

MANUALE D'USO
FREE SABIANA
SISTEMA WIRELESS DI CLIMATIZZAZIONE

USER MANUAL
FREE SABIANA
WIRELESS AIR CONDITIONING SYSTEM



SABIANA

IL COMFORT AMBIENTALE

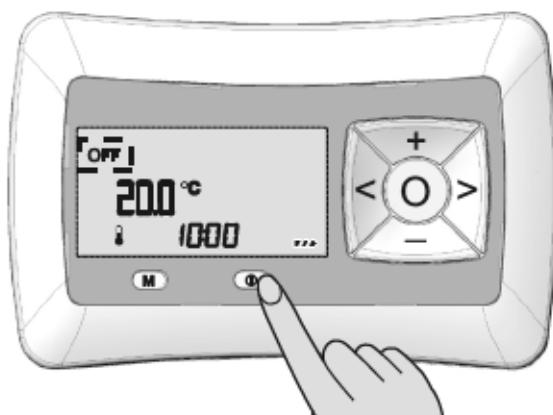
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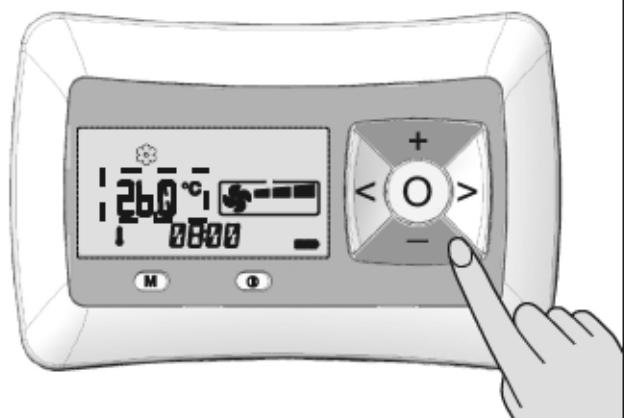
Switch on and switch off

- “ON” / “OFF”



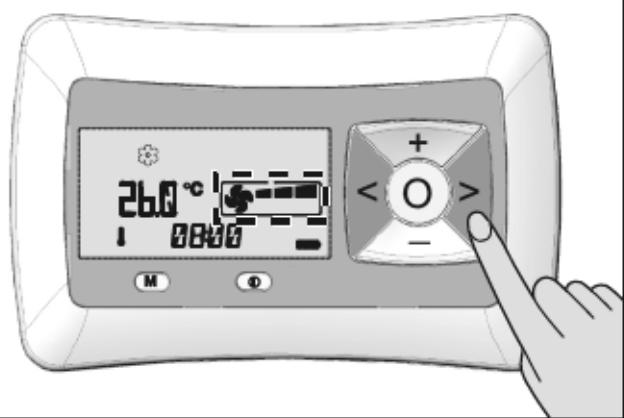
Setting the required temperature

- “+“ to increase temperature
- “-“ to decrease temperature



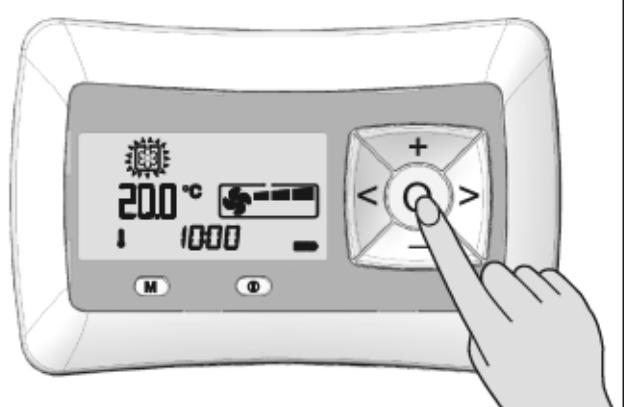
Setting the fan speed

- “>“ to increase fan speed
- “<“ to decrease fan speed



Setting the operating mode

- Press once the “**MODE**” central button.
- Use the “+” / “-“ buttons to select the operating mode.
- Confirm pressing the “**MODE**” central button twice.



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GENERAL NOTICES

Before installing the wireless system, carefully read this installation and use manual.



! The wireless system is designed for fan coil units and must be installed on the equipment in compliance with the instructions contained in this document and in the manual of the equipment to be controlled.

! Signal reception capacity, that is the max. useful distance between each network node, is

- 12 meters in case of standard floor installations
- 8 meters in case of standard floor installations with walls made of bricks or plasterboard
- 6 meters in case of standard built-in installations (suspended ceilings, etc..)

! Metal or ferroconcrete walls further reduce the reception field of the system.

! The radio transmission system used by the wireless control complies with the applicable standards and broadcasts on harmonized band. The system does not interfere with other equipment.

! The maximum number of fan coil units in a network is **25 units**; the maximum number of probes in a network is **4 units**; each network has its own **control panel**.

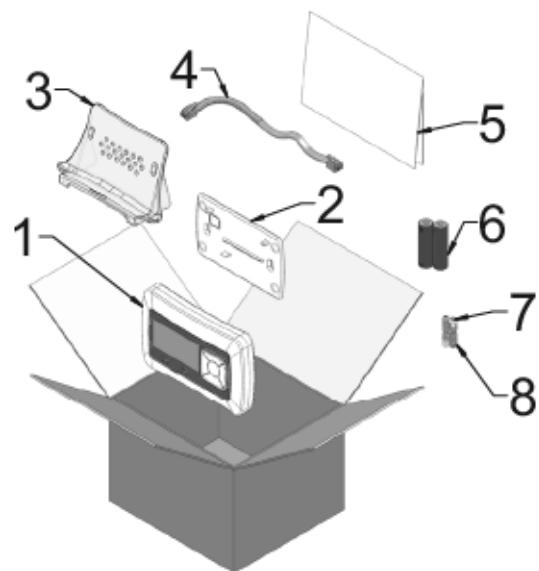
! This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

! Children should be supervised to ensure that they do not play with the appliance.

LIST OF PARTS SUPPLIED

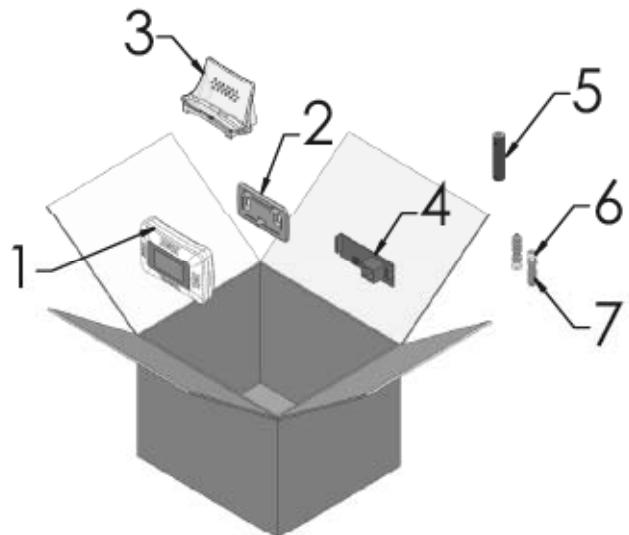
Control panel

- 1 = Control panel
- 2 = Wall support
- 3 = Table support
- 4 = Affiliation cable
- 5 = Instruction manual
- 6 = AA batteries
- 7 = Screws for wall mounting
- 8 = Dowels for wall mounting



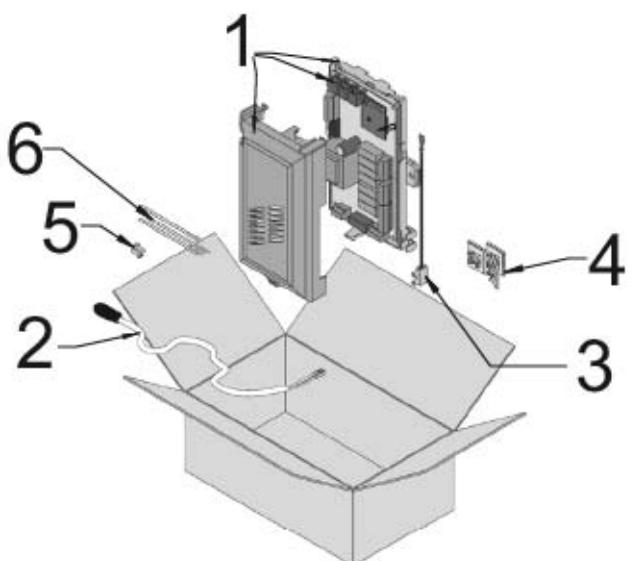
Probe

- 1 = Probe
- 2 = Wall support
- 3 = Table support
- 4 = Affiliation card
- 5 = AAA battery
- 6 = Screws for wall mounting
- 7 = Dowels for wall mounting



Power unit

- 1 = Electronic board with plastic support and casing
- 2 = Air probe
- 3 = Single pole terminal with ground cable
- 4 = Adhesive support
- 5 = Screws to fasten the board to the fan coil unit
- 6 = Cable clamps

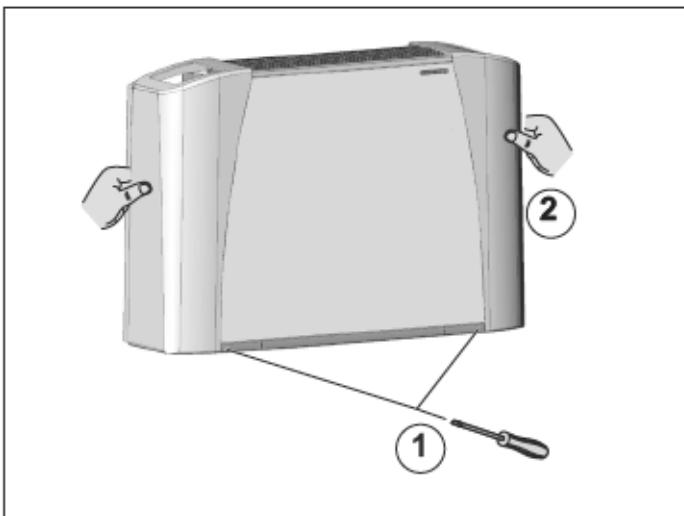


INSTALLATION INSTRUCTIONS

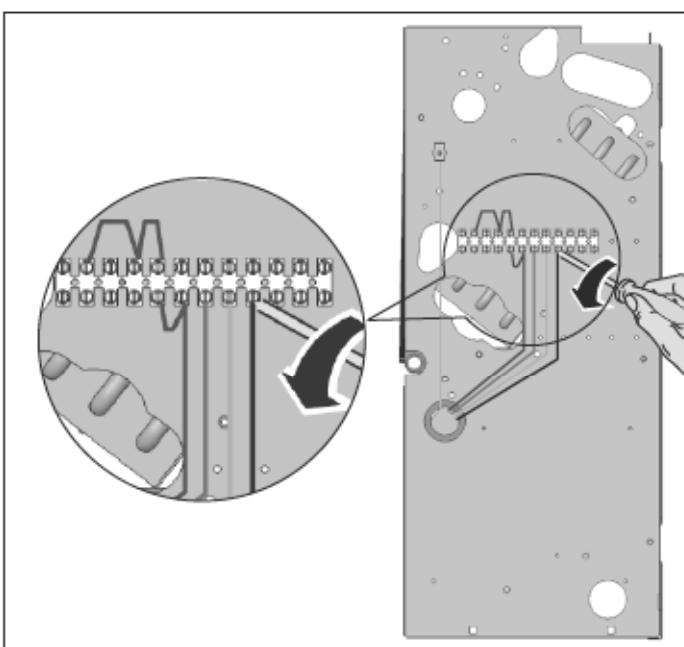
Assembly of power board on FAN COIL UNIT

- Removal of the casing fixed to the product frame by no. 2 self-threading screws:

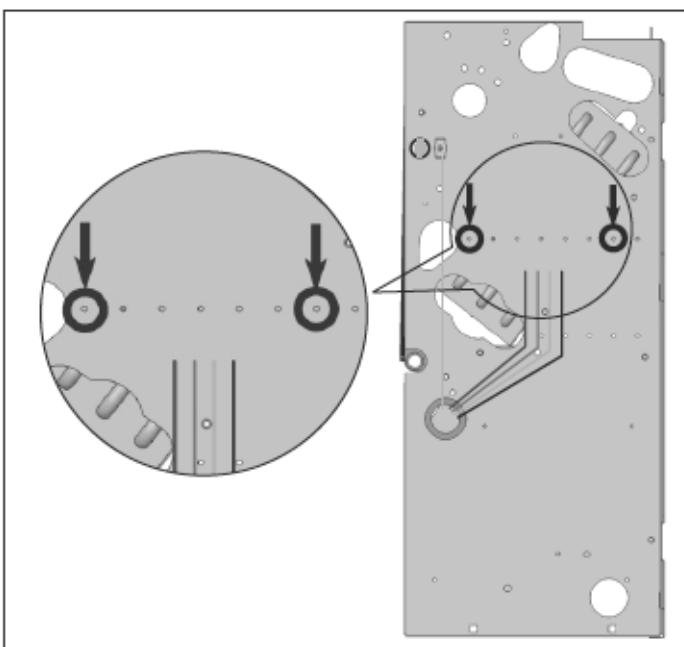
1. screw removal
2. casing removal



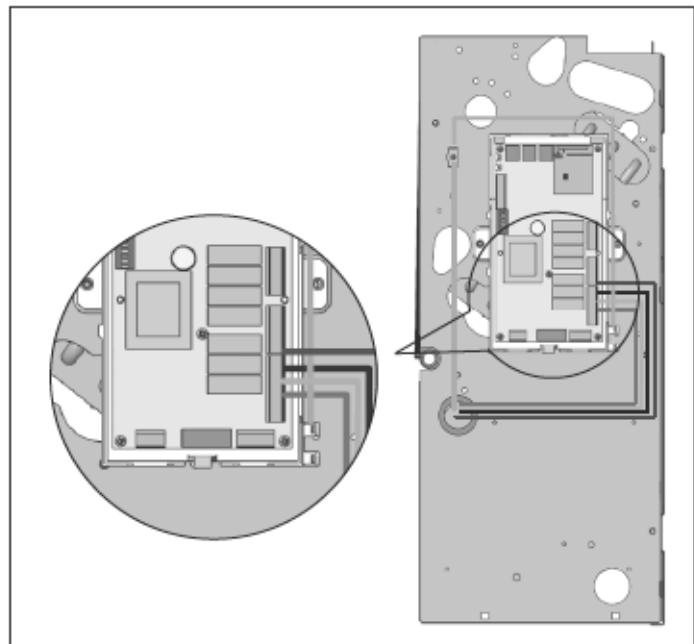
- From the shoulder of the fan coil unit, operating on the terminal board, disconnect the wires of the motor cable.



- Remove the terminal panel applied on the shoulder, unscrewing the two self-threading screws. The two holes highlighted in the figure will be used to fasten the power board.



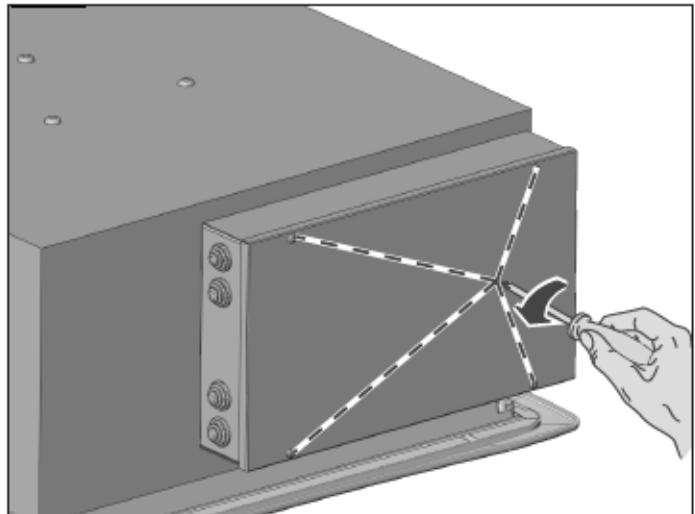
- The figure shows the power board to be fastened by no. 2 self-threading screws included in the kit. It is shown as well the ‘mechanic’ connection of the grounding.



Assembly of power board on CASSETTE FAN COIL UNIT

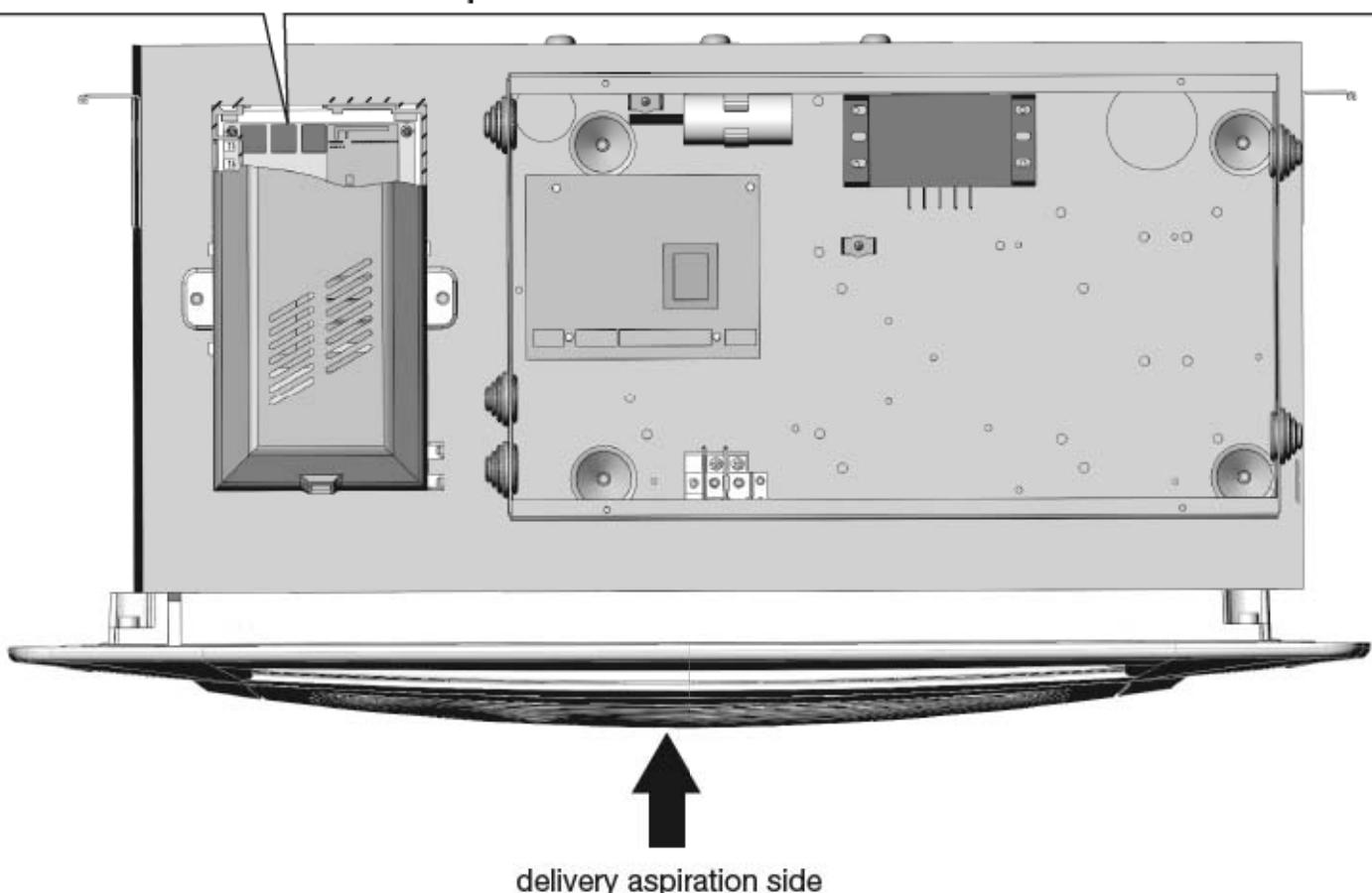
- Remove the cover from the shunt box unscrewing the four screws as indicated in the figure.

1. screw removal
2. cover removal



- Position and fasten, by means of no. 2 self-threading screws included in the kit, the power board as shown in the figure (vertical orientation).

⚠️ IMPORTANT!: to check the correct orientation of the board, make sure that the three connectors face upward.



NOTE: dimensions are recommended, not mandatory.

- Perform the electric connections according to the configuration chosen (see wiring diagram manual).

Use of the control by means of cable

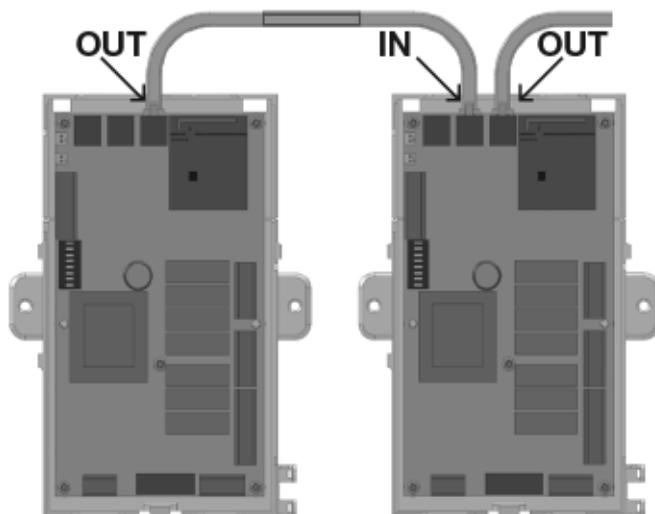
During the installation of the wireless system, it could happen that two or more power units are not able to communicate using the wireless procedure, for example due to the excessive distance between the units or to the wall characteristics.

On such conditions it is possible to wire them in order to grant / assure the transmission.

Wire the terminal “**OUT**” of the nearest power unit to the terminal “**IN**” of the power unit that, not being able to communicate wireless, is isolated. If you have more than 2 units to be wired, you can go on wiring them respecting the series sequence “**OUT**” versus “**IN**”.



IMPORTANT!: the control panel does not require to be connected by cable to the first equipment. It is necessary that the machines are connected among them.



Legend

OUT = output of the connection on the power unit

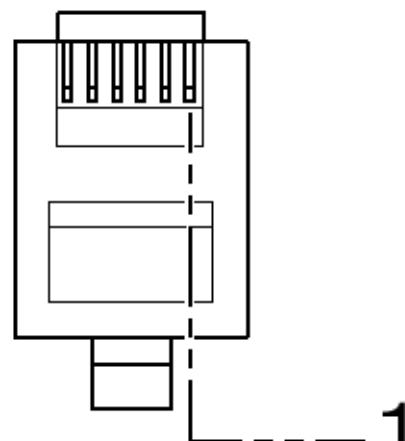
IN = input of the connection on the power unit



IMPORTANT!: for the wiring, use a cable type Belden 1592, 4cp cat5 UTP with a male terminal connector RJ11 type T6 6/6 poles.

The cable must be fixed on the terminal, one by one, respecting the colours sequence:

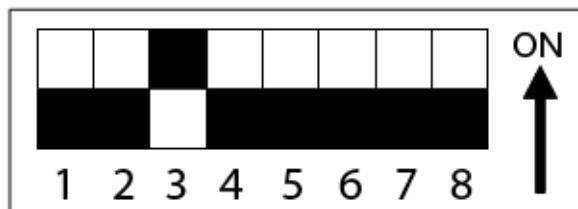
Connection nr	Wire Colour
1	Orange
2	White/Orange
3	Green
4	Brown
5	Blue
6	White/Blue



Setting of the functions (Power unit)

Once all the connections have been performed, it is mandatory to set the functions by means of the Dip switches on the power board of the fan coil unit:

DEFAULT SETTING OF THE DIP-SWITCHES:

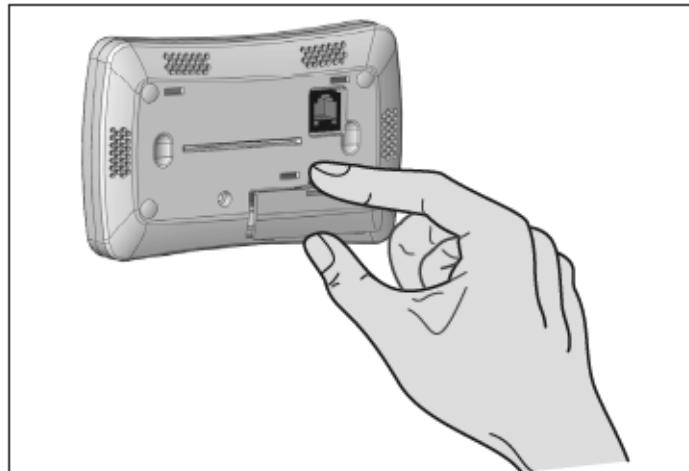


SETTING DIP 6 / DIP 8:

DIP 6 = ON	DIP 6 = OFF
<p>2-tube system Heating/cooling operation is set by the system based on the following options:</p> <ul style="list-style-type: none"> • a) probe T2 is installed (priority mode) to measure system water temperature (only for fan coil units with no resistance installed). The system operates in heating mode if water temperature is over 30°C and operates in cooling mode if water temperature is lower than 20°C. • b) the operating mode is determined by an auxiliary contact AUX 1: - CONTACT OPEN = heating - CONTACT CLOSED = cooling <p>4-tube system Heating/cooling mode is set by the system by means of auxiliary contact AUX 1.</p>	<p>2-tube system Heating/cooling mode is set by means of the control panel.</p> <p>4-tube system Heating/cooling mode is set by means of the control panel which enables as well to set the operating mode “AUTO” (the system automatically chooses whether to heat or cool depending on the target temperature set and the environment temperature measured).</p>
DIP 8 = ON	DIP 8 = OFF
<p>Fan coil unit remote ON-OFF is determined by the auxiliary contact AUX 2:</p> <ul style="list-style-type: none"> - CONTACT OPEN = standard operation - CONTACT CLOSED = remote OFF. 	<p>The activation of the Economy mode (+/- 3°C on the established set) is determined by the auxiliary contact AUX 2:</p> <ul style="list-style-type: none"> - CONTACT OPEN = standard operation - CONTACT CLOSED = variation of the target temperature set (-3°C winter, +3°C summer).

Battery insertion / replacement of control panel

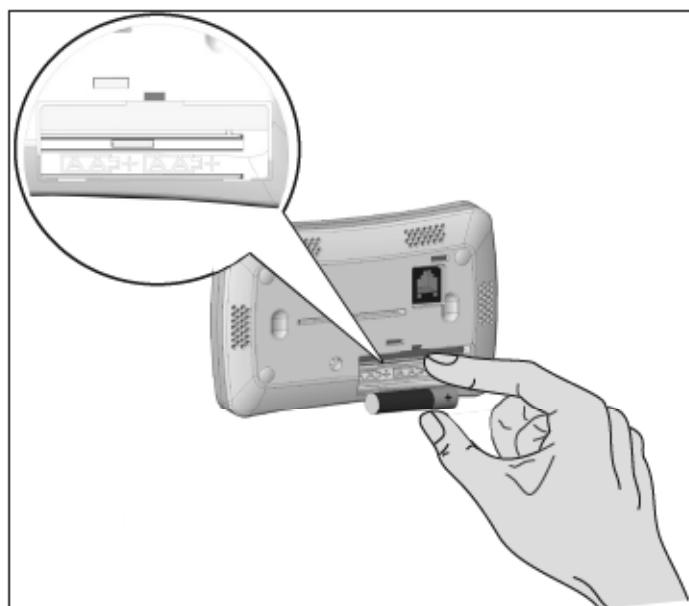
- Open the lid of the battery housing.



- Insert correctly the batteries, respecting the direction indicated on the bottom of the battery housing.



IMPORTANT! : use 1.5 v alkaline batteries, type AA.



CAUTION!: do not dispose of the batteries in the environment. Use the specific containers for disposal.



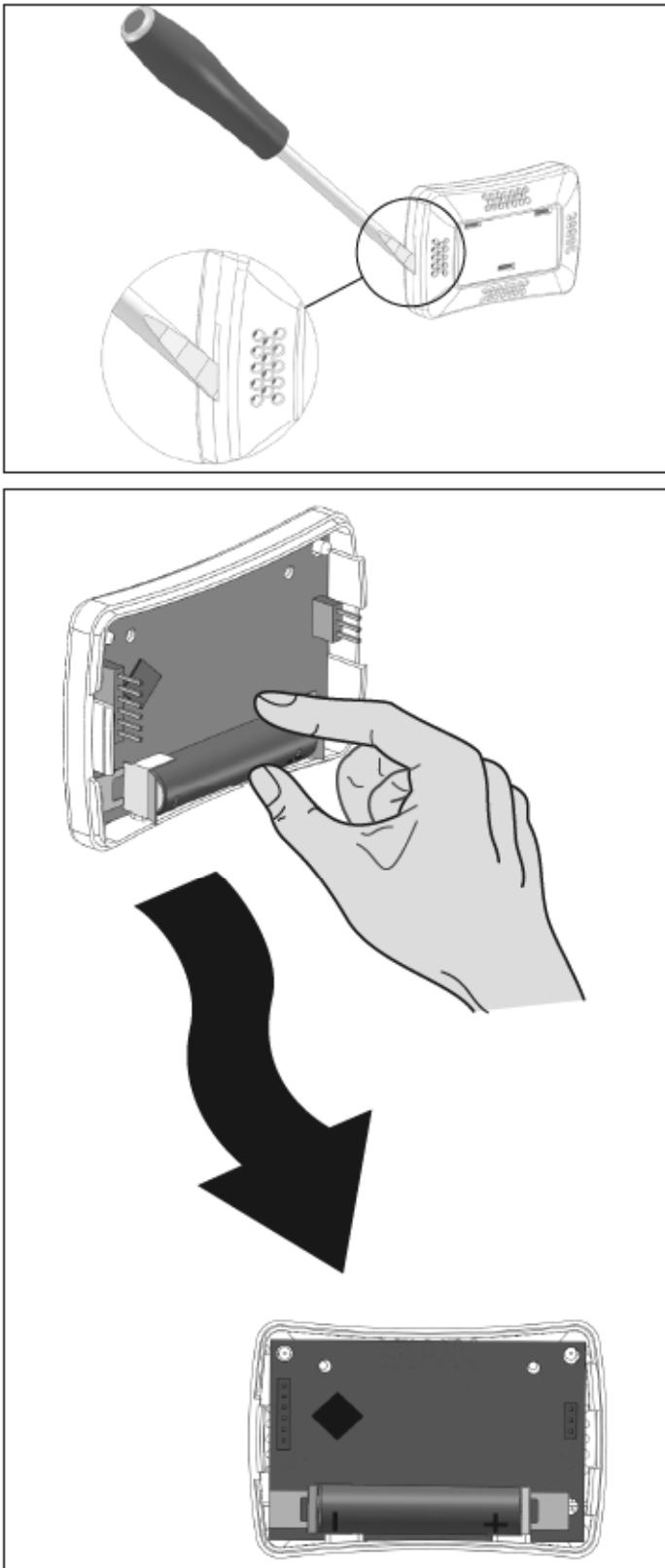
Battery insertion / replacement of probe

This device can measure air temperature in the spot where it is positioned and to transmit it by means of radio communication to the other devices of the system.

It is powered by an AAA battery and can be freely positioned inside the region to be conditioned.

- Open the probe using a flat-tip screwdriver inserting it into the specific slot.
- Insert correctly the battery, respecting the screen print indicated on the electronic board.

! IMPORTANT! : use 1.5 v alkaline batteries, type AAA.



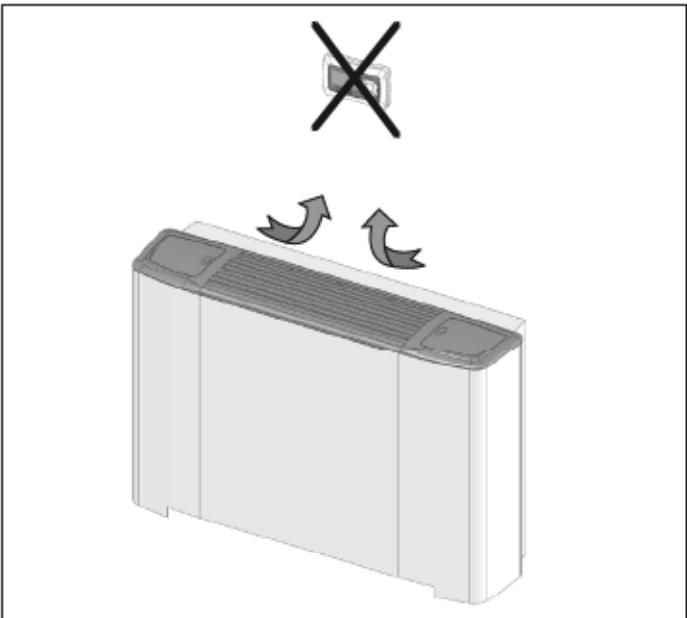
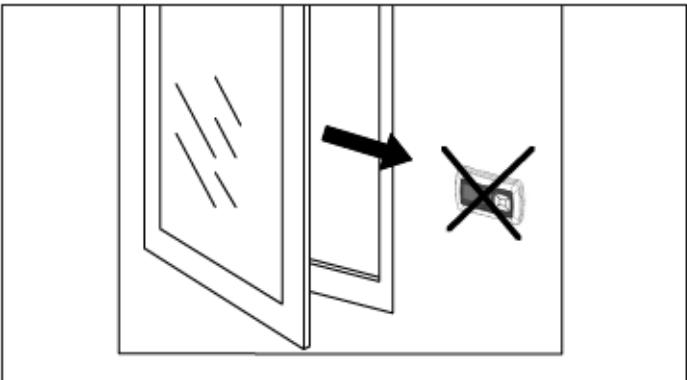
! CAUTION!: do not dispose of the batteries in the environment. Use the specific containers for disposal.



Fitting of the wall mount supports



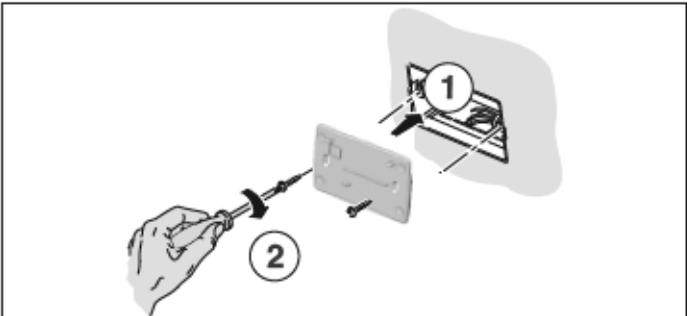
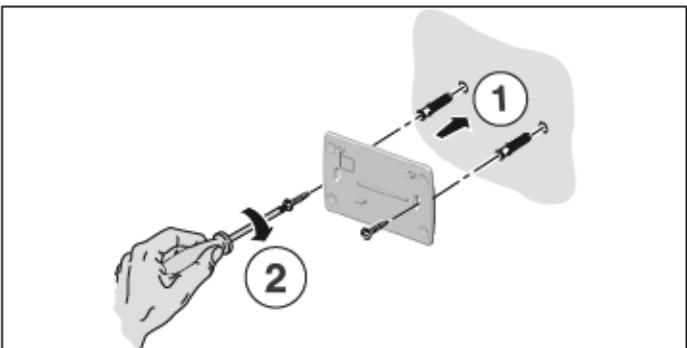
CAUTION!: for the correct measurement of the environment temperature, avoid installation of the control panels and probes in recesses, behind doors, near windows or heat sources. Do not expose the control panel and the probes directly to sun rays.



Control Panel

We recommend to install the panel at an height of 1.5 meters from the floor, using the specific support provided. The support is designed for wall mount by means of the dowels with screws provided or, if available, on 3 module DIN503 shunt box:

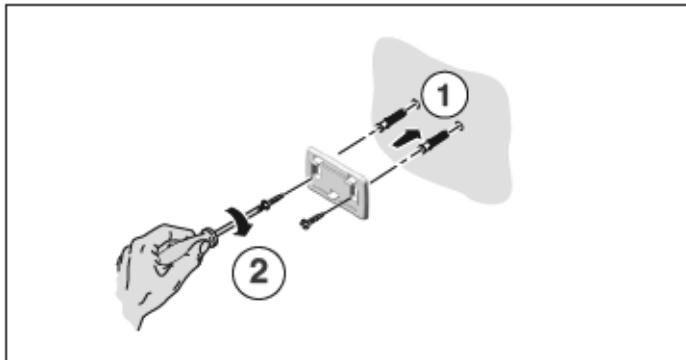
- fastening with dowels,
- Fastening on 3 module box DIN503.



Probe

We recommend to install the probe at an height of 1.5 meters from the floor, using the specific support.

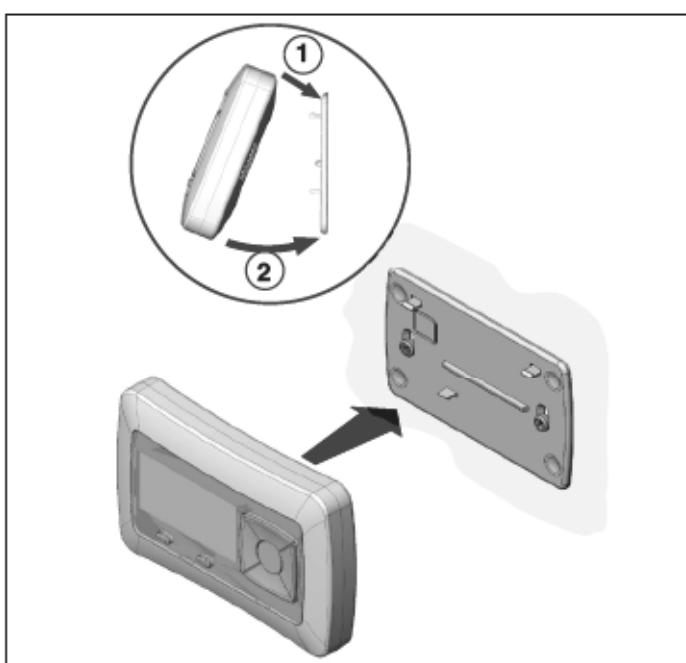
The support can be applied on any wood surface, wall, or fastened by means of screws with dowel.



Assembly on wall support

Control Panel

Fasten the control panel to the wall support by means of quick joint following the indications in the figure.



Probe

Fasten the probe to the wall support by means of quick joint following the indications in the figure.

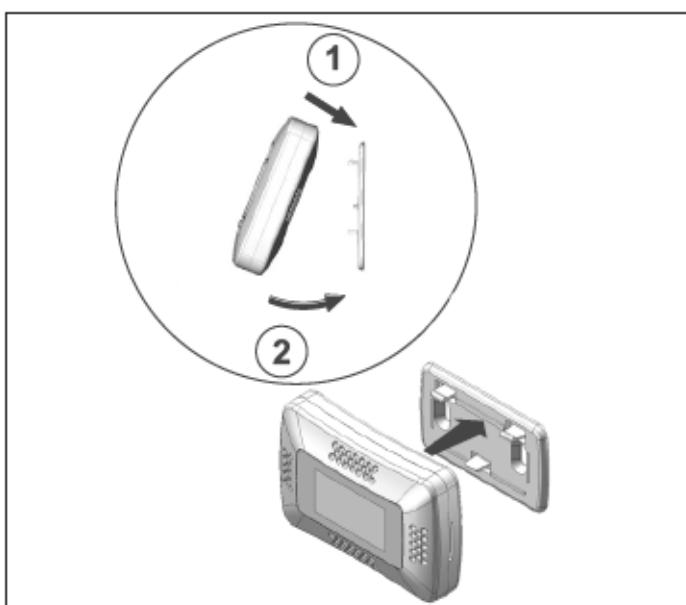
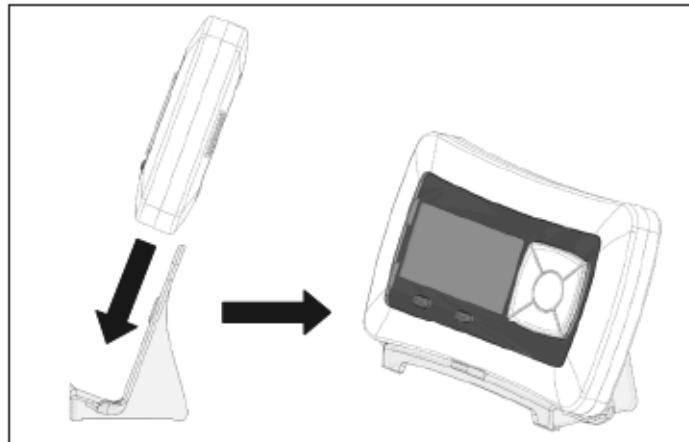


Table support

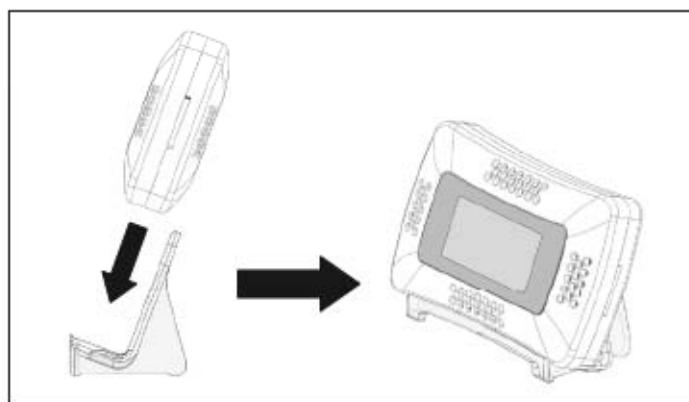
Instead of the wall support, it is possible to house the control and the probe on the table supports provided with the units.

⚠ CAUTION!: for correct measurement of environment temperature, it is important not to position the supports with their equipment in recesses, behind doors, near heat sources.

Control Panel



Probe



USE INSTRUCTIONS

Introduction

Wireless system is an innovative solution for the control of air conditioning units and systems: it is an automatic, programmable, highly flexible, fully wireless, electronic remote control, which provides power savings and system optimization.

This device, controlled by microprocessors, controls the fan coil unit, featuring several functions and options.

Control functions

- Fan coil unit switch on / switch off.
- Measurement of environment temperature.
- Setting and measurement of environment temperature (SET).
- Possibility of remote ON/OFF control of an electric resistance (optional) for heating.
- Possibility of ON/OFF control of the special Electrostatic Filter (accessory for FAN COIL - INDOOR AIR QUALITY only).
- Possibility to select summer or winter operating cycle directly from the control in manual or automatic mode.
- The automatic season change is carried out by means of a CHANGE-OVER probe (2-tube system).
- Manual selection of the three speeds of the fan.
- Automatic selection of the three speeds of the fan depending on the difference between the target temperature set and the environment temperature.
- ON-OFF thermostatic control, both in the summer and winter cycle, of the water valve (2-tube system) or of the two valves (4-tube system).
- In the 4-tube system with fan coil units provided with ON-OFF water valves with constant presence of the two fluids (warm and cold water) in the circuits, it is possible to achieve automatic heating to cooling switch, depending on the difference between environment temperature and target temperature, with 2°C dead zone.
- Connecting the TME low temperature cut-out (optional, located between the fins of the thermal exchange battery), in the winter cycle only, the fan starts only if water temperature is higher than 33°C and stops when it is lower than 28°C.

The wireless radio control system includes three units:

- control panel with button panel and display;
- power unit to be positioned on the fan coil unit;
- additional probe (optional).

The power unit, featuring 230Vac power supply, wired to the different components of the fan coil unit, can be connected to the control terminal through radio communication channels or, if the installation does not allow radio communication, by means of cable.

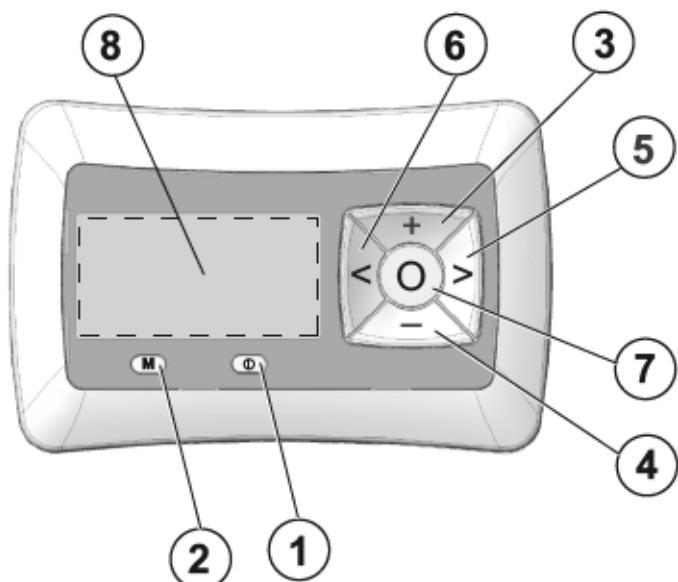


CAUTION!: with the wireless control set to OFF, the fan coil unit is still powered (230Vac). For any maintenance intervention, make sure to remove voltage.

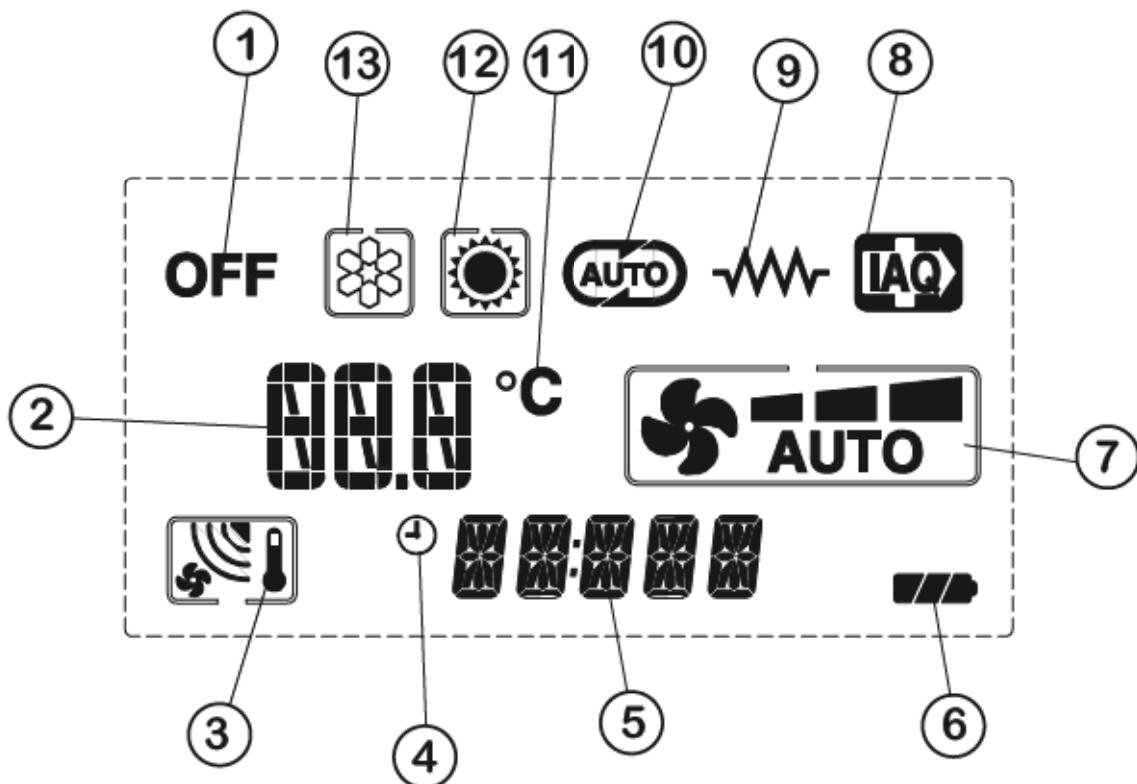
Descriptions of controls and signals

CONTROL PANEL

- 1 = "ON"/ "OFF": switch on / switch off
- 2 = "M": menu / setting / zone view
- 3 = "+": temperature increase / parameter selection
- 4 = "-": temperature decrease / parameter selection
- 5 = ">": ventilation increase
- 6 = "<": ventilation decrease
- 7 = "MODE": operating mode / selection confirmation
- 8 = Control panel symbols (display)



CONTROL PANEL SYMBOLS



- 1 = OFF state
- 2 = Environment temperature measured / setting of target temperature (SET)
- 3 = Communication status / type of equipment displayed
- 4 = Timer active
- 5 = Clock / Error signal display
- 6 = Battery status
- 7 = Ventilation setting
- 8 = Electrostatic filter active
- 9 = Electric resistance enabled
- 10 = Automatic operation
- 11 = Temperature measurement unit
- 12 = Heating active
- 13 = Conditioning active

PROBE

This device can measure air temperature in the spot where it is positioned and to transmit it by means of radio communication to the other devices of the system.

PROBE SIGNALS

- 1 = Environment temperature measured
- 2 = Transmission signal
- 3 = Clock
- 4 = Battery status



The “2” symbol identifies the transmission signal: if the symbol flashes, there is no transmission or the probe currently is offline; if the symbol is steady, the probe operates correctly.

Operation of radio communication

INTRODUCTION

The communication protocol is designed to create ‘mesh’ networks, where every unit can exchange information with the nearby units. If a network node fails, other nodes can replace it, automatically rerouting the information. This way, it is possible to create redundant routes, increasing the overall reliability and providing more flexibility to the entire system.

This is very useful, for instance, in an air conditioning system for a whole building, where a failed equipment should not cause a malfunction of the whole system.

The devices which constitute the thermal control system are:

- Control panel (type A device)
 - Fan coil unit (type B device)
 - Temperature probe (type C device)
-

BASIC STRUCTURE OF A MESH NETWORK

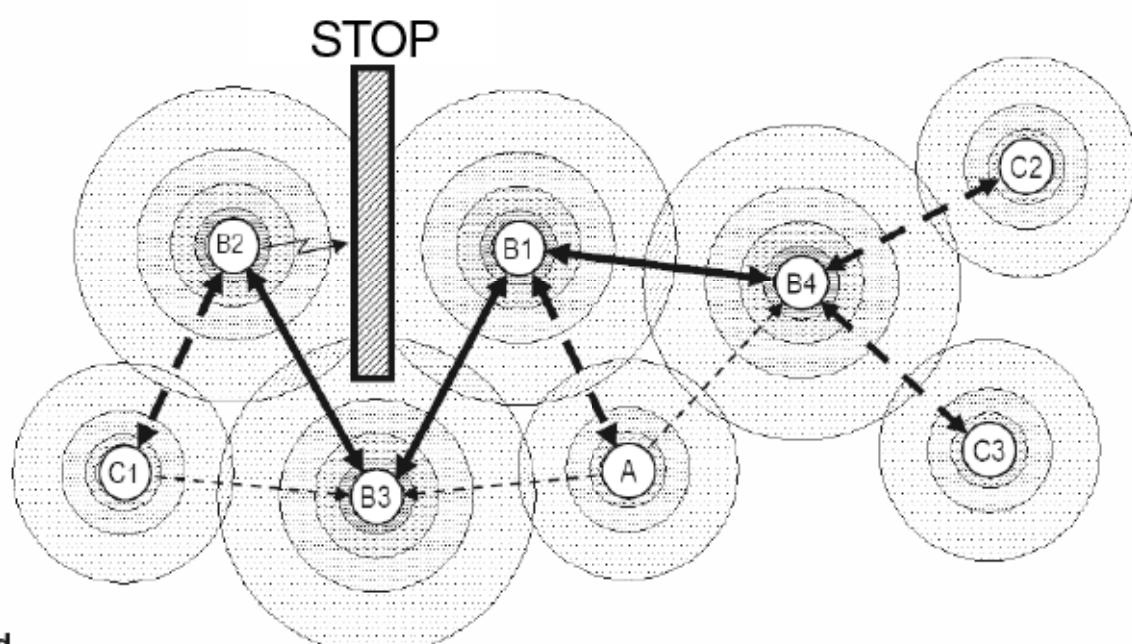
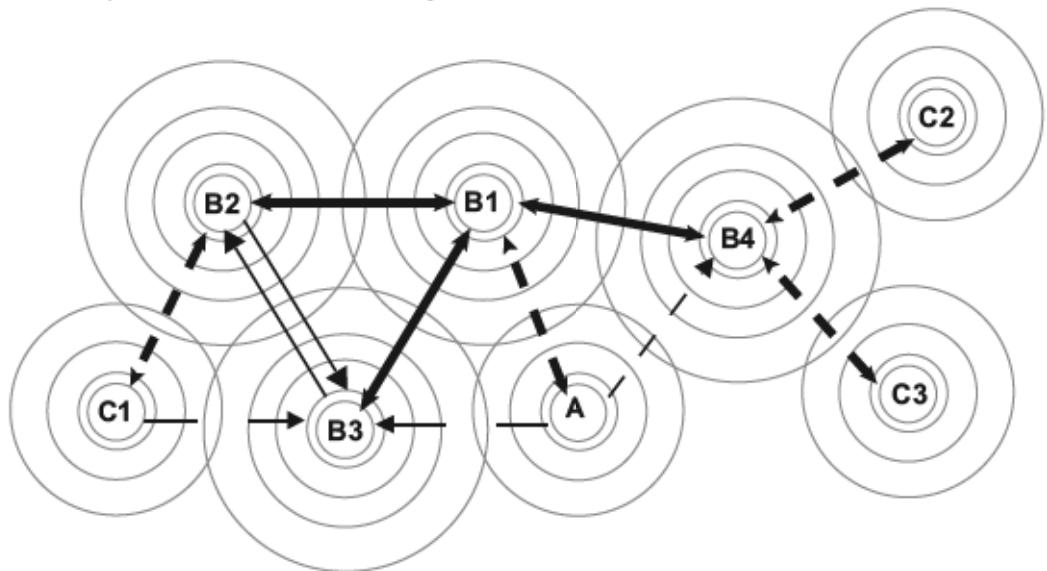
The set of information collected by the different nodes is fully made available to all the devices type A and B, while the type C devices are a ‘source’ of information only.

Type A devices transmit information both periodically and after the interaction of the user. The information generated by other devices periodically reaches device A. Since transmission and reception activities use power, the frequency of the periodic transmissions of the device A is designed to optimize the life of the batteries without compromising the reaction speed of the system.

Type C devices, as type A devices, transmit the information generated (mainly the measured temperature) both periodically and upon a specific event (temperature change above a preset threshold).

Type B devices, being powered by the power grid, maintain the communication, providing information to all the nodes. The information transmitted by device A or devices C can be received directly even by a single type B device. Information routing is adaptive and enables to reposition any node in the area without having to manually reconfigure the network. This network architecture ensures communication, thus the operation of the air conditioning system, even in case of obstacles or disturbances which prevent communication between two or more nodes. This is possible thanks to the capabilities of the protocol implemented in nodes type B to resend the information received to those nodes which cannot receive them directly. If one or more nodes are isolated from the network, they keep operating based on updated information they are still able to exchange based on the latest settings received.

Here is an example of the functional layout of the network:



Legend

A	= control panel
B1	= master fan coil unit
Bx	= fan coil units
Cx	= probes
	= trasmission of information
	= trasmission ignored by the receiving node
STOP	= obstacle to communication

The figures show how the network continuously ‘adapts’ to the operating conditions, providing system reliability.

NOTE: the continuous line indicates a continuous communication over time, the dotted line instead indicates a periodic communication or communication following an event on node type A or C.

System setup

When setting up a network of units, it is important that each unit has an unique identification, so that the system can recognize and set it up. All the units of the system must be provided with an ID.

It is important that each unit of the system is provided with a different ID, otherwise an error message is displayed.

This operation is called "**AFFILIATION**".

To ease setup and management of the machines, we suggest to take note of the ID and zone number assigned. We recommend to create a table with all the IDs required to track each unit.



IMPORTANT!: before setting the units of the network, it is necessary to define their zone. The allocation of units to zones increases system management flexibility.

Here is an example of installation with its table (TABLE 1) :

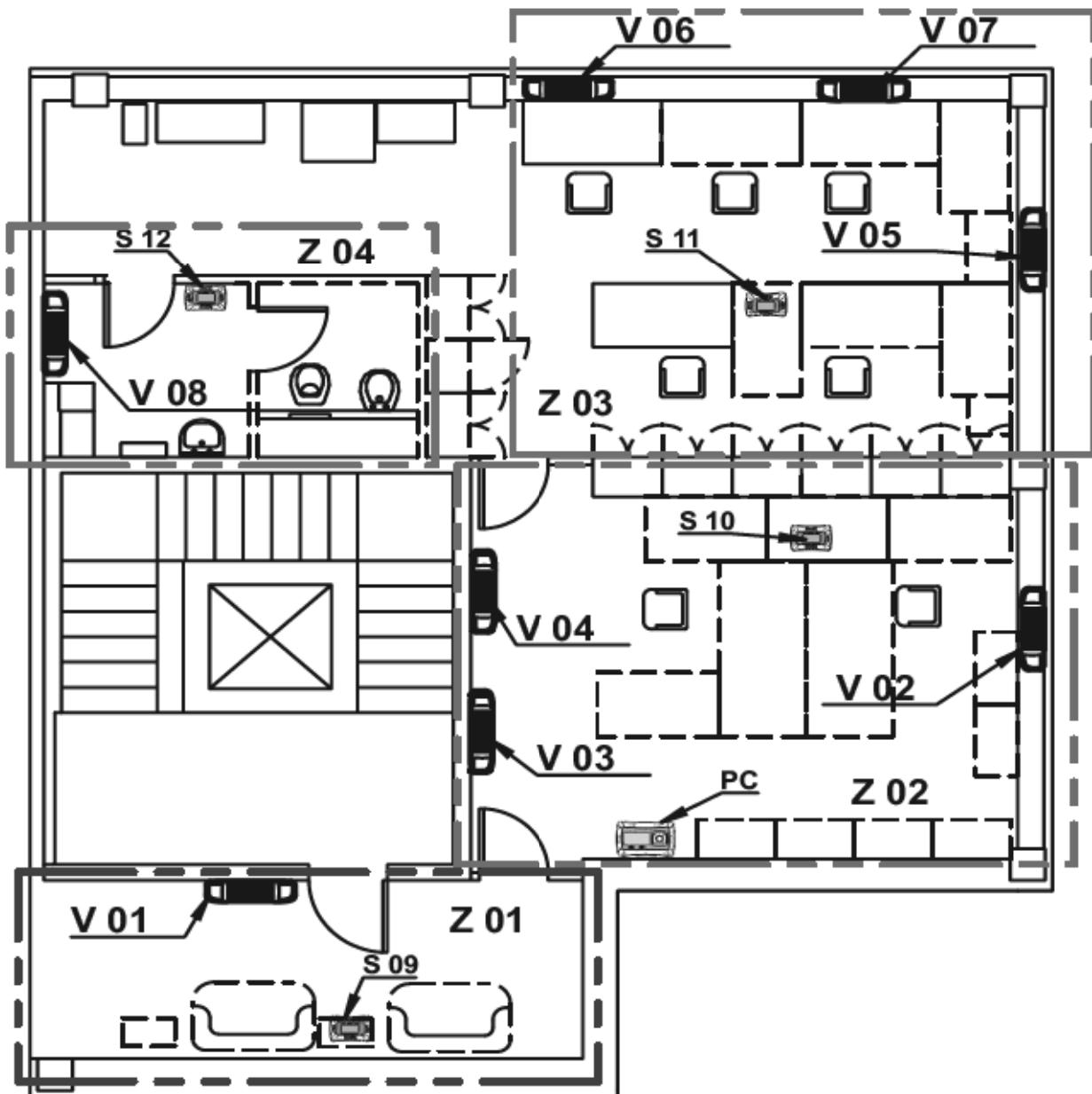


TABLE 1

IMPORTANT!: we recommend to take note of the probes ID and zone number.

NAME	FAN COIL ID	ZONE ID
Hallway (Z 01)	V 01	Z 01
Office 1 (Z 02)	V 02	Z 02
	V 03	Z 02
	V 04	Z 02
	V 05	Z 03
Office 2 (Z 03)	V 06	Z 03
	V 07	Z 03
	V 08	Z 04
Passageway in front of bathroom (Z 04)		

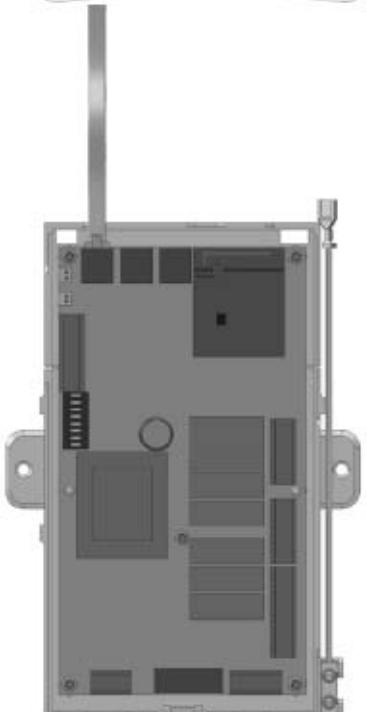
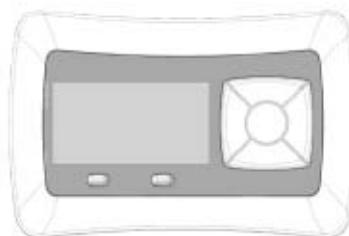
Affiliation of a fan coil unit

After positioning the unit and taking note of the IDs of the units, you can proceed with the affiliation of the units.

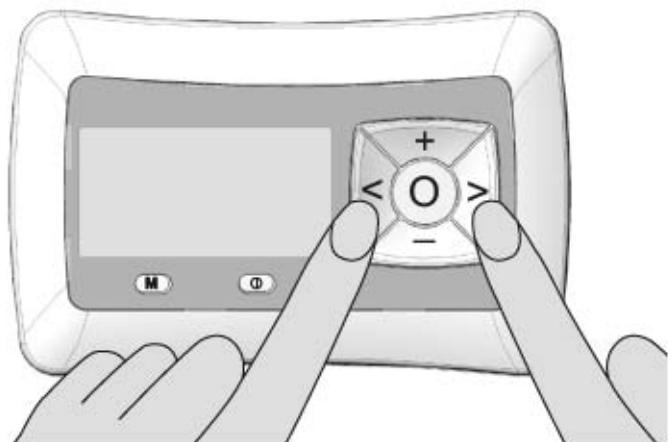
- Once the batteries are inserted, the control panel shows, on the display below, the flashing indication “AFFIL”.
- It is necessary to connect, by means of the cable provided, the control panel to the unit to be affiliated.



CAUTION!: connect the cable to the first connector on the left of the board (as indicated in the figure).



- Once connected to the equipment, to affiliate a device to the network, with the panel “OFF”, enter the affiliation menu by means of the buttons “<” and “>” pressing them at the same time for 5 seconds.



- After 5 seconds, the display confirms the operation displaying “**AFFIL**” (steady); releasing the two buttons, confirm the operation pressing the “**MODE**” central button.



- Once inside the affiliation menu, the control panel proposes the first ID which can be assigned to the unit being affiliated. Select another ID with the “+” / “-” buttons or confirm the proposal pressing the “**MODE**” central button.

⚠️ IMPORTANT!: the numbers already assigned will be automatically skipped, because the ID number is unique and cannot be reassigned.



- Once the ID is confirmed, the control panel proposes the number of the zone where the unit is positioned. Select another zone with the “+” / “-” buttons or confirm the proposal pressing the “**MODE**” central button.



The unit affiliation process is over; now it is possible to remove the cable from the unit and insert it in a new unit to be affiliated. When the affiliation processes are over, completely remove the cable from the control panel.



When you set the ID and zone number, the connected node is displayed on the bottom left of the display:

	control panel symbol
	fan unit symbol
	probe symbol



CAUTION!: during affiliation batteries usage is significant. Do not keep the control panel connected to the power board by means of cable for a long time.



IMPORTANT!: if you try to affiliate a device belonging to another network, the procedure removes the node from the previous network.



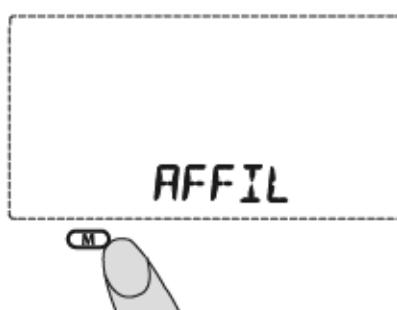
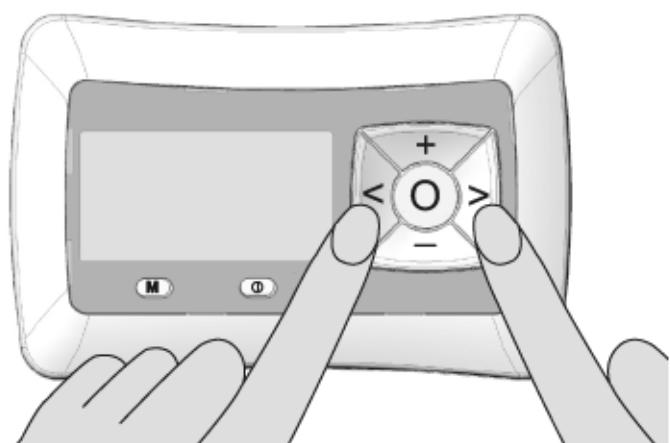
IMPORTANT!: once the affiliation procedure is over, and until full functionality of all the units in the network is achieved, the display shows “ERR01”.

Disaffiliation: removal of a fan coil unit from the network

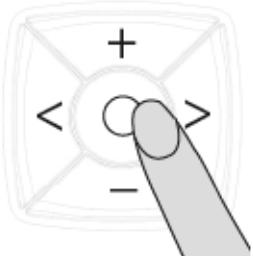
In case of wrong affiliation or removal of a device, it is possible to remove it from the network using two methods: direct (recommended) and indirect.

Direct system

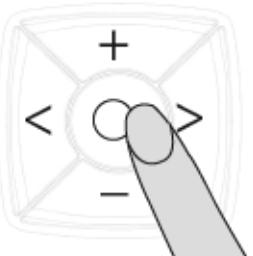
- Connect, by means of the specific cable, the unit to be removed to the control panel;
- With the panel “OFF”, press at the same time for 5 seconds the “<” and “>” buttons.
- When the display shows “AFFIL” press once the “M” menu button to go to the disaffiliation menu.



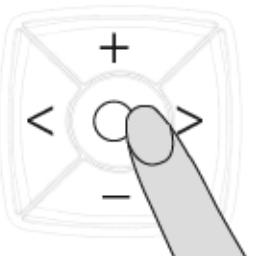
- The display shows: “**REM0V**”. Confirm the operation pressing the “**MODE**” central button.



- The display automatically shows the device to be removed. Confirm the removal pressing the “**MODE**” central confirmation button.



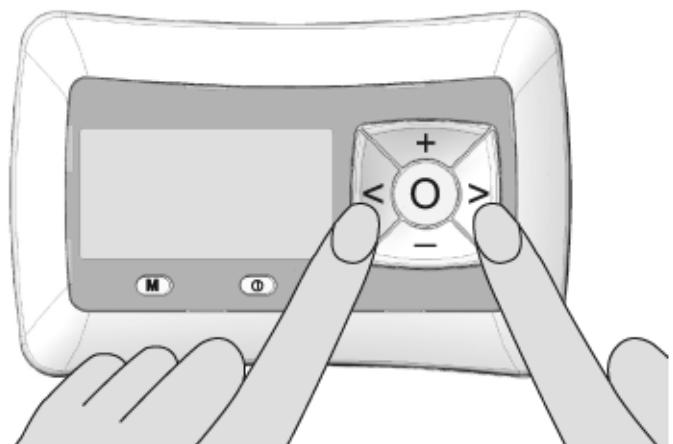
- Since ‘disaffiliation’ is a ‘dangerous’ process, you will be prompted to confirm again the removal of the device. Confirming removal, you return to the main screen.



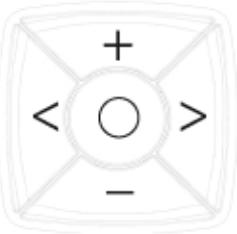
Indirect system

This system is recommended when it is not possible to reach the equipment to be removed. Without connecting the network cable, the device to be removed can be directly deleted from the control panel, which enables to select it among all those available in the network.

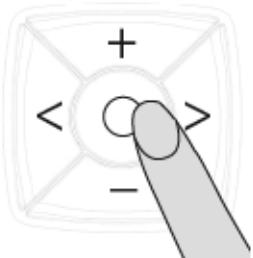
- Press at the same time for 5 seconds the “<” and “>” buttons.



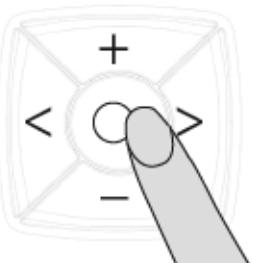
- When the display shows “**AFFIL**” press once the “**M**” menu button to go to the disaffiliation menu.



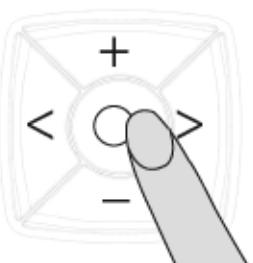
- The display shows: “**REM0V**”. Confirm the operation pressing the “**MODE**” central button.



- The system proposes all the devices available in the network; using the “+” / “-” buttons select the device to be removed. Confirm the removal pressing the “**MODE**” central confirmation button.



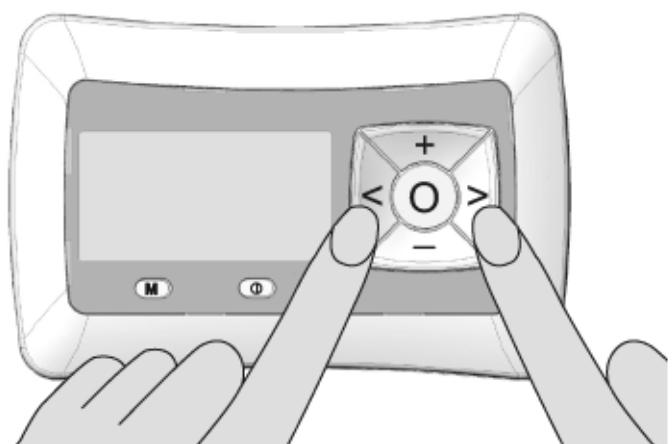
- The display prompts again to confirm removal. Confirm with the “**MODE**” central button. Confirming removal you return to the main screen.



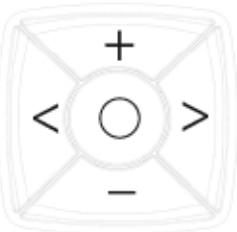
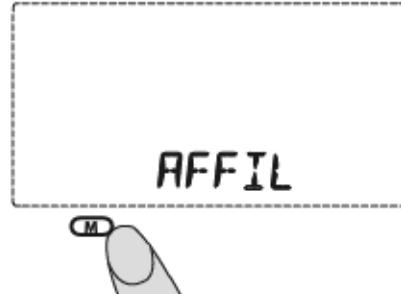
Total removal of the network

With this operation you can remove all the units of the network. Cable connection is not required.

- With the panel “**OFF**”, press at the same time for 5 seconds the “<” and “>” buttons.



- When “**AFFIL**” is displayed, press the “**M**” menu button until “**E ALL**” is displayed.



- Confirm with the “**MODE**” central button.



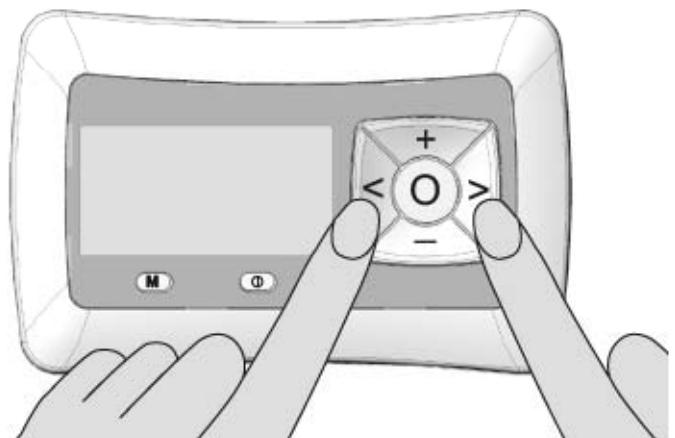
- The system prompts again to confirm the removal of the network. Performing this operation the terminal returns to a blank state. Confirming with the “**MODE**” central button, you return to the main screen, with “**AFFIL**” flashing.



Inherit network

This function enables, in case of replacement of the terminal where the network has been created, to retrieve network data from the fan coil unit to which it is connected by cable.

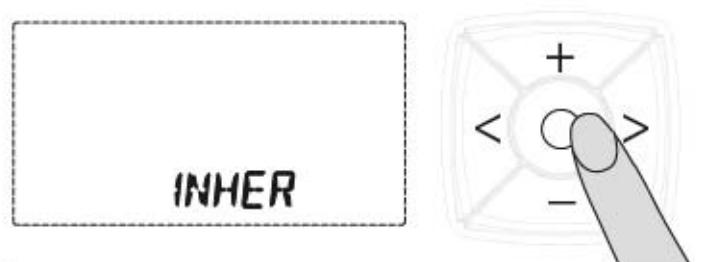
- With the panel “**OFF**”, press at the same time for 5 seconds the “<” and “>” buttons.



- When “**AFFIL**” is displayed, press the “**M**” menu button until “**INHER**” is displayed.



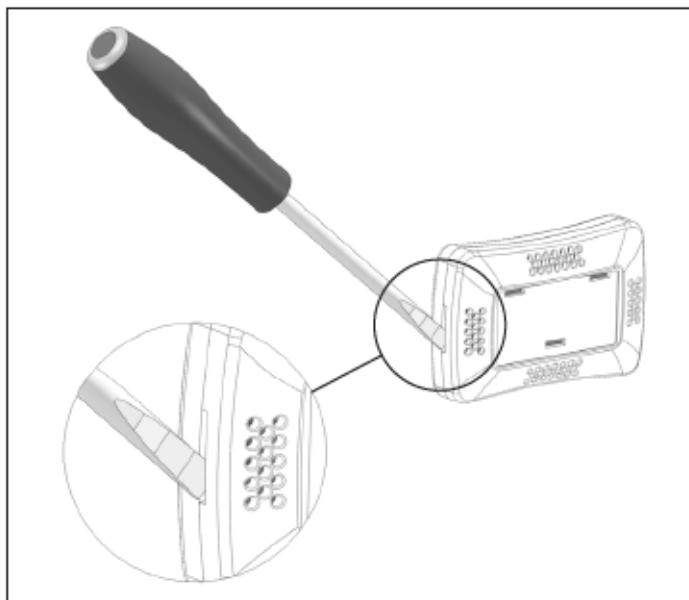
- Confirm with the “**MODE**” central button. The system automatically receives all the information from the unit to which it is connected by cable and is immediately operative.



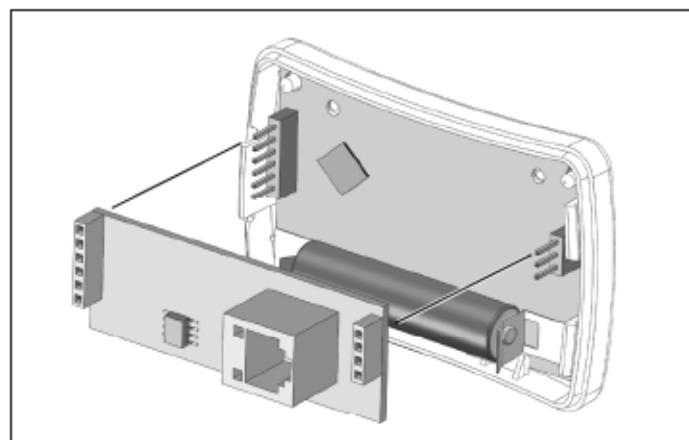
Affiliation of the probe

The probe, as well as the control panel, requires affiliation.

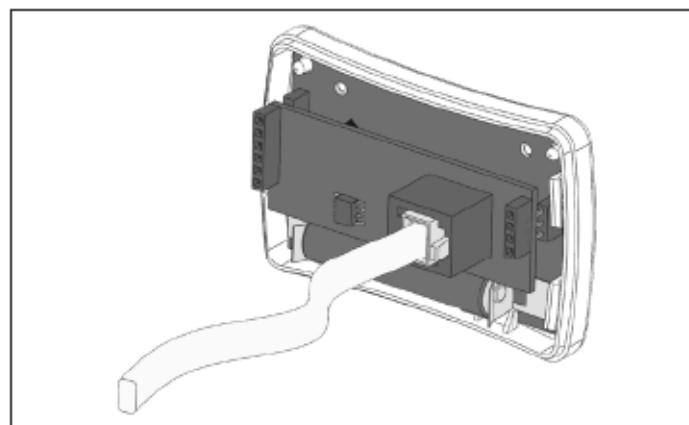
- Remove the rear cabinet of the probe.



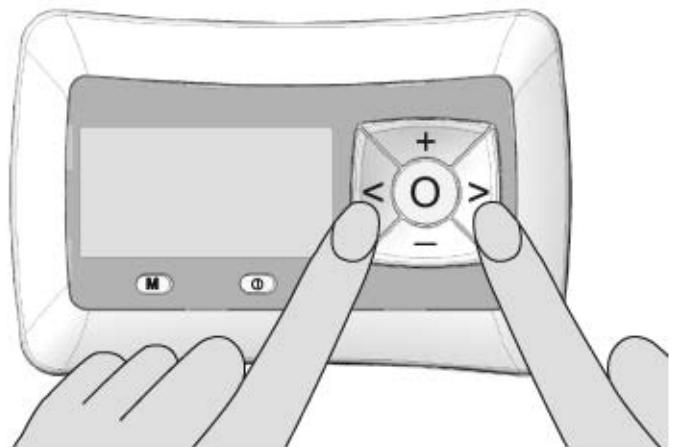
- Insert on the probe the affiliation board provided and insert the cable into the connector.



- Insert one end of the affiliation cable into the control panel and the other one in the probe affiliation board.



- Once the devices have been connected, access the affiliation menu by means of the "<" and ">" buttons pressing them at the same time for 5 seconds with the control panel set to “OFF”.
- After 5 seconds, the display confirms the operation displaying “**AFFIL**” (steady); releasing the two buttons, confirm the operation pressing the “**MODE**” central button.



- Once inside the affiliation menu, the control panel proposes the first ID which can be assigned to the item being affiliated. Select another ID using the “+” / “-” buttons or confirm the proposal pressing the “**MODE**” central button.

! IMPORTANT!: the numbers already assigned will be automatically skipped, because the ID number is unique and cannot be reassigned.



- Once the ID is confirmed, the control panel proposes a zone ID for the area where the unit is positioned. Select another zone with the “+” / “-” buttons or confirm the proposal pressing the “**MODE**” central button.



- The probe affiliation is completed; the probe display shows “**CAV**” (flashing): now it is possible to remove the probe affiliation cable and board; close the rear cover and remove the cable from the panel.



! CAUTION!: during affiliation batteries usage is significant. Do not keep the control panel connected to the power board by means of cable for a long time.

! IMPORTANT!: once the affiliation procedure is over, and until full functionality of all the units in the network is achieved, the display shows “ERR01”.

MAIN SETTING MENU

The setting menu enables to set:

- Timer
- Clock
- Zone management

Pressing for 5 seconds the “**M**” button it is possible to access the setting menu.

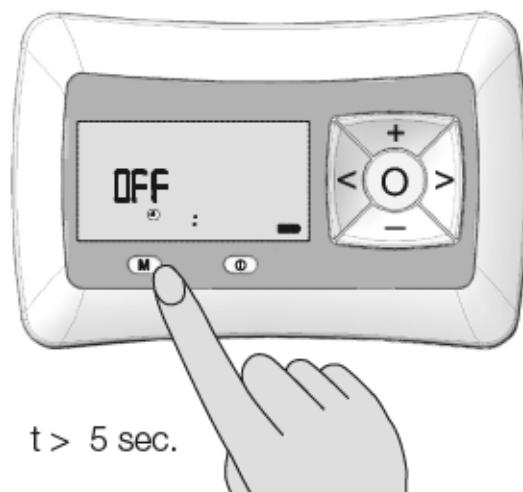
You can move from one setting to another pressing the “**M**” button.

TIMER

When the system is switched on for the first time, the timer is set to “**OFF**”.

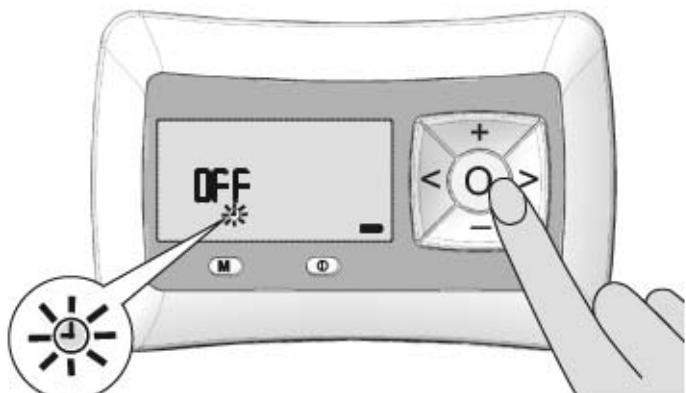
- Access the menu pressing for 5 seconds the “**M**” button.

The display shows:



- Press once the “**MODE**” central button. The Timer symbol flashes.

The display shows:

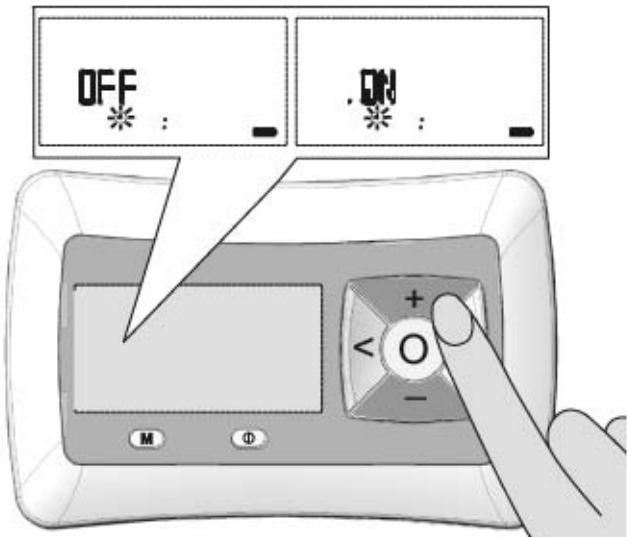


- By means of the “+” / “-” buttons, select whether to enable (“**ON**”) or disable (“**OFF**”) the function.

- Once performed the selection, press the “**MODE**” central button to confirm.

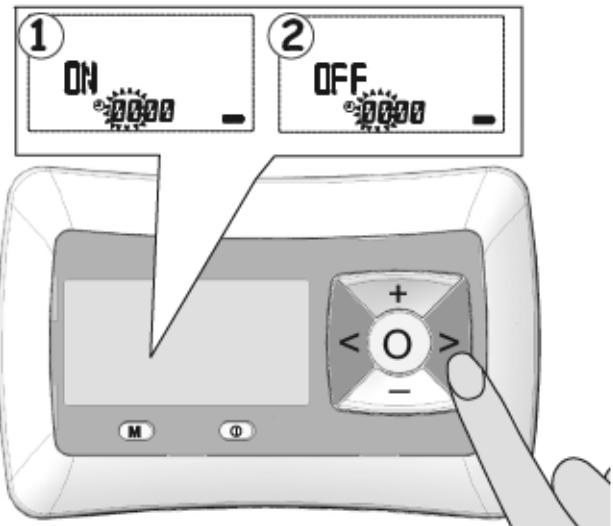
If you set “**OFF**”, after confirmation you return to the standard (main) display.

If you set “**ON**”, after confirmation, you can set the automatic switch on and switch off time (see below).



The panel proposes the menu timer setting “ON” (1).

- Use the “<” and “>” buttons to move from hours to minutes.
- Use the “+” / “-” buttons to increase or decrease hours/minutes.
- Press the “MODE” central button to confirm and go to the automatic switch “OFF” time (2).
- When the setting is over, confirm again with the “MODE” central button to return to the main screen.



Clock

Clock setting is required when:

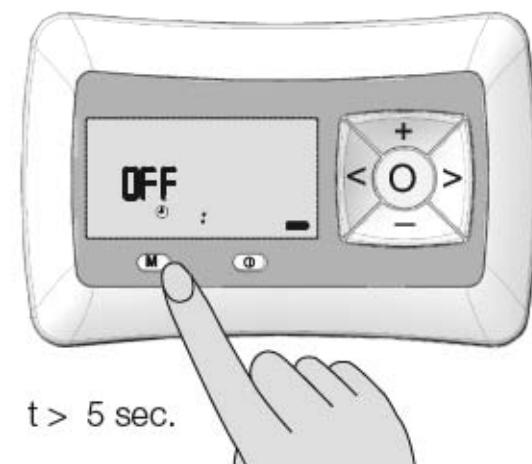
- The control is brand new (blank)
- Batteries have been replaced.



Clock format is 24 hours; do not forget to change the time according to standard/daylight saving time..

- Access the menu pressing for 5 seconds the “M” button.

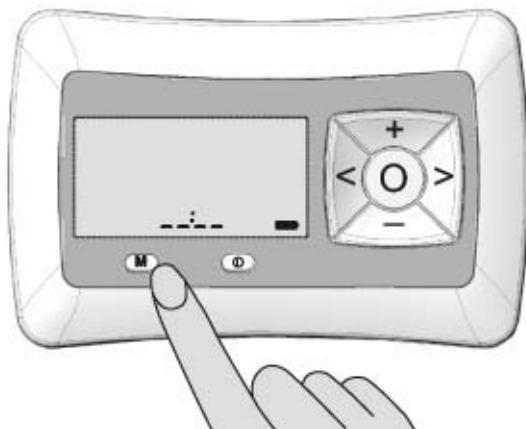
The display shows:



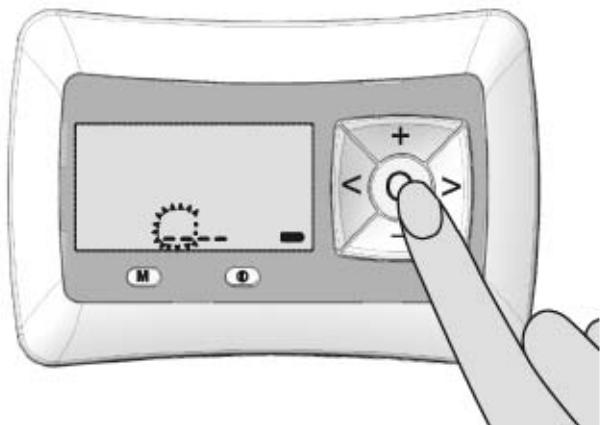
$t > 5 \text{ sec.}$

- A further pressure of the “M” menu button, enables to access the time setting menu.

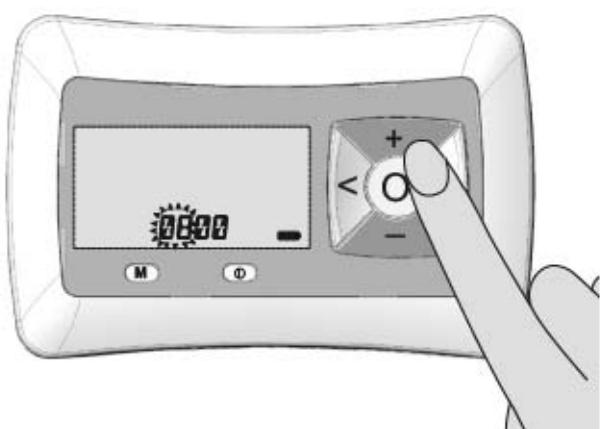
The display shows:



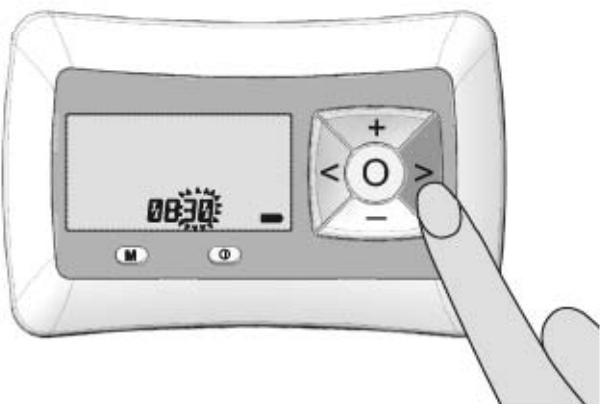
- Press the “**MODE**” central button to access the current time setting: the hour ID flashes.



- Use the “+” and “-” buttons to select the current hour.



- Pressing the “>” button enables to access the minutes.
- Use the “+” and “-” buttons to select the current minutes.
- When the operation is over, press the “**MODE**” central button.

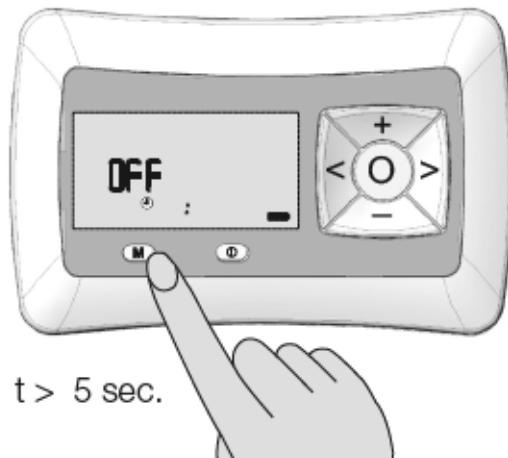


Zone setting

This menu enables to create different settings based on zones. We recommend to use this function after installing probes.

- Access the menu pressing for 5 seconds the “M” button.

The display shows:

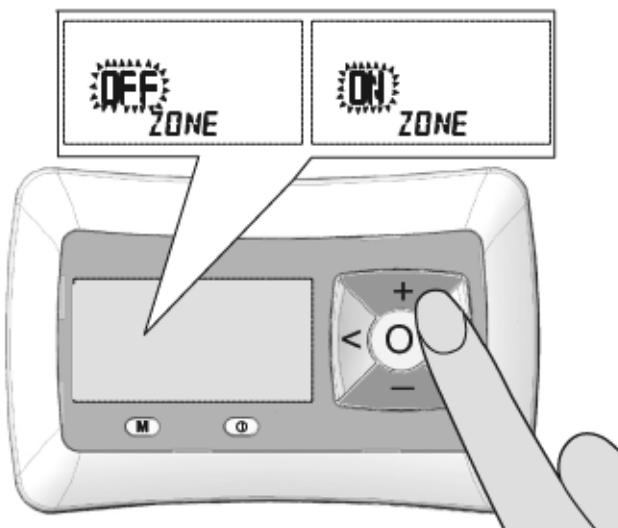


- Use the “M” button to reach the “ZONE” activation menu; the display shows the current state of the menu, flashing.

Default setting “OFF”.



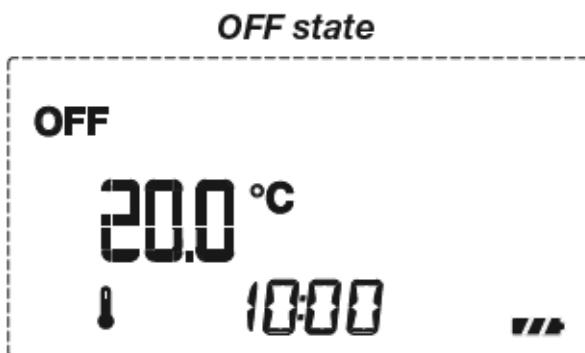
- Use the “+” / “-” buttons to enable/disable the function and confirm with the “MODE” central button.



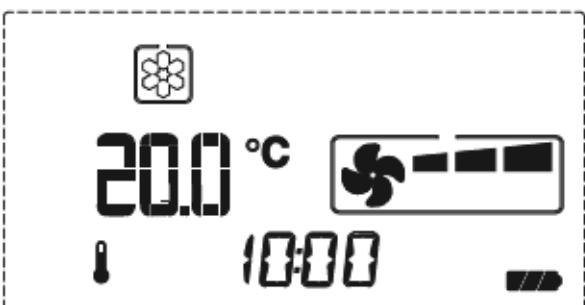
Operation

Switch on and switch off

- To switch on and off the system press the “ON”/ “OFF” on the control panel.
The display shows:



- When switching from “OFF” to “ON”, the display shows the functions set before the last switch off of the system.

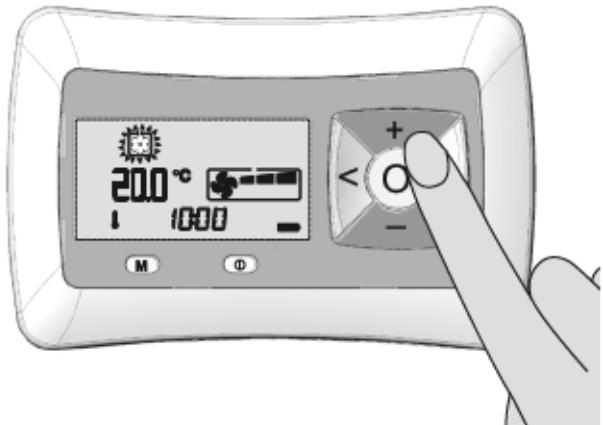
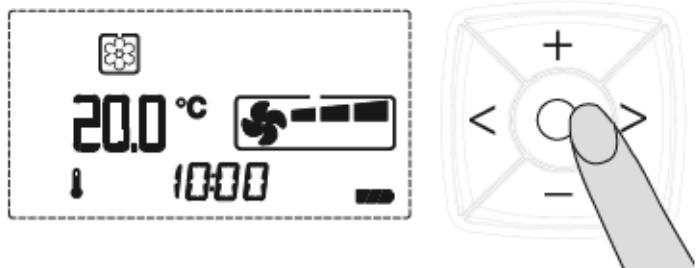


Selection of the operating mode

Three different operating modes can be set:

- COOLING
- HEATING
- AUTOMATIC

- To access the menu, press once the “MODE” central button; the current mode flashes on the top of the display.
- Using the “+” / “-” buttons select a mode and confirm it by pressing twice the “MODE” central button.



! IMPORTANT!: the box on the symbol shows that the mode is operative (the system is heating or cooling).

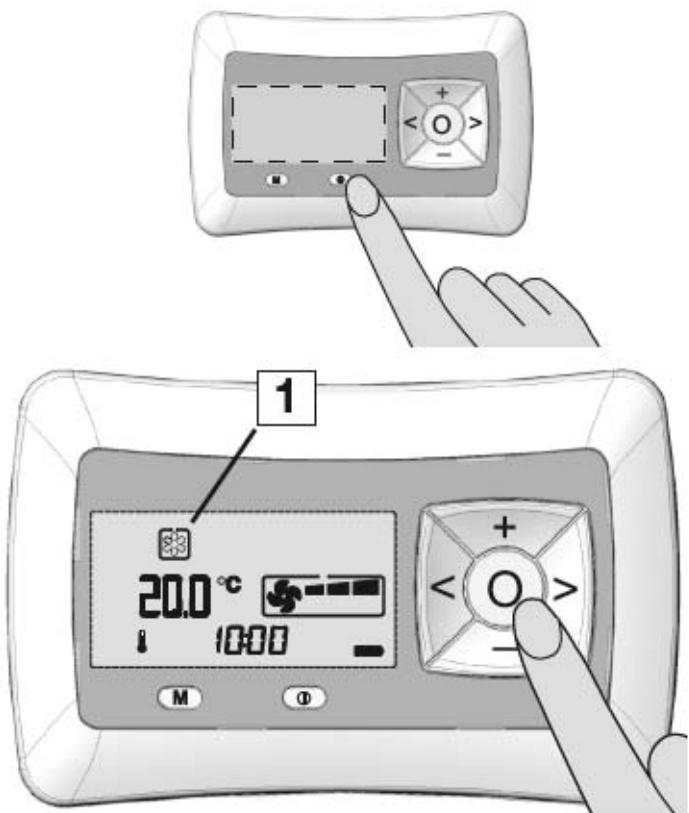
! CAUTION!: the operating mode of the whole system is the same, regardless of the zones.

Cooling mode (summer)

- Press the “ON”/ “OFF” button : switch on / switch off.
- To select the **Cooling** mode, press the “MODE” central button. On the top of the display, one of these symbols is shown:

1		cooling mode
2		heating mode
3		automatic mode

- Using the “+” / “-” buttons select the “1” symbol and confirm pressing twice the “MODE” central button.

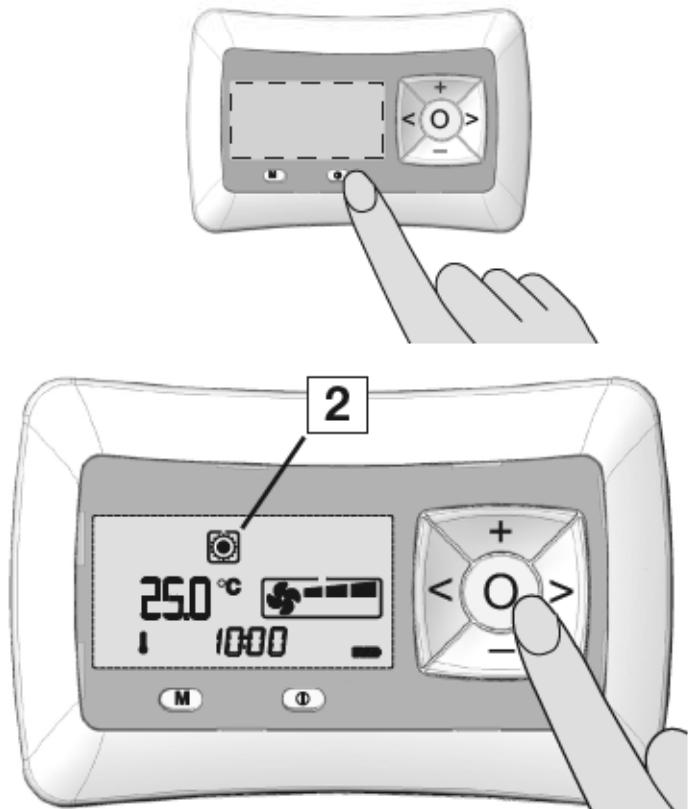


Heating mode (winter)

- Press the “ON”/ “OFF” button : switch on / switch off.
- To select the **Heating** mode, press the “MODE” central button. On the top of the display, one of these symbols is shown:

1		cooling mode
2		heating mode
3		automatic mode

- Using the “+” / “-” buttons select the “2” symbol and confirm pressing twice the “MODE” central button.

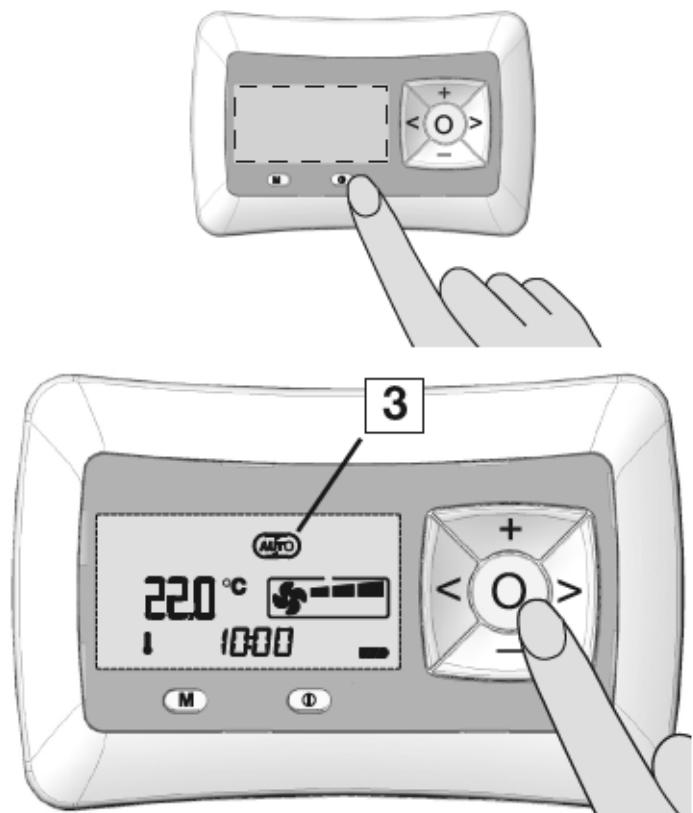


Automatic operating mode (for 4-tube systems only)

- Press the “ON”/ “OFF” button : switch on / switch off.
- To select the **Automatic** mode, press the “**MODE**” central button. On the top of the display, one of these symbols is shown:

1		cooling mode
2		heating mode
3		automatic mode

- Using the “+” / “-” buttons select the “**3**” symbol and confirm pressing twice the “**MODE**” central button.



- ⚠** During automatic switch the panel automatically changes the operating mode from cooling to heating or viceversa, displaying “**AUTO**” as well as the symbol of the selected mode (“**1**”/ “**2**”).
- ⚠** The selection of the mode in automatic operation is performed by the control device according to the difference between the environment temperature and the target temperature.

Additional functions for electric resistances control or electrostatic filter

Besides the standard functions above, it is possible to enable two different devices: electric resistance and electrostatic filter.

⚠ **IMPORTANT!**: to enable/disable these devices, use the DIP Switches on the power board and on at least one fan coil unit (if any) of the system.

⚠ **CAUTION!**: these devices cannot coexist on the same machine; a function excludes the other one. They cannot be enabled at the same time.

Electric resistance

The electric resistance can operate as main or supplementary heating element. The type of operation must be selected by DIP Switches as described before in the chapter 'Setting of the functions (Power unit)'.

"Main" resistance

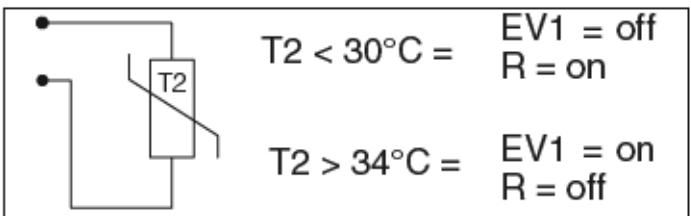
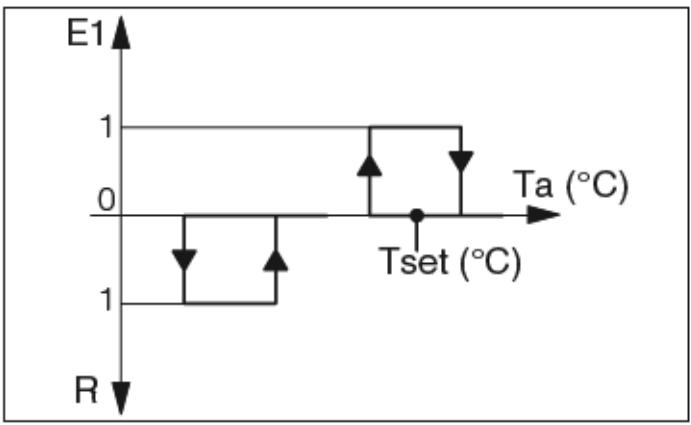
The resistance is used as single heating element and replaces hot water.

"Supplementary" resistance

The resistance is used as integration to hot water as follows:

- Integration to hot water depending on environment temperature

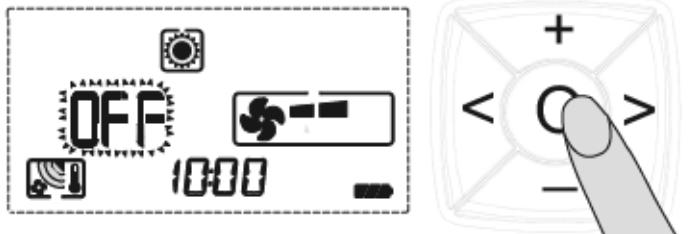
- Valve / resistance switch depending on water temperature probe T2 (only with T2 present).



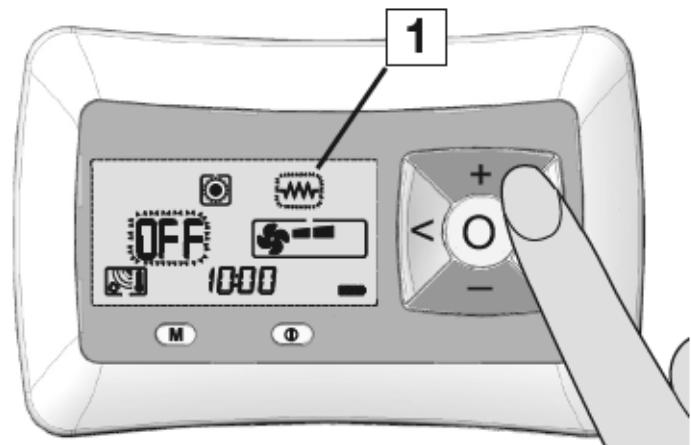
Activation of supplementary electric resistance

Once the resistance is set, it is necessary to enable it from the control panel according to the following procedure:

- With the system ON, press the "**MODE**" central button. On the top of the display the current operation mode flashes; press again the "**MODE**" central button.



- The display shows that the resistance is enabled with the "1" symbol and the current state of the menu, both flashing.
- Use the "+" / "-" buttons to enable/disable the function; to confirm and exit the menu, press twice the "**MODE**" central button.

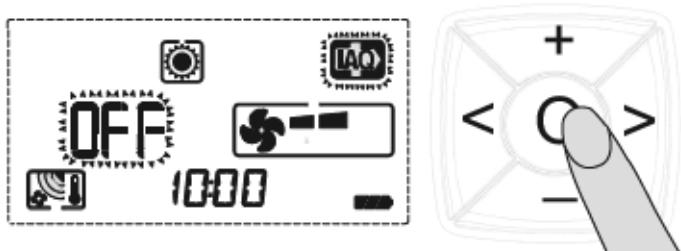


IMPORTANT!: the operation with "main" resistance does not require activation.

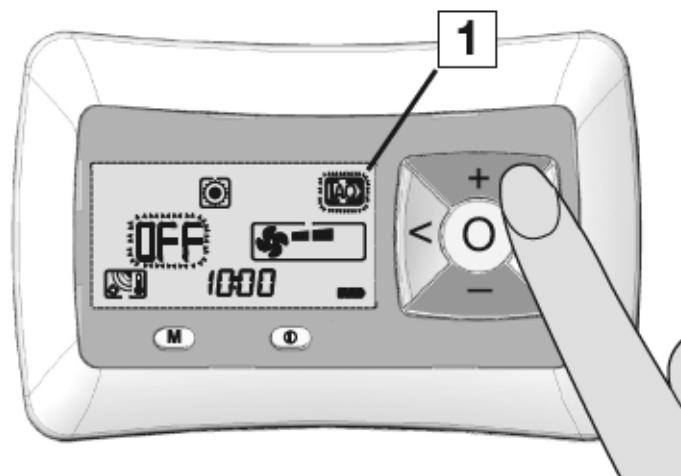
Electrostatic filter

Once the filter function is set and enabled by the DIP Switches, it is necessary to activate it from the control panel, according to the following procedure:

- With the system ON, press the “**MODE**” central button. On the top of the display the current operation mode flashes; press again the “**MODE**” central button.



- The display shows that the filter is enabled with the “**1**” symbol and the current state of the menu, both flashing.
- Use the “+” / “-” buttons to enable/disable the function; to confirm and exit the menu, press twice the “**MODE**” central button.



Setting of the target temperature

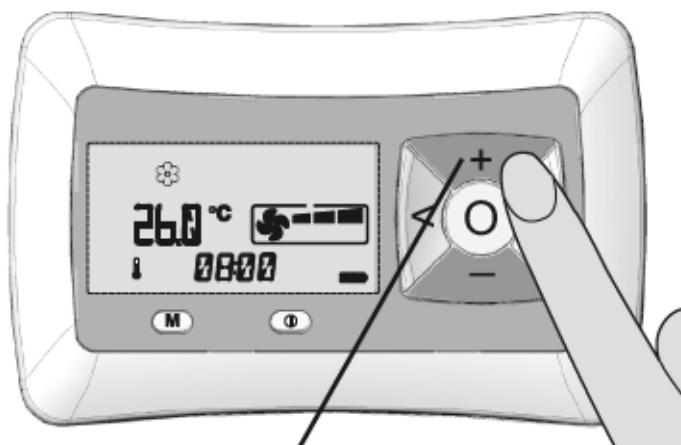
- To set the target temperature, press the “+” / “-” buttons once or several times until the desired temperature is shown.

! The allowed values are 9°C to 34°C.

! Each time the “+” / “-” buttons are pressed, the temperature changes by 0.1 °C.

! The temperature shown on the display during operation is not the target temperature, it is the environment temperature measured by the control panel.

The target temperature is displayed only during the setting operation.

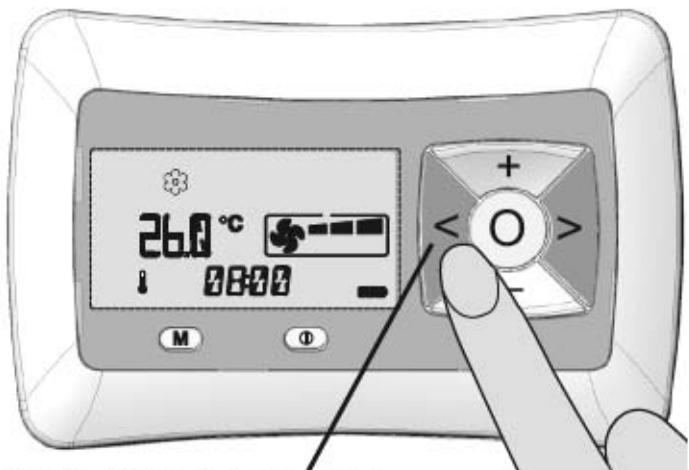


“+” to increase temperature
“-” to decrease temperature

Setting of the fan speed

- Set the required fan speed with the "<" and ">" buttons. The available options are:

	low
	medium
	high
	automatic



">" to increase fan speed
"<" to decrease fan speed

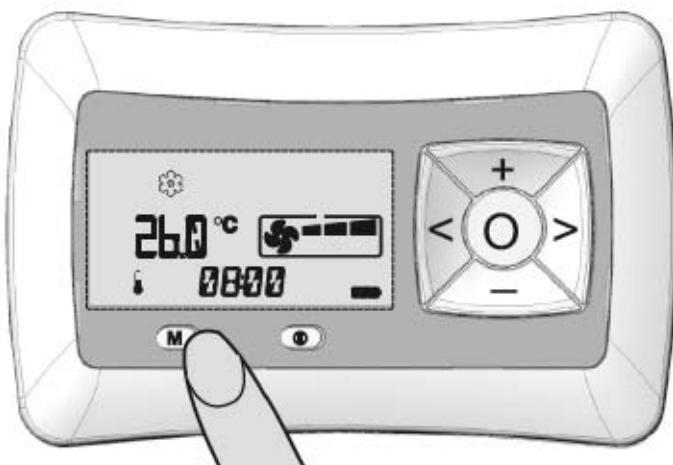


The automatic mode is controlled automatically depending on the difference between the environment temperature and the target temperature.

Operation with active zones

When the zone operative mode is “**active**” it is possible to set a different temperature and fan speed for each zone.

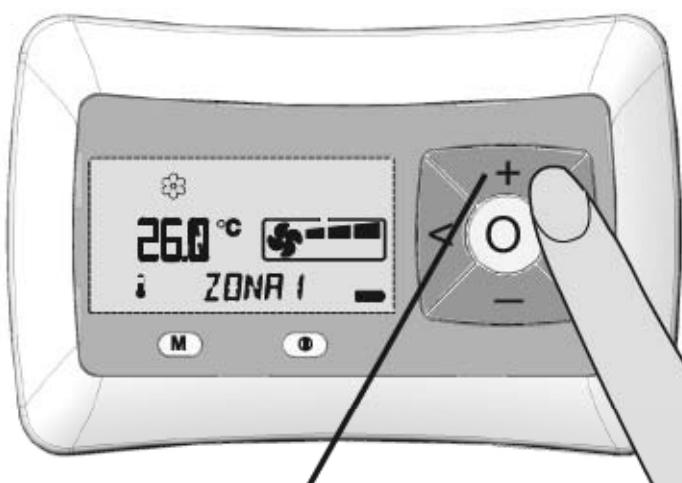
- With the system ON, press the “M” menu button.



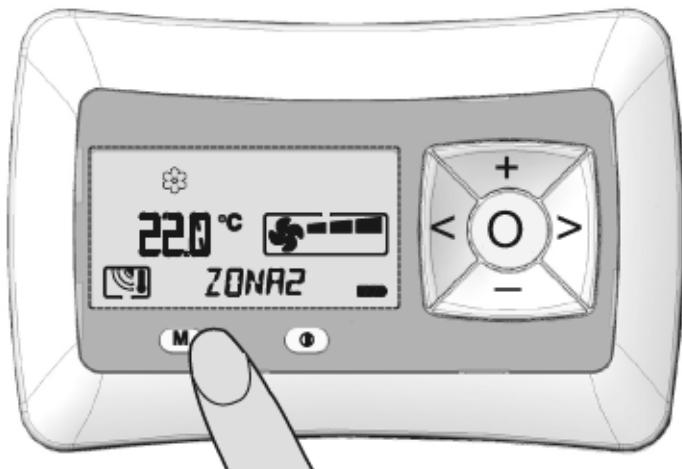
- After 10 seconds the display shows the ID of the target zone and the temperature of the control panel.



- Use the “+” / “-” buttons to increase or decrease the value of the target temperature and the “>” and “<” buttons to increase or decrease the fan speed of the zone.



- To access a different zone, operate the “M” menu button until you access a new zone, whose parameters can be set as described above.



⚠️ IMPORTANT!: the operative mode is the same for the entire system, regardless of the zone.

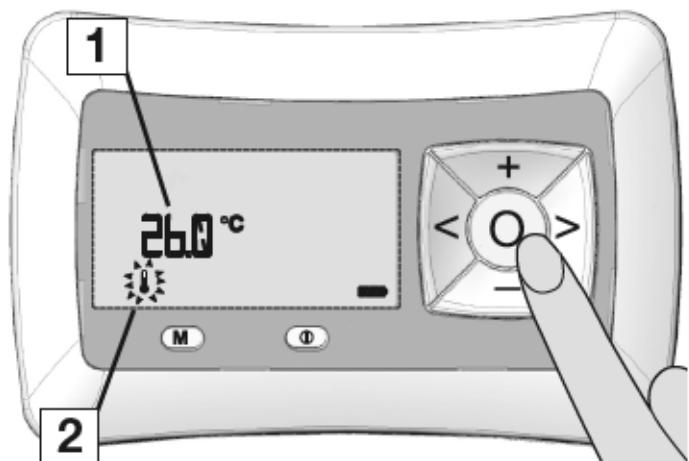
Display of network units

When the settings are performed and the system is operating, it is possible to view the operating parameters of each unit of the network.

- Access this menu pressing several times the “**MODE**” central button until the symbol of the unit flashes.

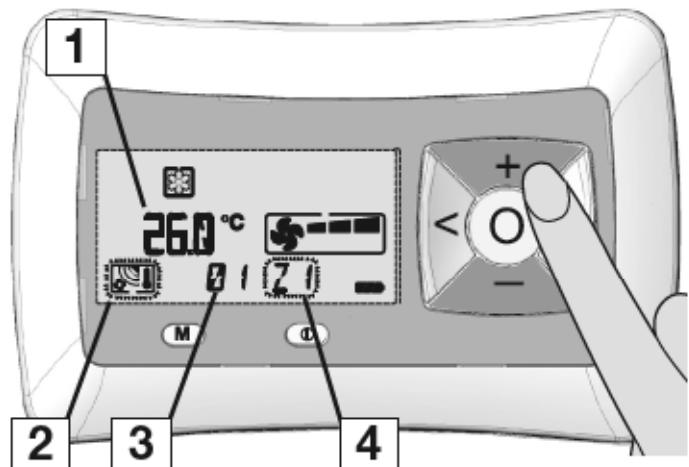
The first screen concerns the control panel; the display shows:

1	measured temperature
2	type of unit



- To view the operating parameters of the other units, use the “+” / “-” buttons to select the unit; for a fan coil unit, the display shows:

1	measured temperature
2	type of unit
3	unit ID
4	zone ID



⚠️ IMPORTANT!: during display, no fan, mode, and target temperature setting can be modified.

⚠️ IMPORTANT!: if the selected device is non sensed by any other device of the network for a time, it will be deemed temporarily unreachable, its data will no longer be shown. Three dots will replace the temperature indications.

⚠️ CAUTION!: once the operating parameters have been viewed, it is important to return to the control panel view.

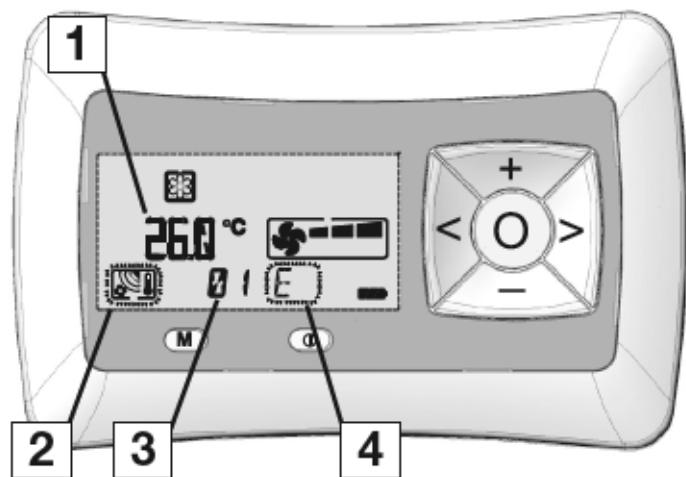
- To exit the menu, press the “**MODE**” central button.

Display with ECONOMY on

When the ECONOMY function is active on a fan coil unit, the control panel display shows the ID of the machine (steady), the zone ID flashes twice and the character “E” flashes once.

- The display shows:

1	measured temperature
2	type of unit
3	unit ID
4	zone ID / E = Economy function



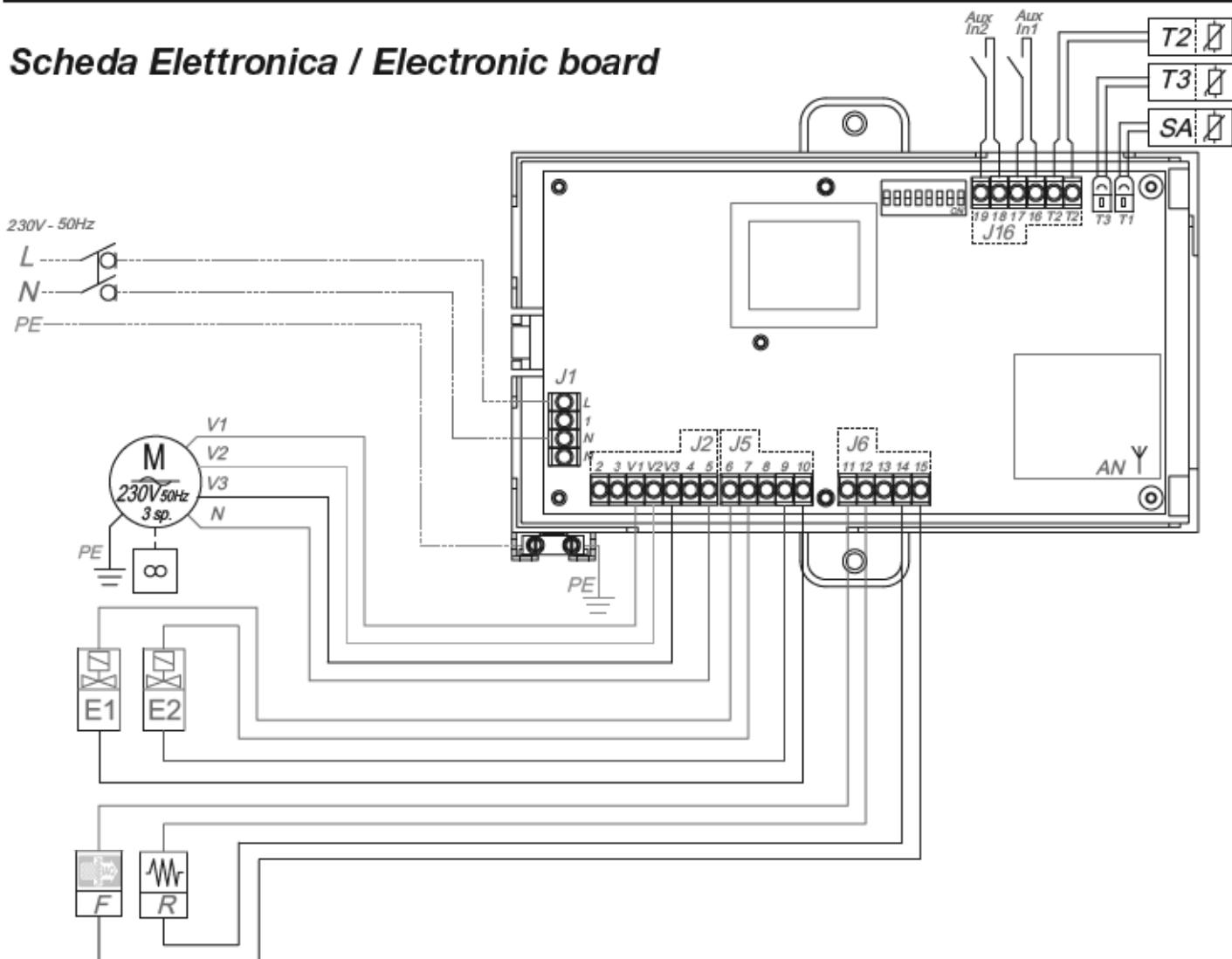
TROUBLESHOOTING

Here is a list of all types of errors:

Error	Description	Cause / Note	Possible solution
ERR01	Flashes, indicating that at least one unit or probe in the network does not communicate.	Unit temporarily isolated in radiofrequency. Not powered unit / unit failure. Exhausted batteries (only for probes).	Power on the unit. Replace the batteries.
ERR02	Affiliation / disaffiliation error. The connected device does not answer.	Cable connected to the wrong port (in case of disaffiliation/ affiliation of power unit). The device to be affiliated/disaffiliated is switched off.	Check for connection/ Switch on the device.
ERR03	Affiliation error.	The connected device has already been affiliated to the network.	Affiliate another unit.
ERR04	Affiliation / disaffiliation error. Disconnected cable.	Cable not connected between control panel and unit. Check for cable connection.	Connect the control panel to the unit to be affiliated / disaffiliated.
ERR05	Device belonging to another network.	It occurs when trying to view the static features (ID + zone) of the unit connected by cable.	
ERR06	Blank device (never affiliated to a network).	It may occur when trying to disaffiliate an unit connected by cable (direct system).	
ERR07	Partial communication failure.	During the procedure there was an error due to non correct reception of a message; so the operation was not successful.	Repeat the procedure. Call the service centre.
ERR08	No device connected to the network.	The control panel is brand new (blank - not yet affiliated).	

SCHEMI ELETTRICI / WIRING DIAGRAMS

Scheda Elettronica / Electronic board



Legenda

M	Moto-ventilatore
MCF1	Morsettiera Alimentazione Resistenza
B1	Termostato di Sicurezza
EHB	Scheda di Controllo Resistenze Elettriche
SEC1	Scheda Elettronica Cassette
T	Autotrasformatore
C	Condensatore
SB	Sensore Livello Condensa
P	Pompa Evacuazione Condensa
S1	Contatto Allarme Condensa
SA (T1)	Sonda Aria
T2	Sonda temperatura acqua (presente)
☒	Sonda temperatura acqua (assente)
T3	Sonda tempeatura minima TME
E	Valvola acqua (impianto 2 tubi)
E1	Valvola acqua calda
E2	Valvola acqua fredda
R	Resistenza elettrica
F	Filtro elettrostatico
Q1	Interruttore di manovra sezionatore
Aux1	Contatto ausiliario per Cambio stagionale remoto
Aux2	Contatto ausiliario per Economy / On-Off Remoto
AN	Antenna

Legend

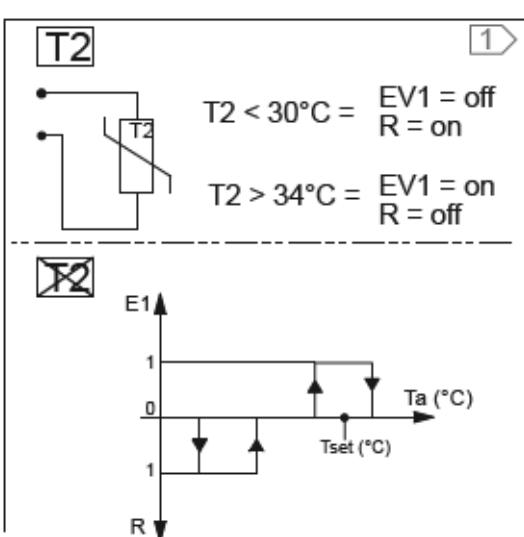
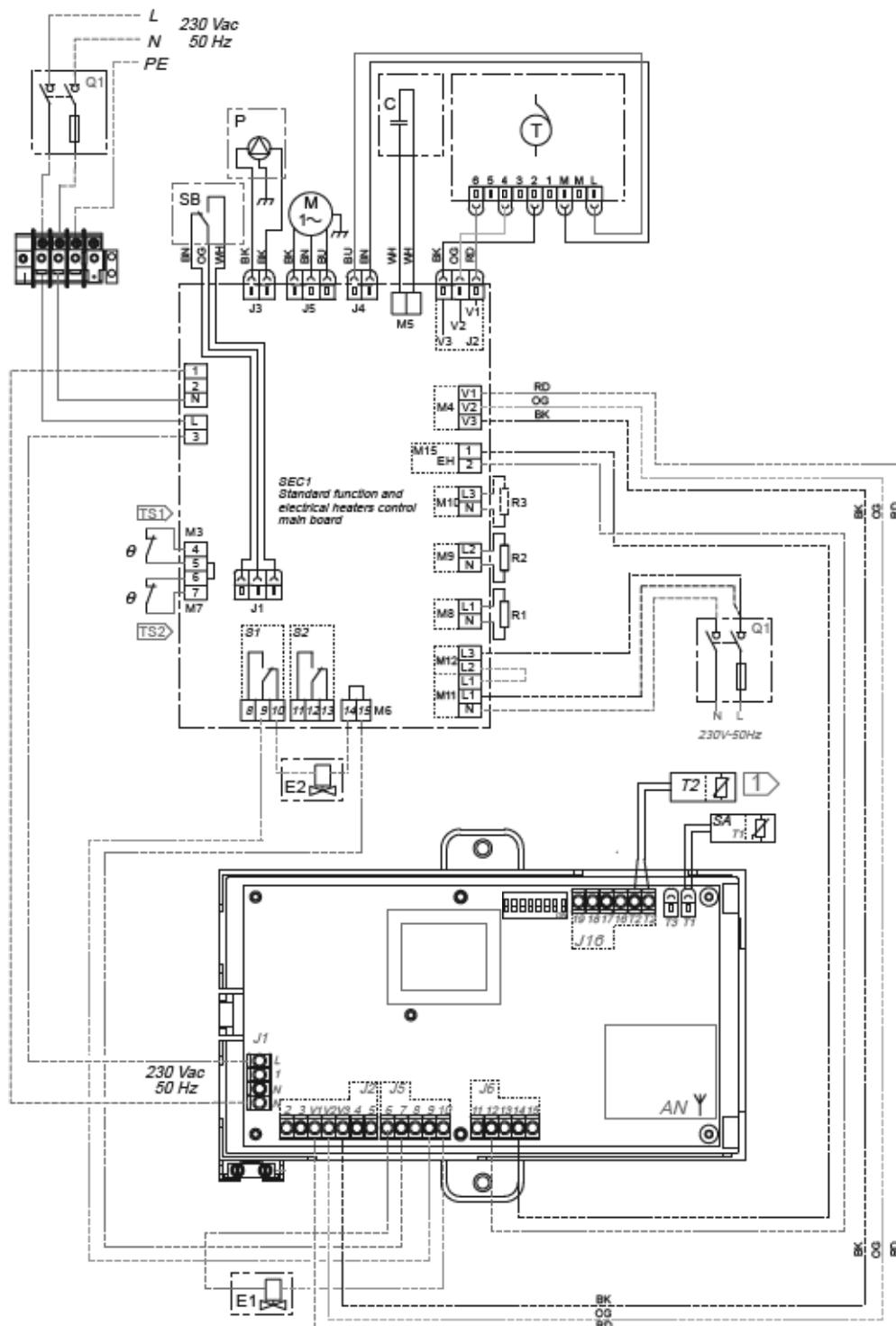
M	Motor-Fan
MCF1	Resistance supply terminal board
B1	Safety Thermostat
EHB	Electric resistance control board
SEC1	Electronic board case
T	Autotransformer
C	Condenser
SB	Condensation Level Sensor
P	Condensation Discharge Pump
S1	Condensation Alarm Contact
SA (T1)	Air Probe
T2	Water Temperature Probe (present)
☒	Water Temperature Probe (not present)
T3	TME Low temperature cut-out
E	Water Valve (impianto 2 tubi)
E1	Hot Water Valve
E2	Cold Water Valve
R	Electric Resistance
F	Electrostatic Filter
Q1	Isolator Switch
Aux1	Auxiliary contact for remote season change
Aux2	Auxiliary contact for remote Economy / On-Off
AN	Antenna

Elenco descrittivo schemi elettrici

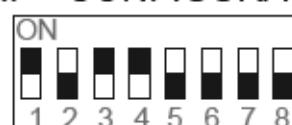
DISEGNO	DESCRIZIONE COMPLETA
CASSETTE	
SE-0055	Impianto 4 tubi - 2 valvole - Resistenza Integrazione
SE-0056	Imp. 4 tubi - 2 valvole - Resistenza Integrazione - Change Over impianto
SE-0057	Impianto 4 tubi - 2 valvole
SE-0058	Impianto 4 tubi - 2 valvole - Change Over Impianto
SE-0059	Impianto 4 tubi - 1 valvola (E2 freddo) - Resistenza Principale
SE-0060	Imp. 4 tubi - 1 valvola (E2 freddo) - Resistenza Principale - Change Over impianto
SE-0061	Impianto 4 tubi - 1 valvola (E2 freddo) - SOLO FREDDO
SE-0062	Impianto 4 tubi - 1 valvola (E1 caldo) - SOLO CALDO
SE-0063	Impianto 2 tubi - 1 valvola (E1 o E2)
SE-0064	Impianto 2 tubi - 1 valvola (E1 o E2) Change Over con T2
SE-0065	Impianto 2 tubi - 1 valvola (E1 o E2) Change Over con AUX-In1
SE-0066	Impianto 2 tubi - 1 valvola (E1 o E2) - Resistenza Integrazione
SE-0067	Imp.2 tubi - 1 valvola - Resistenza Integrazione - Change Over impianto
SE-0068	Impianto 2 tubi - 1 valvola - Resistenza Principale
SE-0069	Impianto 2 tubi - 1 valvola - Resistenza Principale - Change Over impianto
VENTILCONVETTORI	
SE-0070	Impianto 4 tubi - 2 valvole - Resistenza Integrazione
SE-0071	Imp. 4 tubi - 2 valvole - Resistenza Integrazione - Change Over impianto
SE-0072	Impianto 4 tubi - 2 valvole
SE-0073	Impianto 4 tubi - 2 valvole - Change Over Impianto
SE-0074	Impianto 4 tubi - 1 valvola (E2 freddo) - Resistenza Principale
SE-0075	Imp.4 tubi - 1 valvola (E2 freddo) - Resistenza Principale - Change Over impianto
SE-0076	Impianto 4 tubi - 1 valvola (E2 freddo) - SOLO FREDDO
SE-0077	Impianto 4 tubi - 1 valvola (E1 caldo) - SOLO CALDO
SE-0078	Impianto 2 tubi - 1 valvola (E1 o E2)
SE-0079	Impianto 2 tubi - 1 valvola (E1 o E2) Change Over con T2
SE-0080	Impianto 2 tubi - 1 valvola (E1 o E2) Change Over con AUX-In1
SE-0081	Impianto 2 tubi - 1 valvola (E1 o E2) - Resistenza Integrazione
SE-0082	Imp. 2 tubi - 1 valvola - Resistenza Integrazione - Change Over impianto
SE-0083	Impianto 2 tubi - 1 valvola - Resistenza Principale
SE-0084	Imp. 2 tubi - 1 valvola - Resistenza Principale - Change Over impianto
SE-0089	Impianto 4 tubi - 2 valvole - Filtro Elettrostatico
SE-0090	Impianto 4 tubi - 2 valvole - Filtro Elettrostatico - Change Over Impianto
SE-0091	Impianto 2 tubi - 1 valvola (E1 o E2) - Filtro Elettrostatico
SE-0092	Imp. 2 tubi - 1 valvola (E1 o E2) - Filtro Elettrostatico - Change Over Impianto

List of wiring diagram with description

DRAWING	FULL DESCRIPTION
CASSETTE	
SE-0055	4-tube system - 2 valves - Integration resistance
SE-0056	4-tube system - 2 valves - Integration resistance -Equipment
SE-0057	4-tube system - 2 valves
SE-0058	4-tube system - 2 valves - Equipment Change Over
SE-0059	4-tube system - 1 valve (E2 cold) - Main Resistance
SE-0060	4-tube system - 1 valve (E2 cold) - Main Resistance - Equipment Change Over
SE-0061	4-tube system - 1 valve (E2 cold) - COLD ONLY
SE-0062	4-tube system - 1 valve (E1 warm) - WARM ONLY
SE-0063	2-tube system - 1 valve (E1 or E2)
SE-0064	2-tube system - 1 valve (E1 or E2) Change Over with T2
SE-0065	2-tube system - 1 valve (E1 or E2) Change Over with AUX-In1
SE-0066	2-tube system - 1 valve (E1 or E2) - Integration resistance
SE-0067	2-tube system - 1 valve - Integration resistance - Equipment Change Over
SE-0068	2-tube system - 1 valve - Main Resistance
SE-0069	2-tube system - 1 valve - Main Resistance - Equipment Change Over
FAN COIL	
SE-0070	4-tube system - 2 valves - Integration Resistance
SE-0071	4-tube system - 2 valves - Integration Resistance - Equipment Change Over
SE-0072	4-tube system - 2 valves
SE-0073	4-tube system - 2 valves - Equipment Change Over
SE-0074	4-tube system - 1 valve (E2 cold) - Main Resistance
SE-0075	4-tube system - 1 valve (E2 cold) - Main Resistance - Equipment Change Over
SE-0076	4-tube system - 1 valve (E2 cold) - COLD ONLY
SE-0077	4-tube system - 1 valve (E1 warm) - WARM ONLY
SE-0078	2-tube system - 1 valve (E1 or E2)
SE-0079	2-tube system - 1 valve (E1 or E2) Change Over with T2
SE-0080	2-tube system - 1 valve (E1 or E2) Change Over with AUX-In1
SE-0081	2-tube system - 1 valve (E1 or E2) - Integration Resistance
SE-0082	2-tube system - 1 valve - Integration Resistance - Equipment Change Over
SE-0083	2-tube system - 1 valve - Main Resistance
SE-0084	2-tube system - 1 valve - Main Resistance - Equipment Change Over
SE-0089	4-tube system - 2 valves - Electrostatic Filter
SE-0090	4-tube system - 2 valves - Electrostatic Filter - Equipment Change Over
SE-0091	2-tube system - 1 valve (E1 or E2) - Electrostatic Filter
SE-0092	2-tube system - 1 valve (E1 or E2) - Electrostatic Filter - Equipment Change Over



DIP - CONFIGURATION



- Non puo' ricevere la sonda di minima TME (T3)
- Cannot be connected to TME (T3) low temperature cut-out
- Ne peut pas recevoir le sonde TME (T3)
- Die aufnahme des mindesttemperatur thermostats TME (T3)
- No puede recibir la sonda de temperatura minima TME (T3)
- Minimisonden kann inte monteras TME (T3)

TS1>TS2>

- TERMOSTATO DI SICUREZZA
- SAFETY THERMOSTAT
- THERMOSTAT DE SECURITE
- SICHERHEITSTHERMOSTAT
- TERMOSTATO DE SEGURIDAD
- BÄKERHETSTERMOSTAT

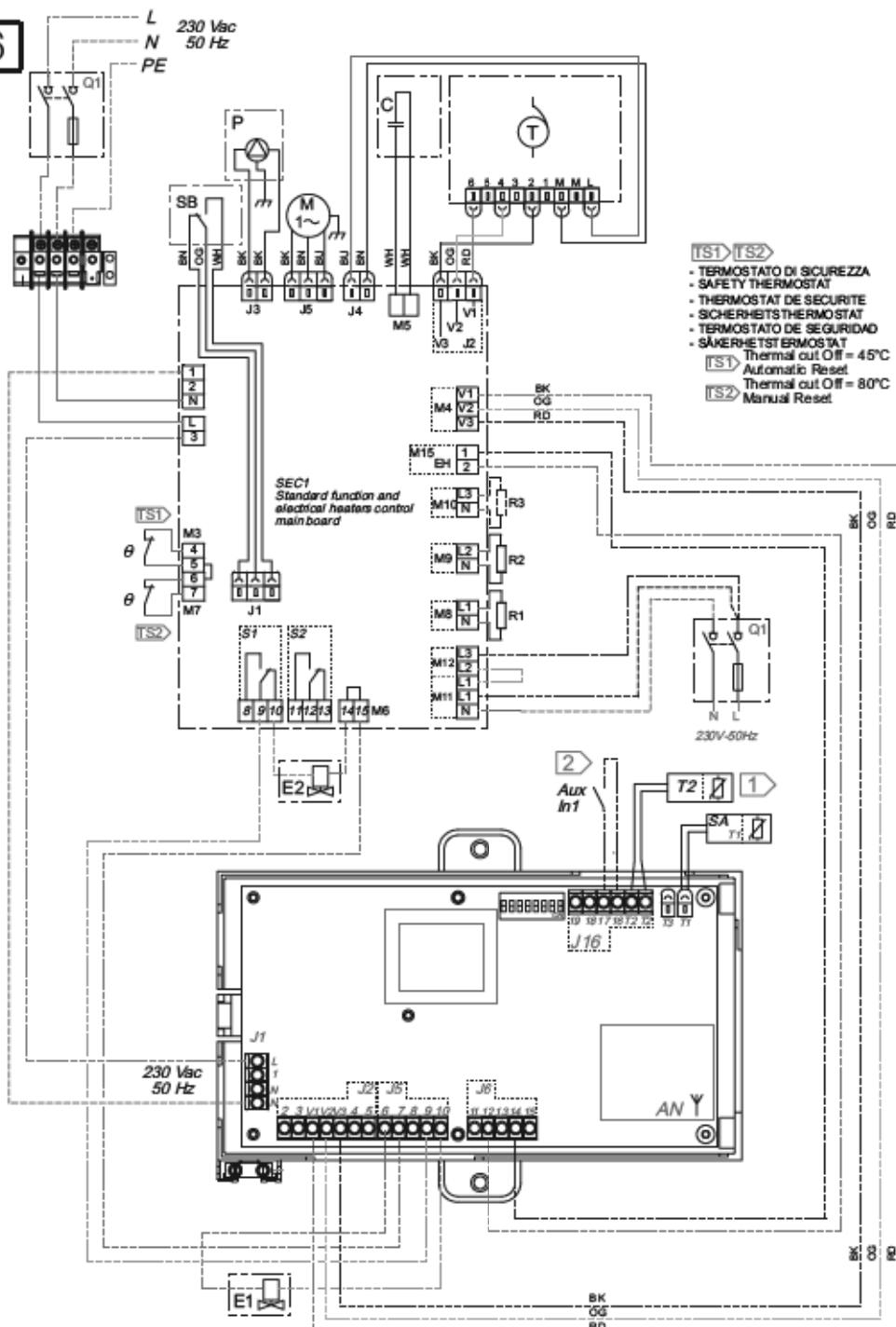
TS1 Thermal cut off = 45°C

TS2 Automatic Reset

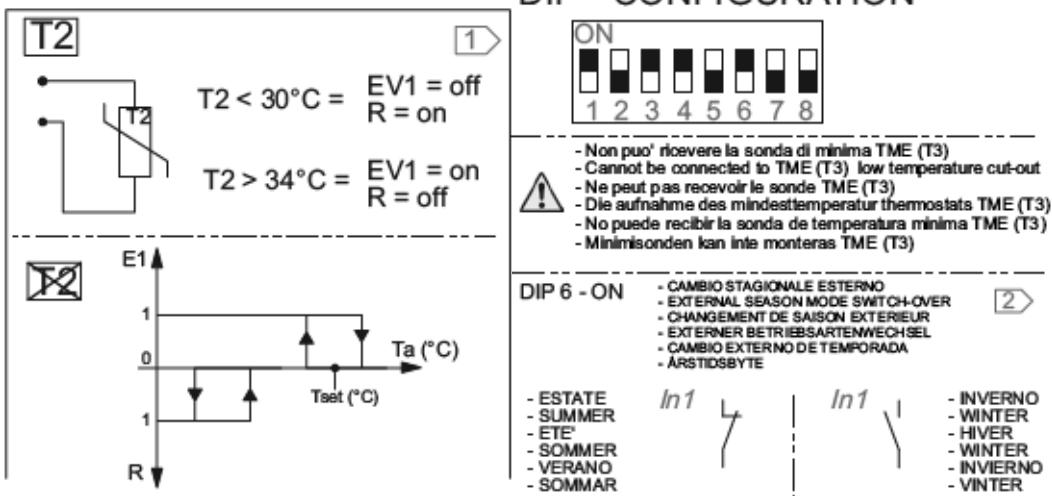
TS2 Thermal cut off = 80°C

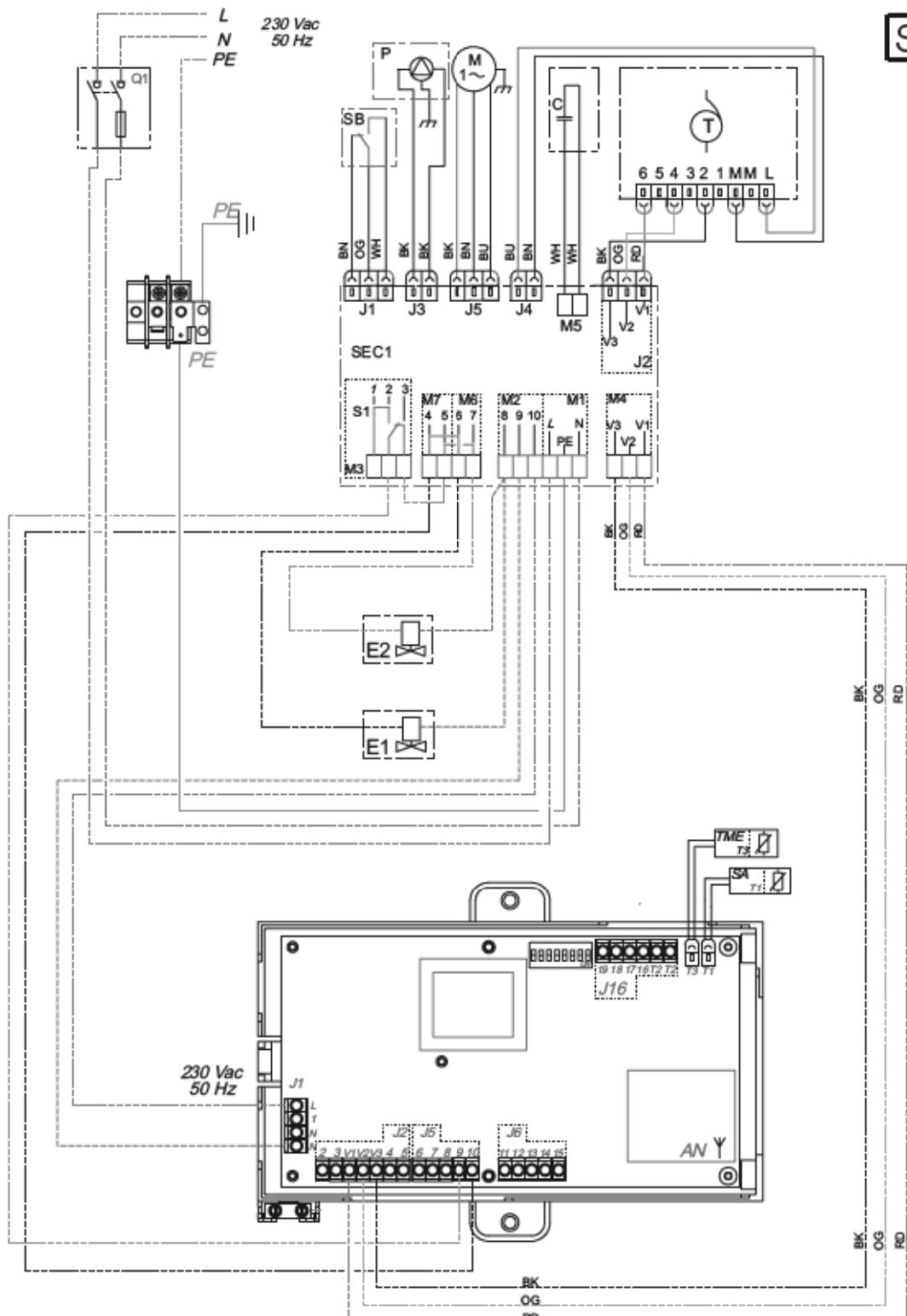
TS2 Manual Reset

SE0056

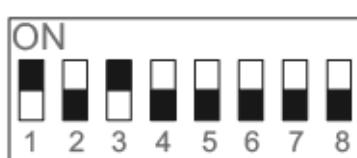


DIP - CONFIGURATION



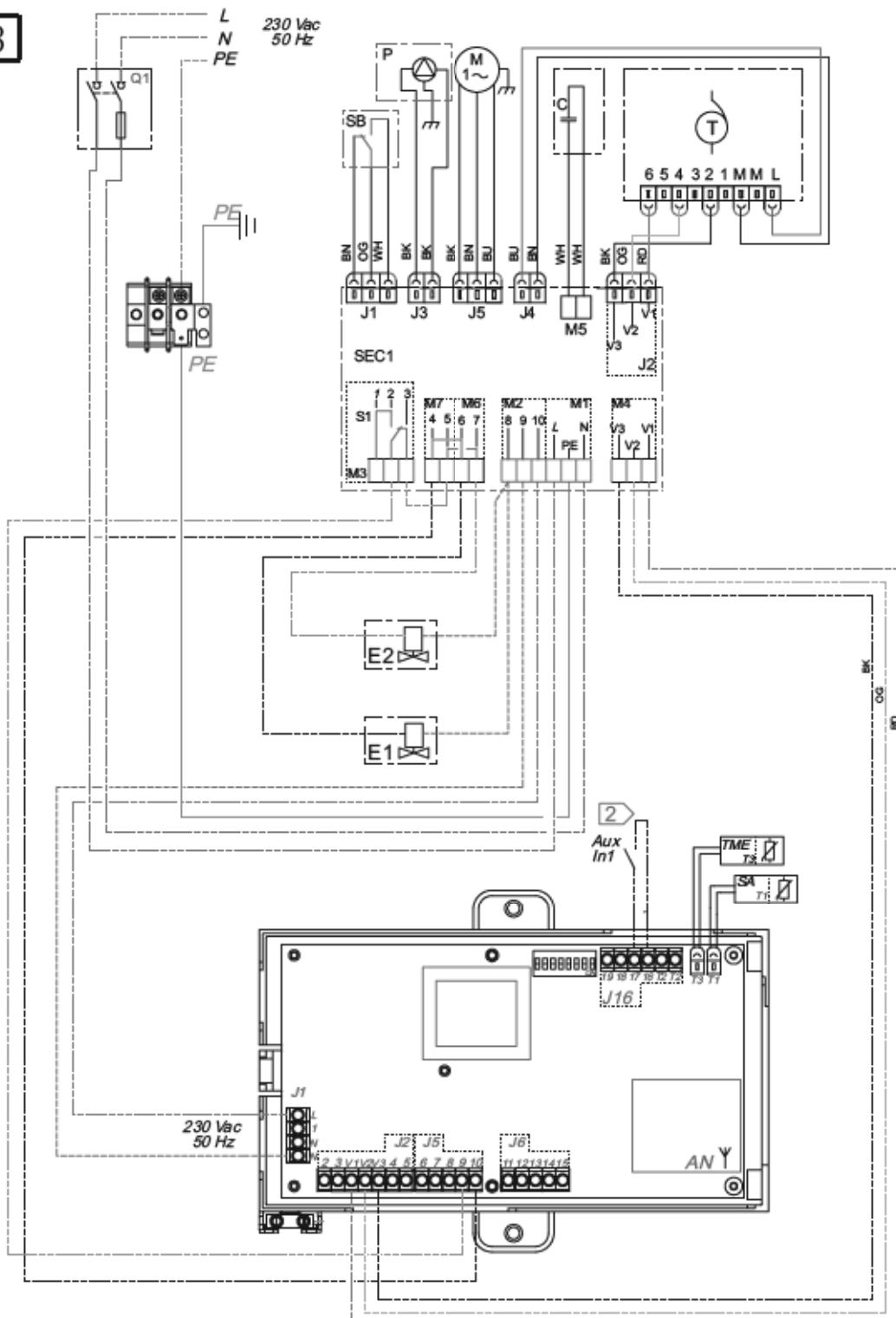


DIP - CONFIGURATION



- Non puo' ricevere la sonda di temperatura T2
- Cannot be connected to T2 temperature cut-out
- Ne peut pas recevoir le sonde T2
- Die aufnahme des temperatur thermostats T2
- No puede recibir la sonda de temperatura T2
- Temperatursonden T2 kan inte monteras

SE0058



- Non puo' ricevere la sonda di temperatura T2
- Cannot be connected to T2 temperature cut-out
- Ne peut pas recevoir le sonde T2
- Die aufnahme des temperatur thermostats T2
- No puede recibir la sonda de temperatura T2
- Temperatursonden T2 kann inte monteras

CAMBIO STAGIONALE ESTERNO
EXTERNAL SEASON MODE SWITCH-OVER
CHANGEMENT DE SAISON EXTERIEUR
EXTERNER BETRIEBSARTENWECHSEL
CAMBIO EXTERNO DE TEMPORADA
ÄRSTIDSSBYT

DIP 6 - ON



- ESTATE
- SUMMER
- ETE'
- SOMMER
- VERANO
- SOMMAR

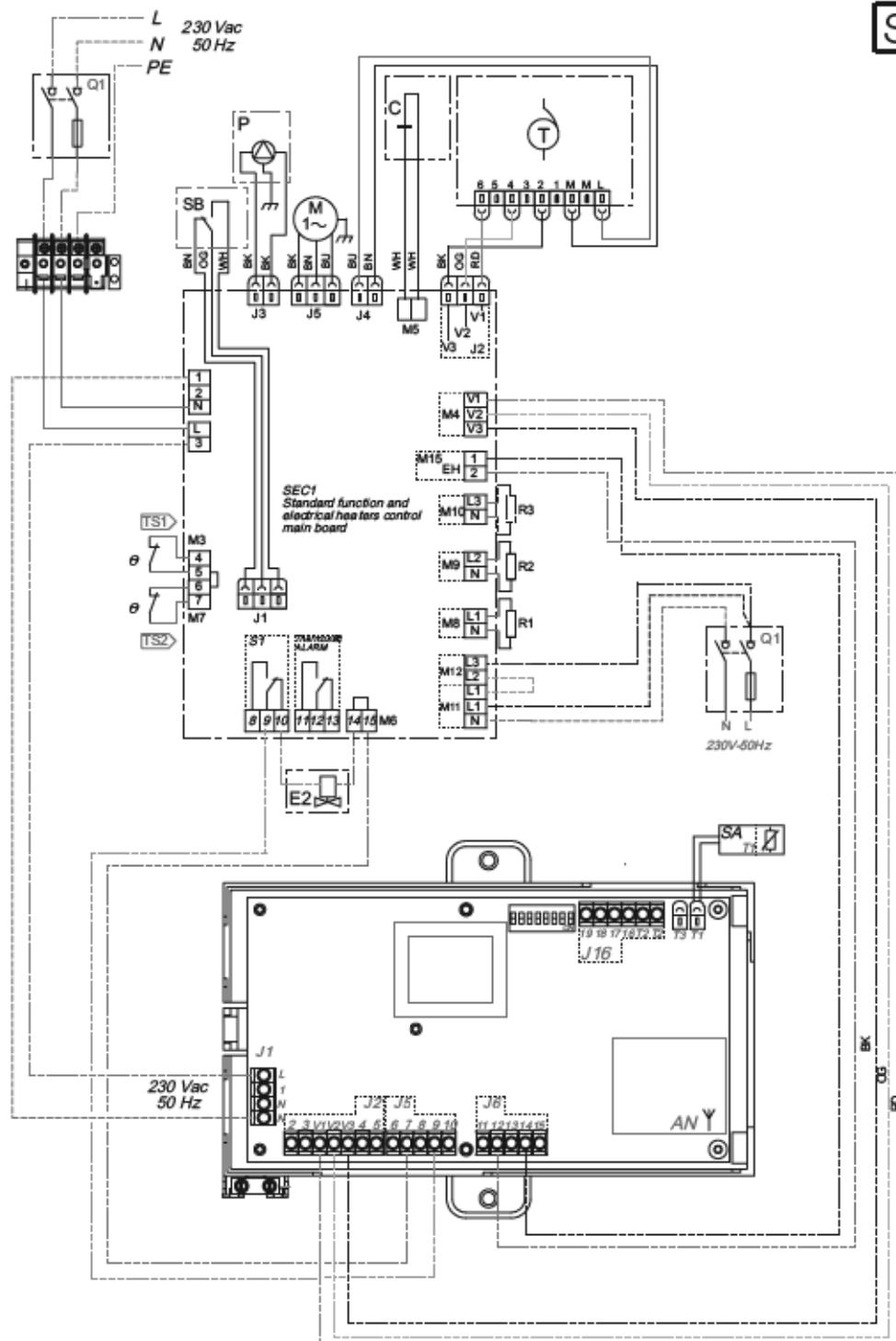
In1

In1

- INVERNO
- WINTER
- HIVER
- WINTER
- INVIERNO
- VINTER

DIP - CONFIGURATION

ON							
1	2	3	4	5	6	7	8



- Non puo' ricevere la sonda di temperatura T2
- Cannot be connected to T2 temperature cut-out
- Ne peut pas recevoir le sonde T2
- Die aufnahme des temperatur thermostats T2
- No puede recibir la sonda de temperatura T2
- Temperatursonden T2 kan inte monteras



- Non puo' ricevere la sonda di minima TME (T3)
- Cannot be connected to TME (T3) low temperature cut-out
- Ne peut pas recevoir le sonde TME (T3)
- Die aufnahme des mindesttemperatur thermostats TME (T3)
- No puede recibir la sonda de temperatura minima TME (T3)
- Minimisonden kan inte monteras TME (T3)



DIP - CONFIGURATION



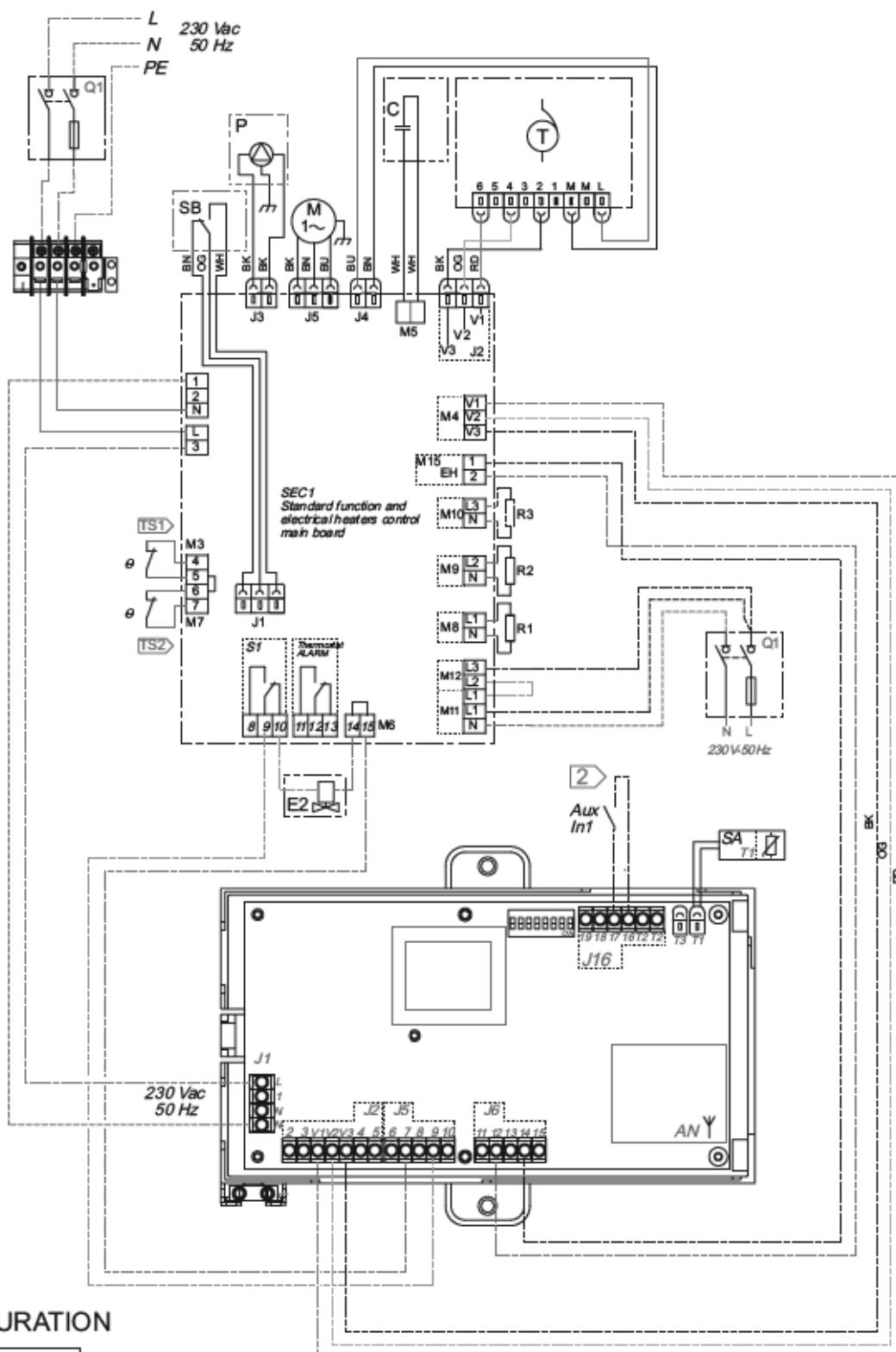
TS1 → TS2

- TERMOSTATO DI SICUREZZA
- SAFETY THERMOSTAT
- THERMO STAT DE SECURITE
- SICHERHEITSTHERMOSTAT
- TERMOSTATO DE SEGURIDAD
- SÄKERHETSTERMOSTAT

TS1 → Thermal cut Off = 45°C
Automatic Reset

TS2 → Thermal cut Off = 80°C
Manual Reset

SE0060



DIP - CONFIGURATION



TS1 TS2

- THERMOMÈTRE DE SÉCURITÉ
 - SAFETY THERMOSTAT
 - THERMO STAT DE SECURITE
 - SICHERHEITS THERMOSTAT
 - TERMOSTATO DE SEGURIDAD
 - SÄKERHETSTHERMOS TAT

 Thermal cut Off = 45°C
Automatic Reset

TS2 Thermal cut Off = 80°C
Manual Reset

DIP 6 - ON

- CAMBIO STAGIONALE ESTERNO
 - EXTERNAL SEASON MODE SWITCH-OVER
 - CHANGEMENT DE SAISON EXTERIEUR
 - EXTERNER BETRIEBSARTENWECHSEL
 - CAMBIO EXTERNO DE TEMPORADA
 - ÄRSTIGSBRYTE

- Non puo' ricevere la sonda di minima TME (T3)
- Cannot be connected to TME (T3) low temperature cut-out
- Ne peut pas recevoir le sonde TME (T3)
- Die Aufnahme des mindesttemperatur thermostats TME (T3)
- No puede recibir la sonda de temperatura minima TME (T3)
- Minimisonden kan niet monteren TME (T3)

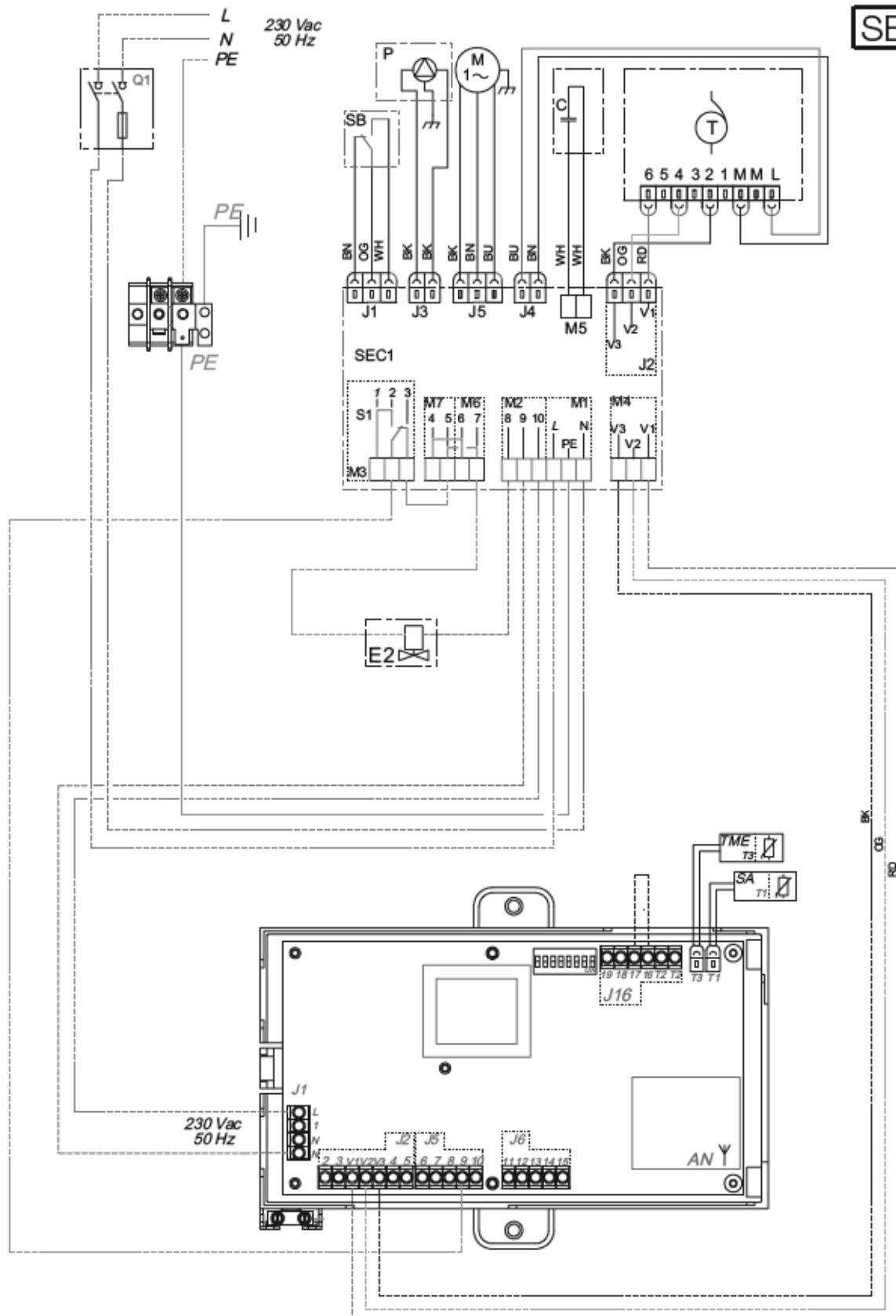
ln1

1

- INVERNO
- WINTER
- HIVER
- WINTER
- INVIERNO

- Non puo' ricevere la sonda di temperatura T2
- Cannot be connected to T2 temperature cut-out
- Ne peut pas recevoir le sonde T2
- Die aufnahme des temperatur thermostats T2
- No puede recibir la sonda de temperatura T2

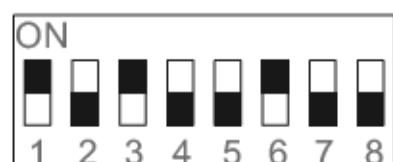
Temperatura inesistente T2 kann info. mehrfach



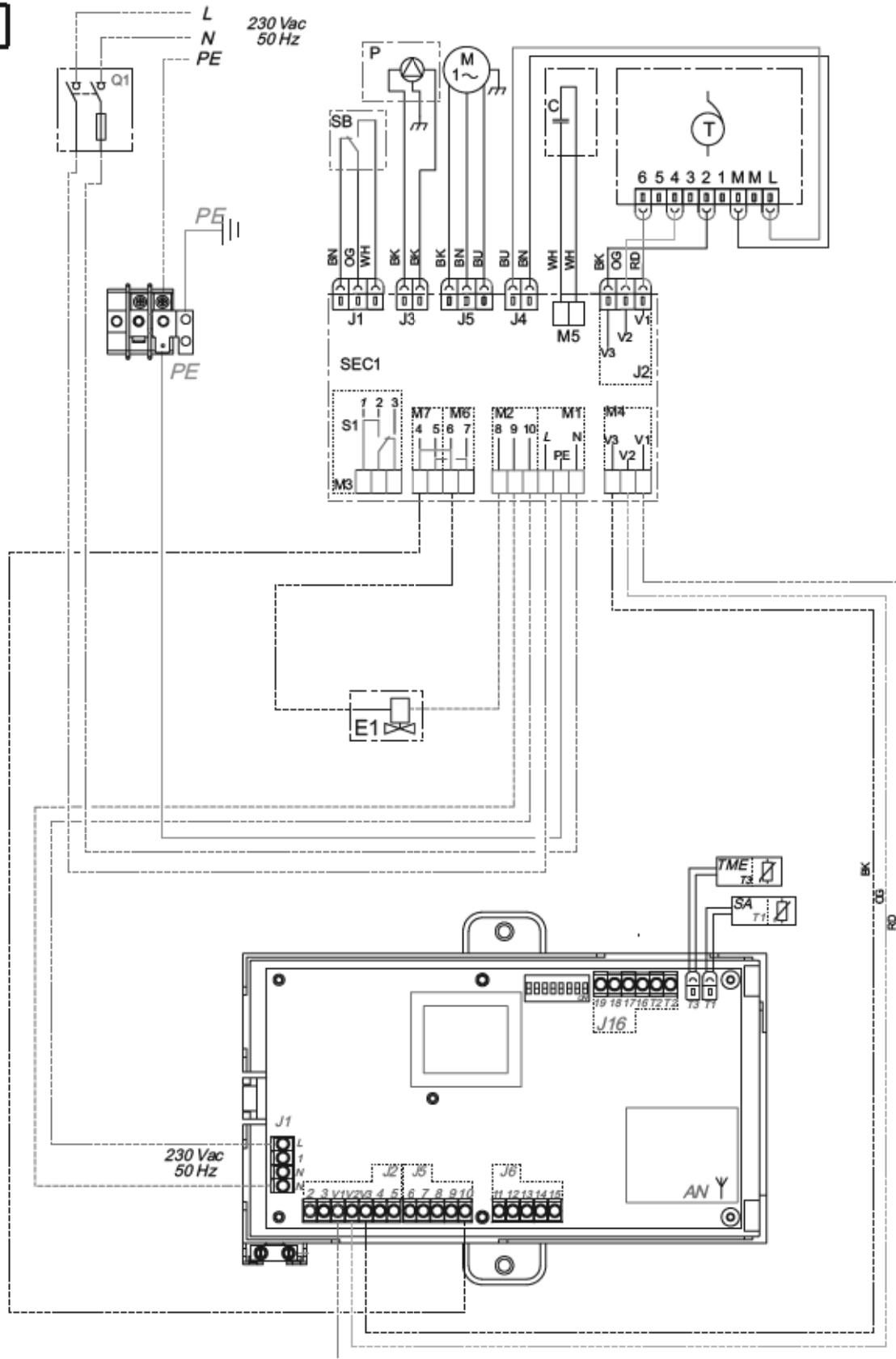
DIP - CONFIGURATION



- Non puo' ricevere la sonda di temperatura T2
- Cannot be connected to T2 temperature cut-out
- Ne peut pas recevoir le sonde T2
- Die aufnahme des temperatur thermostats T2
- No puede recibir la sonda de temperatura T2
- Temperatursonden T2 kan inte monteras



SE0062

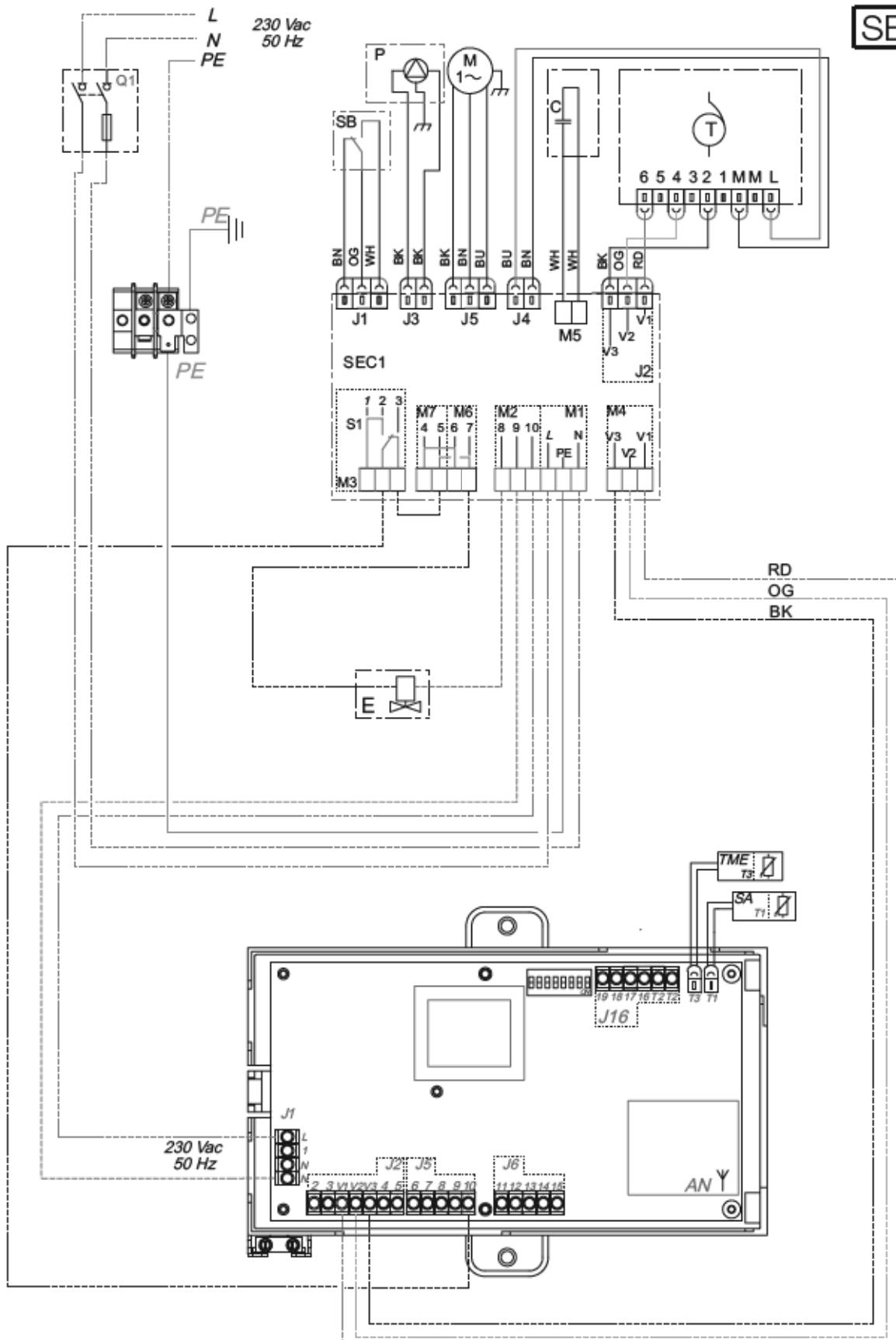


DIP - CONFIGURATION



- Non puo' ricevere la sonda di temperatura T2
- Cannot be connected to T2 temperature cut-out
- Ne peut pas recevoir le sonde T2
- Die aufnahme des temperatur thermostats T2
- No puede recibir la sonda de temperatura T2
- Temperatursensor T2 kann nicht montiert werden.

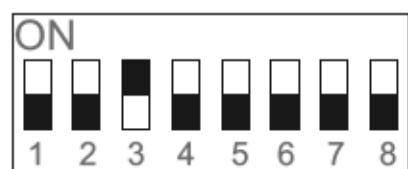




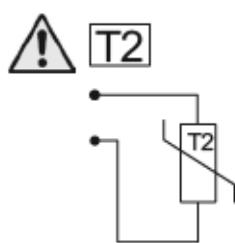
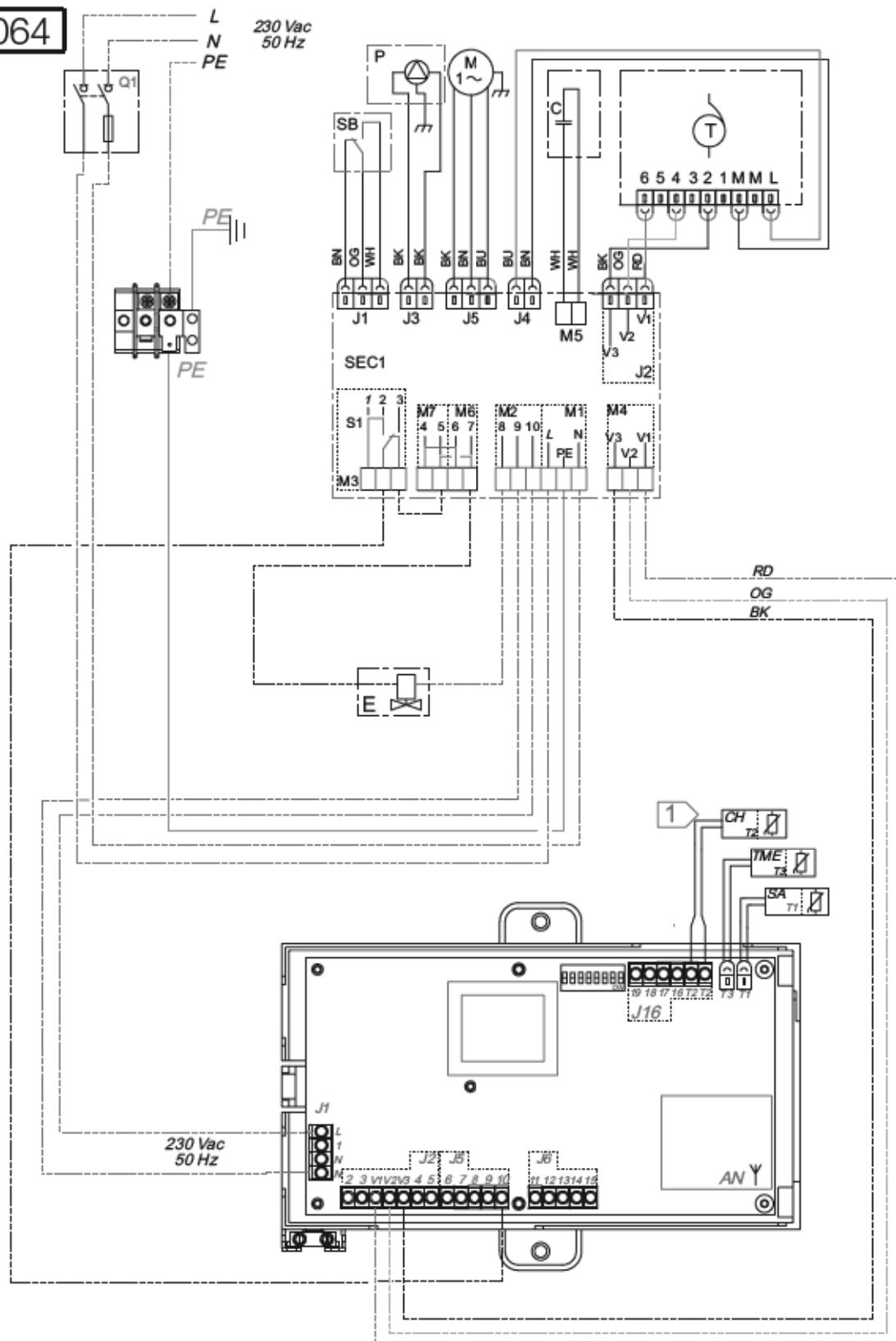
DIP - CONFIGURATION



- Non puo' ricevere la sonda di temperatura T2
- Cannot be connected to T2 temperature cut-out
- Ne peut pas recevoir le sonde T2
- Die aufnahme des temperatur thermostats T2
- No puede recibir la sonda de temperatura T2
- Temperatursonden T2 kan inte monteras



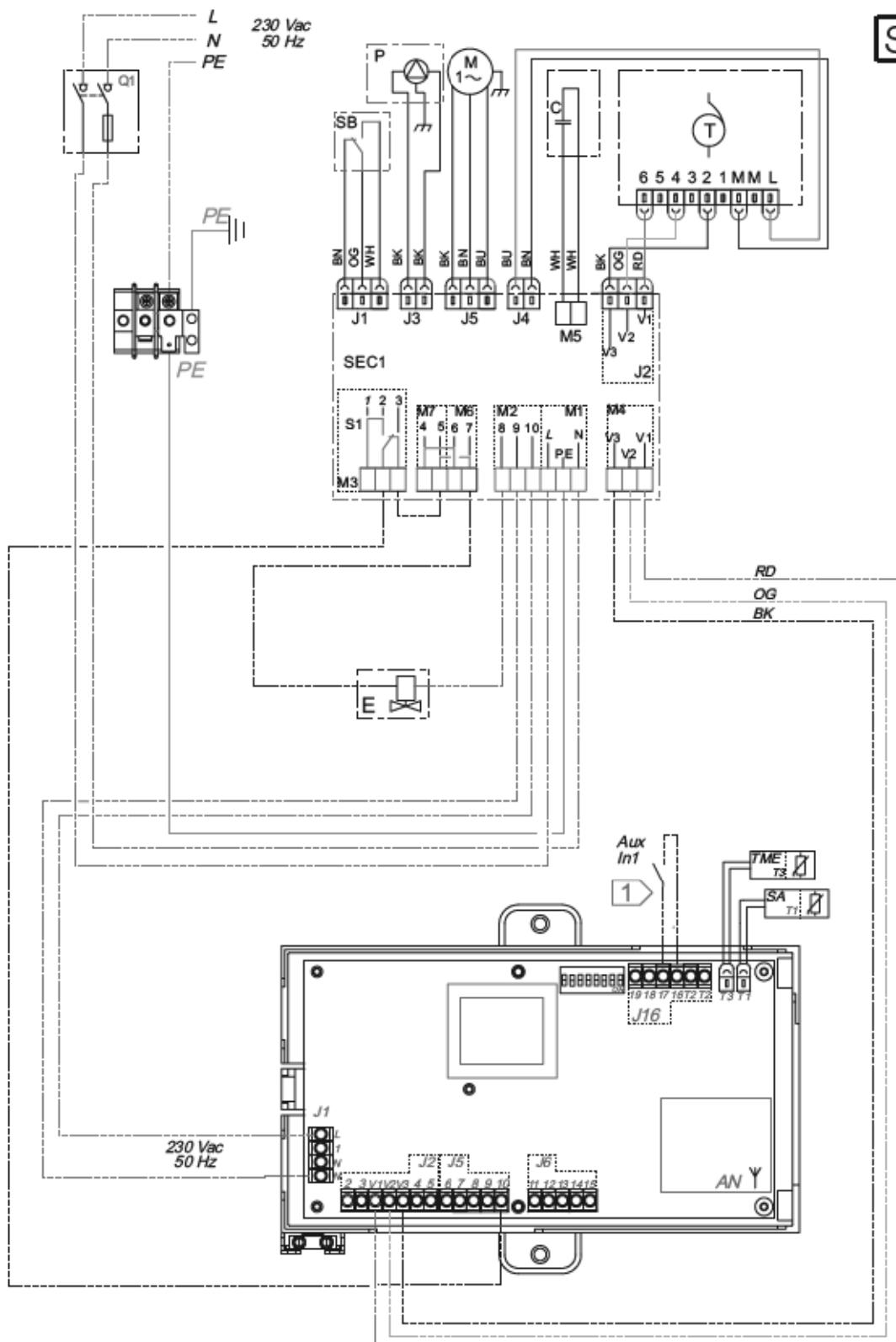
SE0064



- T2 < 20°C =**
- ESTATE
 - SUMMER
 - ETE'
 - SOMMER
 - VERANO
 - SOMMAR
- T2 > 30°C =**
- INVERNO
 - WINTER
 - HIVER
 - WINTER
 - INVIERNO
 - VINTER

DIP - CONFIGURATION





DIP 6 - ON

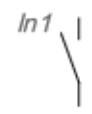
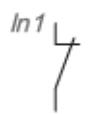
1

- CAMBIO STAGIONALE ESTERNO
- EXTERNAL SEASON MODE SWITCH-OVER
- CHANGEMENT DE SAISON EXTERIEUR
- EXTERNER BETRIEBSARTENWECHSEL
- CAMBIO EXTERNO DE TEMPORADA
- ARSTIDSBYTE

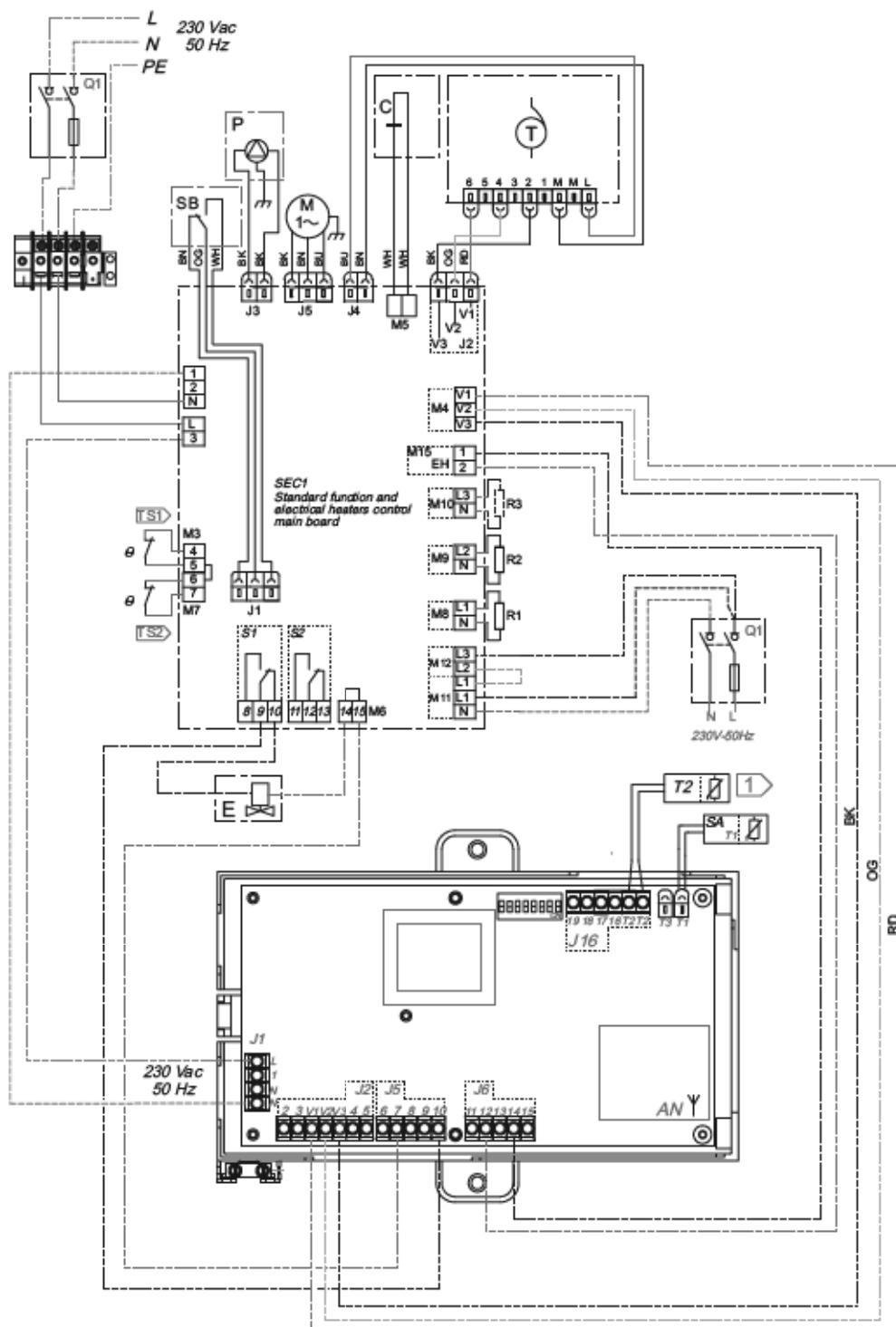
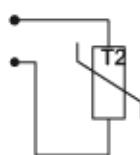
DIP - CONFIGURATION



- ESTATE
- SUMMER
- ETE'
- SOMMER
- VERANO
- SOMMAR

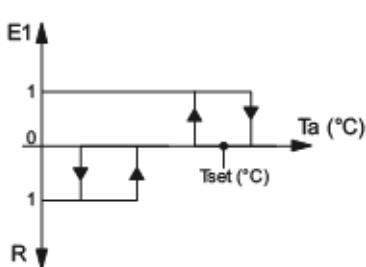


- INVERNO
- WINTER
- HIVER
- WINTER
- INVIERNO
- VINTER

**T2**

$T2 < 30^\circ\text{C}$ = EV1 = off
R = on

$T2 > 34^\circ\text{C}$ = EV1 = on
R = off

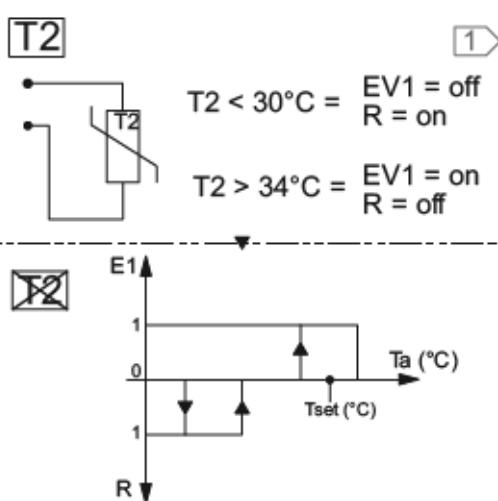
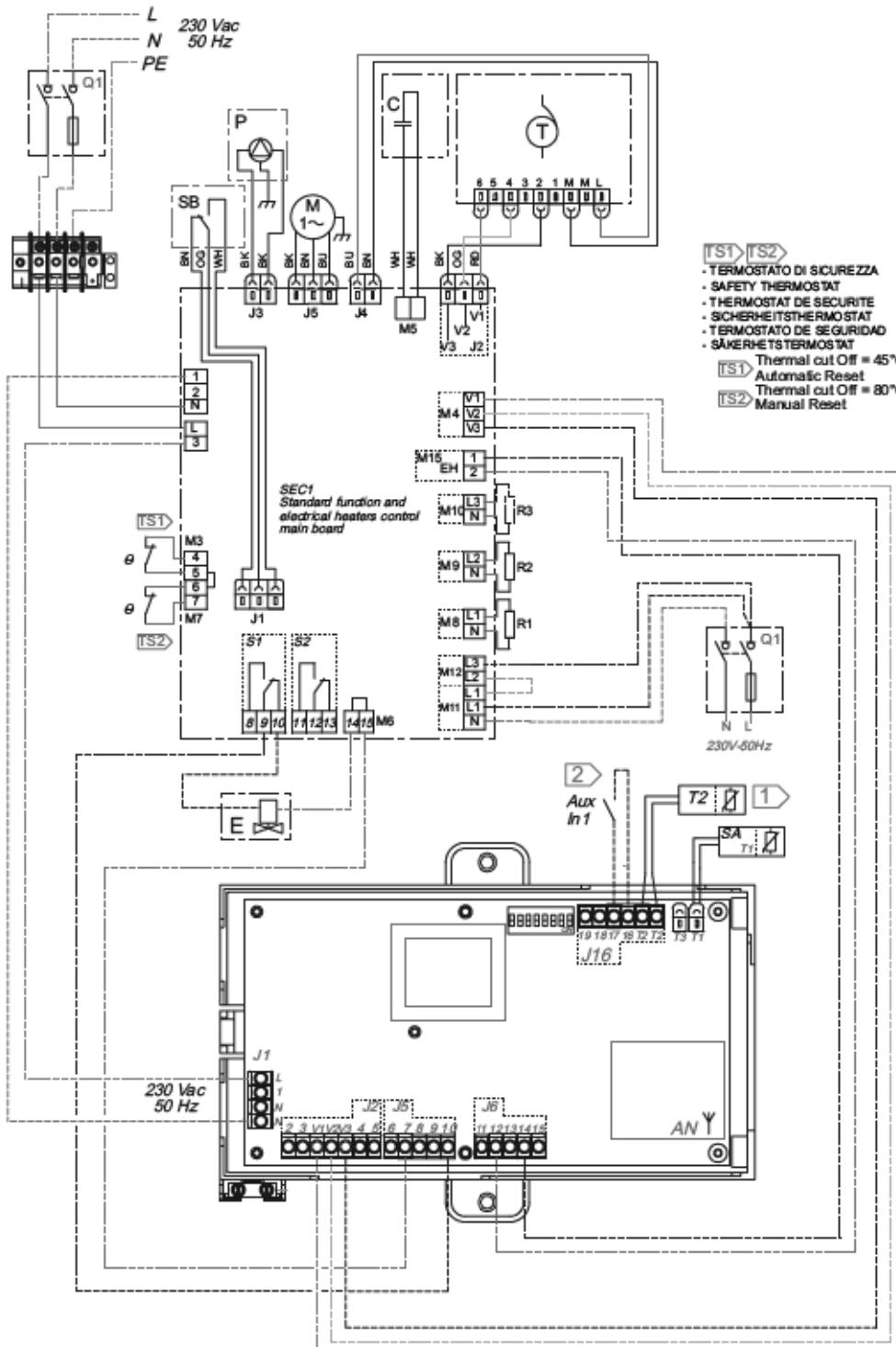
E1**DIP - CONFIGURATION**

- ⚠**
- Non puo' ricevere la sonda di minima TME (T3)
 - Cannot be connected to TME (T3) low temperature cut-out
 - Ne peut pas recevoir le sonde TME (T3)
 - Die aufnahme des mindesttemperatur thermostats TME (T3)
 - No puede recibir la sonda de temperatura minima TME (T3)
 - Minimisonden kan inte monteras TME (T3)

TS1 TS2

- TERMOSTATO DI SICUREZZA
- SAFETY THERMOSTAT
- THERMOSTAT DE SECURITE
- SICHERHEITSTHERMOSSTAT
- TERMOSTATO DE SEGURIDAD
- SÄKERHETSTERMOSSTAT

- TS1** Thermal cut Off = 45°C
Automatic Reset
- TS2** Thermal cut Off = 80°C
Manual Reset



DIP - CONFIGURATION



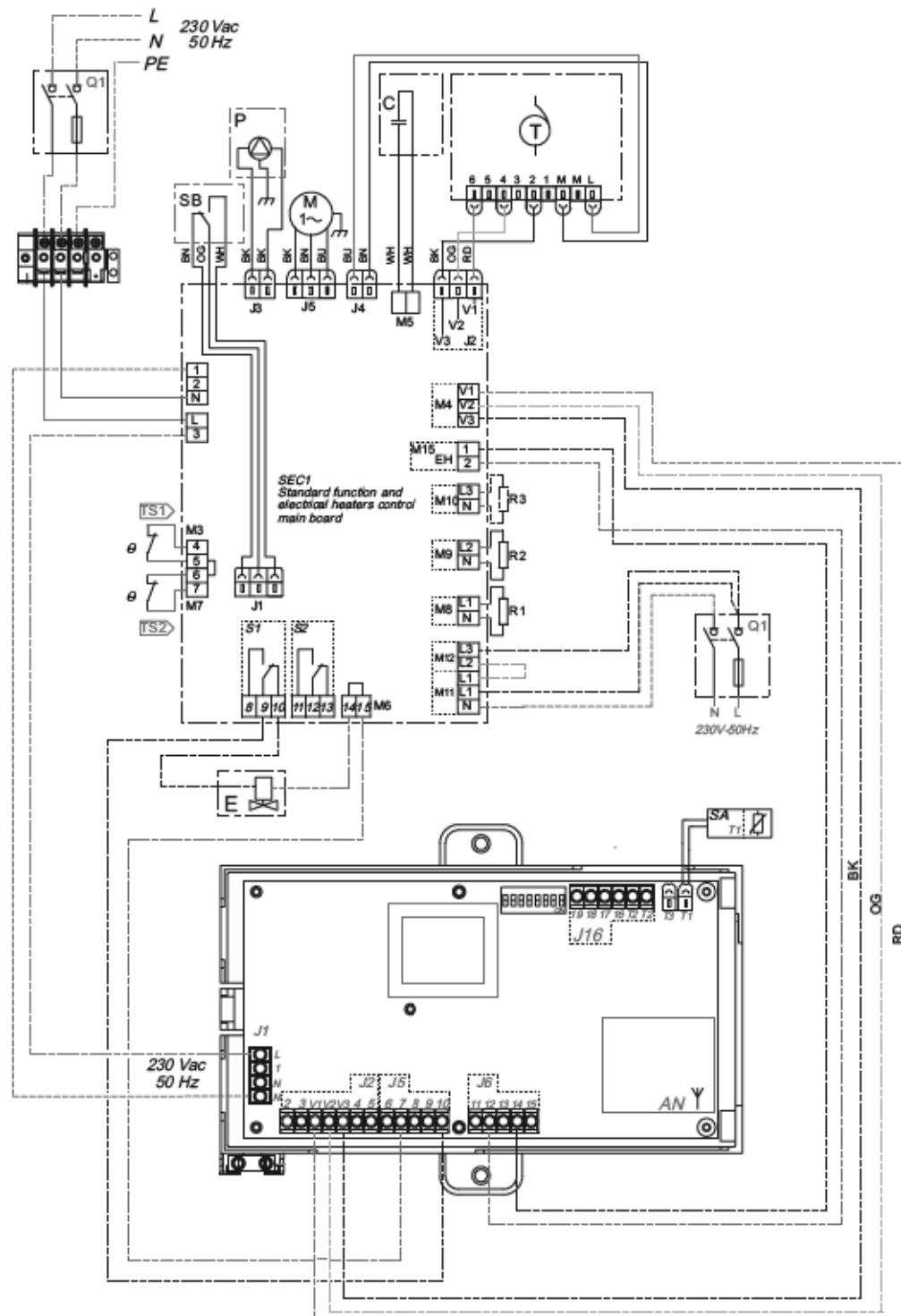
- !**
- Non puo' ricevere la sonda di minima TME (T3)
 - Cannot be connected to the TME (T3) low temperature cut-out
 - Ne peut pas recevoir le sonde TME (T3)
 - Die aufnahme des mindesttemperatur thermostats TME (T3)
 - No puede recibir la sonda de temperatura minima TME (T3)
 - Minimisonden kan inte monteras TME (T3)

DIP 6 - ON

- 1**
- CAMBIO STAGIONALE ESTERNO
 - EXTERNAL SEASON MODE SWITCH-OVER
 - CHANGEMENT DE SAISON EXTERIEUR
 - EXTERNER BETRIEBSARTENWECHSEL
 - CAMBIO EXTERNO DE TEMPORADA
 - ARSTIDSBYTE

-ESTATE
-SUMMER
-ETE'
-SOMMER
-VERANO
-SOMMAR

-INVERNO
-WINTER
-HIVER
-WINTER
-INVIERNO
-VINTER



DIP - CONFIGURATION



- Non puo' ricevere la sonda di minima TME (T3)
- Cannot be connected to TME (T3) low temperature cut-out
- Ne peut pas recevoir le sonde TME (T3)
- Die aufnahme des mindesttemperatur thermostats TME (T3)
- No puede recibir la sonda de temperatura minima TME (T3)
- Minimisonden kan inte monteras TME (T3)

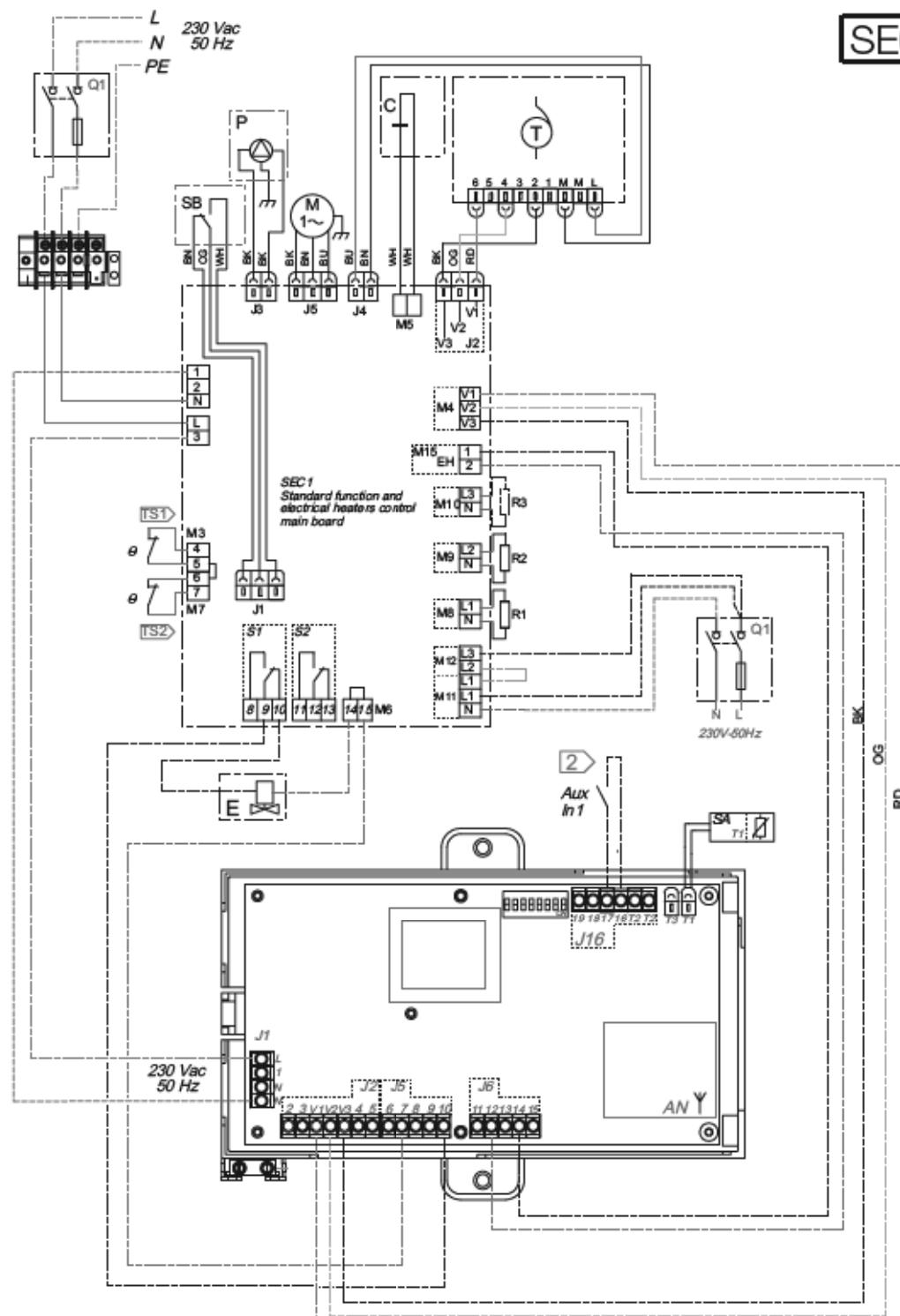


- Non puo' ricevere la sonda di temperatura T2
- Cannot be connected to T2 temperature cut-out
- Ne peut pas recevoir le sonde T2
- Die aufnahme des temperatur thermostats T2
- No puede recibir la sonda de temperatura T2
- Temperaturaonden T2 kan inte monteras

TS1 > TS2

- TERMOSTATO DI SICUREZZA
- SAFETY THERMOSTAT
- THERMOS-TAT DE SECURITE
- SICHERHEITSTHERMOS-TAT
- TERMOSTATO DE SEGURIDAD
- SÄKERHETSTERMOS-TAT

TS1 Thermal cut Off = 45°C
Automatic Reset
Thermal cut Off = 80°C
TS2 Manual Reset

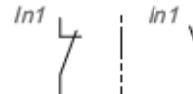


DIP 6 - ON

CAMBIO STAGIONALE ESTERNO
EXTERNAL SEASON MODE SWITCH-OVER
CHANGEMENT DE SAISON EXTERIEUR
EXTERNER BETRIEBSARTENWECHSEL
CAMBIO EXTERNO DE TEMPORADA
ÄRSTIDSGBYTE

2

- ESTATE
- SUMMER
- ETE
- SOMMER
- VERANO
- SOMMAR



- INVERNO
- WINTER
- HIVER
- WINTER
- INVIERNO
- VINTER

DIP - CONFIGURATION

ON	1	2	3	4	5	6	7	8
----	---	---	---	---	---	---	---	---

TS1 **TS2**

- TERMOSTATO DI SICUREZZA
- SAFETY THERMOSTAT
- THERMOSTAT DE SECURITE
- SICHERHEITSTHERMO STAT
- TERMOSTATO DE SEGURIDAD
- SÄKERHETSTERMOSTAT

TS1 Thermal cut Off = 45°C Automatic Reset

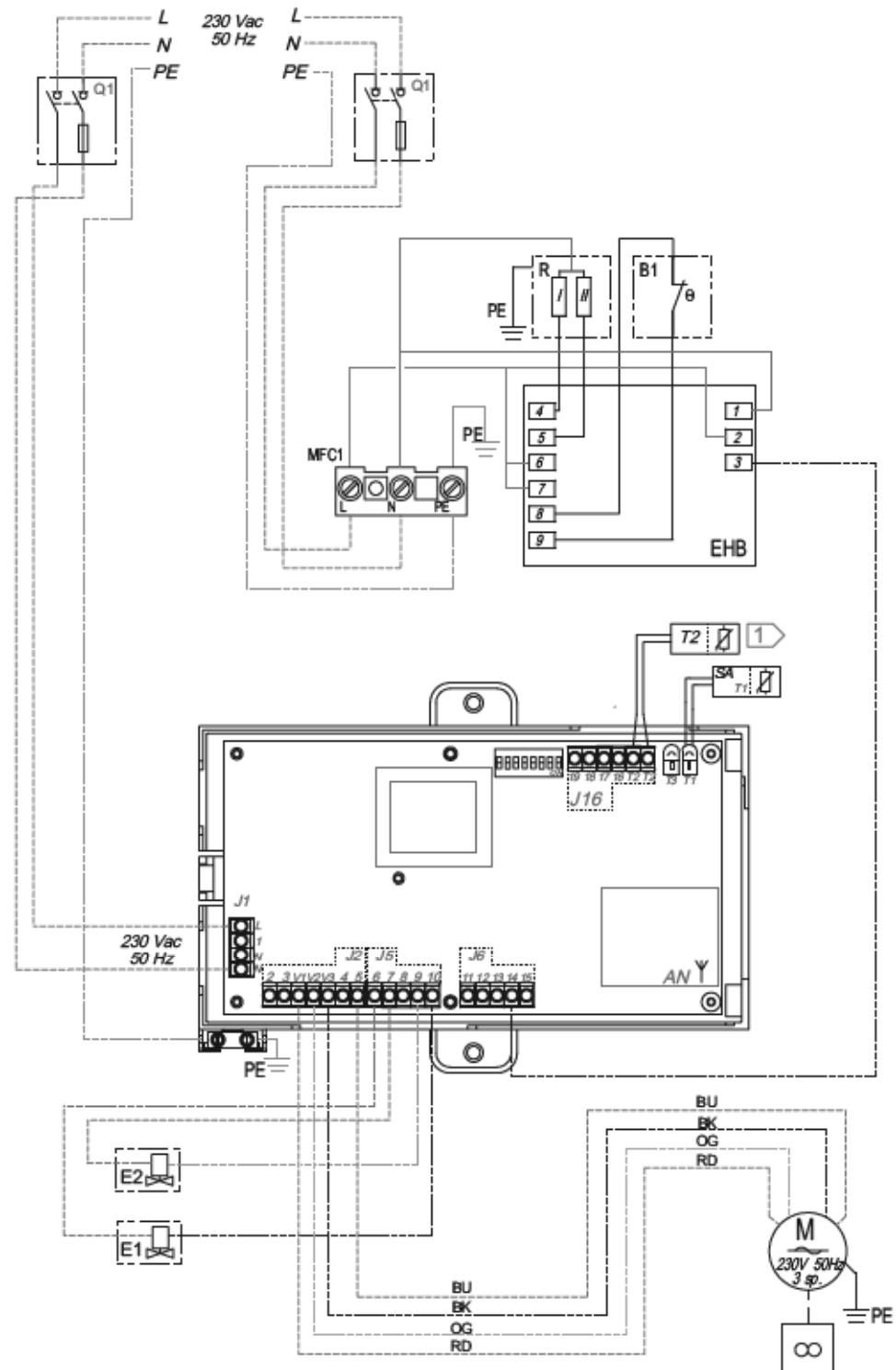
TS2 Thermal cut Off = 80°C Manual Reset



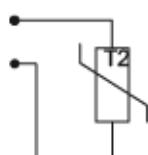
- Non puo' ricevere la sonda di temperatura T2
- Cannot be connected to T2 temperature cut-out
- Ne peut pas recevoir le sonde T2
- Die aufnahme des temperatur thermostats T2
- No puede recibir la sonda de temperatura T2
- Temperatursonden T2 kan inte monteras



- Non puo' ricevere la sonda di minima TME (T3)
- Cannot be connected to TME (T3) low temperature cut-out
- Ne peut pas recevoir le sonde TME (T3)
- Die aufnahme des mindesttemperatur thermostats TME (T3)
- No puede recibir la sonda de temperatura minima TME (T3)
- Minimisonden kan inte monteras TME (T3)



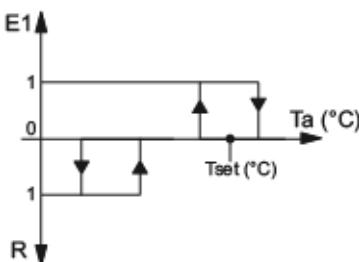
T2



$T2 < 30^\circ\text{C}$ = EV1 = off
R = on

$T2 > 34^\circ\text{C}$ = EV1 = on
R = off

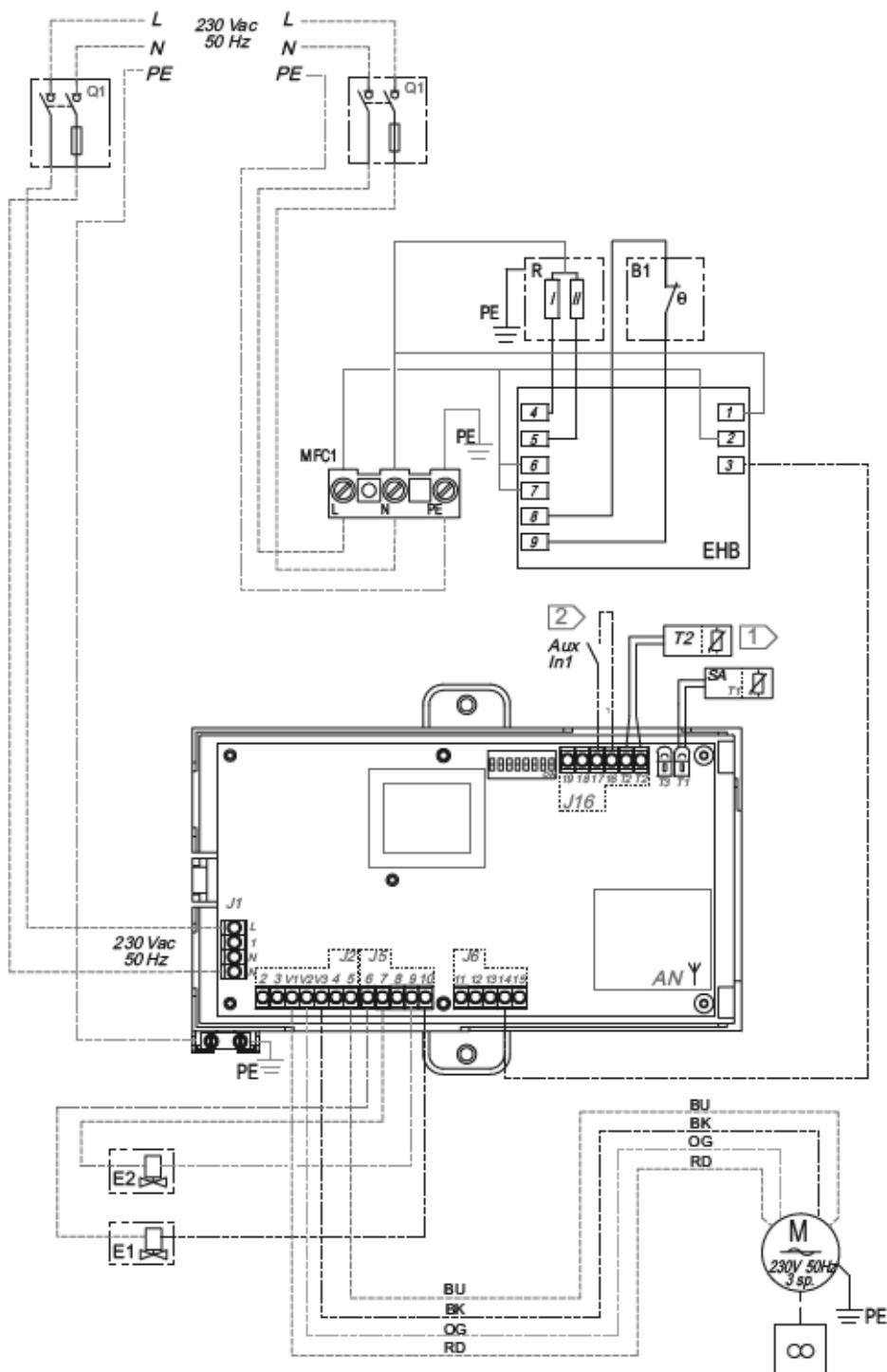
E1



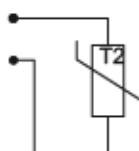
DIP - CONFIGURATION



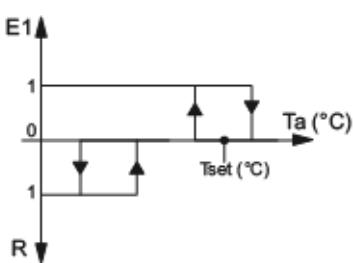
- Non puo' ricevere la sonda di minima TME (T3)
- Cannot be connected to TME (T3) low temperature cut-out
- Ne peut pas recevoir le sonde TME (T3)
- Die aufnahme des mindesttemperatur thermostats TME (T3)
- No puede recibir la sonda de temperatura minima TME (T3)
- Minimisonden kan inte monteras TME (T3)



T2

T2 < 30°C = EV1 = off
R = onT2 > 34°C = EV1 = on
R = off

E1



DIP - CONFIGURATION



- Non puo' ricevere la sonda di minima TME (T3)
- Cannot be connected to TME (T3) low temperature cut-out
- Ne peut pas recevoir le sonde TME (T3)
- Die aufnahme des mindesttemperatur thermostats TME (T3)
- No puede recibir la sonda de temperatura minima TME (T3)
- Minimisanden kan inte monteras TME (T3)

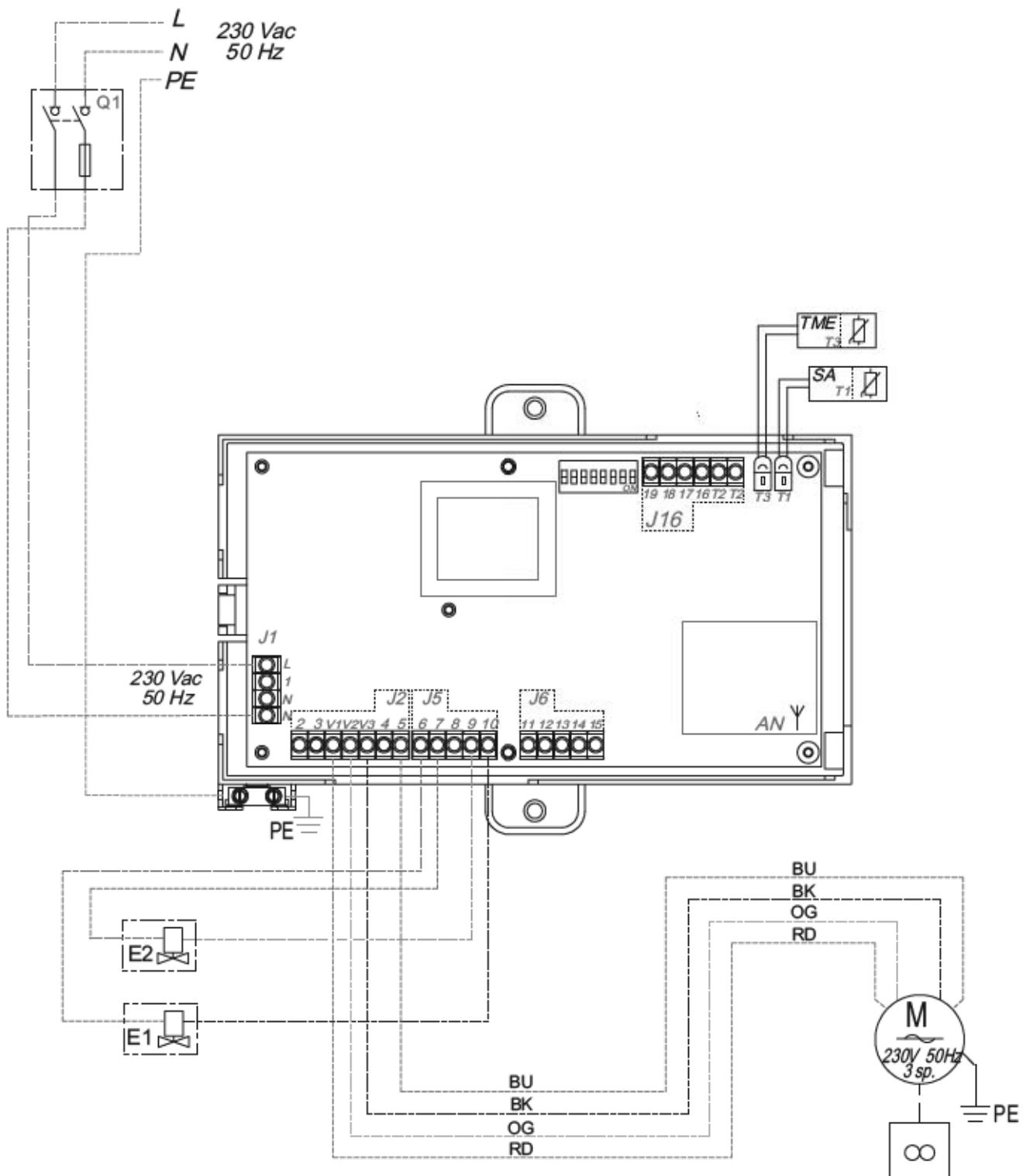
DIP 6 - ON

- CAMBIO STAGIONALE ESTERNO
- EXTERNAL SEASON MODE SWITCH-OVER
- CHANGEMENT DE SAISON EXTERIEUR
- EXTERNER BETRIEBSARTENWECHSEL
- CAMBIO EXTERNO DE TEMPORADA
- ÅRSSTIDSBYTE

- ESTATE
- SUMMER
- ETE'
- SOMMER
- VERANO
- SOMMAR

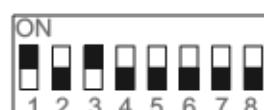
In1

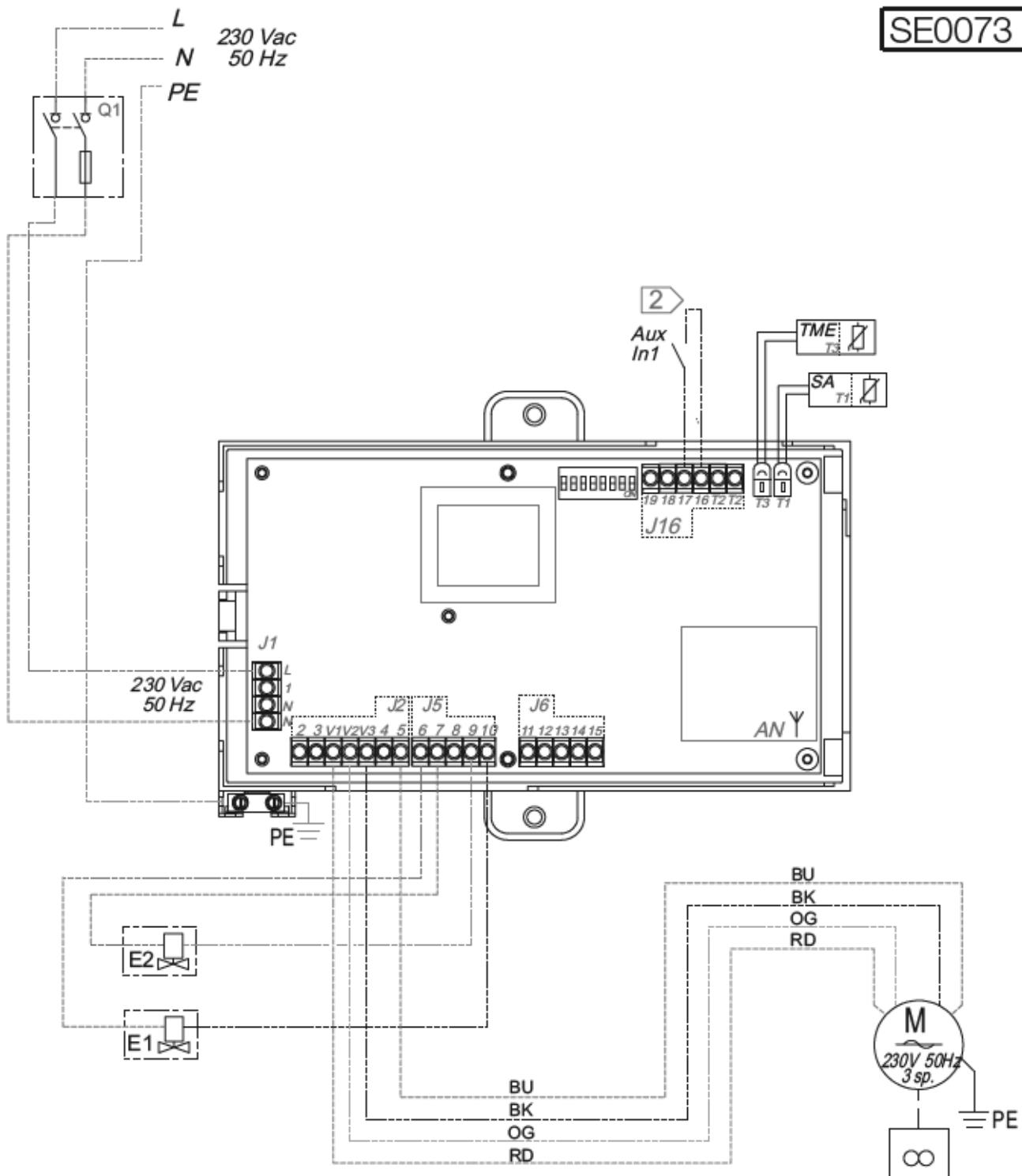
- INVERNO
- WINTER
- HIVER
- WINTER
- INVIERNO
- VINTER



- Non puo' ricevere la sonda di temperatura T2
- Cannot be connected to T2 temperature cut-out
- Ne peut pas recevoir le sonde T2
- Die aufnahme des temperatur thermostats T2
- No puede recibir la sonda de temperatura T2
- Temperatursonden T2 kan inte monteras

DIP - CONFIGURATION





- !**
- Non puo' ricevere la sonda di temperatura T2
 - Cannot be connected to T2 temperature cut-out
 - Ne peut pas recevoir le sonde T2
 - Die aufnahme des temperatur thermostats T2
 - No puede recibir la sonda de temperatura T2
 - Temperaturaonden T2 kan inte monteras

DIP - CONFIGURATION



2 DIP 6 - ON : CAMBIO STAGIONALE ESTERNO
 - EXTERNAL SEASON MODE SWITCH-OVER
 - CHANGEMENT DE SAISON EXTERIEUR
 - EXTERNER BETRIEBSARTENWECHSEL
 - CAMBIO EXTERNO DE TEMPORADA
 - ÅRSSTIDSBYTE

- ESTATE
 - SUMMER
 - ETE'
 - SOMMER
 - VERANO
 - SOMMAR

In1

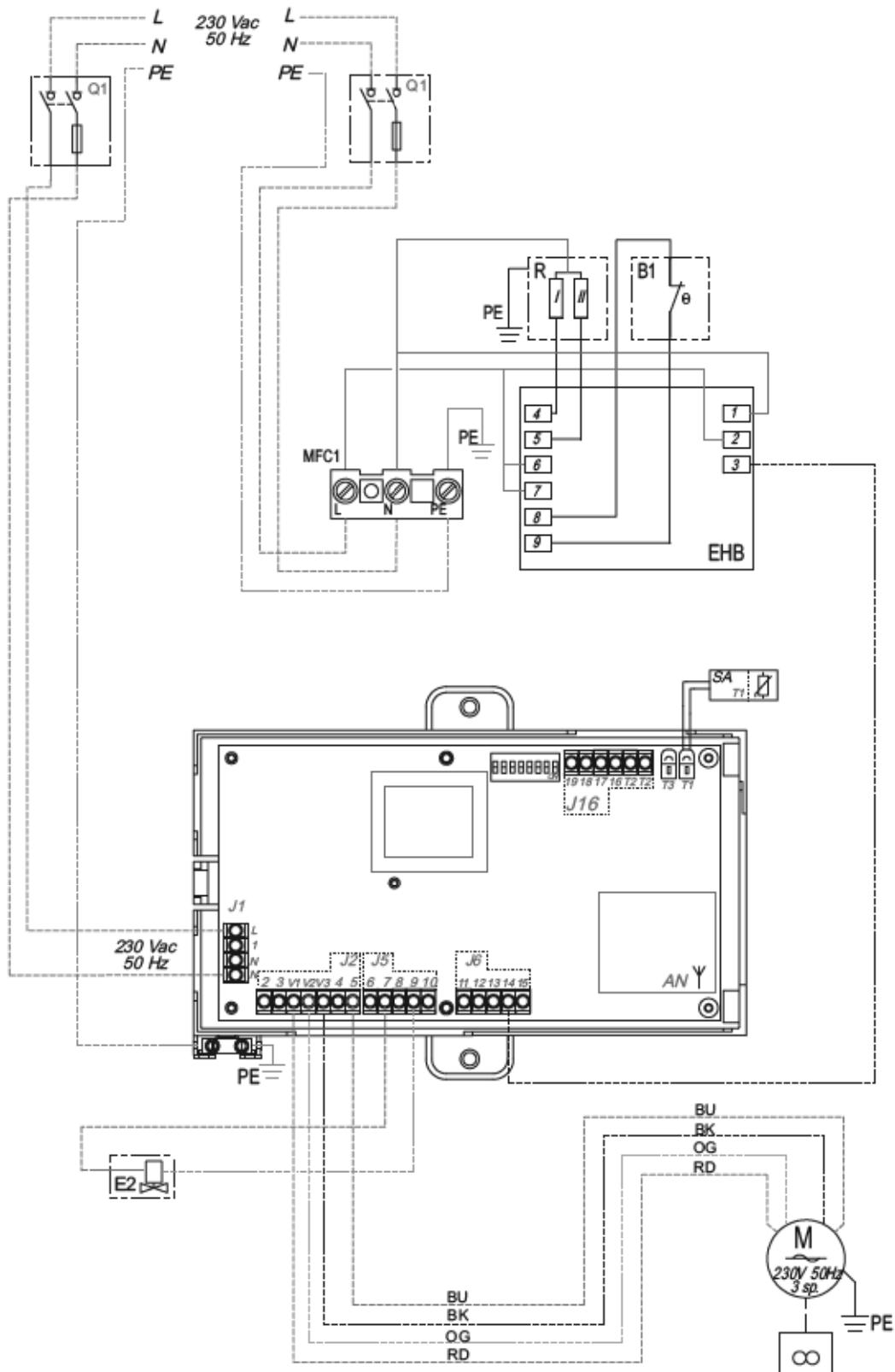


In1



- INVERNO
 - WINTER
 - HIVER
 - WINTER
 - INVIERNO
 - VINTER

SE0074



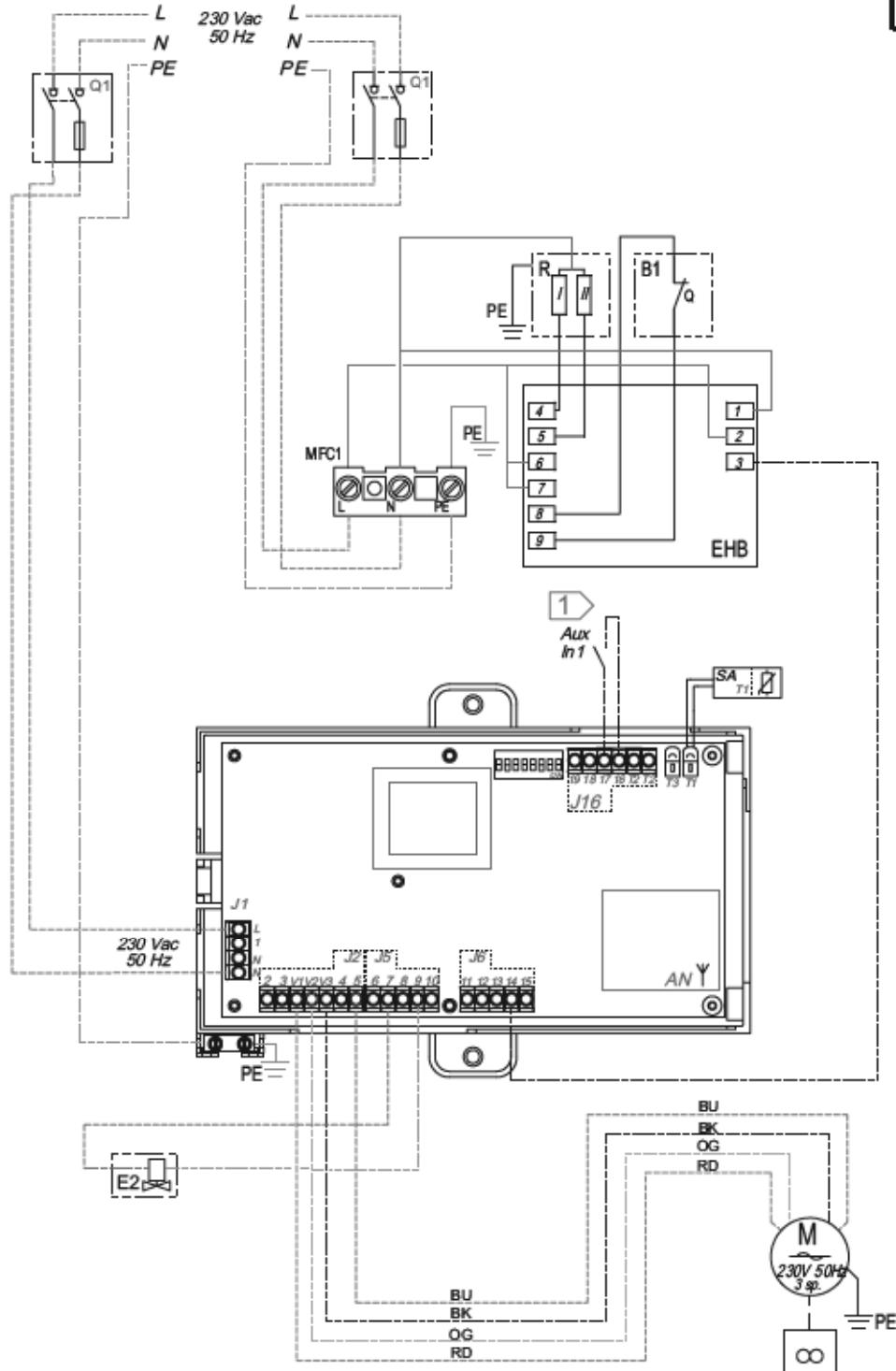
- Non puo' ricevere la sonda di temperatura T2
- Cannot be connected to T2 temperature cut-out
- Ne peut pas recevoir le sonde T2
- Die aufnahme des temperatur thermostats T2
- No puede recibir la sonda de temperatura T2
- Temperatursonden T2 kan inte monteras



- Non puo' ricevere la sonda di minima TME (T3)
- Cannot be connected to TME (T3) low temperature cut-out
- Ne peut pas recevoir le sonde TME (T3)
- Die aufnahme des mindesttemperatur thermostats TME (T3)
- No puede recibir la sonda de temperatura minima TME (T3)
- Minimisonden kan inte monteras TME (T3)

DIP - CONFIGURATION





DIP - CONFIGURATION



- Non puo' ricevere la sonda di temperatura T2
- Cannot be connected to T2 temperature cut-out
- Ne peut pas recevoir le sonde T2
- Die aufnahme des temperatur thermostats T2
- No puede recibir la sonda de temperatura T2
- Temperatursonden T2 kan inte monteras



- Non puo' ricevere la sonda di minima TME (T3)
- Cannot be connected to TME (T3) low temperature cut-out
- Ne peut pas recevoir le sonde TME (T3)
- Die aufnahme des mindesttemperatur thermostats TME (T3)
- No puede recibir la sonda de temperatura minima TME (T3)
- Minimisonden kan inte monteras TME (T3)

DIP 6 - ON

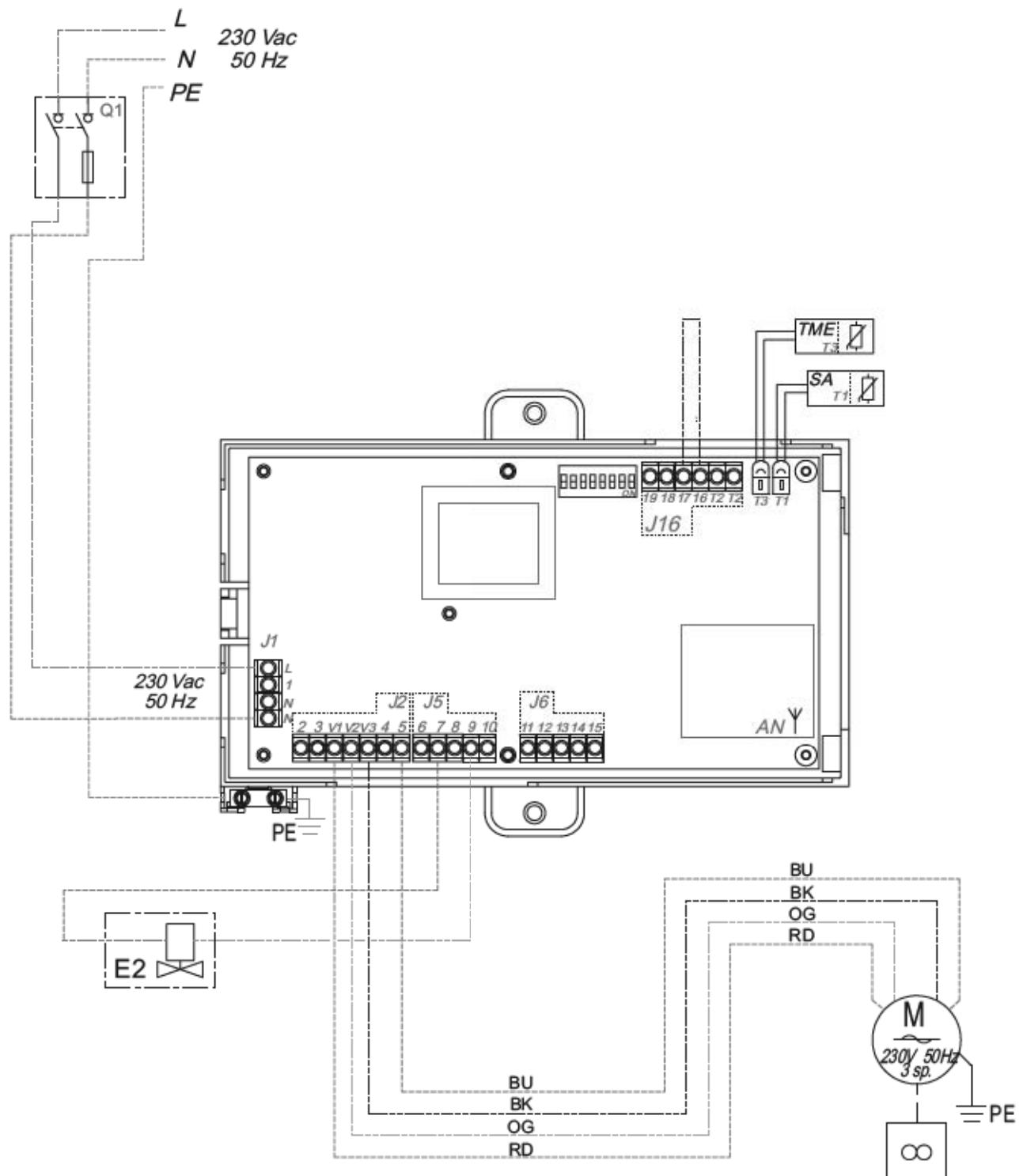


CAMBIO STAGIONALE ESTERNO
EXTERNAL SEASON MODE SWITCH-OVER
CHANGEMENT DE SAISON EXTERIEUR
EXTERNER BETRIEBSARTENWECHSEL
CAMBIO EXTERNO DE TEMPORADA
ÅRSTIDSBYT

- ESTATE
- SUMMER
- ETE
- SOMMER
- VERANO
- SOMMAR

In1

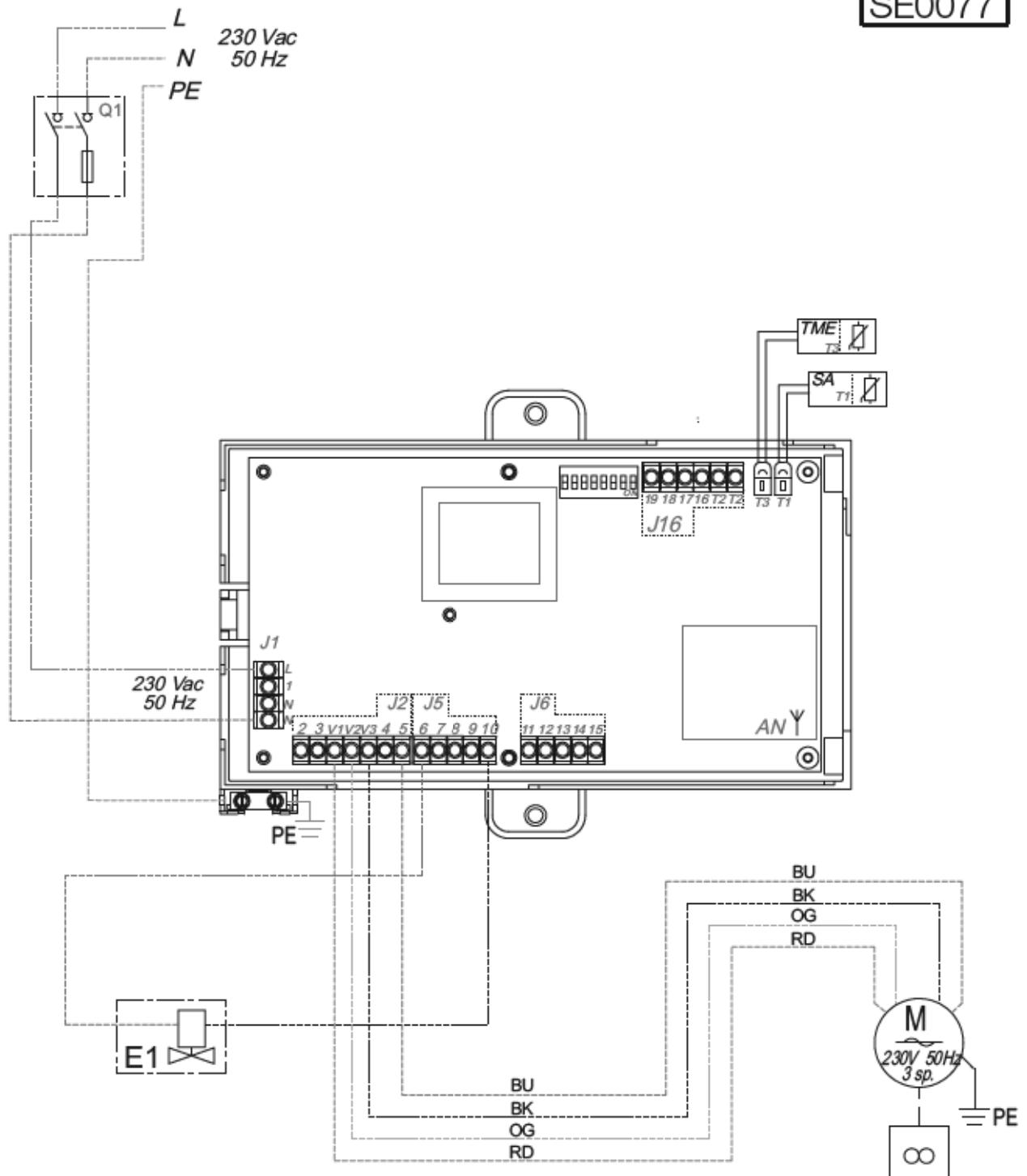
- INVERNO
- WINTER
- HIVER
- WINTER
- INVIERNO
- VINTER



- !**
- Non puo' ricevere la sonda di temperatura T2
 - Cannot be connected to T2 temperature cut-out
 - Ne peut pas recevoir le sonde T2
 - Die aufnahme des temperatur thermostats T2
 - No puede recibir la sonda de temperatura T2
 - Temperatursonden T2 kan inte monteras

DIP - CONFIGURATION



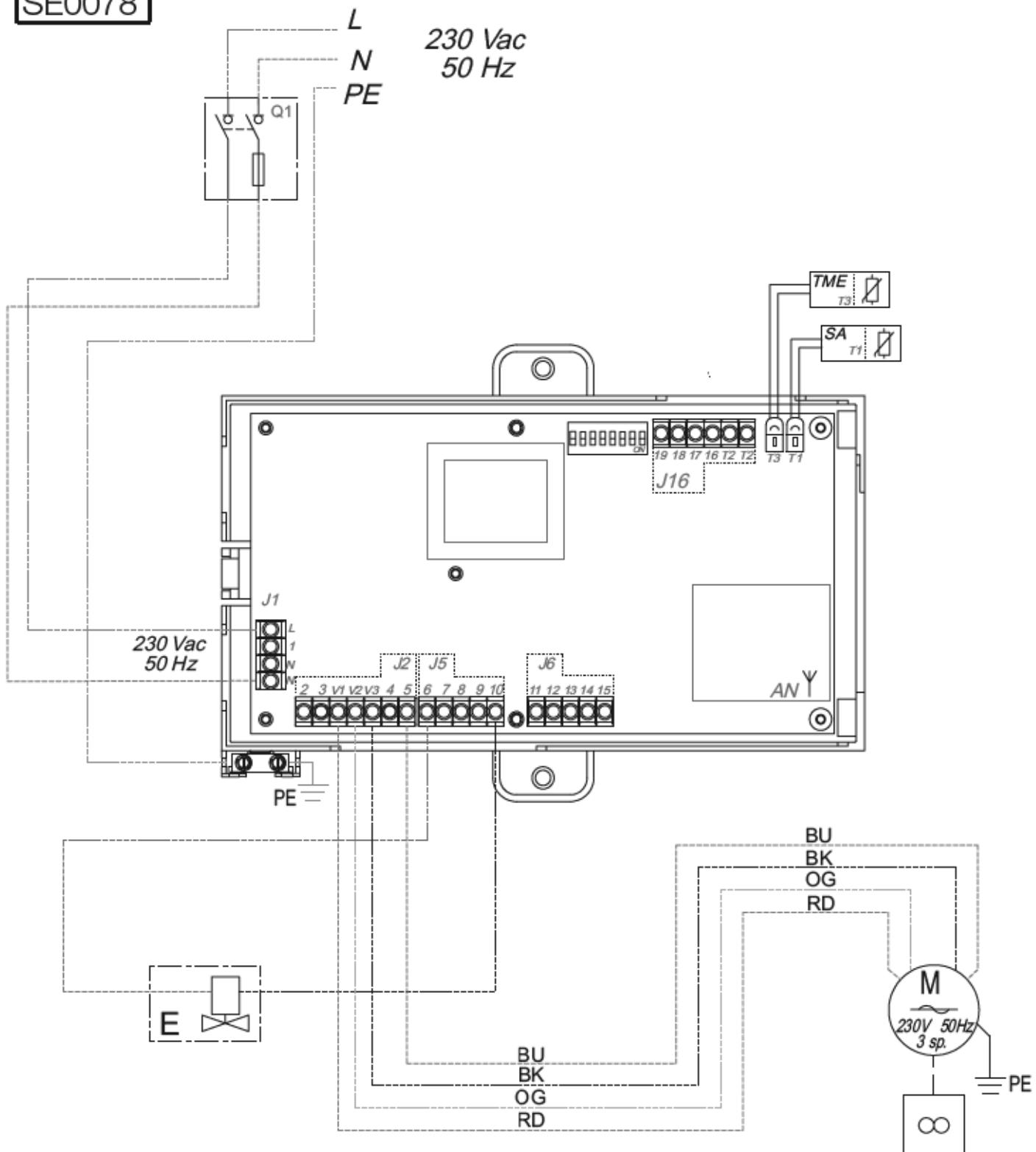


DIP - CONFIGURATION



- Non puo' ricevere la sonda di temperatura T2
- Cannot be connected to T2 temperature cut-out
- Ne peut pas recevoir le sonde T2
- Die aufnahme des temperatur thermostats T2
- No puede recibir la sonda de temperatura T2
- Temperatursonden T2 kan inte monteras

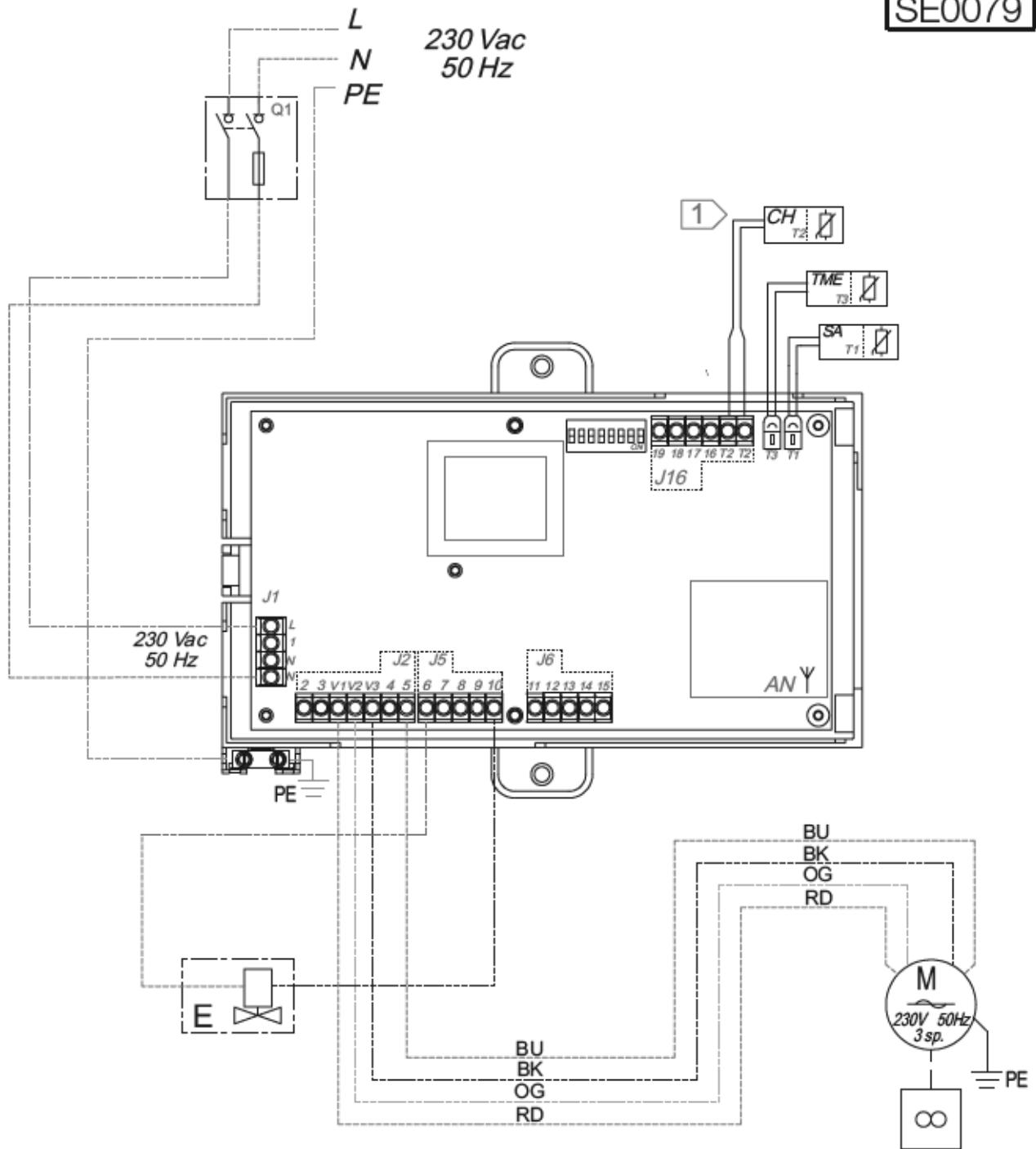
SE0078



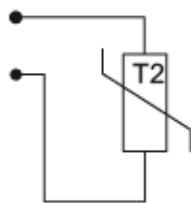
- Non puo' ricevere la sonda di temperatura T2
- Cannot be connected to T2 temperature cut-out
- Ne peut pas recevoir la sonde T2
- Die aufnahme des thermostats T2
- No puede recibir la sonda de temperatura T2
- Temperatursonden T2 kan inte monteras

DIP - CONFIGURATION





1 T2

 $T2 < 20^\circ\text{C} =$

- ESTATE
- SUMMER
- ETE'
- SOMMER
- VERANO
- SOMMAR

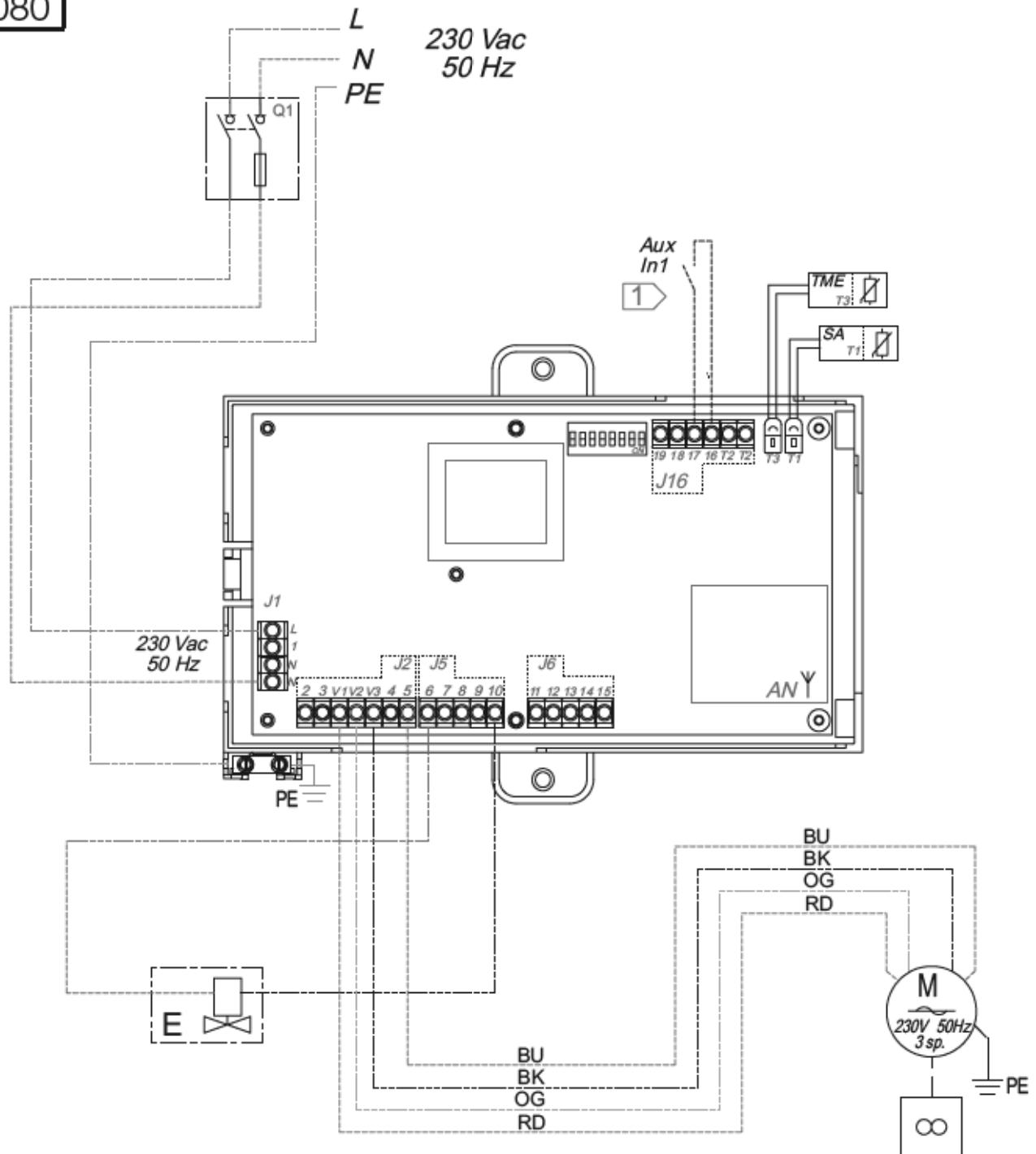
 $T2 > 30^\circ\text{C} =$

- INVERNO
- WINTER
- HIVER
- WINTER
- INVIERNO
- VINTER

DIP - CONFIGURATION



SE0080



1 DIP 6 - ON



- CAMBIO STAGIONALE ESTERNO
- EXTERNAL SEASON MODE SWITCH-OVER
- CHANGEMENT DE SAISON EXTERIEUR
- EXTERNER BETRIEBSARTENWECHSEL
- CAMBIO EXTERNO DE TEMPORADA
- ÅRSTIDSBYTE

- ESTATE
- SUMMER
- ETE'
- SOMMER
- VERANO
- SOMMAR

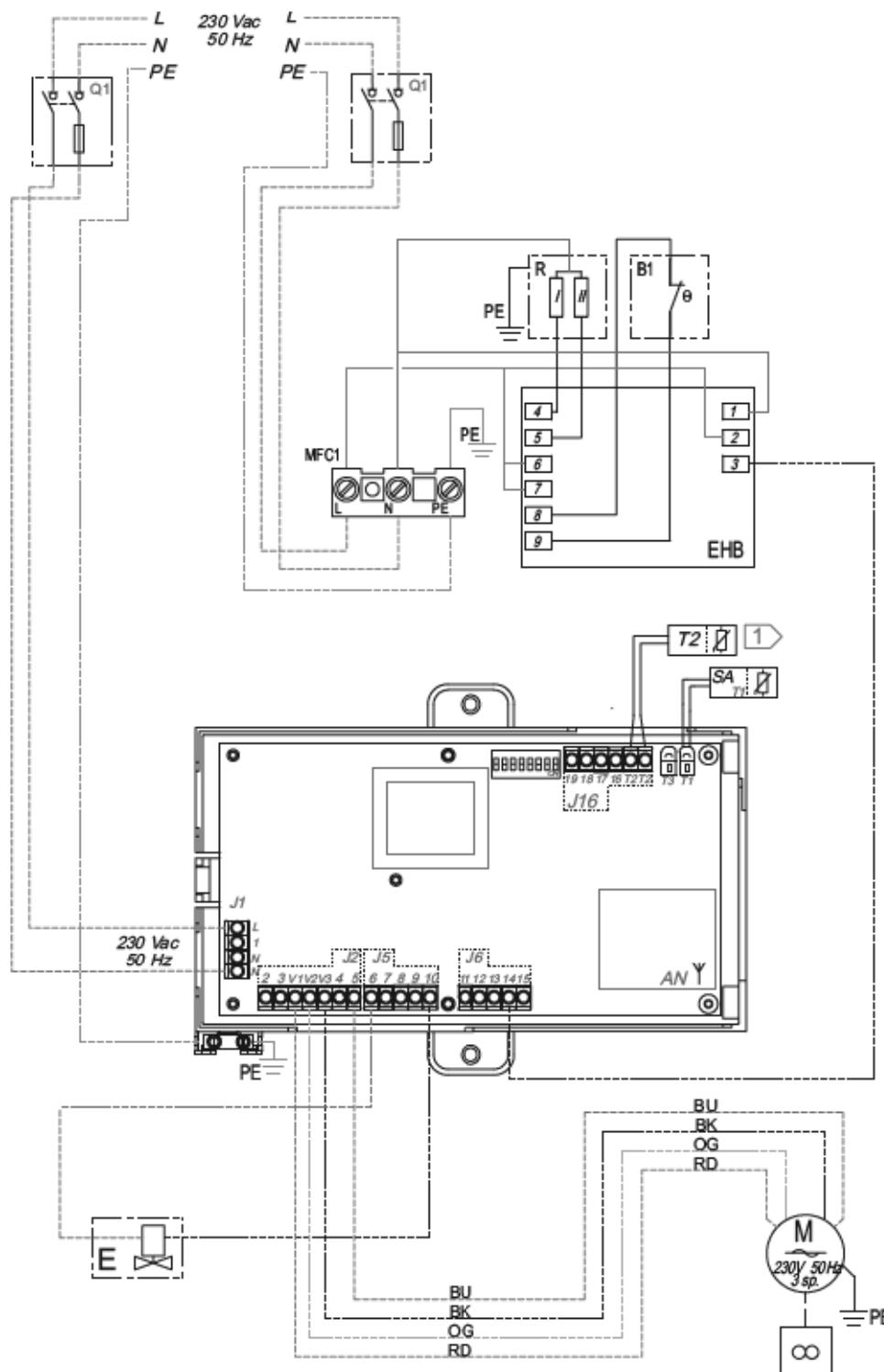
In1

In1

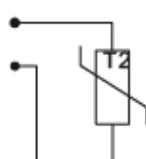
- INVERNO
- WINTER
- HIVER
- WINTER
- INVIERNO
- VINTER

DIP - CONFIGURATION





T2

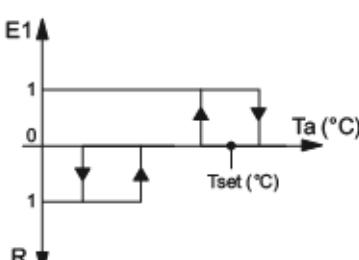


1

$T2 < 30^\circ\text{C}$ = EV1 = off
R = on

$T2 > 34^\circ\text{C}$ = EV1 = on
R = off

T3

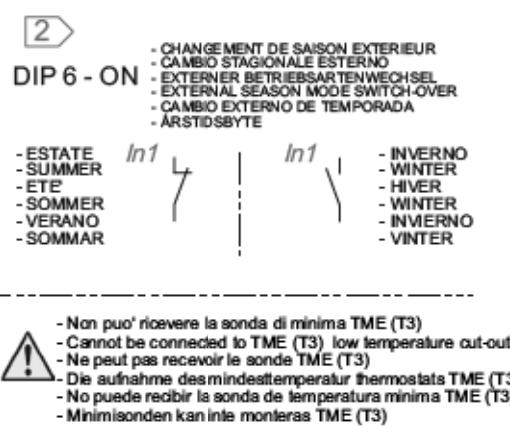
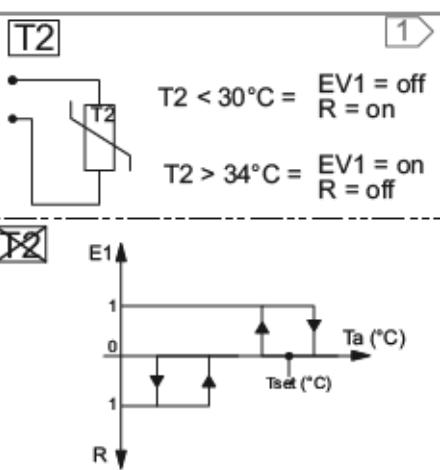
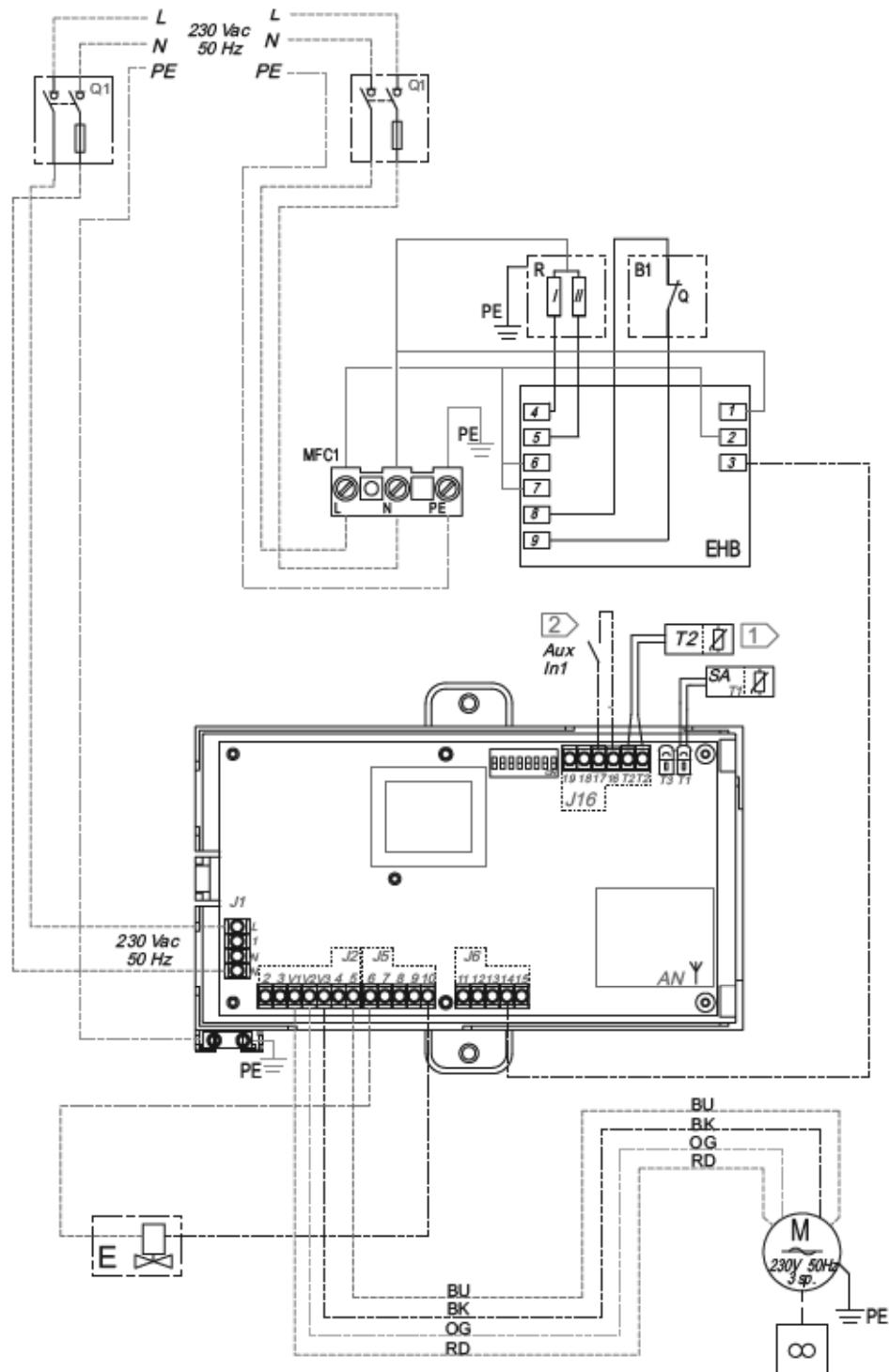


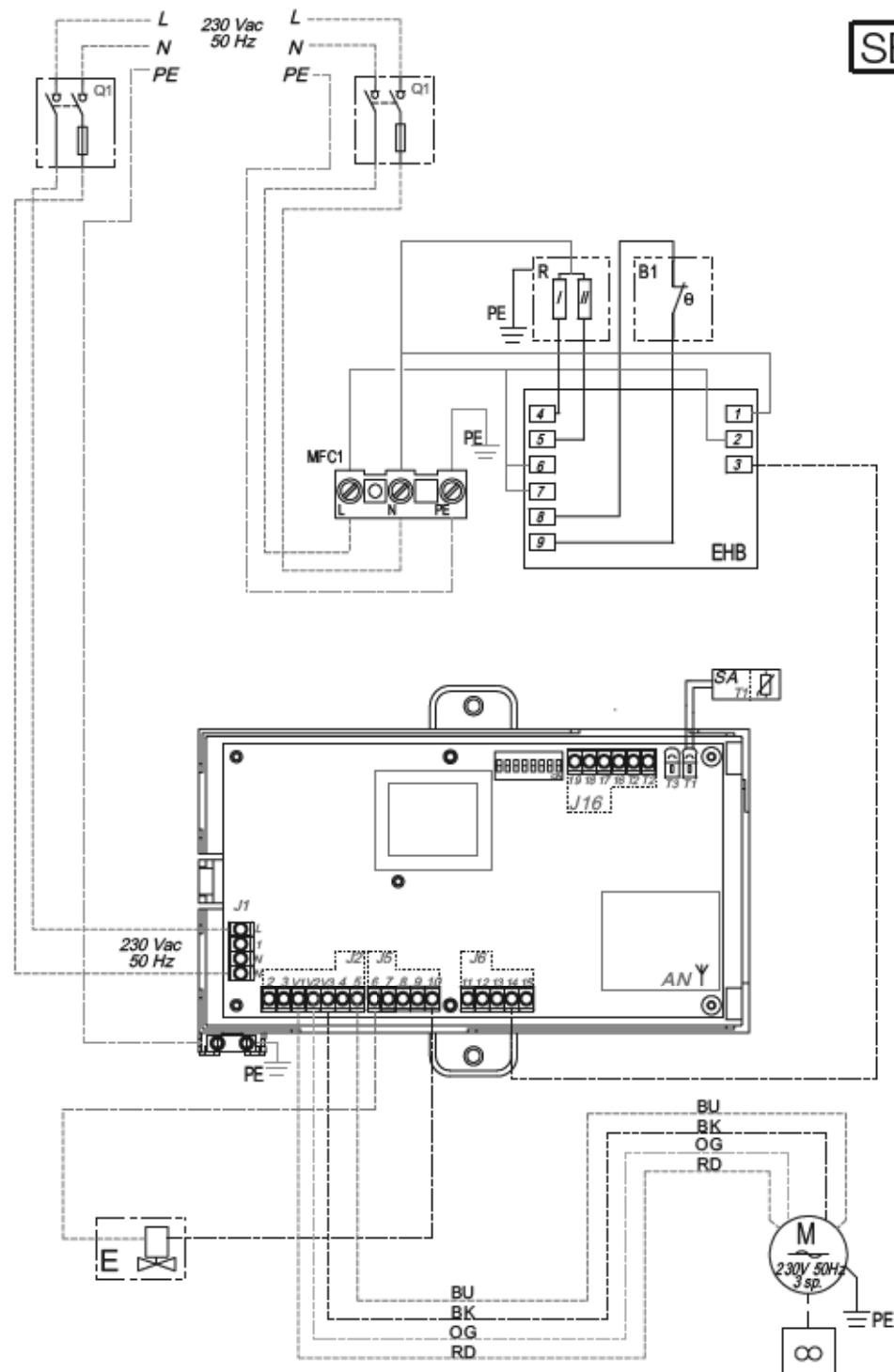
DIP - CONFIGURATION



- Non puo' ricevere la sonda di minima TME (T3)
- Cannot be connected to TME (T3) low temperature cut-out
- Ne peut pas recevoir le sonde TME (T3)
- Die aufnahme des mindesttemperatur thermostats TME (T3)
- No puede recibir la sonda de temperatura minima TME (T3)
- Minimalsonden kan inte monteras TME (T3)

SE0082



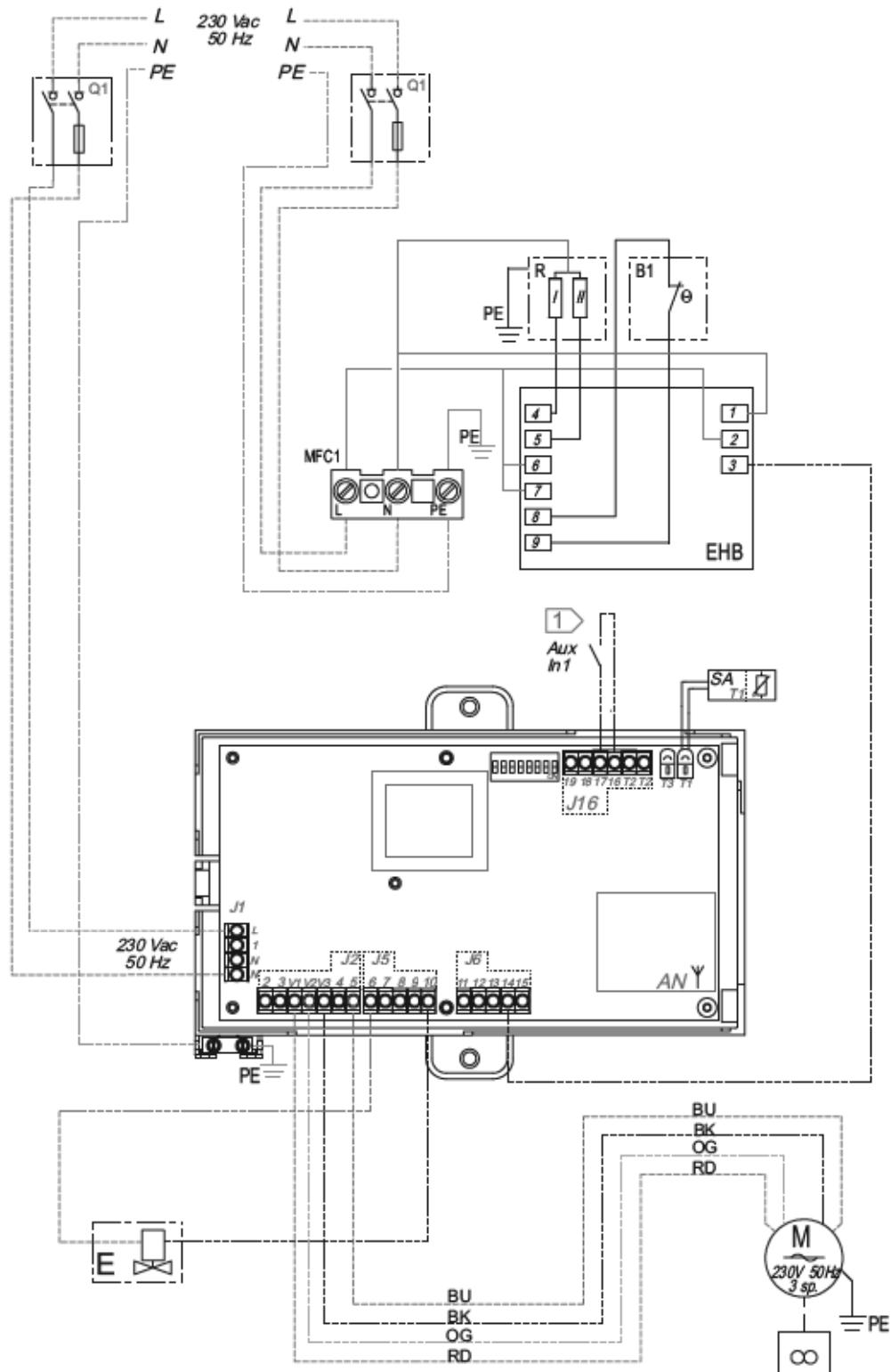


- !**
- Non puo' ricevere la sonda di minima TME (T3)
 - Cannot be connected to TME (T3) low temperature cut-out
 - Ne peut pas recevoir le sonde TME (T3)
 - Die aufnahme des mindesttemperatur thermostats TME (T3)
 - No puede recibir la sonda de temperatura minima TME (T3)
 - Minimisonden kan inte monteras TME (T3)

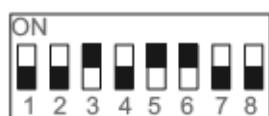
DIP - CONFIGURATION



- !**
- Non puo' ricevere la sonda di temperatura T2
 - Cannot be connected to T2 temperature cut-out
 - Ne peut pas recevoir le sonde T2
 - Die aufnahme des temperatur thermostats T2
 - No puede recibir la sonda de temperatura T2
 - Temperaturaonden T2 kan inte monteras



DIP - CONFIGURATION



- Non puo' ricevere la sonda di minima TME (T3)
- Cannot be connected to TME (T3) low temperature cut-out
- Ne peut pas recevoir le sonde TME (T3)
- Die aufnahme des mindesttemperatur thermostats TME (T3)
- No puede recibir la sonda de temperatura mínima TME (T3)
- Minimalsonden kan inte monteras TME (T3)



DIP 6 - ON

- CAMBIO STAGIONALE ESTERNO
- EXTERNAL SEASON MODE SWITCHOVER
- CHANGEMENT DE SAISON EXTERIEUR
- EXTERNER BETRIEBSARTENWECHSEL
- CAMBIO EXTERNO DE TEMPORADA
- ARSTIDSBYTE

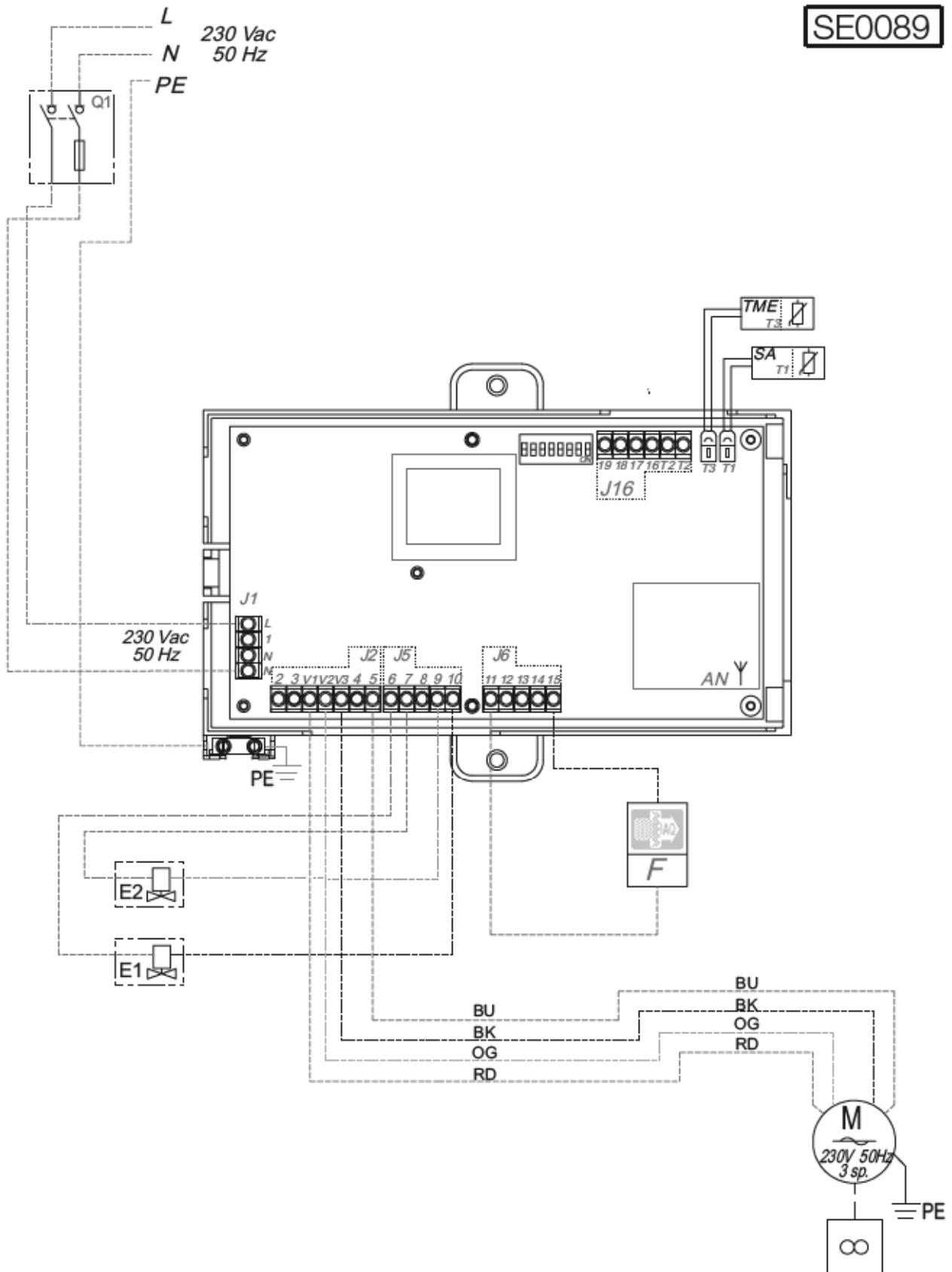
- ESTATE
- SUMMER
- ETE'
- SOMMER
- VERANO
- SOMMAR



- INVERNO
- WINTER
- HIVER
- WINTER
- INVIERNO
- VINTER

- Non puo' ricevere la sonda di temperatura T2
- Cannot be connected to T2 temperature cut-out
- Ne peut pas recevoir le sonde T2
- Die aufnahme des temperatur thermostats T2
- No puede recibir la sonda de temperatura T2
- Temperatursonden T2 kan inte monteras





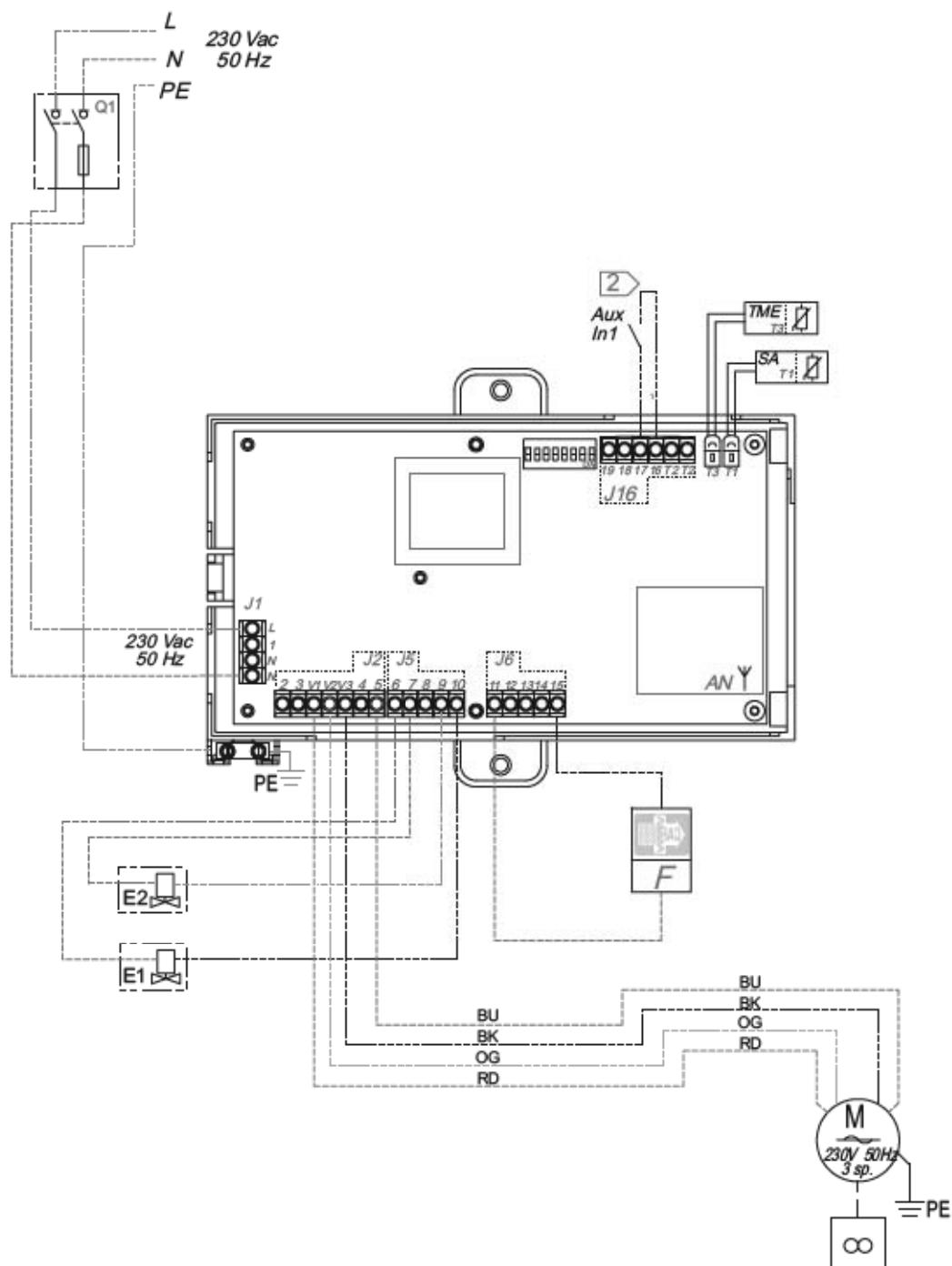
DIP - CONFIGURATION



- Non puo' ricevere la sonda di temperatura T2
- Cannot be connected to T2 temperature cut-out
- Ne peut pas recevoir le sonde T2
- Die aufnahme des temperatur thermostats T2
- No puede recibir la sonda de temperatura T2
- Temperatursonden T2 kan inte monteras



SE0090



DIP - CONFIGURATION



- Non puo' ricevere la sonda di temperatura T2
- Cannot be connected to T2 temperature cut-out
- Ne peut pas recevoir le sonde T2
- Die aufnahme des thermostats T2
- No puede recibir la sonda de temperatura T2
- Temperatursonden T2 kan inte monteras

2 DIP 6 - ON

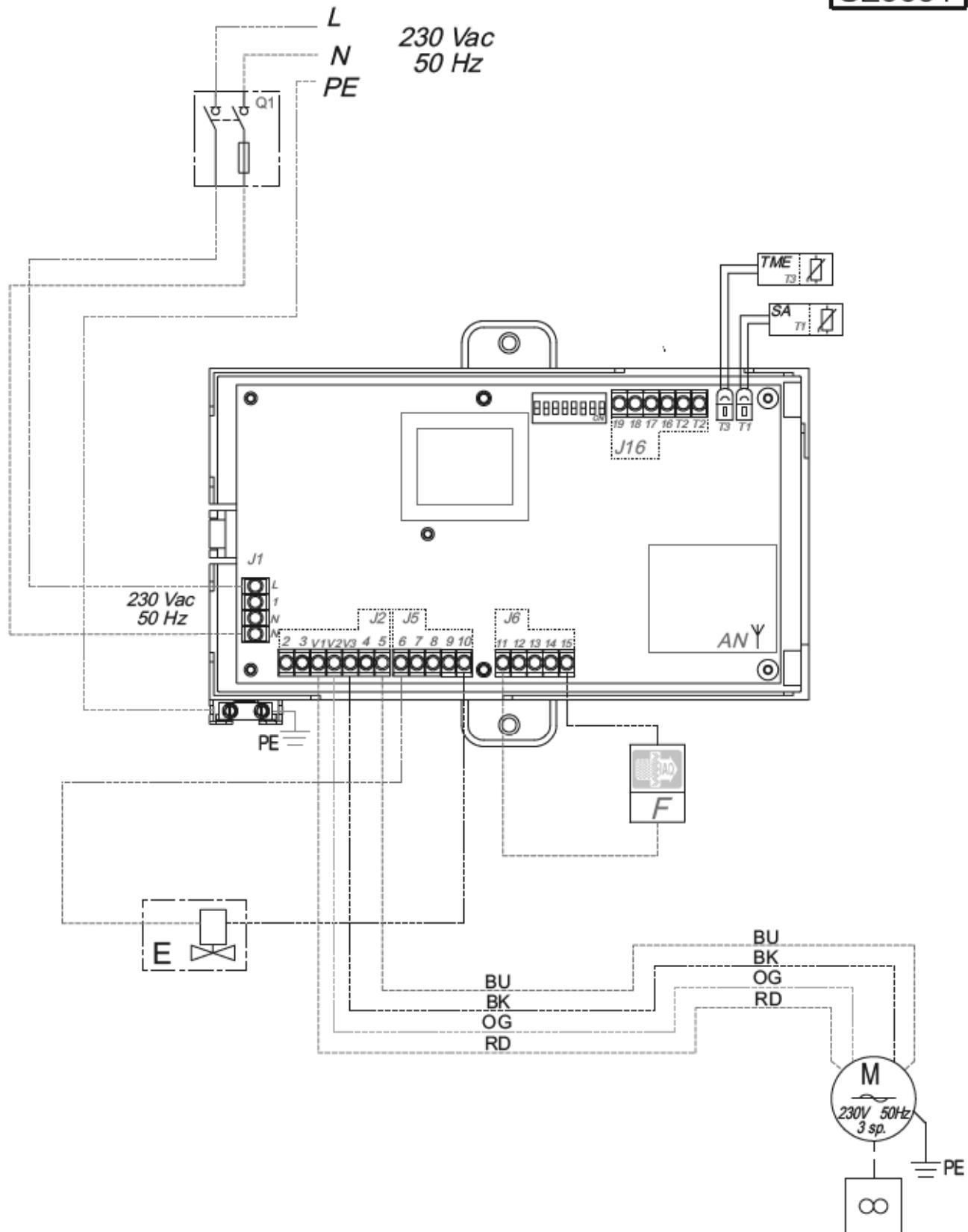
- CAMBIO STAGIONALE ESTERNO
- EXTERNAL SEASON MODE SWITCH-OVER
- CHANGEMENT DE SAISON EXTERIEUR
- EXTERNER BETRIEBSARTENWECHSEL
- CAMBIO EXTERNO DE TEMPORADA
- ÅRSTIDSBYT

- ESTATE
- SUMMER
- ETE'
- SOMMER
- VERANO
- SOMMAR

In1

In1

- INVERNO
- WINTER
- HIVER
- WINTER
- INVIERNO
- VINTER

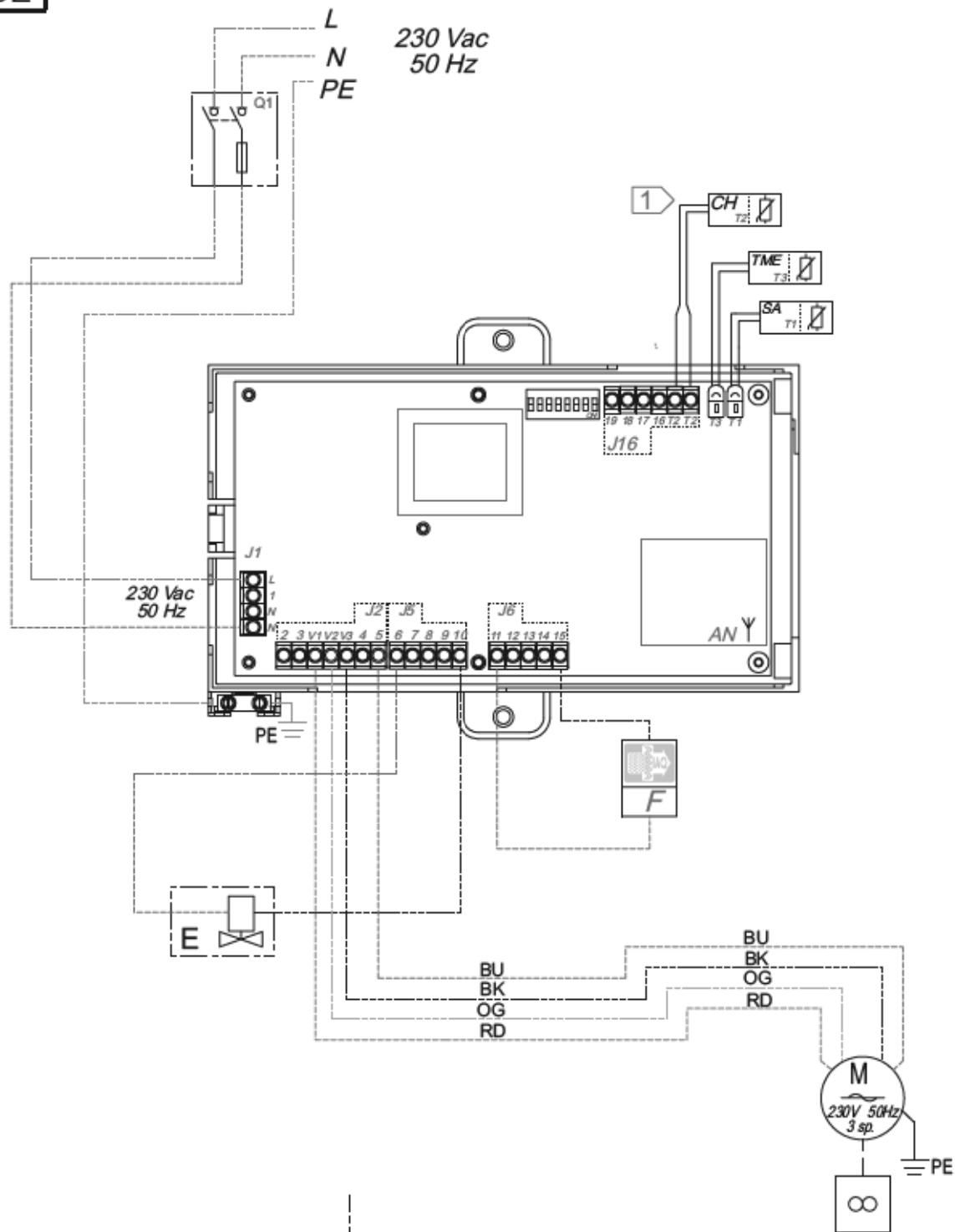


DIP - CONFIGURATION



- Non puo' ricevere la sonda di temperatura T2.
- Cannot be connected to T2 temperature cut-out.
- Ne peut pas recevoir le sonde T2.
- Die aufnahme des temperatur thermostats T2.
- No puede recibir la sonda de temperatura T2.
- Temperatursonden T2 kan inte monteras.

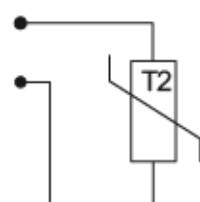
SE0092



DIP - CONFIGURATION



1 T2



$T2 < 20^\circ\text{C} =$

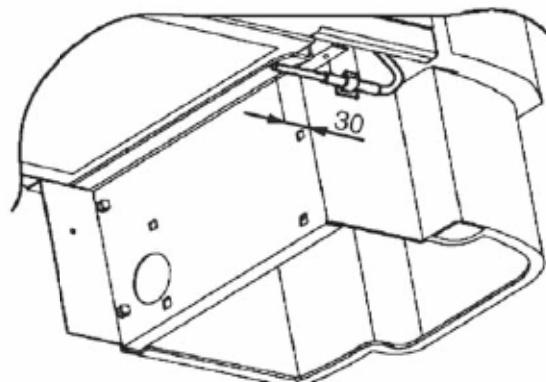
- ESTATE
- SUMMER
- ETE'
- SOMMER
- VERANO
- SOMMAR

$T2 > 30^\circ\text{C} =$

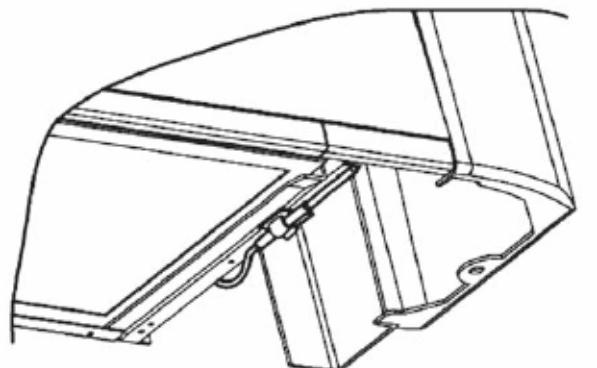
- INVERNO
- WINTER
- HIVER
- WINTER
- INVIERNO
- VINTER

Applicazione della sonda aria / Application of air probe

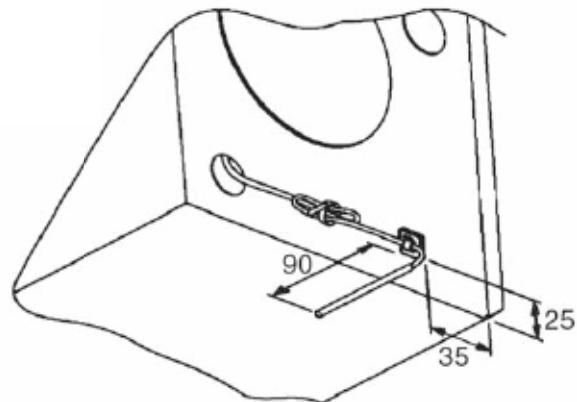
VENTILCONVETTORI / FAN COIL



VER



HOR



Legenda

VER	Mobile verticale
HOR	Incasso / mobile orizzontale

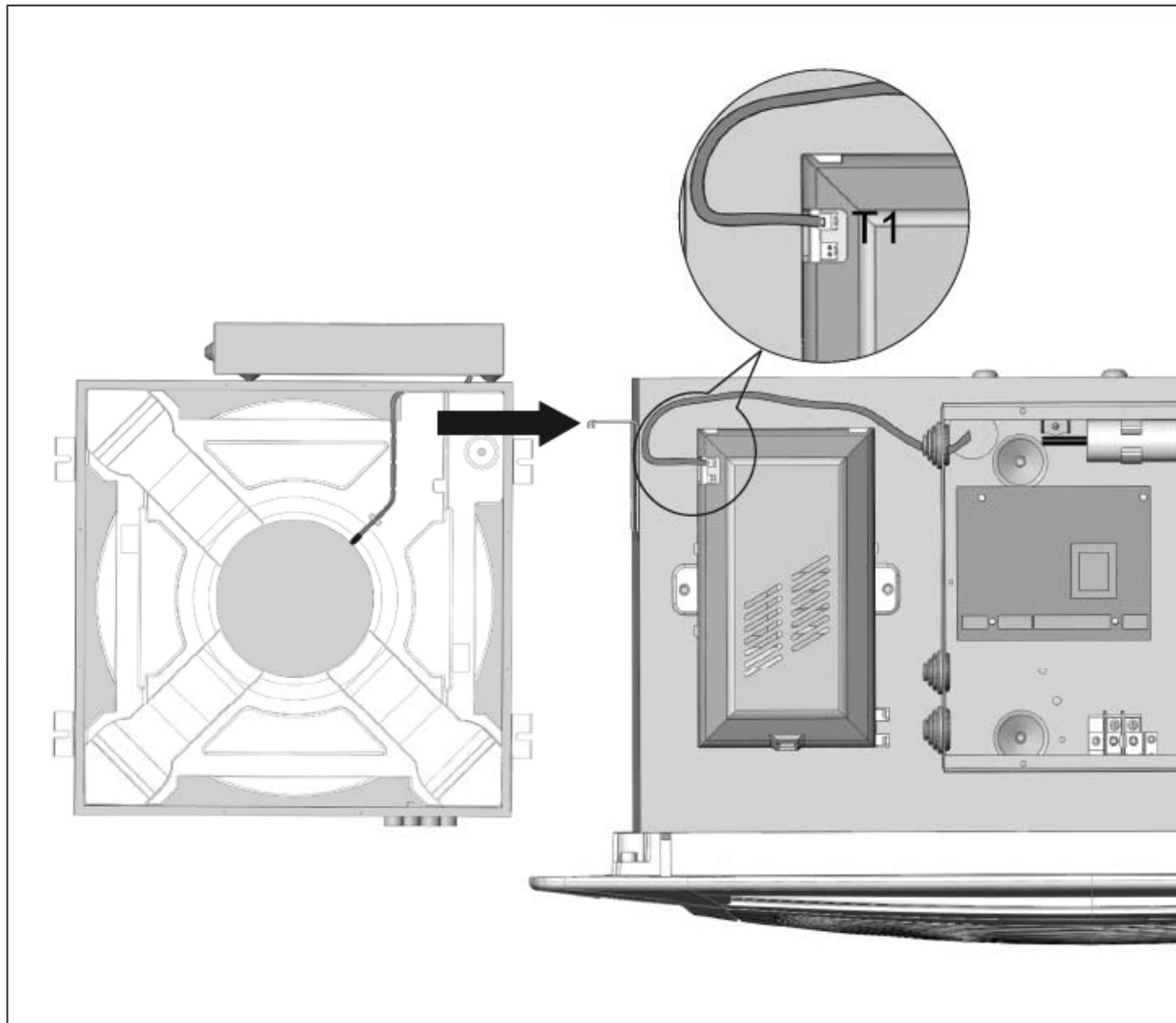
Legend

VER	Vertical casing
HOR	Concealed / horizontal casing

- Collegare la sonda aria al connettore T1 sulla scheda di potenza.

- Connect the air probe to connector T1 on the power board.

CASSETTE



- Collegare la sonda aria al connettore T1 sulla scheda di potenza.
- Connect the air probe to connector T1 on the power board.

Applicazione della sonda di minima TME / Application of the TME low temperature cut-out

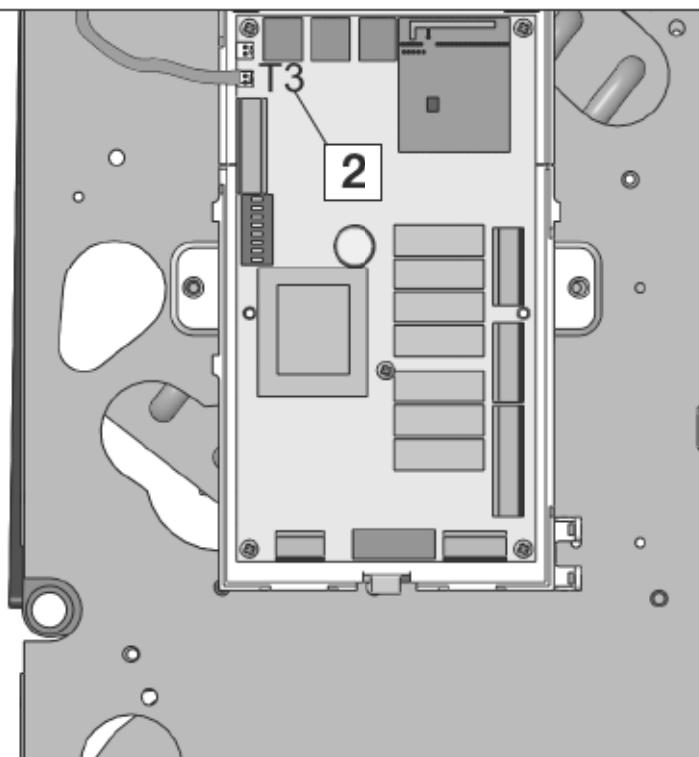
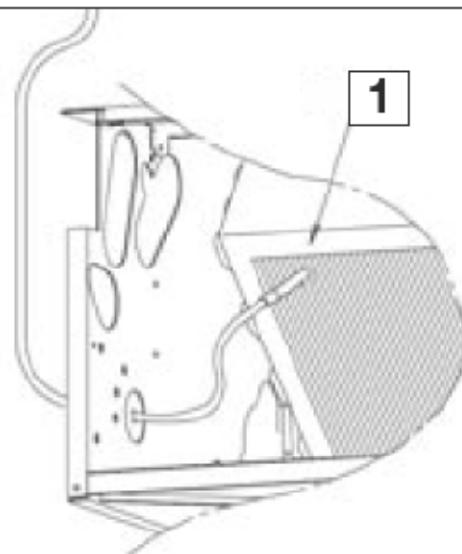
VENTILCONVETTORI / FAN COIL

Se si utilizza la sonda di minima, bisogna procedere nel seguente modo:

- Inserire la sonda di minima tra le alette della batteria (1) tenendola leggermente inclinata verso il basso.
- Collegare la sonda al connettore T3 sulla scheda di potenza (2).

If the low temperature cut-out is used, proceed as follows:

- Insert the low temperature cut-out between the fins of the battery (1) keeping it slightly inclined downward.
- Connect the probe to the connector T3 on the power board (2).



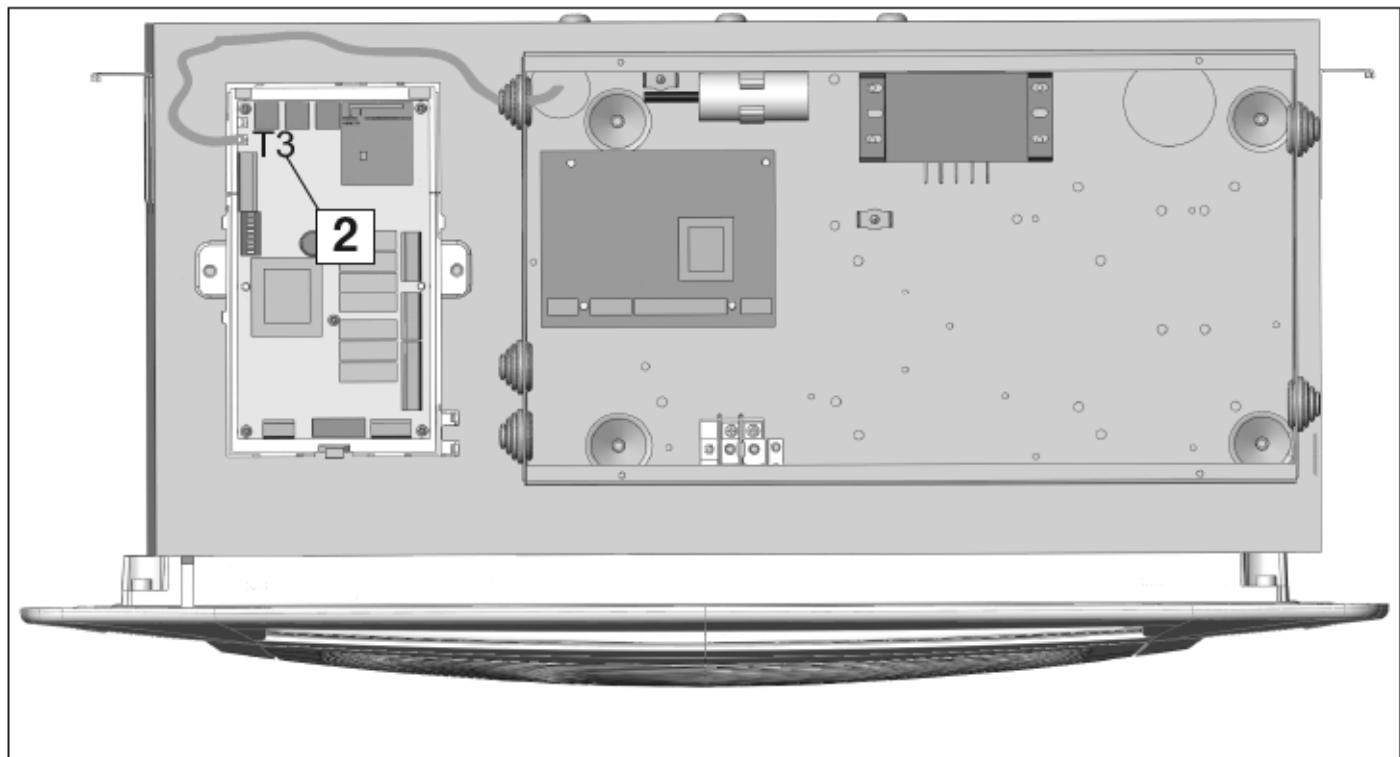
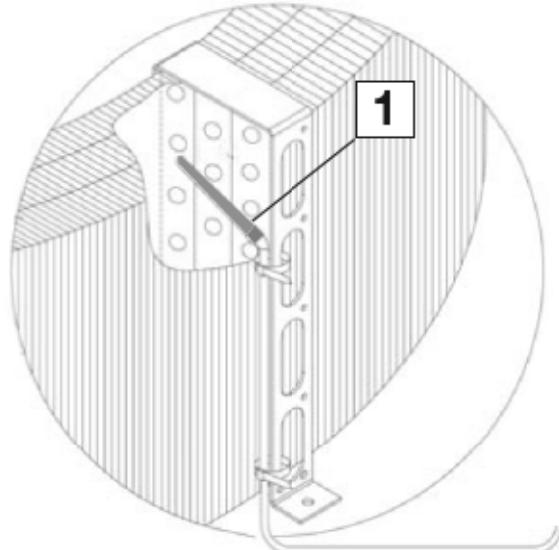
CASSETTE

Se si utilizza la sonda di minima, bisogna procedere nel seguente modo:

- Inserire la sonda di minima tra le alette della batteria (1) tenendola leggermente inclinata verso il basso.
- Collegare la sonda al connettore T3 sulla scheda di potenza (2).

If the low temperature cut-out is used, proceed as follows:

- Insert the low temperature cut-out between the fins of the battery (1) keeping it slightly inclined downward.
- Connect the probe to the connector T3 on the power board (2).



Sabiana spa

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+39.02.9772820
Segreteria telefonica dalle ore 18,30 alle ore 8

telegrammi Sabiana/Corbetta (MI)
C.C.P. 46598207
C.C.I.A.A. N. R.E.A. 1267681 Milano

Cap. Sociale € 2.500.000,00 int. vers.
Cod. Fisc./Partita IVA 09076750158
Reg. Imprese Milano N. 278348



Costruzione e vendita
di apparecchi per
riscaldamento e
condizionamento industriale
e civile

Aerotermini
Termostrisce radianti
Ventilconvettori
Unità trattamento aria ISO 9001-Cert.n° 0545/3
Canne fumarie



Oggetto: **Dichiarazione di conformità**

Object: **Declaration of conformity**

Dichiariamo sotto la nostra responsabilità che il prodotto:

Declare under our responsibility that the product:

Prodotto: Controllo Wireless Free Sabiana

Product: *Free Sabiana Wireless Control*

al quale questa dichiarazione si riferisce, è conforme alle seguenti norme:

to which this declaration relates is in conformity with the following standards or other normative document(s):

EN 60335-1	<ul style="list-style-type: none"> Sicurezza degli apparecchi elettrici d'uso domestico e similare - Norme generali <i>Safety of household and electrical appliances - General requirements</i>
EN 60335-2-40 (+AI)	<ul style="list-style-type: none"> Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2 : Norme particolari per le pompe di calore elettriche, per i condizionatori d'aria e per i deumidificatori <i>Household and similar electrical appliances – Safety – Part 2-40: Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers</i>
EN 300 328 V1.7.1	<ul style="list-style-type: none"> <i>Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using wide band modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive</i>
CEI EN 60730-1	<ul style="list-style-type: none"> Dispositivi elettrici automatici di comando per uso domestico e similare – Parte 1: Norme generali <i>Automatic electrical controls for household and similar use – Part 1 : General requirements</i>
EN 301 489-17 V1.2.1	<ul style="list-style-type: none"> <i>Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2,4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment</i>

in base a quanto previsto dalle Direttive:
following the provisions of the Directives:

2006/95/CE

2004/108/CE

1999/5/CE

Corbetta, 19/01/2009

Luigi Binaghi
Presidente