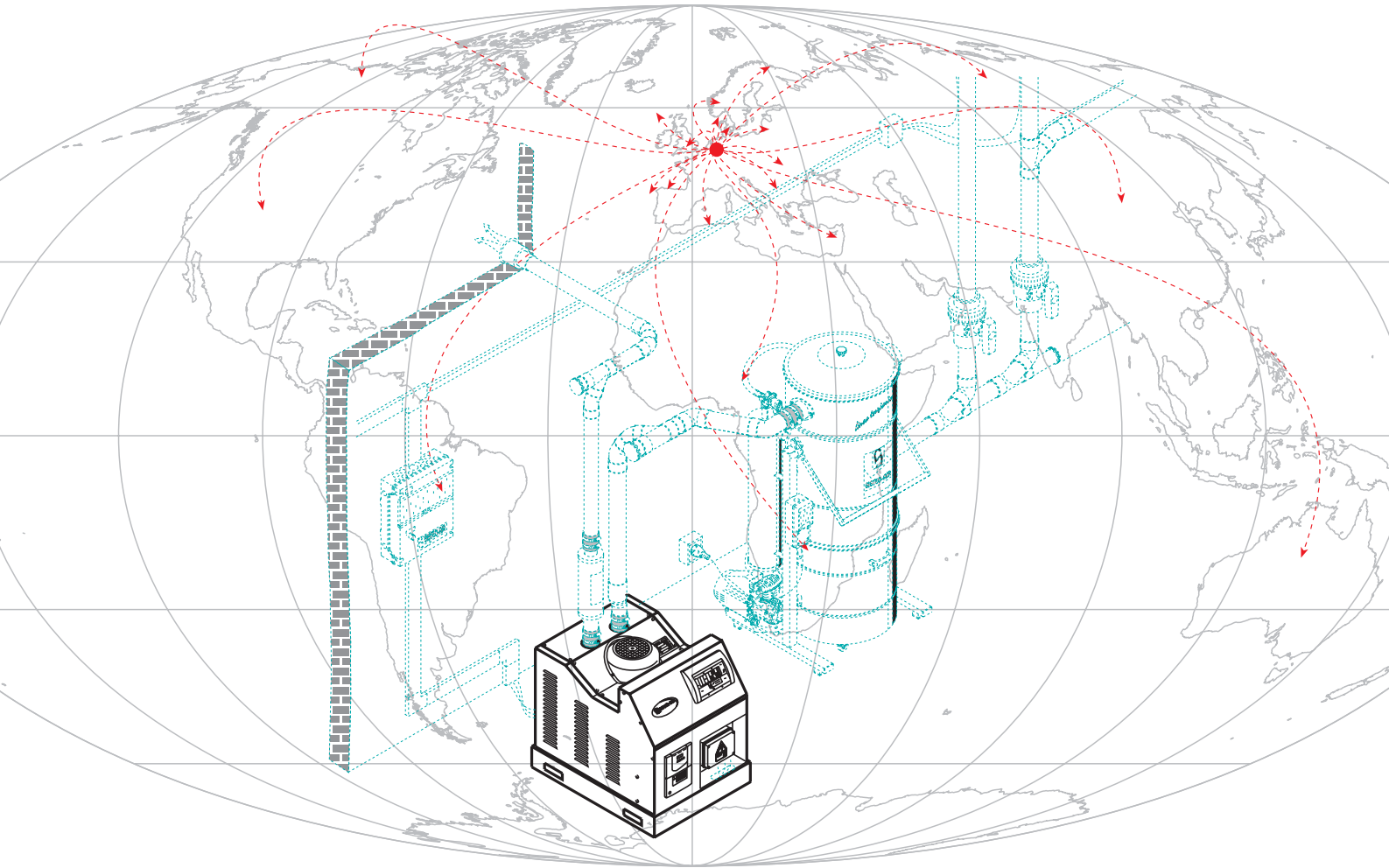


**User Manual, use and maintenance:  
Electronic blowing power units**

**GB** (English)





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English

English

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You must keep this manual for future reference for as long as you own the machinery

Thank you for choosing this SISTEM-AIR product.



Analysing the numerous changes that the market has undergone in the last ten years, SISTEM-AIR has decided to concentrate on the study, research and development of the technical installation contents increasingly linked to simplicity, versatility, appearance and product efficiency.

The greatest stimulus comes from the continuous growth that the product SISTEM-AIR consolidates year after year in the electrical distribution sector, an area without doubt offering strong stimulus while being conscious of the continuous innovations offered by the market in alternative sectors.

This user manual will provide you with useful information and invaluable suggestions to get the most out of your product.

If anything in the manual is unclear, please contact us immediately.

Once again, thank you for purchasing our product.

TECHNICAL AND IT DATA AND THE PREPARATION OF TEXTS AND GRAPHICAL ARRANGEMENTS:  
PREPARED BY SISTEM AIR'S DESIGN OFFICE.

SISTEM AIR RESERVES ALL RIGHTS TO THIS MANUAL; NO PARTIAL OR WHOLE REPRODUCTION IS  
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## 1 - GENERAL INFORMATION

### • 1.1 The user guide

This instruction manual is a document issued by the manufacturer and must be considered an integral part of the product. In case that the system is resold, transferred or hired out to third parties, the guide must be provided to the new user or owner. We recommended using it and keeping it safe for the entire service life of the system. The main purpose of this manual is to familiarize the reader with the proper use of the apparatus, in order to obtain optimum performance, while maintaining it in perfect operating condition .

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### • 1.2 The manufacturer



TECNOPLUS s.r.l.  
Via Cilavegna, 53  
27020 - Gravellona Lomellina  
Tel. +39 0381 650082 - Fax +39 0381 650120  
E.mail: info@sistemair.it - document@sistemair.it  
Website: WWW.sistemair.it

### • 1.3 Communicating with the manufacturer

When contacting the manufacturer for matters or for need of technical provider service relating to the machinery you purchased, you should provide the following data:

- Machine model
- Article code
- Serial number
- Year of manufacturing
- Date of purchase
- Location of purchase

Detailed indications of the problem you are encountering. The complete technical features relative to the blowing unit reproduced on the IDENTIFICATION PLATE located on the unit.

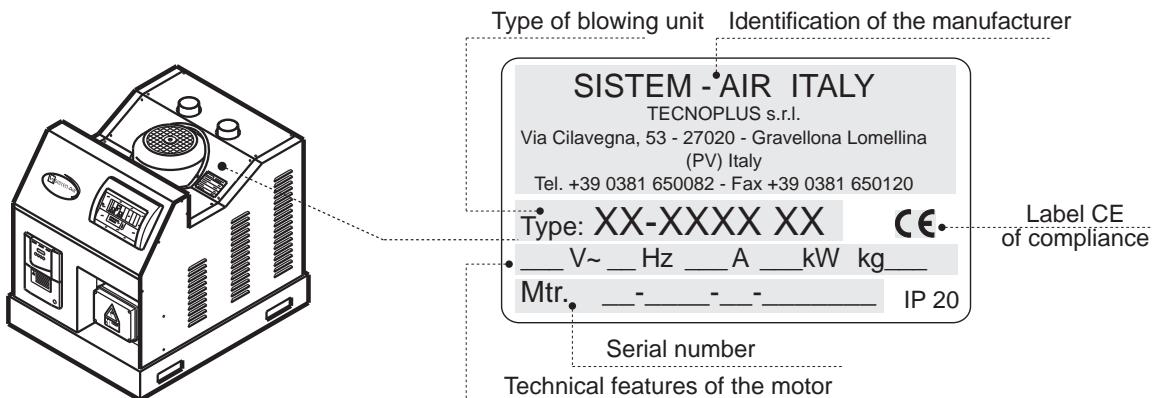
### • 1.4 Identification of the blowing unit

This instruction manual covering use and maintenance refers to the following product:

- |           |            |
|-----------|------------|
| - 060005Q | - 060005QE |
| - 060006Q | - 060006QE |
| - 060008Q | - 060008QE |
|           | - 060010QE |

#### • 1.4.1 Identification plate

The identification plate on this machine is located on the top of the machinery on the right side: It contains the name of the manufacturer, type, year of production, serial no., mass, electrical voltage (Volt), frequency (Hz), The consumption (A), the kind of power and the power installed (kW).



• 1.5 Technical service provider

If necessary, contact only the manufacturer's Support Service or its Authorized Center. Always specify the technical data shown on the identification plate and the serial number of the central vacuum unit.

Technical Service Provider

Authorized Assistance Center

• 1.6 Safety

Only an authorized technician can effect the activation and the inspection to guarantee the security and efficiency of the machine. Every person who will use this machine has to be trained and informed about the danger which accrues from the use of the machine and about the precautions to adopt in order to reduce the risks over the period of usage.

We advise:

That you do not carry out any kind of work, changes or repairs other than those indicated in this manual. Only the technical staff, trained and authorised by the manufacturer, are sufficiently experienced and familiar with the machinery to carry out any technical work.



ATTENTION

Take particular care to ensure that no solid objects even very small ones, end up inside the turbine as this could cause serious damage.



ATTENTION

Before carrying out any operation, disconnect from the power mains.

### • 1.6.1 General and safety warnings

Read carefully any information in this guide about the installation, use and maintenance of the suction unit contained in this manual.

This instruction booklet is an integral and essential part of this product and must be given to the user. We recommended using it and keeping it safe for the entire service life of the system.

This guide has been issued in order to give the most important and necessary information on safety during installation, use and maintenance.

Continuous compliance with the instructions herein contained will guarantee the safety of the operator and prevent people being injured or objects damaged. It will also ensure savings on running costs and a longer life for the machinery. Under no condition should the vacuum module be used for anything other than the operations described. The improper use of the machine is considered as dangerous.

The manufacturer is released of any contractual or extra-contractual duty as a result of improper installation and use as well as failure to comply with the instructions provided by the manufacturer.

Any operation relative to the central vacuum unit must be done exclusively by qualified persons. qualificato.



We advise:

-That you DO NOT carry out any kind of work, changes or repairs other than those indicated in this manual. Only the technical staff, trained and authorised by the manufacturer, are sufficiently experienced and familiar with the machinery to carry out any technical work.

- Immediately disconnect the electrical power supply if:

- the electrical power cable is drawn in and therefore not intact
- the central vacuum unit has been exposed to rain or to excessive humidity.
- the central vacuum unit has been damaged and as consequence the covering is damaged by an impact or when the packing/container has been damaged and as consequence the covering is damaged.
- it is suspected that the central vacuum system requires maintenance or repair.

Wear safety gloves and a face mask when doing maintenance work, emptying the dust container, and replacing or cleaning the filter cartridge.

Use only original spare parts.

Never use the vacuum unit to remove textile stuff, big size bits, and pieces of any material, burning coals or ashes. Never vacuum liquids.

Do not use the system without the filter cartridge.

Do not block the air discharge pipes.

Do not place body parts in contact with the suction accessories.

Do not use several vacuum hoses at the same time and managed by the same micro line; use only one.

Do not leave the system running when not in use and disconnect it from the electrical supply in the event of extended periods of inactivity.

### • 1.7 Warranty

The certificate of guarantee is attached to the central vacuum unit.

The manufacturer guarantees your machinery for 2 years from the date of purchase shown on your sales receipt. The warranty covers all machinery parts with the exception of replacement parts and any accessories.

The warranty does not cover damage incurred during transportation, carelessness in storing the machinery, negligence or poor usage, incorrect or bad installation and maintenance, inadequate power systems to which the machine is attached, bad handling by unauthorised personal and/or those not qualified to correctly intervene on the machine and any other reason that does not involve the manufacturer.

During the warranty period, the manufacturer is committed, via the vendor who sold you the machinery, to replace or repair parts free of charge that were defective at origin or as a result of assembly.

Any repair work carried out under warranty does not prolong the duration of the latter.

THE MANUFACTURER ONLY RESPONDS TO THE WARRANTY CONDITIONS FOUND IN THIS CERTIFICATE. CHANGING OR MODIFYING THIS WARRANTY IS STRICTLY FORBIDDEN AND WOULD RESULT IN THE LATTER BECOMING NULL AND VOID.

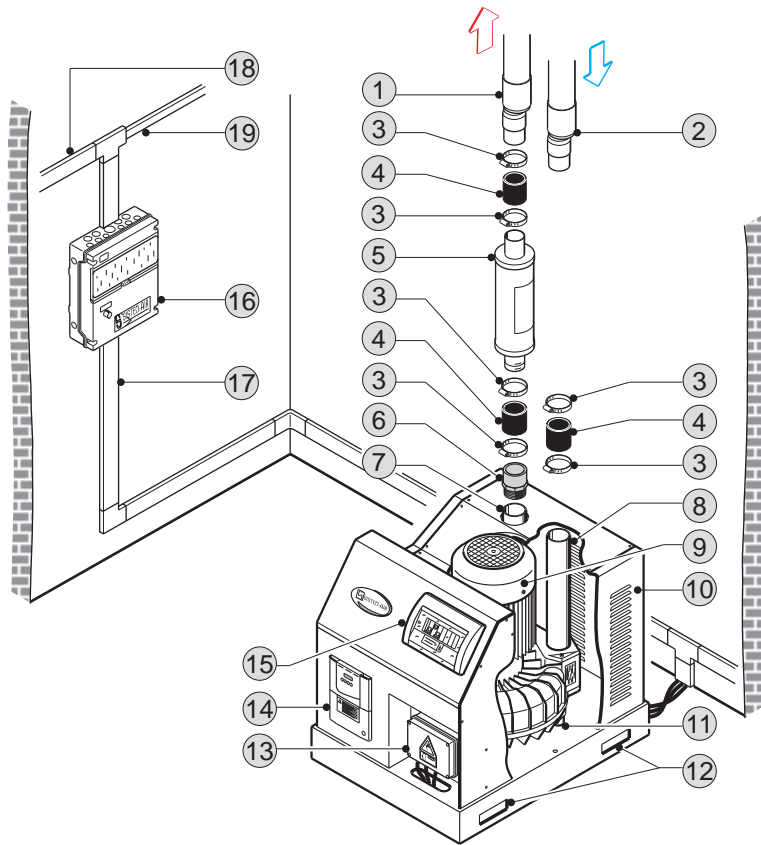
• 1.8 Symbols/Explanations of the manual

English

English

In this manual are used technical and conventional words.

In order to facilitate the comprehension of the instructions you can find the most frequently words used in the following list:



- 1) Discharge pipe
- 2) Connection pipe to dust separator
- 3) Metal collar
- 4) Rubber coupling for connection
- 5) Silencer
- 6) Screw-connector
- 7) Air vent connector
- 8) Vacuum connector
- 9) Motor unit
- 10) Cooling fin
- 11) Turbine
- 12) Handle
- 13) Control panel for electric connection
- 14) Panel for regulating motor speed
- 15) Motor control panel
- 16) Speed modulation control panel
- 17) Connection line motor-control panel
- 18) Supply line
- 19) Micro line

The following symbols are used inside of the manual in order to indicate the operations which demand a specific attention to guarantee the security of the product and the people.

Symbols	Meaning
	General risks: indicates that care must be taken to prevent serious accidents to humans or damaging their health
	Risk from electrocution: something that could happen during the lifespan of the machinery (electrical), causing harm to humans, objects or the environment
	Risk from burning: indicates that care must be taken to prevent situations arising that could seriously burn people.
	General warnings: indicates that you must take care to prevent situations that could damage the machinery.
	Compulsory protective mask: indicates the need to obligatorily use a protective face mask to prevent causing breathing problems.
	Compulsory protective eyewear: indicates the need to obligatorily use eye protection in order to prevent damaging your eyes.
	Compulsory protective gloves: indicates that you must obligatorily protect your hands to avoid damaging your hands.
	Compulsory protective footwear: indicates the need to obligatorily wear protective footwear to prevent damaging your feet.
	Information: indicates that you can find useful consults and information concerning the correlative context.
	Waste disposal: You can find useful informations and helpful consults concerning the waste disposal, if the suction unit does not operate anymore.



- 1.9 Certificate CE of compliance

## DECLARATION OF CONFORMITY



The company,

TECNOPLUS S.r.l.  
Via Cilavegna, 53  
27020 Gravellona Lomellina (PV)  
ITALIA

Declares, on his own responsibility, that the products of the industrial series:

-Blowing power units

Model: \_\_\_\_\_

Item N°: \_\_\_\_\_

Serial N° : \_\_\_\_\_

Year: \_\_\_\_\_

to whom this certificate refers, are in compliance with the legal regulations in force:

Machinery Directive 98/37/CEE (ex 89/392/CEE )  
and subsequent amendments

Electromagnetic Compatibility Directive 89/336/CEE  
and subsequent amendments

Low voltage Directive 73/23/CEE  
and subsequent amendments

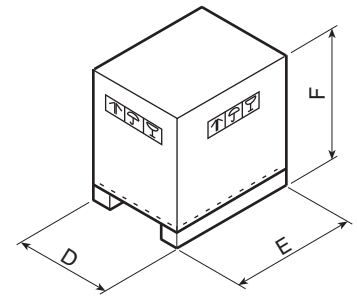
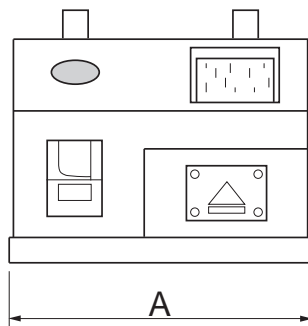
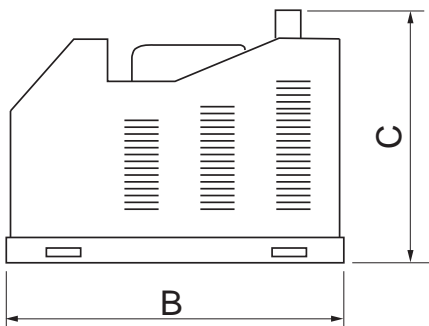
Gravellona, \_\_\_\_\_

TECNOPLUS S.r.l.  
Giancarlo Plebani  
(Managing director)

## 2 - TRANSPORTATION AND UNPACKING

### • 2.1 Weight and dimensions

Model	Mass Net of suction unit (kg)	Dimensions suction unit (cm) (A x B x C)	Packing mass (kg)	Packing Dimensions (cm) (D x E x F)
- 060005Q	73	54 x 69 x 60	81	78 x 58 x 91
- 060006Q	97	54 x 69 x 64	105	78 x 58 x 91
- 060008Q	141	59.5 x 81 x 80	154	86 x 86 x 111
- 060005QE	75	54 x 69 x 60	83	78 x 58 x 91
- 060006QE	88	54 x 69 x 60	96	78 x 58 x 91
- 060008QE	143	59.5 x 81 x 80	156	86 x 86 x 111
- 060010QE	156	59.5 x 81 x 83	169	86 x 86 x 111



### • 2.2 Handling and transportation

Check the overall mass of the machine shown on the ID plate and use the means described to move it properly. The machine is delivered packaged with stretchable film and PVC tape to protect it from damage during transportation. Do not remove the packaging until you have to set it up; this ensures that it remains in good condition. To transport and unpack the machine, proceed as follows

- use a sufficiently large lifting trolley that can support the load, by inserting the forks under and in the centre of the pallet that supports the packed product

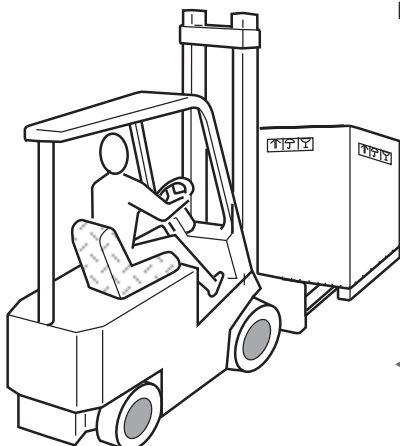
#### WARNING

The packaging around the machine must be kept in the position indicated in the instructions on the external wrapping to prevent the machine tipping over.

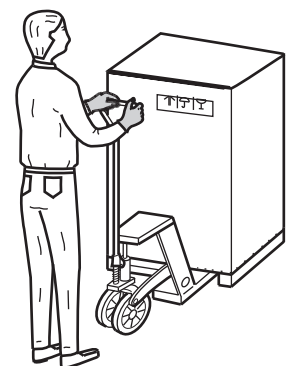
The manufacturer declines all responsibility for damage to the vacuum module delivered if you open the packaging incorrectly.

- CAUTION-

THESE PROCEDURES MUST BE DONE BY QUALIFIED PERSONS. SAFETY SHOES AND GLOVES MUST BE USED



1 Move the suction unit to the location selected for the installation. 1



### •2.3 Unpacking

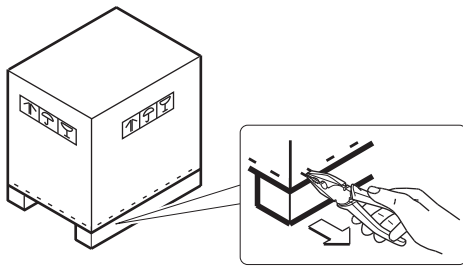
Do not remove the packaging before installing or activating the suction unit in order to avoid damages.

**WARNING:**

- The manufacturer declines all responsibility for damage to the vacuum module delivered if you open the packaging incorrectly.
- The parts of the packaging that come with the machine when it is delivered are aggregate waste and must be disposed of in compliance with the current legislation in force.
- Please take great care in ensuring that no foreign objects block the turbine inlet via the suction and release channels as this could cause serious damage to the vacuum module. Always keep the suction and release channels closed until they are definitively connected to the respective pipes.

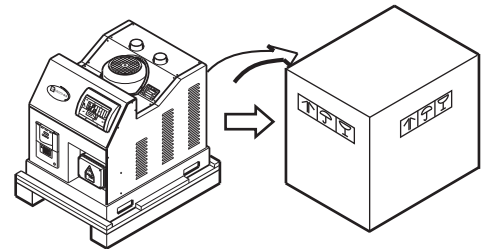


To unpack the machine, proceed as follows

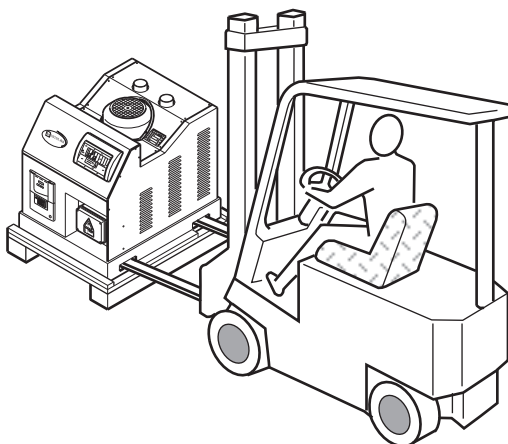


- 1 Arrange the cardboard box on the floor with the opening side upward and use a pincer to remove the metal clips, which fix the cardboard protection to the basic pallet.

- 2 Open the packaging, remove the upper cardboard protection and arrange it on the floor



- 3 Lift the suction unit from the pallet and arrange it on the floor.  
Use a pallet transporter for this operation or a rope with adequate lifting clamps.  
For handling use the 4 handles situated on the basement of the suction unit.  
**IMPORTANT:** In the case of manually handling, this operation must be done by at least 4 persons.



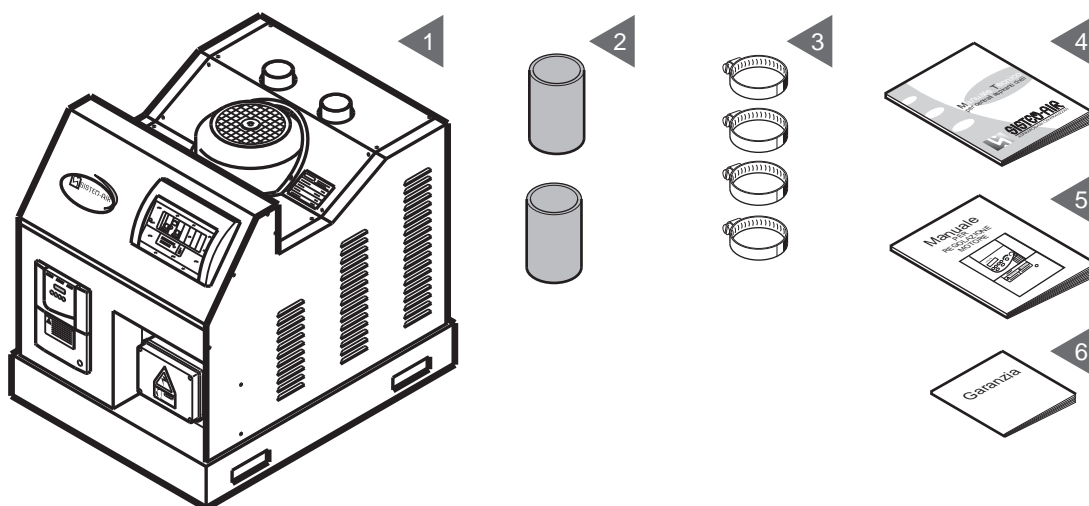
- 4 Take out all the accessories contained in the cardboard box and dispose in compliance with the relevant provisions in force.



• 2.4 Control of the accessories

Do an inventory of the items received:

- 1 - N°1 central vacuum unit
- 2 - N°2 rubber couplings for connection to the discharge and vacuum pipe net
- 3 - N°4 metal collars to fix the couplings
- 4 - N°1 Guide for installation use and maintenance
- 5 - N°1 Panel regulating motor speed (only on pre-fitted models)
- 6 - N°1 Warranty certificate

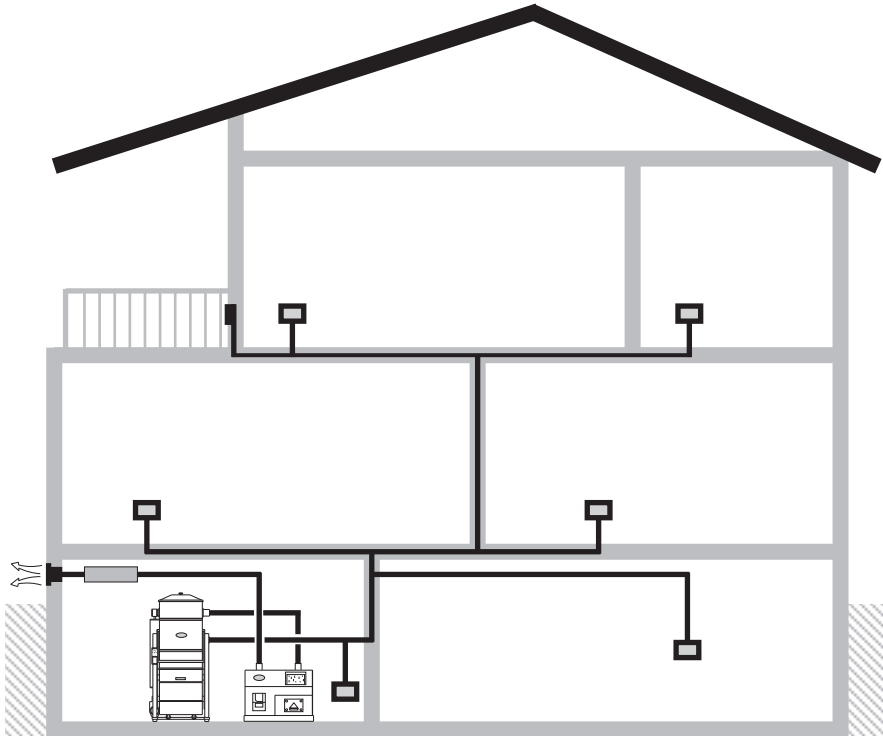


Check that the unit and the related accessories correspond to the list and that there is no shipping damage. If this is not the case, immediately notify the provider.

### 3 - DESCRIPTION OF THE BLOWING UNIT

#### • 3.1 Operating principles

The central vacuum system, suitable for any kind of residential building (civilian housing, office, hotel, service sector), consists of chased, wall-mounted or suspended ceiling-mounted PVC pipe network, which branches off into the various locations. The suction pipe network is equipped with vacuum inlets where the user fits the suction hose. The SISTEM - AIR central vacuum system, positioned in a service location, auto box or other utilization, is attached to the vacuum pipe network. Activation of the central unit occurs by simply inserting the sleeve of the flexible cleaning hose into any vacuum inlet. Depending on the type of hose (electrical or not) the central vacuum unit will be activated immediately or after the switch on the flexible hose handle have been moved to the position "ON".



The motor bodies are ideal for installation and business environments (hotels, public offices, industries..) and can be used individually, or together with other motors. It is essential to use them in conjunction with a dust separator.

The modular system permits to offer the best conditions corresponding to every requirement and regarding the vacuum power. Therefore it is possible to create different installations with 1, 2 or more motor groups in combination with dust separators.

The blowing units should be selected according to the number of operators required and the specific needs of the system.

They should be installed in service rooms that are closed and protected from extreme weather conditions, dampness and excessive temperature changes. You should also choose areas at some distance from heat sources, such as heaters or central heating. Ensure the selected installation rooms are well aired and that the temperature inside does not exceed 40°C. At the planning stage, it is advisable to identify the best location for the separator with respect to the system, leaving a reasonable amount of space for installation, use and maintenance.

The blowing power unit with side channel compresses the air, according to a dynamic principle, and operates with an impeller that rotates without contact and therefore does not require maintenance. It has an integrated electrical motor where a dual parallel flow impeller is attached to the end of the shaft.

The main control panel has electronic equipment to control the speed of the blowing unit as well as a keyboard to search for faults and the maximisation of required performance on the plant. It also has a cooling system for the frequency converter, a mains switch, circuit breaker switch for remote start-up, electrical connection terminal board and various cabling accessories in compliance with legislation.

### • 3.2 Allowed and improper use

The SISTEM - AIR central vacuum unit has been designed to suction dust, objects of very small dimensions and dry materials only. It must not be used for vacuuming textile stuffs, heavy materials, big-size bits and pieces, burning and hot material.

Never vacuum liquids!

The vacuum module must be used together with a SISTEM AIR filtering separator to vacuum dust or small scraps left over from work. The air sucked in by the turbine must always be filtered.

Take particular care to ensure that no solid objects even very small ones, end up inside the turbine as this could cause serious damage.

The machinery must be installed in humidity free areas and in rooms with a temperature lower than 40°C.

It is prohibited to vacuum materials at high risk of explosion (propellant powder) or materials that may be inert alone but which, once vacuumed and mixed in the dust collection container of the central system, may cause hazardous chemical reactions.

It is absolutely prohibited using the central vacuum system in an explosive atmosphere or outside of the standard values of temperature, pressure and humidity.

Any use different from the ones expressly indicated is strictly forbidden.

Any modification or adjustment of the system in order to vacuum a specific material must be approved by the manufacturer, by means of written authorization.

Any use other than that for which the system has been constructed, represents an abnormal condition that may cause damage to the equipment and may constitute a serious hazard to the user



• 3.3 Compliance with EEC Regulations in force

The central vacuum unit described in this manual comply with the following European Community Directives:  
 98/37/CEE - Machinery Directive (ex 89/392/CEE) and subsequent amendments  
 73/23/CEE - Low Voltage Directive (and subsequent amendments)  
 89/336/CEE - Electromagnetic Compatibility Directive (and subsequent amendments)

• 3.4 Safety equipment

The central vacuum units described in this manual are equipped with:

- Magnetic thermal protection switch on the control panel to protect the unit.
- Circuit breaker switch for the micro line on the control panel to protect the micro line and the contacts of the suction inlets.
- Electronic speed converter with thermal safety sensor, to control the tension (+/- 10 %) and irregular working conditions (only on pre-fitted models).

• 3.5 Noise level

The nominal noise level of every single blowing unit diversifys from 68 dB(A) to 85 dB (A), depending on the model and the speed of input.

These values are nominal, as far as they diversify according to the speed of use, to the ambient conditions where the blowing unit has been installed and according to the type of installation.

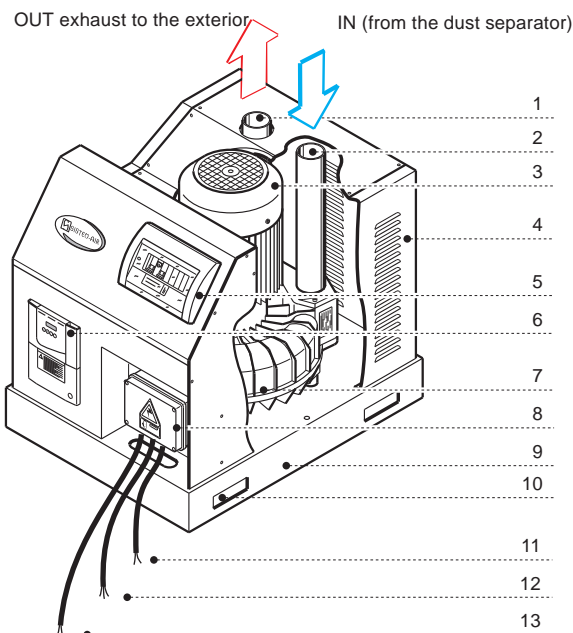
The vacuum unit should be installed in service rooms that are closed and that are adapted for the installation of industrial machines.

• 3.6 Basic components

The industrial blowing units are subdivided into two principal categories:

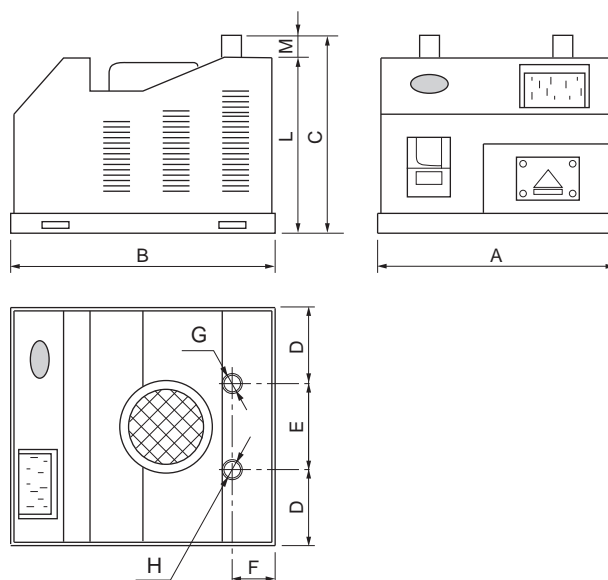
- Without electronic control panel for the modulation of the speed and the capacity (mdoulation of start directly); (Models .....Q).
- With electronic control panel for the modulation of the speed or the capacity (Models .....QE)

The product lines have the same construction technology . They differ as they have a different motor power and the presence or assence of a control panel.



1	Air vent connector
2	Vacuum connector
3	Electric motor
4	Protection cover
5	Motor control panel
6	Panel regulating motor speed (on pre-fitted models)
7	Vacuum pump unit
8	Control panel
9	Base
10	Lifting-handles
11	Cable connection for automatic cleaning system
12	Micro line cable connection
13	Power cable connection

• 3.7 Technical features



Measurement tables and technical data

BLOWING POWER UNIT

ARTICLE NO.	060005Q	060006Q	060008Q	060005QE	060006QE	060008QE	060010QE
Max.number of operators							
Electronic speed converter	NO	NO	NO	YES	YES	YES	YES
Insulation level	IP 20	IP 20	IP 20	IP 20	IP 20	IP 20	IP 20
Power	fasi/ Volt ac 3/380	fasi/ Volt ac 3/380	fasi/ Volt ac 3/380	fasi/ Volt ac 3/380	fasi/ Volt ac 3/380	fasi/ Volt ac 3/380	fasi/ Volt ac 3/380
Frequency	Hz 50/60	Hz 50/60	Hz 50/60	Hz 50	Hz 50	Hz 50	Hz 50
Motor power	kW 2,2	kW 4	kW 5,5	kW 2,2	kW 4	kW 5,5	kW 7,5
Absorption	A 5,8	A 10,5	A 14,5	A 5,8	A 10,5	A 14,5	A 19,8
Socket supply	Volt dc 12	Volt dc 12	Volt dc 12	Volt dc 12	Volt dc 12	Volt dc 12	Volt dc 12
Maximum air flow	m³/h 300	m³/h 460	m³/h 590	m³/h 210/340	m³/h 300/450	m³/h 280/650	m³/h 280/970
Air vent	YES	YES	YES	YES	YES	YES	YES
Weight	kg 73	kg 97	kg 141	kg 75	kg 88	kg 143	kg 156
Measurement A	mm 540	mm 540	mm 595	mm 540	mm 540	mm 595	mm 595
Measurement B	mm 690	mm 690	mm 810	mm 690	mm 690	mm 810	mm 810
Measurement C	mm 600	mm 640	mm 800	mm 600	mm 600	mm 800	mm 830
Measurement D	mm 190	mm 175	mm 202,5	mm 190	mm 190	mm 202,5	mm 182,5
Measurement E	mm 160	mm 190	mm 190	mm 160	mm 160	mm 190	mm 230
Measurement F	mm 140	mm 100	mm 140	mm 140	mm 140	mm 140	mm 130
Measurement G air inlet	Ø mm 60	Ø mm 80	Ø mm 80	Ø mm 60	Ø mm 60	Ø mm 80	Ø mm 100
Measurement H air outlet	Ø mm 60	Ø mm 80	Ø mm 80	Ø mm 60	Ø mm 60	Ø mm 80	Ø mm 100
Measurement L	mm 580	mm 580	mm 750	mm 580	mm 580	mm 750	mm 750
Measurement M	mm 20	mm 60	mm 50	mm 20	mm 20	mm 50	mm 80
Noise level	dB(A) 68 ÷ 85						

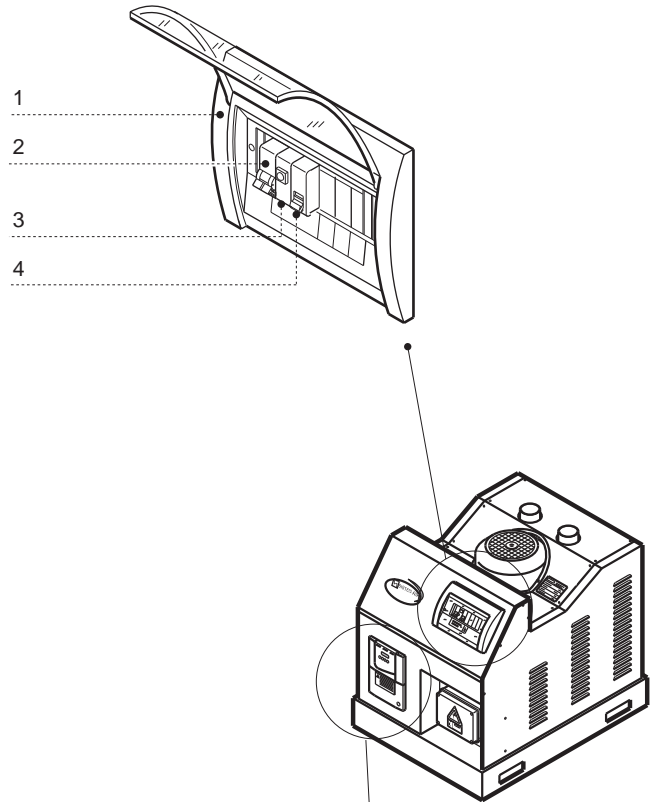
N.B.: Levels of nominal noise. The levels can vary according to the speed of use, environment where the central unit has been installed and the kind of installation.



• 3.8 Electric control panel description

The electric control panel is situated on the frontal protection cover of the vacuum unit.

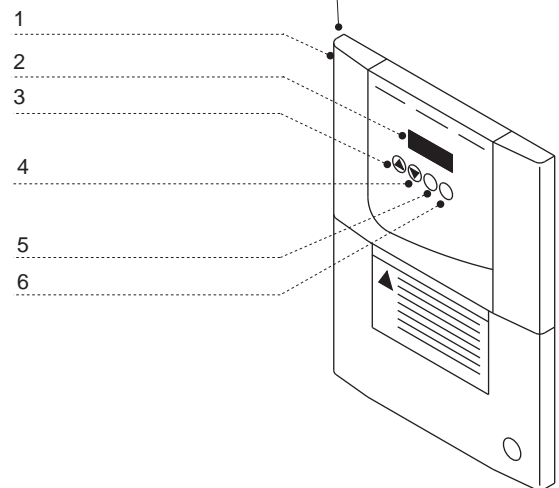
1	Protection cover
2	Main switch (Magnetic thermal) - for models .....QE Main switch (thermal motorsafety system) - for models .....Q
3	Warning light
4	MICRO LINE switch



• 3.9 Electronic speed converter description  
(on pre-fitted models)

The electronic speed converter is situated on the frontal protection cover down to the left.

1	Electronic speed converter
2	Control display
3	Key arrow for menu display and parameter modification
4	Key arrow for menu display and parameter modification
5	Enter the parameter (Enter)
6	Quit the parameter (Esc)



## 4 - INSTALLATION

English

English

### • 4.1 Precautions



- CAUTION -

THESE PROCEDURES MUST BE CARRIED OUT  
ONLY BY QUALIFIED PERSONNEL!



In the following we provide several essential rules to be followed for correct installation within a building. For the installation you need an adapted magnetic thermal safety switch on the frontal side of the unit.

### • 4.2 Installation site

The use of a central vacuum system presupposes the existence of a vacuum pipe network installed by qualified personnel, who has already assessed the optimum location.

Several main rules to follow for correct installation are given below.

In structures of several levels-floors it will be necessary to locate it at the lowest point of the building. They should be installed in service rooms that are closed and protected from extreme weather conditions, dampness and excessive temperature changes. You should also choose areas at some distance from heat sources, such as heaters or central heating where the the temperature inside does not exceed 40°C.

The ambient temperature has to be between -5°C and 40°C.

You should also bear in mind the positioning of the air discharge piping to the outside and the piping coming from the vacuum system.

Ensure the selected installation rooms are well aired, the electric connections are adequate and that there is a reasonable amount of space for installation, use and maintenance.

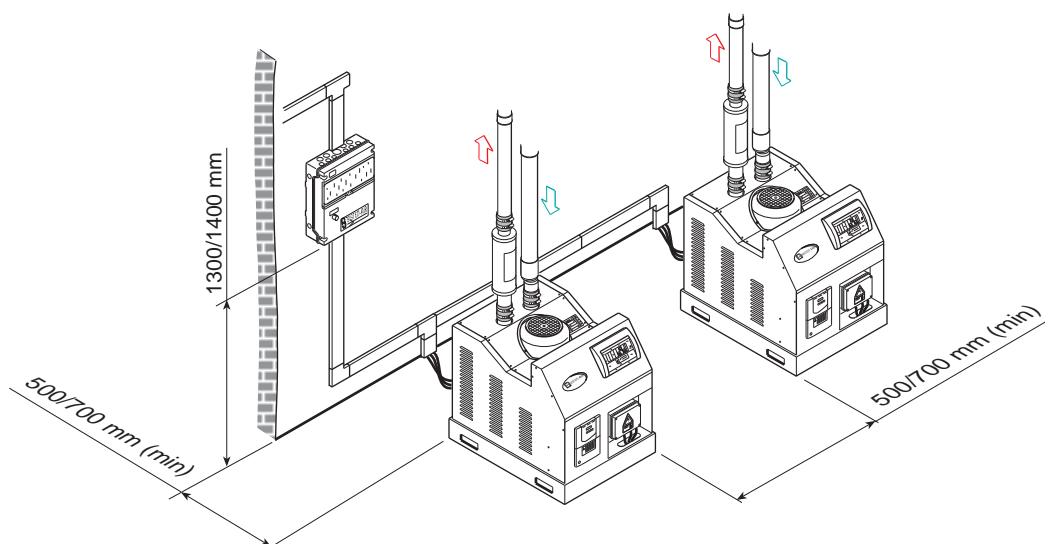
Provide clearance and good lighting around the unit, in order to allow maintenance, use and repair.

If you have any questions, please contact the Manufacturer's Support Service for assistance.

The vacuum unit should be installed in service rooms that are closed and that are adapted for the installation of such kind of industrial machines.

### • 4.3 Installation spaces

Provide clearance (about 700 mm) and good lighting around the unit, in order to allow maintenance, repair, emptying of the dust collection bag and, at the same time, favoring adequate recirculation of air for cooling the motor. If you have any questions, please contact the Manufacturer's Support Service for assistance. To guarantee the handling of the apparatus, ensure the right positioning as stated below, in order to simplify the electric connection and the opening outward.



### • 4.4 Securing the central vacuum unit

The central vacuum system does not require any special anchoring. However, it does require that care be taken relative to the support surface on which it will be placed; that surface must have the following characteristics:

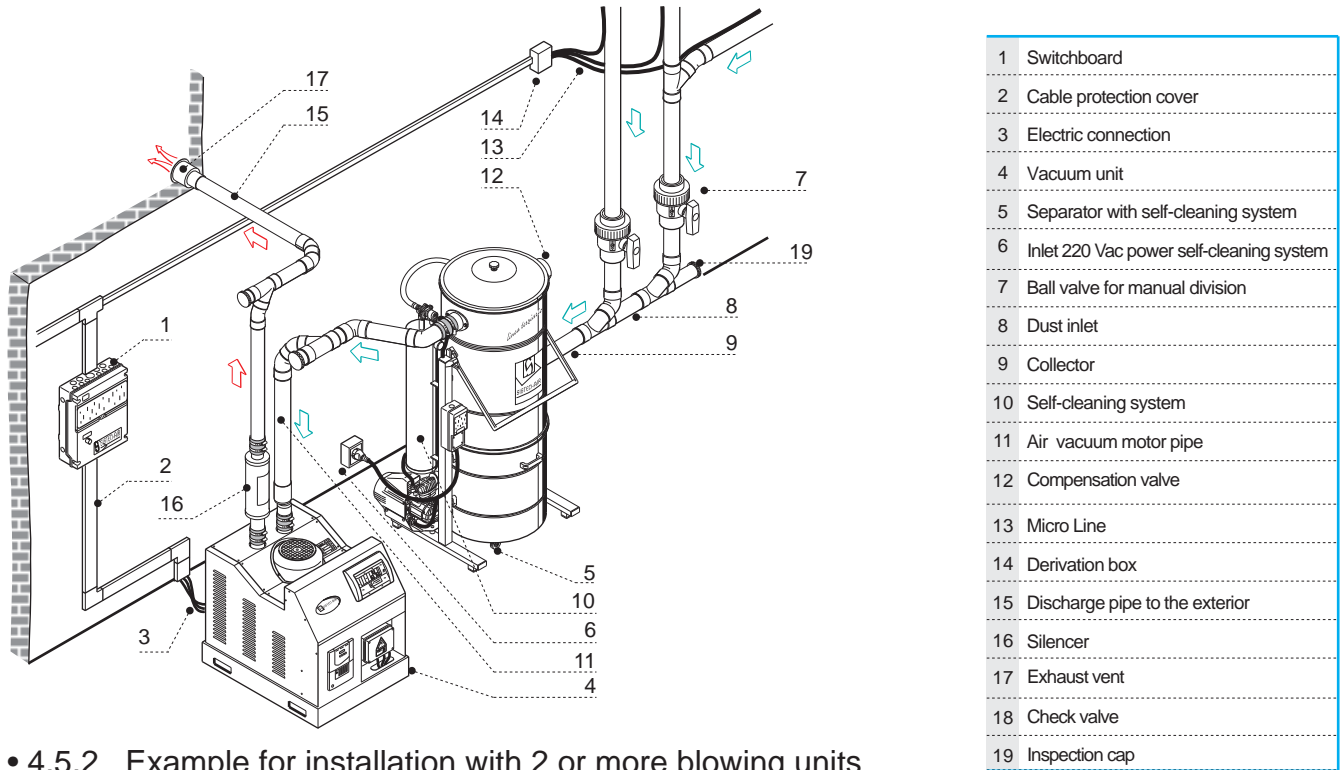
- it must be solid
- it must be perfectly horizontal
- it must not be subject to vibrations
- it should not present disconnections that would render the system unstable

### • 4.5 Type of installation

There exist multifaceted types of installations, depending on the dimensions, on the number of operators and on the type of environment where the central vacuum has to be installed. The basic solution is composed of one vacuum unit and of one separator, that are connected to a vacuum and discharge pipe net and to the power supply system. This basic solution can be amplified referring to the number of blowing units as well as to the number of separators. The central vacuum unit must be installed in places that are protected from extreme weather conditions, dampness or extreme temperature changes. The room where you install it must be sufficiently spacious and well lit to provide easy access to the unit.

#### • 4.5.1 Example for installation with 1 blowing unit

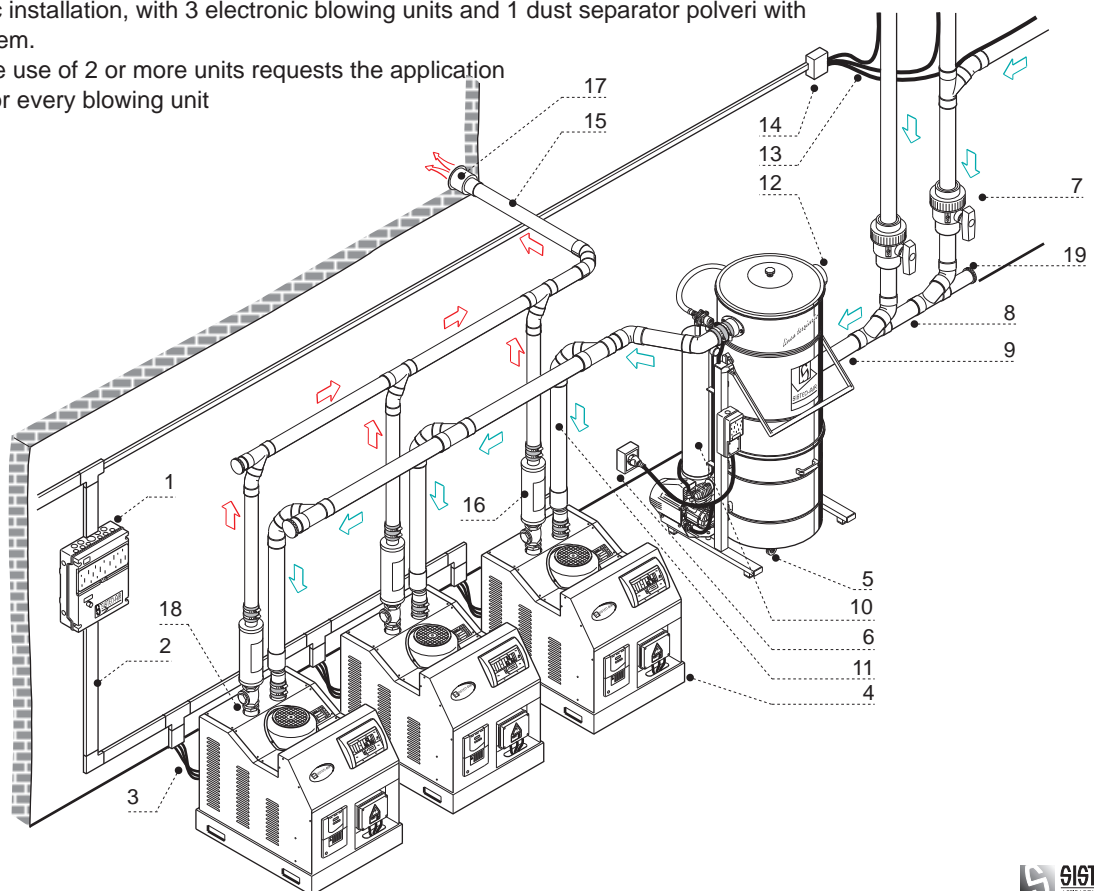
Example for basic installation, with 1 electronic blowing unit and 1 dust separator polveri with self-cleaning system.



#### • 4.5.2 Example for installation with 2 or more blowing units

Example for basic installation, with 3 electronic blowing units and 1 dust separator polveri with self-cleaning system.

**IMPORTANT:** The use of 2 or more units requests the application of check valves for every blowing unit



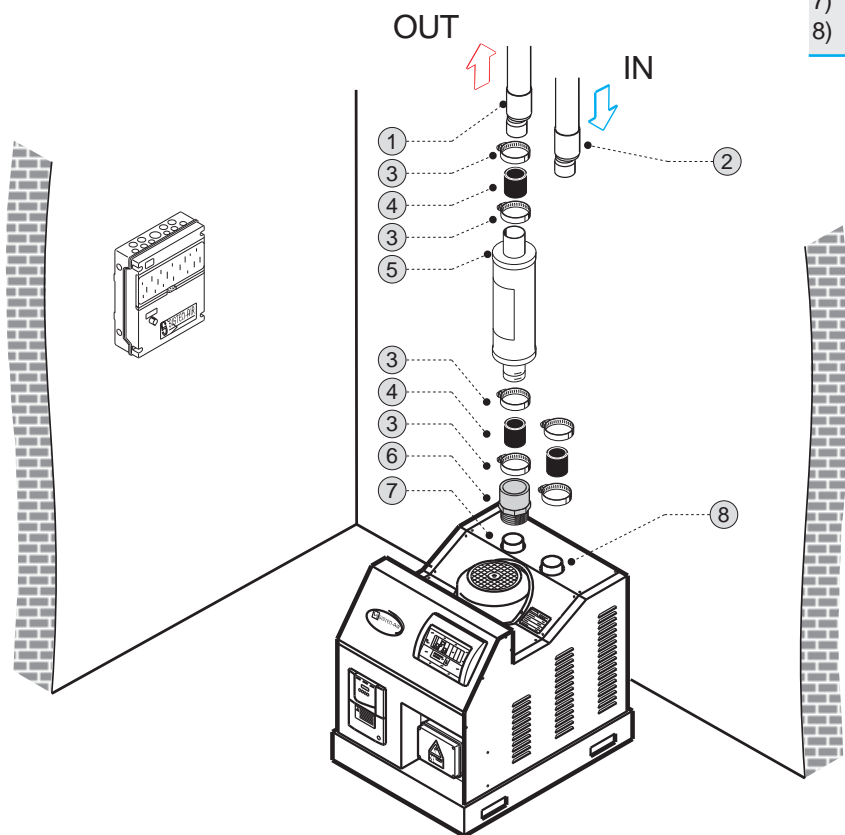
• 4.6 Connection to the pipe network

Using the coupling and the metal collar provided connect the unit to the air aspiration pipe network.  
Fix the silencer.

According to the dimensions and the type of blowing unit, fix the silencer to the screw connector.



- 1) Discharge pipe
- 2) Vacuum pipe
- 3) Metal collar
- 4) Rubber couplings
- 5) Silencer (option)
- 6) Screw connector
- 7) Air vent connector
- 8) Vacuum connector



#### • 4.7 Electric connection



- IMPORTANT -  
BEFORE CARRYING OUT ANY OPERATION,  
DISCONNECT FROM THE POWER MAINS.  
- CAUTION -



The electrical power system for the central vacuum unit must be fitted by a qualified person and in compliance with the current legislation in force.  
The manufacturer declines all responsibility if the machine is not working properly or for injury to humans and/or damage to objects if you connect the machine to an unsuitable electrical power system.

##### Danger

Make sure that the power cable is sufficiently large to support the power of the central unit and make sure that the network voltage corresponds with that shown on the respective ID plates.

Do not touch the central unit with wet or damp hands or feet. Keep children or unauthorised people away from the central unit.

Before plugging in the vacuum unit, verify that the main power supply voltages corresponds to that required by the central vacuum unit (see the identification plate) and that the ground cable wire is present in compliance with the relevant standard in force.

The supply line must not have cables having a cross-section less than the requested quantity concerning the central vacuum system installed. Do not connect the machine to a power line that is susceptible to large voltage variations (ideal voltage = local voltage  $\pm 10\%$ ). Supply the incoming cable with very low safety voltage activation signals. It is recommended, in the installation phase, to provide a bipolar protection switch upstream of the system itself.

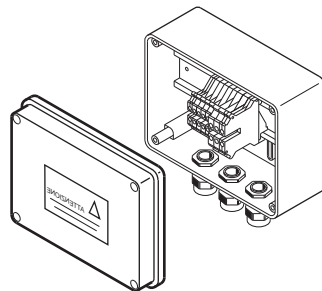
The manufacturer does not assume responsibility for personal and/or property damages resulting from connection to an electric system not in compliance with regulations in force.

### • 4.8 Electric connection to 1 blowing unit

In order to carry out the electric connection it is necessary (see below):

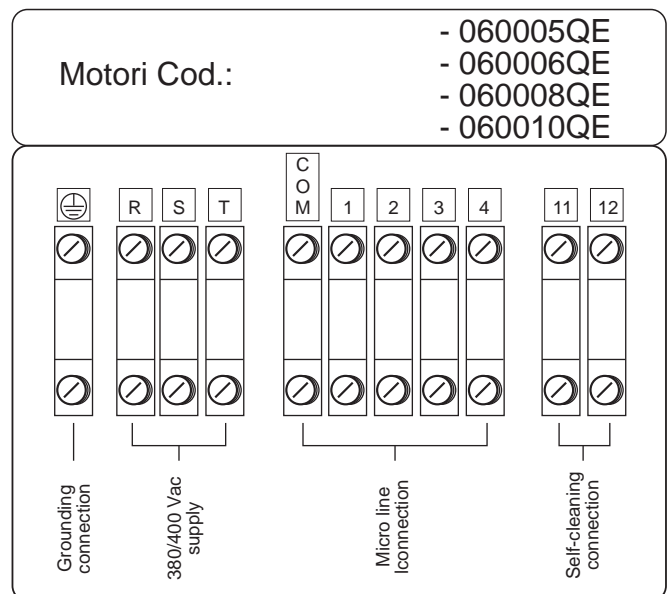
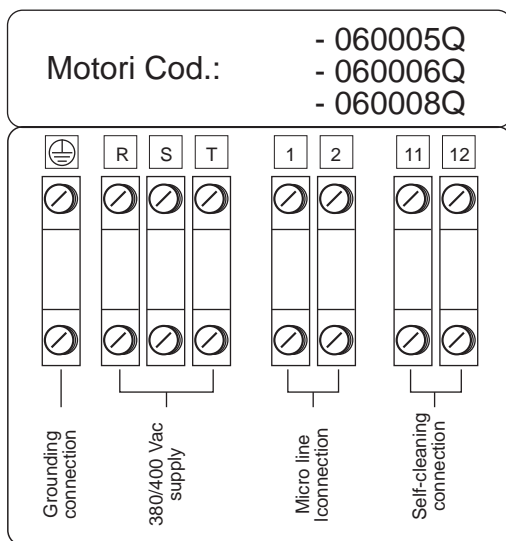
- Connect the starting signal input cable with low safety voltage (MICRO LINE).
- Connect the power line to the terminal strip.
- Connect the self-cleaning cable (only on pre-fitted dust separators).

- 1 Remove the cover of the electric panel.

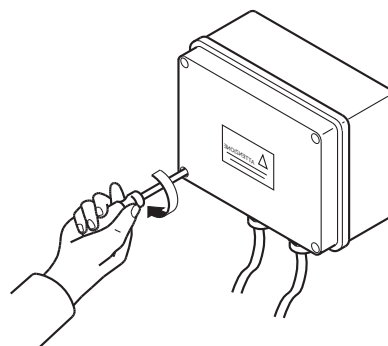


380/400V~ IP 20

- 2 Carry out the electrical connection to the terminal strip observing the layout and the options shown on the inside the box and below:



- 3 Reassemble the cover of the electric panel.



### • 4.9 Electric connection to 2 or more blowing units

The installation of two or more blowing units contemporaneously requests according to the quantity and type of blowing unit . the positioning of an electric control panel for the modulation of the units on the frontal side of the installation.

## 5 - INSTALLATION OF THE ELECTRIC CONTROL PANEL

### • 5.1 Electric control panel Mod. 3301.0 - 3301.6 - 3301.10

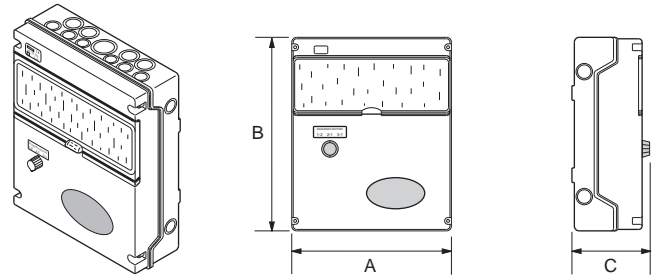
#### Selection and call boards motor start up

The control panel for the start up call selection is used when more than one standard motor without an electronic speed converter, is installed on a single system.

Depending on the control panel installed, it is possible to control the modulation of the installation with 2 up to 8 blowing units connected. The internal electronic system installed on the micro switch line, using the resistive divider (art.3301.4) aims to control turning on and off one or more of the system's motors, according to the number of inlet valves used, and to control the number of operational hours of each motor body. It is, in fact, possible to invert the motors' start up priority using a cyclical switch, thus balancing out the motors' state of wear. The hour meters situated (one for every unit) on the electric control panel permit to modify the command of the activation of the motor.

#### Resistive divider card

The resistive divider is essential when you want to modulate the speed of a motor body. Each divider can hold up to four inlet valves that can be linked up to each other with no maximum limit.



### • 5.1.1 Technical features

Article PANEL	N° MAX.MOTORS	SUPPLY Volt ac	Frequency Hz	A	B	C	FOR MOTORS Article:
3301.6	2	220/240	50	330	400	140	060005Q 060006Q 060008Q
3301.0	3	220/240	50	330	400	140	
3301.10	8	220/240	50	515	650	250	

### • 5.1.2 Operating

The control panel control the motor start sequence.

### • 5.1.3 Switch ON and OFF

To activate the control panel turn the main switch on the "I-ON" position.

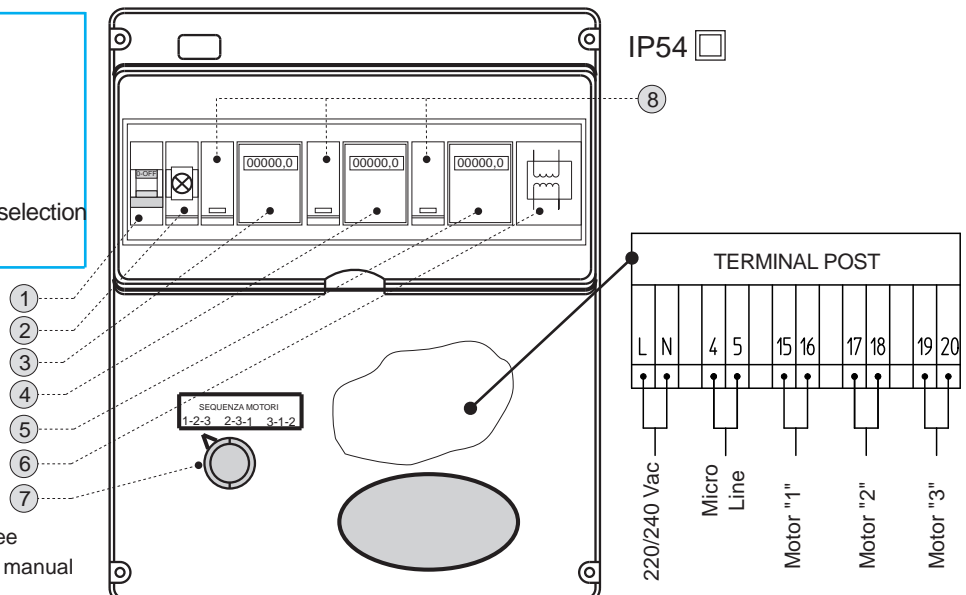
To switch off the panel turn the main switch on the "0-OFF" position.

### • 5.1.4 Selection of motor function

To select the motor start sequence, turn the button situated on the control panel by positioning the arrow towards the start sequence selected.

### • 5.1.5 Legend and connection scheda (example with control panel for 3 motors Art. 3301.0)

- 1) Main switch
- 2) Warning light
- 3) Hour meter motor "1"
- 4) Hour meter motor "2"
- 5) Hour meter motor "3"
- 6) Transformer
- 7) Button for motor start sequence selection
- 8) Remote switch



NOTE: For the complete connection see the electrical schemes attached in this manual

## 5.2 Electrical control panel Mod. 3301.5 - 3301.7

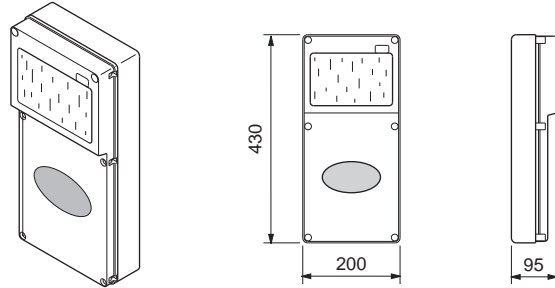
Control panel for the modulation of the motor speed

The electronic panel for the modulation of the speed of the motor body, is used when you one electronic motor is installed. The internal electronic system allows for the installation on the micro switch line, using the resistive divider (parts no.3301.4) to control the speed of the motor body according to the number of inlet valves used, and to obtain greater performance with lower consumption.

The system foresees up to four levels of commutation (4 speeds) and is suitable for all the electronic units even those with different power.

### Resistive divider card

The resistive divider is essential when you want to modulate the speed of a motor body. Each divider can hold up to four inlet valves that can be linked up to each other with no maximum limit.



### 5.2.1 Technical features

ARTICLE	MAX.MOTORS	SUPPLY Volt ac	Frequency Hz	MOTORS Article:
3301.5	1	220/240	50	060005QE 060006QE
3301.7	2	220/240	50	060008QE 0600010QE

### 5.2.2 Operating

The control panel control the motor start sequence (depending on the type of panel used)and the selection of the working speed of the central vacuum unit.

### 5.2.3 Switch ON and Off

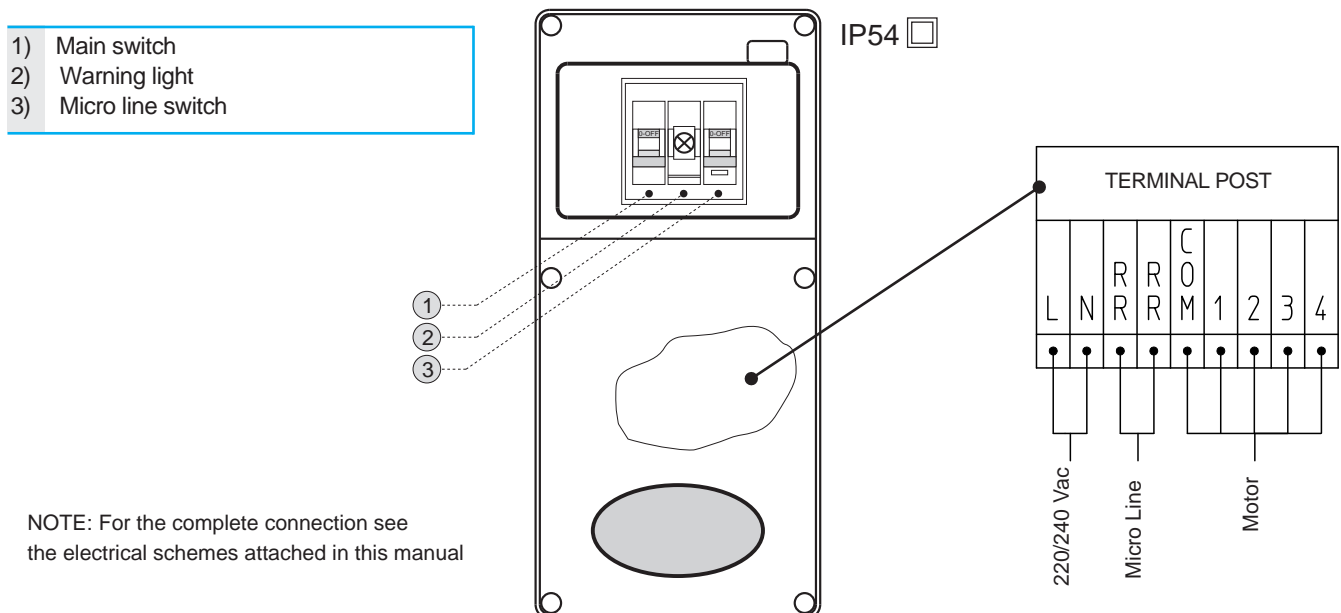
To activate the control panel turn the main switch on the "I-ON" position.

To switch off the panel turn the main switch on the "0-OFF" position.

### 5.2.4 Selection of motor velocity

According to the suction inlet opened, the motor will automatically start by using the speed programmed.

### 5.2.5 Legend and connection schema (example with control panel Art. 3301.5)





• 5.3 Summary table of available speeds

Summary table of available speeds and kind of selection

MODEL	ARTICLE	Speed can be set manually	Speed can be modulated electronically	Speed converter	Electronic board for speed modulation
Industrial motors	060005Q	●	-	-	-
	060006Q	●	-	-	-
	060008Q	●	-	-	-
	060005QE	●●●●	●●●● (1)	√	(2)
	060006QE	●●●●	●●●● (1)	√	(2)
	060008QE	●●●●	●●●● (1)	√	(2)
	060010QE	●●●●	●●●● (1)	√	(2)

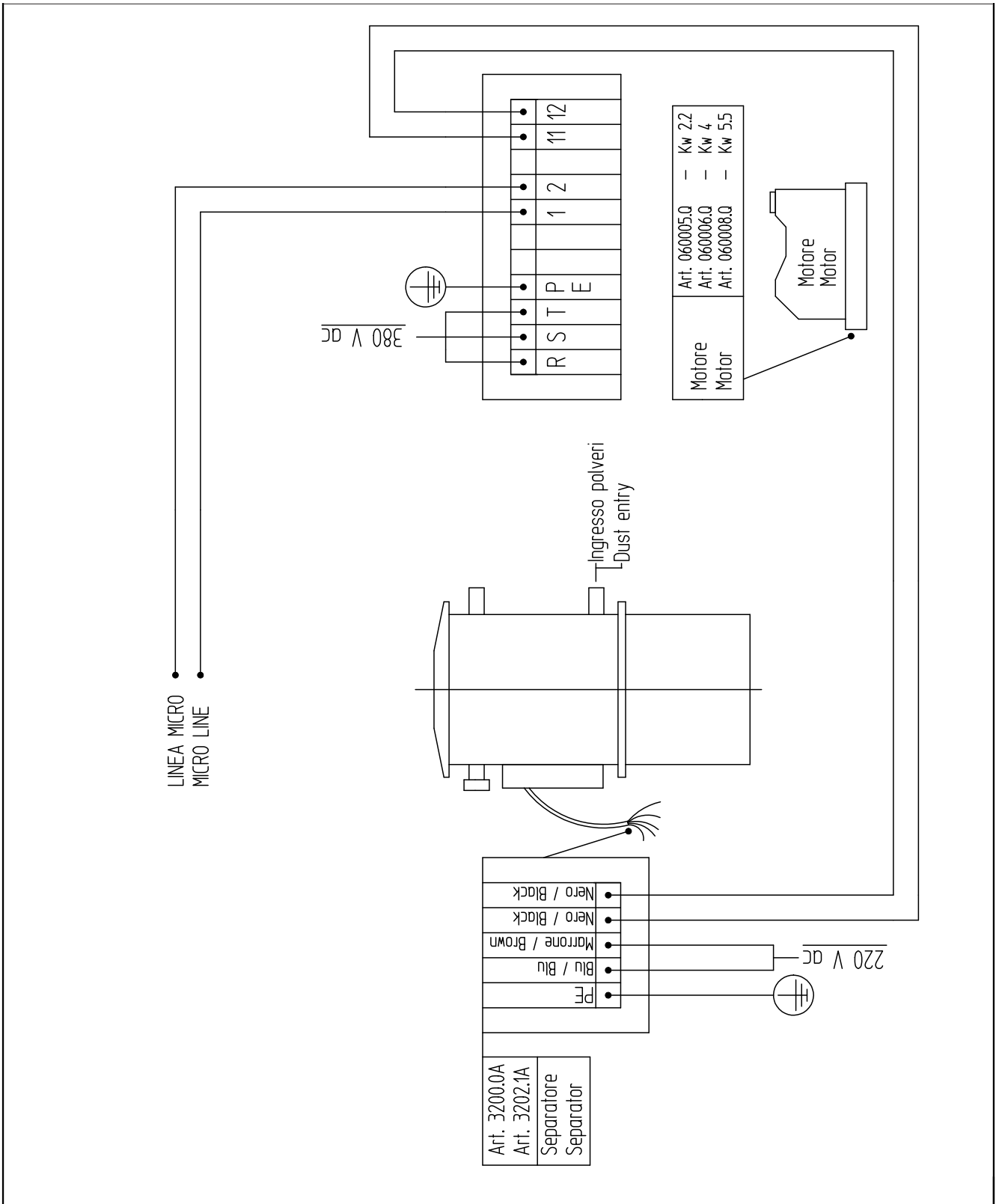
Description

- = Number of speeds that can be set (e.g. ●● = 2 speeds can be set)
- √ = Available
- = Unavailable
- (1) = Utilizabile solo con impianti dotati di partitori resistivi Art. 3301.4
- (2) = Part on request, not included (Art. 3301.5 - 3301.7)

### 5.4 Electrical schema

The following descriptions represent the electric connection schemas for the standard installations. For particular connections please ask to an authorised distributor.

#### • 5.4.1 Electrical schema 1 electrical motor - 1 dust separator with self-cleaning system



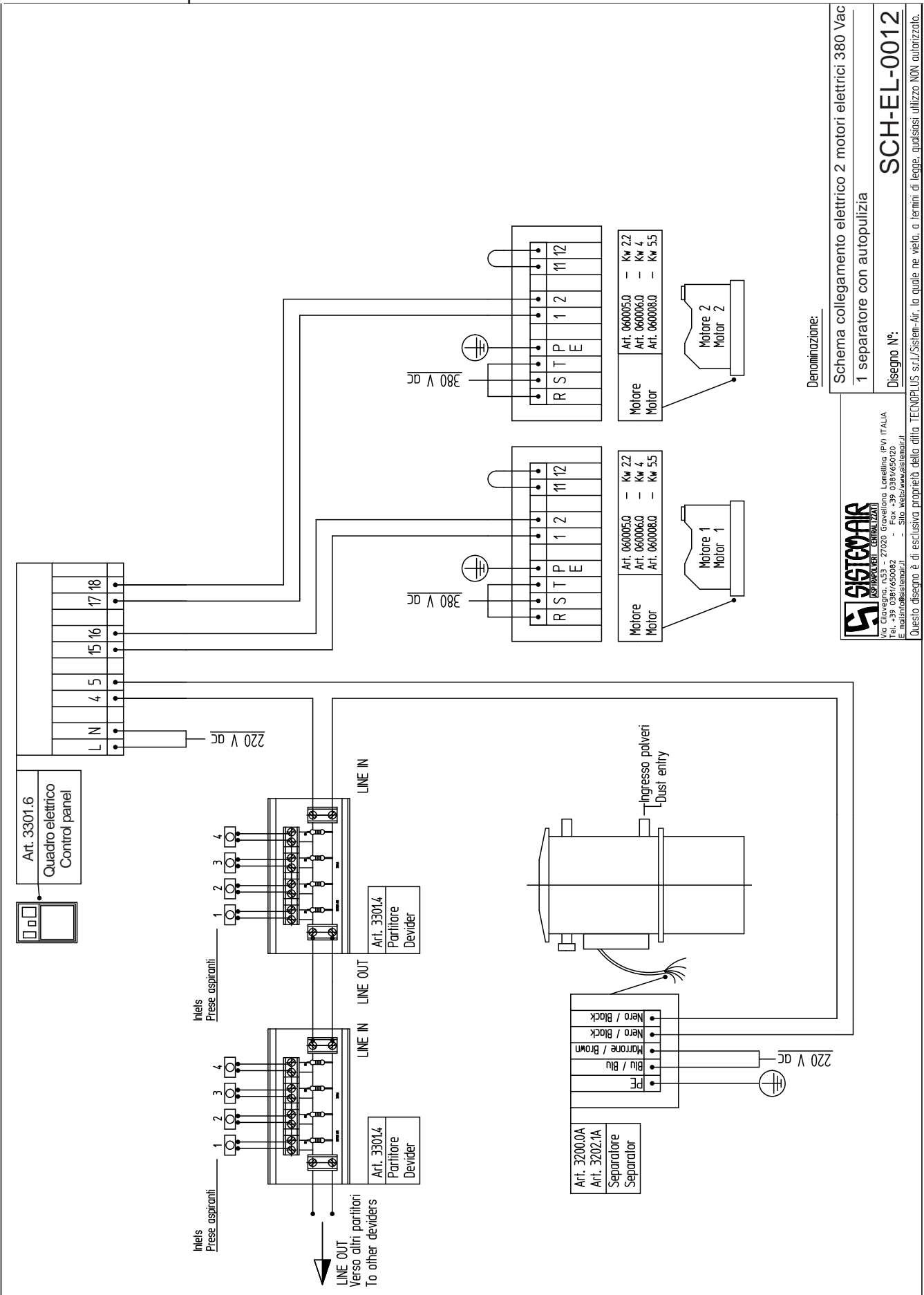
**SISTEM-AIR**  
ASPIRAPOLVERI CENTRALIZZATI  
 Via Citavegna, n.53 - 27020 Gravelona Lamellina (PV) ITALIA  
 Tel. +39 0381/650082 - Fax +39 0381/650120  
 E mail: info@sistemair.it - Sito Web: www.sistemair.it

Denominazione: Schema collegamento elettrico  
 1 motore elettrico 380 Vac e 1 separatore con autopulizia

Disegno N°: **SCH-EL-0014**

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•5.4.2 Electrical schema 2 electrical motors - 1 dust separator with self-cleaning system and control panel Art. 3301.6



Denominazione:

Schema collegamento elettrico 2 motori elettrici 380 Vac  
1 separatore con autopulizia

Disegno N°: **SCH-EL-0012**

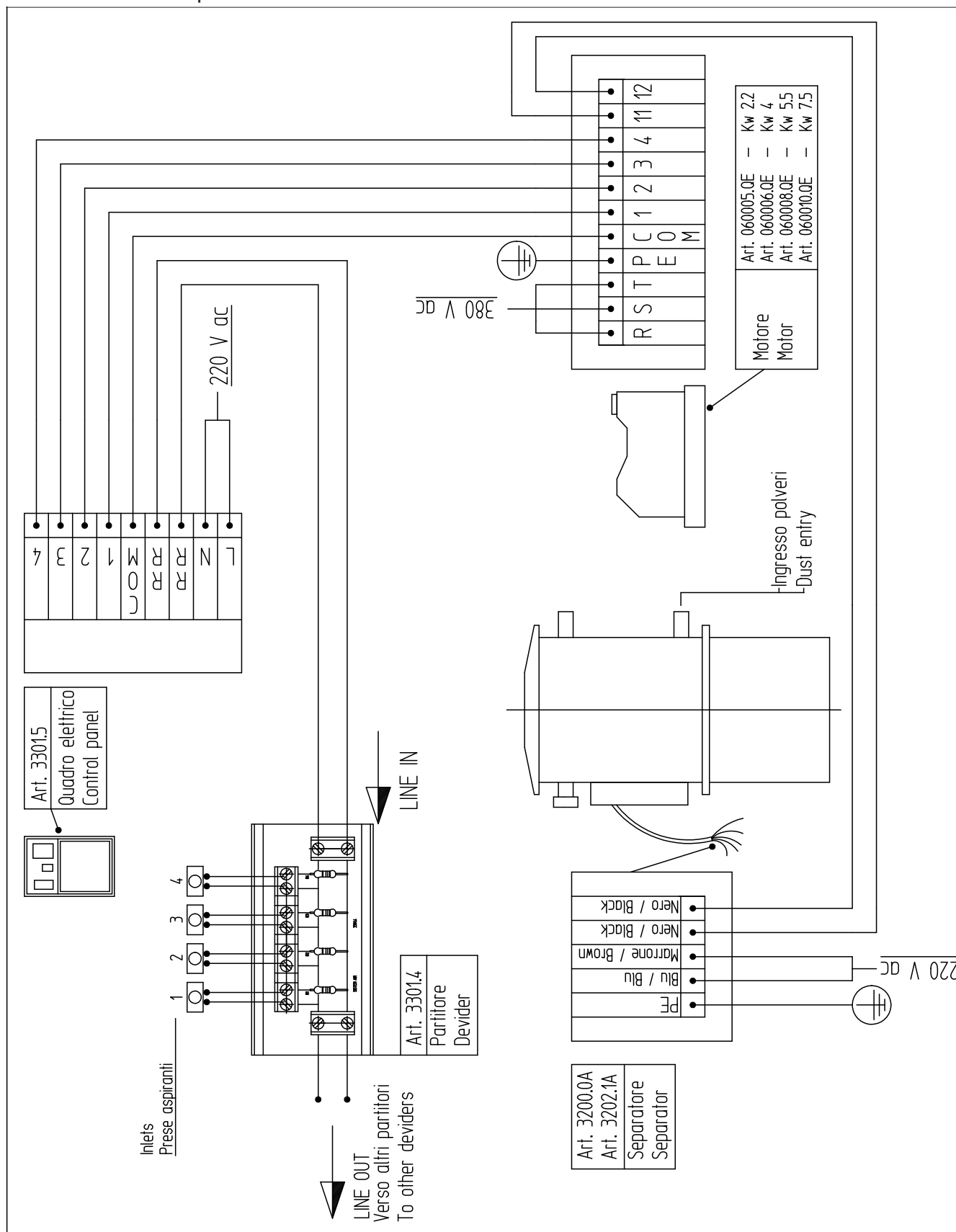


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• 5.4.4 Electrical schema 1 electronic motor - 1 dust separator with self-cleaning system and control panel Art. 3301.5



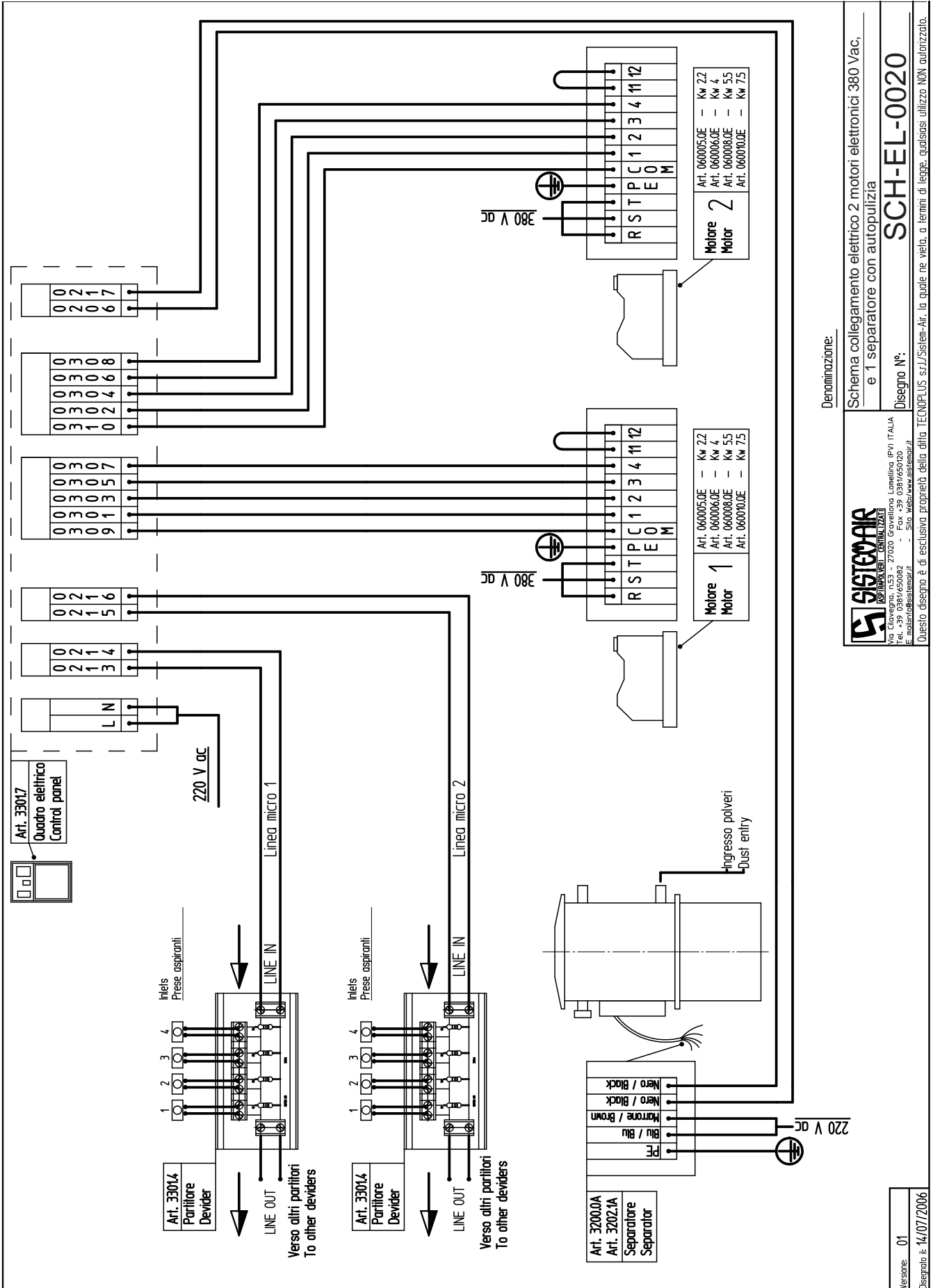
Via Cilavegna, n.53 - 27020 Gravelona Lomellina (PV) ITALIA  
 Tel. +39 0381/650082 - Fax +39 0381/650120  
 E-mail: info@sistemair.it - Sito Web: www.sistemair.it

Denominazione: Schema collegamento elettrico 1 motore elettronico 380 Vac e 1 separatore con autopulizia

Disegno N°: SCH-EL-0010

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•5.4.5 Electrical schema 2 electronic motors - 1 dust separator with self-cleaning system and control panel Art. 3301.7



Denominazione:

Schema collegamento elettrico 2 motori elettronici 380 Vac, e 1 separatore con autopulizia

Disegno N°: SCH-EL-0020

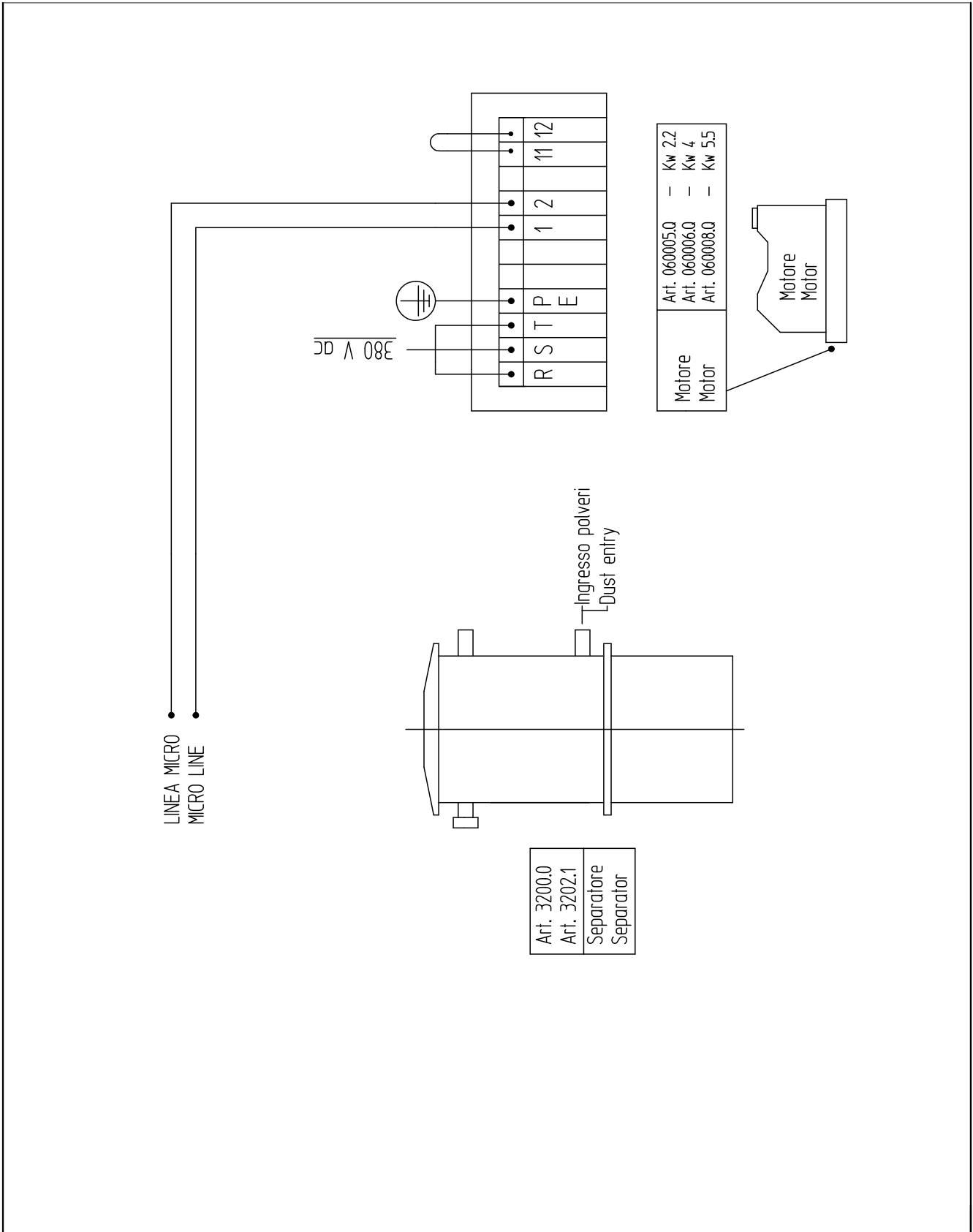


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Versione: 01  
Disegnato il: 14/07/2006

• 5.4.6 Electrical schema 1 electrical motor - 1 dust separator without self-cleaning system



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 Tel. +39 0381/650082 - Fax +39 0381/650120  
 E mail: info@sistemair.it - Site Web: www.sistemair.it

Denominazione: Schema collegamento elettrico 1 motore elettrico 380 Vac e 1 separatore senza autopulizia

Disegno N°:

**SCH-EL-0016**

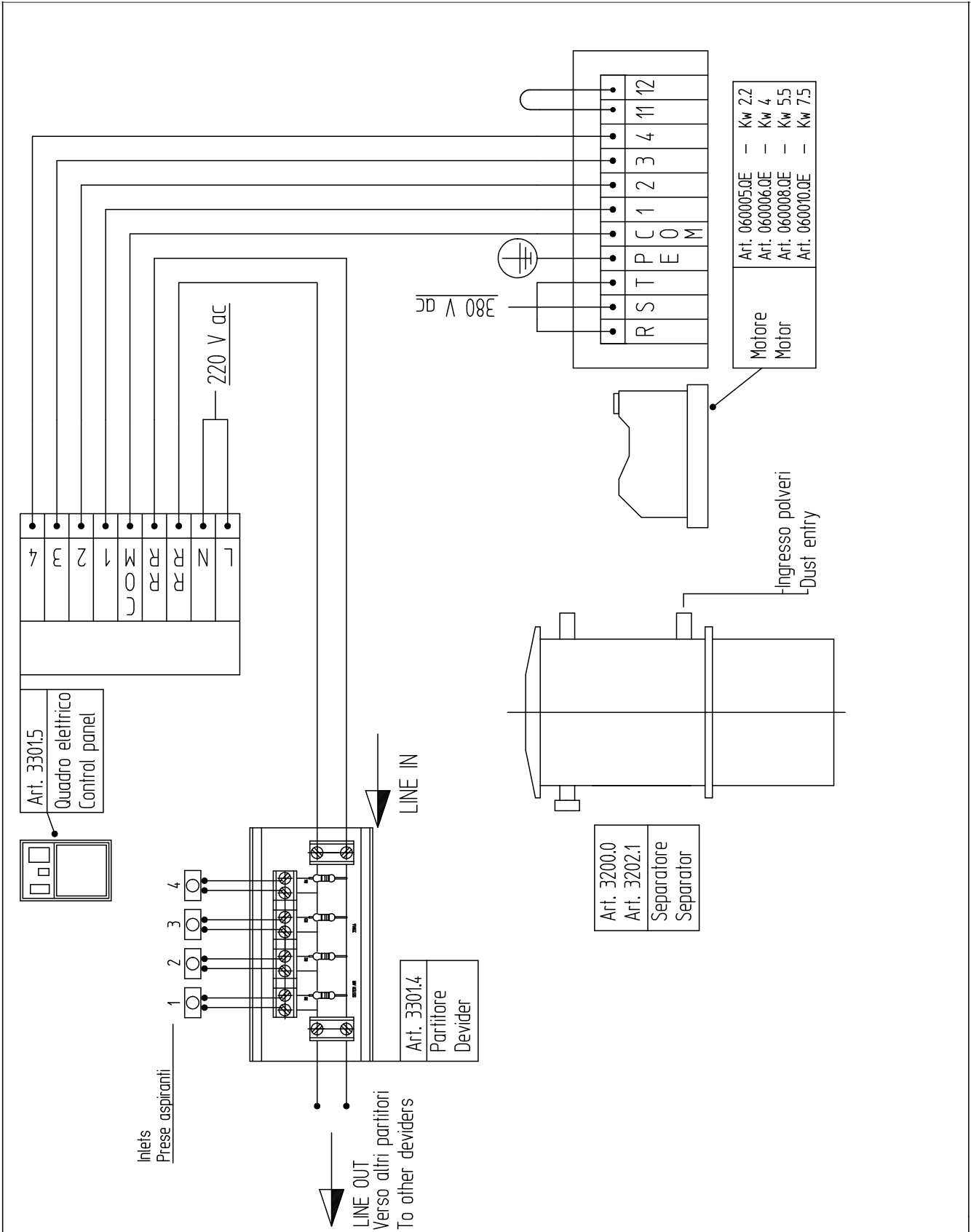
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•5.4.9 Electrical schema 1 electronic motor - 1 dust separator without self-cleaning system and control panel Art. 3301.5



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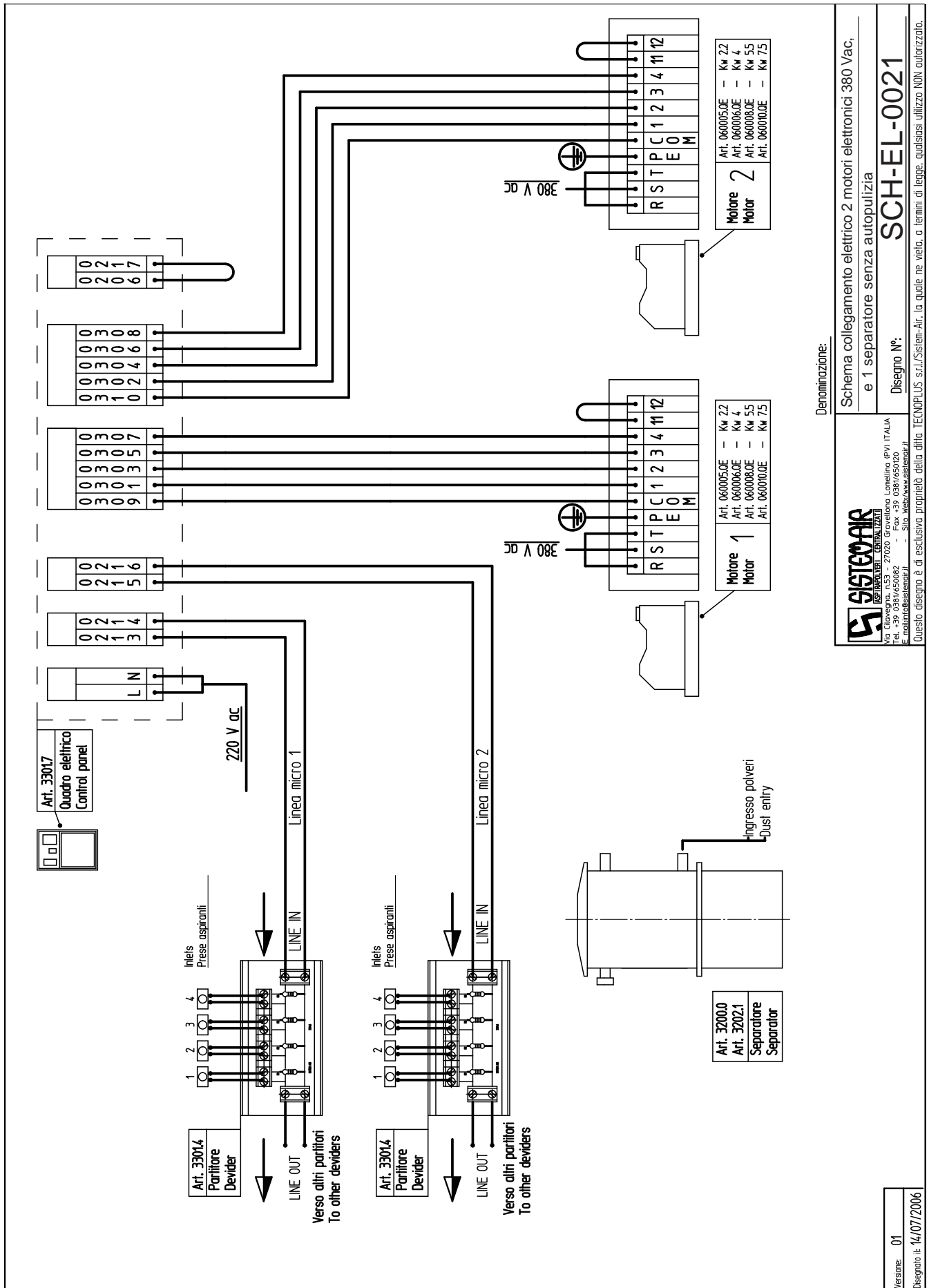
Denominazione: Schema collegamento elettrico 1 motore elettronico 380 Vac, e 1 separatore senza autopulizia

Disegno N°:

**SCH-EL-0019**

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•5.4.10 Electrical schema 2 electronic motors - 1 dust separator without self-cleaning system and control panel Art. 3301.7

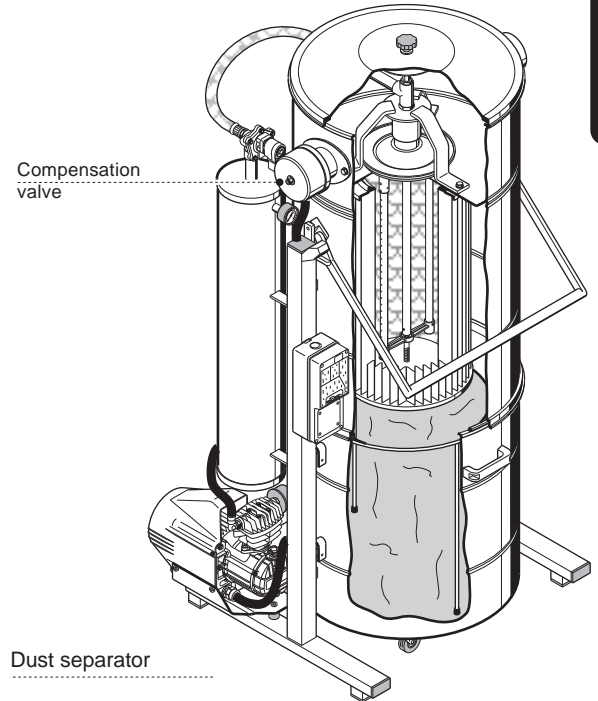


## 6 - INSTALLATION OF COMPENSATION AND RETENTION VALVE



### • 6.1 Compensation valve

This is essential in every modular central unit. Calibrating it (using screws) allows you to get maximum use out of the system every time. It also acts as a safety valve; the kind of valve is in relation to the diameter of the connection piping between the module and separator. The compensation valve is situated besides the dust separator linked with the motor.



#### • 6.1.2 Calibration of the pressure value

This must be done each time you install a central vacuum unit. If there is more than one blowing unit, the adjustment must be done with only one blowing unit on.

If there are blowing units that are pre-fitted with a speed converter, the adjustment must be done by using speed 1.

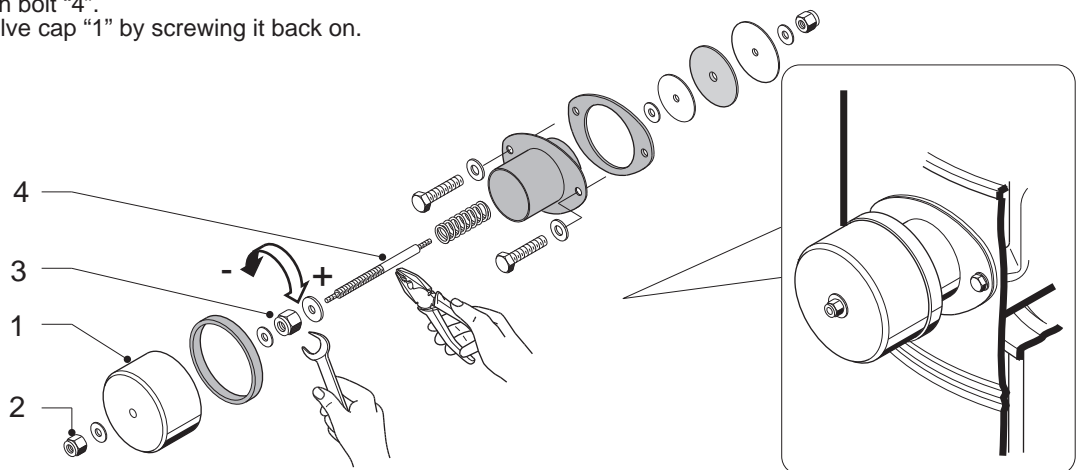
#### CALIBRATION OF THE PRESSURE VALUE

Depending on the installations, calibrate the compensation valve in order to get the best performance, but check that the turbine does not exceed the maximum absorption shown on the plate.

1. With all the suction sockets closed, open the first socket by inserting the vacuum manometer. Open a second suction inlet and insert the hose to start the cleaning operation (see chapter "Testing").
2. Remove the valve cap "1" by unscrewing screw "2".
3. Slacken the lock nut "3" and rotate the bolt "4" following the table shown.
4. In order to increase the pressure, turn bolt "4" clockwise. In order to reduce the pressure, turn bolt "4" anticlockwise.
5. Once the adjustment is complete, tighten the lock bolt "3" again until it locks with bolt "4".
6. Replace the valve cap "1" by screwing it back on.

Motor kW	Supply V ac	Absorption A	Unit model Art.
2,2	380	5.5	060005Q 060005QE
4	380	8.5	060006Q 060006QE
5,5	380	12.5	060008Q 060008QE
7,5	380	17	060010QE

Scheda 1



**Note:**

Once the regulation is complete, always check that the turbine does not exceed the maximum absorption shown on the plate.

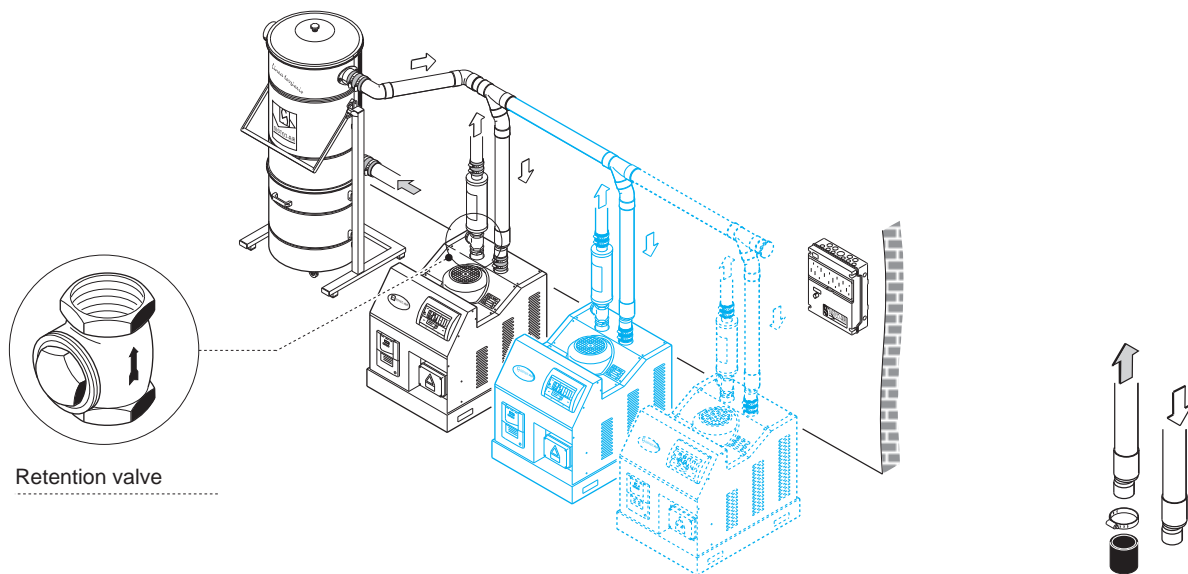
If the flexible pipe is excessively noisy when running, reduce the pressure by turning the compensation valve by about 10-15% of the level shown in the table.

## • 6.2 Retention valve

The retention valve should be installed in the module's discharge when you have central units with 2 vacuum modules  
You must install one retention valve on every blowing unit.

The fixation must be carried out on the air discharge pipe of the blowing unit (See label "OUT")

This does not require calibration and prevents a turbine rotating empty that is not working because another one is vacuuming.  
The size of the valve depends on the kind of turbine used.



Retention valve

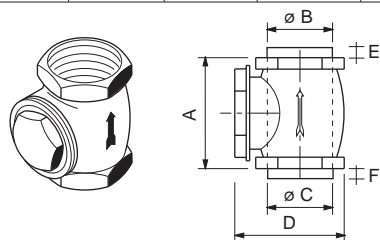
### • 6.2.1 Installation of retention valve

Connect the retention valve to the vacuum connector and screw-on the connector.

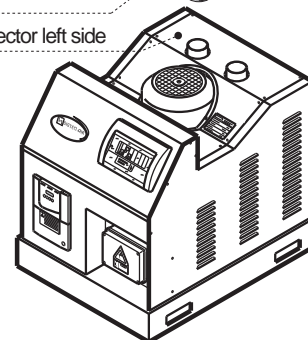
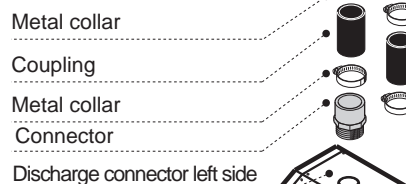
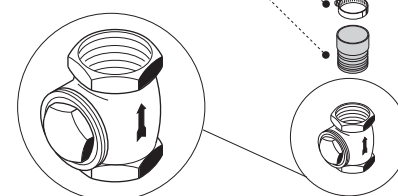
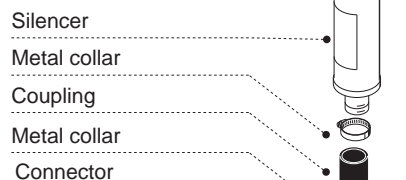
NOTE: The motor connectors vary concerning their forms and dimensions depending on the performance and dimensions of the model.

Install the valve in the right sense, by facing upwards the indicating arrow towards the air discharge pipe.

ARTICLE	BLOWING UNITS						
	060005Q	060006Q	060008Q	060005QE	060006QE	060008QE	060010QE
0110001 (2")	•			•	•		
0110003 (3")		•	•			•	
0110002 (4")							•



ARTICLE	DIMENS.	Ø Hose	A mm	B mm	C mm	D mm	E mm	F mm
0110001	2"	63	97	63	63	92	52	52
0110003	3"	80	136	80	80	132	70	70
0110002	4"	100	165	4" F	4" M	170	-	55



### • 6.3 Periodical control

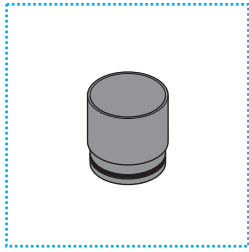
- Disconnect the release piping from the retention valve yearly and make sure that when you turn the central unit on and off, the valve opens and closes as normal.
- Periodically grease the valve cupboard door  
Make sure that the compensation valve opens and closes as normal and that the gasket is not exhausted.

## 7 - TESTING

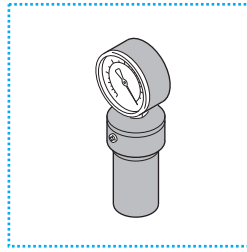
### • 7.1 Testing notes

The final test helps to verify that the central vacuum unit has been installed properly.

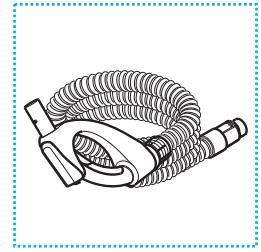
Useful parts for the test:



screw cap for testing installation



vacuum gauge



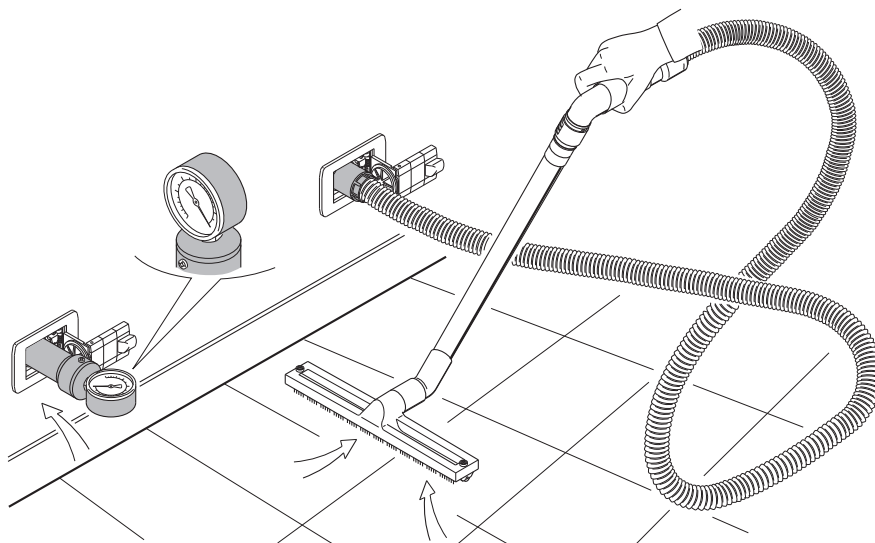
flexible hose for cleaning

Proceed as follows:

- 1) - Connect the vacuum gauge to the inlet connector and after 8/10 Sec.read off the maximum working pressure when the vacuum unit is operable and write the value down.
- 2) - Disconnect the vacuum pipe from the vacuum unit attach the vacuum gauge to the connector
- 3) - Start the vacuum unit by closing the micro line circuit 12 Vdc of the inlet circuit. Read off the maximum working depression after some seconds of time.
- 4) - Compare the value with the value that you've read off before, if you find out that between the two values there is a variation which is inferior to 10%, it signifies that the installation works correctly.
- 5) - If there is a variation which is superior to 10%, it signifies that there are air infiltrations, because of a suction inlet which did not have been installed correctly or the pipe loses air.
- 6) - We advice you to verify that the installation of the suction inlets, suction units and of the pipe network.
- 7) - If the problem persists even after the control of the gasket of the inlets, motor and of the pipe network, please contact an authorized Assistance Center Sistem-Air.
- 8) - If the installation does not represent the problems specified above, look forward to verify the depression as follows:
  - A - Connect the flexible hose for cleaning to the inlet which is the most far away one in relation to the suction unit.
  - B - Insert the vacuum gauge in an intermedia suction inlet by starting the suction unit and read off the value
  - C - If the value is equal or superior to 100 mbar (1000 mmH2O) the installation has been done correctly .
- 9) - Verify if the electric installation works correctly: Open every suction inlet and verify that the suction unit starts to work.

NOTE:

- If the installation is not equipped with suction inlets, use the cap for testing installation.
- In order to improve the performance of the installation and to get the best results concerning the testing, please refer to to the chapter "Calibration of the compensation valve"



## 8 - USE OF THE BLOWING UNITS

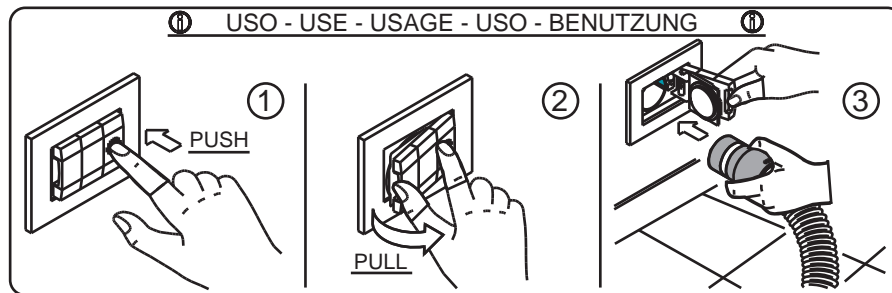
### • 8.1 Usage

Once you have finished the installation, the electric connection, and the micro switch line of the inlets, it is possible to start the central vacuum unit.

Start

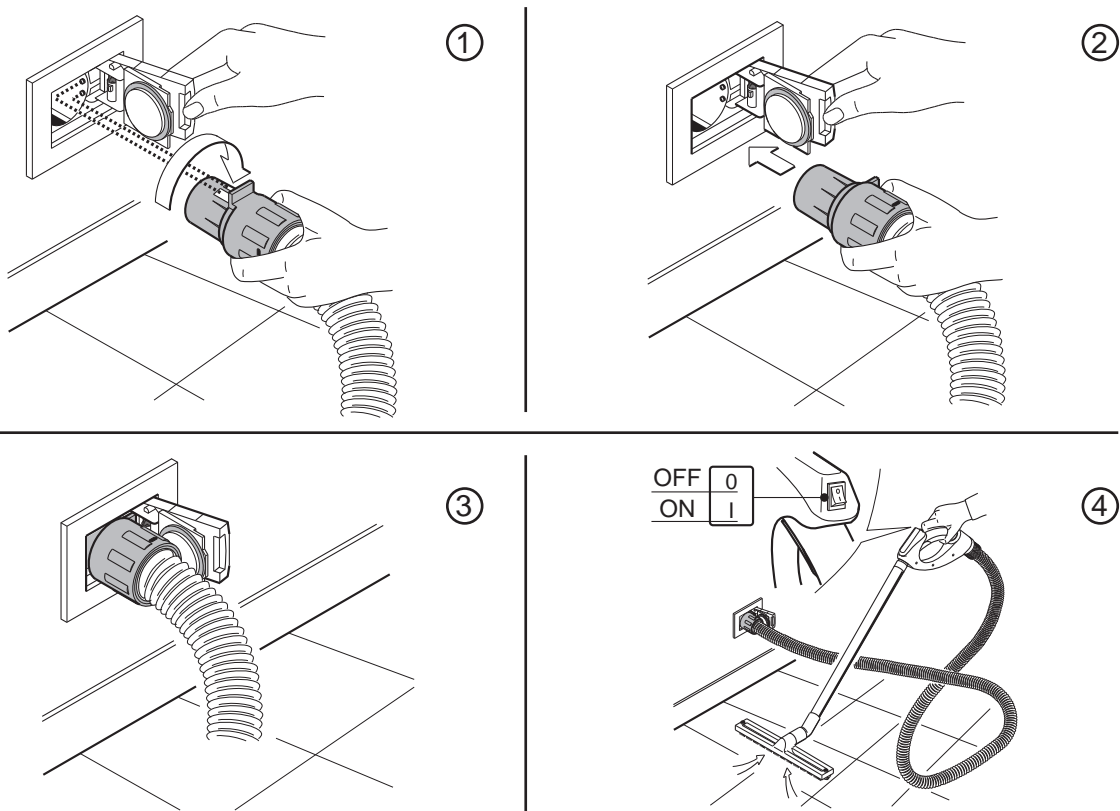
Open the suction inlet in order to start the suction unit.

- 1) Turn the main switch situated on the control panel to the position "On"
  - The system is on power.
- 2) Turn the micro line switch to the position "ON".
- 3) Open the suction inlet of the installation and insert the flexible hose for cleaning.
  - The suction unit starts to vacuum.



- 4) If the installation is equipped by suction inlets for electrical On/OFF hoses, insert the flexible hose in the inlet, so that the 2 plugs of the suction inlet encounter the metal contacts of the hose. Turn the switch situated on the handle of the electrical hose on the position "ON".

- The suction unit starts to vacuum.



Switch off

- 1) In order to switch off the unit, pull out the hose from the suction inlet and close it carefully. In case of an electric hose turn the switch on the handle to the position "OFF". The suction unit stops to vacuum. NOTE: This operation requests several seconds.

## 9 - MAINTENANCE

### • 9.1 Programmed routine maintenance

- CAUTION -

BEFORE CARRYING OUT ANY MAINTENANCE WORK, THE POWER CABLE  
MUST BE DISCONNECTED FROM THE POWER SOURCE  
AND SAFETY GLOVES AND MASK  
MUST BE WORN.



The programmed routine maintenance allows to maintain the suction unit in the best way and guarantees the lifespan of the installation and the performance. Periodically clean the cooling fin of the outer covering by removing the dust with a humid damp cloth. Control periodically the filter cartridge of the dust separator. A dirty filter creates a resistance concerning the air flow. A worn out filter could cause serious damage, as it is probable that dust or small pieces of material end up inside the turbine.

If it is necessary replace the filter.

Periodically clean the outer covering of the system using a damp cloth with water and neutral soap.

Periodical control (yearly)

Disconnect the release piping from the retention valve yearly and make sure that when you turn the central unit on and off, the valve opens and closes as normal.

Periodically grease the valve cupboard door

Caution: Use only water or water and neutral soap when cleaning the system. The use of other solvents or alcohol can cause damage. Ensure complete dryness before restarting the system.

Schema of the recommended maintenance operations:

Time	Procedure type	Done by
10 hours	Clean the filter cartridge of the separator	User
yearly	Cleaning of the cooling fin	User
1 time every 2 years	Replace the filter cartridge (separator)	Service center
yearly	Check obstructions of the air exhaust	Service center
yearly	Check the retention valve	Service center

### • 9.2 Temperature

The temperature of the installation site must not have to excess +40°C. Guarantee that the space around the unit is well aired. especially in case of difficult operating conditions. Avoid to switch-on the unit in short time intervals in order to not overheat the unit.

### • 9.3 Suction pressure

The suction unit must not operate by using a pressure value which provokes the exceeding of the power consumption values' indicated on the indication plate.

### • 9.4 Cleaning of the turbine

If the turbine is noisy, vibrates or malfunctions, turn off immediately the suction unit and contact the service center. It could be necessary a maintenance or cleaning operation in consideration of possible infiltrations of dust coming from the separator. (Check if there is any dust inside of the safety net)

### • 9.5 Exceptional maintenance

Variations of the normal working conditions (increasing of the power consumption, abnormal noise level, vibrations) indicate a defective way of operation; in case of any problem ask the service center for assistance.



## 10 - SERVICING

### • 10.1 Servicing criteria

It is absolutely prohibited to perform procedures on the central vacuum system for repairs and / or maintenance that is not expressly authorized (and therefore not allowed) in the manual.

All procedures for repair of wear or malfunction must be done by qualified personnel from the Technical Assistance. In the event of procedures done by unauthorized personnel, any product warranty becomes null and relieves the manufacturer of any responsibility for any damage to persons and/or in consequence of such procedures.

## 11 - SPARE PARTS

### • 11.1 Spare parts list

There are not installed any components which will worn out rapidly.

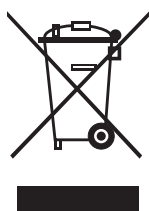
In order to assure optimum and lasting operation of the central vacuum system, we recommend using only SISTEM-AIR original spare parts.

## 12 - REPLACING OUT OF ORDER

### • 12.1 General instructions

If it is decided to decommission the central vacuum system, it is necessary to do so in respect of our health and the environment, in which we live.

Check to see if there are locations and/or recycling of any components of the central system must be done in compliance with the laws in force.



Recycling of the old electric and electronic components (Applicable in every country of the European Union and in countries which do waste separation ). This symbol situated on the product or on the packaging, indicates, that this product can't be disposed of in a normal way. It has to be consigned to an institution specialized in recycling of electronic or electric equipment. In order to reduce the environmental pollution factor of the electric and electronic equipment (WEEE Waste Electrical and Electronic Equipment) and in order to reduce the volume of the WEEE, which are delivered to the waste management plant, please act for the purpose of recycling.

By disposing of the product correctly, you avoid the development of a negative impact on the environment and on the health. The recycling of the material aids to conserve the natural resources. For further information please contact the competent institution for recycling, the shop where you have acquired the product or the distributor.

If the central vacuum unit has been put out of order in case of damage or reparation, signalise it on the decal information plate. Isolate the unit from energy sources. One single person has to be responsible for these operations. If it is about a simple operation, it can be carried out by the user itself.

## • 12.2 Material list

In order to facilitate the recycling of the material and in order to conserve the environment we create a list including the material components of the central vacuum unit.  
Disposal and/or recycling of any components of the central system must be done in compliance with the laws in force.

Material	Included in	Note	Legal regulation
LAQUERED METAL COMPONENTS	Basement, side frame of the box, external protection box		The legal regulations in one country could differ from the regulations in other countries. Please apply to the competent institution in order to read up on the legal regulations and to do the recycling in compliance with the laws in force.
METAL COMPONENTS - ALLOYING	Basement, side frame of the box, external protection box		
RUBBER AND PLASTIC	Vibration-free, couplings, cable clamp, electric box, cable press.		
OILS AND LUBRICANT	inexistent		
IRON MATERIALS WITH GALVANIC TREATMENT	Screws, metal clamps, discharge connection.		
ELECTRONIC CARDS	Speed converter card Motor controll card		
BRANCHING	Cables		
ELECTRIC AND ELECTRONIC MATERIAL	Electronic speed converter, electrical terminal posts		
FILTER MATERIAL	Filter cartridge (separator) Motor filler	Polyester Polyester	

## 13 - OPTIONS

### • 13.1 Table and wall remote control panel



Remote control panel for the control of the maintenance cycles of the installation of the professional/industrial sector. The ease with which it is installed allows you to use it on all existing systems in the central vacuum sector and the pre-set programming allows you to use it immediately.

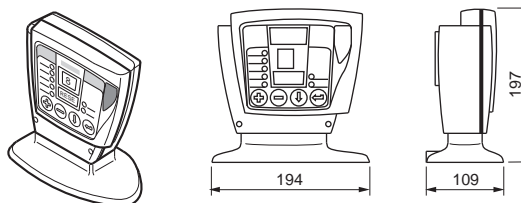
In order to personalise the maintenance cycles, it is possible to intervene on the programming modality foreseen, following the instructions found in the user's. Tecno control comes in three versions:

- "Control-Table" for use in the reception of a hotel or public building
- "Controll-Wall", for professional use with wall installation
- "Control-Remote", for wall installation and domestic use.


The connection and installation are extremely easy as this is done by connecting up to the main electric power network and any micro line point of the vacuum system. You can programme the dust container emptying cycles, filter cleaning and motor maintenance cycles.

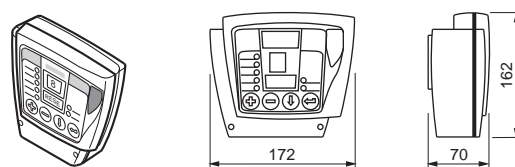
Table remote control panel

ARTICLE	COLOUR	MATERIAL
4200.2	 Aluminium	Plastic
4200.3	 Anthracite	Plastic



Wall remote control panel

ARTICLE	COLOUR	MATERIAL
4200.0	 Anthracite	Plastic



## 14 - TROUBLESHOOTING

### • 14.1 Troubleshooting

Problem	Possible cause	Possible remedy
Air suction is absent in all inlets	The power supply cable is disconnected	Connect the power supply cable.
	The main switch is off or the micro line switch is off	Check and activate the 2 switches bringing it into the I-ON position
	The micro line activation signal cable is disconnected	Connect the activation cable
	The thermal protection of the motor engaged	Wait several minutes for the motor to cool down
There is no air suction in only one inlet	Electrical contacts interrupted or the microswitch of the suction inlet is defective	Contact the technical service provider
Air suction is weak	Use of more inlets at the same time	Use an adequate number of inlets for the suction unit model
	The flexible hose or cleaning accessories are defective	Check the intact condition of the flexible hose and the accessories and replace, if necessary
	The filter cartridge is dirty	Clean and replace the filter cartridge Contact the technical service provider
	The dust container fittings	Check intactness and correct positioning of the fittings
	The pipes of the suction unit are obstructed	Contact the technical service provider
	The air exhaust is obstructed	Contact the technical service provider
The system continues operating even with the suction inlets closed	The microswitch of single inlet is defective	Replace the inlet. Contact the technical service provider
The motor is not running	There is no power.	Make sure that the machine is correctly powered and that the main switch on the switchboard is in position 1-ON.
The motor is not running but the switchboard is properly powered and the mains switch is on.	The inverter is damaged or the wire cabling is incorrect. - the motor has burned out.	Contact the technical service provider
	The motor is overheating.	Contact the technical service provider
The motor is overheating.	The motor is absorbing too much power .	Reduce the working pressure by slackening the vacuum breaker valve.
	There is insufficient ventilation	The room temperature should be no more than 40°C and the machine must be well ventilated.
	The pipe network is obstructed	Contact the technical service provider
The motor is not running as normal.	The turbine has seized up	Contact the technical service provider
	The turbine is dirty	Contact the technical service provider
The main switch shuts down regularly.	The room temperature is too high	-The machine's working temperature must be between -15°C and +40°C; increase the machine's ventilation.
	The air vent flaps are blocked.	- Clean the air vent flaps that are blocked
	Interruption motor fase	Contact the technical service provider
	Motor winder defective	Contact the technical service provider
	The pipe network	Contact the technical service provider
	Micro switch of one inlet is defective	Contact the technical service provider





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