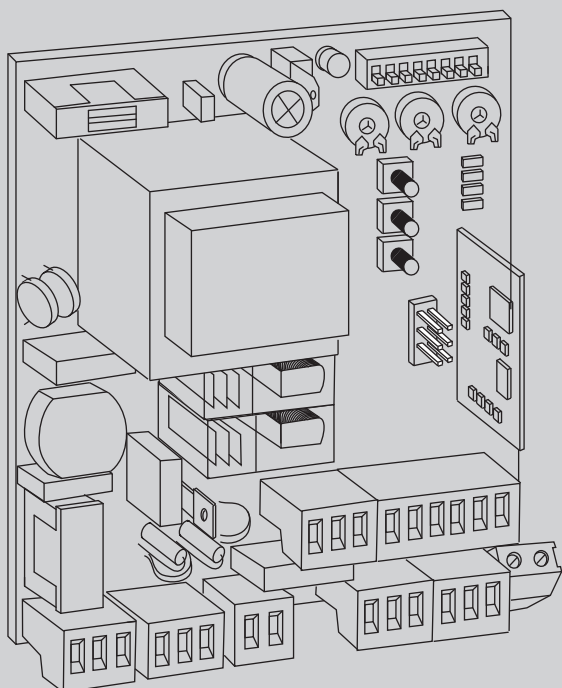




ac

D812434.001.00_04.06-10-16

QUADRO COMANDO
CONTROL PANEL
CENTRALE DE COMMANDE
SELBSTÜBERWACHENDE STEUERUNG
CUADRO DE MANDOS
BEDIENINGSPANEEL



ISTRUZIONI DI INSTALLAZIONE
INSTALLATION MANUAL
INSTRUCTIONS D'INSTALLATION
MONTAGEANLEITUNG
INSTRUCCIONES DE INSTALACION
INSTALLATIEVOORSCHRIFTEN

SHYRA AC F SL / SHYRA AC F SL 120

BFT



AZIENDA CON SISTEMA DI GESTIONE
INTEGRATO CERTIFICATO DA DNV
= UNI EN ISO 9001:2008 =
UNI EN ISO 14001:2004

Attenzione! Leggere attentamente le "Avvertenze" all'interno! **Caution!** Read "Warnings" inside carefully! **Attention!** Veuillez lire attentivement les Avertissements qui se trouvent à l'intérieur!
Achtung! Bitte lesen Sie aufmerksam die „Hinweise“ im Inneren! ¡**Atención!** Leer atentamente las "Advertencias" en el interior! **Let op!** Lees de "Waarschuwingen" aan de binnenkant zorgvuldig!

INSTALLER WARNINGS

WARNING! Important safety instructions. Carefully read and comply with all the warnings and instructions that come with the product as incorrect installation can cause injury to people and animals and damage to property. The warnings and instructions give important information regarding safety, installation, use and maintenance. Keep hold of instructions so that you can attach them to the technical file and keep them handy for future reference.

GENERAL SAFETY

This product has been designed and built solely for the purpose indicated herein. Uses other than those indicated herein might cause damage to the product and create a hazard.

- The units making up the machine and its installation must meet the requirements of the following European Directives, where applicable: 2014/30/EC, 2014/35/EC, 2006/42/EC, 2011/305/EC, 99/05/EC and later amendments. For all countries outside the EEC, it is advisable to comply with the standards mentioned, in addition to any national standards in force, to achieve a good level of safety.
- The Manufacturer of this product (hereinafter referred to as the "Firm") disclaims all responsibility resulting from improper use or any use other than that for which the product has been designed, as indicated herein, as well as for failure to apply Good Practice in the construction of entry systems (doors, gates, etc.) and for deformation that could occur during use.
- Installation must be carried out by qualified personnel (professional installer, according to EN 12635), in compliance with Good Practice and current code.
- Before installing the product, make all structural changes required to produce safety gaps and to provide protection from or isolate all crushing, shearing and dragging hazard areas and danger zones in general in accordance with the provisions of standards EN 12604 and 12453 or any local installation standards. Check that the existing structure meets the necessary strength and stability requirements.
- Before commencing installation, check the product for damage.
- The Firm is not responsible for failure to apply Good Practice in the construction and maintenance of the doors, gates, etc. to be motorized, or for deformation that might occur during use.
- Make sure the stated temperature range is compatible with the site in which the automated system is due to be installed.
- Do not install this product in an explosive atmosphere: the presence of flammable fumes or gas constitutes a serious safety hazard.
- Disconnect the electricity supply before performing any work on the system. Also disconnect buffer batteries, if any are connected.
- Before connecting the power supply, make sure the product's ratings match the mains ratings and that a suitable residual current circuit breaker and overcurrent protection device have been installed upline from the electrical system. Have the automated system's mains power supply fitted with a switch or omnipolar thermal-magnetic circuit breaker with a contact separation that provide full disconnection under overvoltage category III conditions.
- Make sure that upline from the mains power supply there is a residual current circuit breaker that trips at no more than 0.03A as well as any other equipment required by code.
- Make sure the earth system has been installed correctly: earth all the metal parts belonging to the entry system (doors, gates, etc.) and all parts of the system featuring an earth terminal.
- Installation must be carried out using safety devices and controls that meet standards EN 12978 and EN 12453.
- Impact forces can be reduced by using deformable edges.
- In the event impact forces exceed the values laid down by the relevant standards, apply electro-sensitive or pressure-sensitive devices.
- Apply all safety devices (photocells, safety edges, etc.) required to keep the area free of impact, crushing, dragging and shearing hazards. Bear in mind the standards and directives in force, Good Practice criteria, intended use, the installation environment, the operating logic of the system and forces generated by the automated system.
- Apply all signs required by current code to identify hazardous areas (residual risks). All installations must be visibly identified in compliance with the provisions of standard EN 13241-1.
- Once installation is complete, apply a nameplate featuring the door/gate's data.
- This product cannot be installed on leaves incorporating doors (unless the motor can be activated only when the door is closed).
- If the automated system is installed at a height of less than 2.5 m or is accessible, the electrical and mechanical parts must be suitably protected.
- For roller shutter automation only
 - 1) The motor's moving parts must be installed at a height greater than 2.5 m above the floor or other surface from which they may be reached.
 - 2) The gearmotor must be installed in a segregated and suitably protected space so that it cannot be reached without the aid of tools.
- Install any fixed controls in a position where they will not cause a hazard, away from moving parts. More specifically, hold-to-run controls must be positioned within direct sight of the part being controlled and, unless they are key operated, must be installed at a height of at least 1.5 m and in a place where they cannot be reached by the public.
- Apply at least one warning light (flashing light) in a visible position, and also attach a Warning sign to the structure.
- Attach a label near the operating device, in a permanent fashion, with information on how to operate the automated system's manual release.
- Make sure that, during operation, mechanical risks are avoided or relevant protective measures taken and, more specifically, that nothing can be banged, crushed, caught or cut between the part being operated and surrounding parts.
- Once installation is complete, make sure the motor automation settings are correct and that the safety and release systems are working properly.
- Only use original spare parts for any maintenance or repair work. The Firm disclaims all responsibility for the correct operation and safety of the automated system if parts from other manufacturers are used.
- Do not make any modifications to the automated system's components unless explicitly authorized by the Firm.
- Instruct the system's user on what residual risks may be encountered, on the control systems that have been applied and on how to open the system manually in an emergency. Give the user guide to the end user.

-Dispose of packaging materials (plastic, cardboard, polystyrene, etc.) in accordance with the provisions of the laws in force. Keep nylon bags and polystyrene out of reach of children.

WIRING

WARNING! For connection to the mains power supply, use a multicore cable with a cross-sectional area of at least 5x1.5mm² or 4x1.5mm² when dealing with three-phase power supplies or 3x1.5mm² for single-phase supplies (by way of example, type H05RN-F cable can be used with a cross-sectional area of 4x1.5mm²). To connect auxiliary equipment, use wires with a cross-sectional area of at least 0.5 mm².

- Only use pushbuttons with a capacity of 10A-250V or more.
- Wires must be secured with additional fastening near the terminals (for example, using cable clamps) in order to keep live parts well separated from safety extra low voltage parts.
- During installation, the power cable must be stripped to allow the earth wire to be connected to the relevant terminal, while leaving the live wires as short as possible. The earth wire must be the last to be pulled taut in the event the cable's fastening device comes loose.

WARNING! safety extra low voltage wires must be kept physically separate from low voltage wires.

Only qualified personnel (professional installer) should be allowed to access live parts.

CHECKING THE AUTOMATED SYSTEM AND MAINTENANCE

Before the automated system is finally put into operation, and during maintenance work, perform the following checks meticulously:

- Make sure all components are fastened securely.
- Check starting and stopping operations in the case of manual control.
- Check the logic for normal or personalized operation.
- For sliding gates only: check that the rack and pinion mesh correctly with 2 mm of play along the full length of the rack; keep the track the gate slides on clean and free of debris at all times.
- For sliding gates and doors only: make sure the gate's running track is straight and horizontal and that the wheels are strong enough to take the weight of the gate.
- For cantilever sliding gates only: make sure there is no dipping or swinging during operation.
- For swing gates only: make sure the leaves' axis of rotation is perfectly vertical.
- For barriers only: before opening the door, the spring must be decompressed (vertical boom).
- Check that all safety devices (photocells, safety edges, etc.) are working properly and that the anti-crush safety device is set correctly, making sure that the force of impact measured at the points provided for by standard EN 12445 is lower than the value laid down by standard EN 12453.
- Impact forces can be reduced by using deformable edges.
- Make sure that the emergency operation works, where this feature is provided.
- Check opening and closing operations with the control devices applied.
- Check that electrical connections and cabling are intact, making extra sure that insulating sheaths and cable glands are undamaged.
- While performing maintenance, clean the photocells' optics.
- When the automated system is out of service for any length of time, activate the emergency release (see "EMERGENCY OPERATION" section) so that the operated part is made idle, thus allowing the gate to be opened and closed manually.
- If the power cord is damaged, it must be replaced by the manufacturer or their technical assistance department or other such qualified person to avoid any risk.
- If "D" type devices are installed (as defined by EN12453), connect in unverified mode, foresee mandatory maintenance at least every six months
- The maintenance described above must be repeated at least once yearly or at shorter intervals where site or installation conditions make this necessary.

WARNING!

Remember that the drive is designed to make the gate/door easier to use and will not solve problems as a result of defective or poorly performed installation or lack of maintenance



SCRAPPING

Materials must be disposed of in accordance with the regulations in force. Do not throw away your discarded equipment or used batteries with household waste. You are responsible for taking all your waste electrical and electronic equipment to a suitable recycling centre.

DISMANTLING

If the automated system is being dismantled in order to be reassembled at another site, you are required to:

- Cut off the power and disconnect the whole electrical system.
- Remove the actuator from the base it is mounted on.
- Remove all the installation's components.
- See to the replacement of any components that cannot be removed or happen to be damaged.

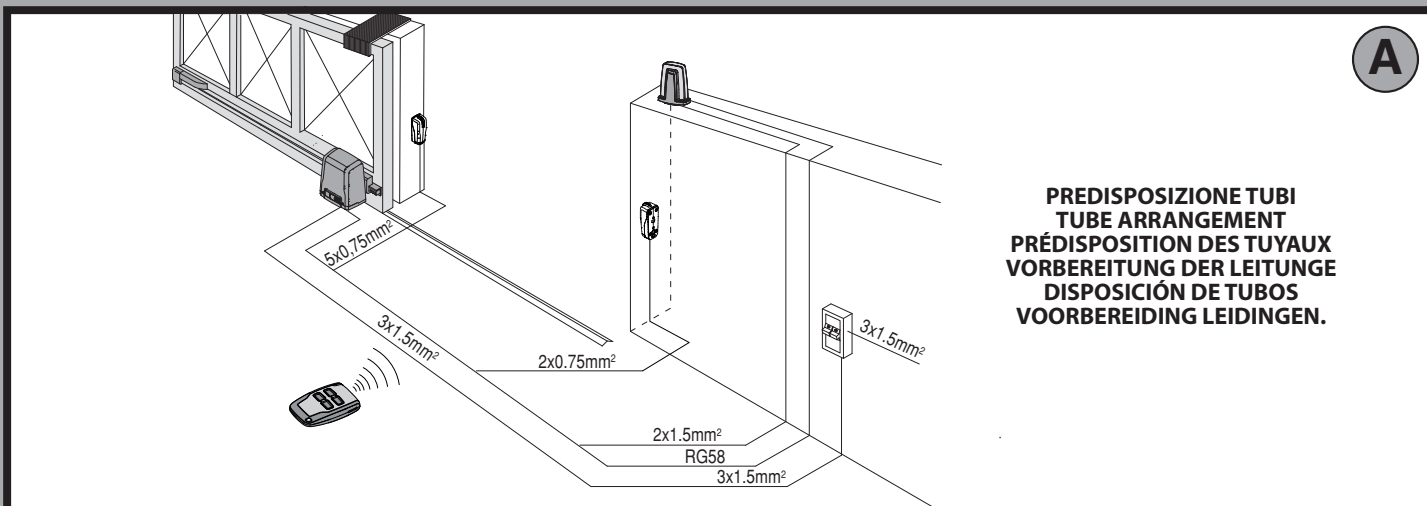
**DECLARATIONS OF CONFORMITY CAN BE FOUND AT <http://www.bft-automation.com/CE>
INSTRUCTIONS FOR USE AND ASSEMBLY CAN BE FOUND IN THE DOWN-LOAD SECTION.**

Anything that is not explicitly provided for in the installation manual is not allowed. The operator's proper operation can only be guaranteed if the information given is complied with. The Firm shall not be answerable for damage caused by failure to comply with the instructions featured herein.

While we will not alter the product's essential features, the Firm reserves the right, at any time, to make those changes deemed opportune to improve the product from a technical, design or commercial point of view, and will not be required to update this publication accordingly.

INSTALLAZIONE VELOCE-QUICK INSTALLATION-INSTALLATION RAPIDE SCHNELLINSTALLATION-INSTALACIÓN RÁPIDA - SNELLE INSTALLATIE

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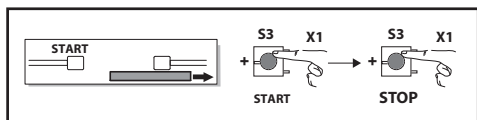
**PREDISPOSIZIONE TUBI
TUBE ARRANGEMENT
PRÉDISPOSITION DES TUYAUX
VORBEREITUNG DER LEITUNG
DISPOSICIÓN DE TUBOS
VOORBEREIDING LEIDINGEN.**

B

Collegamento di 1 coppia di fotocellule non verificate, per fotocellule verificate vedere pagine seguenti.
Connection of 1 couple of untested photocells, for tested photocells see the following pages.
Connexion d'une paire de photocellules non vérifiées, pour les photocellules vérifiées consultez les pages suivantes.
Anschluss von einem Paar nicht überprüfter Fotozellen, für überprüfte Fotozelle siehe die folgenden Seiten.
Conexión de 1 par de fotocélulas no comprobadas, para fotocélulas comprobadas véanse las siguientes páginas.
Aansluiting van 1 paar niet-geverifieerde fotocellen. Raadpleeg de volgende pagina's voor geverifieerde fotocellen.



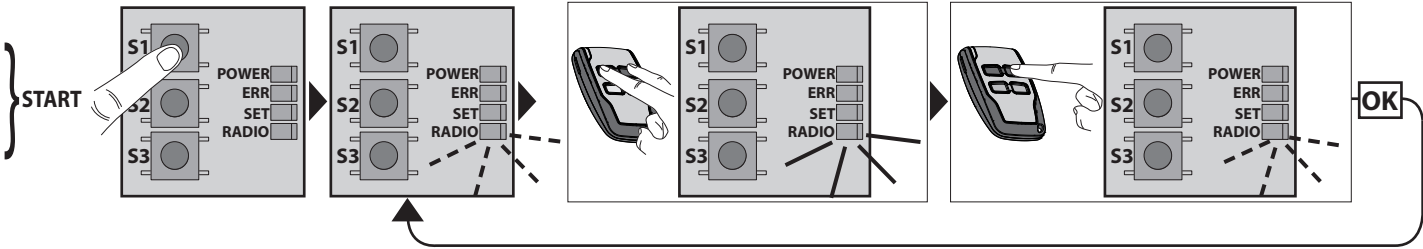
F2	100mAT (~ 230V) 200mAT (~ 120V)
F1	3,15 AF (~ 230V) 6,3 AF (~ 120V)



<table border="1"> <tr><td>L</td><td>N</td><td>GND</td></tr> </table> <p>Alimentazione Power supply Alimentation Stromversorgung Alimentación Voeding</p>	L	N	GND	<table border="1"> <tr><td>10</td><td>11</td><td>12</td></tr> </table> <p>Motore Motor moteur Motor Eindaanslag Encoder</p>	10	11	12	<table border="1"> <tr><td>20</td><td>21</td></tr> </table> <p>Lampeggiante Blinker Clignotant Warnblinkleuchte Bombilla Knipperlicht</p>	20	21	<table border="1"> <tr><td>41</td><td>42</td><td>43</td></tr> </table> <p>Connettore finecorsa Limit switch connector Connecteur de fin de course Steckverbindung Endschalter Conector final de carrera Connector eindaanslag</p>	41	42	43	<table border="1"> <tr><td>50</td><td>51</td><td>52</td></tr> </table> <p>Alimentazione accessori Accessories power supply Alimentation des accessoires Stromversorgung Zubehör Alimentación accesorios Voeding accessoires</p>	50	51	52	<table border="1"> <tr><td>60</td><td>61</td><td>62</td></tr> </table> <p>Comandi Commands Commandes Bedienelemente Mandos Commando's</p>	60	61	62	<table border="1"> <tr><td>70</td><td>71</td><td>72</td><td>73</td><td>74</td><td>75</td></tr> </table> <p>Sicurezza Safety devices Sécurité Sicherheitsvorrichtungen Dispositivos de seguridad Veiligheden</p>	70	71	72	73	74	75	<table border="1"> <tr><td>Y #</td></tr> </table> <p>Antenna Κεραία Antenna Антенна Antena Anten</p>	Y #
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Y #																															

**MEMORIZZAZIONE RADIOCOMANDO/MEMORIZING REMOTE CONTROLS/MÉ MORISATION RADIOCOMMANDE
ABSPEICHERUNG DER FERNBEDIENUNG / MEMORIZACIÓN DEL RADIOMANDO/MEMORIZAÇÃO DO RADIOCOMANDO**

D

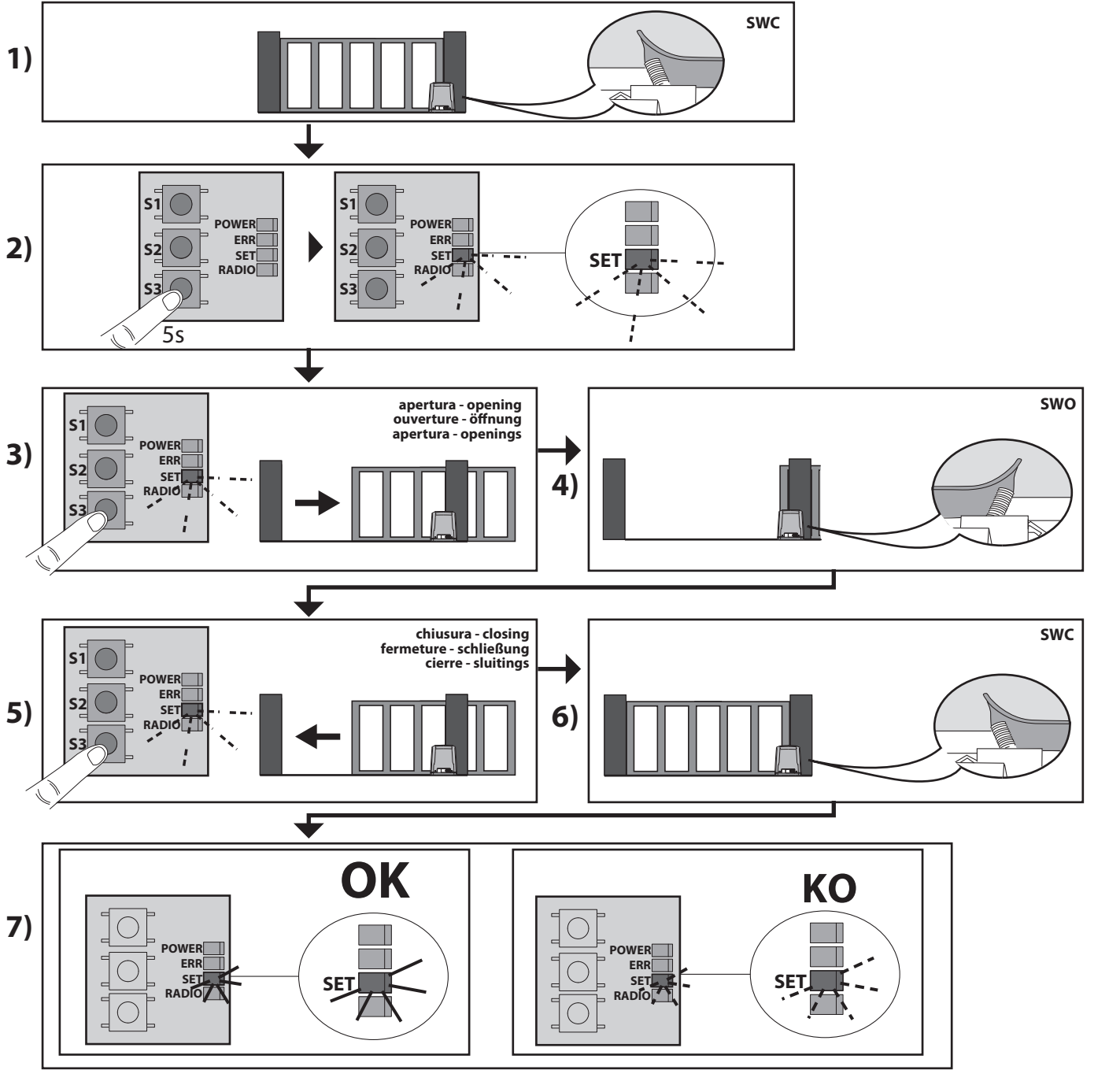


LEGENDA - KEY - LÉGENDE - LEGENDE - LEYENDA - LEGENDA

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**AUTOSET PER MOTORI CON FINECORSA / AUTOSET FOR MOTORS WITH LIMIT SWITCHES / AUTOCONFIGURATION POUR
MOTEURS AVEC FIN DE COURSE / AUTOSET FÜR MOTOREN MIT ENDSCHALTER / AUTOSET PARA MOTORES CON FINAL
DE CARRERA / AUTOSET VOOR MOTOREN MET EINDAANSLAGEN**

D1

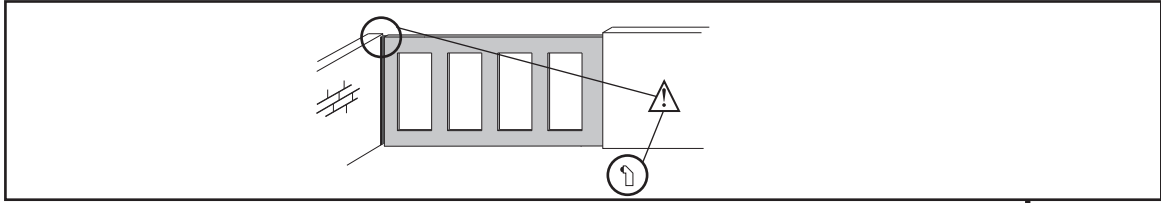


**AUTOSET PER MOTORI SPROVVISTI DI FINECORSO / AUTOSET FOR MOTORS WITH NO LIMIT SWITCHES /
 AUTOCONFIGURATION POUR MOTEURS SANS FIN DE COURSE / AUTOSET FÜR MOTOREN OHNE ENDSCHALTER
 AUTOSET PARA MOTORES SIN FINAL DE CARRERA / AUTOSET VOOR MOTOREN ZONDER EINDAANSLAGEN**

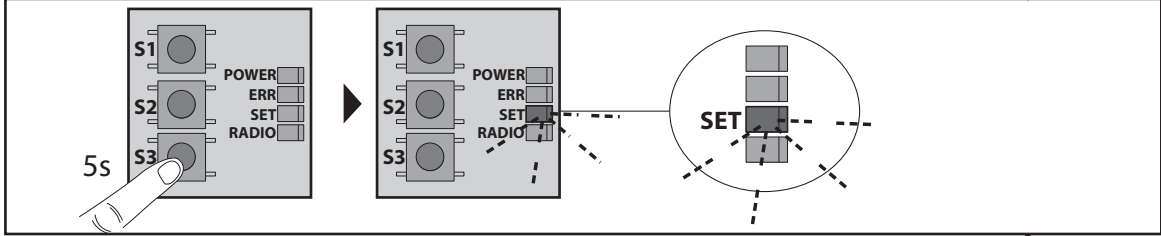
D2

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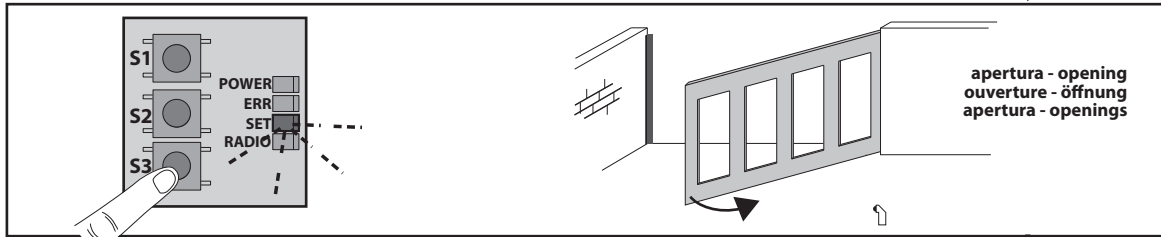
1)



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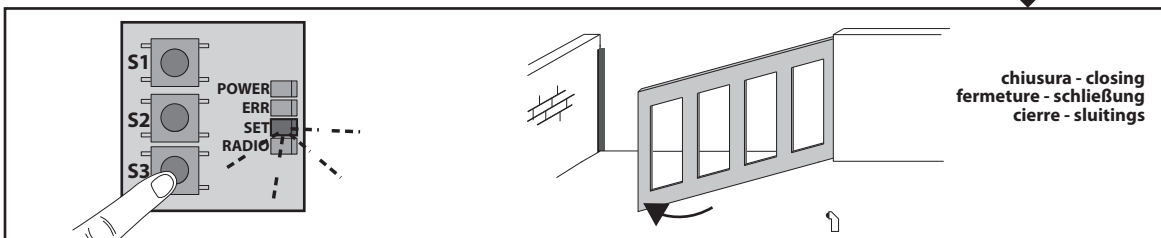
3)



4)



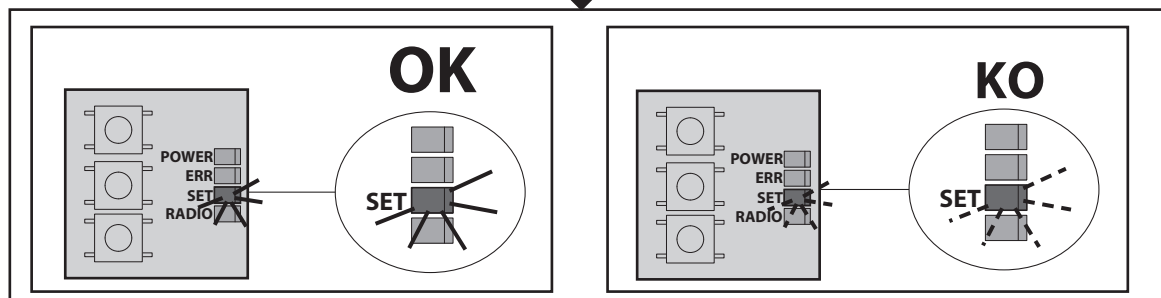
5)



6)

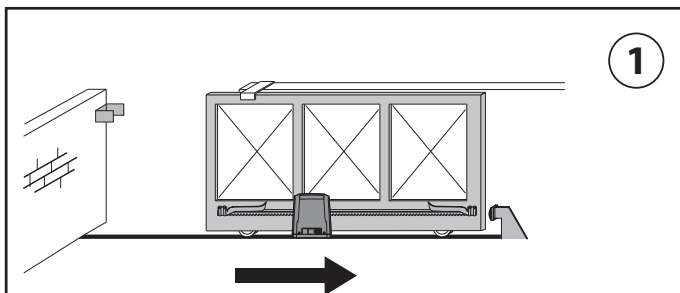


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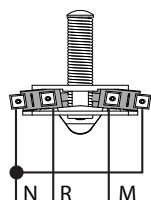
SHYRA AC F SL / SHYRA AC F SL 120

E

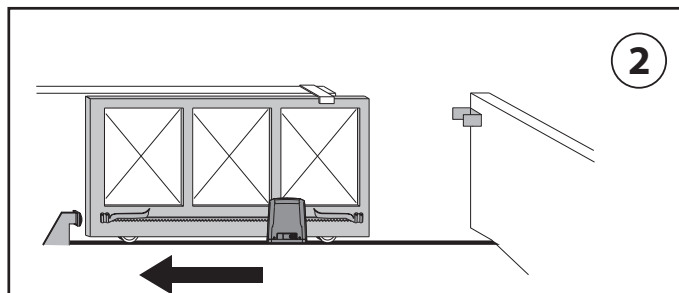
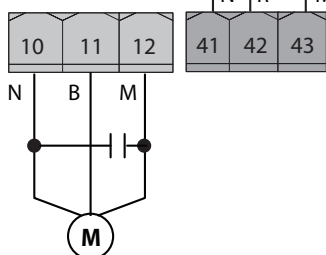


1

M	B	N	R
MARRONE	BLU	NERO	ROSSO
BROWN	BLUE	BLACK	RED
MARRON	BLEU	NOIR	ROUGE
BRAUN	BLAU	SCHWARZ	ROT
MARRÓN	AZUL	NEGRO	ROJO
BRUIN	BLAUW	ZWART	ROOD

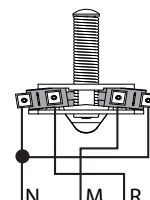


verso di apertura: destra
 opening direction: right
 sens de l'ouverture : droite
 Öffnungsrichtung: rechts
 sentido de apertura: derecha
 openingsrichting: rechtsverso

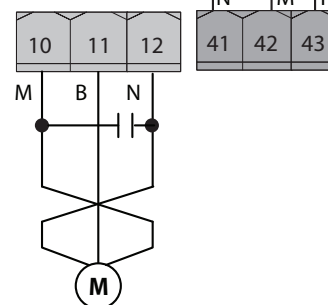


2

M	B	N	R
MARRONE	BLU	NERO	ROSSO
BROWN	BLUE	BLACK	RED
MARRON	BLEU	NOIR	ROUGE
BRAUN	BLAU	SCHWARZ	ROT
MARRÓN	AZUL	NEGRO	ROJO
BRUIN	BLAUW	ZWART	ROOD



verso di apertura: sinistra
 opening direction: left
 sens de l'ouverture : gauche
 Öffnungsrichtung: links
 sentido de apertura: izquierda
 openingsrichting: links



ITALIANO

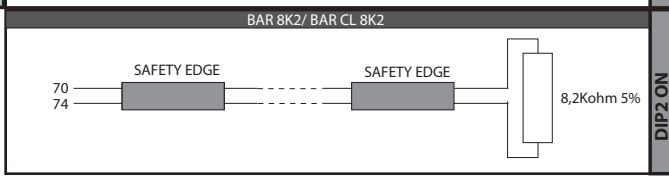
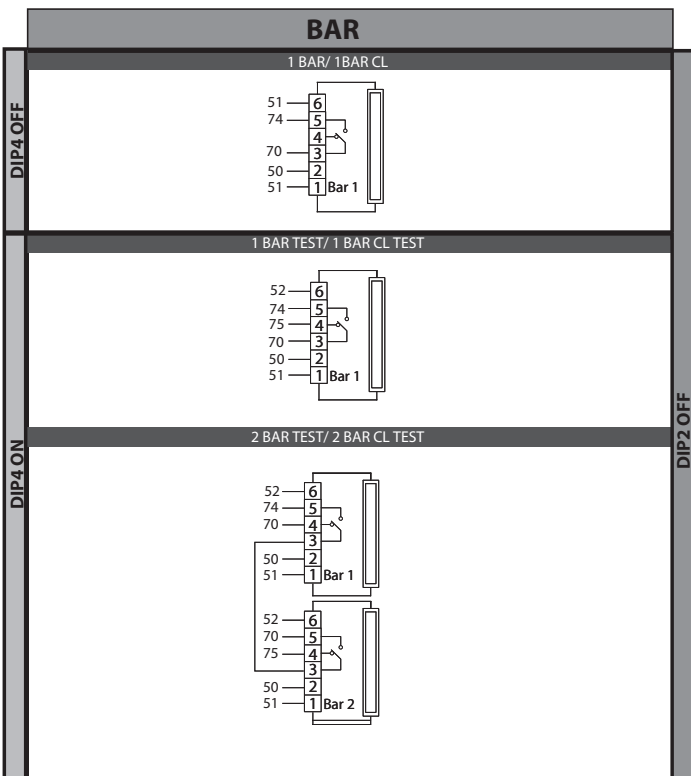
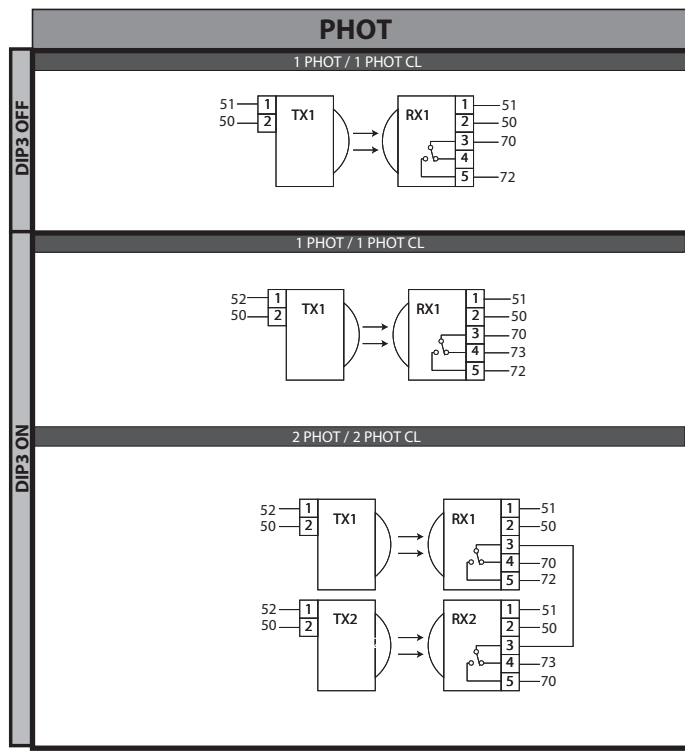
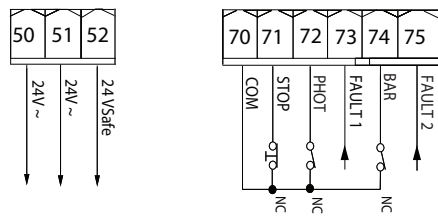
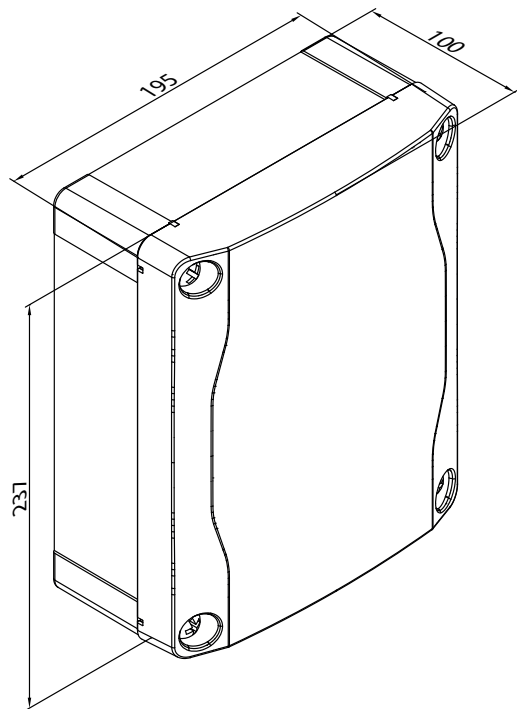
ENGLISH

FRANÇAIS

DEUTSCH

ESPAÑOL

NEDERLANDS



1) GENERAL INFORMATION

The **SHYRA AC F SL** control panel comes with standard factory settings. Any change must be set by means of the TRIMMER and DIP SWITCH settings. Its main features are:

- Control of 1 single-phase motor
 - Electronic torque control
 - Separate inputs for safety devices
 - Built-in radio receiver rolling code with transmitter cloning.
- The board has a terminal strip of the removable kind to make maintenance or replacement easier. It comes with a series of prewired jumpers to make the installer's job on site easier. **The jumpers concern terminals: 70-71, 70-72, 70-74. If the above-mentioned terminals are being used, remove the relevant jumpers.**

TESTING

The **SHYRA AC F SL** panel controls (checks) the start relays and safety devices (photocells) before performing each opening and closing cycle. If there is a malfunction, make sure that the connected devices are working properly and check the wiring.

2) TECHNICAL SPECIFICATIONS

Power supply	110-120V 60Hz (SHYRA AC F SL 120V) 220-230V 50/60 Hz (SHYRA AC F SL 230V)
Panel dimensions	Fig. F
Low voltage/mains insulation	> 2MΩ 500V ---
Operating temperature range	-20 / +55°C
Dielectric rigidity	mains/LV 3750V~ for 1 minute
Accessories power supply	4V~ (demand max. 0,2A)
AUX 0 - Flashing Contact powered	120V~ 40W max (SHYRA AC F SL 120V) 230V~ 40W max (SHYRA AC F SL 230V)
Fuses	Fig. C
Built-in Rolling-Code radio-receiver	frequency 433.92MHz
Setting of parameters and logics	TRIMMER + DIP SWITCH
N° of combinations	4 billion
Max. n° of remotes that can be memorized	63
Pedestrian work time	8 s.
Maximum power	500W
Maximum cycle	S3 33s -1-33s-1x20 pause 36 min.
Maximum work time	120s

Usable transmitter versions:

All **ROLLING CODE** transmitters compatible with ((CR-Ready)).

3) TUBE ARRANGEMENT Fig. A

Install the electrical system referring to the standards in force for electrical systems CEI 64-8, IEC 364, harmonization document HD 384 and other national standards.

4) TERMINAL BOARD WIRING Fig. C

For the electric diagram and the cross section of the cables refer to the manual of the actuator.

WARNINGS - When performing wiring and installation, refer to the standards in force and, whatever the case, apply good practice principles. Wires carrying different voltages must be kept physically separate from each other, or they must be suitably insulated with at least 1mm of additional insulation. Wires must be secured with additional fastening near the terminals, using devices such as cable clamps.

All connecting cables must be kept far enough away from the dissipater.

WARNING! For connection to the mains power supply, use a multicore cable with a cross-sectional area of at least 3x1.5mm² of the kind provided for by the regulations in force.

To connect the motors, use a cable with a cross-sectional area of at least 1.5mm² of the kind provided for by the regulations in force.

The cable must be type H05RN-F at least.

5) SAFETY DEVICES

Note: only use receiving safety devices with free changeover contact.

5.1) TESTED DEVICES Fig.G**5.2) CONNECTION OF 1 PAIR OF NON-TESTED PHOTOCELLS FIG. B**

WARNING!
The values of the impact force according to EN 12453 are only observed with the use of safety edges (active) connected to the board.

6) ADJUSTMENT PROCEDURE

- Before turning the unit on, check electrical connections.
- Adjust the mechanical limit switches (where present)
- Carry out an Autosest to set work time
- Set the trimmer
- Set the dip-switch.

WARNING! Incorrect settings can result in damage to property and injury to people and animals.

WARNING! Check that the force of impact measured at the points provided for by standard EN 12445 is lower than the value laid down by standard EN 12453.

7) MEMORIZING TRANSMITTERS FIG. D**RADIO**

IMPORTANT NOTE: THE FIRST TRANSMITTER MEMORIZED MUST BE IDENTIFIED BY ATTACHING THE KEY LABEL (MASTER).

In the event of manual programming, the first transmitter assigns the RECEIVER'S KEY CODE: this code is required to subsequently clone the radio transmitters.

The Clonix built-in on-board receiver also has a number of important advanced features:

- Cloning of master transmitter (rolling code).
- To use these advanced features, refer to the universal handheld programmer's instructions and to the general receiver programming guide.

8) ADJUSTING THE AUTOSET FIG. D1/D2

It allows setting the motor work time automatically. The work times required to carry out opening and closing are measured; the higher of the 2 measured times is stored and safety time is added to guarantee complete opening or closing also when the motor performance varies.

WARNING!! The autosest must be carried out only after checking that the leaf is moving accurately (opening/closing) and the mechanical stops and limit switches are positioned correctly.

WARNING! During the autosest, the activation of photocells or safety edges causes the autosest function to fail and be abandoned.


Autosest for motors with limit switches (Fig. D1):

- 1 - place the leaf at the closing limit switch.
- 2 - press button S3 for 5 seconds: the SET LED flashes.
- 3 - press button S3 to start the opening manoeuvre.
- 4 - wait for the opening limit switch to operate so that the opening manoeuvre is complete.
- 5 - press button S3 to start the closing manoeuvre.
- 6 - wait for the closing limit switch to operate so that the closing manoeuvre is complete.
- 7 - If the work time has been stored correctly, the SET LED comes on for 10 seconds. If autosest fails the SET LED flashes quickly for 10 seconds.

Autosest for motors with no limit switches (Fig. D2):

- 1 - place the leaf at the gate closure.
- 2 - press button S3 for 5 seconds: the SET LED flashes.
- 3 - press button S3 to start the opening manoeuvre.
- 4 - press button S3 to end the opening manoeuvre.
- 5 - press button S3 to start the closing manoeuvre.
- 6 - press button S3 to end the closing manoeuvre.
- 7 - If the work time has been stored correctly, the SET LED comes on for 10 seconds. If autosest fails the SET LED flashes quickly for 10 seconds.

9) REVERSING THE OPENING DIRECTION (Fig.E)**KEYS**

KEYS	Description
S1	Add Start Key associates the desired key with the Start command.
S2	Add Pedestrian Key associates the desired key with the pedestrian command.
S2 >5s	Confirms the changes made to parameter settings and operating
S1+S2 >10s	Erase List  WARNING! Erases all memorized transmitters from the receiver's memory.
S3	Pressed BRIEFLY, it gives the START command. HELD DOWN (>5 sec.), it activates the AUTASET function. Pressing and holding (>10s) takes the work time back to the default value

INSTALLATION MANUAL

LED INDICATORS:

POWER	Steadily lit: - Mains power on - Board powered - Fuses intact
START	Lit: START input activated
OPEN	Lit: OPEN pedestrian input activated
STOP	Unlit: STOP input activated
PHOT	Unlit: PHOT photocell input activated
FAULT 1	PHOT input safety device test input diagnostics
BAR	Unlit: BAR safety edge input activated
FAULT 2	BAR input safety device test input diagnostics
SWC	Unlit: leaf fully closed
	Lit: motor limit switch is disengaged
	Flashing: end of the work time while closing
SWO	Unlit: leaf fully open
	Lit: motor limit switch is disengaged
	Flashing: end of the work time while opening
ERR	Unlit: no error
	LIT: see error diagnostics table
RADIO (GREEN)	Unlit: remote programming not active
	Radio LED only flashing: Remote programming active, waiting for hidden key.
	Flashing in sync with Set LED: Transmitter deletion in progress
	Lit: remote programming active, waiting for desired key.
SET	Lit 1s: Radio receiver channel activated
	Lit: Set key pressed / Autoset completed successfully
	Flashes three times: Autoset in progress
	Fast flashing 10s: Autoset failed
	Flashing in sync with Radio LED: Transmitter deletion in progress
	Lit 1s: Start/Stop after key S3 pressed
Lit 10s: Autoset completed correctly	

TABLE ERR

		Led ERR		
		Lit	slow flashing	fast flashing
Led SET	Unlit		Photocell test, Costa o Costa 8k2 failed - Check photo-cell connection and/or logic settings	
	Lit	Reverse due to obstacle - Amperostop - Check for obstacles in path		Thermal cutout - Allow automated device to cool
	slow flashing	Internal system supervision control error. - Try turning the board off and back on or press button S2. If the problem persists, contact the technical assistance department. Thermal cutout - Allow automated device to cool		Changed settings and/or Operating logics press S2 for 5s to confirm.

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	Terminal	Definition	Description
Power supply	L	LINE	Single-phase power supply with earth cable
	N	NEUTRAL	
	GND	EARTH	
Motor	10	START + CONDENSER	Motor and condenser connection
	11	COM	
	12	START + CONDENSER	
Aux	20	AUX 0 – POWERED CONTACT 230V (N.O.) (40W MAX)	Exit due to FLASHING LIGHT Contact stays closed while leaves are operating.
	21		
Limit switches	41	+REF SWE	Limit switch common
	42	SWC	Closing limit switch SWC (N.C.)
	43	SWO	Opening limit switch SWO (N.C.)
Accessories power supply	50	0V-	Accessories power supply output.
	51	24V+	
	52	24 Vsafe+	Tested safety device power supply output (photocell transmitter and safety edge transmitter). Output active only during operating cycle.
Commands	60	Common	START and OPEN inputs common
	61	START	START command button (N.O.). Operation according to "Residential / apartment building operation" logic
	62	OPEN	OPEN command button (N.O.). Gate opened with this command. If the input stays closed, the leaves stay open until the contact is opened. When the contact is open, the automated device closes following the TCA time, where activated.

INSTALLATION MANUAL

	Terminal	Definition	Description			
Safety devices	70	Common	STOP, PHOT and BAR inputs common			
	71	STOP	The command stops movement. (N.C.) If not used, leave jumper inserted.			
	72	PHOT (*)	PHOTOCELL input (N.C.). Operation according to "PHOTOCELL/PHOTOCELL DURING CLOSING" logic. If not used, leave jumper inserted.			
	73	FAULT 1	Test input for safety devices connected to PHOT.			
	74	BAR / BAR CL / BAR TEST / BAR CL TEST / BAR 8K2 / BAR CL 8K2 (*)	Safety edge input (N.C.). If not used, leave jumper inserted			
			BAR/8K2 dip	Safety edge check dip	Safety edge operation dip	
			OFF	OFF	OFF	NC input, no verification, reversal while opening and closing (BAR)
			OFF	OFF	ON	NC input, no verification, reversal only when closing, stop when opening (BAR CL)
OFF			ON	OFF	NC input, with verification, reversal while opening and closing (BAR TEST)	
OFF			ON	ON	NC input, with verification, reversal only when closing, stop when opening (BAR CL TEST)	
ON			OFF	OFF	8K2 input, reversal when opening and closing (BAR 8K2)	
ON	OFF	ON	8K2 input, reversal only when closing, stop when opening (BAR CL 8K2)			
75	FAULT 2	Test input for safety devices connected to BAR / BAR CL				
Antenna	Y	ANTENNA	Antenna input.			
	#	SHIELD	Use an antenna tuned to 433MHz. Use RG58 coax cable to connect the Antenna and Receiver. Metal bodies close to the antenna can interfere with radio reception. If the transmitter's range is limited, move the antenna to a more suitable position.			

(*) If "D" type devices are installed (as defined by EN12453), connect in unverified mode, foresee mandatory maintenance at least every six months.
 (*) In the European Union, apply standard EN 12453 for force limitations, and standard EN 12445 for measuring method.

TABLE "A" - PARAMETERS

 **Any modification of parameters/logics must be confirmed by pressing S2 > 5s**





TRIMMER	Parameter	 min.	 max.	 default	Description
T1	Automatic closing time [s]	0	120	0	Waiting time before automatic closing. NOTE: Set to 0 if not used.
T2	Leaf strength [%]	1	100	50%	Force exerted by leaf/leaves.  ATTENTION: It directly affects the impact force: check the set value complies with the safety regulations in force(*). If necessary, install anti-crushing safety devices.
T3	Not used				

TABLE "B" - LOGICS

⚠ Any modification of parameters/logics must be confirmed by pressing S2 > 5s

DIP	Logic	Default	Cross out setting used	Description			
1	Transmitter programming	ON	ON	Enables wireless memorizing of transmitters: 1- Press in sequence the hidden key and normal key (T1-T2-T3-T4) of a transmitter that has already been memorized in standard mode via the radio menu. 2- Press within 10 sec. the hidden key and normal key (T1-T2-T3-T4) of a transmitter to be memorized. The receiver exits programming mode after 10 sec.: you can use this time to enter other new transmitters. This mode does not require access to the control panel. IMPORTANT: Enables the automatic addition of new transmitters, clones and replays.			
			OFF	Disables wireless memorizing of transmitters and automatic addition of clones. Transmitters are memorized only using the relevant Radio menu or automatically with replays. IMPORTANT: Disables the automatic addition of new transmitters and clones			
2	BAR / 8K2	OFF	ON	Input configured as Bar 8k2 (Fig.G). Input for resistive edge 8K2. The command reverses movement for 1 sec.			
			OFF	Input configured as Bar, safety edge (Fig.G). The command reverses movement for 1sec..			
3	Photocell input check	OFF	ON	Enable safety check on the PHOT input. (Fig.G)			
			OFF	Safety check on PHOT input not enabled. (Fig.G)			
4	Edge input check	OFF	ON	Enable safety check on the BAR input. (Fig.G)			
			OFF	Safety check on BAR input not enabled. (Fig.G)			
5	Photocells during closing	OFF	ON	In the event beam is broken, photocell operation is disabled during opening. During closing, movement is reversed immediately.			
			OFF	When beam is broken, photocells are active during both opening and closing. When beam is broken during closing, movement is reversed only once the photocell is cleared.			
6	Safety edge input operation	OFF	ON	Safety edge with active reversal only when closing, when opening the movement stops			
			OFF	Safety edge with active reversal in both directions			
7	Fast closing	OFF	ON	Closes 3 seconds after the photocells are cleared before waiting for the set TCA to elapse.			
			OFF	Logic not enabled			
8	Residential / apartment building operation	OFF	ON	Sets the automation type of operation: ON = Apartment building	Reaction to the START input (wired or radio):		
						Residential	Apartment building
					CLOSED	Opens	Opens
					WHILE CLOSING	Stops	Opens
					OPEN	Closes	Closes
					WHILE OPENING	STOPS + TCA	No effect
			AFTER STOP	Opens	Opens		
			Reaction to the OPEN input (wired):				
				Residential	Apartment building		
			CLOSED	Opens	Opens		
			WHILE CLOSING	Opens	Opens		
			OPEN	No effect	No effect		
WHILE OPENING	Keeps it open	Keeps it open					
AFTER STOP	Opens	Opens					
Reaction to the PEDESTRIAN input (radio):							
	Residential	Apartment building					
CLOSED	Opens partially	Opens partially					
WHILE CLOSING	Stops	Opens partially					
OPEN	Closes	Closes					
WHILE OPENING	STOPS + TCA	No effect					
AFTER STOP	Opens partially	Opens partially					
OFF	OFF = Residential	OFF	OFF	OFF = Residential	Reaction to the START input (wired or radio):		
						Residential	Apartment building
CLOSED	Opens partially	Opens partially					
WHILE CLOSING	Stops	Opens partially					
OPEN	Closes	Closes					
WHILE OPENING	STOPS + TCA	No effect					
AFTER STOP	Opens partially	Opens partially					

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