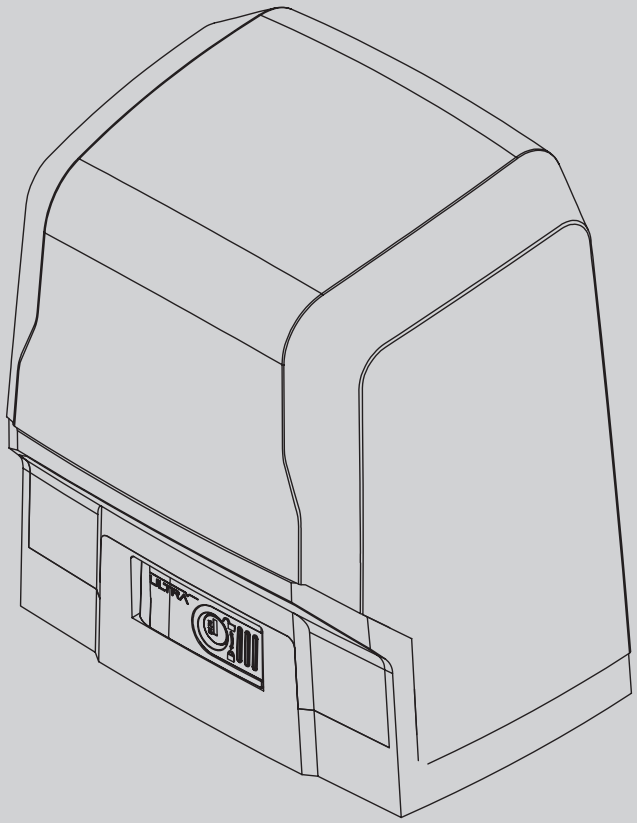
8 027908 478894 >

ULTRA

D812201 00100_03 14-04-16

ACTUATOR FOR RACK SLIDING GATES



INSTALLATION AND USER'S MANUAL

ARES ULTRA BT A 1000
ARES ULTRA BT A 1500

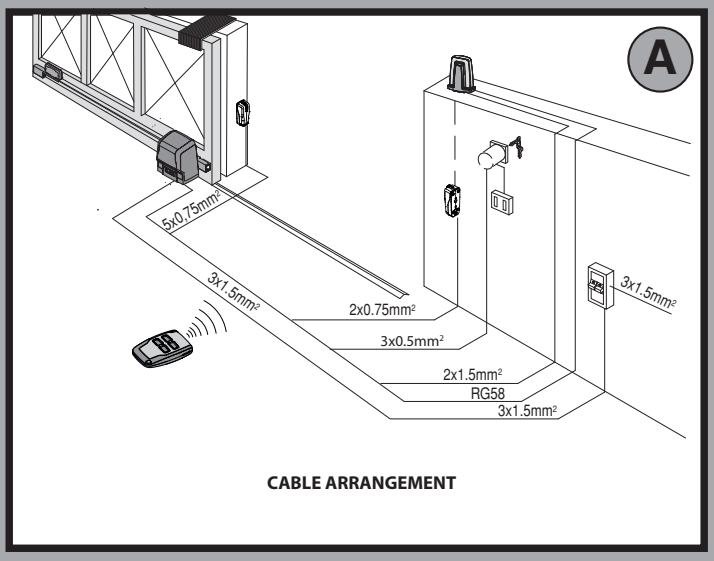
BFT

U-LINK

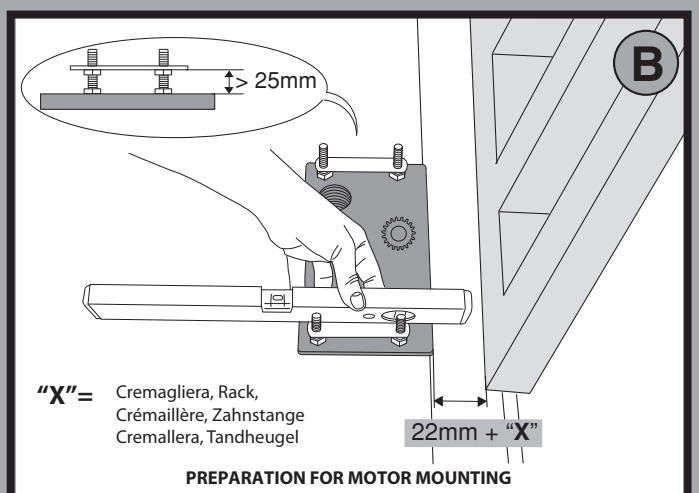
AZIENDA CON SISTEMA DI GESTIONE INTEGRATO CERTIFICATO DA DNV
= UNI EN ISO 9001:2008 =
UNI EN ISO 14001:2004

Caution! Read "Warnings" inside carefully!

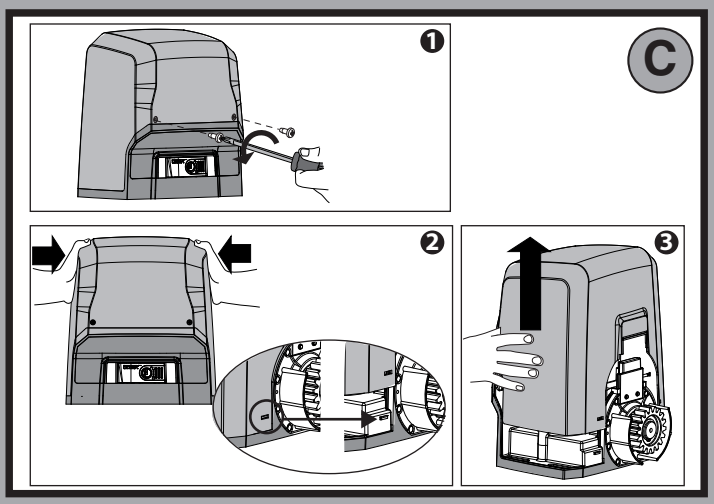
QUICK INSTALLATION

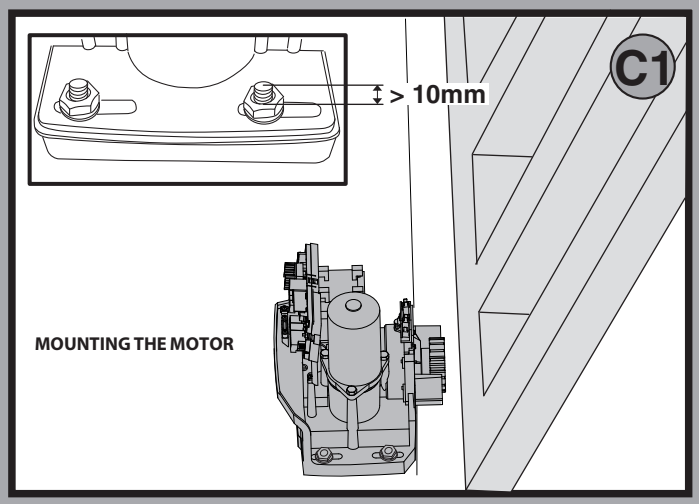


CABLE ARRANGEMENT

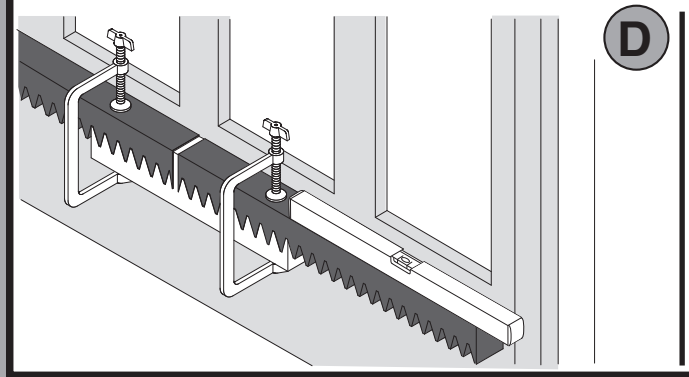


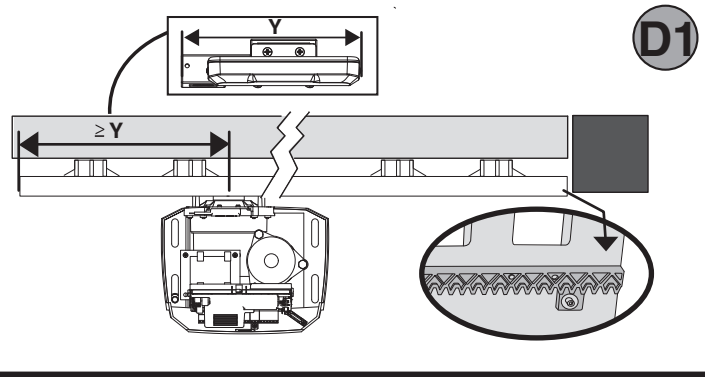
PREPARATION FOR MOTOR MOUNTING



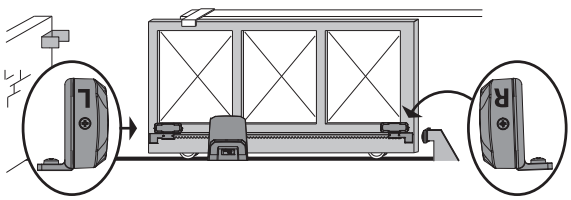


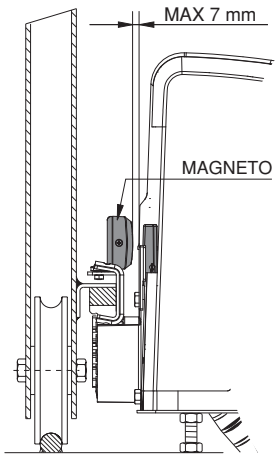
MOUNTING DRIVE ACCESSORIES

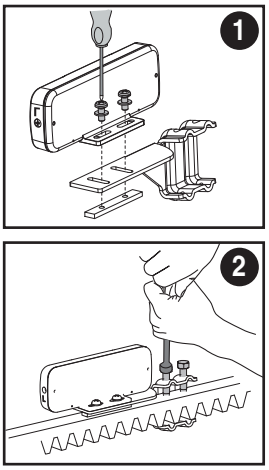




FASTENING LIMIT SWITCH BRACKETS (RH/LH),

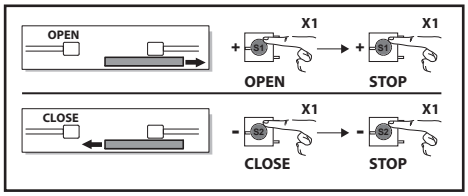


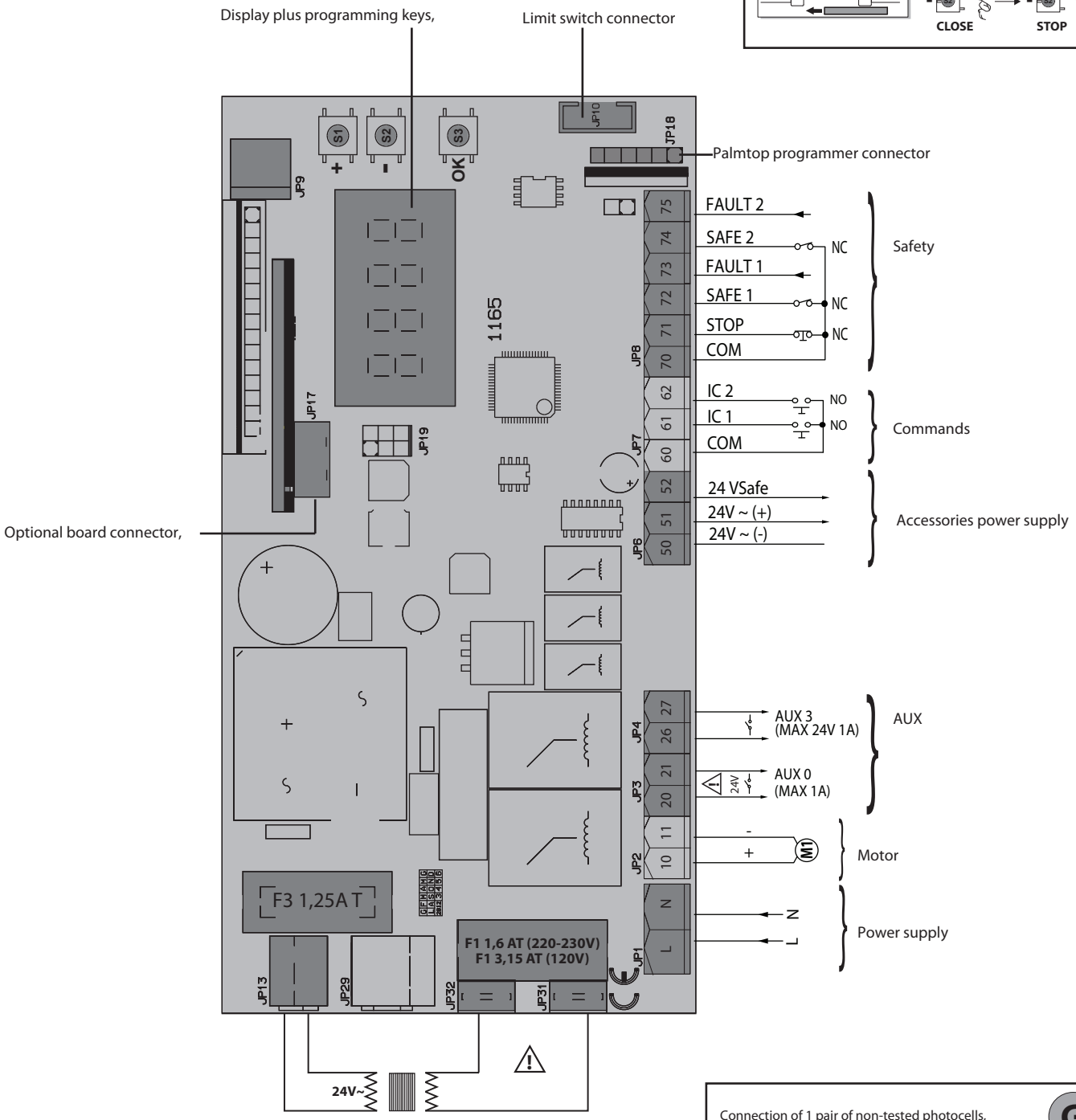


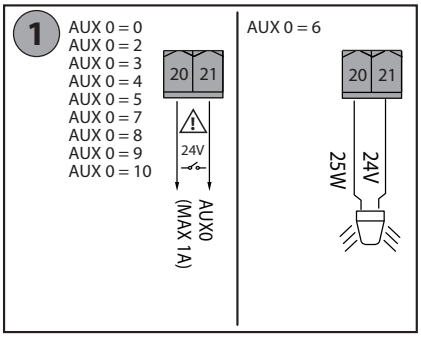


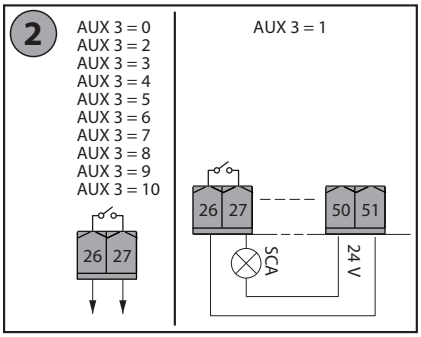
F

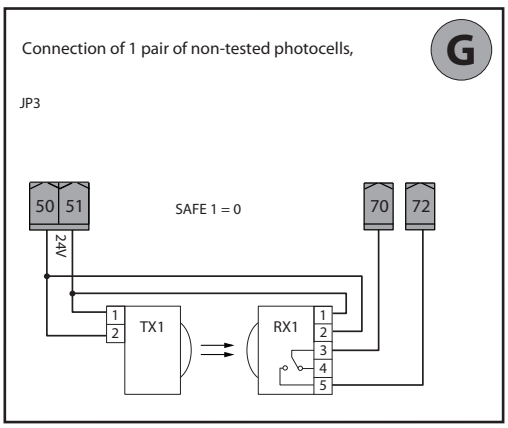
**





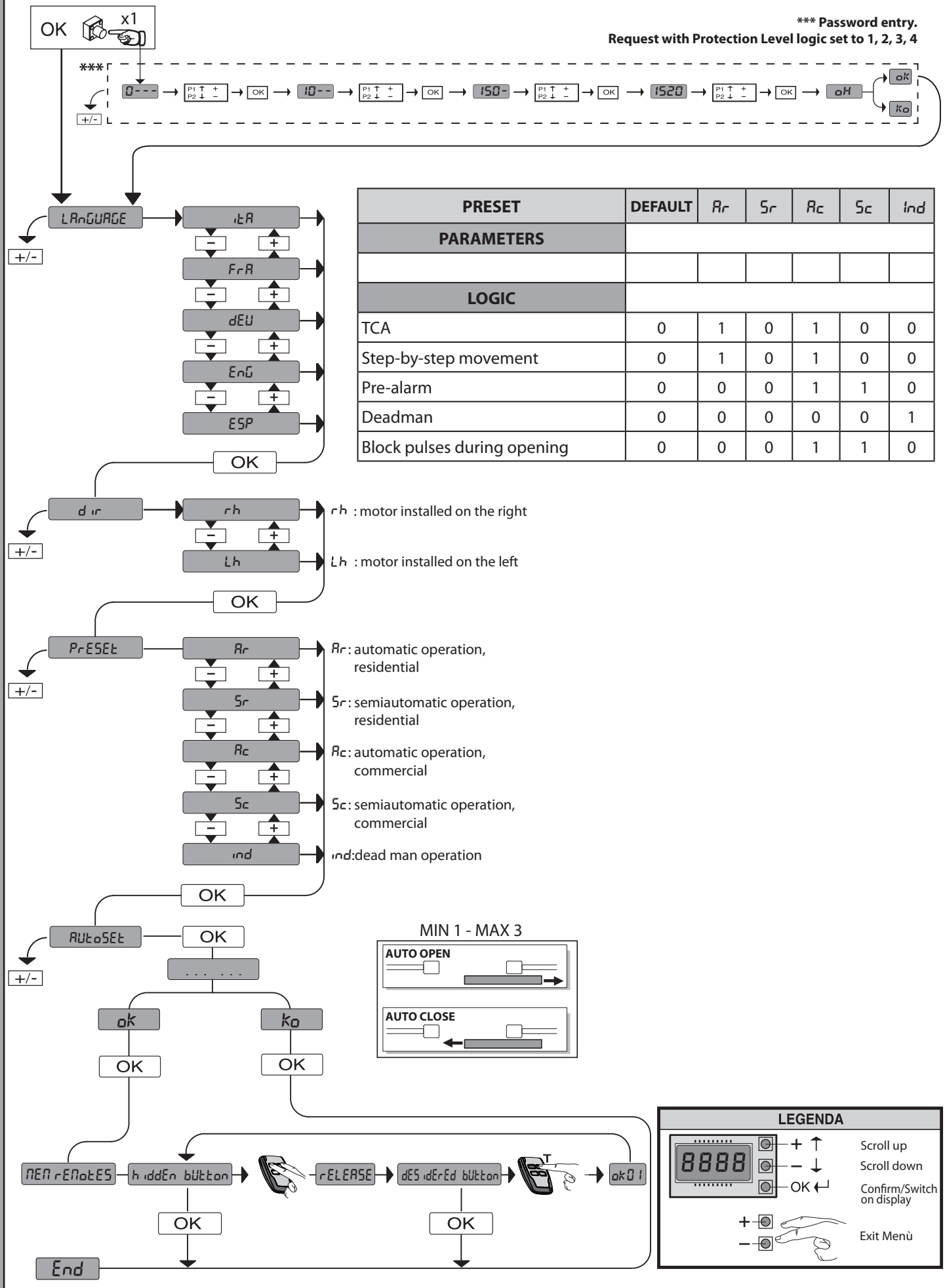




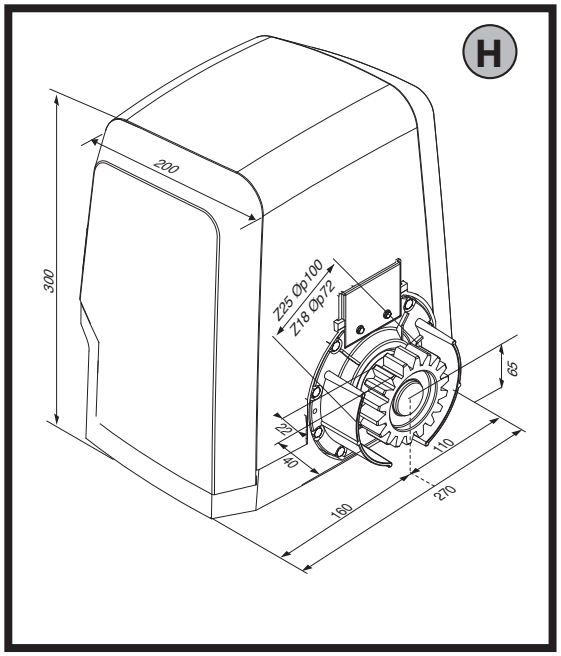


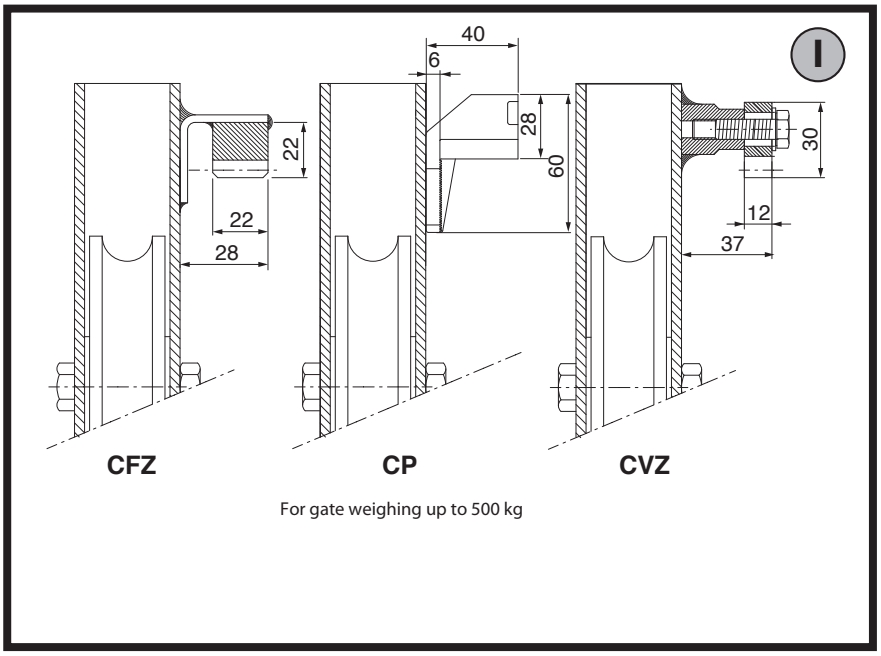
**With reverse logic, opening direction = 000 (DIR=right)

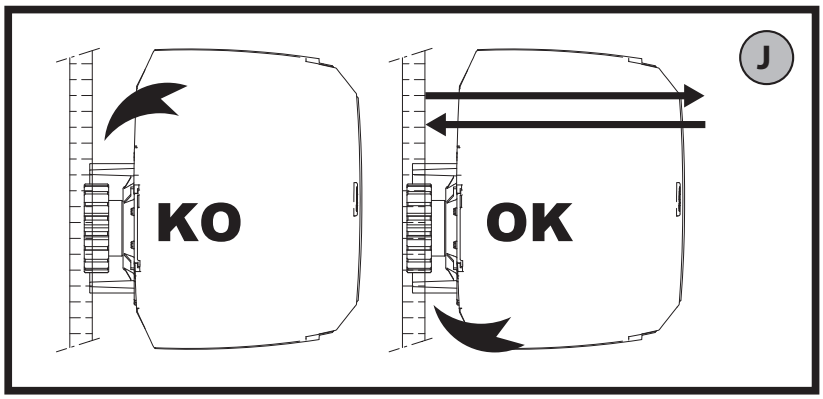
SIMPLIFIED MENU (FIG.1)

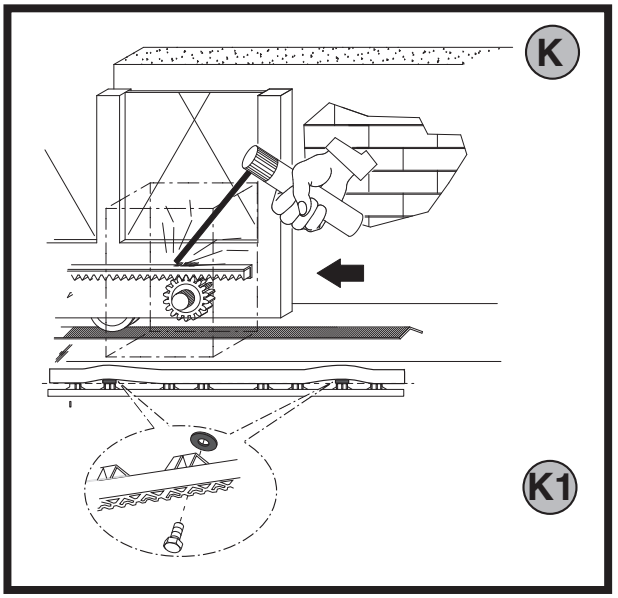


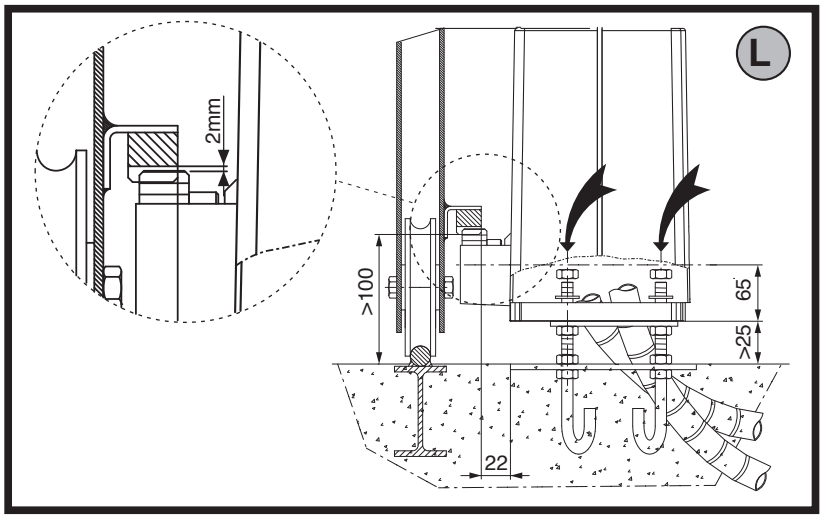
PRESET	DEFAULT	Ar	Sr	Ac	Sc	ind
PARAMETERS						
LOGIC						
TCA	0	1	0	1	0	0
Step-by-step movement	0	1	0	1	0	0
Pre-alarm	0	0	0	1	1	0
Deadman	0	0	0	0	0	1
Block pulses during opening	0	0	0	1	1	0

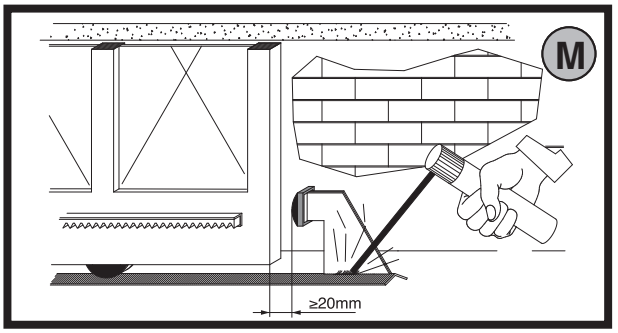

H
200
300
Z25 Op100
Z18 Op72
65
22
40
110
180
270

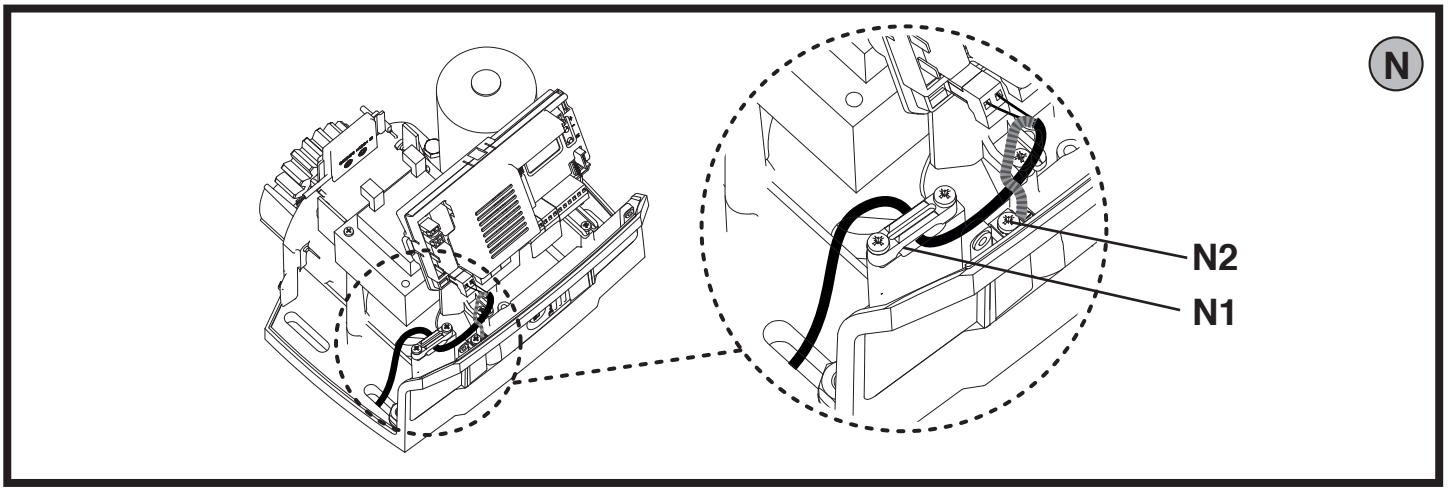

I
40
6
28
60
22
22
28
30
12
37
CFZ
CP
CVZ
For gate weighing up to 500 kg


J
KO
OK

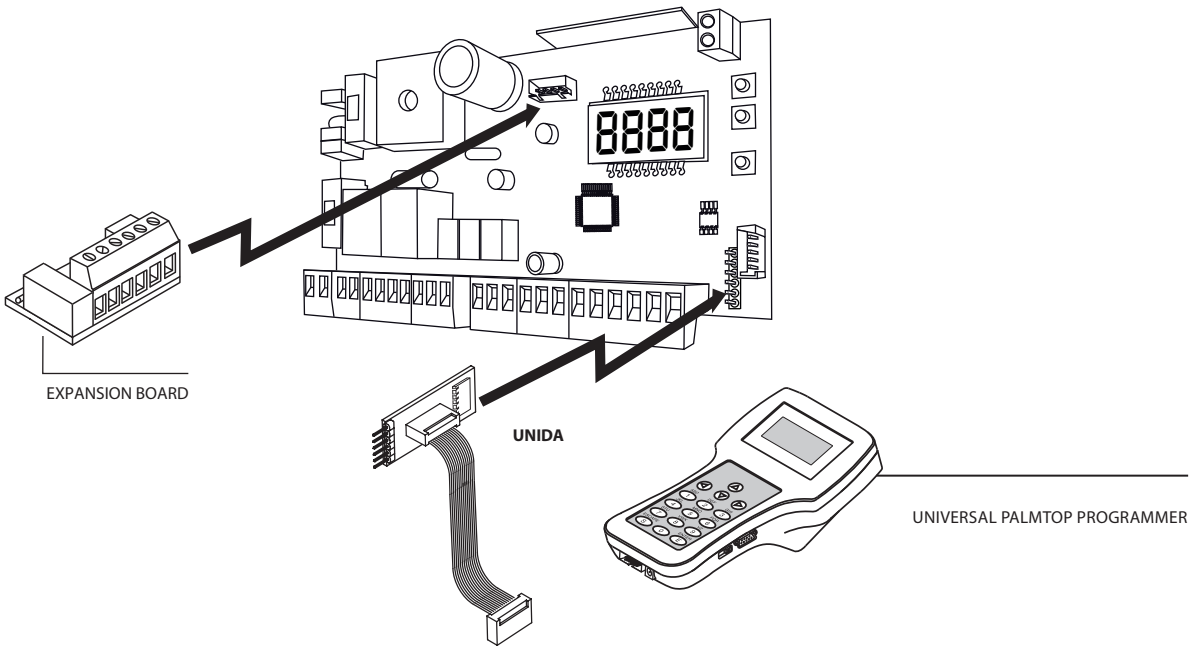

K
K1


L
2mm
>100
65
≥25
22


M
≥20mm


N
N2
N1

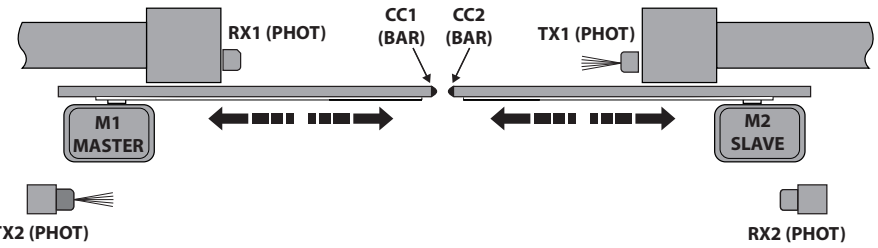
O



P

AddrESS = **0**

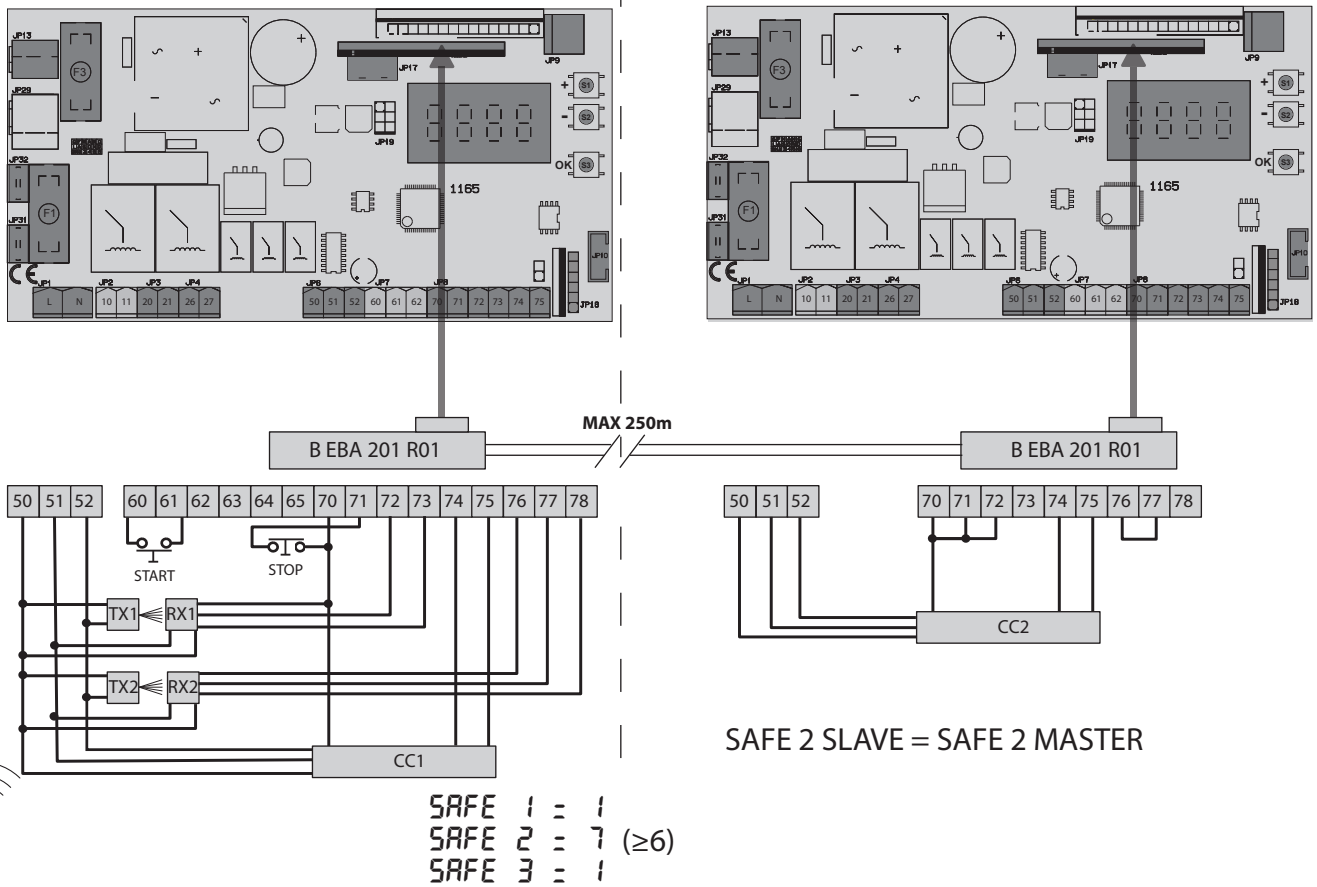
SErIAL ModE = **3**



AddrESS = **0**

SErIAL ModE = **2**

WITH OPPOSITE LEAVES WITH 1 PHOT AND 2 BAR

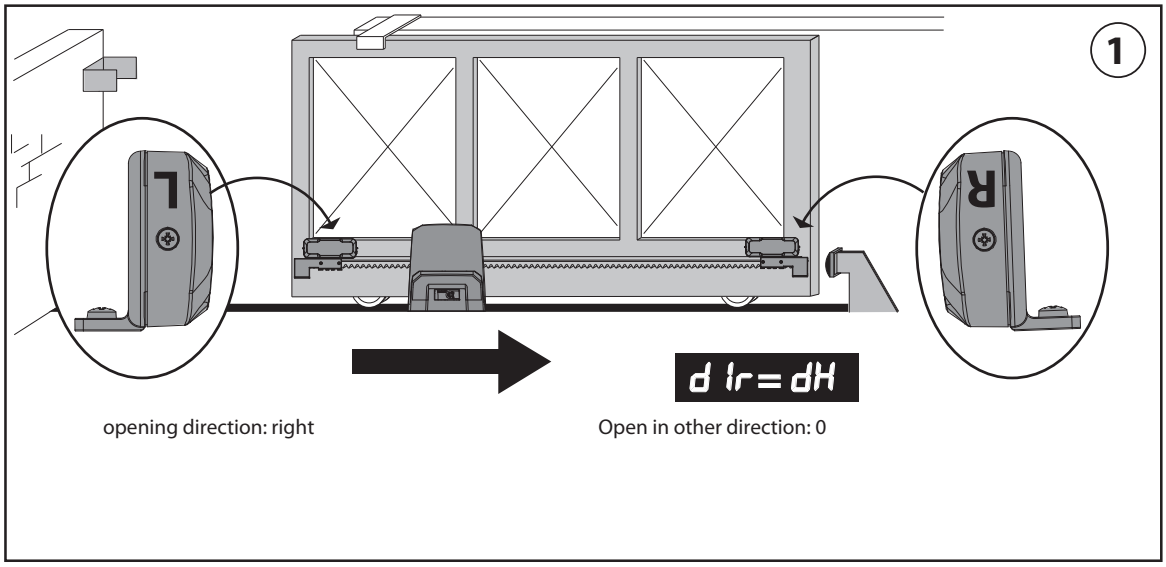


SAFE 2 SLAVE = SAFE 2 MASTER

SAFE 1 = 1
SAFE 2 = 7 (≥6)
SAFE 3 = 1

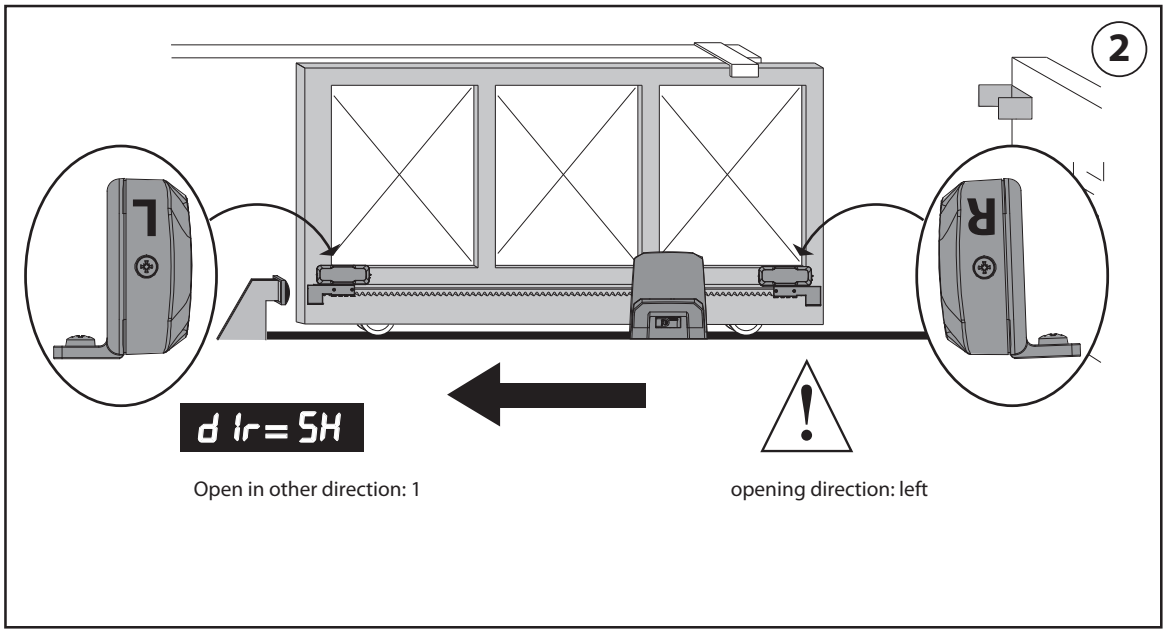
TO CONNECT SEVERAL PHOTOCELLS, REFER TO FIG. S

Q



opening direction: right

Open in other direction: 0

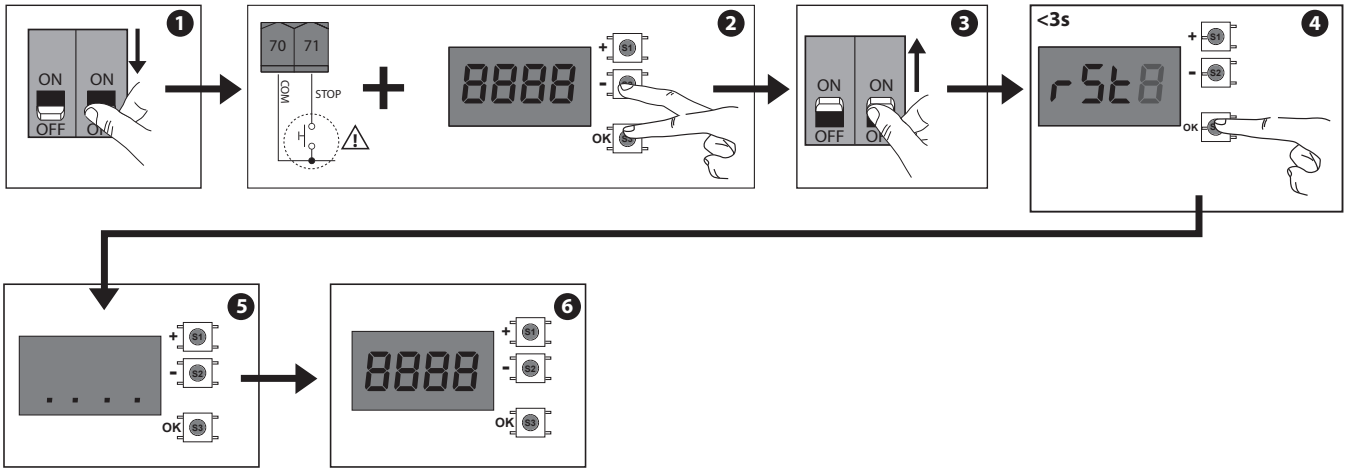


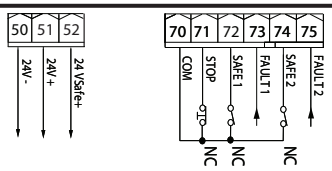
Open in other direction: 1

opening direction: left

- When switching logic configuration from right to left opening, do not swap over the original connection of terminal JP10.

R



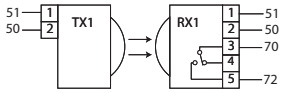


S

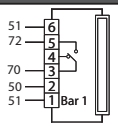
SAFE 1

TEST OFF — SAFE1 = 0,2,4

1 — 1 PHOT / 1 PHOT OP / 1 PHOT CL

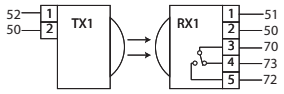


3 — 1 BAR / 1 BAR OP / 1 BAR CL

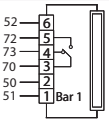


TEST ON — SAFE1 = 1,3,5

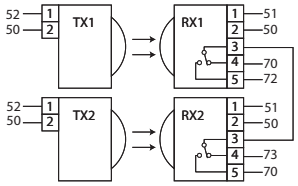
2 — 1 PHOT / 1 PHOT OP / 1 PHOT CL



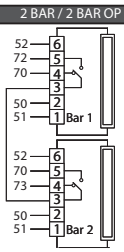
4 — 1 BAR / 1 BAR OP / 1 BAR CL



2 PHOT / 2 PHOT OP / 2 PHOT CL



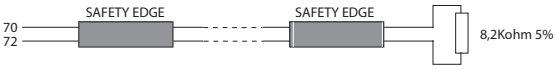
2 BAR / 2 BAR OP / 2 BAR CL



SAFE1 = 7,10,13

SAFE1 = 8,11,14

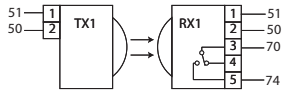
5 — BAR 8K2 / BAR 8K2 OP / BAR 8K2 CL



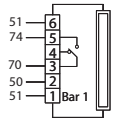
SAFE 2

TEST OFF — SAFE2 = 0,2,4

1 — 1 PHOT / 1 PHOT OP / 1 PHOT CL

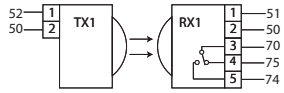


3 — 1 BAR / 1 BAR OP / 1 BAR CL

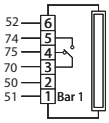


TEST ON — SAFE2 = 1,3,5

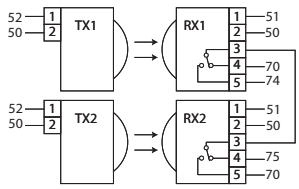
2 — 1 PHOT / 1 PHOT OP / 1 PHOT CL



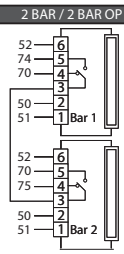
4 — 1 BAR / 1 BAR OP / 1 BAR CL



2 PHOT / 2 PHOT OP / 2 PHOT CL



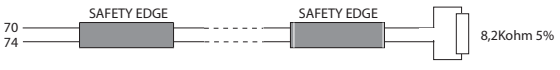
2 BAR / 2 BAR OP / 2 BAR CL



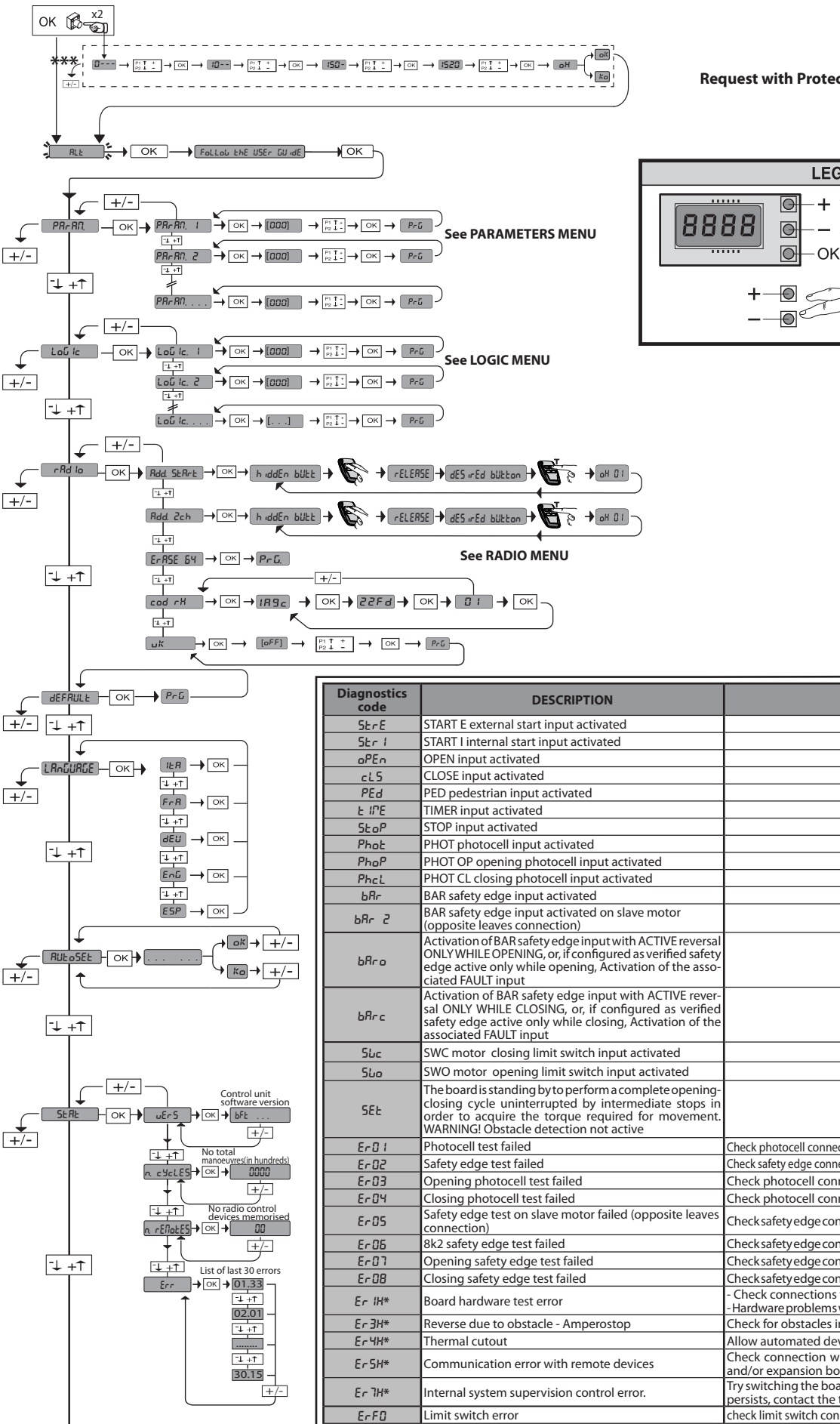
SAFE2 = 7,10,13

SAFE1 = 8,11,14

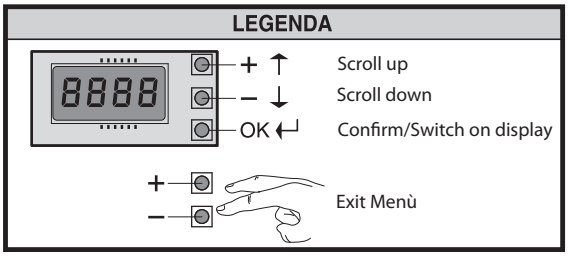
5 — BAR 8K2 / BAR 8K2 OP / BAR 8K2 CL



ACCESS MENUS Fig. 2



***** Password entry.**
Request with Protection Level logic set to 1, 2, 3, 4



Diagnostics code	DESCRIPTION	NOTES
StrE	START E external start input activated	
Str I	START I internal start input activated	
oPEn	OPEN input activated	
cLS	CLOSE input activated	
PEd	PED pedestrian input activated	
t IME	TIMER input activated	
StoP	STOP input activated	
Phot	PHOT photocell input activated	
PhoP	PHOT OP opening photocell input activated	
PhcL	PHOT CL closing photocell input activated	
bAr	BAR safety edge input activated	
bAr 2	BAR safety edge input activated on slave motor (opposite leaves connection)	
bArO	Activation of BAR safety edge input with ACTIVE reversal ONLY WHILE OPENING, or, if configured as verified safety edge active only while opening, Activation of the associated FAULT input	
bArC	Activation of BAR safety edge input with ACTIVE reversal ONLY WHILE CLOSING, or, if configured as verified safety edge active only while closing, Activation of the associated FAULT input	
SUC	SWC motor closing limit switch input activated	
SUO	SWO motor opening limit switch input activated	
SEt	The board is standing by to perform a complete opening-closing cycle uninterrupted by intermediate stops in order to acquire the torque required for movement. WARNING! Obstacle detection not active	
Er01	Photocell test failed	Check photocell connection and/or logic settings
Er02	Safety edge test failed	Check safety edge connection and/or logic settings
Er03	Opening photocell test failed	Check photocell connection and/or parameter/logic setting
Er04	Closing photocell test failed	Check photocell connection and/or parameter/logic setting
Er05	Safety edge test on slave motor failed (opposite leaves connection)	Check safety edge connection and/or parameter/logic settings
Er06	8k2 safety edge test failed	Check safety edge connection and/or parameter/logic settings
Er07	Opening safety edge test failed	Check safety edge connection and/or parameter/logic settings
Er08	Closing safety edge test failed	Check safety edge connection and/or parameter/logic settings
Er 1H*	Board hardware test error	- Check connections to motor - Hardware problems with board (contact technical assistance)
Er3H*	Reverse due to obstacle - Amperostop	Check for obstacles in path
Er4H*	Thermal cutout	Allow automated device to cool
Er5H*	Communication error with remote devices	Check connection with serial-connected accessory devices and/or expansion boards
Er7H*	Internal system supervision control error.	Try switching the board off and back on again. If the problem persists, contact the technical assistance department.
ErF0	Limit switch error	check limit switch connections
ErF1	Limit switch error always active after operation start	Check limit switch and motor connections
ErF3	Error in setting the SAFE inputs	Check the setting of the SAFE inputs is correct

* H = 0,1,…,9,A,B,C,D,E,F

ENGLISH

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: 2004/108/EC, 2006/95/EC, 2006/42/EC, 89/106/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 H05 VV-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 DOWNLOAD 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.

INSTALLATION MANUAL

1) GENERAL INFORMATION

The **ARES ULTRA BT A** 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 release lever.
Stopping is controlled by polarized magnetic limit switches.
The **MERAK** control panel comes with standard factory settings. Any change must be made using the programmer with built-in display or universal handheld programmer.
Fully supports EELINK and U-LINK protocols.
Its main features are:
- Control of 1 low-voltage motor
- Obstacle detection
- Separate inputs for safety devices
- Configurable command inputs
- 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 **MERAK** 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

MOTOR		
	1000	1500
Power supply	110-120V 50/60Hz 220-230V 50/60 Hz(*)	
Power input	240 W	400 W
Pinion module **ARES**	4mm (18 teeth)	4mm (18 teeth)
Pinion module **ARES V**	4mm (25 teeth)	4mm (25 teeth)
Leaf speed **ARES**	9 m/min	9 m/min
Leaf speed **ARES V**	12 m/min	12 m/min
Max. leaf weight **ARES**	1000 Kg	1500 Kg
Max. leaf weight **ARES V**	500 Kg	750 Kg
Max. torque	30 Nm	35 Nm
Impact reaction	Electronic torque limiter	
Lubrication	Lifetime greased	
Manual operation	Lever-operated mechanical release	
Type of use	intensive	
Buffer batteries (optional extras)	Two 12V 1.2Ah batteries	
Environmental conditions	-20 / +55°C	
Protection rating	IP44	
Noise level	<70dBA	
Operator weight	7 kg	
Dimensions	See Fig. H	
CONTROL UNIT		
Low voltage/mains insulation	> 2MOhm 500V ⎓	
Operating temperature range	-20 / +55°C	
Thermal overload protection	Software	
Dielectric rigidity	mains/LV 3750V~ for 1 minute	
Accessories power supply	24V ~ (demand max. 0,5A) 24V ~ safe	
AUX 0	NO 24V ~ powered contact (max.1A)	
AUX 3	NO contact (24V~/max.1A)	
Fuses	Fig. F	
Built-in Rolling-Code radio-receiver	frequency 433.92MHz	
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 Ee link ((ER-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) PREPARATION FOR MOTOR MOUNTING FIG.B

Make a hole in the ground to accommodate the concrete pad where the tie rods will be positioned, keeping to the distances featured in (**FIG.B**).

5) REMOVING THE COVER FIG.C

5.1) MOUNTING THE MOTOR FIG.C1

6) MOUNTING DRIVE ACCESSORIES FIG.D-D1

Recommended rack types (**FIG.J**)

7) RACK CENTRING WITH RESPECT TO PINION FIG.J-K1-L

⚠ **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.K.**

8) FASTENING LIMIT SWITCH BRACKETS FIG.E

Fastening the limit switches:
- Attach the limit switch bracket to the rack as illustrated in FIG. **D1**
- Fasten the magnetic limit switch box to the limit switch bracket with the screws and plate provided, as illustrated in FIG.E – Ref.1.
- Fasten the limit switch bracket to the rack by screwing in the two front screws provided FIG.E ref.2

Right-hand limit switch:
- Fasten the Right-hand magnetic limit switch called "R"; do not exceed the stated maximum distance between the magnetic limit switch box and the limit switch assembly, FIG.E.

Left-hand limit switch:
- Fasten the Left-hand magnetic limit switch called "L"; do not exceed the stated maximum distance between the magnetic limit switch box and the limit switch assembly, FIG.E.

Warning. Do not swap over the limit switch brackets once you have changed the opening direction via the relevant logic

9) STOPS FIG.M

⚠ **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.3-).

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-N

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.N-ref.N1), while the earth wire with the yellow/green-coloured sheath must be connected in the relevant terminal (FIG.N-ref.N2).

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 dissipaters.

11.1) LOCAL COMMANDS Fig.F

While the display is off, pressing the + key commands the gate to Open and pressing the - key commands it to Close. Pressing either key again while the automated device is moving commands the gate to STOP.

12) SAFETY DEVICES

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

12.1) TESTED DEVICES Fig.S

12.2) CONNECTION OF 1 PAIR OF NON-TESTED PHOTOCELLS FIG. G

13) ACCESS TO THE SIMPLIFIED MENU: FIG.1

13.1) CALLING UP MENUS: FIG. 2

13.2) PARAMETERS MENU (PArAM) (PARAMETERS TABLE "A")

13.3) LOGIC MENU (LoGIC) (LOGIC TABLE "B")

13.4) RADIO MENU (rAdIo) (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.

	Terminal	Definition	Description
Power supply	L	LINE	Single-phase power supply
	N	NEUTRAL	
	JP31	TRANSF PRIM	Transformer primary winding connection
	JP32		
	JP13	TRANSF SEC	Board power supply: 24V~ Transformer secondary winding
Motor	10	MOT +	Connection motor 1
	11	MOT -	
Aux	20	AUX 0 - 24V POWERED CONTACT (N.O.) (MAX. 1A)	AUX 0 configurable output - Default setting FLASHING LIGHT. 2ND RADIO CHANNEL/ SCA GATE OPEN LIGHT/ COURTESY LIGHT command/ ZONE LIGHT command/ STAIR LIGHT/ GATE OPEN ALARM/ FLASHING LIGHT/ SOLENOID LATCH/ MAGNETIC LOCK/ MAINTENANCE/ FLASHING LIGHT AND MAINTENANCE. Refer to "AUX output configuration" table.
	21		
	26	AUX 3 - FREE CONTACT (N.O.) (Max. 24V 1A)	AUX 3 configurable output - Default setting 2ND RADIO CHANNEL Output. 2ND RADIO CHANNEL/ SCA GATE OPEN LIGHT/ COURTESY LIGHT command/ ZONE LIGHT command/ STAIR LIGHT/ GATE OPEN ALARM/ FLASHING LIGHT/ SOLENOID LATCH/ MAGNETIC LOCK/ MAINTENANCE/ FLASHING LIGHT AND MAINTENANCE. Refer to "AUX output configuration" table.
	27		
Limit switches	JP10	Limit switches	Limit switch assembly connection
Accessories power supply	50	24V~ (-)	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	IC 1 and IC 2 inputs common
	61	IC 1	Configurable command input 1 (N.O.) - Default START E. START E / START I / OPEN / CLOSE / PED / TIMER / TIMER PED Refer to the "Command input configuration" table.
	62	IC 2	Configurable command input 2 (N.O.) - Default PED. START E / START I / OPEN / CLOSE / PED / TIMER / TIMER PED Refer to the "Command input configuration" table.
Safety devices	70	Common	STOP, SAFE 1 and SAFE 2 inputs common
	71	STOP	The command stops movement. (N.C.) If not used, leave jumper inserted.
	72	SAFE 1	Configurable safety input 1 (N.C.) - Default PHOT. PHOT / PHOT TEST / PHOT OP / PHOT OP TEST / PHOT CL / PHOT CL TEST / BAR / BAR TEST / BAR 8K2 / BAR OP / BAR OP TEST / BAR 8K2 OP/ BAR CL / BAR CL TEST / BAR 8K2 CL Refer to the "Safety input configuration" table.
	73	FAULT 1	Test input for safety devices connected to SAFE 1.
	74	SAFE 2	Configurable safety input 2 (N.C.) - Default BAR. PHOT / PHOT TEST / PHOT OP / PHOT OP TEST / PHOT CL / PHOT CL TEST / BAR / BAR TEST / BAR 8K2 / BAR OP / BAR OP TEST / BAR 8K2 OP/ BAR CL / BAR CL TEST / BAR 8K2 CL Refer to the "Safety input configuration" table.
	75	FAULT 2	Test input for safety devices connected to SAFE 2.
Antenna	Y	ANTENNA	Antenna input. 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.
	#	SHIELD	

AUX output configuration
Aux logic= 0 - 2ND RADIO CHANNEL output. Contact stays closed for 1s when 2nd radio channel is activated.
Aux logic= 1 - SCA GATE OPEN LIGHToutput. Contact stays closed during opening and with leaf open, intermittent during closing, open with leaf closed.
Aux logic= 2 - COURTESY LIGHT command output. Contact stays on for 90 seconds after the last operation.
Aux logic= 3 - ZONE LIGHT command output. Contact stays closed for the full duration of operation.
Aux logic= 4 - STAIR LIGHT output. Contact stays closed for 1 second at start of operation.
Aux logic= 5 - GATE OPEN ALARM output. Contact stays closed if the leaf stays open for double the set TCA time.
Aux logic= 6 - FLASHING LIGHT output. Contact stays closed while leaves are operating.
Aux logic= 7 - SOLENOID LATCH output. Contact stays closed for 2 seconds each time gate is opened.
Aux logic= 8 - MAGNETIC LOCK output. Contact stays closed while gate is closed.
Aux logic= 9 - MAINTENANCE output. Contact stays closed once the value set for the Maintenance parameter is reached, to report that maintenance is required.
Aux logic= 10 - FLASHING LIGHT AND MAINTENANCE output. Contact stays closed while leaves are operating. If the value set for the Maintenance parameter is reached, once the gate has finished moving and the leaf is closed, the contact closes for 10 sec. and opens for 5 sec. 4 times to report that maintenance is required.

Note : If no output is configured as 2nd Radio Channel Output, the 2nd radio channel controls the pedestrian opening.

Command input configuration
IC logic= 0 - Input configured as Start E. Operation according to STEP-BY-STEP POS. logic. External start for traffic light control.
IC logic= 1 - Input configured as Start I. Operation according to STEP-BY-STEP POS. logic. Internal start for traffic light control.
IC logic= 2 - Input configured as Open. The command causes the leaves to open. 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.
IC logic= 3 - Input configured as Closed. The command causes the leaves to close.
IC logic= 4 - Input configured as Ped. The command causes the leaf to open to the pedestrian (partial) opening position. Operation according to STEP-BY-STEP. logic
IC logic= 5 - Input configured as Timer. Operation same as open except closing is guaranteed even after a mains power outage.
IC logic= 6 - Input configured as Timer Ped. The command causes the leaf to open to the pedestrian (partial) opening position. If the input stays closed, the leaf stays open until the contact is opened. If the input stays closed and a Start E, Start I or Open command is activated, a complete opening-closing cycle is performed before returning to the pedestrian opening position. Closing is guaranteed even after a mains power outage.

Safety input configuration
SAFE logic= 0 - Input configured as Phot (photocell) non tested (*). (fig.S, ref.1). Enables connection of devices not equipped with supplementary test contacts. 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. If not used, leave jumper inserted.
SAFE logic= 1 - Input configured as Phot test (tested photocell). (fig.S, ref.2). Switches photocell testing on at start of operation. 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.
SAFE logic= 2 - Input configured as Phot op (photocell active during opening only) non tested (*). (fig.S, ref.1). Enables connection of devices not equipped with supplementary test contacts. In the event beam is broken, photocell operation is disabled during closing. During opening, stops motion for as long as the photocell beam stays broken. If not used, leave jumper inserted.
SAFE logic= 3 - Input configured as Phot op test (tested photocell active during opening only (fig.S, ref.2). Switches photocell testing on at start of operation. In the event beam is broken, photocell operation is disabled during closing. During opening, stops motion for as long as the photocell beam stays broken.
SAFE logic= 4 - Input configured as Phot cl (photocell active during closing only) non tested (*). (fig.S, ref.1). Enables connection of devices not equipped with supplementary test contacts. In the event beam is broken, photocell operation is disabled during opening. During closing, movement is reversed immediately. If not used, leave jumper inserted.
SAFE logic= 5 - Input configured as Phot cl test (tested photocell active during closing only (fig.S, ref.2). Switches photocell testing on at start of operation. In the event beam is broken, photocell operation is disabled during opening. During closing, movement is reversed immediately.
SAFE logic= 6 - Input configured as Bar (safety edge) non tested (*). (fig.S, ref.3). Enables connection of devices not equipped with supplementary test contacts. The command reverses movement for 2 sec.. If not used, leave jumper inserted.
SAFE logic= 7 - Input configured as Bar (tested safety edge (fig.S, ref.4). Switches safety edge testing on at start of operation. The command reverses movement for 2 sec.
SAFE logic= 8 - Input configured as Bar 8k2 (fig.S, ref.5). Input for resistive edge 8K2. The command reverses movement for 2 sec.
SAFE logic=9 Input configured as Bar op, safety edge with active inversion only while opening, if activated while closing, the automation stops (STOP) (Fig. D, ref. 3). Allows connecting devices not fitted with supplementary test contact. The operation while opening causes the movement to be reversed for 2 seconds, the operation while closing causes the automation to stop. If not used, leave jumper inserted.
SAFE logic=10 Input configured as Bar op test, safety edge checked with active inversion only while opening, if activated while closing, the automation stops (STOP) (Fig. D, ref. 4). Activates testing safety edges when starting operation. The operation while opening causes the movement to be reversed for 2 seconds, the operation while closing causes the automation to stop.
SAFE logic=11 Input configured as Bar 8k2 op, 8k2 safety edge with active inversion only while opening, if activated while closing, the automation stops (STOP) (Fig. D, ref. 5). The operation while opening causes the movement to be reversed for 2 seconds, the operation while closing causes the automation to stop.
SAFE logic=12 Input configured as Bar cl, safety edge with active inversion only while closing, if activated while opening, the automation stops (STOP) (Fig. D, ref. 3). Allows connecting devices not fitted with supplementary test contact. The operation while closing causes the movement to be reversed for 2 seconds, the operation while opening causes the automation to stop. If not used, leave jumper inserted.
SAFE logic=13 Input configured as Bar cl test, safety edge checked with active inversion only while closing, if activated while opening, the automation stops (STOP) (Fig. D, ref. 4). Activates testing safety edges when starting operation. The operation while closing causes the movement to be reversed for 2 seconds, the operation while opening causes the automation to stop.
SAFE logic=14 Input configured as Bar 8k2 cl, safety edge with active inversion only while closing, if activated while opening, the automation stops (STOP) (Fig. D, ref. 5). The operation while closing causes the movement to be reversed for 2 seconds, the operation while opening causes the automation to stop.

(*) If "D" type devices are installed (as defined by EN12453), connect in unverified mode, foresee mandatory maintenance at least every six months.

- Receiver community management.

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

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

13.6) LANGUAGE MENU (LAnGUAGE)
Used to set the programmer's language on the display.

13.7) AUTOSET MENU (AUtoSEt)
- For best results, it is advisable to run the autoset function with the motors idle (i.e. not overheated by a considerable number of consecutive operations).
- Launch an autoset operation by going to the relevant menu.
- As soon as you press the OK button, the".... ...." message is displayed and the control unit commands the device to perform a full cycle (opening followed by closing), during which the minimum torque value required to move the leaf is set automatically. The number of cycles required for the autoset function can range from 1 to 3. During this stage, it is important to avoid breaking the photocells' beams and not to use the START and STOP commands or the display. Pressing the + and - keys at the same time during this stage stops the automated device and exits the autoset operation, with the message KO appearing on the display.Once this operation is complete, the control unit will have automatically set the optimum torque values. Check them and, where necessary, edit them as described in the programming section.

⚠ 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.

⚠ Impact forces can be reduced by using deformable edges.

⚠ 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.

INSTALLATION TEST PROCEDURE
1. Run the AUTOSET cycle (*)
2. Check the impact forces: if they fall within the limits (**) skip to point 10 of the procedure, otherwise
3. Where necessary, adjust the speed and sensitivity (force) parameters: see parameters table.
4. Check the impact forces again: if they fall within the limits (**) skip to point 10 of the procedure, otherwise
5. Apply a shock absorber profile
6. Check the impact forces again: if they fall within the limits (**) skip to point 10 of the procedure, otherwise
7. Apply pressure-sensitive or electro-sensitive protective devices (such as a safety edge)
8. Check the impact forces again: if they fall within the limits (**) skip to point 10 of the procedure, otherwise
9. Allow the drive to move only in "Deadman" mode
10. Make sure all devices designed to detect obstacles within the system's operating range are working properly

(*) Before running the autoset function, make sure you have performed all the assembly and make-safe operations correctly, as set out in the installation warnings in the drive's manual.

(**) Based on the risk analysis, you may find it necessary to apply sensitive protective devices anyway

13.8) STATISTICS MENU (StAt)
Used to view the version of the board, the total number of operations (in hundreds), the number of transmitters memorized and the last 30 errors (the first 2 digits indicate the position, the last 2 give the error code). Error 01 is the most recent.

13.9) PASSWORD MENU (PASSword)
Used to set a password for the board's wireless programming via the U-link network. With "PROTECTION LEVEL" logic set to 1,2,3,4, the password is required to access the programming menus. After 10 consecutive failed attempts to log in, you will need to wait 3 minutes before trying again. During this time, whenever an attempt is made to log in, the display will read "BLOC". The default password is 1234.

14) CONNECTION WITH EXPANSION BOARDS AND UNIVERSAL HANDHELD PROGRAMMER VERSION> V1.40 (Fig. O) Refer to specific manual.

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

15) U-LINK OPTIONAL MODULES
Refer to the U-link instructions for the modules.

15.1) REFER TO THE U-LINK MODULE'S INSTRUCTIONS (FIG. P).
Refer to the U-link instructions for the modules.
NOTE: On the board set as the Slave, the Safety Edge input (Safety Edge/ Test Safety Edge/ 8k2 Safety Edge) should only be set to SAFE2.

16) REVERSING THE OPENING DIRECTION (Fig.Q)

17) RESTORING FACTORY SETTINGS (Fig.R)
WARNING: this operation will restore the control unit's factory settings and all transmitters stored in its memory will be deleted.
WARNING! Incorrect settings can result in damage to property and injury to people and animals.
- Cut off power to the board (Fig.R ref.1)
- Open the Stop input and press the - and OK keys together (Fig.R ref.2)
- Switch on the board's power (Fig.R ref.3)
- The display will read RST; confirm within 3 sec. by pressing the OK key (Fig.R ref.4)
- Wait for the procedure to finish (Fig.R ref.5)
- Procedure finished (Fig.R ref.6)

TABLE "A" - PARAMETERS MENU - (PArAM)

Parameter	min.	max.	Default	Personal	Definition	Description
tcA	0	120	10		**Automatic closing time [s]**	Waiting time before automatic closing.
trFLGht. clrt	1	180	40		**Time-to-clear traffic light zone [s]**	Time-to-clear for the zone run through by traffic controlled by the traffic light.
oPd 1St. SLoUd	5	50	10		**Slow-down distance during opening [%]**	Slow-down distance for motor(s) during opening, given as a percentage of total travel. **WARNING: Once the parameter has been edited, a complete uninterrupted opening-closing cycle is required.** **WARNING: when the display reads "SET", obstacle detection is not active.**
cLd 1St. SLoUd	5	50	10		**Slow-down distance during closing [%]**	Slow-down distance for motor(s) during closing, given as a percentage of total travel. **WARNING: Once the parameter has been edited, a complete uninterrupted opening-closing cycle is required.** **WARNING: when the display reads "SET", obstacle detection is not active.**
d 1St.dEcEL	0	50	15		**Deceleration distance [%]**	Deceleration distance (switch from running speed to slow-down speed) for motor(s) both during opening and during closing, given as a percentage of total travel. **WARNING: Once the parameter has been edited, a complete uninterrupted opening-closing cycle is required.** **WARNING: when the display reads "SET", obstacle detection is not active.**
PArt IAL oPEn inG	10	99	20		**Partial opening [%]**	Partial opening distance as a percentage of total opening following activation of PED pedestrian command.
oP.ForcE	1	99	50		**Leaf force during opening [%]**	Force exerted by leaf/leaves during opening. This is the percentage of force delivered, beyond the force stored during the autoset cycle (and subsequently updated), before an obstacle alarm is generated. The parameter is set automatically by the autoset function. **WARNING: It affects impact force directly: make sure that current safety requirements are met with the set value (*). Install anti-crush safety devices where necessary (**).**
cLS.ForcE	1	99	50		**Leaf force during closing [%]**	Force exerted by leaf/leaves during closing. This is the percentage of force delivered, beyond the force stored during the autoset cycle (and subsequently updated), before an obstacle alarm is generated. The parameter is set automatically by the autoset function. **WARNING: It affects impact force directly: make sure that current safety requirements are met with the set value (*). Install anti-crush safety devices where necessary (**).**
oP.SLUdForcE	1	99	50		**Leaf/leaves force during opening during slow-down**	"Force exerted by leaf/leaves during opening at slow-down speed." This is the percentage of force delivered, beyond the force stored during the autoset cycle (and subsequently updated), before an obstacle alarm is generated. The parameter is set automatically by the autoset function. **WARNING: It affects impact force directly: make sure that current safety requirements are met with the set value (*). Install anti-crush safety devices where necessary (**).**
cLS.SLUd. ForcE	1	99	50		**Leaf/leaves force during closing during slow-down [%]**	"Force exerted by leaf/leaves during closing at slow-down speed. " This is the percentage of force delivered, beyond the force stored during the autoset cycle (and subsequently updated), before an obstacle alarm is generated. The parameter is set automatically by the autoset function. **WARNING: It affects impact force directly: make sure that current safety requirements are met with the set value (*). Install anti-crush safety devices where necessary (**).**
oP SPEEd	15	99	99		**Opening speed [%}**	Percentage of maximum speed that can be reached by motor(s) during opening. **WARNING: Once the parameter has been edited, a complete uninterrupted opening-closing cycle is required. WARNING: when the display reads "SET", obstacle detection is not active.**
cL SPEEd	15	99	99		**Closing speed [%]**	Percentage of maximum speed that can be reached by motor(s) during closing. **WARNING: Once the parameter has been edited, a complete uninterrupted opening-closing cycle is required. WARNING: when the display reads "SET", obstacle detection is not active.**
SLoU SPEEd	15	30	25		**Slow-down speed [%]**	Opening and closing speed of motor(s) during slow-down stage, given as a percentage of maximum running speed. **WARNING: Once the parameter has been edited, a complete uninterrupted opening-closing cycle is required. WARNING: When the display reads ""SET"", obstacle detection is not active.**
MAintEnAncE	0	250	0		Programming number of operations for maintenance threshold [in hundreds]	Allows you to set a number of operations after which the need for maintenance will be reported on the AUX output configured as Maintenance or Flashing Light and Maintenance .

(*) In the European Union, apply standard EN 12453 for force limitations, and standard EN 12445 for measuring method.
(**) Impact forces can be reduced by using deformable edges.

TABLE "B" - LOGIC MENU - (LoG Ic)

Logic	Definition	Default	Cross out setting used	Optional extras
tcA	**Automatic Closing Time**	0	0	Logic not enabled
			1	Switches automatic closing on
FASt cLS.	**Fast closing**	0	0	Logic not enabled
			1	Closes 3 seconds after the photocells are cleared before waiting for the set TCA to elapse.
StEP-by-StEP MouMnt	**Step-by-step movement**	0	0	Inputs configured as Start E, Start I, Ped operate with 4-step logic.
			1	Inputs configured as Start E, Start I, Ped operate with 3-step logic. Pulse during closing reverses movement.
			2	Inputs configured as Start E, Start I, Ped operate with 2-step logic. Movement reverses with each pulse.
PrE-ALArM	**Pre-alarm**	0	0	The flashing light comes on at the same time as the motor(s) start.
			1	The flashing light comes on approx. 3 seconds before the motor(s) start.
hoLd-to-rUn	**Deadman**	0	0	Pulse operation.
			1	Deadman mode. Input 61 is configured as OPEN UP. Input 62 is configured as CLOSE UP. Operation continues as long as the OPEN UP or CLOSE UP keys are held down. ⚠ **WARNING: safety devices are not enabled.**
			2	Emergency Deadman mode. Usually pulse operation. If the board fails the safety device tests (photocell or safety edge, Er0x) 3 times in a row, Deadman mode is enabled which will stay active for 1 minute after the OPEN UP - CLOSE UP keys are released. Input 61 is configured as OPEN UP. Input 62 is configured as CLOSE UP. ⚠ **WARNING: with the device set to Emergency Deadman mode, safety devices are not enabled.**
ibL oPEn	**Block pulses during opening**	0	0	Pulse from inputs configured as Start E, Start I, Ped has effect during opening.
			1	Pulse from inputs configured as Start E, Start I, Ped has no effect during opening.
ibL tcA	**Block pulses during TCA**	0	0	Pulse from inputs configured as Start E, Start I, Ped has effect during TCA pause.
			1	Pulse from inputs configured as Start E, Start I, Ped has no effect during TCA pause.
ibL cLoSE	**Block pulses during closing**	0	0	Pulse from inputs configured as Start E, Start I, Ped has effect during closing.
			1	Pulse from inputs configured as Start E, Start I, Ped has no effect during closing.
IcE	**Ice feature**	0	0	The Amperostop safety trip threshold stays at the same set value.
			1	The controller automatically adjusts the obstacle alarm trip threshold at each start up. 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. If in doubt, use auxiliary safety devices. 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 autoset opening and closing cycle.
oPEn In otHEr dirECt.	**Open in other direction**	0	0	Standard operating mode (See Fig.Q Ref. 1).
			1	Opens in other direction to standard operating mode (See Fig. Q Ref.2)

step-by-step mov.

	2 STEP	3 STEP	4 STEP
CLOSED	OPENS	OPENS	OPENS
DURING CLOSING			STOPS
OPEN	CLOSES	CLOSES	CLOSES
DURING OPENING		STOP + TCA	STOP + TCA
AFTER STOP	OPENS	OPENS	OPENS

ENGLISH

Logic	Definition	De-fault	Cross out setting used	Optional extras
SAFE 1	**Configuration of safety input SAFE 1. 72**	0	0	Input configured as Phot (photocell).
			1	Input configured as Phot test (tested photocell).
			2	Input configured as Phot op (photocell active during opening only).
			3	Input configured as Phot op test (tested photocell active during opening only).
SAFE 2	**Configuration of safety input SAFE 2. 74**	6	4	Input configured as Phot cl (photocell active during closing only).
			5	Input configured as Phot cl test (tested photocell active during closing only).
			6	Input configured as Bar, safety edge.
			7	Input configured as Bar, tested safety edge.
			8	Input configured as Bar 8k2.
			9*	Input configured as Bar OP, safety edge with inversion active only while opening. If while closing, the movement stops.
			10*	Input configured as Bar OP TEST, safety edge tested with inversion active only while opening. If while closing, the movement stops.
			11*	Input configured as Bar OP 8k2, safety edge with inversion active only while opening. If while closing, the movement stops.
			12*	Input configured as Bar CL, safety edge with inversion active only while closing. If while opening, the movement stops.
			13*	Input configured as Bar CL TEST, safety edge tested with inversion active only while closing. If while opening, the movement stops.
			14*	Input configured as Bar CL 8k2, safety edge with inversion active only while closing. If while opening, the movement stops.
Ic 1	**Configuration of command input IC 1. 61**	0	0	Input configured as Start E.
			1	Input configured as Start I.
			2	Input configured as Open.
			3	Input configured as Close.
Ic 2	**Configuration of command input IC 2. 62**	4	4	Input configured as Ped.
			5	Input configured as Timer.
			6	Input configured as Timer Pedestrian.
AUX 0	**Configuration of AUX 0 output. 20-21**	6	0	Output configured as 2nd Radio Channel.
			1	Output configured as SCA (gate open light).
			2	Output configured as Courtesy Light command.
			3	Output configured as Zone Light command.
AUX 3	**Configuration of AUX 3 output. 26-37**	0	4	Output configured as Stair Light
			5	Output configured as Alarm
			6	Output configured as Flashing light
			7	Output configured as Latch
			8	Output configured as Magnetic lock
			9	Output configured as Maintenance
			10	Output configured as Flashing Light and Maintenance.
FIXEd codE	**Fixed code**	0	0	Receiver is configured for operation in rolling-code mode. Fixed-Code Clones are not accepted.
			1	Receiver is configured for operation in fixed-code mode. Fixed-Code Clones are accepted.

Logic	Definition	De-fault	Cross out setting used	Optional extras
ProtEct Ion LEuEL	**Setting the protection level**	0	0	A - The password is not required to access the programming menus B - Enables wireless memorizing of transmitters. Operations in this mode are carried out near the control panel and do not require access: - 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. - 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 by repeating the previous step. C - Enables wireless automatic addition of clones. Enables clones generated with the universal programmer and programmed Replays to be added to the receiver's memory. D - Enables wireless automatic addition of replays. Enables programmed Replays to be added to the receiver's memory. E - The board's parameters can be edited via the U-link network
			1	A - You are prompted to enter the password to access the programming menus The default password is 1234. No change in behaviour of functions B - C - D - E from 0 logic setting
			2	A - You are prompted to enter the password to access the programming menus The default password is 1234. B - Wireless memorizing of transmitters is disabled. C - Wireless automatic addition of clones is disabled. No change in behaviour of functions D - E from 0 logic setting
			3	A - You are prompted to enter the password to access the programming menus The default password is 1234. B - Wireless memorizing of transmitters is disabled. D - Wireless automatic addition of Replays is disabled. No change in behaviour of functions C - E from 0 logic setting
			4	A - You are prompted to enter the password to access the programming menus The default password is 1234. B - Wireless memorizing of transmitters is disabled. C - Wireless automatic addition of clones is disabled. D - Wireless automatic addition of Replays is disabled. E - The option of editing the board's parameters via the U-link network is disabled. Transmitters are memorized only using the relevant Radio menu. IMPORTANT: This high level of security stops unwanted clones from gaining access and also stops radio interference, if any.
SEr IAL ModE	**Serial mode** (Identifies how board is configured in a BFT network connection).	0	0	Standard SLAVE: board receives and communicates commands/diagnostics/etc.
			1	Standard MASTER: board sends activation commands (START, OPEN, CLOSE, PED, STOP) to other boards.
			2	SLAVE opposite leaves in local network : the control unit is the slave in an opposite leaves network with no smart module (fig.P)
			3	MASTER opposite leaves in local network: the control unit is the master in an opposite leaves network with no smart module (fig.P)
AddrESS	**Address**	0	[___]	Identifies board address from 0 to 119 in a local BFT network connection. (see U-LINK OPTIONAL MODULES section)
EXPI1	**Configuration of EXPI1 input on input-output expansion board. 1-2**	1	0	Input configured as Start E command.
			1	Input configured as Start I command.
			2	Input configured as Open command.
			3	Input configured as Close command.
			4	Input configured as Ped command.
			5	Input configured as Timer command.
			6	Input configured as Timer Pedestrian command.
			7	Input configured as Phot (photocell) safety.
			8	Input configured as Phot op safety (photocell active during opening only).
			9	Input configured as Phot cl safety (photocell active during closing only).
			10	Input configured as Bar safety (safety edge).
			11*	Input configured as safety Bar OP, safety edge with inversion active only while opening, if while closing the movement stops.
			12*	Input configured as safety Bar CL, safety edge with inversion active only while closing, if while opening the movement stops.
			13*	Input configured as Phot test safety, tested photocell. Input 3 (EXPI2) on input/output expansion board is switched automatically to safety device test input, EXPFAULT1.
			14*	Input configured as Phot op test safety, tested photocell active only while opening. Input 3 (EXPI2) on input/output expansion board is switched automatically to safety device test input, EXPFAULT1
			15*	Input configured as Phot cl test safety, tested photocell active only while closing. Input 3 (EXPI2) on input/output expansion board is switched automatically to safety device test input, EXPFAULT1
			16*	Input configured as Bar safety, tested safety edge. Input 3 (EXPI2) on input/output expansion board is switched automatically to safety device test input, EXPFAULT1.
			17*	Input configured as safety Bar OP test, safety edge with inversion active only while opening, if while closing the movement stops. Input 3 (EXPI2) on input/output expansion board is switched automatically to safety device test input, EXPFAULT1.
			18*	Input configured as safety Bar CL test, safety edge with inversion active only while closing, if while opening the movement stops. Input 3 (EXPI2) on input/output expansion board is switched automatically to safety device test input, EXPFAULT1.

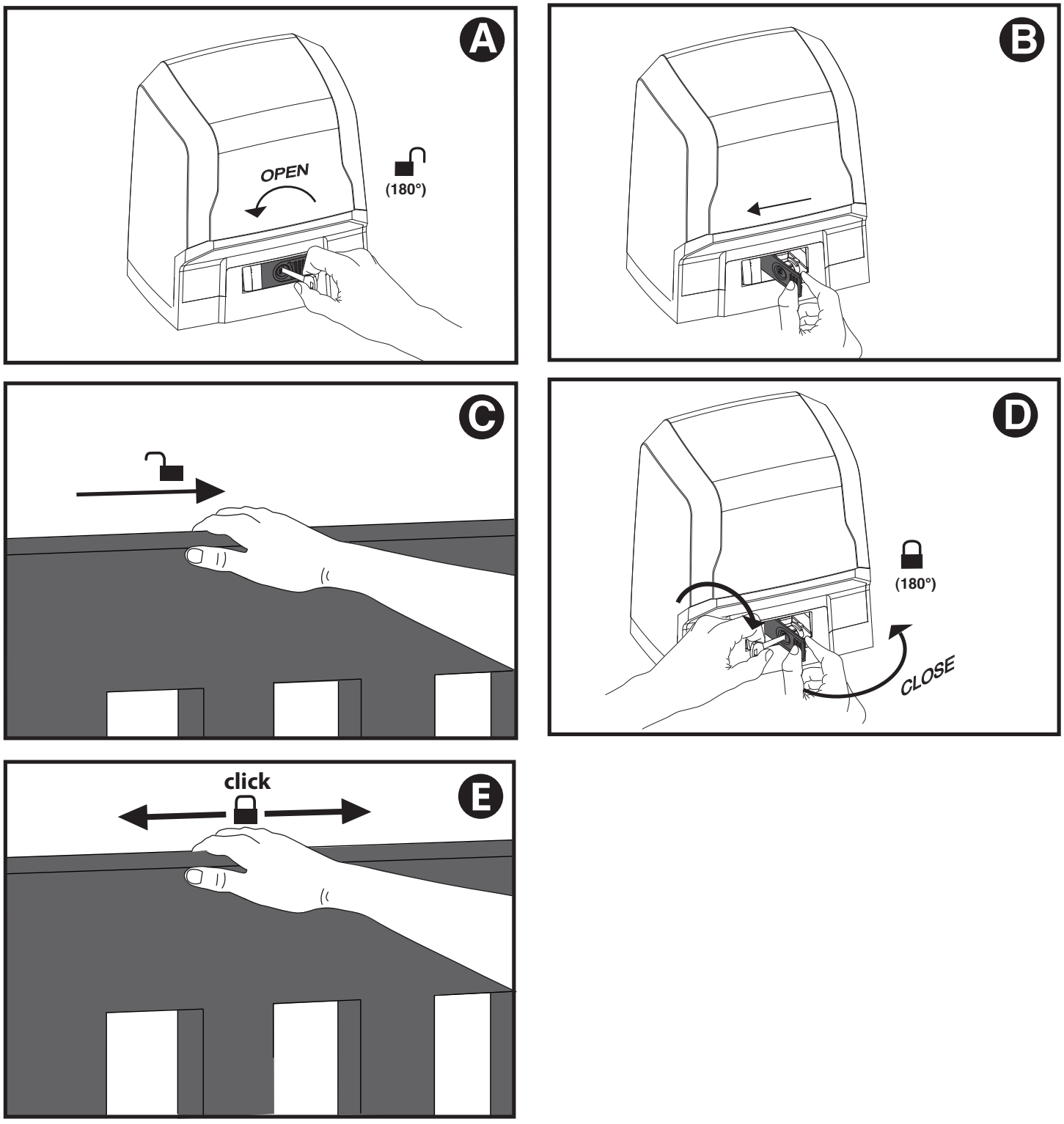
Logic	Definition	De-fault	Cross out setting used	Optional extras
EHP 12	**Configuration of EXPI2 input on input-output expansion board. 1-3**	0	0	Input configured as Start E command.
			1	Input configured as Start I command.
			2	Input configured as Open command.
			3	Input configured as Close command.
			4	Input configured as Ped command.
			5	Input configured as Timer command.
			6	Input configured as Timer Pedestrian command.
			7	Input configured as Phot (photocell) safety.
			8	Input configured as Phot op safety (photocell active during opening only).
			9	Input configured as Phot cl safety (photocell active during closing only).
			10	Input configured as Bar safety (safety edge).
			11*	Input configured as safety Bar OP, safety edge with inversion active only while opening, if while closing the movement stops.
			12*	Input configured as safety Bar CL, safety edge with inversion active only while closing, if while opening the movement stops.
EHPo 1	**Configuration of EXPO2 output on input-output expansion board 4-5**	11	0	Output configured as 2nd Radio Channel.
			1	Output configured as SCA (gate open light).
			2	Output configured as Courtesy Light command.
			3	Output configured as Zone Light command.
			4	Output configured as Stair Light.
EHPo2	**Configuration of EXPO2 output on input-output expansion board 6-7**	11	5	Output configured as Alarm.
			6	Output configured as Flashing light.
			7	Output configured as Latch.
			8	Output configured as Magnetic lock.
			9	Output configured as Maintenance.
			10	Output configured as Flashing Light and Maintenance.
			11	Output configured as Traffic Light control with TLB board.
trAFF Ic L IGht PrE-FLASh InG.	**Traffic light pre-flashing**	0	0	Pre-flashing switched off.
			1	Red lights flash, for 3 seconds, at start of operation.
trAFF Ic L IGht rEd LAMP ALWAYS on	**Steadily lit red light**	0	0	Red lights off when gate closed.
			1	Red lights on when gate closed.

*** Only active on FW ≥ 2.10**

TABLE "C" – RADIO MENU (rAd Io)

Logic	Description
Add StArt	**Add Start Key** associates the desired key with the Start command
Add 2ch	**Add 2ch Key** Associates the desired key with the 2nd radio channel command. If no output is configured as 2nd Radio Channel Output, the 2nd radio channel controls the pedestrian opening.
ErASE 64	**Erase List** ⚠ **WARNING!** Erases all memorized transmitters from the receiver's memory.
cod rH	**Read receiver code** Displays receiver code required for cloning transmitters.
uK	**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 transmitter is last pressed. **OFF=** W LINK programming disabled.

FIG. 3



USER WARNINGS (GB)

WARNING! Important safety instructions. Carefully read and comply with the Warnings and Instructions that come with the product as improper use can cause injury to people and animals and damage to property. Keep the instructions for future reference and hand them on to any new users.
This product is meant to be used only for the purpose for which it was explicitly installed. Any other use constitutes improper use and, consequently, is hazardous. The manufacturer cannot be held liable for any damage as a result of improper, incorrect or unreasonable use.

GENERAL SAFETY

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 when installed correctly by qualified, expert personnel (professional installer).
If installed and used correctly, the automated system will meet operating safety standards. 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 moving.
- Do not allow children to play or stand within range of the automated system.
- The unit can be used by children over 8 years old and by people with reduced physical, sensory or mental capabilities or with no experience or necessary knowledge on condition they are supervised or trained about the safe use of the equipment and understand the risks involved. Children must not play with the unit. Cleaning and maintenance must not be performed by unsupervised children.
- Children must be supervised to ensure they do not play with the device. Do not allow children to play with the fixed controls. Keep remote controls out of reach of children.
- Do not work near hinges or moving mechanical parts.
- Do not hinder the leaf's movement and do not attempt to open the door manually unless the actuator has been released with the relevant release knob.
- Keep out of range of the motorized door or gate while they are moving.
- 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.
- When using roller shutter openers: keep an eye on the roller shutter while it is moving and keep people away until it has closed completely. Exercise care when activating the release, if such a device is fitted, as an open shutter could drop quickly in the event of wear or breakage.
- The breakage or wear of any mechanical parts of the door (operated part), such as cables, springs, supports, hinges, guides…, may generate a hazard. Have the system checked by qualified, expert personnel (professional installer) at regular intervals according to the instructions issued by the installer or manufacturer of the door.
- When cleaning the outside, 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.
- Do not use the automated system if it is in need of repair. In the event the automated system breaks down or malfunctions, cut off mains power to the system; do not attempt to repair or perform any other work to rectify the fault yourself and instead call in qualified, expert personnel (professional

installer) to perform the necessary repairs or maintenance. To allow access, activate the emergency release (where fitted).
- If any part of the automated system requires direct work of any kind that is not contemplated herein, employ the services of qualified, expert personnel (professional installer).
- At least once a year, have the automated system, and especially all safety devices, checked by qualified, expert personnel (professional installer) to make sure that it is undamaged and working properly.
- A record must be made of any installation, maintenance and repair work and the relevant documentation kept and made available to the user on request.
- Failure to comply with the above may result in hazardous situations.

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.

Anything that is not explicitly provided for in the user guide is not allowed. The operator's proper operation can only be guaranteed if the instructions given herein are 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.

Bft Spa
Via Lago di Vico, 44 ITALY
36015 Schio (VI)
T +39 0445 69 65 11
F +39 0445 69 65 22
→www.bft-automation.com

SPAIN
BFT GROUP ITALIBERICA DE AUTOMATISMOS S.L.
08401 Granollers - (Barcelona)
www.bftautomatismos.com

FRANCE
AUTOMATISMES BFT FRANCE
69800 Saint Priest
www.bft-france.com

GERMANY
BFT TORANTRIEBSSYSTEME Gmb H
90522 Oberasbach
www.bft-torantriebe.de

UNITED KINGDOM
BFT AUTOMATION UK LTD
Heaton Mersey,Stockport SK4 3GL
www.bft.co.uk

IRELAND
BFT AUTOMATION LTD
Dublin 12

BENELUX
BFT BENELUX SA
1400 Nivelles
www.bftbenelux.be

POLAND
BFT POLSKA SP. Z O.O.
05-091 ZĄBKI
www.bft.pl

CROATIA
BFT ADRIA D.O.O.
51218 Drazice (Rijeka)
www.bft.hr

PORTUGAL
BFT SA-COMERCIO DE AUTOMATISMOS E MATERIAL DE SEGURANCIA
3026-901 Coimbra
www.bftportugal.com

CZECH REPUBLIC
BFT CZ S.R.O.
Praha
www.bft.it

TURKEY
BFT OTOMATIK KAPI SISTEMELERI SANAY VE
Istanbul
www.bftotomasyon.com.tr

RUSSIA
BFT RUSSIA
111020 Moscow
www.bftrus.ru

AUSTRALIA
BFT AUTOMATION AUSTRALIA PTY LTD
Wetherill Park (Sydney)
www.bftaustralia.com.au

U.S.A.
BFT USA
Boca Raton
www.bft-usa.com

CHINA
BFT CHINA
Shanghai 200072
www.bft-china.cn

UAE
BFT Middle East FZCO
Dubai