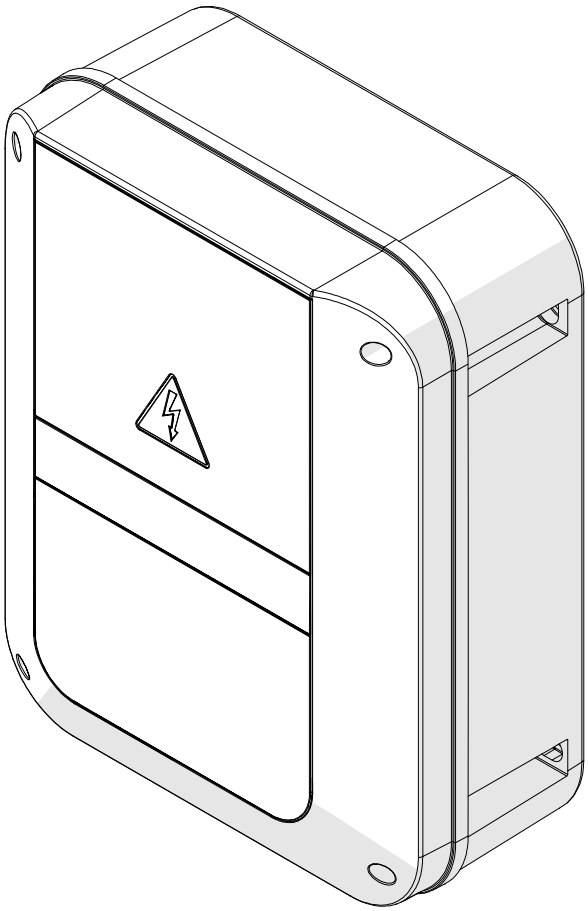
L854200282
05/2022 rev 1

RISE
Rising
Bollards
Evolution

MAX.CP



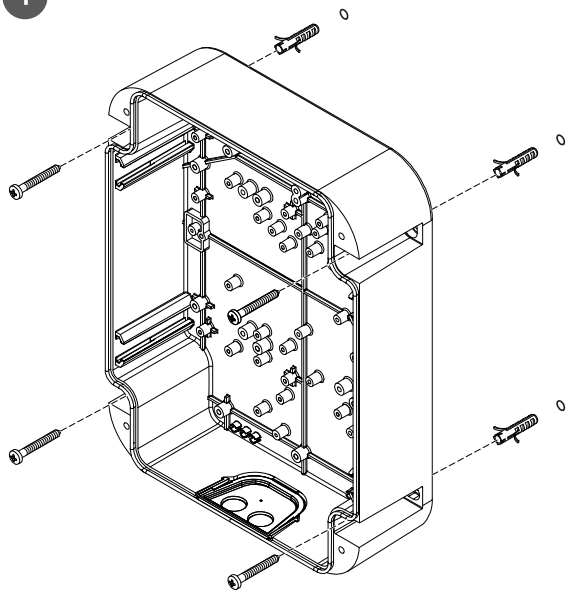
Manuale di installazione
Installation manual
Installationsanleitung
Manuel d'installation

I Centrale di comando per 1 o 2 dissusasori
GB 1 or 2 bollards control unit
DE Steuerzentrale für 1 oder 2 poller
FR Unité de commande pour 1 ou 2 bornes escamotables

Made in Italy

CE

1



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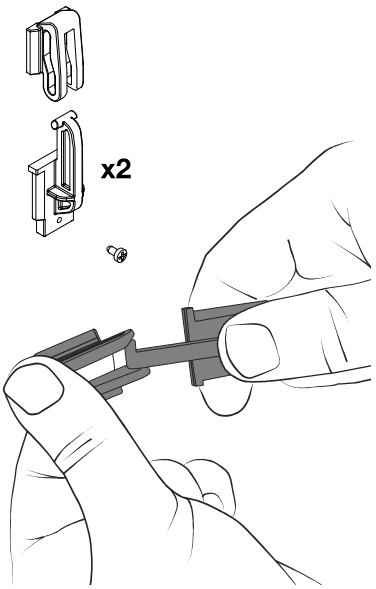

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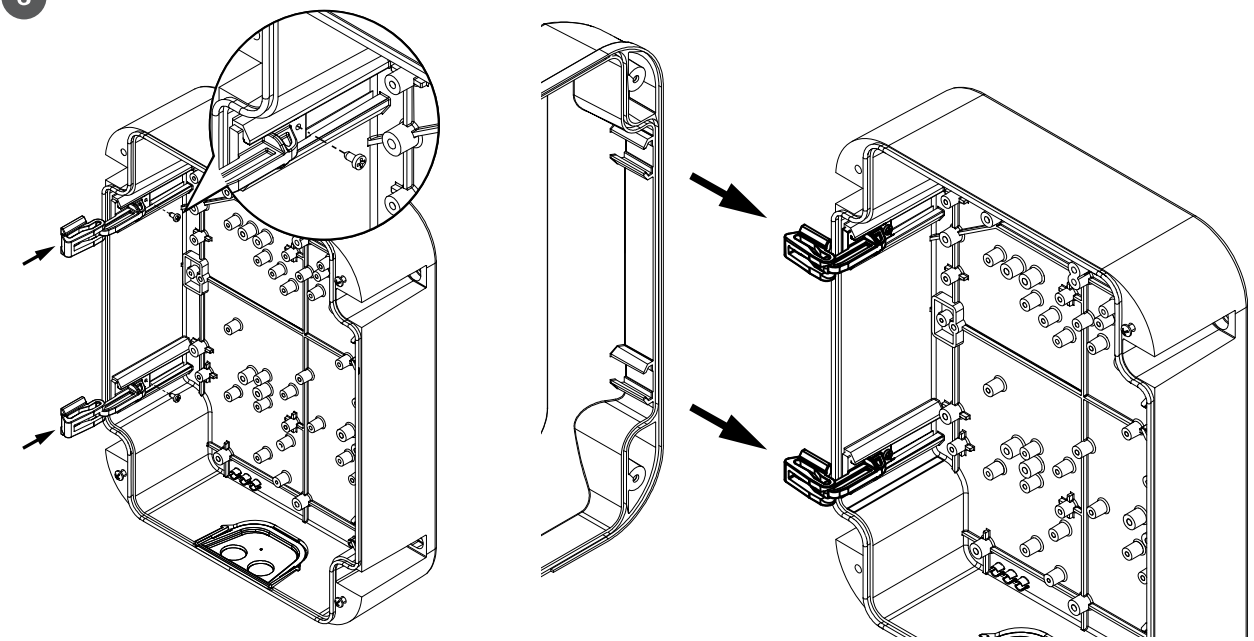

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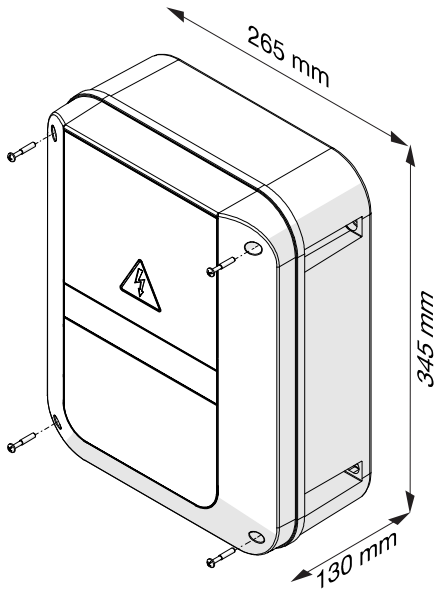

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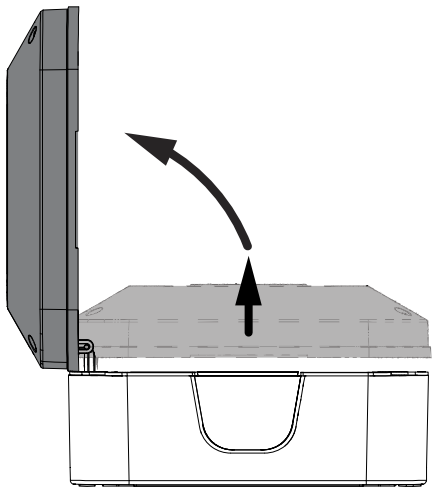

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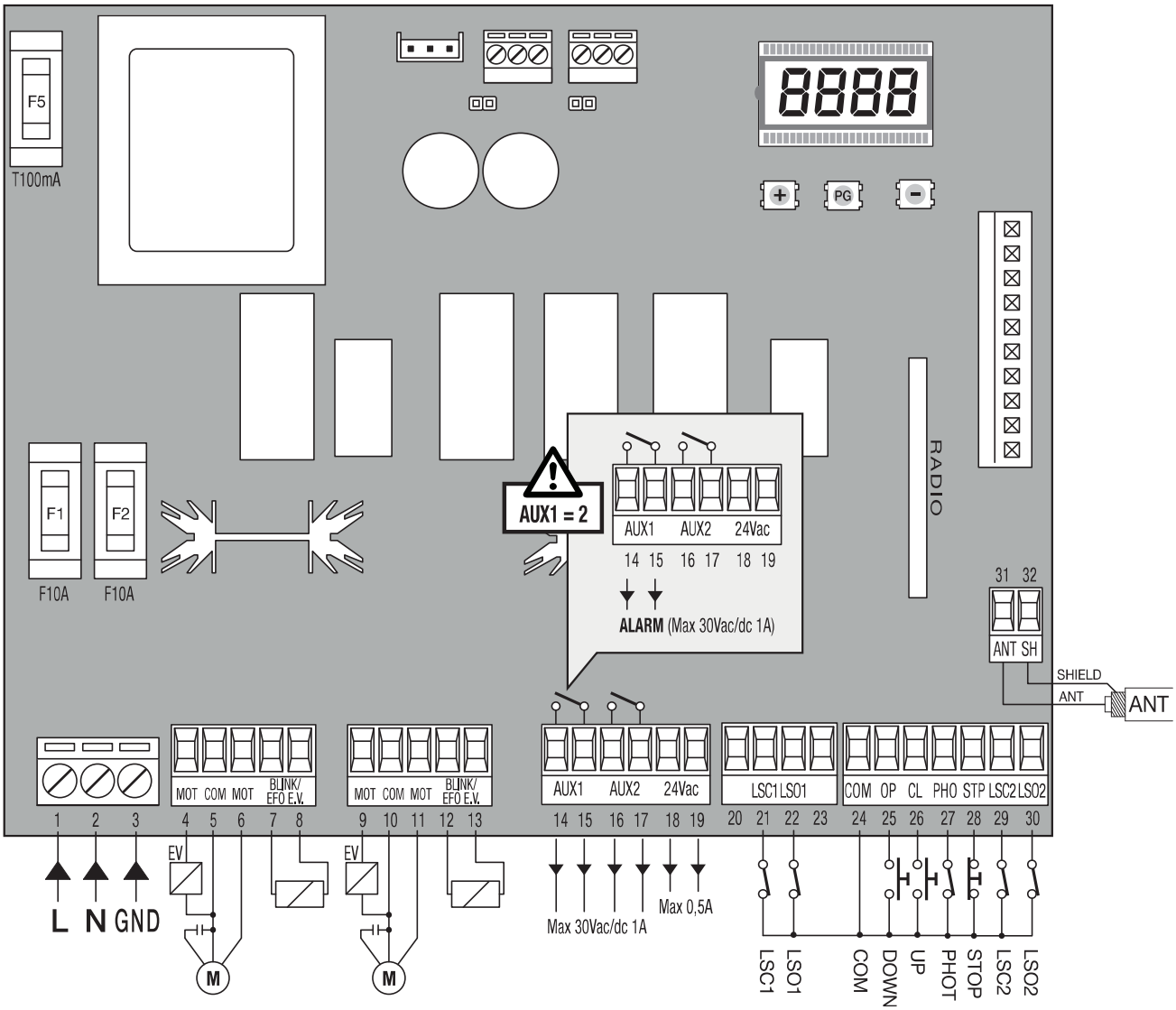
MAX.CP



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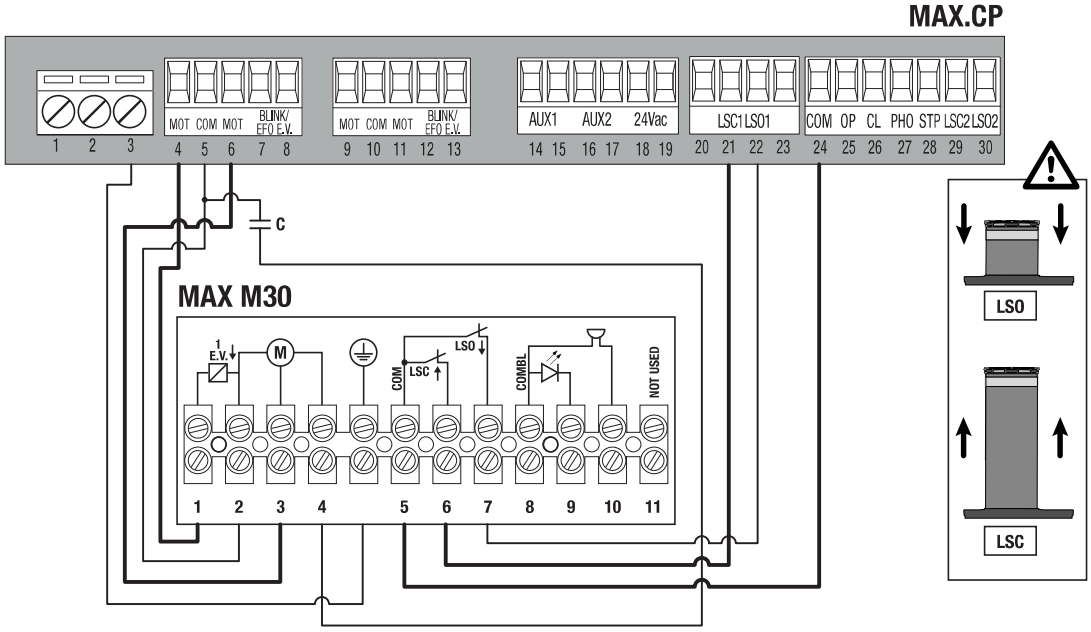
MAX.CP



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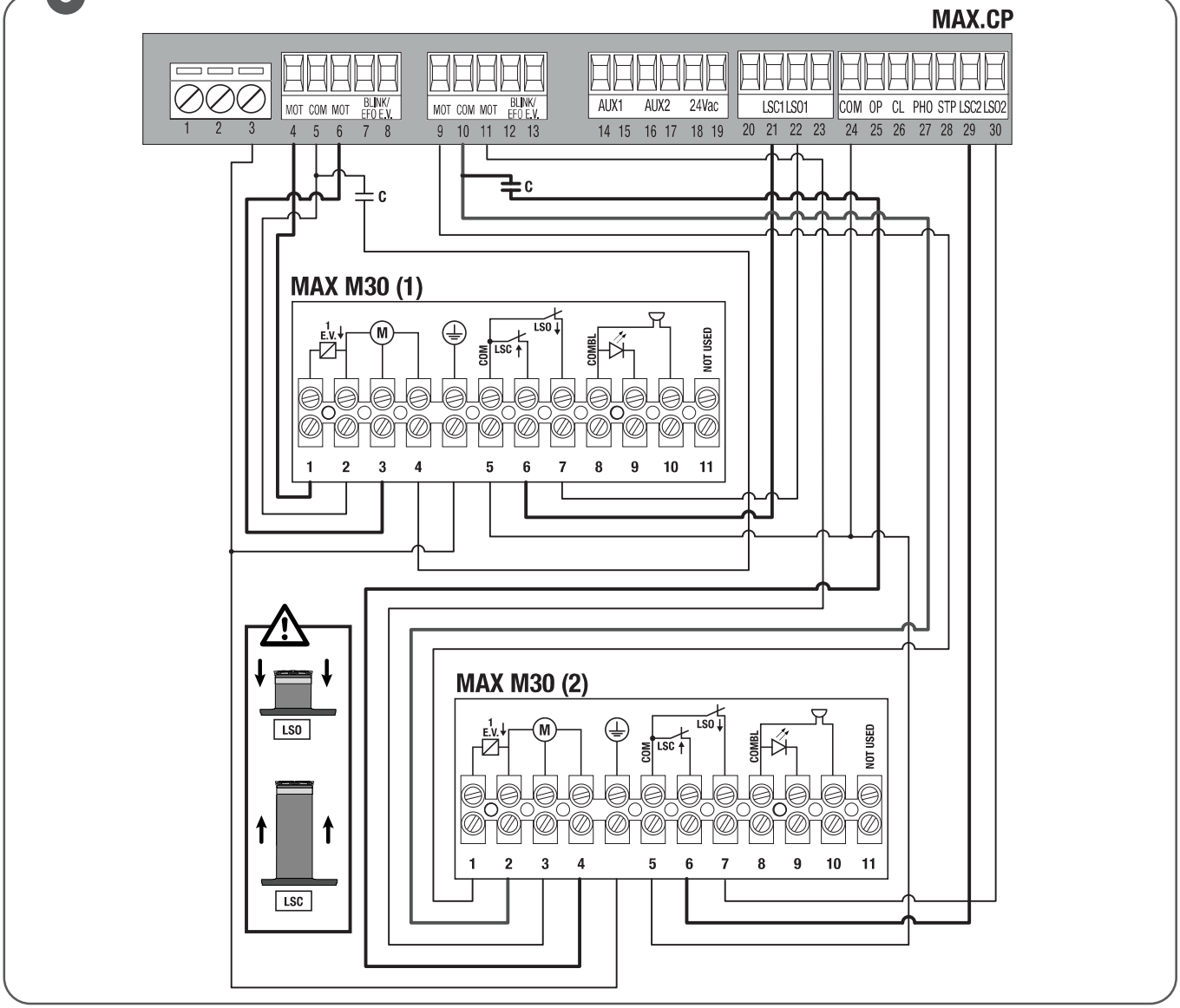
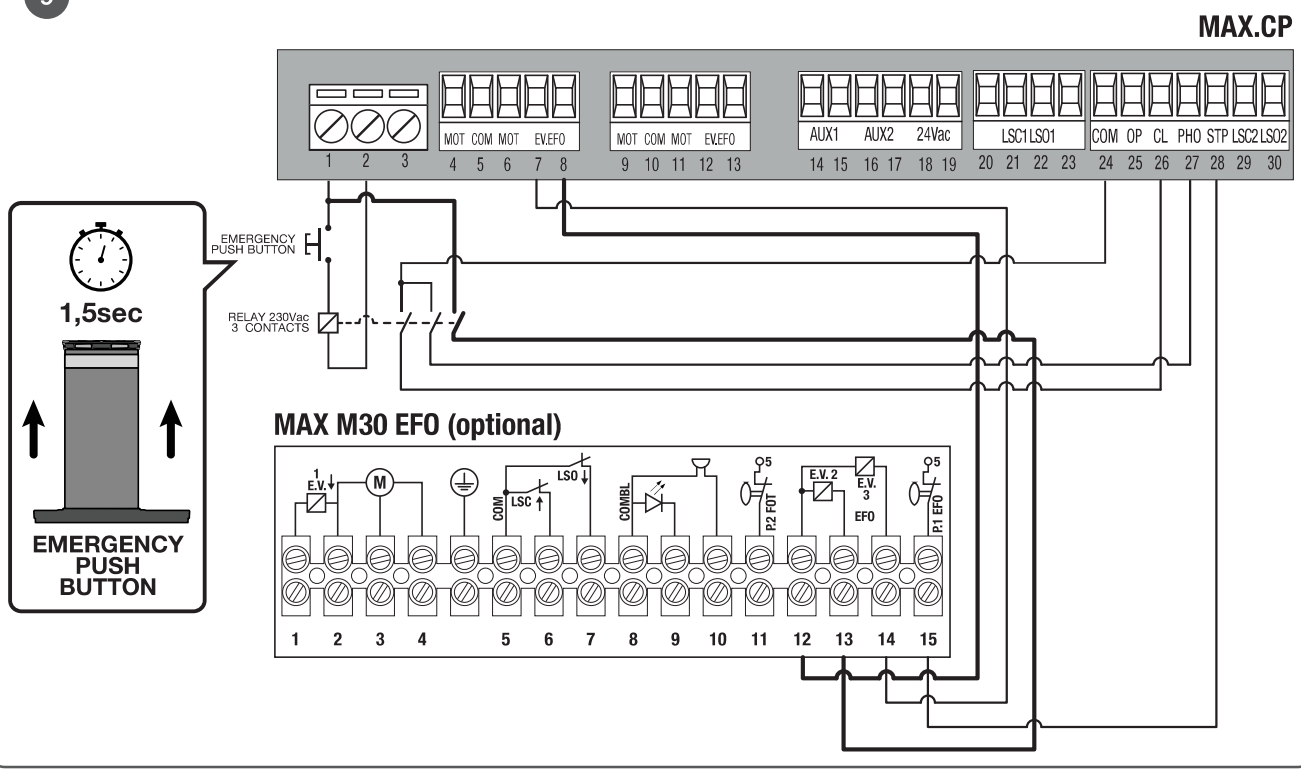
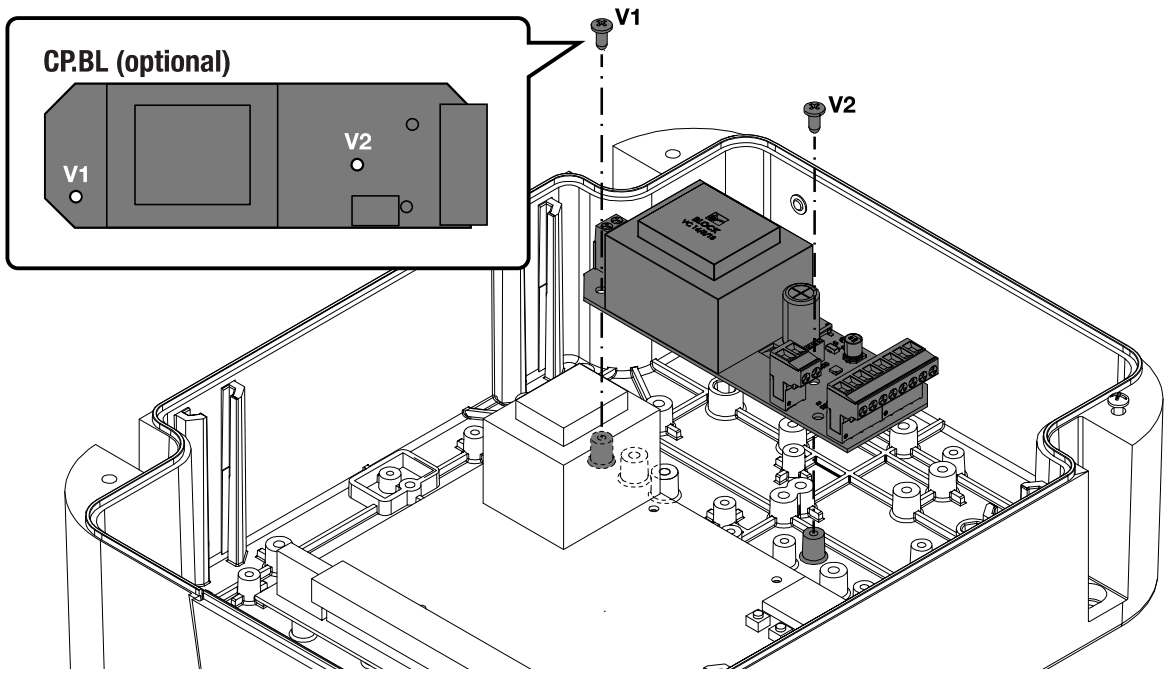
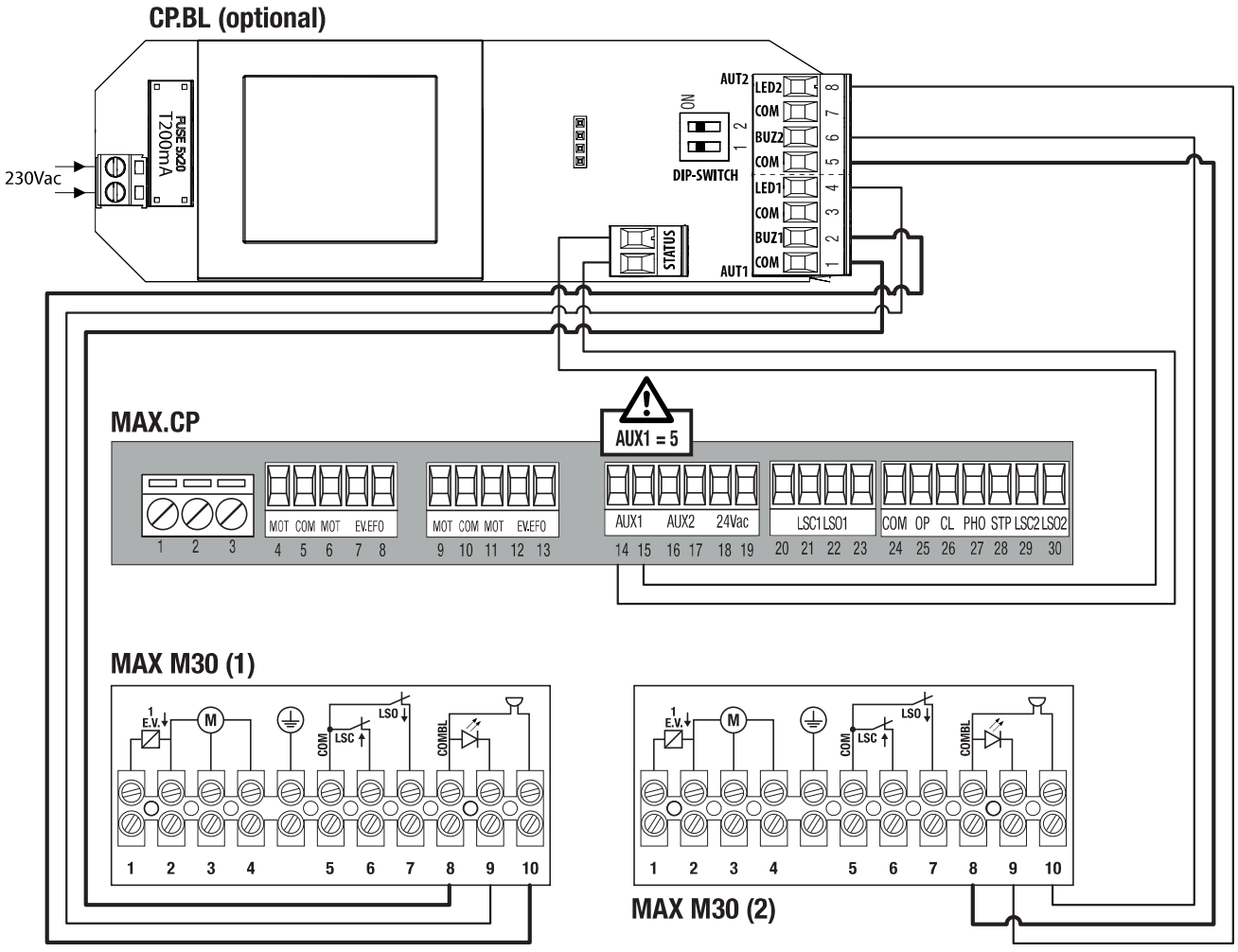

MAX.CP
1 2 3
MOT COM MOT BLINK/ EFO E.V.
4 5 6 7 8
MOT COM MOT BLINK/ EFO E.V.
9 10 11 12 13
AUX1 AUX2 24Vac
14 15 16 17 18 19
LSC1 LSO1
20 21 22 23
COM OP CL PHO STP LSC2 LSO2
24 25 26 27 28 29 30
C
C
MAX M30 (1)
1 E.V.
M
COM
LSC
LSO
COMBL
NOT USED
1 2 3 4 5 6 7 8 9 10 11
LSO
LSC
MAX M30 (2)
1 E.V.
M
COM
LSC
LSO
COMBL
NOT USED
1 2 3 4 5 6 7 8 9 10 11

9


MAX.CP
1 2 3
MOT COM MOT EV.EFO
4 5 6 7 8
MOT COM MOT EV.EFO
9 10 11 12 13
AUX1 AUX2 24Vac
14 15 16 17 18 19
LSC1 LSO1
20 21 22 23
COM OP CL PHO STP LSC2 LSO2
24 25 26 27 28 29 30
EMERGENCY PUSH BUTTON
RELAY 230Vac 3 CONTACTS
1,5sec
EMERGENCY PUSH BUTTON
MAX M30 EFO (optional)
1 E.V.
M
COM
LSC
LSO
COMBL
P2 FOT
E.V. 2
E.V. 3
EFO
P1 EFO
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15


CP.BL (optional)
V1
V2
V1
V2


CP.BL (optional)
230Vac
FUSE 5x20
T200mA
DIP-SWITCH
ON
STATUS
AUT2
LED2
COM
BUZ2
COM
LED1
COM
BUZ1
COM
AUT1
MAX.CP
AUX1 = 5
MOT COM MOT EV.EFO
MOT COM MOT EV.EFO
AUX1 AUX2 24Vac
LSC1 LSO1
COM OP CL PHO STP LSC2 LSO2
MAX M30 (1)
E.V.
M
COM
LSC
LSO
COMBL
MAX M30 (2)

WARNING

The product shall not be used for purposes or in ways other than those for which the product is intended for and as described in this manual. Incorrect uses can damage the product and cause injuries and damages.
The company shall not be deemed responsible for the non-compliance with a good manufacture technique of gates as well as for any deformation, which might occur during use.
Keep this manual for further use.

This manual has been especially written to be use by qualified fitters.
Installation must be carried out by qualified personnel (professional installer, according to EN 12635), in compliance with Good Practice and current code.
Make sure that the structure of the gate is suitable for automation.
The installer must supply all information on the automatic, manual and emergency operation of the automatic system and supply the end user with instructions for use.

Packaging must be kept out of reach of children, as it can be hazardous. For disposal, packaging must be divided the various types of waste (e.g. carton board, polystyrene) in compliance with regulations in force.
Do not allow children to play with the fixed control devices of the product. Keep the remote controls out of reach of children.
This product is not to be used by persons (including children) with reduced physical, sensory or mental capacity, or who are unfamiliar with such equipment, unless under the supervision of or following training by persons responsible for their safety.
Apply all safety devices (photocells, safety edges, etc.) required to keep the area free of impact, crushing, dragging and shearing hazard.
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.
Installation must be carried out using safety devices and controls that meet standards EN 12978 and EN 12453.
Only use original accessories and spare parts, use of non-original spare parts will cause the warranty planned to cover the products to become null and void.
All the mechanical and electrical parts composing automation must meet the requirements of the standards in force and outlined by CE marking.

An omnipolar switch/section switch with remote contact opening equal to, or higher than 3mm must be provided on the power supply mains.
Make sure that before wiring an adequate differential switch and an overcurrent protection is provided.
Pursuant to safety regulations in force, some types of installation require that the gate connection be earthed.
During installation, maintenance and repair, cut off power supply before accessing to live parts.
Also disconnect buffer batteries, if any are connected.
The electrical installation and the operating logic must comply with the regulations in force.
The leads fed with different voltages must be physically separate, or they must be suitably insulated with additional insulation of at least 1 mm.
The leads must be secured with an additional fixture near the terminals.
During installation, maintenance and repair, interrupt the power supply before opening the lid to access the electrical parts
Check all the connections again before switching on the power.
The unused N.C. inputs must be bridged.

WASTE DISPOSAL
As indicated by the symbol shown, it is forbidden to dispose this product as normal urban waste as some parts might be harmful for environment and human health, if they are disposed of incorrectly. Therefore, the device should be disposed in special collection platforms or given back to the reseller if a new and similar device is purchased. An incorrect disposal of the device will result in fines applied to the user, as provided for by regulations in force.

Descriptions and figures in this manual are not binding. While leaving the essential characteristics of the product unchanged, the manufacturer reserves the right to modify the same under the technical, design or commercial point of view without necessarily update this manual.

TECHNICAL DATA

Mains power	230 Vac +/- 10% 50/60 Hz
Motor output	1/2 MAX M30 series bollards | 1 MAX M30 EFO bollard
Maximum motor current	8A for each individual output
Accessory power supply output	24Vac 0.5A max.
Degree of protection	IP54
Operating temp.	-20°C / +60°C
Radio receiver	433.92 MHz built-in and configurable
No. of codes that can be stored	64

MAX.CP CONTROL UNIT

INPUT/OUTPUT FUNCTIONS (FIG.6)

Terminals	Department	Description
1/2/3	Supply	Input 230Vac 50/60Hz 1: L-phase - 2: N-Neutral - 3: GND-Ground
4/5/6	Motor 1	Bollard connection 1: 4: Descent - 5: COM - 6: Ascent
7/8	Blink/EFO E.V.	Output for flashing or EFO device, configurable with EFO logic. With EFO (Emergency Fast Operation) logic, the device allows a fast ascent time of 1.5 seconds.
09/10/2011	Motor 2	Bollard connection 2: 9: Descent - 10: COM - 11: Ascent
12/13	Blink/EFO E.V.	Output for flashing or EFO device, configurable with EFO logic. With EFO (Emergency Fast Operation) logic, the device allows a fast ascent time of 1.5 seconds.
14/15	Auxiliary output 1	Auxiliary output 1 configurable via parameter AUX1 Voltage free contact max 30Vac/dc 1A.
16/17	Auxiliary output 2	Auxiliary output 1 configurable via parameter AUX2 Voltage free contact max 30Vac/dc 1A.
18/19	24 Vac	Accessory power supply output 24Vac/0.5A max.
20	Not used	
21	LSC1	Closing limit switch input (bollard up) bollard 1
22	LSO1	Opening limit switch input (bollard down) bollard 1
23	Not used	
24	Common Inputs	Common for all control inputs.
25	Descent	Button input (N.O. contact), for the descent of bollards, configurable as Clock contact
26	Ascent	Button input (N.O. contact), for the ascent of bollards.
27	Photocell	Safety device connection input, N.C. contact. (e.g. photocells, magnetic loops, etc.).
28	STOP	STOP button input (N.C. Contact) / configurable with EFO logic
29	LSC2	Closing limit switch input (bollard up) bollard 2
30	LSO2	Opening limit switch input (bollard down) bollard 2
31/32	Antenna	Built-in radio receiver board antenna connection: 31: ANT-signal- 32: SHIELD-shield.
FUSES		
F1	F10A	Motor Protection 1
F2	F10A	Motor Protection 2
F5	T 100 mA	Transformer Protection/Accessories

PROGRAMMING

The various functions are programmed using the LCD display on the control unit and by setting the desired values in the programming menus described below.
The parameters menu allows a numerical value to be set to a function, similar to an adjustment trimmer.
The logic menu allows a function to be activated or deactivated, similar to the setting of a dip-switch.
Other special functions follow the parameters and logic menus and may vary depending on the type of control unit or software revision.

TO ACCESS PROGRAMMING

1 - Press the <PG> button to display the first “PAR” parameter menu.
2 - Use the <+> or <-> button to choose the menu you wish to select.
3 - Press the <PG> button to display the first function available in the menu.
4 - Use the <+> or <-> button to select the function you wish to change.
5 - Press the <PG> button to display the value currently set for the selected function.
6 - Use the <+> or <-> button to select the value you wish to assign to the function.
7 - Press the <PG> button to display the “PRG” signal indicating successful programming.

NOTES

Pressing <+> and <-> simultaneously within a function menu allows you to return to the top menu without making any changes.
Hold the <+> or <-> button to accelerate the increase/decrease of values.
After 30 seconds, the control unit exits programming mode and switches off the display.

PARAMETERS, LOGICS AND SPECIAL FUNCTIONS

The following tables describe the individual functions available in the control unit.

PARAMETERS (PAr)			
MENU	**FUNCTION**	**MIN-MAX-(Default)**	**MEMO**
tcA	Automatic ascent time of bollard 1 and bollard 2. At the end of the set time the control unit commands the bollard ascent again.	3-240-(10s)	
tM1	Bollard working time 1. Adjusts the maximum duration of the descent and ascent manoeuvre of bollard 1. It must be set about 4 seconds longer than the actual running time of the automatism.	1-90-(10s)	
tM2	Bollard working time. Adjusts the maximum duration of the bollard descent and ascent manoeuvre 2. It must be set about 4 seconds longer than the actual running time of the automatism.	1-90-(10s)	
bLc	Hold time, it commands an ascent manoeuvre for approx. 3 seconds Value expressed in hours. The value 0 disables the function.	0-12-(2)	
bLco	Adjusts the stopping time after the OPEN limit switch has been intercepted. Value expressed in tenths of a second.	0-20-(10)	
bLcc	Adjusts the stopping time after the CLOSE limit switch is intercepted. Value expressed in tenths of a second.	0-20-(10)	
AUH1	Sets the operating mode of auxiliary output 1 0: Contact for connection of bollard 1 status light (see AUX connection diagram). Light on when the bollard is lowered. Flashing light frequency 1 flash/second with bollard in descent. Flashing light frequency 2 flash/second with bollard in ascent. Warning light off with bollard raised. 1: AUX 1 contact closed only when bollard 1 is raised. 2: Contact for connection of siren/alarm, closed during the ascent of the bollard 1, see connection diagram Fig.6. 3: Output replicates the status of input LSC1 4: Output reverses the status of input LSC1 5: Light-buzzer board command output mod. CP.BL (fig.10) 6: Zone light output. The output is activated with bollard in movement or with bollard lowered (and logic TCA=ON) 7: Traffic light output. The output is deactivated when the bollard is fully lowered Note: If logic PP=On the settings are relative only to bollard 1 If logic PP=off the settings are relative to both bollards.	0-7-(5)	
AUH2	Sets the operating mode of auxiliary output 2 0: Contact for connection of bollard 2 status light (see AUX connection diagram). Light on when the bollard is lowered. Flashing light frequency 1 flash/second with bollard in descent. Flashing light frequency 2 flash/second with bollard in ascent. Warning light off with bollard raised. 1: AUX 2 contact closed only when the bollard is raised. 2: Contact for siren/alarm connection, closed during the ascent of the bollard 2, see connection diagram Fig.6. 3: Output replicates the status of input LSC2 4: Output replicates the status of input LSO2 5: Light-buzzer board command output mod. CP.BL (fig.10) 6: Zone light output. The output is activated with bollard in movement or with bollard lowered (and logic TCA=ON) 7: Traffic light output. The output is deactivated when the bollard is fully lowered Note: If logic PP=On the settings are relative only to bollard 2 If logic PP=off the settings are relative to both bollards.	0-7-(0)	
ch1	Sets the operating mode of channel 1 of the plug-in receiver. 0: Open 1: Close 2: Step-by-Step 3: STOP. Note: If logic PP=On the settings are relative to bollard 1 only If logic PP=off the settings are relative to both bollards.	0-3-(0)	

ch2	Sets the operating mode of the channel 2 input of the plug-in receiver. 0: Open 1: Close 2: Step-by-Step 3: STOP. Note: If logic PP=On the settings are relative to bollard 2 only If logic PP=off the settings are relative to both bollards.	0-3-(1)	

LOGICS (LoG)			
MENU	**FUNCTION**	**ON-OFF-(Default)**	**MEMO**
tcA	Enables or disables the automatic ascent time.	(OFF)	
ibL	Enables or disables the condominium function during descent. ON: PP commands wired and radio commands disabled during descent OFF: function disabled	(OFF)	
ibcA	Enables or disables PP commands from the transmitter during the TCA phase. On: PP commands not enabled. Off: PP commands enabled.	(OFF)	
ibc	Enables or disables the condominium function during ascent. ON: PP commands wired and radio commands disabled during ascent OFF: function disabled	(OFF)	
ScL	Enables or disables the rapid closing. On: Fast ascent enabled. When the bollard is lowered or during the descent phase, the photocell triggers automatic ascent after 3 seconds. Activate only with TCA=ON Off: fast ascent disabled.	(OFF)	
PP	Enables or disables the simultaneous operation of the bollards. On: the input DOWN acts a PP input for bollard 1, the UP input acts as a PP input for bollard 2 Off: the DOWN input operates both bollards during the descent, the UP input operates both bollards in closing (ascent)	(OFF)	
PrEo	Enables or disables pre-wiring before bollard descent ON: pre-warning enabled. The flashing output is activated 5s before the start of the downward motor (do not use with EFO installed) OFF: Prewarning disabled	(OFF)	
PrEc	Enables or disables the prewarning before the bollard goes UP ON: Pre-warning enabled. The flashing output is activated 5s before the start of the downward motor (do not use with EFO installed) OFF: Pre-warning disabled	(OFF)	
nLSU	Enables/disables timed operation of bollards. ON: Timed operation of the bollards (the operating time is defined by parameters TM1 and TM2). OFF: operation with limit switch.	(OFF)	
hAM	Enables or disables the water hammer function. ON: Function enabled. Before each descent manoeuvre, the control unit commands a fast descent and ascent manoeuvre to facilitate ice breaking. OFF: function disabled	(OFF)	
htr	Enables or disables the Human Present function. On: Human Present function. The DOWN/UP button must be kept pressed throughout the manoeuvre. Off: Automatic operation.	(OFF)	
EFo	EFO (Emergency Fast operation) device operation ON: operation for a bollard equipped with an EFO system. The STOP input becomes a pressure switch input, the BLINK output controls the valve for the additional tank (EFO). OFF: normal operation.	(OFF)	
AoPF	Enables or disables the “forced opening in the absence of mains power” function. ON: Function active. In the event of a mains power failure the bollard descends automatically (see connection diagram ellectrovalve) NB: the dedicated flashing output for the bollard cannot be used OFF: Function not active	(OFF)	

cuAr	Enables or disables programmable code transmitters. On: Radio receiver enabled exclusively for rolling-code transmitters. Off: Receiver enabled for rolling-code and programmable (self-learning and dip/switch) transmitters.	(ON)	
rEn	Enables or disables remote switching of radio transmitters (see REMOTE LEARNING section). On: Remote entry enabled Off: Remote entry disabled	(ON)	

RADIO (rAd)

MENU	FUNCTION
PP 1	Selecting this function, the receiver waits (Push) for a transmitter code to be assigned to the step-step function for bollard 1. Press the key of the transmitter you want to assign to this function. If the code is valid, it is stored and the message OK is displayed. If the code is not valid, the message Err is displayed.
PP2	Selecting this function, the receiver waits (Push) for a transmitter code to be assigned to the step-step function for bollard 2. Press the key of the transmitter you want to assign to this function. If the code is valid, it is stored and the message OK is displayed. If the code is not valid, the message Err is displayed.
oPEn	Selecting this function, the receiver waits (Push) for a transmitter code to be assigned to the OPEN function (both bollards) Press the key of the transmitter you want to assign to this function. If the code is valid, it is stored and the message OK is displayed. If the code is not valid, the message Err is displayed.
cLoSE	Selecting this function, the receiver waits (Push) for a transmitter code to be assigned to the CLOSE function (both bollards) Press the key of the transmitter you want to assign to this function. If the code is valid, it is stored and the message OK is displayed. If the code is not valid, the message Err is displayed.
cLr	Selecting this function, the receiver waits (Push) for a transmitter code to be deleted from the memory If the code is valid, it is deleted and the message OK is displayed. If the code is not valid or not stored in the memory, the message Err is displayed.
rtr	Completely deletes the memory of the receiver. Confirmation of the operation is requested. When this function is selected, the receiver waits (Push) for a new PGM to confirm the operation. At the end of the deletion, the message OK is displayed.

MANOEUVRES NUMBER (nMA 1)

Displays the number of complete cycles (descent+ascent) performed by the M1 bollard. The first press of the <PG> button displays the first 4 digits, the second press the last 4. Ex. <PG> 0012 >>> <PG> 3456: 123,456 cycles made.

MANOEUVRES NUMBER (nMA2)

Displays the number of complete cycles (descent+ascent) performed by the 2 bollard. The first press of the <PG> button displays the first 4 digits, the second press the last 4. Ex. <PG> 0012 >>> <PG> 3456: 123,456 cycles made.

RESET (rES)

RESET of the control unit. WARNING!: Resets the control unit to default values.
Pressing the <PG> button for the first time causes the RES message to flash; pressing the <PG> button again resets the control unit.
Note: The transmitters are not deleted from the receiver, nor is the access password.
All logics and parameters are reset to default values, so the autoset procedure must be repeated.

ACCESS PASSWORD (codE)

Allows you to enter a protection code for access to programming the control unit.
It is possible to enter a four-character alphanumeric code using the numbers 0 to 9 and the letters A-B-C-D-E-F.
The default value is 0000 (four zeros) and indicates the absence of a protection code.
It is possible to cancel the code entry operation at any time by pressing the + and - buttons simultaneously. Once the password has been entered, it is possible to operate the control unit, going in and out of programming for a period of about 10 minutes, in order to allow the adjustment operations and functions testing.
Replacing the code 0000 with any other code enables the protection of the control unit, preventing access to all menus. If you wish to enter a protection code, proceed as follows:
- select the Code menu and press OK.
- The code 0000 is displayed, even if a protection code has already been previously entered.
- Use the + and - keys to change the value of the flashing character.
- The OK key confirms the flashing character and moves on to the next one.
- After entering the 4 characters, a confirmation message “CONF” appears.
- after a few seconds the code 0000 is displayed again.
- it is necessary to reconfirm the previously entered protection code in order to avoid unintentional entries.

If the code corresponds to the previous one, an “OK” confirmation message is displayed.
The control unit automatically exits the programming phase, and to access the menus again it will be necessary to enter the stored protection code.
IMPORTANT: NOTE the protection code and KEEP IT IN A SAFE PLACE for future maintenance. To remove a code from a protected control unit, it is necessary to enter programming mode with the password and reset the code to the default value 0000. IF THE CODE IS LOST, IT IS NECESSARY TO CONTACT THE AUTHORISED TECHNICAL SERVICE CENTRE FOR A TOTAL RESET OF THE CONTROL UNIT.

TRANSMITTERS REMOTE LEARNING

If you have a transmitter already stored in the receiver, it is possible to carry out radio remote learning (without having to access the control unit).
IMPORTANT: The procedure must be carried out with the bollard down during the TCA break.
Proceed as follows:
1 Press the hidden key of the transmitter already stored.
2 Press, within 5s, the key of the transmitter already stored corresponding to the channel to associate with the new transmitter. The flashing light comes on.
3 Press, within 10s, the hidden key of the new transmitter.
4 Press, within 5s, the key of the new transmitter to associate with the channel chosen in point 2. The flashing light goes out.
5 The receiver memorises the new transmitter and immediately exits programming.

OPTIONAL BOARD CP.BL (FIG.10)

Optional 230Vac power supply board that identifies the position of the bollard through STATUS to control the LEDs signalling the bollard and the buzzers.
Fix the board in place using screws V1 and V2 (Fig. 10).
Proceed to connect the MAX.CP control unit and the M30 bollard as shown in the diagram.
The board has two dip-switches to set the operating mode when the bollard is fully raised:

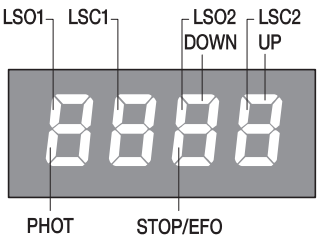
DIP 1 ON	DIP 2 ON	Fixed access LEDs
DIP 1 ON	DIP 2 OFF	Normal flashing LEDs (200ms on/ 200ms off)
DIP 1 OFF	DIP 2 ON	Fast flashing LEDs (100ms on/ 100ms off)
DIP 1 OFF	DIP 2 OFF	Slow flashing LEDs (500ms on/ 500ms off)

DIAGNOSTICS

During normal operation, the LCD display shows the status of the inputs and outputs as shown in the diagram opposite. Each activation of an input/output corresponds to the switching on of the corresponding segment of the LCD display.
The way the LSO1/LSC1/LSO2/LSC2 segments flash indicates the operating mode (Logic NLSW).

2 flashes with pause:
Stop on mechanical stops, magnetic limit switches are not used.
Logic NLSW=ON - timed operation.

No flashing (steady on):
Operation with magnetic limit switches. Logic NLSW:OFF.



DISPOSAL

If the product is taken out of service, it is necessary to follow the legal provisions in force at the time with regard to the separate disposal and recycling of the various components (metals, plastics, electrical cables, etc.); it is advisable to contact your installer or a specialised company authorised for this purpose.

Dichiarazione di Conformità UE (DoC)

Nome del produttore: **Rise S.r.l**
Indirizzo: **Via del Capitello, 45 - 36066 Sandrigo (VI) - Italia**
Telefono: **+39 0444 751401**
Indirizzo e-mail: **info@riseweb.it**

Dichiara che il documento è rilasciato sotto la propria responsabilità e appartiene al seguente prodotto:

Tipo di prodotto: **Centrale di comando 230Vac**
Modello/Tipo: **MAX.CP**

Il prodotto sopraindicato risulta conforme alle disposizioni imposte dale seguenti direttive:

Direttiva 2014/53/EU
Direttiva 2011/65/EU

Sono state applicate le norme armonizzate e le specifiche tecniche descritte di seguito:

ETSI EN 300 220-1 V3.1.1
ETSI EN 300 220-2 V3.1.1
ETSI EN 301 489-1 V2.1.1
ETSI EN 301 489-3 V2.1.1
EN 61000-6-2:2005, EN 61000-6-3:2007 + A1:2011
EN 60335-1:2012 + A11:2014; EN 60335-2-103:2015
50581:2012

Il Certificato di Conformità di questo documento corrisponde all'ultima revisione disponibile al momento della stampa e può risultare differente per esigenze editoriali dall'originale disponibile presso il produttore.

Benincà Luigi, Responsabile legale.
Velo d'Astico, 13/09/2021.

EU Declaration of Conformity (DOC)

Manufacturer's name: **Rise S.r.l**
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Declare that the DOC is issued under our sole responsibility and belongs to the following product:

Model/Product: **230Vac Control Unit**
Type: **MAX.CP**

The object of the declaration described above is in conformity with the relevant Union harmonization legislation:

Direttiva 2014/53/EU
Direttiva 2011/65/EU

The following harmonized standards and technical specifications have been applied:

ETSI EN 300 220-1 V3.1.1
ETSI EN 300 220-2 V3.1.1
ETSI EN 301 489-1 V2.1.1
ETSI EN 301 489-3 V2.1.1
EN 61000-6-2:2005, EN 61000-6-3:2007 + A1:2011
EN 60335-1:2012 + A11:2014; EN 60335-2-103:2015
50581:2012

The Certificate of Conformity in this document corresponds to the latest revision available at the time of printing and may differ for editorial reasons from the original available from the manufacturer.

Benincà Luigi, Responsabile legale.
Velo d'Astico, 13/09/2021.