1 DISPOSING OF WASTE

During processing, waste or rejections are created that shall be collected, recycled or disposed of, in compliance with the prevailing laws of the country where the Control unit is installed.

9.2 CONTROL UNIT SCRAPPING

Upon unit scrapping, separate the plastic parts from any electrical components, that shall be sent to different waste disposal centres, as per prevailing rules.

The machine metal parts shall be divided into steel and other metals or alloys, and then routed to recycling firms.

Unit scrapping does not cause any special risk, as far as it is performed by qualified personnel with suitable equipment.

10 ANNEXES

10.1 DECLARATIONS

The following Declarations are hereby attached:

- Declaration of conformity.

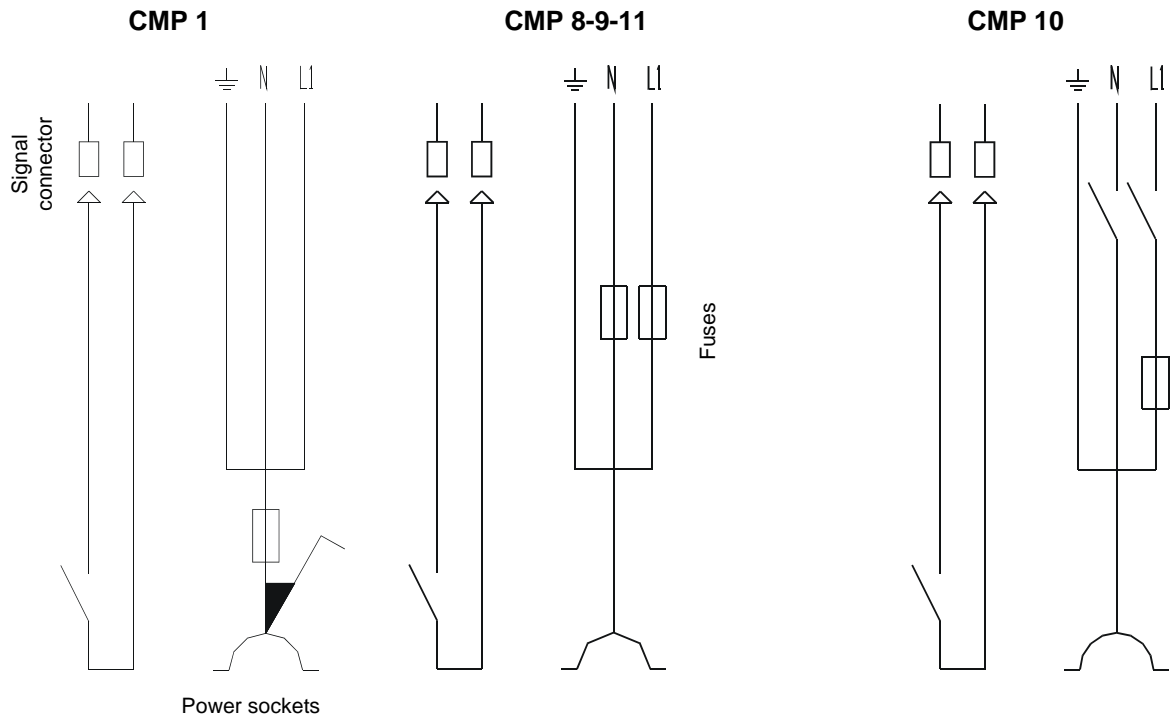
10.2 DIAGRAMS

The following Diagrams are hereby attached:

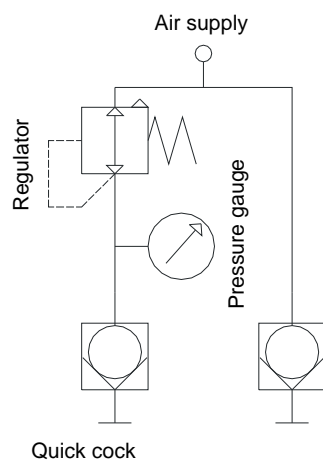
- Pneumatic circuit diagram
- Control unit exploded view

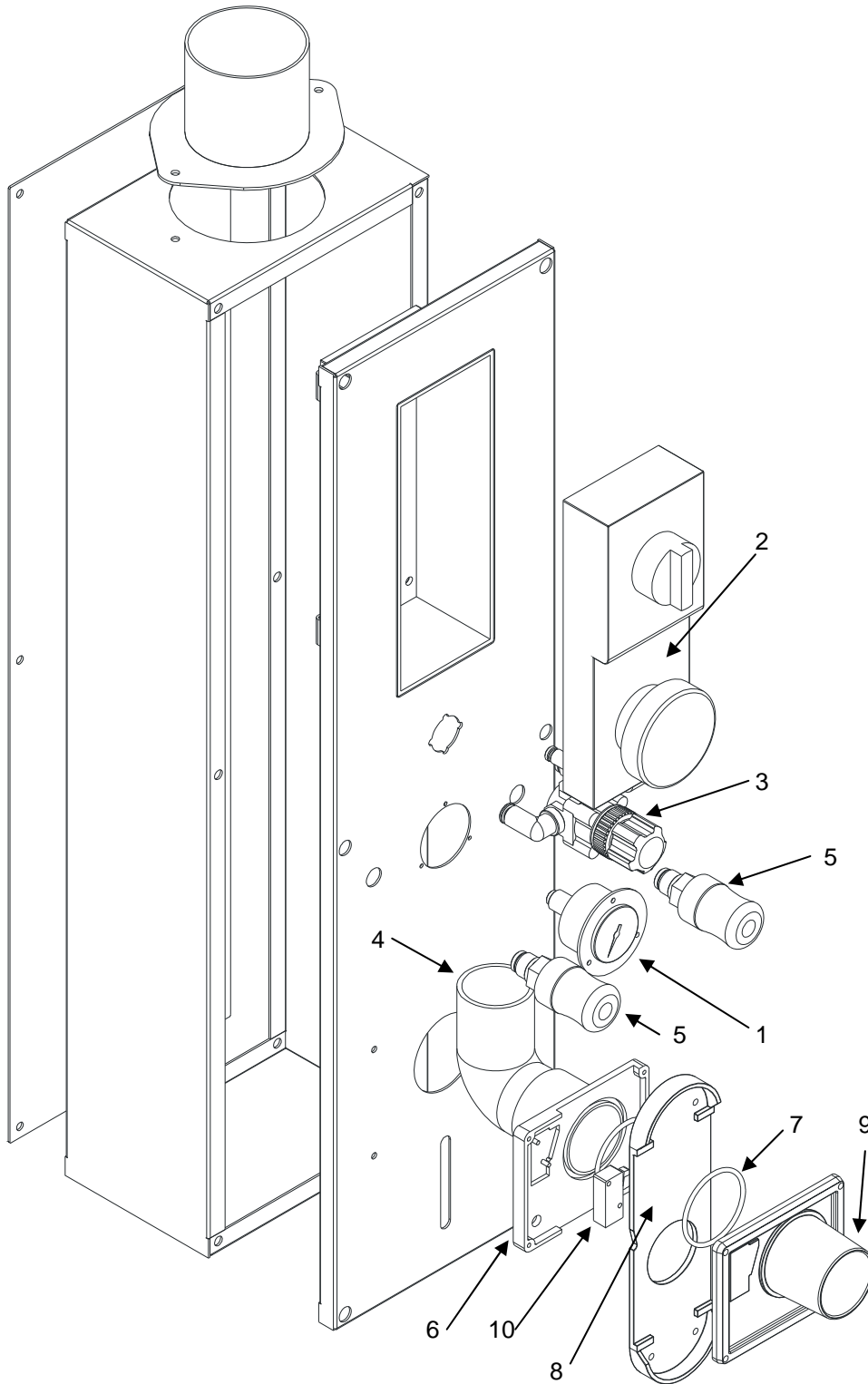


Electric circuit diagram



Pneumatic circuit diagram





For descriptions, see Table 8.1 A



THE UNDERSIGNED COMPANY **C.A.V SR.L.**

VIA R. MORANDI, 93 - 40060 TOSCANELLA DI DOZZA (BO)
TEL.: +39 0542 673488 - TELEFAX: +39 0542 672065
E-MAIL: SALES@CAVITALY.COM - HTTP://WWW.CAVITALY.COM
M/BO 015576
ITALY

DECLARES, UNDER ITS OWN EXCLUSIVE RESPONSIBILITY, THAT THE MACHINE

MODEL CMP

REGISTRATION NO.

CONSTRUCTION DATE

TO WHICH THIS DECLARATION IS REFERRED, IS IN ACCORDANCE WITH THE FOLLOWING DIRECTIVES:

DIRECTIVE 2006/42/EC (MACHINERY DIRECTIVE)
DIRECTIVE 2006/95/EC (LOW VOLTAGE DIRECTIVE)
DIRECTIVE 2004/108/EC (ELECTROMAGNETIC COMPATIBILITY DIRECTIVE)

FURTHERMORE, WE DECLARE THAT THE TECHNICAL DOSSIER HAS BEEN COMPILED BY:

LUCA LUCIA
C/O C.A.V. SRL
VIA R. MORANDI, 93 - 40060 TOSCANELLA DI DOZZA (BO)
TEL.: +39 0542 673488 - TELEFAX: +39 0542 672065
E-MAIL: UT@CAVITALY.COM

TOSCANELLA,

TECHNICAL DOSSIER COMPILER

LUCA LUCIA

LEGAL REPRESENTATIVE

DOMENICO LUCIA



**Please fill in and return this form by fax
for Warranty registration**

Date:

Control unit model:

Serial no.:

Year of manufacture:

To be filled in by the Customer

Company name

Address

Phone no.: Fax no.:E-mail:

Company name of installing firm

.....
.....



C.A.V. srl

Via R. Morandi, 93 - 40060 Toscanella di Dozza (BO)

Tel.: +39 0542 673488 / Fax: +39 0542 672065

www.cavitaly.com - sales@cavitaly.com

www.smaisystem.com - info@smaisystem.com