

INSTALLAZIONE VELOCE-QUICK INSTALLATION-INSTALLATION RAPIDE SCHNELLINSTALLATION-INSTALACION RAAPIDA - SNELLE INSTALLATIE



## LUX G BT

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SUB BT

inv.direz. ap / open in other direct.
inv.sens.ouv / inv richt offnung inv.direcc.ap./ Omkering openingsrichting:

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inv.direz. ap / open in other direct
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1 (EHL)



| PRESET | DEFAULT | Rr | 5 r | Rc | 5 c | and |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PARAMETERS |  |  |  |  |  |  |
| Motor 2 opening delay time [s] | 3 | 3 | 3 | 3 | 3 | 3 |
| Motor 1 closing delay time [s] | 3 | 3 | 3 | 3 | 3 | 3 |
| Automatic closing time [s] | 10 | 10 | 10 | 10 | 10 | 10 |
| Time-to-clear traffic light zone [s] | 40 | 40 | 40 | 40 | 40 | 40 |
| Slow-down distance during opening [\%] | 10 | 10 | 10 | 10 | 10 | 10 |
| Slow-down distance during closing [\%] | 10 | 10 | 10 | 10 | 10 | 10 |
| Deceleration distance [\%] | 15 | 15 | 15 | 15 | 15 | 15 |
| Leaf force during opening [\%] | 50 | 50 | 50 | 50 | 50 | 50 |
| Leaf force during closing [\%] | 50 | 50 | 50 | 50 | 50 | 50 |
| Opening speed [\%\} | 99 | 99 | 99 | 99 | 99 | 99 |
| Closing speed [\%] | 99 | 99 | 99 | 99 | 99 | 99 |
| Slow-down speed [\%] | 25 | 25 | 25 | 25 | 25 | 25 |
| LOGIC |  |  |  |  |  |  |
| Motor type | 0 | 1 | 1 | 1 | / | 1 |
| Automatic Closing Time | 0 | 1 | 0 | 1 | 0 | 0 |
| Fast closing | 0 | 0 | 0 | 0 | 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 |
| Block pulses during TCA | 0 | 0 | 0 | 0 | 0 | 0 |
| Block pulses during closing | 0 | 0 | 0 | 0 | 0 | 0 |
| Hammer during opening | 0 | 0 | 0 | 0 | 0 | 0 |
| Hammer during closing | 0 | 0 | 0 | 0 | 0 | 0 |
| Stop maintenance | 0 | 0 | 0 | 0 | 0 | 0 |
| Closing limit switch pressure | 0 | 0 | 0 | 0 | 0 | 0 |
| ICE feature | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 motor active | 0 | / | 1 | / | 1 | 1 |
| Open in other direction | 0 | 1 | 1 | 1 | 1 | 1 |
| SAFE 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| SAFE 2 | 6 | / | / | / | / | / |
| SAFE 3 | 2 | / | $/$ | / | / | / |
| SAFE 4 | 4 | / | $/$ | / | / | 1 |
| SAFE 5 | 0 | / | 1 | / | 1 | 1 |
| SAFE 6 | 6 | 1 | 1 | 1 | 1 | 1 |
| IC 1 | 0 | / | $/$ | / | / | 1 |
| IC 2 | 4 | 1 | 1 | / | 1 | 1 |
| IC 3 | 2 | / | / | / | / | / |
| IC 4 | 3 | / | / | / | / | / |
| AUX 1 | 3 | / | $/$ | / | $/$ | / |
| AUX 2 | 1 | / | / | / | / | / |
| AUX 3 | 0 | / | / | / | 1 | / |
| Type of lock. | 0 | 1 | 1 | 1 | 1 | 1 |
| Fixed code | 0 | 0 | 0 | 0 | 0 | 0 |
| Transmitter programming | 1 | 1 | 1 | 1 | 1 | 0 |
| Serial mode | 0 | 0 | 0 | 0 | 0 | 0 |
| Address | 0 | 0 | 0 | 0 | 0 | 0 |
| EXPI1 | 1 | / | / | / | / | / |
| EXPI2 | 0 | / | / | / | 1 | 1 |
| EXPO1 | 9 | 1 | 1 | 1 | 1 | 1 |
| EXPO2 | 9 | / | 1 | 1 | 1 | 1 |
| Traffic light pre-flashing | 0 | 0 | 0 | 0 | 0 | 0 |
| Steadily lit red light | 0 | 0 | 0 | 0 | 0 | 0 |





## 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 ad dition 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.
-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 installthis 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 meets code requirements.
-Make sure that upline from the mains power supply there is a residual current circuit breaker that trips at no more than 0.03 A 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.
-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 $5 \times 1.5 \mathrm{~mm}^{2}$ or $4 \times 1.5 \mathrm{~mm}^{2}$ when dealing with threephase power supplies or $3 \times 1.5 \mathrm{~mm}^{2}$ for single-phase supplies (by way of example, type H05VV-F cable can be used with a cross-sectional area of $4 \times 1.5 \mathrm{~mm}^{2}$ ). To connect auxiliary equipment, use wires with a cross-sectional area of at least $0.5 \mathrm{~mm}^{2}$. - 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. -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


## 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. There are no particular hazards or risks involved in scrapping the automated system. For the purpose of recycling, it is best to separate dismantled parts into like materials (electrical parts - copper - aluminium - plastic - etc.).

## 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.

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

[^0]| Maximum motor power | $180 \mathrm{~W}+180 \mathrm{~W}(24 \mathrm{~V}=-)$ |
| :--- | :--- |
| Accessories power supply | $24 \mathrm{~V} \sim$（demand max．1A） <br> $24 \mathrm{~V} \sim$ safe |
| AUX 1 | NO 220－230V～powered contact（max．5A） |
| AUX 2 | NO contact（220－230V～／max．5A） |
| AUX 3 | NO contact（24V～／max．1A） |
| LOCK | Output for 12／24V＝－solenoid lock： <br> Solenoid latch（max．30 W） <br> Magnetic（max．15 W） |
| Flashing light | 24V～max．25W |
| Dimensions | see Fig．B |
| Fuses | see Fig．C |
| $\mathrm{N}^{\circ}$ of combinations | 4 billion |
| Max．n of transmitters that can be memorized | 63 |

other voltages to order）
Usable transmitter versions：
All ROLLING CODE transmitters compatible with（（ER－Ready））

## 4）TUBE ARRANGEMENT Fi g．A

## 5）TERMINAL BOARD WIRING Fig．C

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 othe or they must be suitably insulated with at least 1 mm of additional insulation． Wires must be secured with additional fastening near the terminals，using devices such as cable clamps．
All connecting cables must be kept far enough away from the dissipater．

|  | Terminal | Definition | Description |
| :---: | :---: | :---: | :---: |
|  | L | LINE | Single－phase power supply $220-230 \mathrm{~V} 50 / 60 \mathrm{~Hz}$（ ${ }^{*}$ ） |
|  | N | NEUTRAL |  |
|  | JP5 | TRANSF PRIM | Transformer primary winding connection，220－230V． |
|  | JP7 |  |  |
|  | JP21 | TRANSF SEC | Board power supply： <br> 24V～Transformer secondary winding <br> $24 \mathrm{~V}=$ Buffer battery power supply |
| $\begin{aligned} & \text { ⿳亠丷厂犬 } \\ & \stackrel{0}{0} \end{aligned}$ | 10 | MOT1＋ | Connection motor 1．Time lag during closing． Check connections shown in Fig．E |
|  | 11 | MOT1－ |  |
|  | 14 | MOT2＋ | Connection motor 2．Time lag during opening． Check connections shown in Fig．E |
|  | 15 | MOT2－ |  |
|  | 20 | LIGHT 24v | Flashing light 24V output max．25W． |
|  | 21 |  |  |
|  | 22 | $\begin{aligned} & \text { AUX 1- } \\ & \text { 220-230V~ } \\ & \text { POWFRED } \end{aligned}$ | AUX 1 configurable output－Default setting ZONE LIGHT Output． <br> 2ND RADIO CHANNEL／SCA GATE OPEN LIGHT／COURTESY LIGHT／ZONE LIGHT／STAIR LIGHT／GATE OPEN ALARM／FLASHING LIGHT／ <br> SOLENOID LATCH／MAGNETIC LOCK． <br> Refer to＂AUX output configuration＂table． |
|  | 23 |  |  |
|  | 24 | AUX 2 －FREE CONTACT （N．O．） （Max．220－230V 5A） | AUX 2 configurable output－Default setting SCA GATE OPEN LIGHT Output． <br> 2ND RADIO CHANNEL／SCA GATE OPEN LIGHT／COURTESY LIGHT command／ZONE LIGHT command／STAIR LIGHT／GATE OPEN ALARM／FLASHING LIGHT／SOLENOID LATCH／MAGNETIC LOCK． <br> Refer to＂AUX output configuration＂table． |
|  | 25 |  |  |
|  | 26 27 | $\begin{gathered} \text { AUX } 3 \text { - FREE } \\ \text { CONTACT } \\ \text { (N.O.) } \\ \text { (Max. } 24 \mathrm{~V} 1 \mathrm{~A}) \\ \hline \end{gathered}$ | AUX 3 configurable output－Default setting 2ND RADIO CHANNEL Output． <br> 2ND RADIO CHANNEL／SCA GATE OPEN LIGHT／COURTESY LIGHT command／ZONE LIGHT command／STAIR LIGHT／GATE OPEN ALARM／FLASHING LIGHT／SOLENOID LATCH／MAGNETIC LOCK． <br> Refer to＂AUX output configuration＂table． |
|  | 28 | LOCK 12V／24＝－－ | Type of lock logic $=0-12 \mathrm{~V}=-$－solenoid latch output（max．30W）．Output activated with a pulse each time gate is opened． |
|  |  |  | Type of lock logic＝1－12V＝－－magnetic lock output（max．15W）．Output activated when gate is closed． |
|  | 29 |  | Type of lock logic＝2－24V＝－－solenoid latch output（max．30W）．Output activated with a pulse each time gate is opened． |
|  |  |  | Type of lock logic＝3－24V＝－－magnetic lock output（max．15W）．Output activated when gate is closed． |
|  | 41 | ＋REF SWE | Limit switch common |
|  | 42 | SWC 1 | Motor 1 closing limit switch SWC1（N．C．）． |
|  | 43 | SWO 1 | Motor 1 opening limit switch SWO1（N．C．）． |
|  | 44 | SWC 2 | Motor 2 closing limit switch SWC2（N．C．）． |
|  | 45 | SWO 2 | Motor 2 opening limit switch SWO2（N．C．）． |
|  | 42 | SW 1 | Limit switch control motor 1. <br> For actuators with single－wire limit switch control． |
|  | 43 | SW 2 | Limit switch control motor 2. <br> For actuators with single－wire limit switch control． |

INSTALLATION MANUAL

|  | Terminal | Definition | Description |
| :---: | :---: | :---: | :---: |
|  | 41 | + REF SWE | Limit switch common |
|  | 42 | SW 1 | Limit switch control motor 1. |
|  | 43 | SW 2 | Limit switch control motor 2. |
|  | 50 | $24 \mathrm{~V}-$ | Accessories power supply output. |
|  | 51 | $24 \mathrm{~V}+$ |  |
|  | 52 | 24 V safe+ | Tested safety device power supply output (photocell transmitter and safety edge transmitter). Output active only during operating cycle. |
| $\begin{aligned} & \text { n } \\ & \text { C } \\ & \text { त } \\ & E \\ & 0 \\ & 0 \end{aligned}$ | 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. |
|  | 63 | Common | IC 3 and IC 4 inputs common |
|  | 64 | IC 3 | Configurable command input 3 (N.O.) - Default OPEN. START E / START I / OPEN / CLOSE / PED / TIMER / TIMER PED Refer to the "Command input configuration" table. |
|  | 65 | IC 4 | Configurable command input 4 (N.O.) - Default CLOSE. 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 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. <br> PHOT / PHOT TEST / PHOT OP / PHOT OP TEST / PHOT CL / PHOT CL TEST / BAR / BAR TEST / BAR 8K2 <br> Refer to the "Safety input configuration" table. |
|  | 75 | FAULT 2 | Test input for safety devices connected to SAFE 2. |
|  | 76 | Common | SAFE 3 and SAFE 4 inputs common |
|  | 77 | SAFE 3 | Configurable safety input 3 (N.C.) - Default PHOT OP. <br> PHOT / PHOT TEST / PHOT OP / PHOT OP TEST / PHOT CL / PHOT CL TEST / BAR / BAR TEST / BAR 8K2 <br> Refer to the "Safety input configuration" table. |
|  | 78 | FAULT 3 | Test input for safety devices connected to SAFE 3. |
|  | 79 | SAFE 4 | ```Configurable safety input 4 (N.C.) - Default PHOT CL. PHOT / PHOT TEST / PHOT OP / PHOT OP TEST / PHOT CL / PHOT CL TEST / BAR / BAR TEST / BAR 8K2 Refer to the "Safety input configuration" table.``` |
|  | 80 | FAULT 4 | Test input for safety devices connected to SAFE 4. |
|  | 81 | Common | SAFE 5 and SAFE 6 inputs common |
|  | 82 | SAFE 5 | ```Configurable safety input 5 (N.C.) - Default PHOT. PHOT / PHOT TEST / PHOT OP / PHOT OP TEST / PHOT CL / PHOT CL TEST / BAR / BAR TEST / BAR 8K2 Refer to the "Safety input configuration" table.``` |
|  | 83 | FAULT 5 | Test input for safety devices connected to SAFE 5. |
|  | 84 | SAFE 6 | ```Configurable safety input 6 (N.C.) - Default BAR. PHOT / PHOT TEST / PHOT OP / PHOT OP TEST / PHOT CL / PHOT CL TEST / BAR / BAR TEST / BAR 8K2 Refer to the "Safety input configuration" table.``` |
|  | 85 | FAULT 6 | Test input for safety devices connected to SAFE 6. |
|  | Y | ANTENNA | Antenna input. <br> Use an antenna tuned to 433 MHz . 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 $=0-2$ ND RADIO CHANNEL output. <br> Contact stays closed for 1 s when 2 nd radio channel is activated. |  |  |  |
| Aux logic $=1$ - SCA GATE OPEN LIGHToutput. <br> 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. <br> Contact stays closed for 1 second at start of operation. |  |  |  |
| Aux logic=5-GATE OPEN ALARM output. <br> 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. <br> Contact stays closed for 2 seconds each time gate is opened. |  |  |  |
| Aux logic $=8$ - MAGNETIC LOCK output. Contact stays closed while gate is closed. |  |  |  |
| Command input configuration |  |  |  |
| IC logic= 0 - Input configured as Start E. Operation according to StEP-by-5tEP Mou. logic. External start for traffic light control. |  |  |  |

## INSTALLATION MANUAL

IC logic= 1 - Input configured as Start I. Operation according to 5tEP-by-5tEP flou. logic. Internal start for traffic light control.
C 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 $5 t E P-b y-5 t E P$. logic
IC logic= 5 - Input configured as Timer.
Operation same as open except closing is guaranteed even after a mains power outage.
C 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.F, 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.F, 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.F, 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.F, 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.F, 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.F, 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.F, 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.F, 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.F, ref.5). Input for resistive edge 8K2.
The command reverses movement for 2 sec .
(*) If "D" type devices are installed (as defined by EN12453), connect in unverified mode, foresee mandatory maintenance at least every six months.

## 6) MOTOR WIRING Fig. E

7) SAFETY DEVICES

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

## 7.1) TESTED DEVICES Fig. $F$

7.2) CONNECTION OF 1PAIR OF NON-TESTED PHOTOCELLS FIG.D
8) CALLING UP MENUS: FIG. 1

## 8.1) PARAMETERS MENU (PRrR $)^{(P A R A M E T E R S ~ T A B L E ~ " A ") ~}$

8.2) LOGIC MENU (Lóar) (LOGIC TABLE"B")
8.3) RADIO MENU ( - Rd '0) (RADIO TABLE "C")

MPORTANT NOTE: THE FIRST TRANSMITTER MEMORIZED MUST BE IDENTIFIED BY ATTACHING THE KEY LABEL (MASTER).
In the event of manual programming, the first transmitter assigns the RECEIVER'S KEY CODE: this code is required to subsequently clone the radio transmitters.
The Clonix built-in on-board receiver also has a number of important advanced features:

- Cloning of master transmitter (rolling code or fixed code).
- Cloning to replace transmitters already entered in receiver.
- Transmitter database management.

Receiver community management.
To use these advanced features, refer to the universal handheld programmer's instructions and to the general receiver programming guide.
8.4) DEFAULT MENU (dEFR䜣t)

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

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

## 8.6) AUTOSET MENU (RULoSEL)

- Launch an autoset operation by going to the relevant menu.
- As soon as you press the OK button, the ${ }^{n}$..........." 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.
Once this operation is complete, the control unit will have automatically set the optimum torquevalues. Checkthem and, where necessary, edit them as described in the programming section.

[^1]1. Run the AUTOSET cycle (*)
2. Check the impact forces:ifthey fall within the limits $\left({ }^{* *}\right)$ 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

## 8.8) LIMIT SWITCH ADJUSTMENT MENU (L.5L Rd $\mathrm{A}^{\prime}$ )

Used to adjust limit switches for motors featuring encoders
The menu is enabled with the following motors: LUX BT, LUX G BT. In all other cases, the "not RuR iLBLE" message is displayed.
NOTE: these operations must be performed in deadman mode at reduced speed and without the safety devices operating. If logic mode" $\mid$ Rot. Rct" is set, only messages relating to motor 1 will be displayed ("oP円 !"and "cLif l").

## 8.9) STATISTICS MENU

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.

### 8.10) PASSWORD MENU

Used to set a password for the board's wireless programming.

## 9) CLOSING LIMIT SWITCH PRESSURE Fig. G Ref. A-B <br> OPENING DIRECTION Fig. G Ref. C-D

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

## WARNING! Incorrect settings can result in damage to property and injury to people and animals. <br> 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. <br> Impact forces can be reduced by using deformable edges. <br> 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).

## 11) U-LINK OPTIONAL MODULES

Refer to the U-link instructions for the modules.

TABLE "A" - PARAMETERS MENU - (PRr PR )

| Parameter | min. | max. | Default | Personal | Definition | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| opEn dELRY $t$ IRE | 0 | 10 | 3 |  | Motor 2 opening delay time [s] | Motor 2 opening delay time with respect to motor 1. |
| $\begin{gathered} \text { cL5 dELRY } \\ \varepsilon \cap E \end{gathered}$ | 0 | 25 | 3 |  | Motor 1 closing delay time [s] | Motor 1 closing delay time with respect to motor 2. |
| tcR | 0 | 120 | 10 |  | Automatic closing time [s] | Waiting time before automatic closing. |
| ErF.Lunt.cir.t | 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. |
| op.d 6t.5Lolid | 0 | 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. |
| cL.d 15t.5Loidd | 0 | 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 5 St.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. |
| of.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. <br> The parameter is set automatically by the autoset function. $\qquad$ <br> WARNING: It affects impact force directly: make sure that current safety requirements are met with the set value (*). Install anticrush safety devices where necessary ( ${ }^{* *}$ ). |
| cL5.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. <br> The parameter is set automatically by the autoset function. $\qquad$ <br> WARNING: It affects impact force directly: make sure that current safety requirements are met with the set value (*). Install anticrush 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 5peed | 15 | 99 | 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. |

(*) 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.

INSTALLATION MANUAL
TABLE "B" - LOGIC MENU - (LoĹ ic)

| Logic | Definition | Default | Cross out setting used | Optional extras |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Motar LSPE | Motor type <br> (Set the type of motor connected to the board). | 0 | 0 | Motors not active |  |  |  |  |
|  |  |  | 1 | ELI 250 BT |  |  |  |  |
|  |  |  | 2 | PHOBOS BT |  |  |  |  |
|  |  |  | 3 | IGEA BT |  |  |  |  |
|  |  |  | 4 | LUX BT |  |  |  |  |
|  |  |  | 5 | LUX G BT |  |  |  |  |
|  |  |  | 6 | SUB BT |  |  |  |  |
| LeR | Automatic Closing Time | 0 | 0 | Logic not enabled |  |  |  |  |
|  |  |  | 1 | Switches automatic closing on |  |  |  |  |
| FRSt ci5. | Fast closing | 0 | 0 | Logic not enabled |  |  |  |  |
|  |  |  | 1 | Closes 3 seconds after the photocells are cleared before waiting for the set TCA to elapse. |  |  |  |  |
| $5 t E P-6 y-5 t E P$ <br> fouEfink | Step-by-step movement | 0 | 0 | Inputs configured as Start E, Start I, Ped operate with 4-step logic. Inputs configured as Start E, Start I, Ped operate with 3 -step logic. Pulse during closing reverses movement. | step-by-step mov. |  |  |  |
|  |  |  | 1 |  |  | 2 STEP | 3 STEP | 4 STEP |
|  |  |  |  |  | CLOSED | OPENS | OPENS | OPENS |
|  |  |  | 2 | Inputs configured as Start E, Start I, Ped operate with 2-step logic. Movement reverses with each pulse. | $\begin{aligned} & \text { DURING } \\ & \text { CLOSING } \end{aligned}$ |  |  | STOPS |
|  |  |  |  |  | OPEN | CLOSES | CLOSES | CLOSES |
|  |  |  |  |  | DURING OPENING |  | STOP + TCA | STOP + TCA |
|  |  |  |  |  | AFTER STOP | OPENS | OPENS | OPENS |
| Pre-RLRrit | 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-ta-riin | Deadman | 0 | 0 | Pulse operation. |  |  |  |  |
|  |  |  | 1 | Deadman mode. <br> Input 61 is configured as OPEN UP. <br> Input 62 is configured as CLOSE UP. <br> Operation continues as long as the OPEN UP or CLOSE UP keys are held down. |  |  |  |  |
|  |  |  | 2 | Emergency Deadman mode. Usually pulse operation. <br> If the board fails the safety device tests (photocell or safety edge, ErOx) 3 times in a row, the device is switched to Deadman mode, which will stay active until the OPEN UP or CLOSE UP keys are released. Input 61 is configured as OPEN UP. <br> Input 62 is configured as CLOSE UP. <br> WARNING: with the device set to Emergency Deadman mode, safety devices are not enabled. |  |  |  |  |
| bl 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. |  |  |  |  |
| bl tcr | 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. |  |  |  |  |
| bL cLo5E | 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. |  |  |  |  |
| rRif blou c.ap | Hammer during opening | 0 | 0 | Logic not enabled |  |  |  |  |
|  |  |  | 1 | Before opening completely, the gate pushes for approx. 2 seconds as it closes. This allows the solenoid lock to be released more easily. <br> IMPORTANT - Do not use this function if suitable mechanical stops are not in place. |  |  |  |  |
| rRif biout c.cl | Hammer during closing | 0 | 0 | Logic not enabled |  |  |  |  |
|  |  |  | 1 | Before closing completely, the gate pushes for approx. 2 seconds as it opens. This allows the solenoid lock to be released more easily. <br> IMPORTANT - Do not use this function if suitable mechanical stops are not in place. |  |  |  |  |
|  | Stop maintenance | 0 | 0 | Logic not enabled |  |  |  |  |
| biac PEr5,5L |  |  | 1 | If motors stay idle in fully open or fully closed position for more than one hour, they are switched on in the direction of the stop for approx. 3 seconds. This operation is performed every hour. NB: In hydraulic motors, this function serves to compensate a possible reduction in the volume of oil due to a drop in temperature during extended pauses, such as during the night, or due to internal leakage. <br> IMPORTANT - Do not use this function if suitable mechanical stops are not in place. |  |  |  |  |

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| Logic | Definition | Default | Cross out setting used | Optional extras |
| :---: | :---: | :---: | :---: | :---: |
| Pre55 5in | Closing limit switch pressure | 0 | 0 | Movement is stopped only when the closing limit switch trips: in this case, the tripping of the closing limit switch must be adjusted accurately (Fig.G Ref.B). |
|  |  |  | 1 | Use when there is a mechanical stop in closed position. <br> This function allows leaves to press against the mechanical stop without the Amperostop sensor interpreting this as an obstacle. <br> Thus the rod continues its stroke for a few seconds after meeting the closing limit switch or as far as the mechanical stop. In this way, the leaves come to rest perfectly against the stop by allowing the closing limit switches to trip slightly earlier (Fig.G Ref.A). |
| $16 E$ | 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. |
| i Mat.an | 1 motor active | 0 | 0 | Both motors active (2 leaves). |
|  |  |  | 1 | Only motor 1 active (1 leaf). |
| opEn in other dirEct. | Open in other direction | 0 | 0 | Standard operating mode (See Fig.G Ref. C). |
|  |  |  | 1 | Opens in other direction to standard operating mode (See Fig. G Ref.D) |
| SRFE | 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). |
| 5RFE 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. |
| SAFE 3 | Configuration of safety input SAFE 3. 77 | 2 | 0 | Input configured as Phot (photocell). |
|  |  |  | 1 | Input configured as Phot test (tested photocell). |
| SAFE 4 | Configuration of safety input SAFE 4. 79 | 4 | 2 | Input configured as Phot op (photocell active during opening only). |
|  |  |  | 3 | Input configured as Phot op test (tested photocell active during opening only). |
| SRFE 5 | Configuration of safety input SAFE 4. 79 | 0 | 4 | Input configured as Phot cl (photocell active during closing only). |
|  |  |  | 5 | Input configured as Phot cl test (tested photocell active during closing only). |
| SRFE 5 | Configuration of safety input SAFE 6. 84 | 6 | 6 | Input configured as Bar, safety edge. |
|  |  |  | 7 | Input configured as Bar, tested safety edge. |
| 151 | Configuration of command input IC 1. 61 | 0 | 0 | Input configured as Start E. |
|  |  |  | 1 | Input configured as Start I. |
| 152 | Configuration of command input IC 2. 62 | 4 | 2 | Input configured as Open. |
|  |  |  | 3 | Input configured as Close. |
| 153 | Configuration of command input IC 3. 64 | 2 | 4 | Input configured as Ped. |
|  |  |  | 5 | Input configured as Timer. |
| 154 | Configuration of command input IC 4. 65 | 3 | 6 | Input configured as Timer Pedestrian. |


| INSTALLATION MANUAL |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Logic | Definition | Default | Cross out setting used | Optional extras |
| RLIH | Configuration of AUX 1 output. 22-23 | 3 | 0 | Output configured as 2nd Radio Channel. |
|  |  |  | 1 | Output configured as SCA (gate open light). |
|  |  |  | 2 | Output configured as Courtesy Light command. |
| RUH 2 | Configuration of AUX 2 output. 24-25 | 1 | 3 | Output configured as Zone Light command. |
|  |  |  | 4 | Output configured as Stair Light |
|  |  |  | 5 | Output configured as Alarm |
| RiH 3 | Configuration of AUX 3 output. 26-37 | 0 | 6 | Output configured as Flashing light |
|  |  |  | 7 | Output configured as Latch |
|  |  |  | 8 | Output configured as Magnetic lock |
| Lach | Type of lock.28-29 | 0 | 0 | Output confiqured as 12V=-- solenoid latch. |
|  |  |  | 1 | Output configured as 12V=-- magnetic lock. |
|  |  |  | 2 | Output configured as $24 \mathrm{~V}=-$ solenoid latch. |
|  |  |  | 3 | Output configured as 24V $=-$ - magnetic lock. |
| F HEd 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. |
| rha so Prou | Transmitter programming | 1 | 0 | Disables wireless memorizing of transmitters. <br> Transmitters are memorized only using the relevant Radio menu. <br> IMPORTANT: Disables the automatic addition of new transmitters, clones and replays. |
|  |  |  | 1 | Enables wireless memorizing of transmitters: <br> 1- Press in sequence the hidden key and normal key (T1-T2-T3-T4) of a transmitter that has already been memorized in standard mode via the radio menu. <br> 2- Press within 10s the hidden key and normal key (T1-T2-T3-T4) of a transmitter to be memorized. The receiver exits programming mode after 10s: you can use this time to enter other new transmitters. This mode does not require access to the control panel. <br> IMPORTANT: Enables the automatic addition of new transmitters, clones and replays. |
| 5Er IRL ModE | Serial mode <br> (Identifies how board is configured in a 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. |
| RoddrE55 | Address | 0 | [___] | Identifies board address from 0 to 127 in a local network connection. (see U-LINK OPTIONAL MODULES section) |
| EHP 1 | 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 Phot test safety (tested photocell). <br> Input 3 (EXPI2) on input/output expansion board is switched automatically to safety device test input, EXPFAULT1. |
|  |  |  | 12 | Input configured as Phot op test safety (tested photocell active during opening only). Input 3 (EXPI2) on input/output expansion board is switched automatically to safety device test input, EXPFAULT1. |
|  |  |  | 13 | Input configured as Phot cl test safety (tested photocell active during closing only). Input 3 (EXPI2) on input/output expansion board is switched automatically to safety device test input, EXPFAULT1. |
|  |  |  | 14 | Input configured as Bar safety (tested safety edge). <br> Input 3 (EXPI2) on input/output expansion board is switched automatically to safety device test input, EXPFAULT1. |


| Logic | Definition | Default | Cross out setting used | Optional extras |
| :---: | :---: | :---: | :---: | :---: |
| EHP 2 | 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). |
| EHPO | Configuration of EXPO2 output on input-output expansion board 4-5 | 9 | 0 | Output configured as $2^{\text {nd }}$ 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. |
| EHPOL | Configuration of EXPO2 output on input-output expansion board 6-7 | 9 | 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 Traffic Light control with TLB board. |
| trRFF is L ELit PrEFLRSh iní | Traffic light preflashing | 0 | 0 | Pre-flashing switched off. |
|  |  |  | 1 | Red lights flash, for 3 seconds, at start of operation. |
| LrRFF is L wht rEd LRMP RLLRYY5 on | Steadily lit red light | 0 | 0 | Red lights off when gate closed. |
|  |  |  | 1 | Red lights on when gate closed. |

TABLE "C" - RADIO MENU (rRd ı)

| Logic | Description |
| :---: | :--- |
| Rdd $5 t R r t$ | Add Start Key <br> associates the desired key with the Start command |
| Rdd 2ch | Add 2ch Key <br> associates the desired key with the 2nd radio channel command. Associates the desired key with the 2nd radio channel command. If no output <br> is configured as 2nd Radio Channel Output, the 2nd radio channel controls the pedestrian opening. |
| ErR5E 54 | Erase List <br> ! WARNING! Erases all memorized transmitters from the receiver's memory. |
| Lad rH | Read receiver code <br> Displays receiver code required for cloning transmitters. |
| Lit | ON = Enables remote programming of cards via a previously memorized W LINK transmitter. <br> It remains enabled for 3 minutes from the time the W LINK transmitter is last pressed. <br> OFF= W LINK programming disabled. |


[^0]:    ## 2）GENERAL INFORMATION

    The THALIA P control panel comes with standard factory settings．Any change must be made using the programmer with built－in display or universal handheld ${ }^{\circ}$ programmer．The Control unit completely supports the EELINK protocol
    Its main features are：
    －－Control of 1 or 224 V BT motors
    Note： 2 motors of the same type must be used．
    Electronic torque control with obstacle detection
    Limit switch control inputs based on motor selected
    －Separate inputs for safety devices
    Built－in radio receiver rolling code with transmitter cloning．
    The board has a terminal strip of the removable kind to make maintenance or replacement easier．It comes with a series of prewired jumpers to make the installer＇s job on site easier．
    The jumpers concern terminals：70－71，70－72，70－74，76－77，76－79，81－82， 81－84．If the above－mentioned terminals are being used，remove the rel－ evant jumpers．

    ## TESTING

    The THALIA P panel controls（checks）the start relays and safety devices（pho－ tocells）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．

    ## 3）TECHNICAL SPECIFICATIONS

    | Power supply | $220-230 \mathrm{~V} 50 / 60 \mathrm{~Hz}\left(^{*}\right)$ |
    | :--- | :--- |
    | Low voltage／mains insulation | $>2 \mathrm{MOhm} 500 \mathrm{~V}=-=$ |
    | Operating temperature range | $-10 /+55^{\circ} \mathrm{C}$ |
    | Thermal overload protection | Software |
    | Dielectric rigidity | mains／LV 3750V $\sim$ for 1 minute |
    | Motor output current | max． $7.5 \mathrm{~A}+7.5 \mathrm{~A}$ |
    | Motor relay switching current | 10 A |

[^1]:    A 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. 8.7)INSTALLATION TEST PROCEDURE

