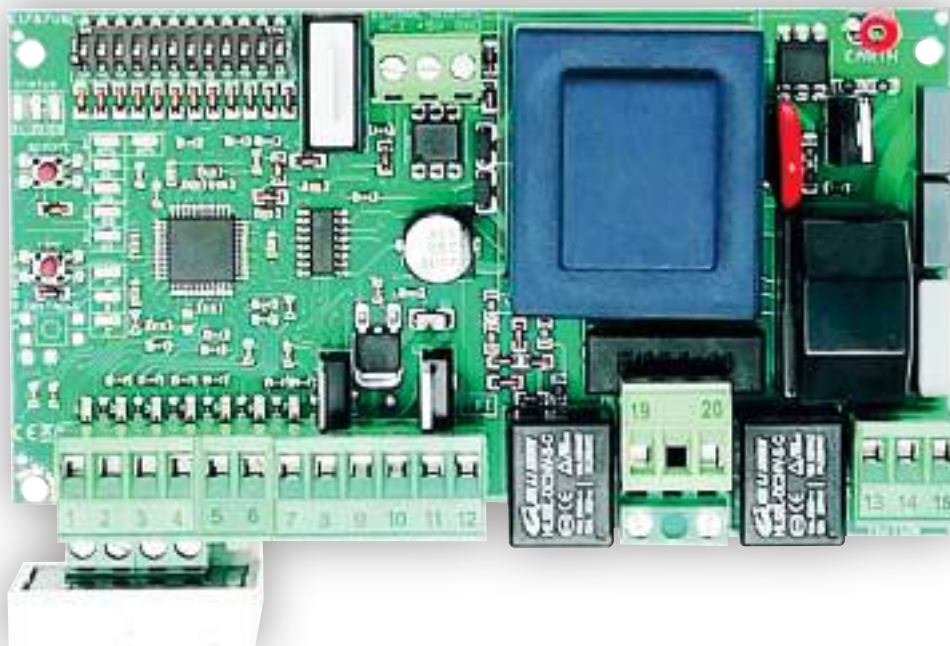


APE-570/0740



TECHNICAL CHARACTERISTICS

- **Power supply:** 230Vac
- **Max managed motor power:** 1000W
- **Accessory power supply:** 24Vdc 200mA
- **Flasher output:** 24Vac, 5 Watts
- 230Vac independent xed output (flasher)
- **Frequency:** 433.92Mhz
- **Storable radio codes:** 100
- **Dimensions:** 137x78x33mm
- **Operating temperature:** -10°C, +70°C

MAIN FUNCTIONS

- Fault signals via LEDs
- Adjustment of motor force in normal running
- Adjustment of pause time (automatic closing)
- Condominial
- Step-by-step
- Photocell test
- Motor testing
- Self-learning of radio codes with start function
- Self-learning of radio codes with stop function
- Radio code self-learning with function of quick closing
- Deletion of single radio code
- Deletion of all radio codes
- Sequential programming
- Multifunction inputs
- 230 VAC independent output (flasher)
- Connection of No.3 8K2 safety edges in opening
- Connection of no.3 8K2 safety edges in closing

OPTIONAL ACCESORIES

Relay for auxiliary outputs (not included)
OUT1 / OUT2



Power supply 24 VDC

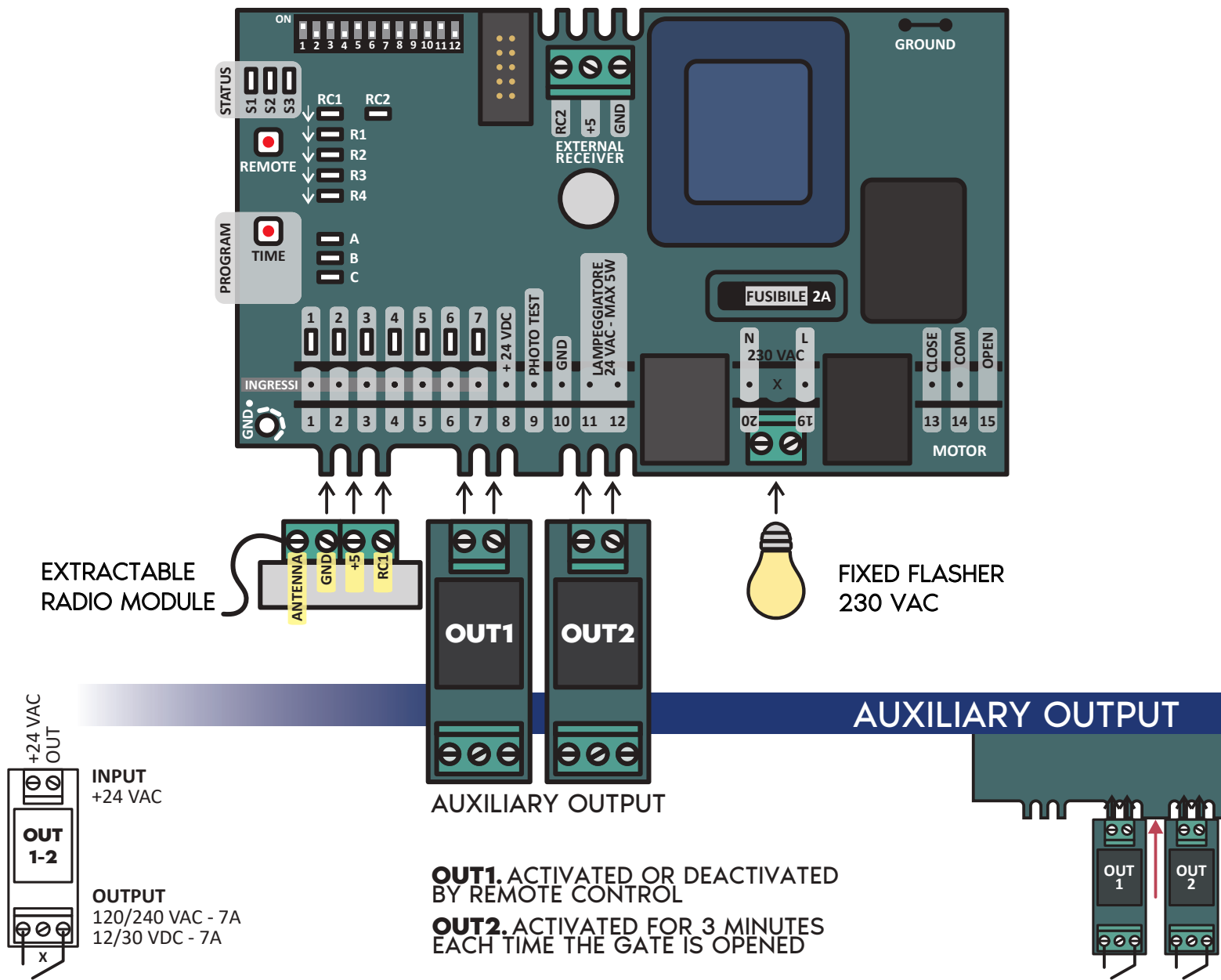
Radio module (not included)



Frequency 433.92 MHz
Power supply 5V - 10 mA

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 effected 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 signaling 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.

LAYOUT



LED

S1-S2-S3	GATE STATES / CENTRAL CONTROL UNIT SIGNALS
RC1	SIGNAL RECEIVED FROM INTERNAL RADIO
RC2	SIGNAL RECEIVED FROM EXTERNAL RADIO
R1 START	STARTS THE GATE IN OPENING AND CLOSING
R2 STOP	STOPS THE GATE
R3 PEDESTRIAN	STARTS A PEDESTRIAN OPENING
R4 OUT1 ON/OFF	ACTIVATES OR DEACTIVATES OUT1

A-C LED PROGRAMMING
1-2-3-4-5-6-7 LED INPUT

STATUS LED SIGNALS

S1	S2	S3	
Off	Off	Off	STAND BY, GATE CLOSED
On	On	Off	OPENING OR CLOSING IN PROGRESS, GATE
On	Off	Off	PROGRAMMING IN PROGRESS
On	On	Off	PHOTOCELL TEST ERROR
On	Off	On	MOTOR TEST ERROR: THERMAL OR CONNECTION
On	On	On	PROGRAMMING ERROR: WRONG PROCEDURE

FUNCTIONS DESCRIPTIONS

SLOW DOWN: BEFORE THE END OF OPENING AND CLOSING, THE GATE SLOWS DOWN FOR THE PROGRAMMED TIME. DURING THE SLOWDOWN THE MOTOR FORCE IS MAXIMUM.

PEDESTRIAN WORK TIME: THE GATE OPENS FOR 8 SECONDS.

SOFT START: THE MOTOR IS STARTED GRADUALLY PRESERVING THE MECHANICAL STRUCTURE OF THE GATE AND THE RACK.

TEST: BEFORE EACH THE PROPER OPERATION OF THE MOTOR AND PHOTOCELLS IS CHECKED. IF ANY OF THE TESTS FAILS THE MANEUVER IS NOT STARTED, THE LEDS INDICATE THE MALFUNCTION FOUND. THE MOTOR TEST FAILS IF THE MOTOR IS IN THERMAL PROTECTION, IN CASE OF CONNECTION ERROR OR NOT WORKING. THE PHOTOCELL TEST FAILS IF THE TRANSMITTER AND RECEIVER ARE NOT PROPERLY ALIGNED, IF THERE ARE INSTALLATION ERRORS OR IF THEY ARE DAMAGED.

DISABLE UNCONNECTED N.C. INPUTS: DISABLES ALL UNCONNECTED N.C. INPUTS. IF THE N.C. INPUT IS LATER CONNECTED THE CONTROL UNIT WILL ENABLE IT AUTOMATICALLY NOT CONSIDERING THE DIP SWITCH POSITION.

MOTOR BRAKE: THE CONTROL UNIT BRAKES THE MOTOR IF THE GATE REACHES THE END POSITION WITHOUT HAVING PERFORMED THE SLOWDOWN, PRESERVING THE INTEGRITY OF THE MOTOR.

WORK MODE

AUTOMATIC CLOSING: THE GATE CLOSING AUTOMATICALLY AFTER THE PROGRAMMED AUTOMATIC CLOSING TIME.

- DURING CLOSING THE START AND PEDESTRIAN CONTROLS REVERSE THE MANEUVER.
- DURING OPENING THE START AND PEDESTRIAN CONTROLS STOP THE MANEUVER.

CONDOMINIUM WITH AUTOMATIC CLOSING: THE GATE CLOSING AUTOMATICALLY AFTER THE AUTOMATIC CLOSING TIME PROGRAMMED.

- DURING CLOSING THE START AND PEDESTRIAN CONTROLS REVERSE THE MANEUVER.
- DURING OPENING THE START AND PEDESTRIAN COMMANDS ARE IGNORED.

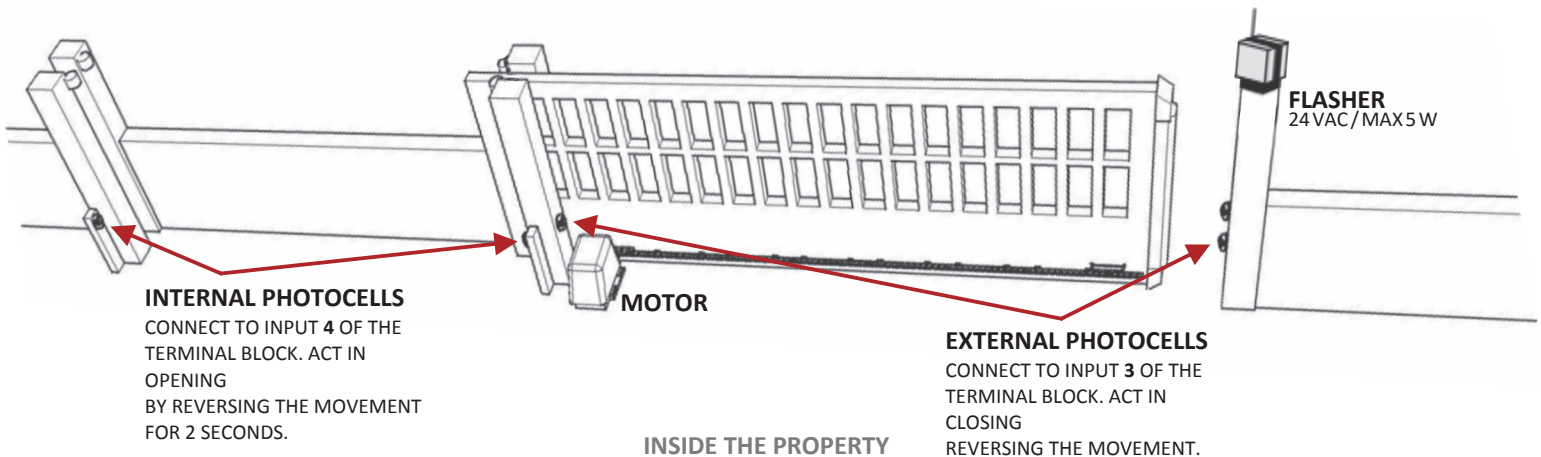
STEP-BY-STEP: THE GATE REMAINS OPEN AFTER THE OPENING IS COMPLETED.

- DURING CLOSING AND OPENING THE START AND PEDESTRIAN COMMANDS STOP THE MANEUVER.

STEP-BY-STEP WITH AUTOMATIC CLOSING: THE GATE CLOSING AUTOMATICALLY AFTER THE AUTOMATIC CLOSING TIME PROGRAMMED.

- DURING CLOSING AND OPENING THE START AND PEDESTRIAN CONTROLS STOP THE MANEUVER.

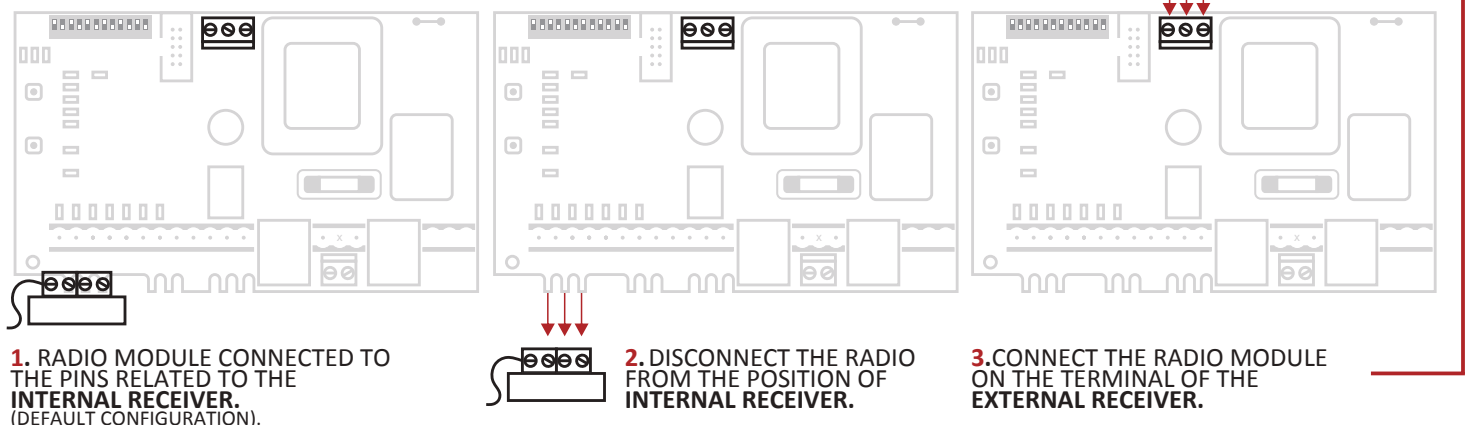
STANDARD INSTALLATION

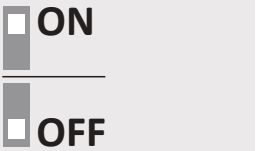


USEFUL TIPS

OPTIONAL

IF MORE SIGNAL RANGE IS NEEDED, IT IS ADVISABLE TO DISCONNECT THE RADIO FROM THE **INTERNAL RECEIVER** POSITION AND CONNECT IT VIA APPROPRIATE WIRES ON THE TERMINAL BLOCK RELATED TO THE **EXTERNAL RECEIVER**.





- 1.2. MOTOR FORCE
- 3. SLOWING
- 4. SOFT START
- 5. TEST
- 6.7. OPERATION LOGIC

- 8. 8K2 SAFETY EDGE IN OPENING
- 9. 8K2 SAFETY EDGE IN CLOSING
- 10. DISABLE UNCONNECTED N.C. INPUTS
- 11. SELECT FUNCTION TERMINAL 1-7
- 12. MOTOR BRAKE

DIP 1-2 MOTOR FORCE: The motor force during opening is equal to the value selected by DIP1-2 **DIP 1-2**

DIP 1-2 1 OFF 2 OFF	DIP 1-2 1 ON 2 OFF	DIP 1-2 1 OFF 2 ON	DIP 1-2 1 ON 2 ON
Force 40%	Force 60%	Force 80%	Force 100%

DIP 3 SLOWING **DIP 3**

DIP 3 OFF	DIP 3 ON
Deactivated 	Enabled. The motor ends its run with speed at 50% of the speed normal working speed. The force of the motor during the slowdown is at 100%

DIP 4 ARRANQUE SUAVE **DIP 4**

DIP 4 OFF	DIP 4 ON
Deactivated 	Enabled. The motor starts by gradually increasing the force until it reaches maximum force after 1.2 seconds. After this time, the working force will be the one programmed by DIP 1-2

DIP 5 TEST **DIP 5**

DIP 5 OFF	DIP 5 ON
Deactivated tests 	Activado. Antes de cada maniobra, la central realiza el test del motor y el test de la fotocélula. En caso de error, no se realizará ninguna maniobra y los LEDs de estado señalarán el error.

DIP 6-7 OPERATION LOGIC **DIP 6-7**

DIP 6-7 6 OFF 7 OFF	DIP 6-7 6 ON 7 OFF	DIP 6-7 6 OFF 7 ON	DIP 6-7 6 ON 7 ON
Standard + Automatic closing 	Automatic closing + Condominal 	Step-by-Step 	Automatic closing + step by step

DIP 8 8K2 SAFETY EDGE IN CLOSING **DIP 8**

DIP 8 OFF	DIP 8 ON
Deactivated 	Enabled. You can connect up to 3 8K2 edges to terminal 3

DIP 9 COSTA DI SICUREZZA 8K2 IN APERTURA **DIP 9**

DIP 9 OFF	DIP 9 ON
Deactivated 	Enabled. You can connect up to 3 8K2 edges to terminal 4

DIP 10 DISABLE UNCONNECTED N.C. INPUTS **DIP 10**

DIP 10 OFF	DIP 10 ON
Enabled N.C. input 	All connected NC inputs are disabled. When connecting an NCI input to central it will enable the detected function beyond the position of DIP 10

DIP 11 SELECT FUNCTION TERMINAL 1 - 7 you can choose the function related to terminals 1 - 7 **DIP 11**

DIP 11 OFF	DIP 11 ON
 1 START 7 PEATONAL	 1 ABIERTO 7 CERRADO

DIP 12 MOTOR BRAKE **DIP 12**

DIP 12 OFF	DIP 12 ON
Deactivated 	Enabled. Each time the gate is stopped the motor brakes for 0.2 seconds, limiting the inertia of the gate.

1	2	3	4	5	6	7	8	9	10	11	12

TERMINAL BLOCK CONNECTIONS

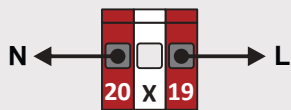
1	2	3	4	5	6	7	8	9	10	11	12

1. START N.O.
2. STOP N.C.
3. EXTERNAL PHOTOCELL N.C. / 8K2 EDGE
4. INTERNAL PHOTOCELL N.C. / 8K2 EDGE
5. CLOSING LIMIT SWITCH N.C. / N.O.

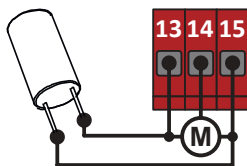
6. LIMIT SWITCH OPENING N.C. / N.O.
7. PEDESTRIAN N.O.
8. + VDC / COMMON / +24 VAC
9. PHOTOCELL TEST
10. GND

- 11.12. FLASHER
13. LOCKING MOTOR
14. COMMON MOTOR
15. OPENING MOTOR
- 20.X.19. 230 VAC steady flasher

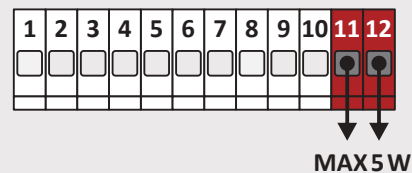
POWER SUPPLY TERMINAL 20-19



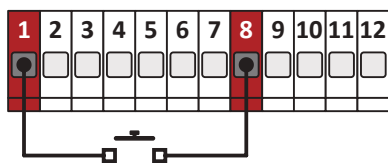
MOTOR TERMINAL 13-14-15



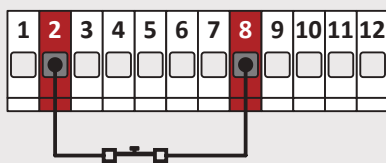
FLASHER TERMINAL 11-12



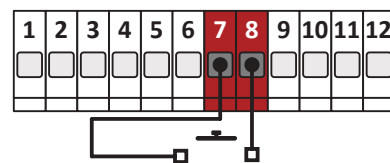
START TERMINAL 1-8



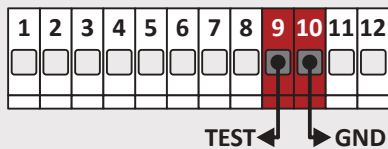
STOP TERMINAL 2-8



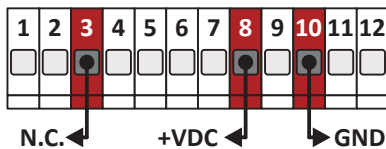
PEDESTRIAN TERMINAL 7-8



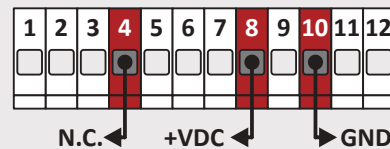
PHOTOCELL TRANSMITTER TERMINAL 9-10



RX EXTERNAL PHOTOCELL TERMINAL 3-8-10



RX INTERNAL PHOTOCELL TERMINAL 4-8-10



CONNECTION TO SAFETY EDGE

8K2 SAFETY EDGE IN CLOSING

8K2 SAFETY EDGE IN OPENING

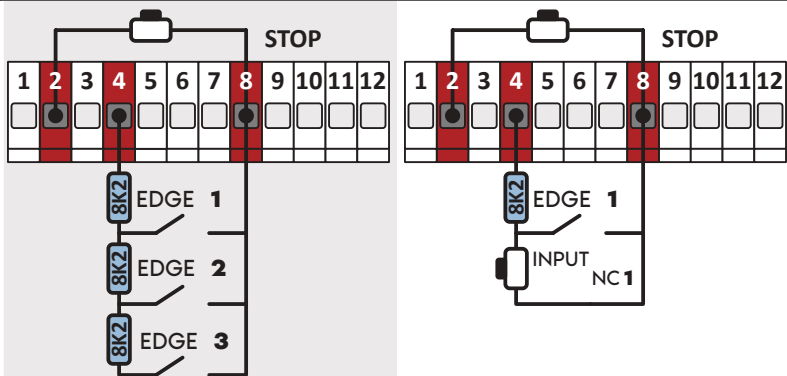
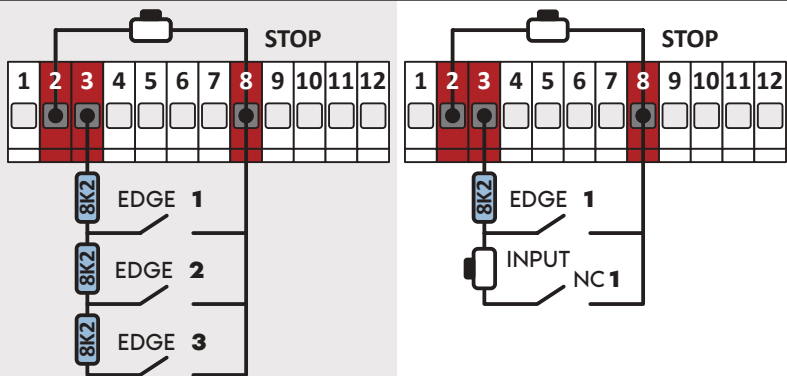


3 8K2 EDGES TERMINAL 2-3-8

1 8K2 EDGE + 1 NC INPUT TERMINAL 2-3-8

3 8K2 EDGES TERMINAL 2-4-8

1 8K2 EDGE + 1 NC INPUT TERMINAL 2-4-8



NB: shown is the connection with 3 8K2 edges, if only one edge is needed do not consider EDGE 2 and 3. If 2 edges are needed do not consider EDGE 3.

- set **DIP 8** to **OFF**
- connect the edges in series (up to a maximum of 3 8K2 edges)
- set **DIP 8** to **ON**
- test the connected ribs by checking **LED 3** on the terminal block (OFF not active / ON active)
- **LED 3** flashes and **LED A-B-C** show the number of installed edges:

instalados:

LED 3 flashes	EDGE 1	EDGE 2	EDGE 3
1	A	A	A
2	A	B	A
3	A	B	C

- after 5 seconds the LEDs turn off automatically. If LEDs **A-B-C** are off and LED 3 remains on, recheck the connections.

*If STOP is not used, make a link between terminal 2 and 3.

- set **DIP 9** to **OFF**
- connect the edges in series (up to a maximum of 3 8K2 edges)
- set **DIP 9** to **ON**
- test the connected ribs by checking **LED 4** on the terminal block (OFF not active / ON active)
- **LED 4** flashes and **LED A-B-C** show the number of installed edges:

instalados:

LED 4 parpadea	EDGE 1	EDGE 2	EDGE 3
1	A	A	A
2	A	B	A
3	A	B	C

- after 5 seconds the LEDs turn off automatically. If LEDs **A-B-C** are off and LED 3 remains on, recheck the connections.

*If STOP is not used, make a link between terminal 2 and 8.

MEMORIZE A REMOTE CONTROL

WHILE HOLDING DOWN THE KEY OF THE REMOTE CONTROL TO BE STORED, IF YOU WANT TO ASSOCIATE IT WITH THE FUNCTION START FUNCTION YOU WILL NEED TO PRESS THE **REMOTE BUTTON 1 TIME**, IF OF **STOP** IT WILL BE NECESSARY TO PRESS **2 TIMES THE REMOTE BUTTON**, IF OF **PEDESTRIAN** IT WILL BE NECESSARY TO PRESS **3 TIMES THE REMOTE BUTTON**, IF OF **OUT1 ON/OFF** IT WILL BE NECESSARY TO PRESS **4 TIMES THE REMOTE KEY**. TO CONFIRM THAT THE SIGNAL HAS BEEN RECEIVED, THE RADIO LEDS OR **RC1** OR **RC2** WILL LIGHT UP.

MAINTAIN PRESSED THE KEY OF THE REMOTE CONTROL TO MEMORIZE.



DELETE A STORED REMOTE CONTROL

BY HOLDING DOWN THE KEY OF THE REMOTE CONTROL TO BE ERASED, IF IT IS ASSOCIATED WITH THE FUNCTION OF: **START** IT WILL BE NECESSARY TO PRESS **4 TIMES THE REMOTE BUTTON**, IF OF **STOP** IT WILL BE NECESSARY TO PRESS **3 TIMES THE REMOTE BUTTON**, IF OF **PEDESTRIAN** IT WILL BE NECESSARY TO PRESS **2 TIMES THE REMOTE BUTTON**, IF OF **OUT1 ON/OFF** IT WILL BE NECESSARY TO PRESS **1 TIMES THE REMOTE BUTTON**.

MAINTAIN PRESSED THE KEY OF THE REMOTE CONTROL TO ERASE.



DELETE ALL REMOTE CONTROLS

TO ERASE ALL STORED REMOTE CONTROLS **HOLD DOWN THE REMOTE KEY FOR ABOUT 6 SECONDS**. DURING THIS TIME THE LEDS **R1, R2, R3, R4**, WILL GO FROM BEING ALL ON TO TURNING OFF IN SEQUENCE. WHEN THE LEDS ARE OFF ALL THE REMOTE CONTROLS WILL BE ERASED.

MAINTAIN PRESSED THE KEY OF THE REMOTE CONTROL FOR CIRCA 6 SECONDS



SCHEDULING OF MANEUVER TIMES

Programming must be done with the gate closed

1



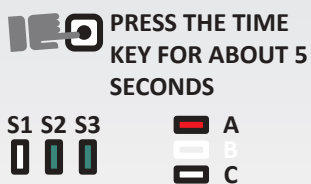
2



3



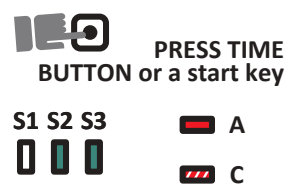
4



LED A lights up and the gate opens. You are programming the working time of the motor.



LED A flashes. The motor continues opening in slowed down mode. The time for the motor to slow down is being programmed.



LED A is on. The gate is stopped in the open position. LED C flashes by scanning the seconds. You are programming the automatic closing time



The programming is finished. The gate closes.



A) Statement for Household EEE without Batteries or Portable Accumulators

INFORMATION TO USERS OF HOUSEHOLD EQUIPMENT OR PROFESSIONAL

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

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

- for equipment of very small dimensions, that is, with at least one external side not greater than 25 cm, free delivery with no 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 with dimensions greater than 25 cm, delivery is provided to all points of sale in a 1-for-1 mode, i.e., delivery to the retailer may take place only at the time of purchase of a new equivalent product on a one-for-one basis. Adequate separate collection for the subsequent initiation of the discarded equipment for recycling, treatment and environmentally sound 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.

Improper disposal of the product by the user will result in the application of the sanctions under current legal regulations.



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property of ABTECNO srl - Via Cicogna 95
40068 San Lazzaro di Savena (BO)
info@abtecno.com

www.abexo.tech

