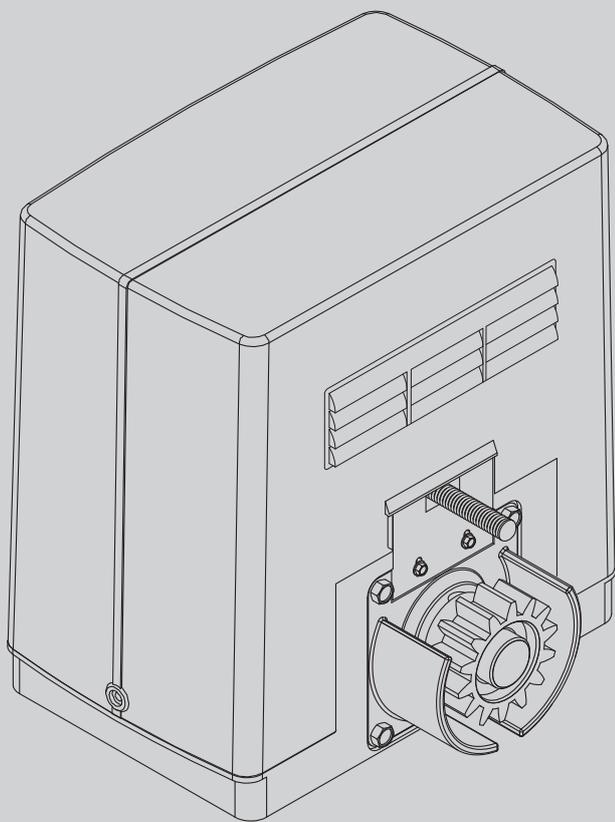




D811343 00100_03 25-01-11

ATTUATORE IN BASSA TENSIONE PER CANCELLI SCORREVOLI A CREMAGLIERA
LOW-VOLTAGE ACTUATOR FOR RACK SLIDING GATES
ACTIONNEUR A BASSE TENSION POUR PORTAILS COULISSANTS A CREMAILLIERE
NIEDERSpannungsANTRIEB FÜR ZAHNSTANGEN-SCHIEBETORE
SERVOMOTOR DE BAJA TENSION PARA CANCELAS CORREDERAS DE CREMALLERA
LAAGSPANNINGSACTUATOR VOOR SCHUIFHEKKEN MET TANDHEUGEL



ISTRUZIONI D'USO E DI INSTALLAZIONE
INSTALLATION AND USER'S MANUAL
INSTRUCTIONS D'UTILISATION ET D'INSTALLATION
INSTALLATIONS-UND GEBRAUCHSANLEITUNG
INSTRUCCIONES DE USO Y DE INSTALACION
INSTALLATIEVOORSCHRIFTEN

DEIMOS BT + QSC D MA

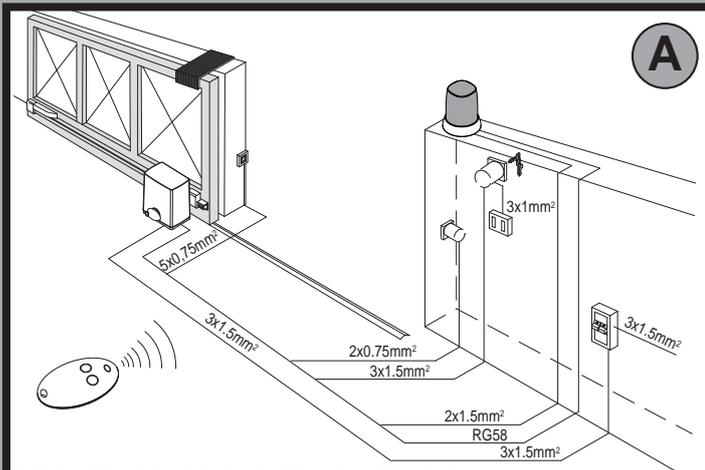


AZIENDA CON SISTEMA DI GESTIONE
INTEGRATO CERTIFICATO DA DNV
= UNI EN ISO 9001:2008 =
UNI EN ISO 14001:2004

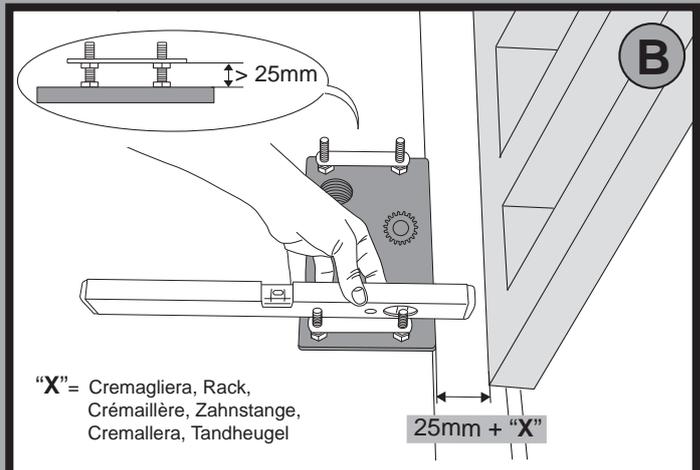
Attenzione! Leggere attentamente le "Avvertenze" all'interno! **Caution!** Read "Warnings" inside carefully! **Attention!** Veuillez lire attentivement les Avertissements qui se trouvent à l'intérieur! **Achtung!** Bitte lesen Sie aufmerksam die „Hinweise“ im Inneren! **¡Atención!** Leer atentamente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

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

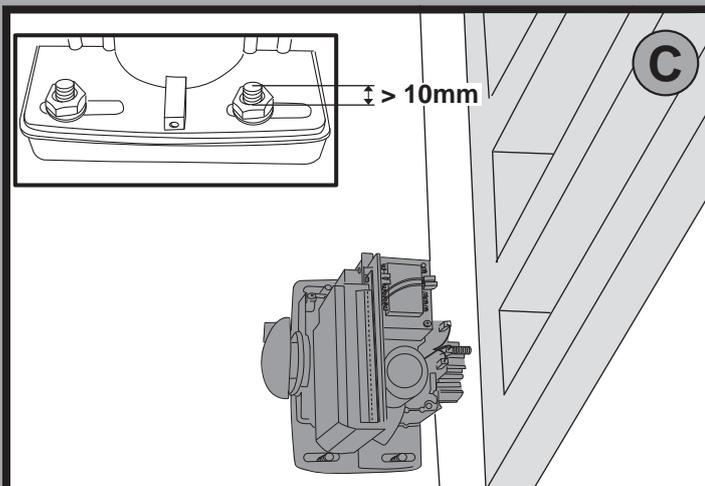
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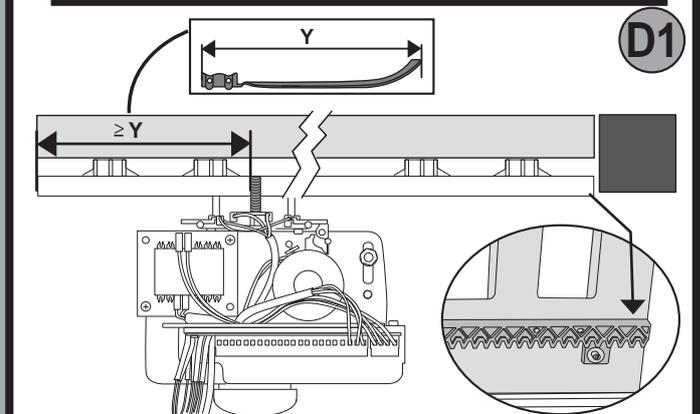
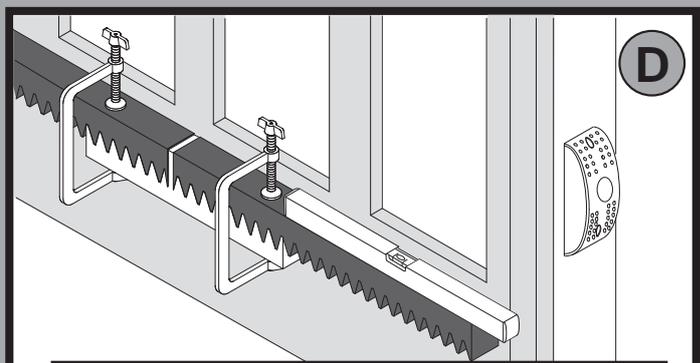
**PREDISPOSIZIONE TUBI, TUBE ARRANGEMENT,
PRÉDISPOSITION DES TUYAUX, VORBEREITUNG DER LEITUNGEN,
DISPOSICIÓN DE TUBOS, VOORBEREIDING LEIDINGEN.**



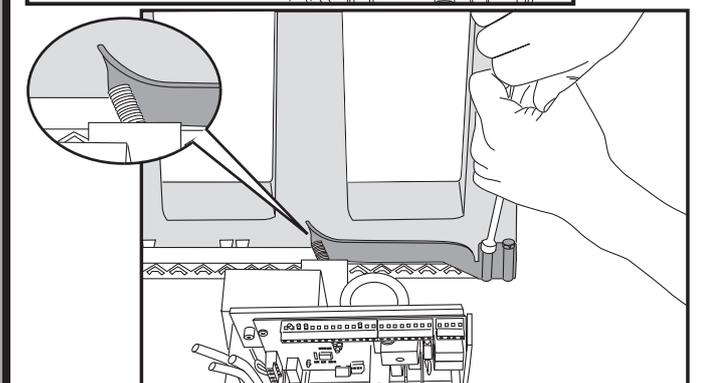
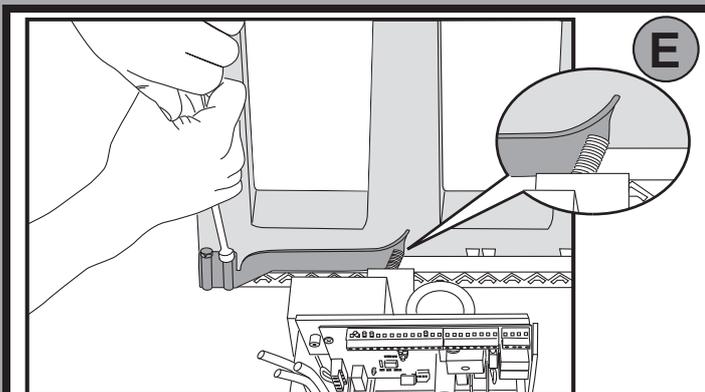
**Predisposizione fissaggio motore, Preparation for motor mounting,
Aménagement fixation moteur, Vorbereitung Motorbefestigung,
Disposición fijación del motor, Voorbereiding bevestiging motor.**



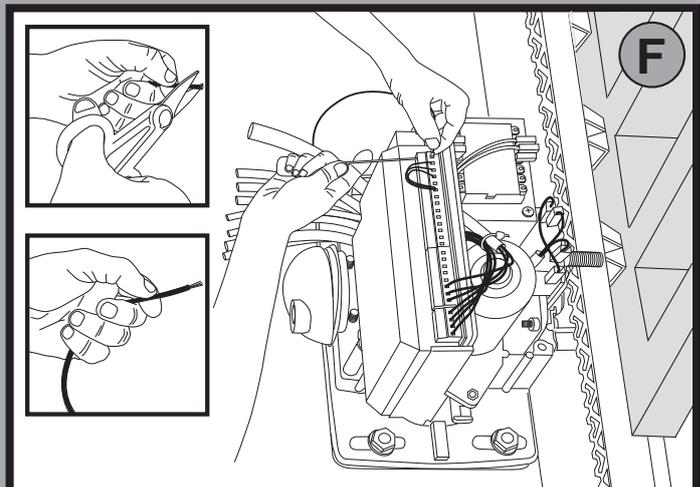
**Montaggio motore, Mounting the motor, Montage moteur,
Montage Motor, Montaje del motor, Montage motor.**



**Montaggio accessori trasmissione, Mounting drive accessories,
Montage accessoires transmission, Montage Antriebszubehör,
Montaje de accesorios transmisión, Montage accessoires overbrenging.**

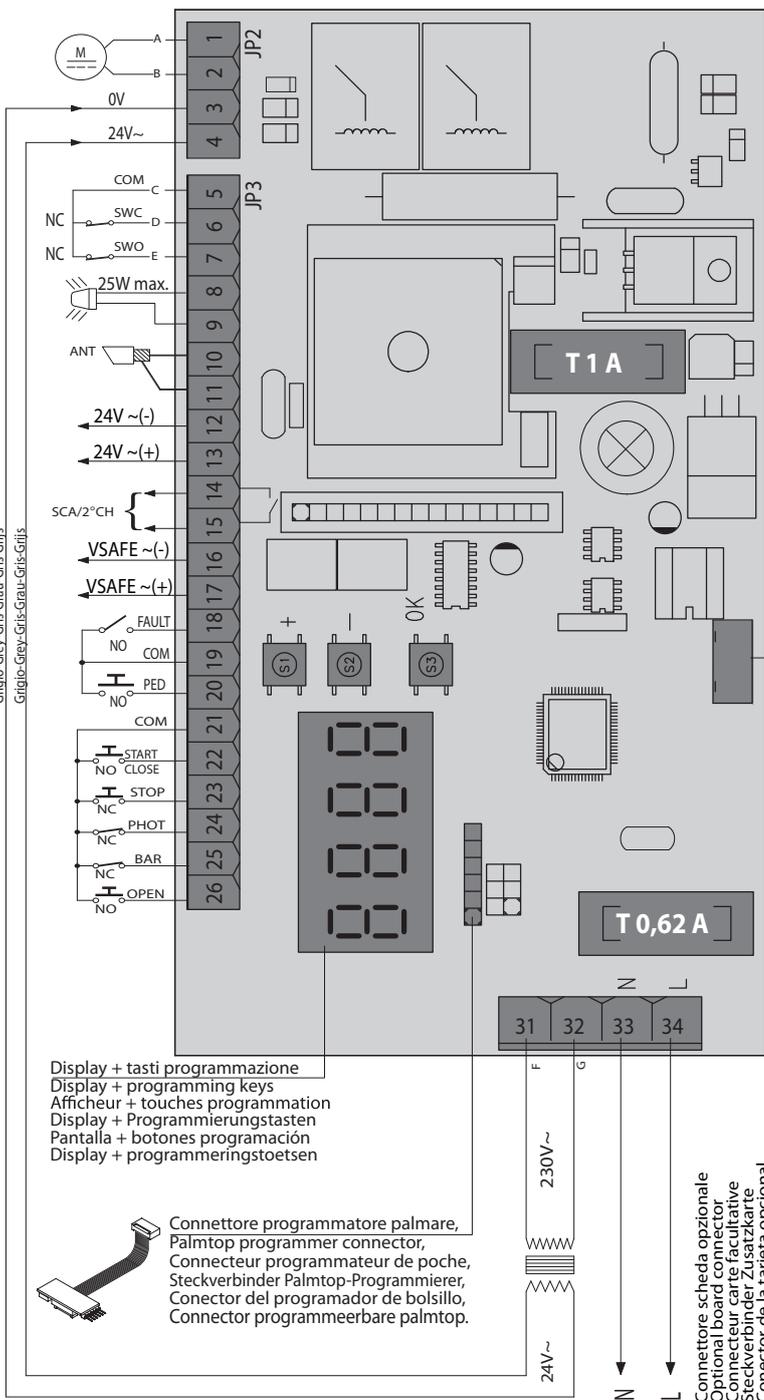


**Fissaggio staffe finecorsa (dx e sx), Fastening limit switch brackets (RH/LH),
Fixation étriers fin de course (drt et gch), Befestigung Bügel Anschläge (rechts und links),
Fijación abrazaderas final de carrera (der. e izq.),
Bevestiging stangen aanslag (rechts en links).**



**Collegamento morsetti, Terminal board wiring,
Connexion plaque à bornes, Anschluss Klemmleiste,
Conexión tablero de bornes, Aansluiting aansluitkast.**

G



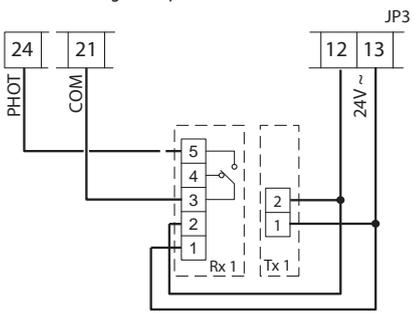
Display + tasti programmazione
 Display + programming keys
 Afficheur + touches programmation
 Display + Programmierungstasten
 Pantalla + botones programación
 Display + programmeringstoetsen

Connettore programmatore palmare,
 Palmtop programmer connector,
 Connecteur programmeur de poche,
 Steckverbinder Palmtop-Programmierer,
 Conector del programador de bolsillo,
 Connector programmeerbare palmtop.

Connettore scheda opzionale
 Optional board connector
 Connecteur carte facultative
 Steckverbinder Zusatzkarte
 Conector de la tarjeta opcional
 Connector optionele kaart

H

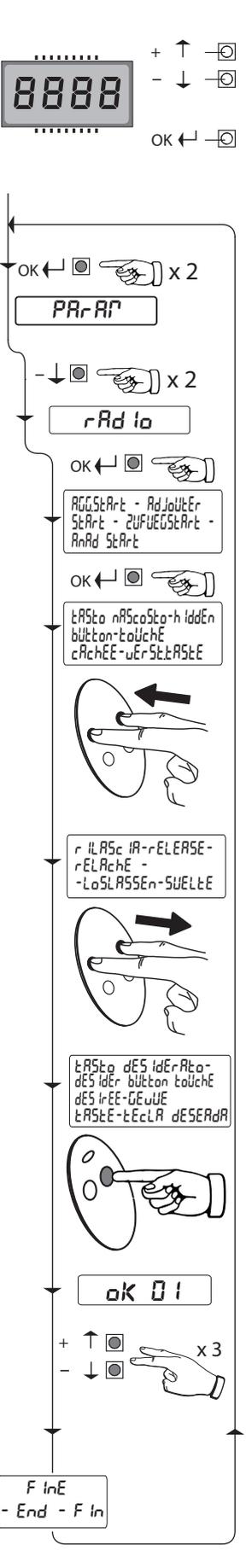
Collegamento di 1 coppia fotocellule non verificate
 Connection of 1 pair of non-tested photocells
 Connexion 1 paire photocellules non vérifiées
 Anschluss von einem Paar nicht überprüften Fotozellen
 Conexión de 1 par fotocélulas no comprobadas
 Aansluiting van 1 paar fotocellen anders dan "trusted device"



LOGICA test fotocellule OFF / Photocell test LOGIC OFF
 LOGIQUE essai photocellules Désactivée / LOGIK Test Fotozellen OFF
 LÓGICA prueba fotocélulas OFF / LOGICA test fotocellen OFF

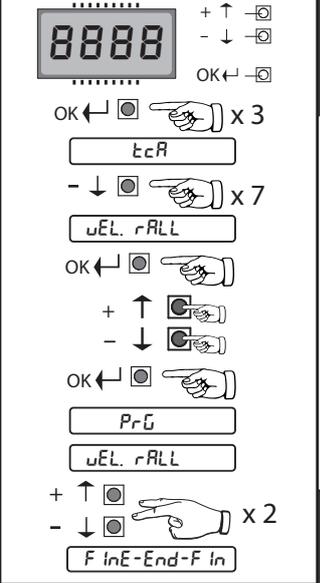
I

MEMORIZZAZIONE RADIOCOMANDO
 MEMORIZING REMOTE CONTROLS
 MÉMORISATION RADIOCOMMANDE
 ABSPEICHERUNG DER FERNBEDIENUNG
 MEMORIZACION DEL RADIOMANDO
 GEHEUGENOPSLAG AFSTANDSBEDIENING



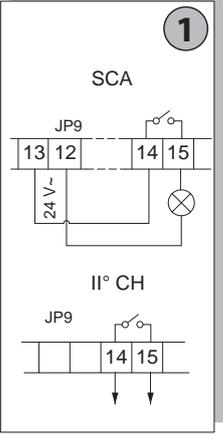
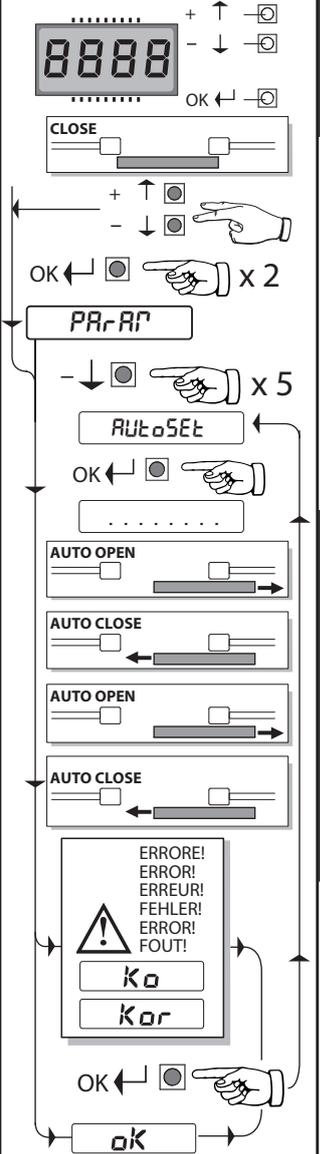
J

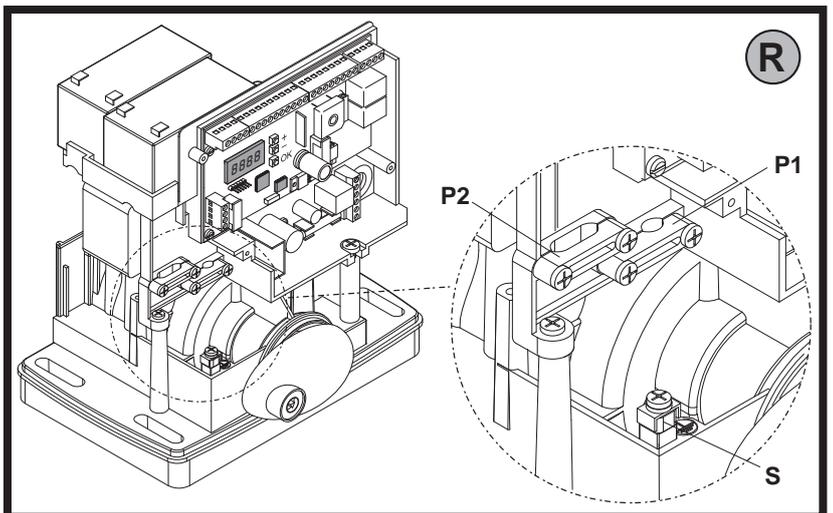
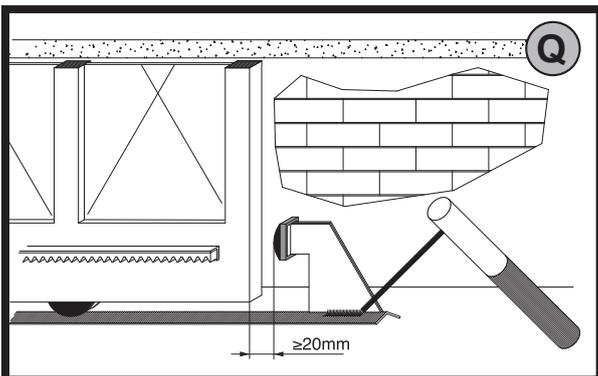
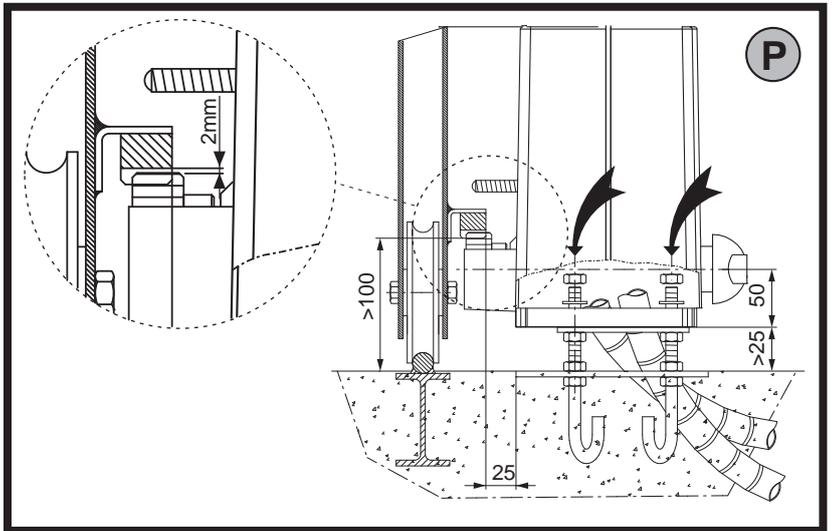
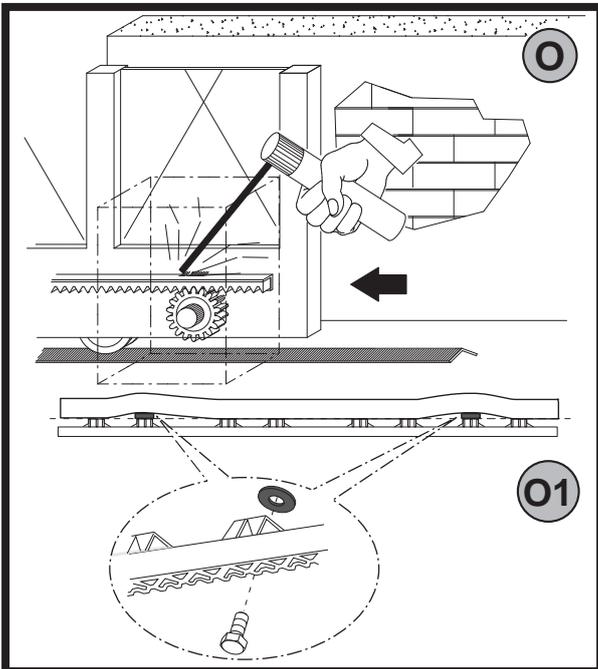
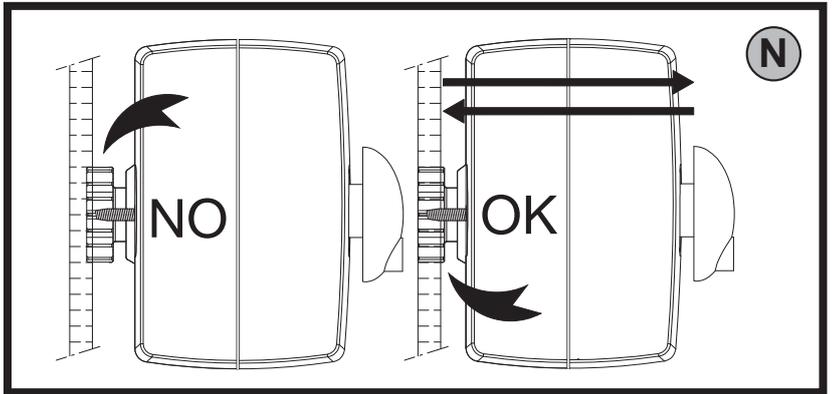
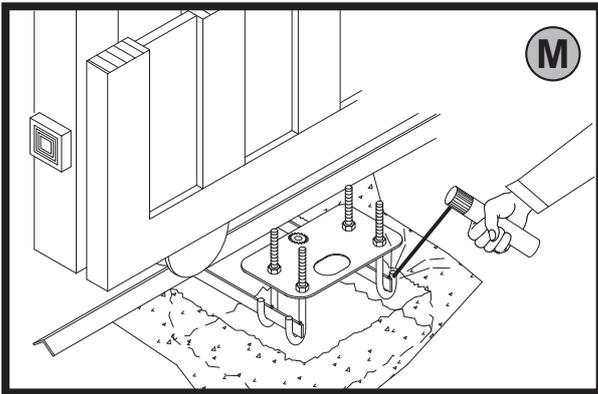
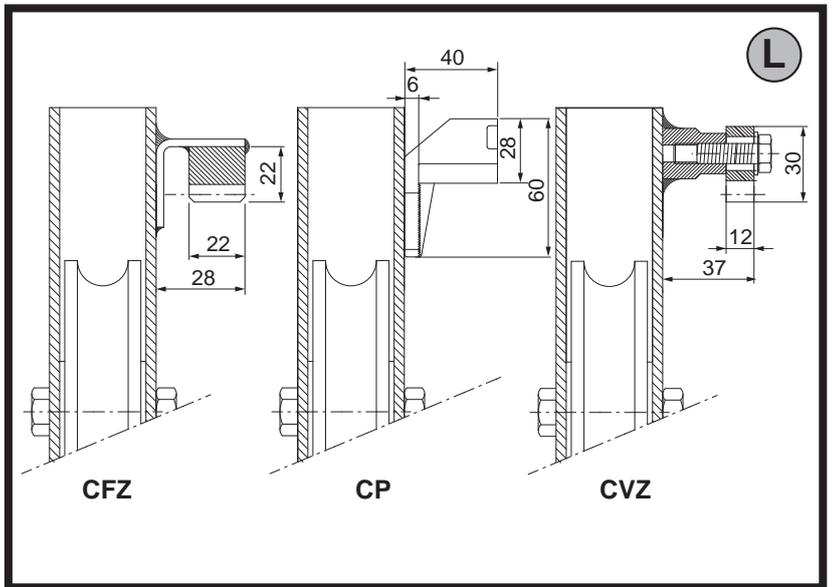
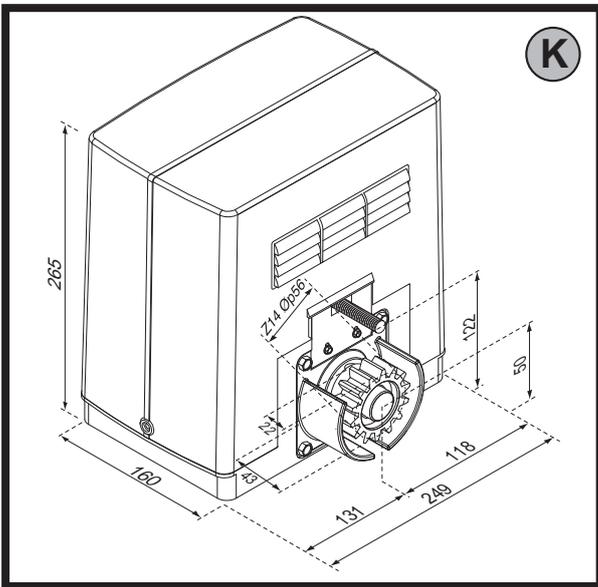
REGOLAZIONE VELOCITA' RALLENTAMENTO
 ADJUSTING SLOW-DOWN SPEED
 REGLAGE VITESSE RALENTISSEMENT
 EINSTELLUNG GESCHWINDIGKEIT VERLANGSAMUNG
 REGULACIÓN VELOCIDAD DECELERACIÓN
 AFSTELLING SNELHEID VERTRAGING

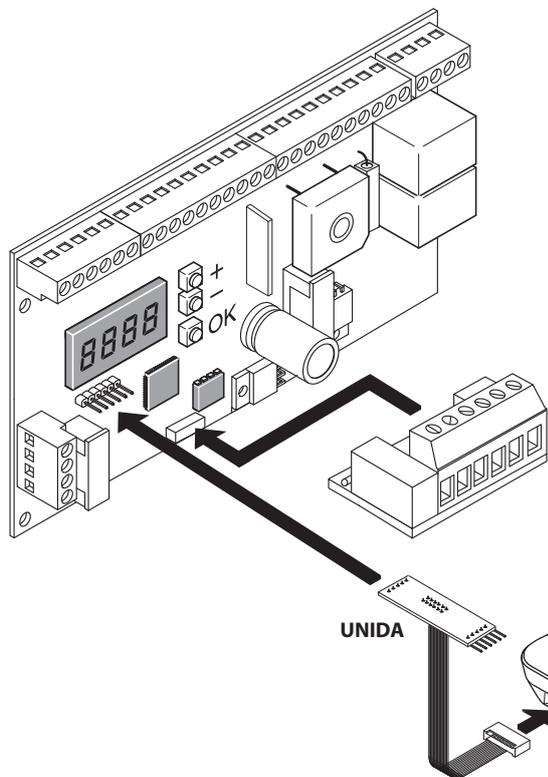


J1

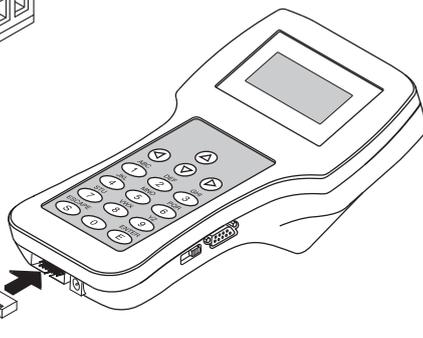
REGOLAZIONE AUTOSSET,
 ADJUSTING AUTOSSET,
 REGLAGE AUTOSSET,
 EINSTELLUNG AUTOSSET,
 REGULACION AUTOSSET,
 AFSTELLING AUTOSSET.





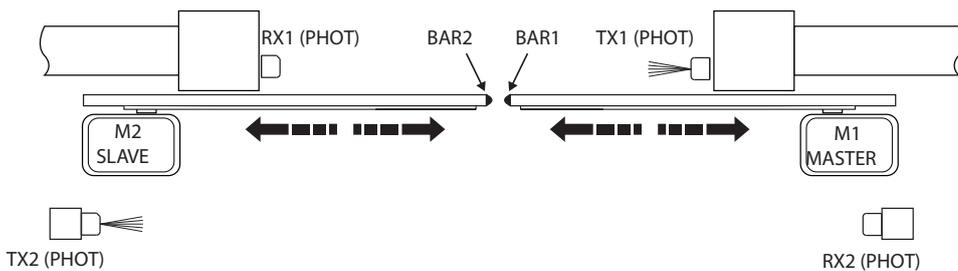


SCHEDA DI ESPANSIONE
 EXPANSION BOARD
 CARTE EXPANSION
 ERWEITERUNGSKARTE
 TARJETA DE EXPANSIÓN
 UITBREIDINGSKAART



Programmatore palmare universale
 Universal palmtop programmer
 Programmateur de poche universel
 Universellen Palmtop-Programmierer
 Programador de bolsillo universal
 Programmeerbare Universele Palmtop

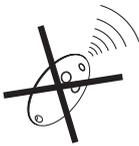
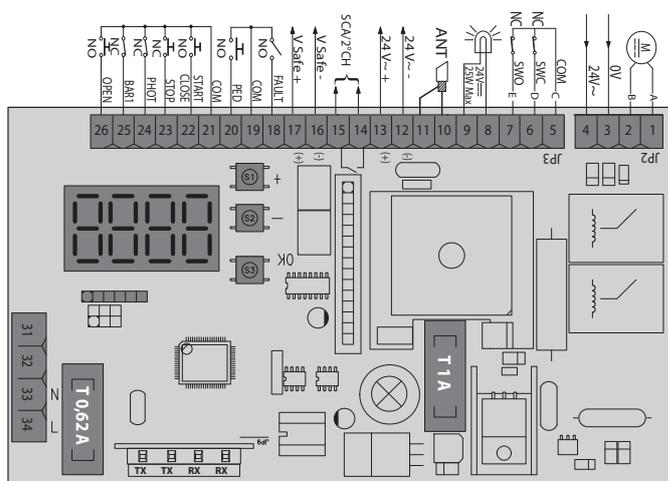
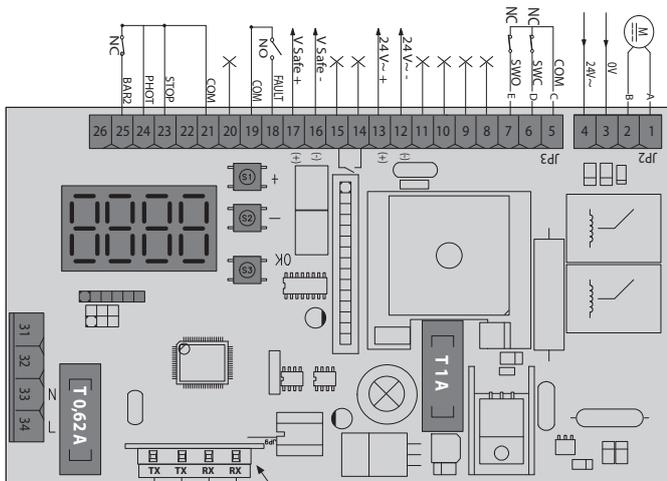
UNIDA

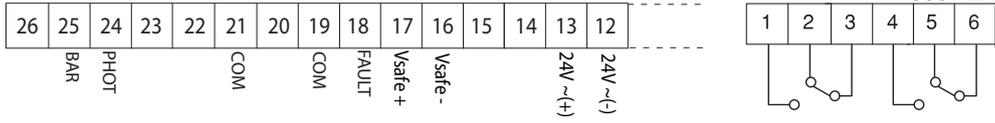


QSC-D
 M2 (SLAVE)
 ZonE=128
 PAsEr=OFF

lasciare ponticellati
 leave jumpered
 laissez-la pontée
 überbrückt lassen
 dejar puenteado
 brug niet verwijderen

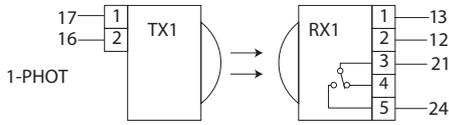
QSC-D
 M1 (MASTER)
 ZonE=128
 PAsEr=ON



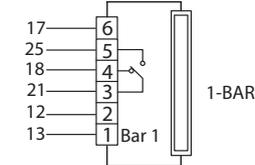


TEST PHOT = ON

1

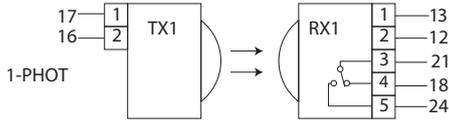


A

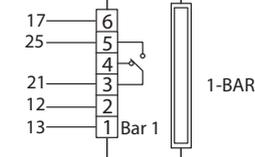


FAULT/PHOT=OFF

2

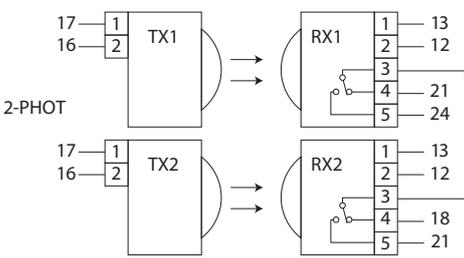


B

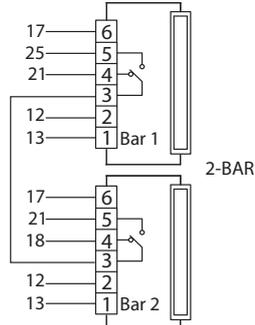


FAULT/PHOT=ON

3

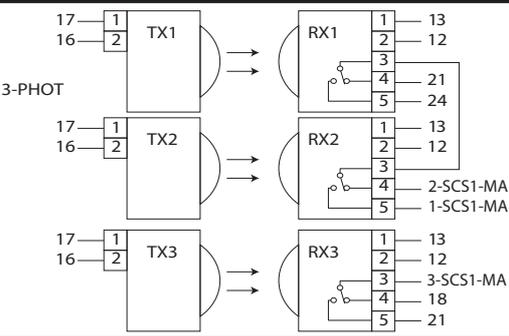


C

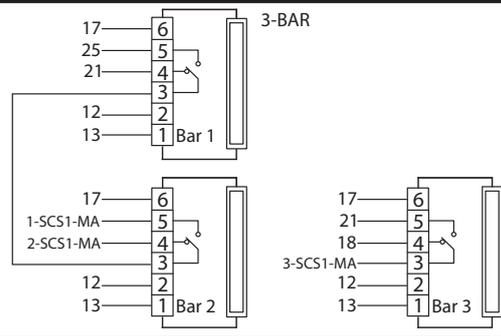


TEST BAR = ON

4

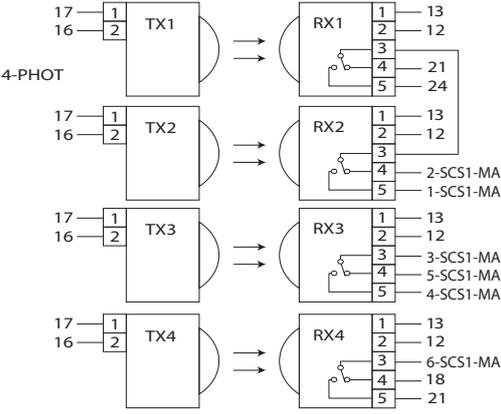


D

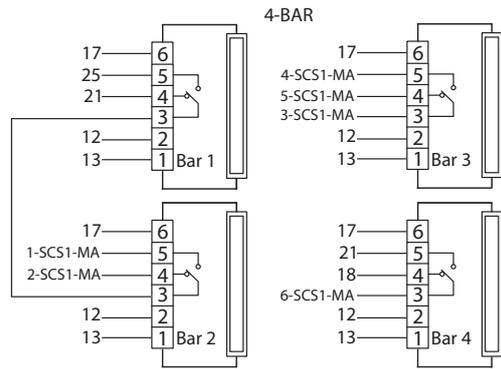


FAULT/PHOT=OFF

5



E



TEST BAR = ON

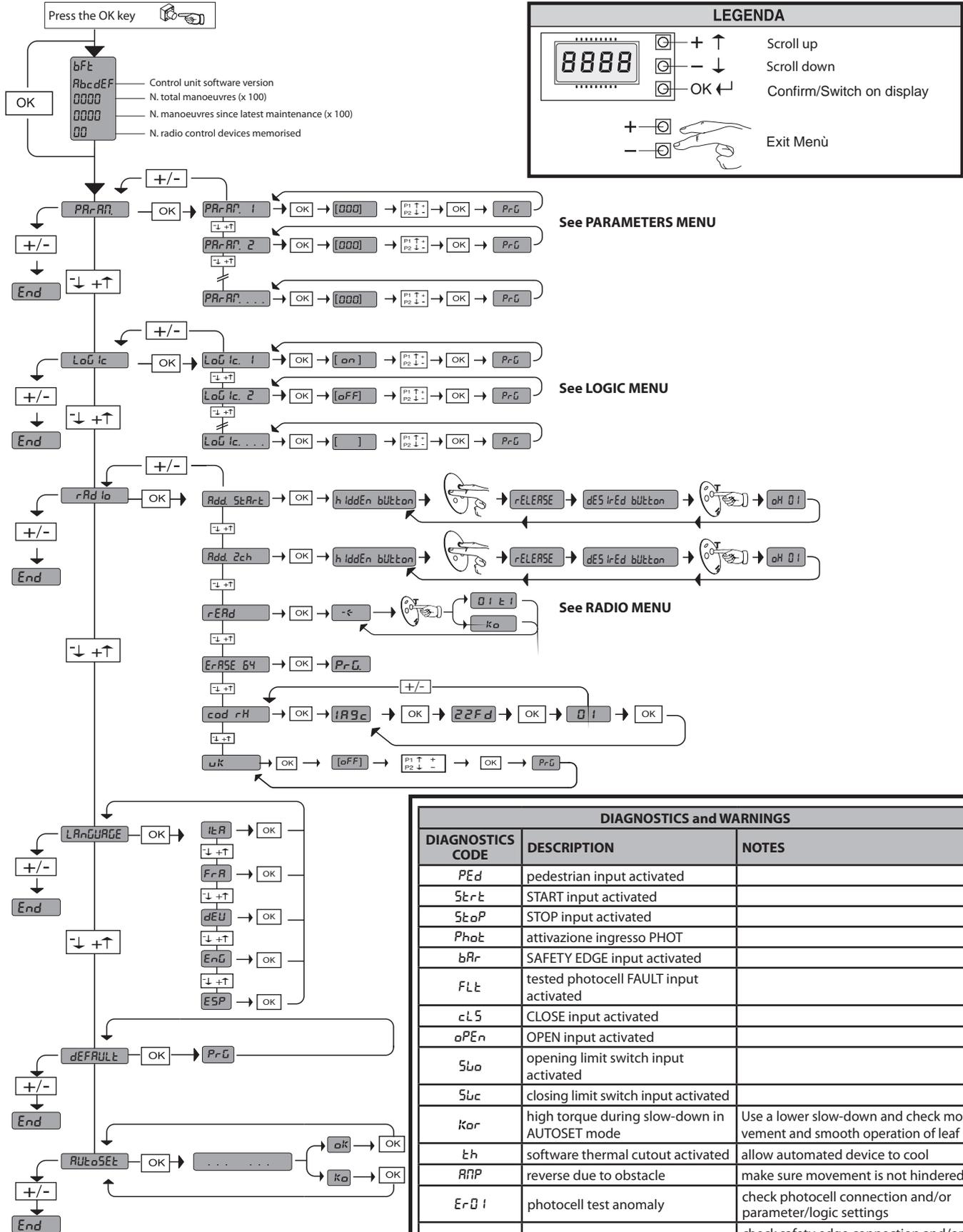
Combinazioni possibili, Possible combinations, Combinaisons possibles, Mögliche Kombinationen, Combinaciones posibles, Mogelijke combinaties

FAULT/PHOT= OFF			
FOTOCPELLULE FOTAZELLEN PHOTOCÉLULAS FOTOCÉLLEN	FOTOCÉLULAS PHOTOCÉLULAS PHOTOCÉLULES FOTOCÉLLEN	COSTE LEISTEN SAFETY EDGES	CANTOS LINTEAUX RANDEN
1			A
1			C
1			D
1			E

FAULT/PHOT= ON			
FOTOCPELLULE FOTAZELLEN PHOTOCÉLULAS FOTOCÉLLEN	FOTOCÉLULAS PHOTOCÉLULAS PHOTOCÉLULES FOTOCÉLLEN	COSTE LEISTEN SAFETY EDGES	CANTOS LINTEAUX RANDEN
2			B
3			B
4			B
5			B

ACCESS TO MENUS Fig. 1

D811343 00100_03



DIAGNOSTICS and WARNINGS		
DIAGNOSTICS CODE	DESCRIPTION	NOTES
<i>PEd</i>	pedestrian input activated	
<i>StAr-t</i>	START input activated	
<i>StoP</i>	STOP input activated	
<i>PhoE</i>	attivazione ingresso PHOT	
<i>bRr</i>	SAFETY EDGE input activated	
<i>FLt</i>	tested photocell FAULT input activated	
<i>cLS</i>	CLOSE input activated	
<i>oPEn</i>	OPEN input activated	
<i>SLo</i>	opening limit switch input activated	
<i>SLoC</i>	closing limit switch input activated	
<i>kOr</i>	high torque during slow-down in AUTOSET mode	Use a lower slow-down and check movement and smooth operation of leaf
<i>th</i>	software thermal cutout activated	allow automated device to cool
<i>RrP</i>	reverse due to obstacle	make sure movement is not hindered
<i>ErO i</i>	photocell test anomaly	check photocell connection and/or parameter/logic settings
<i>ErO2</i>	safety edge test anomaly	check safety edge connection and/or parameter/logic settings
<i>Er IH *</i>	hardware anomaly	check connections to motor
<i>ErSH *</i>	communication anomaly	check connection with accessory devices and/or expansion boards or serial-connected devices

* H = 0,1,...,9,A,B,C,D,E,F

35.40

- Set torque threshold
- Maximum instantaneous motor torque

WARNING! Important safety instructions. Carefully read and comply with the Warnings booklet and Instruction booklet that come with the product as incorrect installation can cause injury to people and animals and damage to property. They contain 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.

1) GENERAL SAFETY

WARNING! An incorrect installation or improper use of the product can cause damage to persons, animals or things.

- The units making up the machine and its installation must meet the requirements of the following European Directives: 2004/108/EEC, 2006/95/EEC, 98/37/EEC, 89/106/EEC and later amendments. For all countries outside the EEC, it is advisable to comply with the above-mentioned standards, in addition to any national standards in force, to achieve a good level of safety.
- 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.
- Make sure the stated temperature range is compatible with the site in which the automated system is due to be installed.
- Before performing installation, remove any cables or chains that are not needed and disable any equipment that is not required for installation purposes. Also check that the door/gate is in a good state of mechanical repair, is correctly balanced and opens and closes as it should do.
- Do not install the product in an explosive atmosphere.
- Disconnect the electricity supply before performing any work on the system. Also disconnect buffer batteries, if any are connected.
- Have the automated system's mains power supply fitted with a switch or omnipolar thermal-magnetic circuit breaker with a contact separation of at least 3.5 mm.
- Make sure that upline from the mains power supply there is a residual current circuit breaker that trips at 0.03A.
- 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 standard EN 12978.
- Apply all safety devices (photocells, safety edges, etc.) required to keep the area free of crushing, dragging and shearing hazards.
- The motor cannot be installed on panels incorporating doors (unless the motor can be activated when the door is open)
- If the automated device is installed at a height of less than 2.5 m or is accessible, the electrical and mechanical parts must be suitably protected.
- Any fixed controls must be installed within sight of the door but away from moving parts. Unless the control is key operated, it must be installed at a height of at least 1.5 m and in a place where it 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.
- If there are no instructions already, attach a label near the operating device, in a permanent fashion, with information on how to operate the manual release.
- Make sure that nothing can be crushed between the guided part and surrounding fixed parts during the door's operation
- Once installation is complete, make sure the motor has the right settings 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.
- 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.
- Anything which is not expressly provided for in the present instructions, is not allowed.
- Instruct the product user about the control systems provided and the manual opening operation in case of emergency.

Warning! For connection to the mains power supply, use a multicore cable with a cross-section of at least 4x1.5mm² of the kind provided for by the regulations mentioned above (by way of example, type H05 VV-F cable can be used with a cross-section of 4x1.5mm²). To connect auxiliary equipment, use wires with a cross-section of at least 0,75 mm².

Have an omnipolar circuit breaker installed with a contact separation of at least 3 mm and featuring overload protection, suitable for cutting the automated device off from the mains.

Only use pushbuttons with a capacity of 10A-250V or more.

The cables must be held in position using an extra fixing device in the proximity of the terminals, e.g. with cable clamps.

Also add more clips to the limit device wires, to the transformer primary or secondary wires, and to the wires connected to the printed circuit.

During installation, the power supply cable must be stripped in order for the earthing wire to be connected to the appropriate terminal, but the active

wires must be left as short as possible. The earthing wire must be the last to stretch in the case where the cable fixing device becomes loose.

! WARNING: extremely low safety voltage cables must be physically separated from low voltage cables.

! Access to the electrical compartment or to limit switches must be allowed to skilled personnel only.

! Setting sensitivity incorrectly can result in damage to property and injury to people and animals.

Compliance with current safety rules with regard to people, animals and property must be assured at all times and, more specifically, measures must be taken to avoid risks of injury due to crushing, in the area where the pinion and rack mesh, and any other mechanical hazards. **All critical points must be protected by safety devices in accordance with the provisions of the regulations in force.**

CHECKING THE AUTOMATED DEVICE

Before the automated device is finally put into operation, perform the following checks meticulously:

- Make sure all components are fastened securely.
- Check the correct functioning of all safety devices (limit microswitches, photocells, sensitive edges etc.).
- Make sure that the anti-crush system stops the door within the limits provided for by the standards in force.
- Check the emergency operation control device.
- Check the opening and closing operations with the control devices in use.
- Check the standard and customised electronic functioning logic.

MAINTENANCE

WARNING: before opening the door, the spring must be unloaded (vertical boom). **WARNING:** Before carrying out any maintenance to the installation, disconnect the mains power supply. The following points need checking and maintenance:

- Photocell optics. Clean occasionally.
- Electric edge. Carry out a periodical manual check to ensure that the edge stops the bar in case of obstacles.
- Dismantle the gearmotor and replace the lubricating grease every two years.
- When any operational malfunction is found, and not resolved, disconnect the mains power supply and request the assistance of a specialised technician (installer). When the operator is out of order, activate the emergency release (see Fig.2), if necessary, so as to release the manual boom opening and closing operations.

SCRAPPING

Materials must be disposed of in conformity with the current regulations. In case of scrapping, the automation devices do not entail any particular risks or danger. In case of recovered materials, these should be sorted out by type (electrical components, copper, aluminium, plastic etc.).

DISMANTLING

When the automation system is disassembled to be reassembled on another site, proceed as follows:

- Disconnect the power supply and the entire electrical installation.
- Remove the actuator from its fixing base.
- Disassemble all the installation components.
- In the case where some of the components cannot be removed or are damaged, they must be replaced.

Correct controller operation is only ensured when the data contained in the present manual are observed. The Company is not to be held responsible for any damage resulting from failure to observe the installation standards and the instructions contained in the present manual.

The descriptions and illustrations contained in the present manual are not binding. The Company reserves the right to make any alterations deemed appropriate for the technical, manufacturing and commercial improvement of the product, while leaving the essential product features unchanged, at any time and without undertaking to update the present publication.

1) FOREWORD

The **DEIMOS BT-MA** actuator is highly versatile in terms of installation options due to the extremely low position of the pinion, the actuator's compact nature and the height and depth adjustment features it offers. The adjustable electronic torque limiter provides anti-crush safety. Manual emergency operation is extremely easy to perform using just a knob. Stopping at end of travel is controlled by electromechanical microswitches. The built-in control panel controls the start relays and safety devices (photocells, safety edge) each time before performing any operation.

2) TECHNICAL SPECIFICATIONS

MOTOR	
Power supply	single-phase 230V ±10%, 50Hz (*)
Motor	24V
Power input	70W
Max. current demand	0,5A (230V~) - 1A (110V~)
Pinion module	4mm (14 teeth)
Leaf speed	12m/min
Max. leaf weight	5000N (≈500kg)
Max. torque	20Nm
Impact reaction	Electronic torque limiter
Lubrication	Lifetime greased
Manual operation	Knob-operated mechanical release
Type of use	intensive
Buffer batteries (optional extras)	Two 12V 1.2Ah batteries
Environmental conditions	from -15°C to +40°C
Protection rating	IP24
Noise level	<70dBA
Operator weight	7kg (≈70N)
Dimensions	See Fig. K
CONTROL UNIT	
Accessories power supply	24V ~ (180 mA)
Built-in Rolling-Code radio-receiver	frequency 433.92MHz
Automatic closing time	range 0 to 120s
Work time	max. 2 mins.
Pedestrian opening time	fixed 7s
Reverse pause	approx. 1s
Setting of parameters and options	Universal handheld programmer/ LCD display
N° of combinations	4 billion
Max. n° of remotes that can be memorized	63

(*) Special supply voltages to order.

Usable transmitter versions:

All ROLLING CODE transmitters compatible with



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) PREPARATION FOR MOTOR MOUNTING FIG.B

- Make a hole in the ground to accommodate the concrete pad, with anchors embedded in the base plate for fastening the gearbox assembly, keeping to the distances featured in **FIG.B**.
- To keep the base plate in the right position during installation, it may be useful to weld two iron plates under the track to which the anchors can then be welded (**FIG.M**).

5) MOUNTING THE MOTOR FIG.C

6) MOUNTING DRIVE ACCESSORIES FIG.D-D1

7) RACK CENTRING WITH RESPECT TO PINION FIG.N-O1-P

DANGER - Welding must be performed by a competent person issued with the necessary personal protective equipment as prescribed by the safety rules in force FIG.O.

8) FASTENING LIMIT SWITCH BRACKETS FIG.E

9) STOPS FIG.Q

DANGER - The gate must be fitted with mechanical stops to halt its travel both when opening and closing, thus preventing the gate from coming off the top guide. Said stops must be fastened firmly to the ground, a few centimetres beyond the electric stop point.

10) MANUAL RELEASE (See USER GUIDE -FIG.2-).

Warning Do not JERK the gate open and closed, instead push it GENTLY to the end of its travel.

11) TERMINAL BOARD WIRING Fig. F-G

Once suitable electric cables have been run through the raceways and the automated device's various components have been fastened at the predetermined points, the next step is to connect them as directed and illustrated in the diagrams contained in the relevant instruction manuals. Connect the live, neutral and earth wire (compulsory). The mains cable must be clamped in the relevant cable gland (**FIG.R-ref.P1**), and the accessories' wires in the cable gland (**FIG.R-ref.P2**), while the earth wire with the yellow/green-coloured sheath must be connected in the relevant terminal (**FIG.R-ref.S**).

TERMINAL	DESCRIPTION
1-2	Motor connection. WARNING - If opening direction is not correct, swap wires over.
3-4	24V transformer secondary winding.
5-6	Closing limit switch SWC (5 Black common - 6 Red). WARNING - If opening direction is not correct, swap opening and closing limit switch wires over.
5-7	Opening limit switch SWO (5 Black common -7 Brown). WARNING - If opening direction is not correct, swap opening and closing limit switch wires over.
8-9	Flashing light 24V max. 25W.
10-11	Antenna (10 signal - 11 braiding). 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.
12-13	Accessories power supply: 24 V operation with mains power on. 24 V (12-,13+) operation with no mains power and optional buffer battery kit. Mod. SB BAT.
14-15	Free contact (NO). Gate Open Light SCA (24V max. 3W) or 2nd radio channel output (FIG.G-ref.1). This option can be set via the "logic menu".
16-17	Safety device power supply output (photocell transmitter and safety edge transmitter). N.B.: output active only during operating cycle. 24 V Vsafe operation with mains power on. 24 V (16-,17+) Vsafe operation with no mains power and optional buffer battery kit. Mod. SB BAT.
18-19	FAULT safety devices input.
19-20	Pedestrian control button PED (NO) Opens the gate for a period of 5 seconds with the set logic modes (3 or 4 steps).
21-22	START/CLOSE control button and key-operated selector (NO). This option can be set via the "logic menu".
21-23	STOP control button (NC). Whatever the case, stops the automated device until a new start command is given. If not used, leave jumpered.
21-24	PHOT photocell input. If not used, leave jumpered.
21-25	Safety edge contact input BAR (NC). When tripped, the gate stops and reverses for approx. 3 secs. If not used, leave jumpered.
21-26	OPEN control button (NO).
31-32	230V~ transformer primary winding.
33-34	Single-phase power supply 230V, 50-60Hz (33N - 34L).

12) CONNECTION WITH EXPANSION BOARDS AND UNIVERSAL HANDHELD PROGRAMMER (Fig.T)

Refer to specific manual.

13) OPPOSITE SLIDING LEAVES (FIG.U)

14) SAFETY DEVICES

NOTE: ONLY USE RECEIVING SAFETY DEVICES WITH FREE CHANGEVER CONTACT.

14.1) TESTED DEVICES (FIG.V)**14.2) NON-TESTED DEVICES (FIG.H)****15) CALLING UP MENUS: FIG. 1****15.1) PARAMETERS MENU (PR-RN) (PARAMETERS TABLE "A")****15.2) LOGIC MENU (L-OG-IC) (LOGIC TABLE "B")****15.3) RADIO MENU (R-RD-ID) (RADIO TABLE "C")****- 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 or fixed code).
- Cloning to replace transmitters already entered in receiver.
- Transmitter database management.
- Receiver community management.

To use these advanced features, refer to the universal handheld programmer's instructions and to the general receiver programming guide.

15.4) LANGUAGE MENU (L-INGUIR)

Used to set the programmer's language on the display.

15.5) DEFAULT MENU (DEFRAULT)

Restores the controller's DEFAULT factory settings. Following this reset, you will need to run the AUTOSET function again.

15.6) AUTOSET MENU (RILE-OSSE) FIG. J1

Used for automatic setting of motor torque and fast time during opening and closing.

Before running the AUTOSET function, adjust slow-down speed (Fig. J).

WARNING! The AUTOSET operation must be performed starting from the closing limit switch position. If you attempt to run the AUTOSET function in any other position, the following error message will appear: "n5uc" and the operation will not be performed.

WARNING!! The AUTOSET operation must be performed only once you have checked that the leaf is moving accurately (opening/closing) and that the limit switches are tripping correctly.

WARNING: if slow-down speed is edited after the AUTOSET operation, the AUTOSET function will need to be run again.

During this stage, it is important to avoid breaking the photocells' beams and not to use the START, STOP, PED, CLOS and OPEN commands or the display.

WARNING! While the AUTOSET function is running, the obstacle detection function is not active. Consequently, the installer must monitor the automated system's movements and keep people and property out of range of the automated system.

When using buffer batteries, the AUTOSET function must be run with the control panel running off mains power.

WARNING! DIAGNOSTICS For: high torque during slow-down in AUTOSET mode. Use a lower slow-down and check movement and smooth operation of leaf.

15.1) TABLE A: PARAMETERS MENU (PR-RN)

Parameter	min.	max.	default	personal	Definition	Description
εcR	0 sec.	120 sec.	10		Automatic Closing Time	Pause time before automatic closing.
oPε	1%	99%	80		Opening motor torque	Sets motor's operating force during opening at normal speed.
cL Sε	1%	99%	80		Closing motor torque	Sets motor's operating force during closing at normal speed.
oPε SLoL	1%	99%	25		Opening motor torque during slow-down	Sets motor's operating force during opening at slowed speed.
cL Sε SLoL	1%	99%	25		Closing motor torque during slow-down	Sets motor's operating force during closing at slowed speed.
norRoPSPEEd	1 sec.	2 min.	25		Fast Time during Opening	Length of normal speed stage during opening.
norRoLSSPEEd	1 sec.	2 min.	25		Fast Time during Closing	Length of normal speed stage during closing.
SLoL SPEEd	0	3	0		Slow-down speed	Selects slow-down speed. 0=no slow-down 1=faster slow-down 2=medium slow-down 3=slower slow-down
ZonE	0	128	0		Zone	Serial connection address. Set the Zone number in the range 0 to 127. The zone number allows you to create groups of automated devices, each of which answers to the Zone Master. Each zone can have only one Master. The Master of zone 0 also controls the Masters and Slaves of the other zones. Zone 128: Opposite Sliding Leaves (Fig. U).

15.2) TABLE B: LOGIC MENU (L-OG-IC)

Logic	Default	Definition	Cross out setting used	Description
εcR	OFF	Automatic Closing Time	ON	Switches automatic closing on.
			OFF	Switches automatic closing off.
ε SεEP	OFF	3 step	ON	Switches to 3-step logic. A start pulse has the following effects: door closed: opens during opening: stops and switches on TCA (if configured). door open: closes during closing: stops and opens again
			OFF	Switches to 4-step logic. A start pulse has the following effects: door closed: opens during opening: stops and switches on TCA (if configured) door open: closes during closing: stops and does not switch on tca (stop) after stop: opens
εbL oPEr	OFF	Block Pulses	ON	The start pulse has no effect during opening.
			OFF	The start pulse has effect during opening or closing.
Phoεoc.oPEr	OFF	Photocells during opening	ON	When beam is broken, operation of the photocell is switched off 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.

INSTALLATION MANUAL

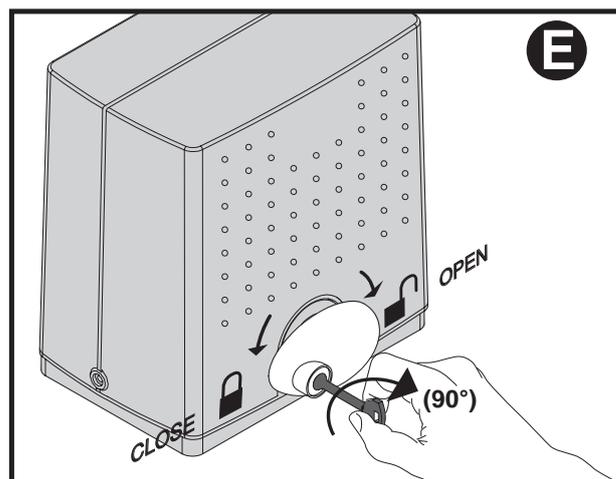
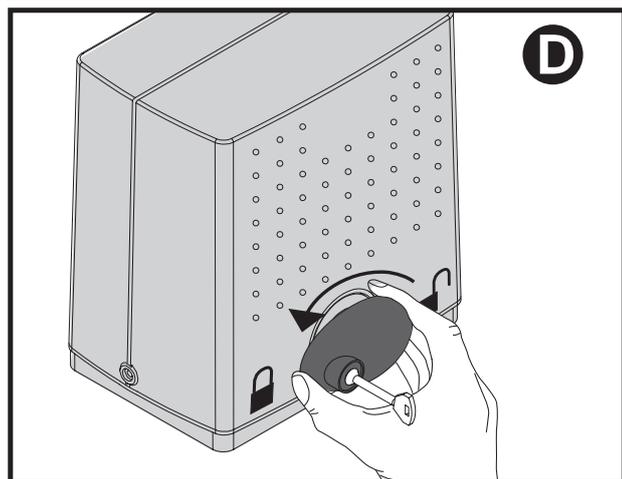
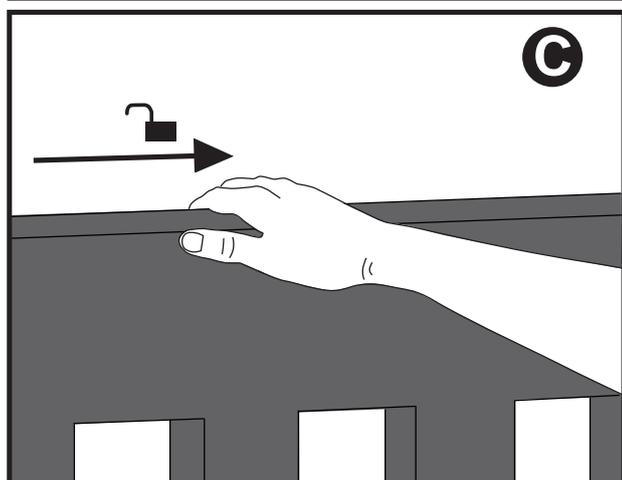
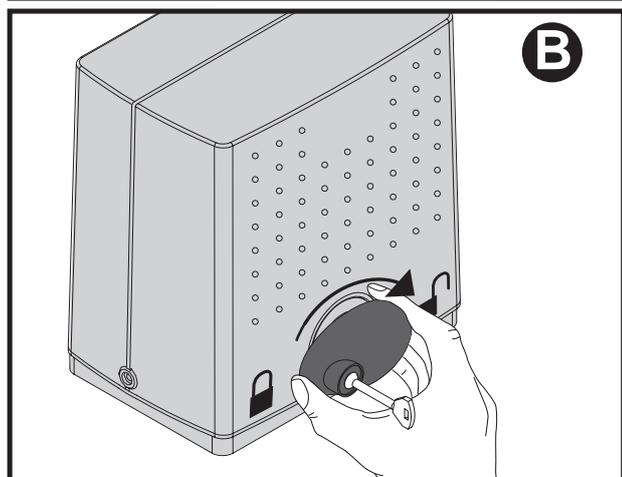
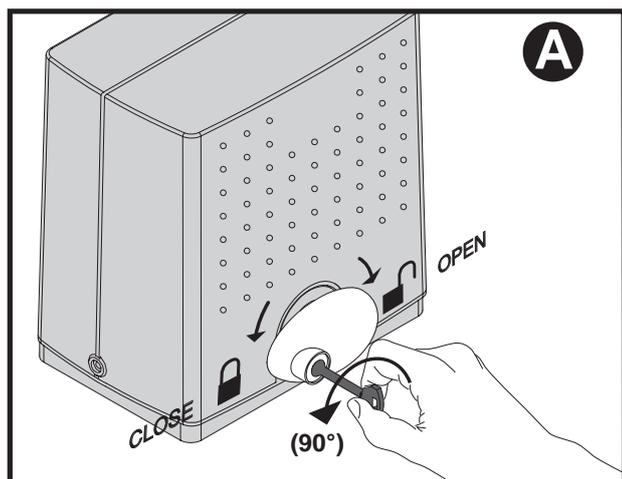
D811343 00100_03

Logic	Default	Definition	Cross out setting used	Description
tEst Phot	OFF	Photocell test	ON	Switches photocell testing on
			OFF	Switches photocell testing off If disabled (OFF), it inhibits the photocell testing function, enabling connection of devices not equipped with supplementary test contacts.
tEst bAr	OFF	Safety edge testing	ON	Switches safety edge testing on.
			OFF	Switches safety edge testing off If disabled (OFF), it inhibits the safety edge testing function, enabling connection of devices not equipped with supplementary test contacts.
FRULt Phot	ON	Fault Phot	ON	The fault input is associated with the photocell test circuit, up to 4 pairs of tested photocells and one tested safety edge can be connected (Fig. V)
			OFF	The fault input is associated with the safety edge test circuit, up to 4 tested safety edges and one pair of tested photocells can be connected (Fig. V).
ScR 2ch	OFF	Gate open light or 2nd radio channel	ON	The output between terminals 14-15 is set as Gate open light: in this case, the 2nd radio channel controls pedestrian opening.
			OFF	The output between terminals 14-15 is set as 2nd radio channel.
PrEARL	OFF	Pre-alarm	ON	The flashing light comes on approx. 3 seconds before the motors start.
			OFF	The flashing light comes on at the same time as the motors start.
hold to tUn	OFF	Deadman	ON	Deadman mode: operation continues as long as the control key is held down. (OPEN terminal 21-26, CLOSE terminal 21-22).
			OFF	Pulse operation, according to 3- or 4-step logic.
StArt - cLoSE	OFF	START - CLOSE setting	ON	Input between terminals 21-22 works as CLOSE.
			OFF	Input between terminals 21-22 works as START.
F iHEd codE	OFF	Fixed code	ON	Receiver is configured for operation in fixed-code mode.
			OFF	Receiver is configured for operation in rolling-code mode.
rRd io PrOG	ON	Remote control programming	ON	Enables wireless memorizing of transmitters: 1- Press in sequence the hidden key (P1) 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 secs. the hidden key (P1) and normal key (T1-T2-T3-T4) of a transmitter to be memorized. The receiver exits programming mode after 10 secs.: you can use this time to enter other new transmitters. This mode does not require access to the control panel.
			OFF	Disables wireless memorizing of transmitters. Transmitters are memorized only using the relevant Radio menu.
PrAStEr	OFF	Master/slave	ON	Control panel is set up as the Master unit in a centralized serial connection system. WARNING: the control panel set as the master must be the first in the series.
			OFF	Control panel is set up as a Slave unit in a centralized serial connection system.
iCE	OFF	ICE	ON	The controller automatically adjusts the Amperostop safety trip threshold at each start up. This feature is useful when dealing with installations running at low temperatures. WARNING: once this feature has been activated, you will need to perform an autose opening and closing cycle.
			OFF	The Amperostop safety trip threshold stays at the same set value.

15.3) TABLE C: RADIO MENU (rRd io)

	Description
Rdd StArt	Add Start Key associates the desired key with the Start command.
Rdd 2ch	Add 2ch Key associates the desired key with the 2nd radio channel command.
rERd	Read Checks a key of a receiver and, if memorized, returns the position of the remote control in the memory (from 01 to 63) and number of the key (T1-T2-T3 or T4).
ErRSE 64	Erase List WARNING! Erases all memorized remote controls from the receiver's memory.
cod rH	Read receiver code Displays receiver code required for cloning remote controls.
Wk	ON = Enables remote programming of cards via a previously memorized W LINK transmitter. It remains enabled for 3 minutes from the time the W LINK remote control is last pressed. OFF = W LINK programming disabled.

FIG. 2



USER'S MANUAL (GB)

Thank you for choosing this product. The Firm is confident that its performance will meet your operating needs. This product meets recognized technical standards and complies with safety provisions. We hereby confirm that it is in conformity with the following European directives: 2004/108/EEC, 2006/95/EEC, 98/37/EEC, 99/05/EEC (and later amendments).

1) GENERAL SAFETY

WARNING Important safety instructions. Carefully read and comply with the Warnings booklet and Instruction booklet that come with the product as improper use can cause injury to people and animals and damage to property. Keep hold of instructions for future reference. This product has been designed and built solely for the purpose indicated herein. Uses not contemplated herein might result in the product being damaged and could be a source of danger

- 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.

If installed and used correctly, the automated system will meet the required level of safety. Nonetheless, it is advisable to observe certain rules of behaviour so that accidental problems can be avoided:

- Keep adults, children and property out of range of the automated system, especially while it is operating.
- This application is not meant for use by people (including children) with impaired mental, physical or sensory capacities, or people who do not have suitable knowledge, unless they are supervised or have been instructed by people who are responsible for their safety.
- Children must be supervised to ensure they do not play with the application. Keep remote controls or other control devices out of reach of children in order to avoid the automated system being operated inadvertently.
- The manual release's activation could result in uncontrolled door movements if there are mechanical faults or loss of balance.
- Do not deliberately hinder the door's movement and do not attempt to open the door manually unless the actuator has been released with the relevant release knob.
- Check the system frequently, especially cables, springs or supports, to detect any loss of balance and signs of wear or damage.
- When cleaning the outside or performing other maintenance work, always cut off mains power.
- Keep the photocells' optics and illuminating indicator devices clean. Check that no branches or shrubs interfere with the safety devices (photocells).
- Do not use the automated system if it is in need of repair. In the event of a malfunction, cut off the power, activate the emergency release to allow access and call in qualified technical personnel (professional installer).
- If the automated system requires work of any kind, employ the services of qualified personnel (professional installer).
- Have the automated system checked by qualified personnel once a year.
- Anything that is not explicitly provided for in these instructions is not allowed.
- The operator's proper operation can only be guaranteed if the information given herein is complied with. The Firm shall not be answerable for damage caused by failure to comply with the installation rules and instructions featured herein.
- Descriptions and illustrations herein are not binding. 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

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