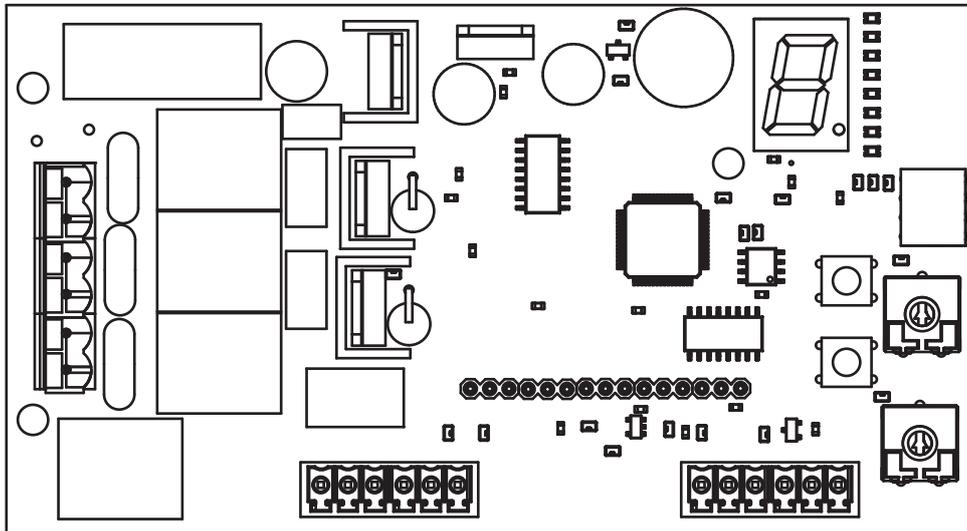


PRG-M24

NEXTA
T E C H



Electronic control unit for the automation of outdoor pergolas with rotating slats and board for optional LED management.

24 Vdc power supply.

Output for 1 or 2 x 24 VDC motors max 120 W each.

433.92 MHz receiver for radio transmitters.

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1 - PRODUCT FEATURES

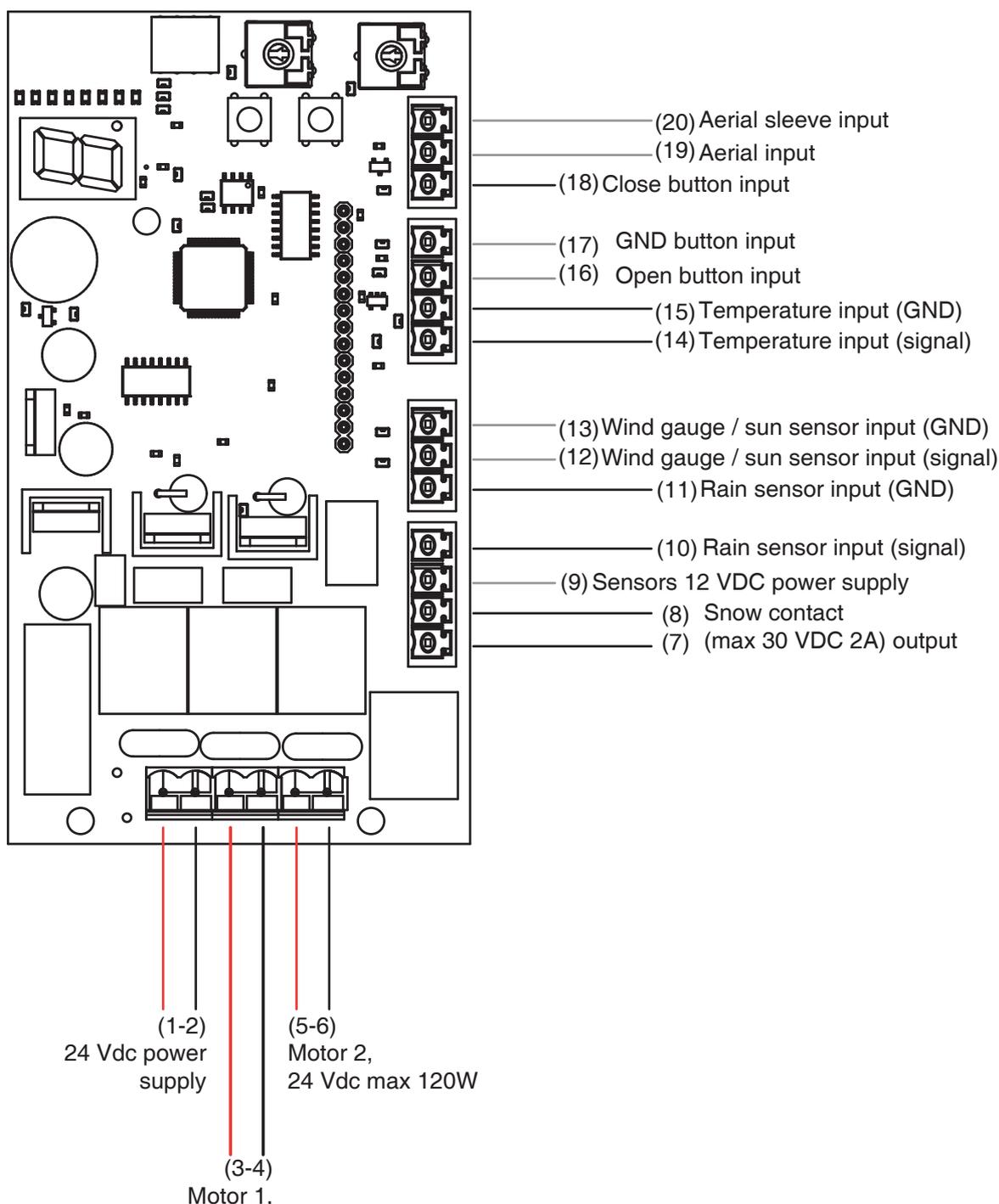
1.1 TECHNICAL DATA

Power supply (Input)	24 Vdc
Type of load (Output)	1 or 2 x 24 VDC motors
Max load power (Output)	Max 120 W per output
Number of programmable transmitters	150
Receiver frequency RF	433.920MHz
Operating temperature	-10° +55°
Dimensions (board only)	127 X 70 h 22 mm

2 - ELECTRICAL CONNECTIONS

WARNINGS

- Installation must be carried out only by qualified technicians in compliance with the electrical and safety standards in force.
- All connections must be made with the power turned off.
- Use suitable cables.
- Do not cut through the aerial
- A suitably sized disconnection device must be set up on the electric power line that supplies the product
- Disposal of waste materials must fully respect local standards.
- Do not exceed the load limits shown and use protected power supply units of the correct size for the load.



NOTE:

- Connect maximum 120 W per output.
- Operation of the inputs is manual
- The control unit can manage either the wind sensor (wind gauge) or the sun sensor. The two sensors cannot be connected in parallel

3 - SETTING UP CONTROL UNIT

The following functions are the default settings for the control unit:

- Manual management of a motor Ouvrir / Arrêter / Fermer
- Wired inputs enabled manually (operation cannot be set)
- No transmitter programmed
- No sensor enabled

Some functions can be set via the keys, LEDs and trimmers.

USE OF PROGRAMMING INTERFACE:

By using the SEL and SET keys you can move around inside the menus and change the various functions.

Each time you press the SEL key you move between LEDs. Each LED indicates a function (see following table for specific functions).

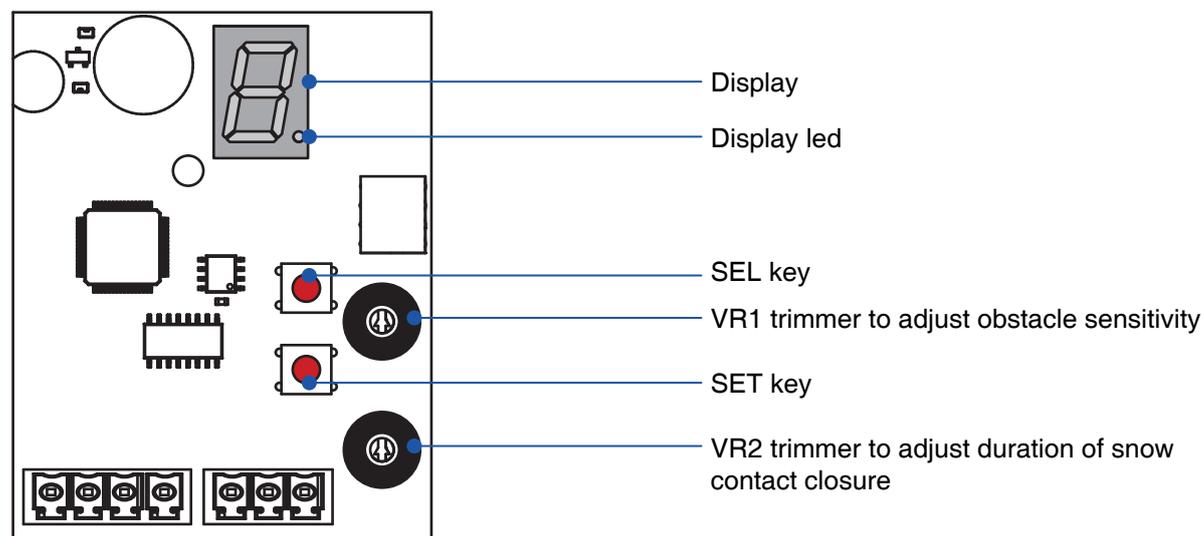
To select the parameter press the SET key and then select the value that appears on the display with the SEL key (the display's LED flashes).

Confirm the selected value by pressing the SET key again (the display's LED stays on).

After 20 seconds the control unit goes back into stand-by.

LED	DESCRIPTION	DEFAULT	PARAGRAPH
Motor type	Selecting motors and operating mode	1 motor, manual	3.1
Code	Remote control management	No associated remote control	3.2
T.motor	Setting motor time	No motor time	3.3
Wind	Management of wind sensor	Disabled	3.4
Rain	Management of rain sensor	Disabled	3.5
Temperature	Management of temperature sensor	Disabled	3.6
Snow	Management of snow sensor	Disabled	3.7
Sun	Management of sun sensor	Disabled	3.8

After making the connections automation is already in operation with manual commands via wire.



4 - SETTING OPERATING MODE

Default: 1 motor, manual

This procedure is used to set the number of motors connected and the type of control.

There can be 1 or 2 motors (synchronised operation).

Operation via radio can be:

MANUAL the motor moves in the direction selected until the transmitter key is held down

NOTE: sensors not enabled

AUTOMATIC each time the key is pressed the motor moves 30% of the total travel in the selected direction

VENETIAN press and release the key and the motor moves slightly in the selected direction, press and hold (>2sec) and it moves fully in the selected direction

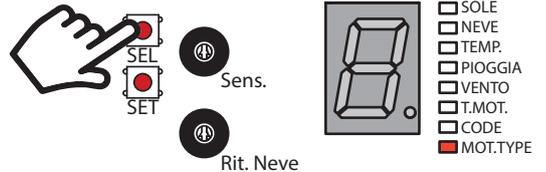
OPEN/STOP/CLOSE each time the key is pressed the motor moves fully in the selected direction

Note: if automatic, Venetian or OPEN/STOP/CLOSE operation is set it will be necessary to notify the control unit of the working time of the motor(s) with the procedure in paragraph 6 every time that the parameter is changed

PROCEDURE

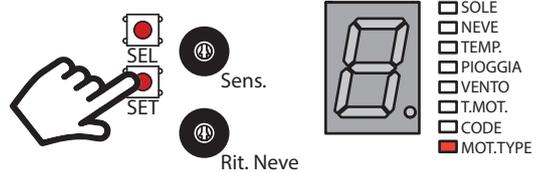
STEP 1

Keep pressing and releasing the SEL key until the «Mot. Type» LED comes on.
The display shows the current setting.



STEP 2

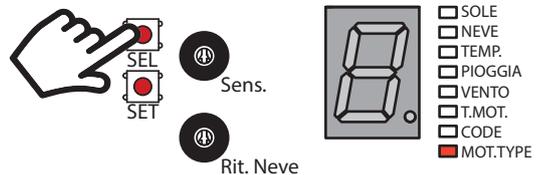
Press and release the SET button to confirm. The LED on the display flashes.



STEP 3

By pressing and releasing the SEL key, select the value corresponding to the setting you want, according to the following table.

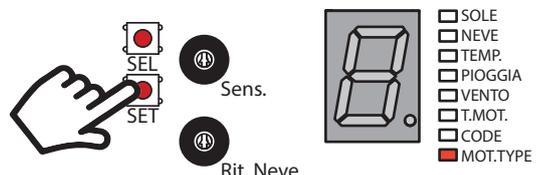
DISPLAY NO.	DESCRIPTION
1	1 motor manual operation
2	1 motor automatic operation
3	1 motor Venetian operation
4	1 motor Open/Stop/Close operation
5	2 motors manual operation
6	2 motors automatic operation
7	2 motors Venetian operation
8	2 motors Open/Stop/Close operation
E	Exit



STEP 4

Press and release the SET button to confirm.

Wait 20 seconds or press the SEL button until a horizontal line appears on the display.



Note: if automatic or Venetian operation is set it will be necessary to notify the control unit of the working time of the motor(s) with the procedure in paragraph 6 every time that the parameter is changed

5 - REMOTE CONTROL MANAGEMENT

Default: no transmitter associated / remote programming enabled

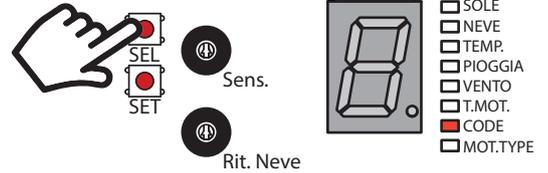
With this procedure it is possible to:

- Associate a compatible transmitter
- Delete the programmed transmitters

PROCEDURE

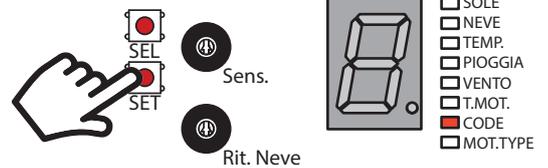
STEP 1

Keep pressing and releasing the SEL key until the «Code» LED comes on.



STEP 2

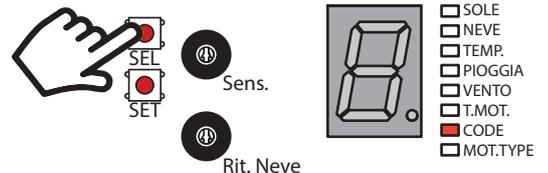
Press and release the SET button to confirm.
The «Code» LED flashes.



STEP 3

By pressing and releasing the SEL key, select the value corresponding to the setting you want, according to the following table.

DISPLAY NO.	DESCRIPTION
1	Save remote control
8	Not used
9	Deleting all remote controls
E	Exit



1 (save remote control)

8

9 (deleting)

STEP 4a

Press and release the SET key and the LED on the display flashes, then send an "UP" command with the transmitter to be saved.

The display will show:

S = remote control saved

P = remote control already saved

r = remote control not recognised

F = remote control memory full

Wait 20 seconds or press the SEL button until an E (exit) appears on the display and confirm with the SET button.

STEP 4b

Not used

STEP 4c

Press and hold the SET key (about 5 seconds) to confirm the deletion. The control unit will beep.

Wait 20 seconds or press the SEL button until an E (exit) appears on the display and confirm with the SET button.

6 - SETTING WORKING TIME OF MOTORS

Default: no time set

NOTE: Before carrying out this procedure programme a remote control (see paragraph 5)

Also check that the motor stops when it gets to the limit and the letter "L" appears on the display (the limit is detected if there is a mechanical stop or where there is a built-in limit switch).

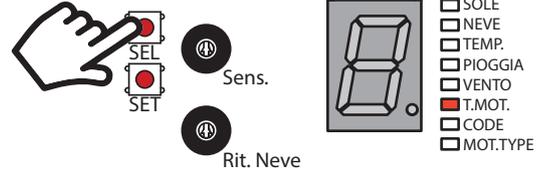
If that does not occur, adjust the movement threshold with the VR1 trimmer "Sens." (the trimmer adjusted full scale to "-" disables the movement threshold).

To obtain non-manual operation via radio set the operation to automatic, Venetian or Open-Stop-Close (see paragraph 3.1).

PROCEDURE

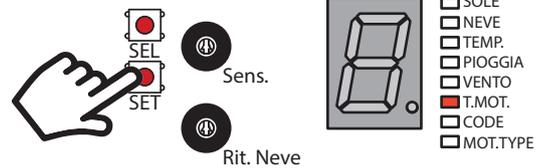
STEP 1

Keep pressing and releasing the SEL key until the «T.MOT.» LED comes on.



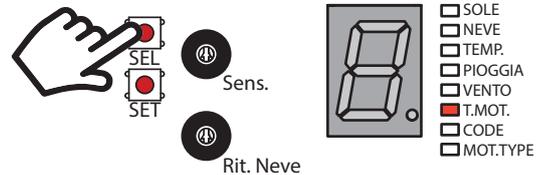
STEP 2

Press and release the SET button to confirm. The LED on the display flashes.



STEP 3

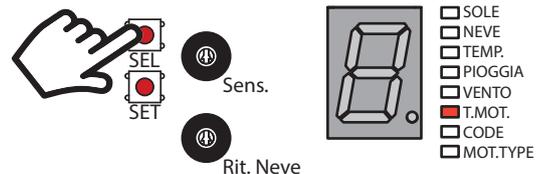
By pressing and releasing the SEL key you can select value "0" on the display



STEP 4

Press and release the SET button to start automatic programming. The control unit will make a closing movement followed by opening and closing cycles at the end of which the maneuver times will be programmed.

ATTENTION: if the first movement is opening instead of closing, press the SET button to interrupt the programming of the run and invert the phases of the motor. Then repeat the procedure.



7 - MANAGEMENT OF SENSORS

7.1 - SETTING WIND SENSOR

Default: not enabled

NOTE:

-The input into terminals 12-13 is designed for either the wind sensor or the sun sensor. Therefore activate only the sensor you want once it is connected.

- The sensor works only if the operating mode is set at automatic or Venetian, see paragraph 4.

If the wind sensor is activated a speed threshold must be set. Above this, the sensor will put the control unit into alarm mode.

ALARM: the control unit detects a wind speed higher than the one set, for 10 seconds. Then the control unit turns the pergola slats to 33% of complete opening and disables the reception of remote commands and of any commands from apps until the alarm is over.

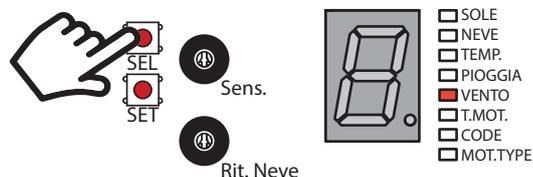
ALARM NOT PRESENT/END OF ALARM: the control unit detects a wind speed lower than the one set, for 60 seconds.

ALARM TEST: the control unit makes a brief opening movement followed by a brief closing movement. When the test is completed the control unit will beep 4 times in confirmation.

PROCEDURE:

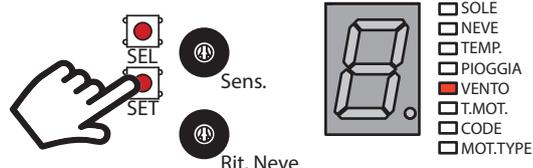
STEP 1

Keep pressing and releasing the SEL key until the «Wind (Vento)» LED comes on.
The display shows the current setting.



STEP 2

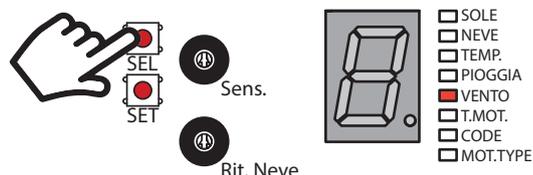
Press and release the SET button to confirm.
The LED on the display flashes.



STEP 3

By pressing and releasing the SEL key, select the value corresponding to the setting you want, according to the following table.

DISPLAY NO.	DESCRIPTION
d	Wind sensor disabled
0	Wind sensor test
1	Wind sensor intervention 5km/h
2	Wind sensor intervention 10km/h
3	Wind sensor intervention 15km/h
4	Wind sensor intervention 20km/h
5	Wind sensor intervention 25km/h
6	Wind sensor intervention 30km/h
7	Wind sensor intervention 35km/h
8	Wind sensor intervention 40km/h
9	Wind sensor intervention 45km/h
E	Exit



d (disabled)

0 (test)

1-9 (enabled)

STEP 4a

Press and release the SET key and the LED on the display will stop flashing.

STEP 4b

Press and release the SET key and the LED on the display will stop flashing.
To carry out the test turn the wind sensor (wind gauge) blades by hand: the control unit will make a brief opening movement followed by a brief closing movement. When the test is completed the control unit will beep 4 times.
NOTE: when the test is completed remember to activate/deactivate the sensor to exit test mode.

STEP 4c

Press and release the SET key and the LED on the display will stop flashing.
When the wind sensor puts the control unit into alarm mode, the letter "A" appears on the display.

7.2 - SETTING RAIN SENSOR

Default: not enabled

NOTE

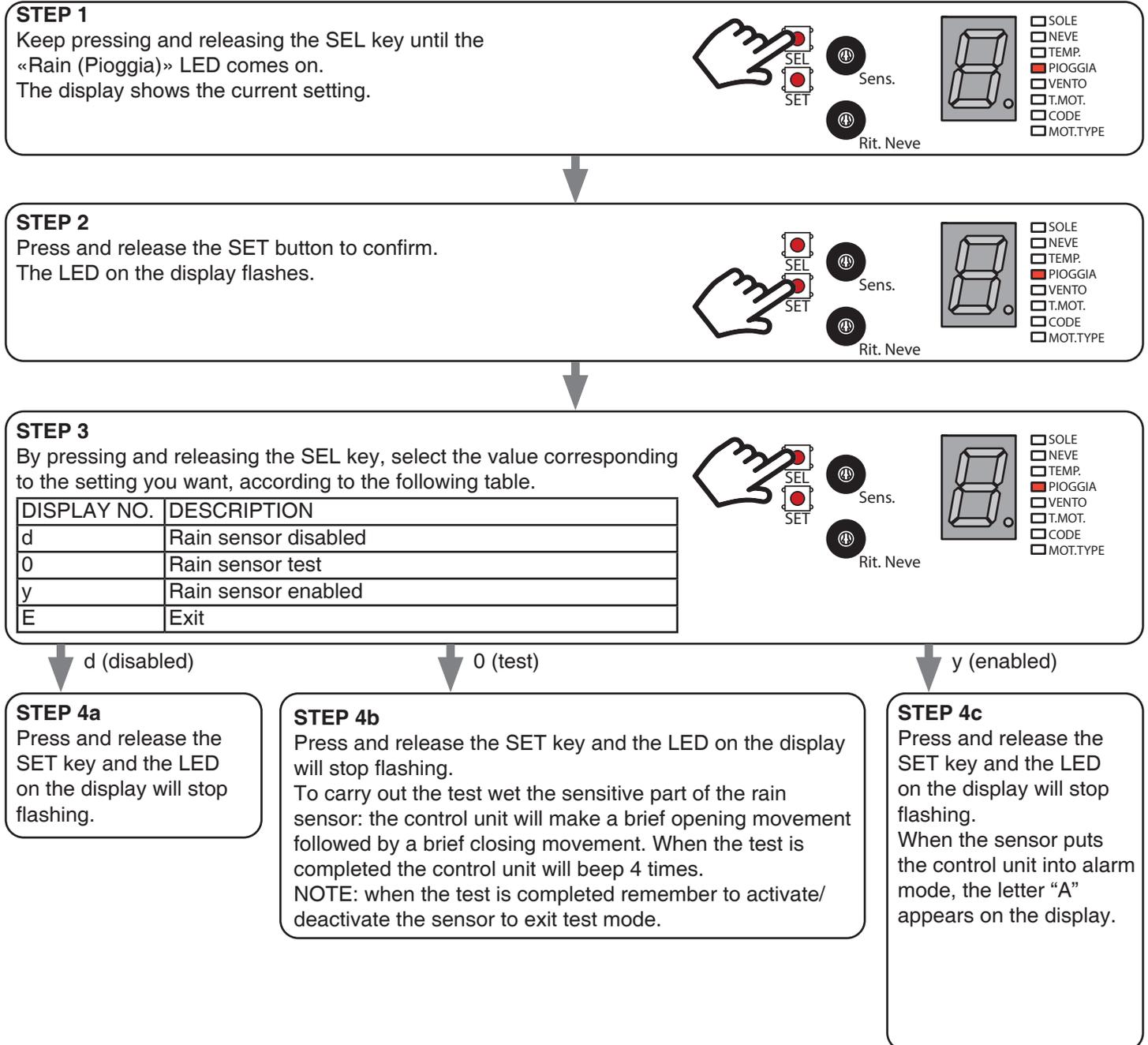
- The sensor works only if the operating mode is set at automatic, Venetian or Open/Stop/Close, see paragraph 4. When the sensor detects water, it puts the control unit into alarm mode.

ALARM: the sensor detects water: then the control unit turns the pergola slats to close completely and disables the reception of remote commands until the alarm is over.

ALARM NOT PRESENT/END OF ALARM: the sensitive part of the rain sensor is dry.

ALARM TEST: the control unit makes a brief opening movement followed by a brief closing movement. When the test is completed the control unit will beep 4 times in confirmation.

PROCEDURE:



7.3 - SETTING TEMPERATURE SENSOR

Default: not enabled

NOTE

- The sensor works only if the operating mode is set at automatic, Venetian or Open/Stop/Close, see paragraph 4

When the sensor detects a temperature below 2°C, it puts the control unit into alarm mode to stop ice forming.

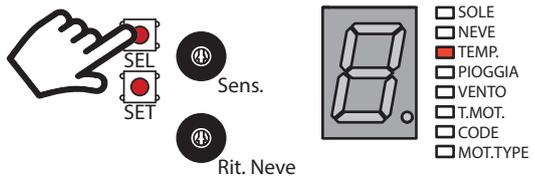
ALARM: the sensor detects a temperature below 2°C and the pergola is closed: then the control unit turns the pergola slats to 4% of full opening and activates the snow contact (terminals 7 and 8) for a period from 30 minutes to 4 hours, that can be set with the VR2 trimmer "Snow Delay"

ALARM NOT PRESENT/END OF ALARM: the temperature detected is above 3°C or a command is received

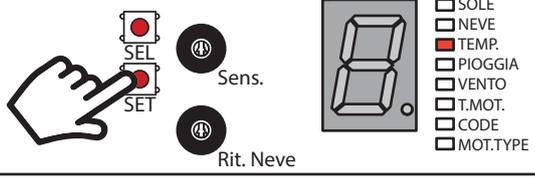
ALARM TEST: the control unit makes a brief opening movement followed by a brief closing movement. When the test is completed the control unit will beep 4 times in confirmation.

PROCEDURE:

STEP 1
Keep pressing and releasing the SEL key until the «Temp» LED comes on.
The display shows the current setting.

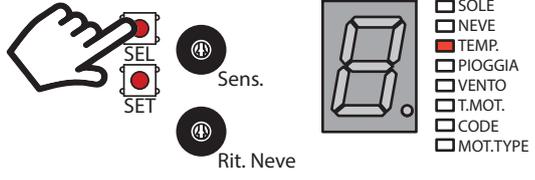


STEP 2
Press and release the SET button to confirm.
The LED on the display flashes.



STEP 3
By pressing and releasing the SEL key, select the value corresponding to the setting you want, according to the following table.

DISPLAY NO.	DESCRIPTION
d	Temperature sensor disabled
0	Temperature sensor test
y	Temperature sensor enabled
E	Exit



↓ d (disabled)

↓ 0 (test)

↓ y (enabled)

STEP 4a
Press and release the SET key and the LED on the display will stop flashing.

STEP 4b
Press and release the SET key and the LED on the display will stop flashing.
To carry out the test grasp the sensor between your fingers so as to change the temperature detected by a few °C: the control unit will make a brief opening movement followed by a brief closing movement. When the test is completed the control unit will beep 4 times.
NOTE: when the test is completed remember to activate/deactivate the sensor to exit test mode.

STEP 4c
Press and release the SET key and the LED on the display will stop flashing.
When the sensor puts the control unit into alarm mode, the letter "A" appears on the display.

7.4 - SETTING SNOW ALARM

Default: not enabled

NOTE

- The sensor works only if the operating mode is set at automatic, Venetian or Open/Stop/Close,, see paragraph 4
The control unit does not have an actual snow sensor, but the alarm is generated by the combined rain sensor and temperature sensor alarms.

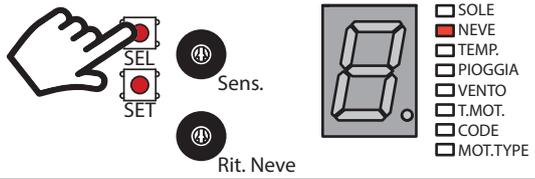
ALARM: the temperature measured is lower than 2°C and the rain sensor detects water: then the control unit turns the pergola slats to 66% of full opening and the commands are enabled only manually. Then the snow contact (terminals 7 and 8) is activated for a period from 30 minutes to 4 hours, that can be set with the VR2 trimmer "Snow Delay"

ALARM NOT PRESENT/END OF ALARM: the temperature detected is above 3°C or no rain is detected.

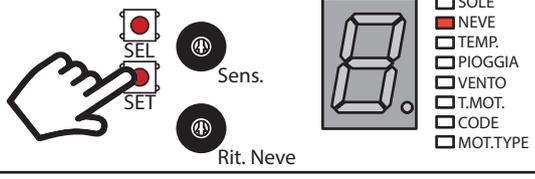
ALARM TEST: the control unit makes a brief opening movement followed by a brief closing movement. When the test is completed the control unit will beep 4 times in confirmation.

PROCEDURE:

STEP 1
Keep pressing and releasing the SEL key until the «Snow (Neve)» LED comes on.
The display shows the current setting.

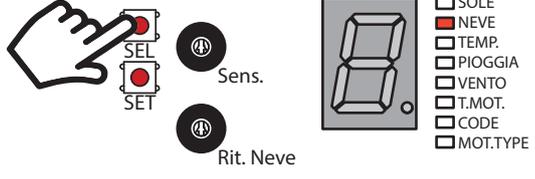


STEP 2
Press and release the SET button to confirm.
The LED on the display flashes.



STEP 3
By pressing and releasing the SEL key, select the value corresponding to the setting you want, according to the following table.

DISPLAY NO.	DESCRIPTION
d	Snow sensor disabled
0	Snow sensor test
y	Snow sensor enabled
E	Exit



↓ d (disabled)

↓ 0 (test)

↓ y (enabled)

STEP 4a
Press and release the SET key and the LED on the display will stop flashing.

STEP 4b
Press and release the SET key and the LED on the display will stop flashing.
To carry out the test wet the sensitive part of the rain sensor and grasp the temperature sensor in your hands: the control unit will make a brief opening movement followed by a brief closing movement. When the test is completed the control unit will beep 4 times.
NOTE: when the test is completed remember to activate/deactivate the sensor to exit test mode.

STEP 4c
Press and release the SET key and the LED on the display will stop flashing.
When the sensor puts the control unit into alarm mode, the letter "A" appears on the display.

7.5 - SETTING SUN SENSOR

Default: not enabled

NOTE: the input into terminals 6-7 is designed for either the wind sensor or the sun sensor. Therefore activate only the sensor you want once it is connected.

The sensor works only:

- if the operating mode is set at automatic or Venetian, see paragraph 4
- there are no other active sensors

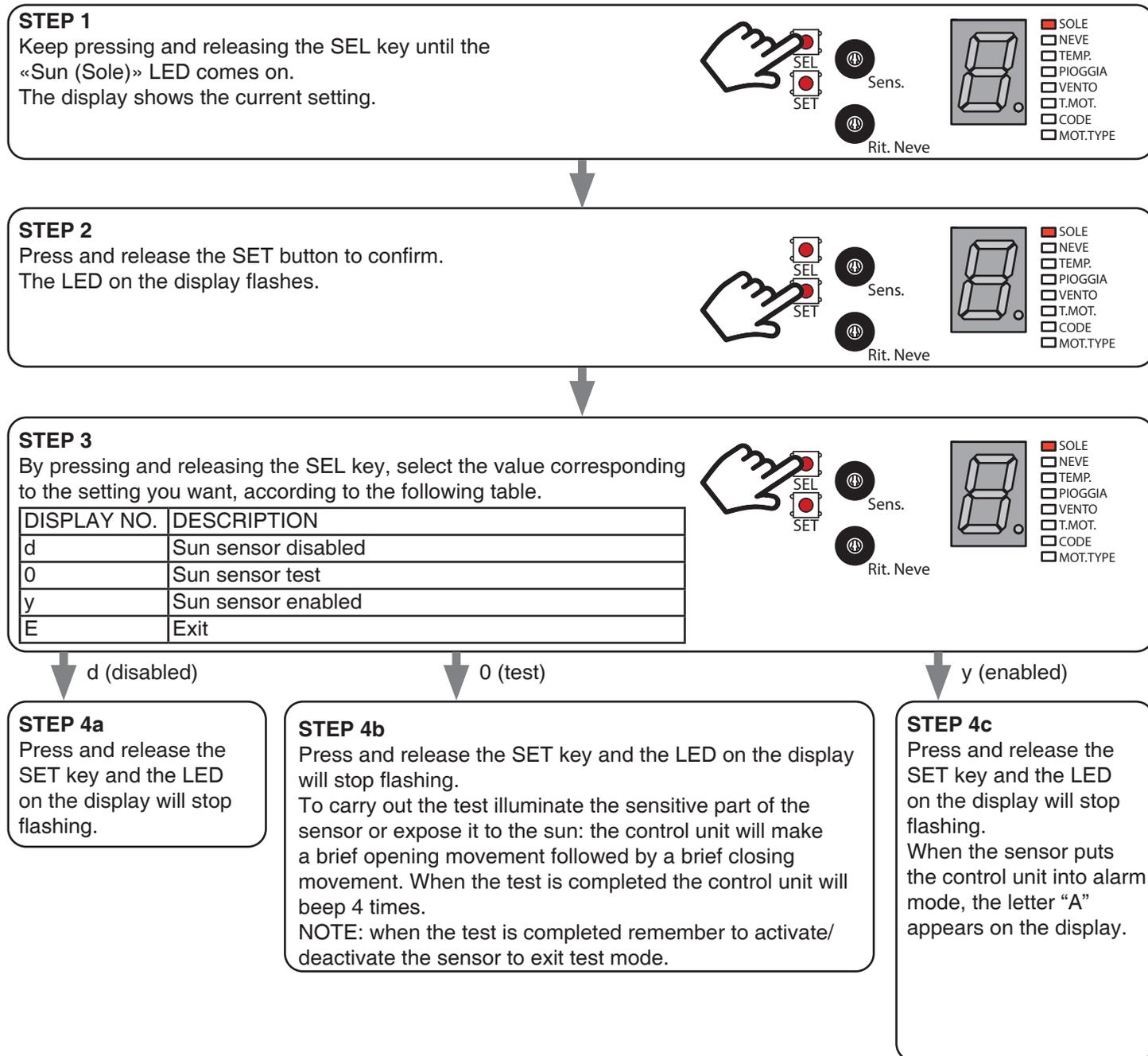
When the sensor detects sun for more than 10 minutes, it puts the control unit into alarm mode to create a shaded zone.

ALARM: the sensor receives direct light for a period of more than 10 minutes: then the control unit turns the slats to close completely.

ALARM NOT PRESENT/END OF ALARM: the sensor is in the shade or a command is received

ALARM TEST: the control unit makes a brief opening movement followed by a brief closing movement. When the test is completed the control unit will beep 4 times in confirmation.

PROCEDURE:



8 - RESETTING CONTROL UNIT

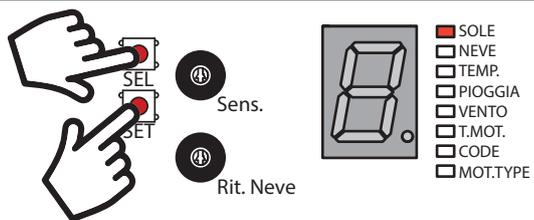
This procedure is used to set the control unit with the factory parameters.

PROCEDURE:

STEP 1

Press SET and SEL at the same time until all the red LEDs come on.

When the reset is completed the control unit will beep 3 times in confirmation.





V2.0

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