Ultra

ATTUATORE PER CANCELLI SCORREVOLI A CREMAGLIERA
ACTUATOR FOR RACK SLIDING GATES
ACTIONNEUR POUR PORTAILS COULISSANTS A CREMAILLERE
ANTRIEB FÜR ZAHNSTANGEN-SCHIEBETORE
SERVOMOTOR PARA CANCELAS CORREDERAS DE CREMALLERA
ACTUATOR VOOR SCHUIFHEKKEN MET TANDHEUGEL



## ¿ U-LINK



AZIENDA CON SISTEMA DI GESTIONE SERTIFICATO DA DNV GL $=$ ISO $9001=$


FIG. 3


INSTALLAZIONE VELOCE-QUICK INSTALLATION-INSTALLATION RAPIDE SCHNELLINSTALLATION-INSTALACION RÁPIDA - SNELLLE INSTALLATIE



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


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



Fotocellule non verificate（Check ogni 6 mesi） Photocells not checked（Check every 6 months） Photocellules non vérifiées（contrôle tous les 6 mois） Fotozellen nicht überprüft（alle 6 Monate überprüfen） Fotocélulas no controladas（Control cada 6 meses） Fotocellen niet gecontroleerd（Check elke 6 maanden）





| PRESET | DEFAULT | Rr | Sr | Rc | $5 c$ | ind |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PARAMETER |  |  |  |  |  |  |  |  |
| LOGIK |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| TCA | 0 | 1 | 0 | 1 | 0 | 0 |  |  |
| Bewegung Schritt Schritt | 0 | 1 | 0 | 1 | 0 | 0 |  |  |
| Voralarm | 0 | 0 | 0 | 1 | 1 | 0 |  |  |
| Mann anwesend | 0 | 0 | 0 | 0 | 0 | 1 |  |  |
| Blockiert Öffnungsimpulse | 0 | 0 | 0 | 1 | 1 | 0 |  |  |


rEc ：Rechts

Lik5：Links


Rr：Automatikbetrieb，
Wohnbereich
5r：Halbautomatikbetrieb，
Wohnbereich
Rc：Automatikbetrieb，
Hausbereich
5c：Halbautomatikbetrieb，
Hausbereich
ind：Betrieb bei anwesendem
Menschen






ESEMPIO APPLICAZIONE ANTE CONTRAPPOSTE CON 1 PHOT E 2 BAR-SAMPLE APPLICATION WITH OPPOSITE LEAVES WITH 1 PHOT AND 2 BAREXEMPLED'APPLICATION VANTAUX OPPOSÉS AVEC 1 PHOT ET 2 BAR-ANWENDUNGSBEISPIEL EINANDER ENTGEGENGESETZTE TORFLÜGEL MIT 1 PHOT UND 2 BAR EJEMPLO DE APLICACIÓN DE HOJAS CONTRAPUESTAS CON 1 PHOT Y 2 BAR-VOORBEELDTOEPASSING TEGENOVERGESTELDE VLEUGELS MET 1 PHOT EN 2 BAR


- SAFE 2 SLAVE = SAFE 2 MASTER


1






## INSTALLATION MANUAL

1) GENERAL INFORMATION

The DEIMOS 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 O nature and the height and depth adjustment features it offers. The adjustable - electronic torque limiter provides anti-crush safety.Manual emergency operation $\propto_{0}^{\infty}$ 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 |  |  |
| :---: | :---: | :---: |
|  | 400 | 600 |
| Power supply | $\begin{aligned} & 110-120 \mathrm{~V} 50 / 60 \mathrm{~Hz} \\ & 220-230 \mathrm{~V} 50 / 60 \mathrm{~Hz}\left({ }^{*}\right) \end{aligned}$ | $\begin{aligned} & 110-120 \mathrm{~V} 50 / 60 \mathrm{~Hz} \\ & 220-230 \mathrm{~V} 50 / 60 \mathrm{~Hz}\left({ }^{*}\right) \\ & \hline \end{aligned}$ |
| Motor | $24 \mathrm{~V}=-$ | $24 \mathrm{~V}=-\mathrm{l}$ |
| Power input | 50W | 70W |
| Max. current demand | $\begin{aligned} & 0,5 \mathrm{~A}(230 \mathrm{~V} \sim)-1 \mathrm{~A} \\ & (110 \mathrm{~V} \sim) \end{aligned}$ | $\begin{aligned} & 0,5 \mathrm{~A}(230 \mathrm{~V} \sim)-1 \mathrm{~A} \\ & (110 \mathrm{~V} \sim) \end{aligned}$ |
| Pinion module (standard) | 4mm (14 teeth) | 4 mm (14 teeth) |
| Leaf speed (standard) | $12 \mathrm{~m} / \mathrm{min}$ | $12 \mathrm{~m} / \mathrm{min}$ |
| Max. leaf weight-standard** | 4000N ( $\approx 400 \mathrm{~kg}$ ) | $6000 \mathrm{~N}(\approx 600 \mathrm{~kg})$ |
| Pinion module (fast) | 4mm (18 teeth) | 4 mm (18 teeth) |
| Leaf speed (fast) | $15.5 \mathrm{~m} / \mathrm{min}$ | $15.5 \mathrm{~m} / \mathrm{min}$ |
| Max. leaf weight-fast** | 3000 N ( $\approx 300 \mathrm{~kg}$ ) | 3600 N ( $\approx 360 \mathrm{~kg}$ ) |
| Max. torque | 20Nm | 30 Nm |
| Impact reaction | Electronic torque limiter | Electronic torque limiter |
| Lubrication | Lifetime greased | Lifetime greased |
| Manual operation | Lever-operated mechanical release | Lever-operated mechanical release |
| Type of use | intensive | intensive |
| Buffer batteries (optional extras) | Two 12V 1.2Ah batteries | Two 12V 1.2Ah batteries |
| Environmental conditions | from $-20^{\circ} \mathrm{C}$ to $+55^{\circ} \mathrm{C}$ | from $-20^{\circ} \mathrm{C}$ to $+55^{\circ} \mathrm{C}$ |
| Protection rating | IP44 | IP44 |
| Noise level | <70dBA | <70dBA |
| Operator weight | 7 kg ( $\approx 70 \mathrm{~N}$ ) | 7 kg ( $\approx 70 \mathrm{~N}$ ) |
| Dimensions | See Fig. 1 | See Fig. 1 |
| CONTROL UNIT |  |  |
| Low voltage/mains insulation | > 2MOhm 500V =-- |  |
| Operatingtemperaturerange | $-20 /+55^{\circ} \mathrm{C}$ |  |
| Thermal overload protection | Software |  |
| Dielectric rigidity | mains/LV 3750V~ for 1 minute |  |
| Accessories power supply | $\begin{aligned} & \text { 24V~ (demand max. 0,5A) } \\ & 24 \mathrm{~V} \sim \text { safe } \end{aligned}$ |  |
| AUX 0 | NO 24V ~powered contact (max.1A) |  |
| AUX 3 | NO contact (24V~/max.1A) |  |
| Fuses | Fig. G |  |
| Built-in Rolling-Code radio-receiver | frequency 433.92 MHz |  |
| Setting of parameters and options | Universal handheld programmer/LCD display |  |
| $\mathrm{N}^{\circ}$ of combinations | 4 billion |  |
| Max. $\mathrm{n}^{\circ}$ of remotes that can be memorized | 63 |  |

${ }_{* *}^{*}$ ) Special supply voltages to order
Sere are no minimum or maximum dimension restrictions for the guided part that can be used.

Usable transmitter versions:
AII ROLLING CODE transmitter
3) TUBE ARRANGEMENT Fig.A

Install the electrical system referring to the standards in force for electrical systems CEI 64-8, IEC 364, harmonization document HD 384 and other national standards.
4) PREPARATION FOR MOTOR MOUNTING FIG.B

Make a hole in the ground to accommodate the concrete pad, with anchors embedded in the base plate for fastening the gearbox assembly, keeping to the distances featured in FIG.B.

## 5) REMOVING THE COVER Fig.C

Unscrew the relevant two front screws (FIG. C - rif.1)

- Push as illustrated (FIG.C - rif.2 - rif.3) to release the cover from the two rear blocks (FIG.C - rif.3A e FIG.C - rif.3B).
Lift the cover (FIG.C - rif.4).


## 6) MOUNTING THE MOTOR FIG.D

## 7) MOUNTING DRIVE ACCESSORIES FIG.E-E1

Recommended rack types (FIG.J)

## 8) RACK CENTRING WITH RESPECT TO PINION FIG.K-L1-M



## 9) FASTENING LIMIT SWITCH BRACKETS FIG.F

Fastening the limit switches:

- Attach the limit switch bracket to the rack as illustrated in FIG.F ref. 1
-Fasten the magnetic limit switch box to the limit switch bracket with the nuts and screws provided, as illustrated in figure F ref. 2 - F ref.3.
- Fasten the limit switch bracket to the rack by screwing in the two front screws provided FIG.F ref. 4.
When using racks CVZ and CVZ-S, use spacers as illustrated in FIG.J ref. 1
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.F 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.F.
Warning. Do not swap over the limit switch brackets once you have changed the opening direction via the relevant logic


## 10) STOPS FIG.N

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.
Note: the safety edge N1 must be installed so that it is not triggered by the mechanical stops.

## 11) MANUAL RELEASE (See USER GUIDE -FIG.3-). <br> Warning Do not JERK the gate open and closed, instead push it GENTLY to the end of its travel.

## 12) TERMINAL BOARD WIRING Fig. G-P

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.P-ref.P1) and in the grommet (FIG.P-ref.P2), while the earth wire with the yellow/green-coloured sheath must be connected in the relevant terminal (FIG.P-ref.S) and the extra low voltage wires must be run through the relevant grommet (FIG.P ref.P3).

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 different voltages must be kept physically separate from each oth
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 dissipaters.

## 12.1) LOCAL COMMANDS Fig.G

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.

## 13) SAFETY DEVICES

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

## 13.1) TESTED DEVICES Fig.U

## 13.2) CONNECTION OF 1 PAIR OF NON-CHECKED PHOTOCELLS FIG. H1

## 13.3) CONNECTION OF 1 PAIR OF CHECKED PHOTOCELLS FIG. H2

## 14) ACCESS TO THE SIMPLIFIED MENU: FIG. 1

14.1) CALLING UP MENUS: FIG. 2
14.2) PARAMETERS MENU (קR (PR) (PARAMETERS TABLE "A")
14.3) LOGIC MENU (Loí ic) (LOGIC TABLE "B")
14.4) RADIO MENU (rRd io) (RADIO TABLE " C ")

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

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

To use these advanced features, refer to the universal handheld programmer's DEIMOS ULTRA BT A 400 - DEIMOS ULTRA BT A 600-25

INSTALLATION MANUAL

|  | Terminal | Definition | Description |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \frac{\lambda}{0} \\ & \frac{0}{2} \\ & \text { n } \\ & \text { 히 } \\ & 0 \end{aligned}$ | L | LINE | Single-phase power supply 220-230V $\sim 50 / 60 \mathrm{~Hz}$ * |
|  | N | NEUTRAL |  |
|  | JP31 | TRANSF PRIM | Transformer primary winding connection, 220-230V $\sim$. |
|  | JP32 |  |  |
|  | JP13 | TRANSF SEC | Board power supply: <br> 24V~ Transformer secondary winding |
| ºLO | 10 | MOT + | Connection motor 1 |
|  | 11 | MOT - |  |
| $\stackrel{\times}{\frac{x}{3}}$ | 20 | AUX 0-24V POWERED CONTACT <br> (N.O.) (MAX. 1A) | AUX 0 configurable output - Default setting FLASHING LIGHT. <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/ 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. <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/ MAINTENANCE/ FLASHING LIGHT AND MAINTENANCE. Refer to "AUX output configuration" table. |
|  | 27 |  |  |
| 范 | JP10 | Limit switches | Limit switch assembly connection |
|  | 50 | 24V- | Accessories power supply output. |
|  | 51 | $24 \mathrm{~V}+$ |  |
|  | 52 | 24 Vsafe+ | Tested safety device power supply output (photocell transmitter and safety edge transmitter). Output active only during operating cycle. |
| $\begin{aligned} & \text { n } \\ & \frac{E}{\pi} \\ & \underline{E} \\ & \underline{0} \\ & 0 \end{aligned}$ | 60 | Common | IC 1 and IC 2 inputs common |
|  | 61 | IC 1 | Configurable command input 1 (N.O.) - Default STARTE. 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. |
|  | 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 | Ingresso di sicurezza configurabile 1 (N.C.) - Default PHOT. <br> PHOT / PHOT TEST / PHOT OP / PHOT OP TEST / PHOT CL / PHOT CL TEST / BAR / BAR TEST / BAR 8K2 / BAR OP / BAR OP <br> TEST / BAR 8K2 OP/ BAR CL / BAR CL TEST / BAR 8K2 CL <br> Far riferimento alla tabella "Configurazione degli ingressi di sicurezza". |
|  | 73 | FAULT 1 | Test input for safety devices connected to SAFE 1. |
|  | 74 | SAFE 2 | Ingresso di sicurezza configurabile 2 (N.C.) - Default BAR. <br> PHOT / PHOT TEST / PHOT OP / PHOT OP TEST / PHOT CL / PHOT CL TEST / BAR / BAR TEST / BAR 8K2 / BAR OP / BAR OP <br> TEST / BAR 8K2 OP/ BAR CL / BAR CL TEST / BAR 8K2 CL <br> Far riferimento alla tabella "Configurazione degli ingressi di sicurezza". |
|  | 75 | FAULT 2 | Test input for safety devices connected to SAFE 2. |
|  | 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 |  |



Note : If no output is configured as $\mathbf{2 n d}$ Radio Channel Output, the $\mathbf{2 n d}$ radio channel controls the pedestrian opening.


*) If "D" type devices are installed (as defined by EN12453), connect in unverified mode, foresee mandatory maintenance at least every six months.
instructions and to the general receiver programming guide.

## 14.5) DEFAULT MENU ( $d E F R L i L t$ )

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

## 14.6) LANGUAGE MENU (LRnEuRFE)

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

## 14.7) AUTOSET MENU (RLito5Et)

- 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 fuillcycyle (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 tandard 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.


## 14.8)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 $\left({ }^{* *}\right)$ 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 ( ${ }^{\left({ }^{*}\right)}$ ) 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 sureall devices designed to detect obstacleswithin the system'soperating
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

## 14.9) STATISTICS MENU (StRt)

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.

### 14.10) PASSWORD MENU (PR55Lord)

Used to setapasswordforthe board's wireless programming via the U-linknetwork. 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.

## 15) CONNECTION WITH EXPANSION BOARDS AND UNIVERSAL HANDHELD

 PROGRAMMER VERSION > V1.40 (Fig. Q) Refer to specific manual.WARNING! Incorrect settings can result in damage to property and injury to people and animals.

## 16) U-LINK OPTIONAL MODULES

Refer to the U-link instructions for the modules.

## 16.1) REFER TO THE U-LINK MODULE'S INSTRUCTIONS (FIG. R).

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.

## 17)REVERSING THE OPENING DIRECTION (Fig.S)

## 18) RESTORING FACTORY SETTINGS (Fig.T)

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.T ref.1)
- Open the Stop input and press the - and OK keys together (Fig.T ref.2)
- Switch on the board's power (Fig.T ref.3)
-The display will read RST; confirm within 3 sec. by pressing the OK key (Fig.T ref.4) Wait for the procedure to finish (Fig.T ref.5)
Procedure finished (Fig.T ref.6)

TABLE "A" - PARAMETERS MENU - (PRrRח)

| Parameter | min. | max. | Default | Personal | Definition | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LcR | 0 | 120 | 10 |  | Automatic closing time [s] | Waiting time before automatic closing. |
| ErFiLEht. cLr.L | 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. |
| $\begin{aligned} & \text { op.d i5t. } \\ & \text { SLouid } \end{aligned}$ | 1(***) | 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. <br> WARNING: when the display reads "SET", obstacle detection is not active. |
| $\begin{aligned} & \text { ct.d i5t. } \\ & \text { SLouid } \end{aligned}$ | 1(***) | 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. <br> WARNING: when the display reads "SET", obstacle detection is not active. |
| d ISt.dEcEL | 0 | 50 | 15 |  | Deceleration distance [\%] | Deceleration distance (switch from running speed to slow-down speed) for motor(s) both duringopeningandduringclosing, givenasapercentageoftotaltravel.WARNING:Oncethe parameterhasbeenedited,acompleteuninterruptedopening-closingcycleisrequired. WARNING: when the display reads "SET", obstacle detection is not active. |
| PRrt IRL opEn inúu | 10 | 99 | 20 |  | Partial opening [\%] | Partial opening distance as a percentage of total opening following activation of PED pedestrian command. |
| opforcE | 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. <br> 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 (**). |
| cL5Force | 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. <br> 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 (**). |
| of. SLid.forcE | 1 | 99 | 50 |  | Leaf/leaves force during opening during slow-down | "Force exerted by leaf/leaves during opening at slow-down speed." <br> 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. <br> 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 (**). |
| ci5.5Liud. ForcE | 1 | 99 | 50 |  | Leaf/leaves force during closing during slow-down [\%] | "Force exerted by leaf/leaves during closing at slow-down speed." <br> 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. <br> 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 5PEEd | 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. |
| SLoL 5PEEd | 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. |
| TR intenRince | 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.
${ }^{(* * *)}$ If the calculated value is less than $\mathbf{3 0} \mathbf{~ c m}$, it is set to $\mathbf{3 0} \mathbf{~ c m}$.


## INSTALLATION MANUAL

| Logic | Definition | Default | $\begin{aligned} & \text { Cross } \\ & \text { out } \\ & \text { setting } \\ & \text { used } \end{aligned}$ | Optional extras |
| :---: | :---: | :---: | :---: | :---: |
| 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). |
| SRFE 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 BarOP, safety edge with inversion active only while opening. If while closing, the movementstops. |
|  |  |  | 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 BarCL, safety edge with inversion active only while closing. If whileopening, the movementstops. |
|  |  |  | 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. 6 1``` | 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. |
| RLH 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. |
|  |  |  | 4 | Output configured as Stair Light |
| RUH 3 | Configuration of AUX 3 output. 26-37 | 0 | 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. |
| F HHEd 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. |



## INSTALLATION MANUAL

| Logic | Definition | Default | $\begin{aligned} & \text { Cross } \\ & \text { out } \\ & \text { setting } \\ & \text { used } \end{aligned}$ | Optional extras |
| :---: | :---: | :---: | :---: | :---: |
| EHP i2 | 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 $2^{\text {nd }}$ 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. |
| EHPoz | 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 is L tuht PrEFLRSh inú. | Traffic light preflashing | 0 | 0 | Pre-flashing switched off. |
|  |  |  | 1 | Red lights flash, for 3 seconds, at start of operation. |
| ErRFF ic L tuht rEd LRПp RLLRBY5 on | Steadily lit red light | 0 | 0 | Red lights off when gate closed. |
|  |  |  | 1 | Red lights on when gate closed. |

* Only active on FW $\geq 2.10$

TABLE "C" - RADIO MENU (rRd io)

| Logic | Description |
| :---: | :---: |
| Rdd 5thrt | Add Start Key associates the desired key with the Start command |
| Rdd 2ch | Add 2ch Key <br> 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. |
| ErR5E 54 | Erase List WARNING! Erases all memorized transmitters from the receiver's memory. |
| cod rH | Read receiver code <br> Displays receiver code required for cloning transmitters. |
| - K | $\mathbf{O N}=$ 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. |

