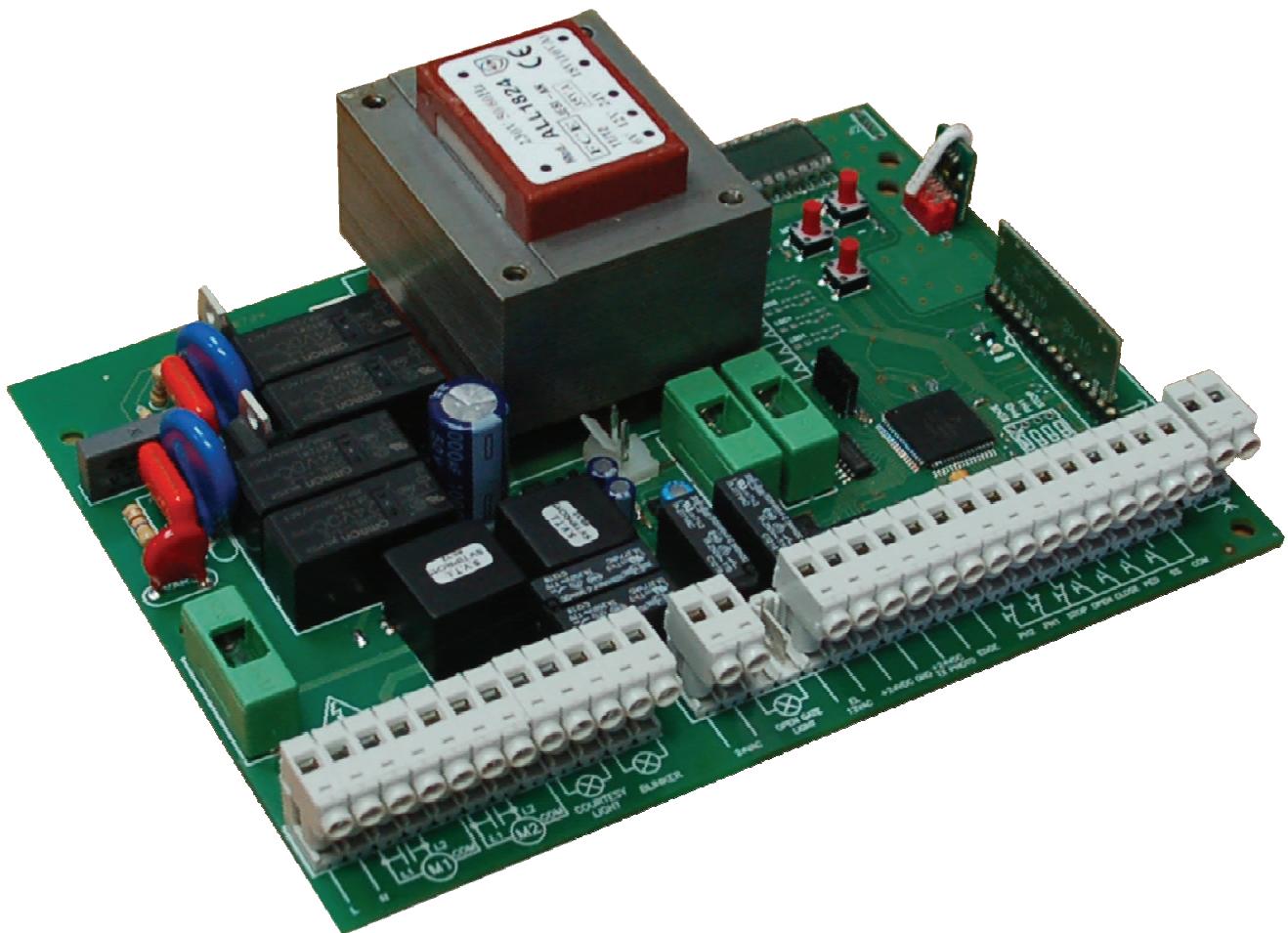


CONTROL UNIT BIOS2

Programmable Control board for wings gates

www.remotecontrolgates.co.uk



Manual for installation



1. Introduzione

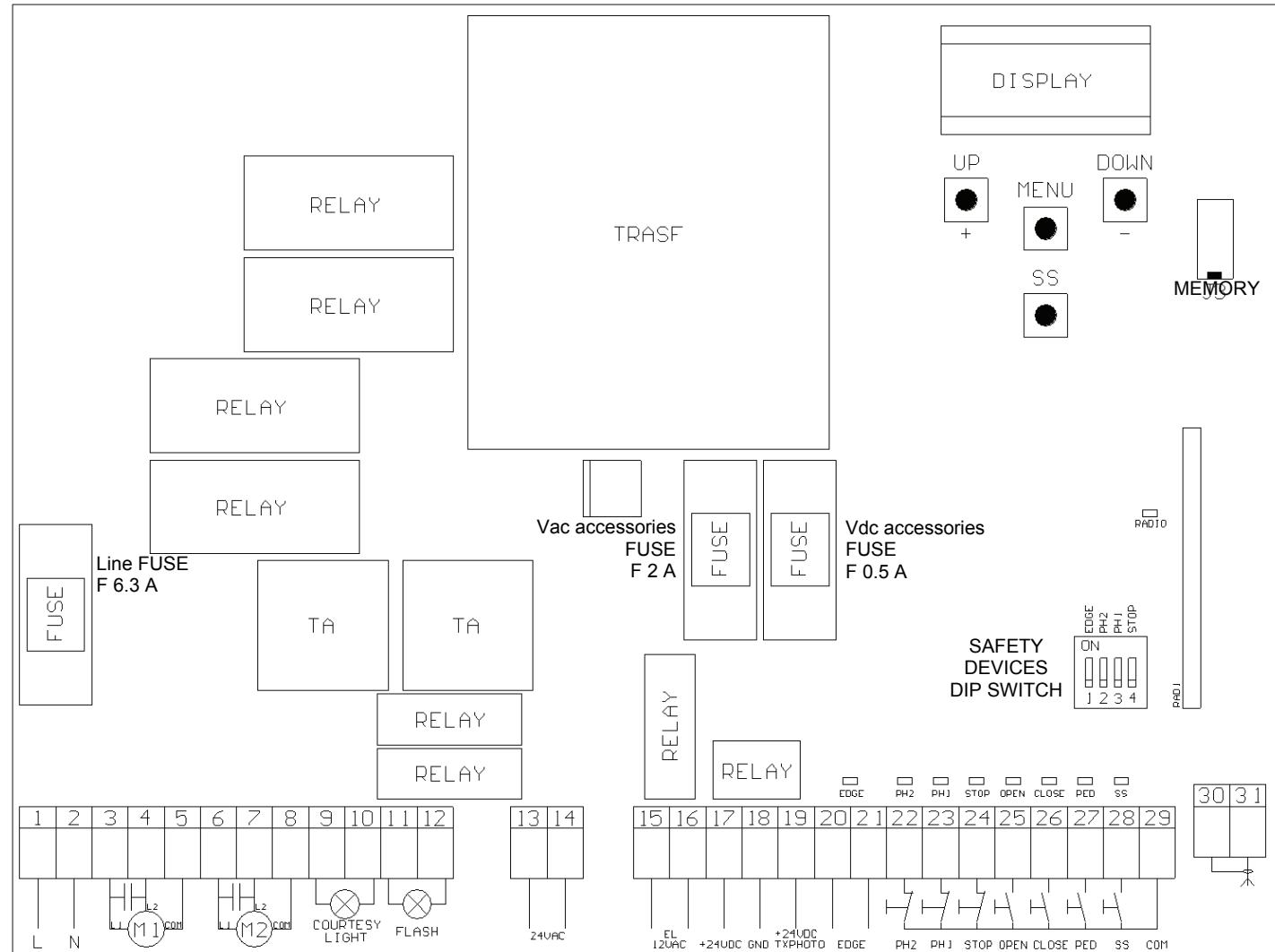
The control unit BIOS2 is particularly indicated for the installation of 1 or 2 wing gates with 230 Vac motors with maximum power absorbed of 700W. The control unit equipped with a display that allows a precise regulation of the thrust of the gates and sensitivity. It is also possible to adjust the delay in closure of the second wing in the base settings menu. The control unit can memorize up to 8000 transmitters with the external memory, with the step by step, pedestrian, open and close functions. It is supplied with inputs for interior and exterior photocell, safety edge (mechanical or 8k2), possibility to connect the buttons for step by step, pedestrian, open, close and stop. The outputs include a 230 Vac flashing light, electrical lock 12 Vac 15 VA or by the expansion card R1 (not supplied) with dry contact 230 Vac 5A max/30 Vdc 5A max, courtesy light/zone light/open gate light, 24 Vac/dc accessories power supply.



**ATTENTION: DO NOT INSTALL THE CONTROL UNIT WITHOUT READING THE INSTRUCTIONS FIRST !!!
THE INSTALLATION SHOULD BE PERFORMED ONLY BY QUALIFIED PERSONNEL.**

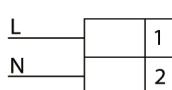
For a correct functioning of the system, it is absolutely indispensable the use of mechanical stops in opening and closing.

2. Configuration



3. Connections

1



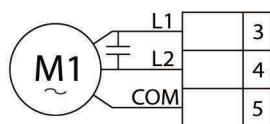
POWER SUPPLY

Connect the power supply cable between clamp 1 and 2 of the control unit

Power supply 230 Vac 50 Hz

Do not connect the card directly to the electric network. Put a device which can ensure the disconnection of each pole from the power supply of the control unit.

2



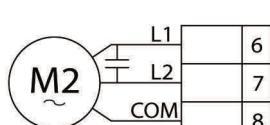
MOTOR 1 OUTPUT

Connect the **common** of the motor 1 to the clamp 5 of the control unit.

Connect the **phase 1** of the motor 1 to the clamp 3 of the control unit.

Connect the **phase 2** of the motor 1 to the clamp 4 of the control unit.

Connect to the MOTOR 1 output the wing which beats. Install an eventual electrical lock on this wing. MOTOR 1 is always activated first during opening phase and in second during closing phase.

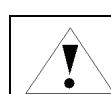


MOTOR 2 OUTPUT

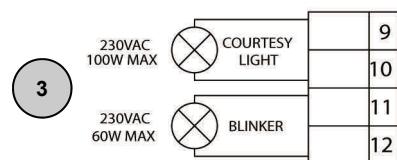
Connect the **common** of the motor 2 to the clamp 8 of the control unit.

Connect the **phase 1** of the motor 2 to the clamp 6 of the control unit.

Connect the **phase 2** of the motor 2 to the clamp 7 of the control unit.



Motor condensers 230 Vac
!Risk of electric shock!

**COURTESY LIGHT OUTPUT**

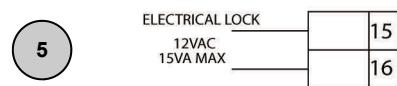
Connect the courtesy light to the clamps 9 and 10, 230Vac 100W MAX.

It is possible to light up the action area of the automatism during each motion.

The functioning of the auxiliary light is controlled in the advanced menu FCY.

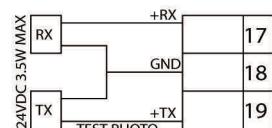
**ACCESSORIES OUTPUTS**

Accessories output 24Vac 9W max.

**ELECTRICAL LOCK OUTPUT**

12Vac 15VA

The functioning of the electrical lock is controlled in the advanced menu HRo.

**PHOTOCELLS POWER SUPPLY**

Connect the clamp 17 of the control unit to the clamp + of the power supply of the photocells receiver.

Connect the clamp 18 of the control unit to the power supply clamp - of the photocells receiver and of the transmitter.

Connect the clamp 19 of the control unit to the power supply clamp of the transmitter of the photocells.

The photocells test is activated in the advanced menu tPh.

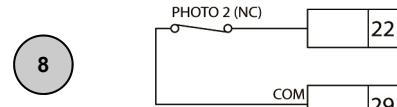
ATTENTION: the control unit gives a voltage of 24 Vdc and can supply a maximum power of 3.5W.

For the safety edge test connect the test device of the safety edge on the power supply pins of the TX (test activated with low logic signal 0Vdc). Please refer to the manual of the safety edge.

**SAFETY EDGE INPUT**

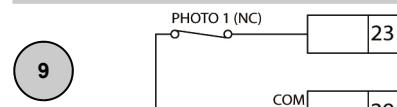
Connect the safety edge contacts to the clamps 20 and 21 of the control unit.

Select the type of security edge used (mechanical or 8K2) through the menu Edi, select the type of functioning through the menu Ed. If not used set the DIP switch EDGE ON.

**OPENING PHOTOCELL INPUT**

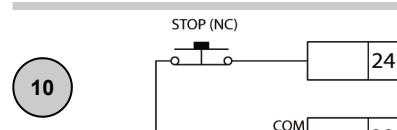
Connect the **NORMALLY CLOSED** contact of the photocell (PHOTO 2) between the clamps 22 and 29 of the control unit.

The functioning of the opening photocell is controlled in the advanced menu Ph2. If not used set the DIP switch PH2 ON.

**CLOSING PHOTOCELL INPUT**

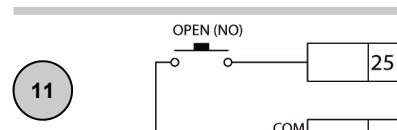
Connect the **NORMALLY CLOSED** contact of the photocell (PHOTO 1) between the clamps 23 and 29 of the control unit.

The functioning of the closing photocell is controlled in the advanced menu 5Ph. If not used set the DIP switch PH1 ON.

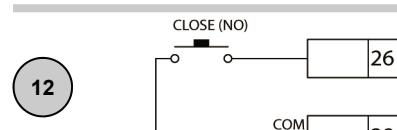
**STOP INPUT**

Connect the contact **NORMALLY CLOSED** of the STOP between the clamps 24 and 29 of the control unit.

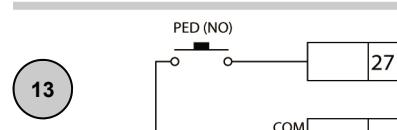
If not used set the DIP switch STOP ON.

**OPEN INPUT**

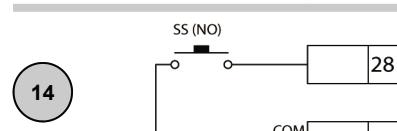
Connect the button OPEN between the clamps 25 and 29 of the control unit.

**CLOSE INPUT**

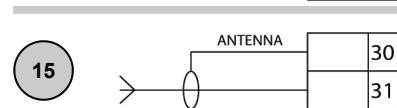
Connect the button CLOSE between the clamps 26 and 29 of the control unit.

**PEDESTRIAN INPUT**

Connect the button PED between the clamps 27 and 29 of the control unit.

**STEP BY STEP INPUT**

Connect the button SS between the clamps 25 and 28 of the control unit.

**ANTENNA**

Connect the signal cable of the antenna to the clamp 31 and the ground of the antenna to the clamp 30 of the control unit.

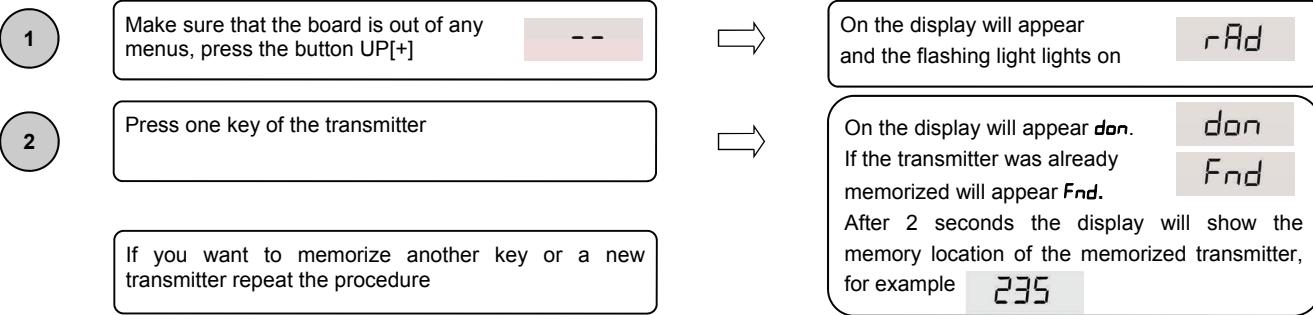
The presence of the metallic parts or humidity in the walls could have negative influences on the range of the system. We suggest therefore not to place the receiving antenna and/or transmitters near big metallic objects, near the floor or on the ground.

4. Remote control learning

4.1 Learning of one transmitter

The 1st memorized key performs the STEP by STEP function (opening and closing of the gate), the 2nd key performs the pedestrian opening, the 3rd key performs the OPEN function, 4th key performs the CLOSE function.

The control unit exits from the learning phase if no new key or trasnmitter command is given in 10 seconds.



4.2 Learning with the hidden key of an already memorized transmitter

With the hidden key of a transmitter it is possible to enter the learning phase in order to memorize new keys or new transmitters.

With the automation still, with the aid of a clip press the hidden button of an already memorized transmitter, the flashing light lights on, now it is possible to memorize new keys or transmitters.

4.3 Cancellation of one transmitter

Enter the learning phase with the UP[+] button or with the hidden key of a memorized transmitter (see 5.1 or 5.2). Press in the same time the hidden key and 1st key of the transmitter that you want to cancel.

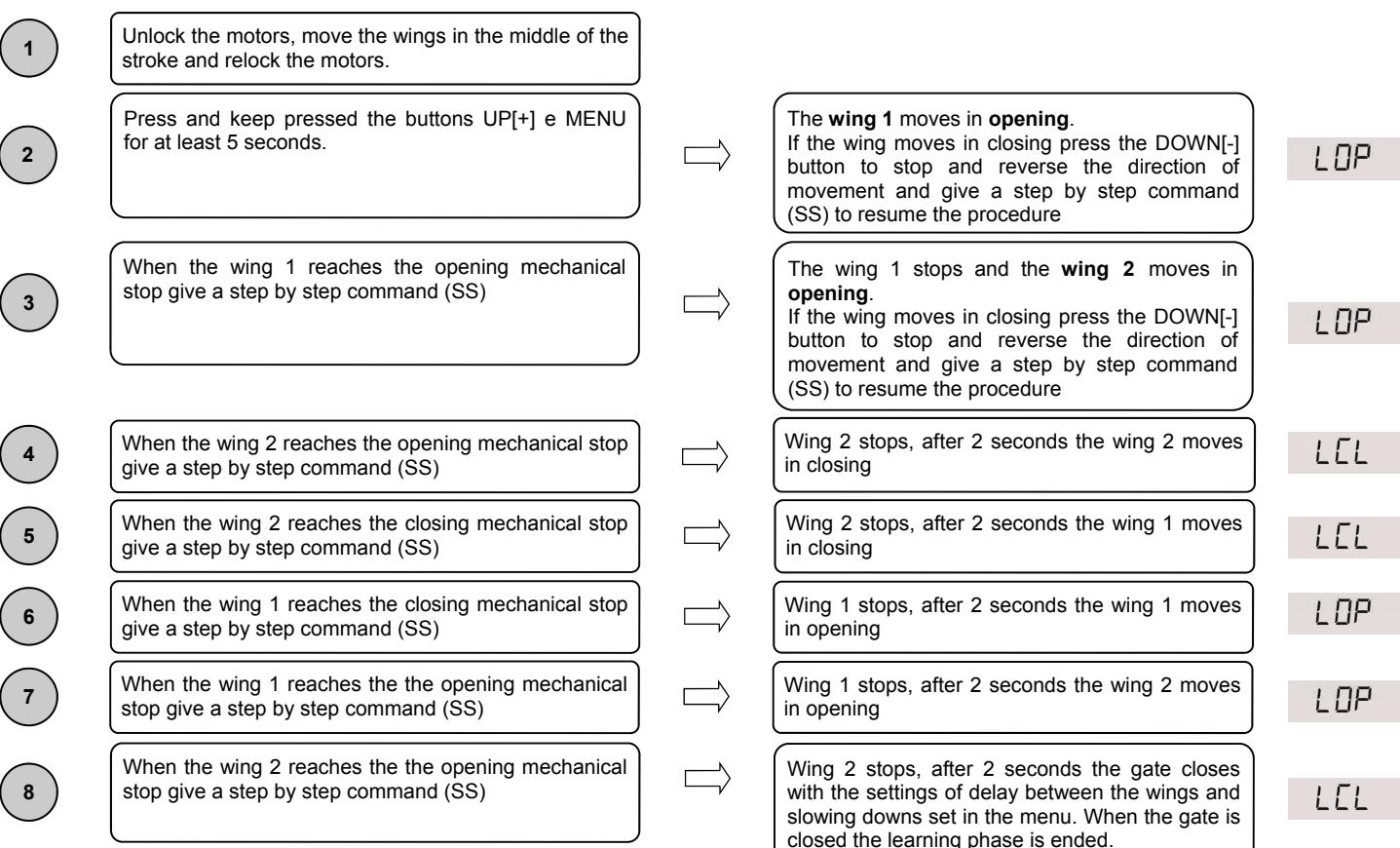
The flashing light blinks 4 times and on the display will appear **Lr**

5. Setting the wing stroke

For a correct functioning of the system, it is absolutely indispensable the use of mechanical stops in opening and closing.

5.1 Easy settings of the wings stroke (parameter LSI ≠ P)

Connect to the MOTOR 1 output the wing which beats. Install an eventual electrical lock on this wing. MOTOR 1 is always activated first during opening phase and in second during closing phase. In this procedure it is necessary to provide the limits positions of the wings with a step by step command (SS).

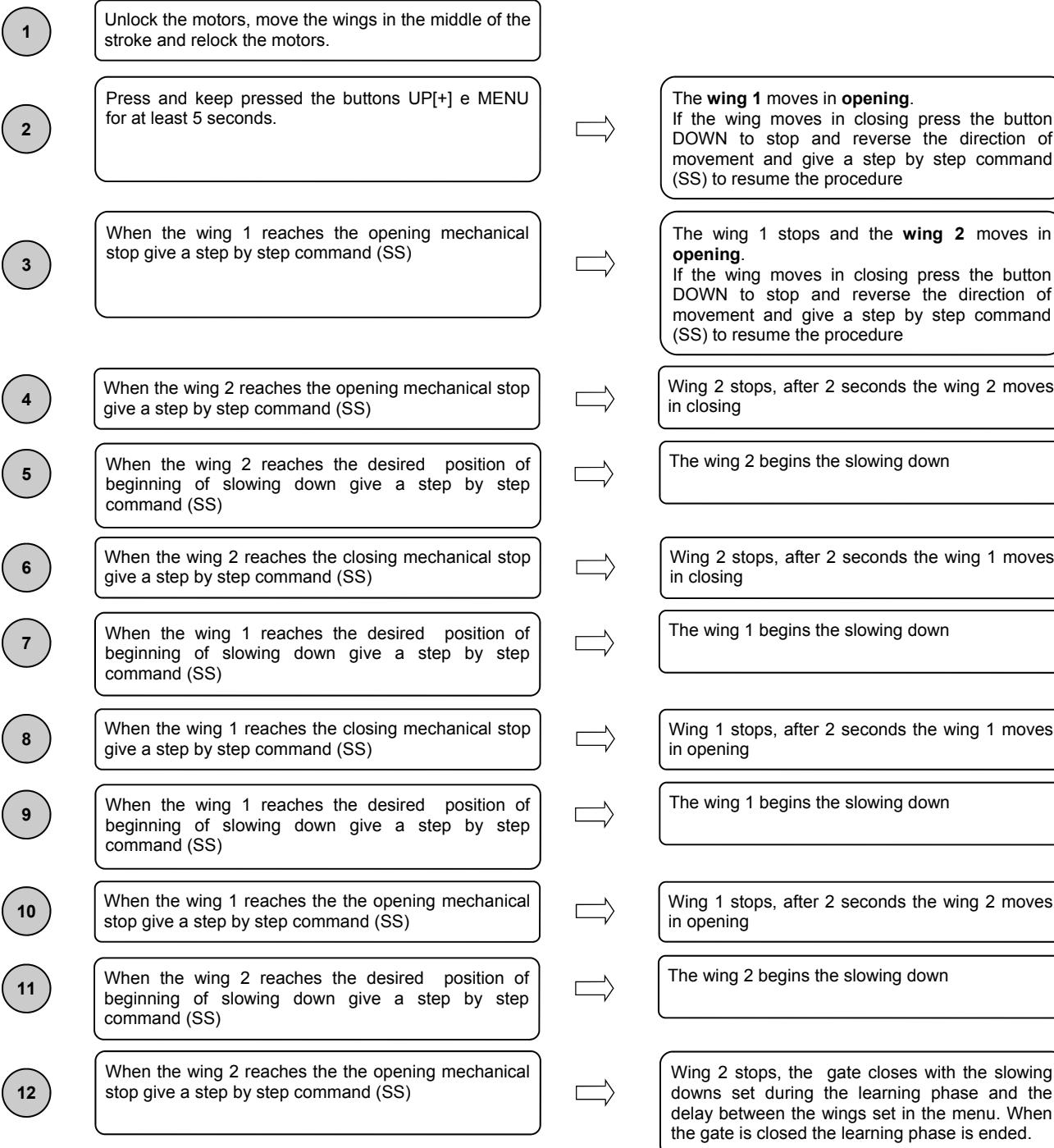


Warning: in case of intervention of a safety device, the learning is stopped and will appear on the display the written **L--**
Press Step by Step key to start again the learning from the 2nd point.

For a correct functioning of the system, it is absolutely indispensable the use of mechanical stops in opening and closing.

5.2 Advanced settings of the wings stroke (parameter $L5I = P$)

Connect to the MOTOR 1 output the wing which beats. Install an eventual electrical lock on this wing. MOTOR 1 is always activated first during opening phase and in second during closing phase. In this procedure it is necessary to provide also the positions where the slowing downs begin with a step by step command (SS).



Warning: in case of intervention of a safety device, the learning is stopped and will appear on the display the written
Press Step by Step key to start again the learning from the 2nd point.

6. Menu

Entering the menu:

To enter the base menu settings keep pressed the MENU button for at least one second

To enter the advanced menu settings keep pressed the MENU button for at least five seconds

Navigation into the menu:

It is possible to move from an entry to another one using UP[+] e DOWN[-] buttons,

To change a parameter keep pressed the MENU button for at least 1 second until the parameter begins blinking, so release the key.

Use UP[+] and DOWN[-] buttons to change the parameter

At the end keep pressed MENU for al least 1 second until the parameter stops blinking to save the change.

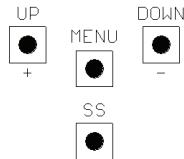
A quick pressure of the menu key is enough to leave a menu

Ex. Base menu

ECL

Ex. Advanced menu

ELF.



6.1 Base settings menu:

| MENU | DESCRIPTION | SELECTABLE VALUES min-max | DEFAULT | UNITS |
|------------|--|------------------------------|---------|-------|
| ECL | Auto reclosing time (0 = disabled) | 0-900 | 20 | s |
| Etr | Auto reclosing time after transit(0 = disabled) | 0-30 | 0 | s |
| SEI | Obstacle sensitivity (0 = disabled 100 = maximum sensitivity) | 0-100 | 0 | % |
| Erq | Motor torque (running torque) | 10-100 | 100 | % |
| SSL | Slowing down mode 0 = normal 1 = fast with more torque | 0-1 | 0 | |
| Sbs | Step by step configuration 0 = normal (OP-ST-CL-ST-OP-ST...) 1 = alternated STOP (OP-ST-CL-OP-ST-CL...) 2 = alternated (OP-CL-OP-CL...) 3 = condominium – timer 4 = condominium with immediate auto reclosing | 0-4 | 0 | |
| bkt | After black-out 0 = no action 1 = closing | 0-1 | 0 | |
| SSt | Soft start 0 = disabled 1 = enabled | 0-1 | 0 | |
| dly | Second wing delay | 0-300 | 2 | s |
| Lsi | Amplitude of slowing down (0 = disabled) P = personalized during learning 0...100% = percentage of stroke | 0-100 | 15 | % |
| ASL | Anti slip | 0-300 | 0 | s |
| nit | Number of motors 1 = 1 motor 2 = 2 motors | 1-2 | 2 | |

6.2 Advanced menu:

| MENU | DESCRIPTION | SELECTABLE VALUES min-max | DEFAULT | UNITS |
|-------------|--|------------------------------|---------|---------|
| Sl.d | First coupling between Bluetooth device and control unit | | | |
| ELF. | Electrical brake activation time 0 = disabled 1 - 100= enabled | 0-100 | 0 | x0.01 s |
| SPh | Functioning of closing photocell PHOTO1 moving from closed 0 = Check PHOTO1 1 = The gate opens also with PHOTO1 busy | 0-1 | 1 | |

6.2 Advanced menu:

| MENU | DESCRIPTION | SELECTABLE VALUES min-max | DEFAULT | UNITS |
|---------------------------|---|------------------------------|---------|-------------|
| <i>P<small>h</small>2</i> | Functioning of opening photocell PHOTO2 0 = Enabled in opening and closing OP/CL 1 = Enabled only in opening OP | 0-1 | 0 | |
| <i>t<small>p</small>h</i> | Photocells test 0 = disabled 1 = enabled PHOTO1 2 = enabled PHOTO2 3 = enabled PHOTO1 and PHOTO2 | 0-3 | 0 | |
| <i>E<small>d</small>i</i> | Safety edge type 0 = contact (NC) 1 = resistive (8k2) | 0-1 | 0 | |
| <i>i<small>e</small>d</i> | Operation mode of safety edge 0= working only in closing with inversion of movement 1 = stops the automation (both opening and closing) and free the obstacle (short inversion) | 0-1 | 0 | |
| <i>t<small>e</small>d</i> | Safety edge test 0 = disabled 1 = enabled | 0-1 | 0 | |
| <i>L<small>p</small>o</i> | Pedestrian opening | 0-100 | 30 | % |
| <i>t<small>p</small>c</i> | Auto reclosing time from pedestrian opening (0 = disabled) | 0-900 | 20 | s |
| <i>F<small>p</small>r</i> | Blinker output mode 0 = Fix 1 = Blinking | 0-1 | 1 | |
| <i>t<small>p</small>r</i> | Pre-flashing time (0 = disabled) | 0-10 | 0 | s |
| <i>F<small>c</small>y</i> | Courtesy light settings 0 = At the end of movement for a TCY time 1 = On if the gate is not closed + TCY time 2 = On if courtesy light timer (TCY) not expired 3 = Open gate light on/off 4 = Open gate light with proportional flashing | 0-4 | 0 | |
| <i>t<small>c</small>y</i> | Courtesy light time | 0-900 | 0 | s |
| <i>d<small>e</small>r</i> | Dead-man 0 = disabled 1 = enabled | 0-1 | 0 | |
| <i>S<small>e</small>r</i> | Setting threshold of cycles for assistance request. Once limit is reached the next cycles will be done with fast blinking (only if <i>F<small>p</small>r</i> enabled) (0 = disabled) | 0-100 | 0 | x1000 cicli |
| <i>S<small>e</small>f</i> | Continuous blinking for assistance request (done only with closed gate). 0 = disabled 1 = enabled | 0-1 | 0 | |
| <i>H<small>a</small>o</i> | Water-hammer and electrical lock in opening phase (0 = disabled) | 0-100 | 0 | x100 ms |
| <i>H<small>a</small>c</i> | Water-hammer in closing phase (0 = disabled) | 0-100 | 0 | x100 ms |
| <i>t<small>p</small>r</i> | Time of pressure in closed for hydraulic motors (0 = disabled) | 0-480 | 0 | minuti |
| <i>t<small>r</small>s</i> | Viewing of the memory location for a single transmitter | 0-999 | | |
| <i>t<small>r</small>c</i> | Cancellation of a single transmitter | 0-999 | | |
| <i>d<small>e</small>f</i> | Restore default settings, enter to modify the parameter and then keep pressed the MENU button, a count down appears that ends with <i>don</i> on the display | | | |
| <i>t<small>r</small>f</i> | Cancelling all transmitters, enter to modify the parameter and then keep pressed the MENU button, a count down appears that ends with <i>don</i> on the display | | | |

6.3 Menu description:

6.3.1 Base settings menu

ECL Auto reclosing time

Active when the gate is in the completely open position, the gate automatically closes after ECL seconds. In this phase the display shows -ECL with the blinking dash, that during the last 10 seconds will be replaced by the count down.

Etr Auto reclosing time after transit

If in the opening phase or in the completely open position the beam of the photocells is obscured and freed, the gate automatically closes after Etr seconds when the completely open position is reached. In this phase the display shows -ETR with the blinking dash, that during the last 10 seconds will be replaced by the count down.

SEI Obstacle sensitivity

Adjust the obstacle sensitivity to ensure a correct functioning of the gate, it must stop if there is an obstacle but also it must ensure the complete movement in the worst conditions (exp. winter, hardening of motors, etc). After the adjustment of this parameter it is recommended to perform a complete movimentation (opening and closing) before trying the obstacle detection.

Erq Motor torque

Adjust the motor torque to ensure a correct functioning of the gate, it is possible to adjust the percentage of torque between 10% to 100%. After the adjustment of this parameter it is recommended to perform a complete movimentation (opening and closing) to ensure a correct functioning of the gate.

SSL Slowing down mode

The control unit has 2 different type of slowing downs : standard or with higher torque and speed, for heavier gates.

Sb5 Step by step configuration (SS)

- Sb5 = 0 Normal (OP-ST-CL-ST-OP-ST...)

Typical functioning of Step by Step. During the movement a SS command stops the gate.
- Sb5 = 1 Alternated STOP (OP-ST-CL-OP-ST-CL...)

Alternated functioning with STOP during the opening. During the opening phase a SS command stops the gate.
- Sb5 = 2 Alternated (OP-CL-OP-CL...)

The user cannot stop the gate during the movement with a SS command.
A SS command during the movement inverts the movement.
- Sb5 = 3 Condominium – timer

A SS command only opens the gate. When the gate is completely open, if the command persists the control unit will wait until the opening of the contact before beginning the countdown of the automatic reclosing (if enabled), another SS command in this phase will restart the countdown of the automatic reclosing.
- Sb5 = 4 Condominium with immediate auto reclosing

Like condominium – timer (previous point) but during the countdown a SS command will close the gate.

blt After black-out

When the control unit turns on after a black-out,

- blt = 0 No action – when the control unit turns on the gate doesn't move until the first command, the first movement is a slow opening.
- blt = 1 Closing – turning on the control unit it will perform a slow closing.

SSr Soft start

The movement begins with reduced torque, used in light gates.

dL4 Second wing delay

This is the setting of the delay of the second wing to ensure a correct working. In the closing phase the control unit adds 4 additional seconds to ensure that the wings don't overlap also in the worst conditions of functioning.

L5i Amplitude of slowing down

With this parameter it is possible to adjust the amplitude of the slowing down and eventually disable it (L5i =0). If you need more precise or different slowing down between opening and closing it is possible to set the parameter L5i on P (personalized) and perform an advanced learning of strokes (5.2) providing also the beginning of slowing downs during the learning.

R5L Antislip

This parameter is used if the motor slips, the control unit adds R5L seconds to movimentation to ensure a complete movements of the wings also in the worst condition.

n1b Number of motors

This parameter is used to set the number of motors, the learning operations and the functionality will be modified depending on this parameter.

6.3.2 Advanced menu

SI_d. Bluetooth

Item of the menu needed to the first coupling between an Android device and the control unit. Refer to the Help of the Android application for the connection procedure.

EL_F. Electrical brake

Short reverse movement with reduced torque to reduce the inertia of the gate. The operation is performed at each stop of the movement except for fast movement after the intervention of a safety devices.

SP_h. Functioning of closing photocell PHOTO1 moving from closed position

The closing photocell has the following functioning

- Closing: immediate inversion of movement
- Opening from an intermediate position: no intervention
- Opening from closed position:
 - ◆ SP_h. = 0 The gate doesn't move if PHOTO1 beam is cut
 - ◆ SP_h. = 1 The gate moves while PHOTO1 beam is cut

Ph_2. Functioning of opening photocell PHOTO2

The opening photocell has the following functioning

- Opening: stops the movement and waits until the beam is freed, then moves in opening.
- Closing:
 - ◆ Ph_2. = 0 Stops the movement and waits until the beam is freed, then moves in opening
 - ◆ Ph_2. = 1 No intervention

EP_h. Photocells test

Enabling this function, before each movement starting from still gate, the control unit performs a functional check of the photocells. The check will not be performed in case of fast movement after the intervention of a safety devices. Follow paragraph 3.6 for the connections of the photocells.

Ed_i. Safety edge type

The control unit can work with two different type of safety edge:

- Ed_i. = 0 Mechanical with normally closed contact
- Ed_i. = 1 Resistive 8k2

iE_d. Operation mode of safety edge

To allow the installation of the safety edges in both the directions of movements, it is possible to choose 2 different functioning:

- iE_d. = 0 Only in closing with total inversion of movement
- iE_d. = 1 Both directions of movements, stop and short inversion to free the obstacle

EP_d. Safety edge test

Enabling this function the control unit performs a functional check of the safety edge. This function is used if the edge connected to the control unit has an electronic self test (exp. radio edge R.CO.O). Connect the test contact of the edge to the power supply of the transmitter of the photocells (paragraph 3.6) ad enable the self test with low voltage 0Vdc (for the compatibility follow the instruction of the manual of the safety edge).

EP_o. Pedestrian opening

Pedestrian opening can be performed only starting from closed. The parameter sets the opening like a percentage of the total stroke of the first wing.

EP_c. Auto reclosing time from pedestrian opening

Active when the gate is in the pedestrian opening, the gate automatically closes after EP_c. seconds. In this phase the display shows - EP

FP_r. Flashing light output mode

It is possible to choose 2 different functioning for the blinker output:

- FP_r. = 0 Fixed blinker output. It will be necessary to connect a self flashing blinker (B.RO LIGHT 230 Vac)
- FP_r. = 1 Flashing light blinker output. It will be necessary to connect a fix light blinker (B.RO LIGHT FIX 230 Vac)

EP_r. Pre-flashing time

Pre-flashing before each movement in both directions, EP_r. seconds of pre-flashing

FC_y. Courtesy light settings

The control unit has 4 different functionings for courtesy light:

- FC_y. = 0 the light switches off at the end of a movement after FC_y. seconds
- FC_y. = 1 the light switches off only with closed gate after FC_y. seconds
- FC_y. = 2 lighted on for FC_y. seconds from the beginning of a movement, indipendently of the condition of the gate
(the light could switch off before the end of movement)
- FC_y. = 3 open gate light - the light switches off immediately when the gate reaches the closed position
- FC_y. = 4 open gate light with proportional blinking:
 - ◆ opening – slow blinking
 - ◆ closing – fast blinking
 - ◆ opened – light on
 - ◆ closed – light off
 - ◆ stopped – 2flash + long wait + 2flash + long wait +...

EC_y. Courtesy light timer

Courtesy light activation timer

dE.R. Dead man

During dead man functioning mode the gate moves only with a permanent command.

The enabled commands are OPEN and CLOSE. SS and PED are disabled. During dead man functioning all the automatic movements are disabled, like short or total inversions. All safety devices are disabled except for STOP.

SE.r. Setting threshold of cycles for assistance request

It is possible to set a number of cycles before the request of assistance. Once the limit is reached the next cycles will be done with fast blinking (only if FP_r enabled)

SE.F. Continuous flashing light for assistance request

Once limit SE.r. is reached the flashing light will blink also with the gate closed to show the request of assistance.

HR.o. Water-hammer and electrical lock in opening phase

This functioning is used with an electrical lock. The gate before opening closes shortly on the mechanical stop with the electrical lock activated, to ensure the correct declutching. The parameter is the time of pressure on the mechanical stop before opening, settable from 0.1s to 10 s. The sequence done by the control unit before opening is the following:

- preventive activation of the electrical lock [1,5s]
- motor activation in closing with maximum torque. The duration of this phase is setted by the parameter HR.o.
- inversion of direction with another 2 seconds of activation of the electrical lock.

The control unit activate the electrical lock also if it moves from an intermediate position.

HR.c. Water-hammer in closing phase

This functioning is used with an electrical lock. When the gate reaches the closing mechanical stop the control unit perform a strong pressure, HR.c. seconds long, to ensure the locking of the electrical lock.

HP.r. Time of pressure in closed position for hydraulic motors

This function is used to keep high the pressure of hydraulic motors, done only with closed gate, the control unit performs 1 minute of closing every HP.r. minutes to keep high the pressure into the motors and the correct closed position.

Er.5. Viewing of the memory position for a single transmitter

With the item of the menu Er.5. it is possible to view the memory location in which a transmitter is memorized.

To perform the function, move to Er.5. and then confirm by pressing the button MENU. Keep pressed MENU button until the display will show SEE then release the button.

At this point press a button of the memorized transmitter (it does not active any command). The display shows:

- the memory location for 2 seconds, if is memorized;
- the written not for 2 seconds, if is not memorized.

After 2 seconds the display returns to the screen SEE and it will be possible to perform this function with another transmitter.

To exit from the function, press MENU button. Otherwise after 15 seconds without transmission, the control unit exits from the function and shows the written tout

Er.L. Cancellation of a single transmitter

With the item of the menu Er.L. it is possible to delete a single transmitter from the memory.

To perform the function, move to Er.L. and then confirm by pressing the button MENU. Keep pressed MENU button until the display will show 0, then release the button. Select the memory location of the transmitter. Press and keep pressed MENU button until the display will show CLR, then release the button.

To exit from the function, press MENU button. If the display shows the written Err, there are problems with the memory (for example empty position or disconnected memory).

dE.F. Restore default settings

With the item of the menu dE.F. it is possible to restore the default settings of the control unit. The reset will restore all the parameters of the base and advanced menu, but doesn't modify the learnt strokes, the directions of motors and the transmitters.

Move to dE.F. then keep pressed MENU button until the display shows 0, release the button. Press again and keep pressed MENU button, the display will show a count down d00,d19,...,d01, don't release the button until the display shows

don

Er.F. Erasing of all transmitters

With the item of the menu Er.F. it is possible to erase all the transmitters learnt.

Move to Er.F. then keep pressed MENU button until the display shows 0, release the button. Press again and keep pressed MENU button, the display will show a count down d00,d19,...,d01, don't release the button until the display shows

don

7. Display and control unit state

7.1 Normal functioning:

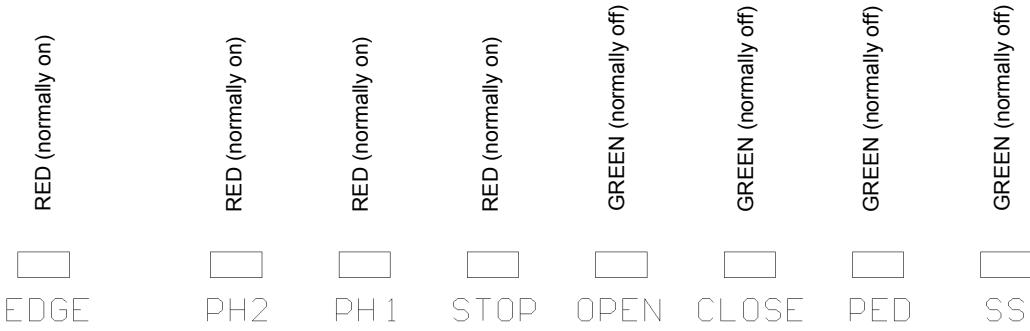
| | |
|------|--|
| -- | Standby - Gate closed or after the switch on of the control unit |
| OP | Opening phase |
| CL | Closing phase |
| SO | Gate closed by user during opening |
| SC | Gate closed by user during closing |
| HR | Gate stopped by an external event (photocells, stop) |
| oP | Gate opened without automatic reclosing |
| PE | Gate opened in pedestrian position without automatic reclosing |
| -EC | Gate opened waiting for auto reclosing, last 10 seconds the dash will be replaced by the countdown |
| -EP | Gate opened in pedestrian position waiting for auto reclosing, last 10 seconds the dash will be replaced by the countdown |
| 000 | During the normal functioning and out from any menu, the pression of the DOWN[-] button lets you see the number of cycles done, you will see units with dots on the bottom of display and thousand without dot, another pression of DOWN[-] or MENU button let you to leave the cycles visualization |
| 000 | Visualized during the learning of transmitters |
| don | Visualized when memorized a new transmitter or at the end of a reset |
| Fnd | Visualized when memorized a key of a transmitter already memorized |
| CLR | Visualized when a trasmitter is erased |
| LOP | Visualized during the learnign of strokes to indicate that the control unit is opening the gate and waiting for the command of opening mechanical stop |
| LCL | Visualized during the learning of strokes to indicate that the control unit is clkosign the gate and waiting for the command of closing mechanical stop |
| L-- | Visualized during the learning of strokes if there is an intervention of safety devices |
| SEE | Visualized when the control unit waits a transmitter signal, during the function of viewing of the memory location. |
| not | Visualized when the transmitter is not stored on the memory, during the function of viewing of the memory location. |
| fout | Visualized when the control unit exits from the function of viewing of the memory location for inactivity. |
| Snd | Visualized during the first coupling with the Bluetooth device. |
| C -- | Visualized when the control unit is connected to a Bluetooth device |
| L -- | Visualized when Bluetooth device is disconnecting from the control unit. |

7.2 Errors:

| | |
|-----|---|
| EFO | Impact sensor intervention |
| EEd | Safety edge intervention |
| ELS | Limit switches error (both opening and closing electrical limit switches busy in the same time) |
| EPH | Malfunctioning of photocells |
| ETH | Thermical intervention to preserve the control unit |
| EIE | Memory error |
| FUL | Full memory |
| Err | Memory error during functions viewing memory location or cancellation of a single transmitter |

The visualization of an error on the display persist until another command is given

7.3 Input LED and safety devices



8. Technical features

POWER SUPPLY AND CONSUMPTION

| | |
|---|--------------------|
| Power supply voltage | 230 Vac - 50/60 Hz |
| Absorption from line (Standby) | 55mA @ 230 Vac |
| Standard configuration (2 couple of photocells, RX radio safety edge) | |
| Line fuse | F6.3A |

MOTOR POWER SUPPLY

| | |
|------------------------------------|--------------------|
| Number of motors | 1 / 2 |
| Motor power supply voltage | 230 Vac - 50/60 Hz |
| Maximum power absorbed from motors | 2 x 700W |

ACCESSORIES POWER SUPPLY

| | |
|---|--|
| Accessories power supply voltage | 24Vdc - 24Vac |
| Maximum current absorbed from accessories | 145 mA dc - 375 mA ac |
| Maximum power absorbed from accessories | 3.5 W dc - 9W ac |
| Accessories fuses | Accessories 24Vdc F0.5A Accessories 24Vac F2A |
| Blinker output | 230 Vac 60W max |
| Courtesy light output / open gate light | 230 Vac 100W max |
| Electrical lock output | from terminal board 12 Vac 15 VA with R1 card (optional) dry contact 230 Vac 5A, 30 Vdc 5A max |

FUNCTIONALITY

| | |
|------------------------|-------------------|
| 433 MHz radio receiver | Rolling code |
| Maximum transmitters | 1000 (up to 8000) |
| Safety edge input | NC / 8k2 |

GUARANTEE - In compliance with legislation, the manufacturer's guarantee is valid from the date stamped on the product and is restricted to the repair or free replacement of the parts accepted by the manufacturer as being defective due to poor quality materials or manufacturing defects. The guarantee does not cover damage or defects caused by external agents, faulty maintenance, overloading, natural wear and tear, choice of incorrect product, assembly errors, or any other cause not imputable to the manufacturer. Products that have been misused will not be guaranteed or repaired. Printed specifications are only indicative. The manufacturer does not accept any responsibility for range reductions or malfunctions caused by environmental interference. The manufacturer's responsibility for damage caused to persons resulting from accidents of any nature caused by our defective products, are only those responsibilities that come under Italian law.