www.corradi.eu

User manual:

control unit for TYPE 2/3 motor for PERGOTENDA®

rev02 25.10.16

Corradi
OUTDOOR LIVING SPACE

This manual contains important information about how to use and safety of the installation. Follow the instructions and keep them for future reference. The device is designed exclusively for the handling of PERGOTENDA® Corradi, any other use is considered improper and prohibited.

Notes on radio systems

It is advisable **to avoid using radio systems in areas with strong interference** (for example, near police stations, airports, ports, hospital, etc.). A technical inspection is in any case advisable before installing any radio system in order to identify sources of interference. Radio systems can be used where possible disturbances or malfunctioning of the transmitter or the receiver do not cause a risk factor, or if the risk factor is cancelled by suitable safety systems. The presence of radio device operating on the same transmission frequency (**433,42 MHz**) can interfere with the radio receiver of the motor and so reduce the range of the system and limit the functionality of the installation.

Disposal

Dispose materials on the proper containers, complying with the law in force in your locality. This product may have substances that are polluting for the environment and dangerous for the health. At the end of the product life cycle, carefully comply with the waste disposal rules. It is strickly forbidden to dispose the product on the domestic waste.

Technical specifications (@ 20°C)

✓ Power supply:	230 Vac, 50/60 Hz	✓ Memorizable sun sensor:	1
✓ Contact capacity:	5A at 250 Vac	✓ Memorizable wind sensor:	up to 4
✓ Working temperature:	from –20 to +55 °C	✓ Range (estimes):	100m outdoor, 20m indoor
✓ IP protection:	IP68		
✓ Working frequency:	433.42 MHz	(*) rain sensor and sun sensor included	
✓ Memorizable transmitters:	up to 40 (*)		

01. WARNINGS

01.1 WARNINGS FOR SAFETY

Incorrect installation can cause serious injuries ● Keep these instructions for future maintenance work and disposal of the product ● All the product installation, connection, programming and maintenance operations must be carried out only by a qualified and skilled technician, who must comply with laws, provisions, local regulations and the instructions given in this manua ● The wiring must comply with current IEC standards ● Some applications require hold-to-run operation and can exclude the use of radio controls or require particular safety devices ●To prevent potentially dangerous situations, check the operating condition of the structure regularly

01.2 WARNINGS FOR INSTALLATION

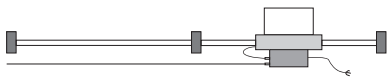
The product must be installed in accordance with the provisions in the PERGOTENDA® CORRADI technical manual ● Check that the package is intact and has not been damaged in transit ● A heavy knock and the use of unsuitable tools can cause the damage ● Do not pierce or tamper with the product in any way. Do not modify or replace parts without the manufacturer's permission ●The power cable must be positioned in such a way that it does not come into contact with moving parts ●If there are several radio appliances in the same system, they must not be less than 1.5 m apart ● Do not install the product near metal surfaces ● Use momentary (hold-to-run) control buttons. Do NOT use stay-put switches ● Position the buttons within sight of the roller shutter/awning but a long way from its moving parts. Position the buttons more than 1.5 m from the floor

01.3 WARNINGS FOR USE

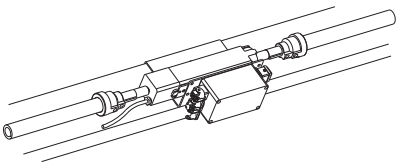
The product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are supervised or given instructions on how to use the product by a person responsible for their safety ● Before operating the roller shutter/awning, make sure there are no people or objects in the area involved in its movement. Check the automation during movement and keep people at a safe distance, until the movement ends ●Do not allow children to play with the appliance or with the fixed control devices. Also, keep the portable control devices (remote controls) out of the reach of children ● Do not operate the roller shutter/awning when maintenance operations are being carried out (e.g. window cleaning). If the control device is automatic, disconnect the motor from the power line

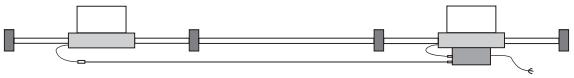
02. ELECTRICAL CONNECTIONS

To connect the motor, follow the diagram on the box.
For the connection of the button (optional) see the following scheme:

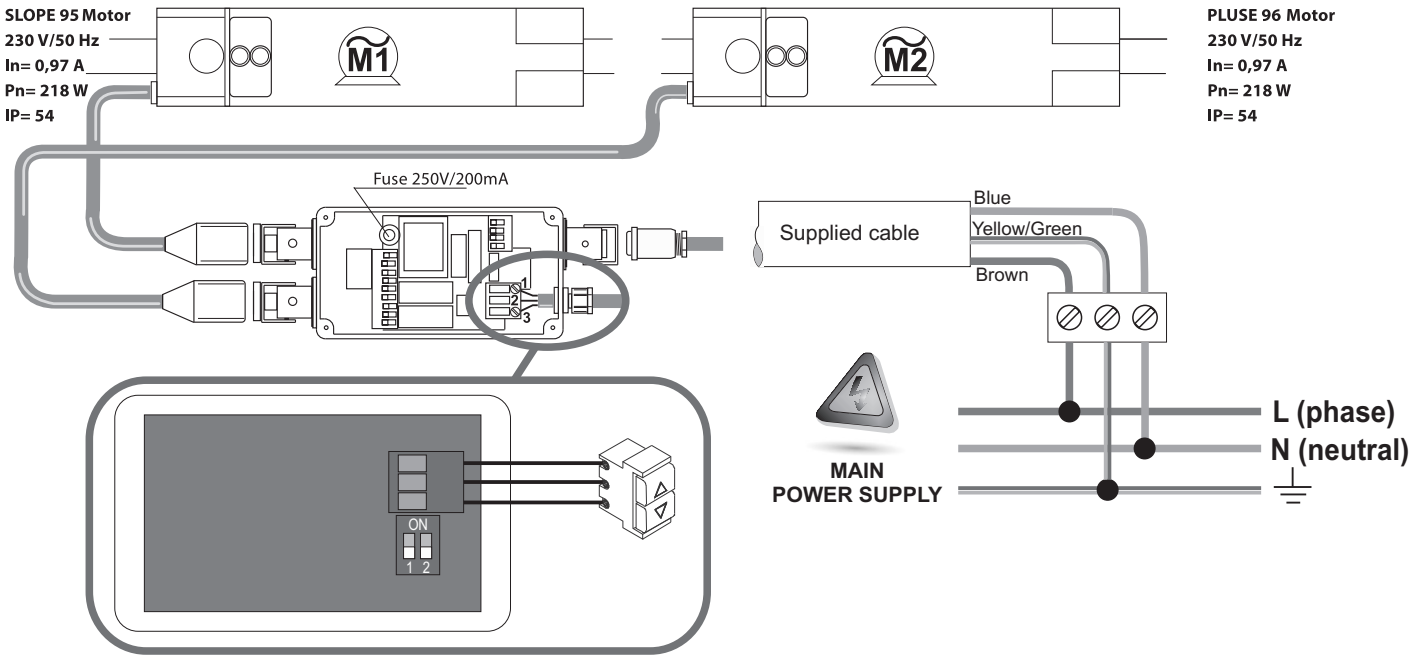


With automatic opening limit switch for one motor





With automatic opening limit switch for two motors



02.1 POWER SUPPLY

The device must be supplied to the voltage 230 Volts 50 Hz exclusively via the supplied cable.

02.2 CONNECTION OF THE MOTOR (or motors)

The device is capable of driving up to 2 motors PERGOTENDA® Corradi. The motors must be connected to the proper keyed connectors.

02.3 CONNECTION OF COMMAND BUTTON (optional)

The device is able to handle 2 clean contacts, typically used for the installation of command buttons via cable. The buttons should be with momentary positions (hold to run), do not use buttons with maintained position. If necessary, connect the control buttons as shown. If the switch SW1 is set to OFF (factory setting), buttons work in "pulse" mode, if the switch SW1 is set to ON the buttons work in "hold to run" mode.

02.3.1 PULSE MODE (switch SW1 OFF)

Pressing a button for 0.5 seconds, the motor moves in the commanded direction. To stop the motor press briefly (less than 0.5 seconds) any button.

02.3.2 HOLD-TO-RUN MODE (switch SW1 ON)

The motor moves in upward or downward direction if the relative contact is closed for at least 0.5 sec; the motor stops as soon as the contact opens.

02.4 CONNECTION WITH HOME AUTOMATION CONTROL UNIT

The control outputs of the home automation control unit (following H.A.C.U.) must be connected to the command inputs of the device, replacing the manual buttons. Consequently, the H.A.C.U. must comply with the rules of operation of the command buttons, depending on whether the command buttons work in PULSE mode (factory setting) or in HOLD TO RUN mode (see section 02.3)

Rules that the H.A.C.U. must comply to control the motors operating with buttons in PULSE mode.

a) The H.A.C.U. must not measure the current drawn by the command inputs of the motor (which absorb less than 1 mA).
b) The H.A.C.U. must be connected to the motor as shown, substituting the command buttons with the outputs of the H.A.C.U..
c) To operate the motor, the H.A.C.U. must close contact (up or down) for more than 0.5 seconds (typically using a pulse duration of 1 second).
d) To stop the motor, the H.A.C.U. must close contact (up or down) for 0.5 seconds or less (typically using a pulse duration of 0.2 seconds).

Rules that the H.A.C.U. must comply to control the motors operating with buttons in HOLD TO RUN mode.

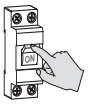
a) The H.A.C.U. must not measure the current drawn by the command inputs of the motor (which absorb less than 1 mA).
b) The H.A.C.U. must be connected to the motor as shown, substituting the command buttons with the outputs of the H.A.C.U..
c) To allow the conclusion of the entire opening / closing, the H.A.C.U. must be able to close the contact UP / DOWN to the time required for the motor to perform the complete operation.
d) To stop the motor, the H.A.C.U. must be able to re-open the contacts UP / DOWN at any time.

At the time of this document printing, specific issues related to the connection between the module and H.A.C.U. are not known (if you follow the rules above). However the manufacturer disclaims any responsibility concerning the non-compatibility (even partial) with any H.A.C.U.. If the H.A.C.U. uses KNX protocols or similar, contact the vendors of home automation controller informing them of the rules above. Probably the manufacturer of H.A.C.U. can provide appropriate interfaces to connect the device to the H.A.C.U..

03. FIRST INSTALLATION

03.1 USING A TRANSMITTER

A

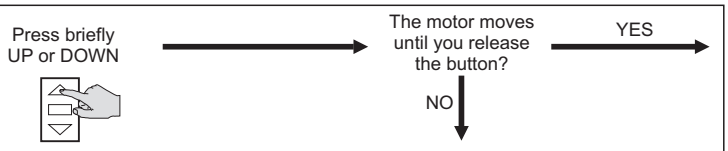


Give power to the module

B (1)

Within 15s press PROG of the transmitter

C (2)

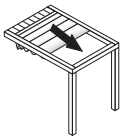


Remove power to the module, wait few seconds, repeat the procedure from point A

D (3)

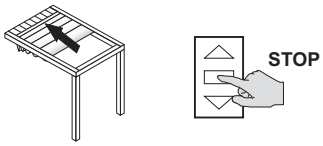
Press **STOP** 3 times

E



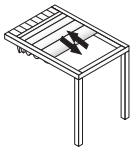
After a few seconds the motor moves downward. Wait. The motor stops automatically when the fabric is tense.

F



The motor moves upward. Press STOP in the desired upper end position.

G

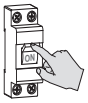


The module stores the settings; the motor signals that installation is complete.

(1) : not use the commands by wire. When you press PROG of the transmitter, the commands by wire are inhibited.
(2) : the motor moves in "hold to run" mode: by pressing UP or DOWN of the transmitter the motor moves in a certain direction until you release the button.
(3) : the button must be pressed for 3 times briefly, about 1 second between pressing and the next.

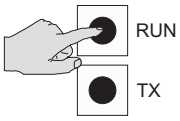
03.2 USING RUN BUTTON (onboard)

A



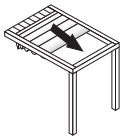
Give power to the module

B



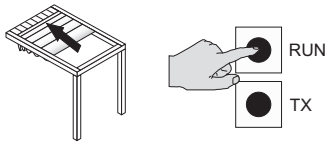
Press RUN on the board until the LED lights (about 2 seconds), then release RUN.

C



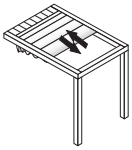
After a few seconds the motor moves downward. Wait. The motor stops automatically when the fabric is tense.

D



The motor moves upward. Press RUN in the desired upper end position.

E



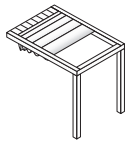
The module stores the settings; the motor signals that installation is complete.

Note: If you want to memorize a transmitter, see section 04.2

04. MEMORIZATION/DELETION OF A RADIO DEVICE

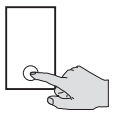
04.1 USING A TRANSMITTER

A



Bring the motor in an intermediate position

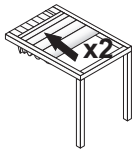
B



Press PROG of the transmitter for about 5 s

C

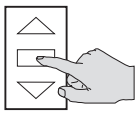
The onboard LED lights up



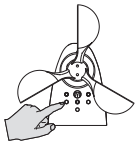
The motor makes 2 briefly upward movements

WITHIN 15 seconds...

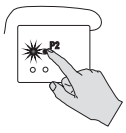
D (1)



Press **STOP** of the transmitter you want memorize/delete.

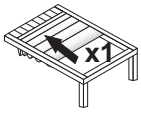


Press **1** of the sensor you want memorize/delete.

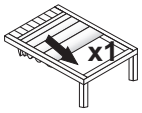


Press **P2** of the rain sensor you want memorize/delete.

E



Memorized !



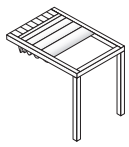
Deleted !

The motor signals the operation performed.

(1) Hold down the button on the transmitter or radio sensor until the motor performs the signal in point E. In particular, to memorize or delete a battery powered sensor you may need to hold the button up to 10 seconds. If the button is not pressed within 15 seconds, the motor exits the programming and signals it with 2 downward movements. If the module has memorized only one hand-held transmitter, it can't be deleted (the non-cancellation is indicated by two downward movements).

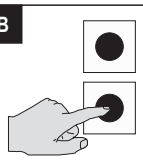
04.2 USING TX BUTTON (onboard)

A



Bring the motor in an intermediate position

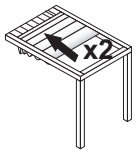
B



Press TX for about 5 s

C

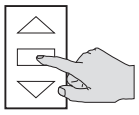
The onboard LED lights up



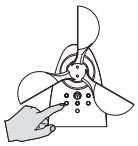
The motor makes 2 briefly upward movements

WITHIN 15 seconds...

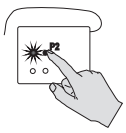
D (1)



Press **STOP** of the transmitter you want memorize/delete.

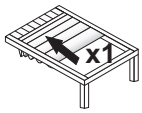


Press **1** of the sensor you want memorize/delete.

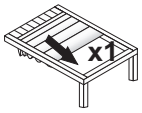


Press **P2** of the rain sensor you want memorize/delete.

E



Memorized !



Deleted !

The motor signals the operation performed.

(1) Hold down the button on the transmitter or radio sensor until the motor performs the signal in point E. In particular, to memorize or delete a battery powered sensor you may need to hold the button up to 10 seconds. If the button is not pressed within 15 seconds, the motor exits the programming and signals it with 2 downward movements. If the module has memorized only one hand-held transmitter, it can't be deleted (the non-cancellation is indicated by two downward movements).

05. SUN, WIND, RAIN SENSOR

05.1 WIND SENSOR

If the wind radio sensor measures a wind speed greater than the set threshold, the wind sensor sends the message of "wind alarm": the device commands an upward movement and inhibits the manual controls until the dangerous situation remains.

05.2 SUN SENSOR

If the sun sensor measures a brightness above the set threshold for at least 2.5* minutes, the sensor sends the message "presence of sun": the device commands a lowering operation. If the sun sensor measures a brightness below the set threshold for at least 18* minutes, the sun sensor sends the message "absence of sun": the device commands an upward movement. The "sun function" can be turned on / off by the transmitter (see transmitter manual "sun function"). If the "sun function" is inactive, the device will ignore commands from the sun sensor. When you change the setting of the "sun function", the motor makes a signaling (1 short upward movement and one brief downward movement).

(*) these values can be different depending on the model of radio sensor you use

05.3 RAIN SENSOR

If the rain sensor measures a rainfall intensity above the set threshold, the rain sensor sends the message "presence of rain": the device commands an upward or downward movement, depending on what you set on the rain sensor. The manual controls are still active.

06. TEST RADIO FUNCTION

When you memorize a wind sensor in PERGOTENDA, a control of communication between the wind sensor and the module is automatically activated. If communication is lost for more than 60 minutes, the module performs an upward movement to protect the structure. This manoeuvre is performed automatically every 60 minutes until the restoration of radio communication. The factory recommends keeping the "radio test" in order to identify in good time any malfunction of the radio sensor. The TEST RADIO function can be activated / deactivated only through a hand-held transmitter.

ARCO

01. Bring the motor in an intermediate position
02. Press MENU for about 5 sec, until «rS» appears on display
03. Press 1 time PREV / 7 times NEXT. «17» appears on display
04. Press STOP. The motor signals: 1 up = active, 1 down = inactive
05. To deactivate: press PREV To activate: press NEXT
06. Press STOP. The motor signals: 1 up = active, 1 down = inactive

FLUTE, KUADRO

01. Bring the motor in an intermediate position
02. Holding down STOP, press PROG for about 1 sec, until LEDs light
03. Press 1 time UP / 7 times DOWN.
04. Press STOP. The motor signals: 1 up = active, 1 down = inactive
05. To deactivate: press DOWN To activate: press UP
06. Press STOP. The motor signals: 1 up = active, 1 down = inactive

Other transmitters...

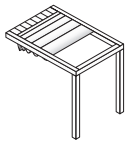
See the User manual of the transmitter at section:

«RECEIVER MENU - Function 17 - Test radio»

07. MODIFY BOTH THE LIMIT SWITCH

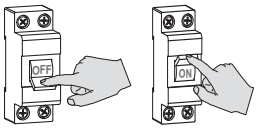
After installing the product, if necessary, you can change the stroke using the RUN button on the board (see section 3.2) or from the transmitter through the following procedure:

A



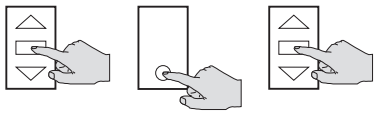
Brings the fabric away from the lower stop (at least 50 cm).

B



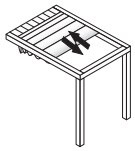
Switch off power supply, wait 5 s, switch on power supply

C



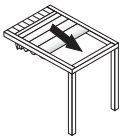
Within 15 seconds, press in sequence: STOP, PROG, STOP.

D



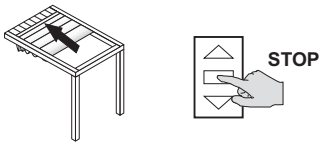
The motor signals with an alternate movement.

E



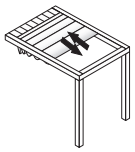
After a few seconds the motor moves downward. Wait. The motor stops automatically when the fabric is tense.

F



The motor moves upward. Press STOP in the desired upper end position.

G



The module stores the settings; the motor signals that procedure is complete.

08. RESET

This procedure restores the module to the default conditions (factory settings). This procedure must only be carried out by qualified technical staff. Having carried out the reset procedure, the qualified technician must promptly carry out all the installation operations described at section 03. FIRST INSTALLATION.

08.1 USING A TRANSMITTER

Before the "reset" by transmitter:
- ✓ Select the radio channel on the transmitter that controls the device to reset.
- ✓ Make sure that this radio channel controls only the device you want to reset.

ARCO

01. Bring the motor in an intermediate position.
02. Press MENU for about 5 sec, until «rS» appears on display
03. Press 2 time PREV / 9 times NEXT. «29» appears on display
04. Press STOP. The display flashes, the motor performs some movement
05. Press together PREV and NEXT for about 2 seconds until the motor indicates that the reset was performed (1 moving up / down).
06. Reinstall the module (see section 03.1).

FLUTE, KUADRO

01. Bring the motor in an intermediate position.
02. Holding down STOP, press PROG for about 1 sec, until LEDs light
03. Press 2 time UP / 9 times DOWN.
04. Press STOP. The LEDs flash, the motor performs some movement
05. Press together UP and DOWN for about 2 seconds until the motor indicates that the reset was performed (1 moving up / down).
06. Reinstall the module (see section 03.1).

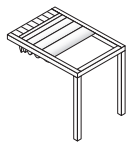
Other transmitters...

See the User manual of the transmitter at section:

«RECEIVER MENU - Function 29 - Receiver reset»

08.2 USING TX AND RUN BUTTONS (onboard)

A

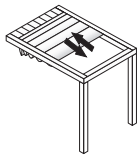


Bring the motor in an intermediate position

B

Press togheter TX and RUN buttons.

C



The motor signals with an alternate upward and downward movement.

D

Reinstall the module (see section 03.1 or 03.2)

CE

Corradi
OUTDOOR LIVING SPACE