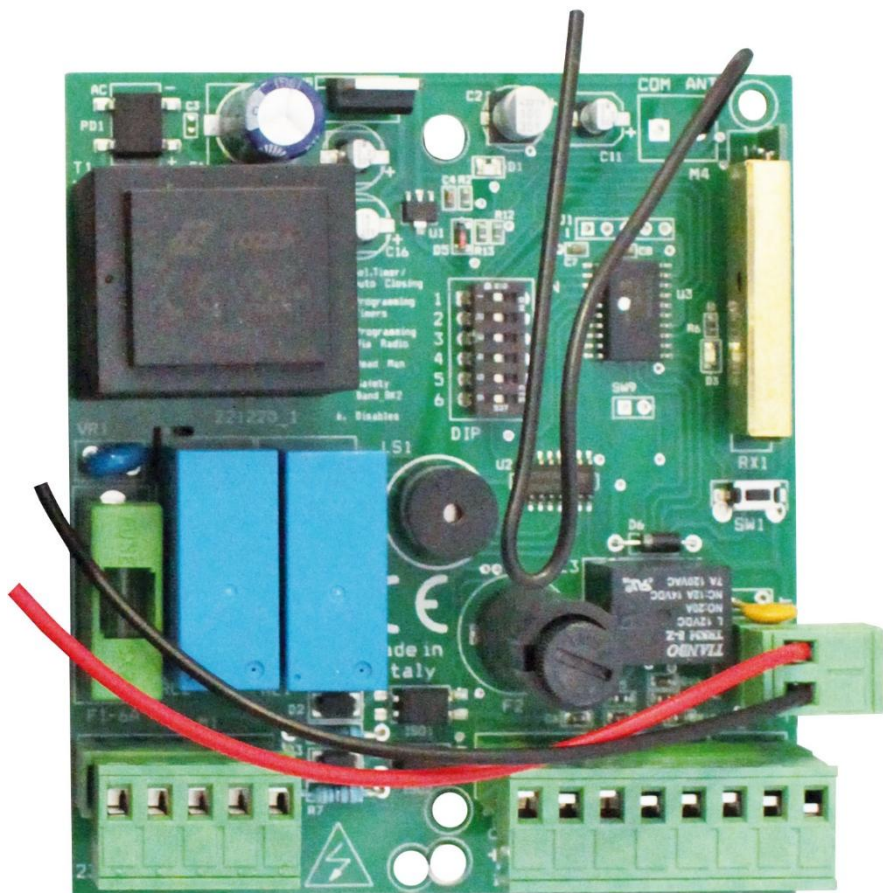


WITH REMOTE-CONTROLLED ELECTRIC BRAKE FOR MOTORIZED ROLLING SHUTTERS

APE - 528 / 0225



- **Power supply: 230 Vac 50 +/-10%**
- **Motor power: 750 W**
- **Working time: adjustable until max 2 minutes 30 seconds**
- **Automatic closing time: adjustable until max 3 minutes**
- **Electric brake outlet fixed radio 60 seconds**
- **Input Security Coast 8K2 or NC wire (see dip5-6)**
- **Code combination: 72 million**
- **Radio code programming: self-learning**
- **Frequency: 433,92Mhz**
- **Sensitivity: greater than -100dbm**
- **Application range: standard 50 mt (10m deadman)**
- **Antenna: built-in**
- **Operating temperature: 0°C/70°C**



USER INSTRUCTIONS

Abexo®

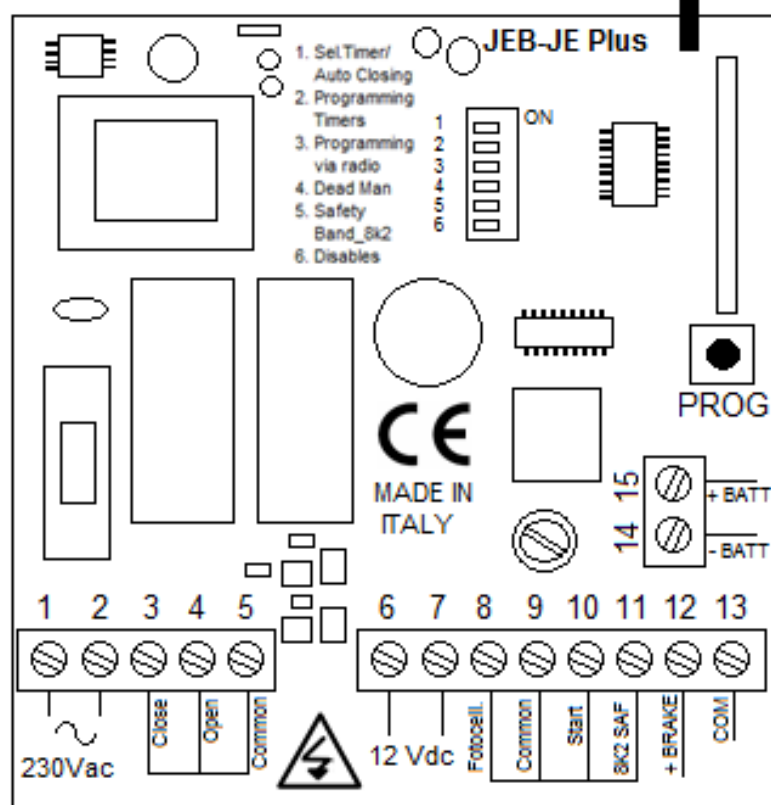
AUTOMATION ACCESSORIES

ABEXO is a registered trademark owned
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WARNINGS FOR INSTALLER - GENERAL SAFETY RULES

1. Read the instructions carefully before proceeding with the installation of the control unit.
2. Keep these instructions for any future reference.
3. This product is designed and manufactured exclusively for the use intended and indicated in this documentation. Any other use not expressly indicated could impair the integrity of the product and/or represent a source of danger.
4. For the safety, you must carefully follow the instructions provided in this manual. Incorrect installation or incorrect use of the product may cause serious personal injury.
5. Materials used for packaging should not be left within the reach of children, as they are potential sources of danger, and should be properly disposed of.
6. AB Tecno Srl disclaims all liability for any consequences resulting from improper use or use other than that for which the device was designed and constructed.
7. AB Tecno Srl is not responsible for non-compliance with applicable EC standards for motorized locks, as well as any deformation that may arise in use.
8. Do not install the equipment in an explosive atmosphere: the presence of gas or inflammable fumes constitutes a serious source of safety hazard.
9. Installation must be effectuated in accordance with EN 12453 and EN 12445. For non-EEC countries, in order to achieve a sufficient level of safety, the above standards must be observed in addition to the individual national regulatory references.
10. Before working on the system, disconnect any batteries and disconnect the power supply.
11. It is advisable to provide for the presence of an omnipolar switch with contact opening distance equal to or greater than 3 mm on the mains power supply of the automation. We recommend the use of a circuit breaker of 6A with an omnipolar breaker.
12. Check that there is a differential circuit breaker upstream of the system with a 0.03A threshold.
13. Check that the grounding system is properly made and connect the metal parts of the enclosure to it.
14. Even automations that have an internal safety anti-crushing function requires functional check in all cases in compliance with the standards indicated in Section 9.
15. Safety devices (EN 12978 standard) enable the protection of any hazard areas from mechanical Risks related to movement, such as crushing, conveying, shearing and lifting.
16. For each installation, we suggest using at least one signalling light (ex. flashing lights), as well as a warning sign properly fixed and clearly visible.
17. AB Tecno Srl disclaims any responsibility related to the safety and proper operation of the automation.
18. The installer must provide the final user with all information regarding manual operation of the automation in case of emergency.
19. During operation, do not allow children or others to stand near the system during operation.
20. Keep out of the reach of children any remote control or device to prevent the possible unwanted operation of the automation.
21. The transit of people and vehicles is permitted only and exclusively when the automation is fully opened.
22. The User of the automation must refrain from any attempt to repair and/or direct intervention and refer exclusively to qualified personnel. Otherwise, AB Tecno Srl declines all responsibility for any possible consequences.
23. Anything not expressly indicated in these instructions is not allowed.

ELECTRICAL WIRING



CONNECTIONS:

CON.1

- 1 - 230 Vac line input (Phase).
- 2 - 230 Vac line input (Neutral).
- 3 - Motor output opens
- 4 - Motor output closes
- 5 - Common motor output

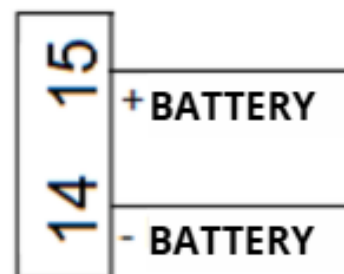
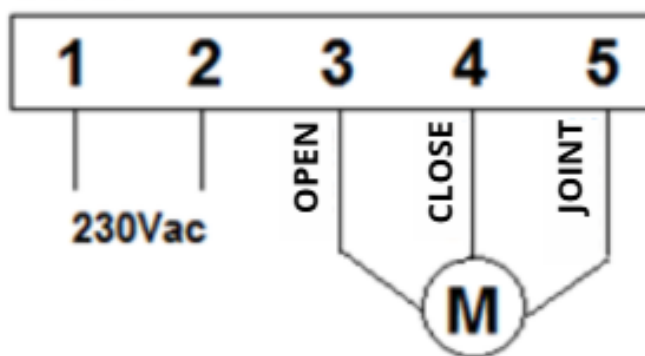
CON.2

- 6 - Services power supply output +12 Vdc
- 7 - Services power supply output - 12 Vdc.
- 8 - Safety device input (NC).
- 9 - GND common input.
- 10 -Input open-close command button (NO).
- 11 -Input safety rib 8k2.
- 12 -Motor electrobrake input (+)
- 13 -Input motor electrobrake (-)
- 14 -Input battery 12V 1.2A - 7A (-)
- 15 -Input battery 12V 1.2A - 7A (+)

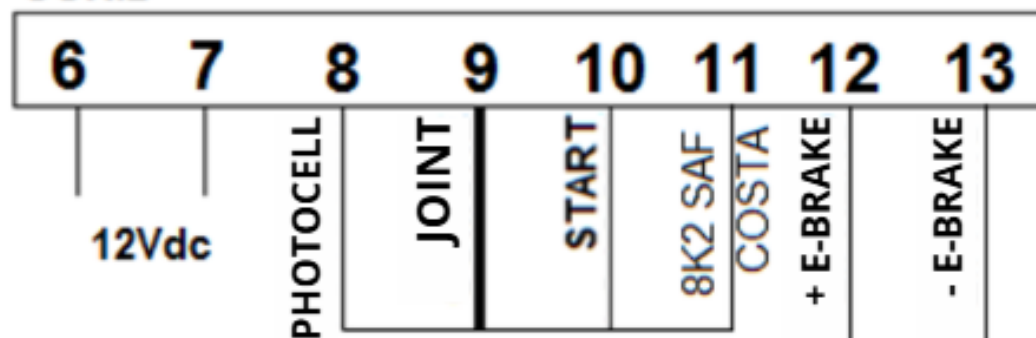
NOTES:

- Since the control unit is not equipped with any disconnection device with reference to 230Vac power supply, always provide a suitable disconnector.
- Normally closed (NC) inputs must be jumpered if not used.

CON.1



CON.2



FUNCTIONING

Step-by-step operation:

The first pulse (from radio control or low-voltage push-button) commands opening until the end of travel opens or when the operating time expires; the second pulse commands the closing of the window.

If a pulse is sent before the operation time expires, the control unit makes the motion stop; a further command determines the resumption of motion in the opposite direction.

Automatic closing:

The control unit allows the window to close again (when it is on the opening end stop) automatically without sending additional commands. The choice of this mode of operation is described in the "Automatic closing time" programming mode.

Safety device:

The control unit allows the supply and connection of photocells, pneumatic safety edges, mechanical ribs and resistive ribs 8K2.

For photocell input, tripping in the opening phase is not considered, in the closing phase it causes reversal of motion. This input if not used must be jumpered or follow table Dip 5-6.

DIP-SWITCH SELECTION

- **Dip 1 Sel. Timer / Auto closing:**
ON automatic closing with timer
OFF automatic closing deactivated
- **Dip 2 Programming timer:**
ON programming operating time (1 OFF)
 programming closing time (1 ON)
OFF programming operation time disabled
- **Dip 3 radio programming:**
ON radio programming new transmitters enabled
OFF radio programming disabled
- **Dip 4 Man Present in closing:**
ON in order to realize closing, the transmitter button or alternative button must be held down. If it is not held down the operation stops.
OFF normal operation
- **Dip 5-6 exclusions and/or enabling safeties:**

DIP5	DIP6	
ON	ON	Both photo and edge are disabled
ON	OFF	Both photo and mechanical edge are enabled
OFF	ON	Both photo and 8k2 edge are enabled
OFF	OFF	Photo enabled, edge disabled

FUNCTIONING

Programming automatic closing time

Can only take place if the door is at rest. After enabling programming with dip 1 and 2 set to ON, it starts with a press of the start button or a preprogrammed transmitter and ends with another press of the start button or a transmitter.

The time between the two pulses will remain set.

A sound and light alert will indicate the start and end of programming.

Programming operation time (factory setting 25 seconds with stop on reaching end of stroke both opening and closing).

This can be done only after closing the damper with the start button or with a previously programmed transmitter. Once programming is activated with switch **2** to ON and **1** to OFF, programming begins by pressing the start button or a previously programmed transmitter.

A sound and light signal will indicate the start of programming, and the door will open until it reaches the corresponding end of travel (the open + 3 seconds travel time is put into memory).

Once open, the close command is given by pressing the start button or a transmitter until the door reaches the door close end of travel, at which time a sound and light signal will indicate the end of programming. (The close travel time + 3 seconds is put into memory).

A margin of 3 seconds is added to the actual run time in order to ensure complete door operation.

Reset

If for any reason it is necessary to recover the factory programmed automatic operation and closing times, the process below should be followed:

A - Turn off the 230V power supply

B - Set the dips to the following position:

1 = OFF

2 = ON

3 = OFF

4 = ON

5-6 = irrelevant

C - Remove any wires connected to terminal 9.

D - Supply 230V power to the switchboard, an audible signal warns that the process is complete. Reset the wires connected to terminal 9 and relocate the dips to the same position they were in before starting the process.

TRANSMITTER CODE STORAGE

To memorize transmitter codes, the control panel must be in a stable condition and the door stopped.

Manual memorization

To memorize the code, press the PROG programming button until the buzzer sounds.

The red LED lights up and when the button is released the LED remains lit indicating that the device is ready to memorize the transmitter code. From this moment any code received will be memorized.

Then we will press on the transmitter the function with which we want to activate the automatism. The red LED, accompanied by the acoustic indicator, will begin to flash confirming that memorization has been carried out. Once 10 seconds have passed since the last reception of a code, the device will automatically exit the memorization function by turning off the red Led and emitting two short beeps.

When we memorize transmitters with hidden key, automatically the latter is learned

The hidden key is located at the back of the transmitter.

To activate it, a pen tip or something similar must be inserted into the hole provided.

Radio memorization with a transmitter is done through the aforementioned hidden key. Radio memorization with transmitter with hidden key (TXMANO) or by pressing 1 and 4 together (TXDITO)

In order to use this function, it is necessary to have previously memorized a code of a transmitter with hidden key, damper closed (limit switch close open) and to have set dip.3 to the ON position.

Proceed as follows:

a) Press the hidden button of one of the previously memorized transmitters for 1 second for the device to enter the code sequence, the red LED lights up and the beep sounds.

From this moment we can memorize the codes of the new transmitters.

b) We will get confirmation of the memorization by the flashing light of the red Led and a short beep. The control unit automatically exits the memorization function once 2 seconds have passed since the last reception of a code, turning off the red Led and emitting two short beeps.

Electrobrake Unlocking via Radio

To use this function, it is necessary to:

(a) have previously memorized a code from a transmitter with a hidden key (TX3MANO) or TX4DITO.

b) have connected the two electro brake wires in terminal blocks 12 and 13 respecting the polarity.

c) have connected the 12V battery (1.2Ah-7Ah) in terminal blocks 14 and 15 respecting the polarities.

Unlocking the electric brake by radio can be done in the presence or absence of 230Vac power supply. The release is activated by pressing the hide button on the remote control (located at the back of the remote control) for 6 seconds (TX3MANO) or by pressing together buttons 1 and 4 TX4DITO).

The brake will be released for 60 seconds, which is the time needed to be able to lift the shutter by hand.

The control unit is equipped with a Battery Charging and Maintenance System.

When the battery is getting low, the control unit will beep in succession.

Clearing All Codes

Erasing all codes is achieved by "resetting" the memory. Press the PROG key for 4 seconds. A burst of flashing red lights and a short beep will be produced, indicating that all previously stored codes have been erased. The device will remain in the code storage sequence waiting to store new codes.

Out of memory indication

When there are 50 different codes memorized (transmitters) and we are trying to memorize new codes, the control unit will make a series of red flashing lights and a series of beeps for 10 seconds, ending the programming process, showing that the memory is exhausted.

PRODUCT DISPOSAL



A) Statement for Household EEE without Batteries or Portable Accumulators

INFORMATION TO USERS OF HOUSEHOLD OR PROFESSIONAL EQUIPMENT

Pursuant to Article 26 of Legislative Decree No. 49 of March 14, 2014, "Implementation of Directive 2012/19/EU on waste electrical and electronic equipment (WEEE)"

The crossed-out bin symbol on the equipment or its packaging indicates that the product at the end of its useful life must be collected separately from other waste to allow for proper treatment and recycling. The user should, therefore, return the equipment that has reached the end of its useful life free of charge to the appropriate municipal centers for separate collection of electrical and electronic waste, or return it to the retailer in accordance with the following procedures:

- For equipment of very small size, that is, with at least one external side not exceeding 25 cm, free delivery without obligation to purchase is provided at stores with a sales area of electrical and electronic equipment exceeding 400 square meters. For stores with a smaller size, this mode is optional.

- for equipment larger than 25 cm, delivery to all points of sale on a 1-for-1 basis, i.e., delivery to the retailer may take place only when a new equivalent product is purchased on a one-for-one basis.

Adequate separate collection for subsequent initiation of the decommissioned equipment for environmentally sound recycling, treatment and disposal helps to avoid possible adverse environmental and health effects and promotes the reuse and/or recycling of the materials of which the equipment is composed.

Unauthorized disposal of the product by the user will result in the application of penalties under current legal regulations.



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