Multi-function control panel for sliding gate - 230Vac

- Programming display
- Electronic adjustment of working time
- Automatic programming procedure with obstacle detection (anti-crushing function) or step-by-step programming procedure with electronic adjustment of power and deceleration.
- “Quick closing” function
- Pedestrian Opening function
- Multi-Occupation function.
- Pre-Blinking function.
- Additional radio channel (optional module)
- Built-in radio receiver 433.92MHz (64 codes) suitable for standard fix-code transmitters or rolling-code transmitters.
- Terminal for safety edge 8K2 type
- Fault Diagnostic with display messages

TECHNICAL FEATURES

<table>
<thead>
<tr>
<th>Item code</th>
<th>PQ80S</th>
</tr>
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<tbody>
<tr>
<td>Control Panel Dimensions</td>
<td>137 x 84 x 37 mm</td>
</tr>
<tr>
<td>Box dimensions</td>
<td>220 x 290 x 90 mm</td>
</tr>
<tr>
<td>Control Panel Weight</td>
<td>160 g</td>
</tr>
<tr>
<td>Main Power</td>
<td>230V ~ 50-60Hz</td>
</tr>
<tr>
<td>Main Power Tolerance</td>
<td>-10% +20%</td>
</tr>
<tr>
<td>Transformer</td>
<td>230/21Vac – 15VA</td>
</tr>
<tr>
<td>Main Fuse</td>
<td>5 A</td>
</tr>
<tr>
<td>Rated power input</td>
<td>600 W</td>
</tr>
<tr>
<td>Rated current</td>
<td>3.5 A</td>
</tr>
<tr>
<td>Current in stand-by mode</td>
<td>30 Ma</td>
</tr>
<tr>
<td>Blinker power supply</td>
<td>24 Vac, max 20 W</td>
</tr>
<tr>
<td>Accessories power supply</td>
<td>24 Vdc , max 5 W</td>
</tr>
<tr>
<td>Working temperature</td>
<td>-20 +50 °C</td>
</tr>
</tbody>
</table>
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**ANNEX 1** Table for PROGRAMMING
**ANNEX 2** CE Declaration
1. WARNINGS

WARNING: This manual contains important information concerning personal safety. An incorrect installation or an improper use may lead to severe injuries.

Read carefully and pay particular attention to the safety sections marked by the symbol ⚠️.

Store this manual safely for future use.

⚠️ Do not allow children or pets near your gate. Never let children operate or play with gate controls. Keep the remote controls away from children and unauthorised users.

⚠️ All wirings or operations on the control panel must be performed with the control panel disconnected from the power supply.

⚠️ Connect the control panel only to a power supply line equipped with safety grounding system.

Wiring, settings and commissioning of this control board must be carried out by qualified and experienced personnel only. The installation has to comply to laws and regulations in force, with particular reference to EN 12445 provisions.

This appliance is only to be used with the power supply unit provided with the appliance.

Means for disconnections must be incorporated in the fixed wiring in accordance with the wiring rules and wiring diagram (please see paragraph 3).

When operating a biased-off switch, make sure that other persons are kept away.

Frequently examine the installation for signs of wear or damage to cables. Do not use if repair or adjustment is needed.
2. WIRING DIAGRAM and COMPONENTS

DISPLAY = segments display
J1 = radio module
J5 = plug for optional modules
F2 = 230V fuse 5A
FR1 = 24V fuse 1.6A (self-restorable)
FR2 = 24V fuse 0.6A (self-restorable)
V1 = secondary varistor
K1/K3 = motor relay
K4 = blinker relay
TR2 = filter
JP1 = AERIAL terminal block
JP2 = secondary transformer plug 24Vac
JP3 = main transformer plug 230Vac
JP4 = CONTROLS terminal block
JP5 = PHOTOCELLS terminal block
JP6 = BLINKER terminal block
JP7 = input Motor
JP8 = input LIMIT-SWITCH
JP9 = 230V MAIN power/earth terminal block

Display BUTTONS Legend

<table>
<thead>
<tr>
<th>Button</th>
<th>Legend</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="enter.png" alt="Enter" /></td>
<td>ENTER</td>
</tr>
<tr>
<td><img src="exit.png" alt="Exit" /></td>
<td>EXIT</td>
</tr>
<tr>
<td><img src="increase.png" alt="Increase" /></td>
<td>INCREASE or START command (when not programming)</td>
</tr>
<tr>
<td><img src="decrease.png" alt="Decrease" /></td>
<td>DECREASE or PEDESTRIAN START command (when not programming)</td>
</tr>
</tbody>
</table>
3. ELECTRIC WIRINGS

WIRING Diagram for 230Vac motor

PROTECO S.r.l. Via Neive, 77 - 12050 Castagnito (CN) ITALY Tel. +39 0173 210111 - Fax +39 0173 210199 info@proteco.net - www.proteco.net
JP1 = AERIAL terminal block

21 aerial cable (SIGNAL)
22 aerial cable (EARTH)

JP2 = TRANSFORMER secondary plug 24Vac (red wires)

JP3 = TRANSFORMER main plug 230Vac (black wires)

JP4 = CONTROLS terminal block

1 START command (N.O. contact)
2 STOP command (N.C. contact)
3 PEDESTRIAN START command (N.O. contact)
4 NEUTRAL for controls

JP5 = PHOTOCELLS and SAFETY DEVICES

5 CLOSING PHOTOCELLS terminal (N.C. contact)
6 OPENING PHOTOCELLS terminal (N.C. contact)
7 Photocells RECEIVER power supply -24V
8 Photocells RECEIVER/TRANSMITTER
9 Photocell TRANSMITTER power supply -24V

JP6 = BLINKER terminal block

10 BLINKER power supply 24Vac
11 BLINKER power supply 24Vac

JP7 = MOTOR terminal block

15 OPENING LIMIT-SWITCH
16 NEUTRAL
17 CLOSING LIMIT-SWITCH

 JP8 = LIMIT-SWITCH terminal block

12 NEUTRAL-
13 OPENING LIMIT-SWITCH
14 CLOSING LIMIT-SWITCH

JP9 = 230V MAIN POWER/ EARTH terminal block

Pole disconnect means must be incorporated in the fixed wiring to the control panel

JP5 = plug for optional modules
3.1 MOTORS wiring

Please check motor wirings according to the gate opening direction

Gate opening from left to RIGHT (view from inside courtyard)

The control unit is pre-set for gate opening from left to right (looking from inside the courtyard as shown in the drawing).

Gate opening from right to LEFT (view from inside property)

In case of gate opening from right to left please adjust parameter C6 in C.C accordingly to 01 (see page 16).

3.1.1 WIRING SCHEME FOR MOTOR ON THE RIGHT SIDE AND GATE CLOSING LEFT (inside view)

ONLY FOR MOTORS WITH MAGNETIC LIMIT SWITCHES

MAGNETIC LIMIT SWITCHES FIXING (inside view)

In case of gate opening from right to left please adjust parameter C6 in C.C accordingly to 01 (see page 16).
### 3.2 MAIN POWER wiring

**Pole disconnect** means must be incorporated according to current rating.

Connect 230V power to 18 - 19 - 20 terminals on JP9 terminal block, paying attention to respect polarity (18 PHASE- 20 NEUTRAL).

![Diagram of Pole Disconnect Device](image)

### 3.3 START controls wiring

Wire the START control/push-button to 1 and 4 terminals on JP4 terminal block (N.O. contact).

Additional START controls/push-buttons can be wired in parallel (N.O. contact).

![Diagram of JP4 Terminal Block](image)

#### 3.3.1 TIMER (for permanent opening command) wiring

Wire the TIMER to 1 and 4 terminals on JP4 terminal block (N.O. contact).

**NOTICE:**

IF WIRING A TIMER-CLOCK YOU MUST SET MULTI-OCCUPATION FUNCTION ON

![Diagram of Timer Wiring](image)

#### 3.3.2 KEY-SWITCH wiring

Wire the KEY-SWITCH to 1 and 4 terminals on JP4 terminal block (N.O. contact).

![Diagram of Key-Switch Wiring](image)

### 3.4 PEDESTRIAN START controls wiring

Wire the PEDESTRIAN START control/push-button to 3 and 4 terminals on JP4 terminal block (N.O. contact).

Additional PEDESTRIAN START controls/push-buttons can be wired in parallel (N.O. contact).

![Diagram of Pedestrian Start Controls Wiring](image)
3.5 STOP push-button wiring

Wire the STOP push-button to 2 and 4 terminals on JP4 terminal block. Additional STOP controls/push-buttons can be wired in parallel (N.C. contact).

![Diagram of JP4 terminal block with terminals 1 to 11 labeled]

**The wiring of an emergency stop push-button is highly recommended for the safety of people and objects.**

**Note:** Should you need to temporarily exclude the STOP connections, please set parameter in the ACCESSORIES menu to \( \text{DISABLED} \).

3.6 PHOTOCELLS wiring

3.6.1 CLOSING Photocells

Power the CLOSING PHOTOCELLS wiring them to terminals 7 - 8 - 9 on JP5 terminal block.

Wire the N.C. contact of the photocells to terminals 5 - 7 on JP5 terminal block.

The closing photocells will behave as follows:

- If an obstacle interrupts the photocell beam when the gate is closing, the automation **STOPS and REVERSES** in about 1.5 seconds.
- An obstacle detected by the photocells when the gate is OPENING does not cause any effect.

Additional sets of CLOSING PHOTOCELLS can be wired in series (N.C. contact).

**For safety reasons at least one set of photocells must be installed to protect the CLOSING area of the gate.**

**Note:** Should you need to temporarily exclude the CLOSING PHOTOCELLS connections, please set parameter in the ACCESSORIES menu to \( \text{DISABLED} \).

3.6.2 OPENING Photocells

Power the OPENING PHOTOCELLS wiring them to terminals 7 - 8 - 9 on JP5 terminal block.

Wire the N.C. contact of the photocells to terminals 6 - 7 on JP5 terminal block.

The opening photocells will behave as follows:

- If an obstacle interrupts the photocell beam when gate is opening, the automation **STOPS and REVERSES** in about 3 seconds.

Additional sets of OPENING PHOTOCELLS can be wired in series (N.C. contact).

**For safety reasons at least one set of photocells must be installed to protect the OPENING area of the gate.**

**Note:** Should you need to temporarily exclude the OPENING PHOTOCELLS connections, please set parameter in the ACCESSORIES menu to \( \text{DISABLED} \).
3.7 SAFETY EDGE wiring

3.7.1 CLOSING (Mechanical) Safety Edge
Wire the CLOSING SAFETY EDGE to terminals 5 - 9 on JP5 terminal block.

- If the safety edge meet any obstacle while the gate is CLOSING, the automation STOPS and REVERSES.
- An obstacle detected by the safety edge while the gate is OPENING does not cause any effect.

3.7.2 OPENING (Mechanical) Safety Edge
Wire the OPENING SAFETY EDGE to terminals 6 - 9 on JP5 terminal block.

- If the safety edge meet any obstacle while the gate is OPENING, the automation STOPS and REVERSES for about 3 seconds.
- An obstacle detected by the safety edge while the gate is CLOSING does not cause any effect.

(Mechanical) SAFETY EDGE + PHOTOCELLS
Wire the (Mechanical) SAFETY EDGE in series to the receiver photocell (N.C. contact)

- If the safety edge meet any obstacle while the gate is CLOSING, the automation STOPS and REVERSES.
- An obstacle detected by the safety edge while the gate is OPENING does not cause any effect.
3.7.3 CLOSING SAFETY EDGE 8K2 type
Wire the CLOSING SAFETY EDGE 8K2 to terminals 5 - 9 on JP5 terminal block.
Please make sure that parameter $P2$ in $PP$ menu is set on $02$.

- If the safety edge meet any obstacle while the gate is CLOSING, the automation STOPS and REVERSES.

- An obstacle detected by the safety edge while the gate is OPENING does not cause any effect.

SAFETY EDGE 8K2 + PHOTOCELLS
Wire the 8K2 safety edge in series to the receiver photocell (N.C. contact)
Please make sure that parameter $P2$ in $PP$ menu is set on $02$.

- If the safety edge meet any obstacle while the gate is CLOSING, the automation STOPS and REVERSES.

- An obstacle detected by the safety edge while the gate is OPENING does not cause any effect.

3.7.4 OPENING Safety Edge 8K2 type
Wire the OPENING SAFETY EDGE 8K2 to terminals 6 - 9 on JP5 terminal block.
Please make sure that parameter $P3$ in $PP$ menu is set on $03$.

- If the safety edge meet any obstacle while the gate is OPENING, the automation STOPS and REVERSES for about 3 seconds.

- An obstacle detected by the safety edge while the gate is CLOSING does not cause any effect.

SAFETY EDGE 8K2 + PHOTOCELLS
Wire the 8K2 safety edge in series to the receiver photocell (N.C. contact)
Please make sure that parameter $P3$ in $PP$ menu is set on $03$.

- If the safety edge meet any obstacle while the gate is OPENING, the automation STOPS and REVERSES for about 3 seconds.

- An obstacle detected by the safety edge while the gate is CLOSING does not cause any effect.
3.8 BLINKER wiring

You can wire a flashing light (20W max) to 10 - 11 terminals on JP6 terminal block.

The flashing light will behave as follows:

- **QUICK** flashing  →  the gate is **OPENING**
- **SLOW** flashing  →  the gate is **CLOSING**
- **STILL** light on  →  the gate is in **PAUSE TIME** before the automatic closing

Note: You can select the kind of flashing light with **HL** parameter in the FUNCTIONS menu.

3.9 AUX/2ND RADIO CHANNEL module

Plug the additional MRX01 module (optional) into J5 connector, please pay attention to the module’s orientation as shown in the picture.

Before setting the dip-switches SW1 on the AUX module, make sure that the control panel is disconnected from any power supply.

3.9.1 2ND RADIO CHANNEL settings

Note: to use the MRX04 module as a 2nd radio channel, you need to save the corresponding radio code.

Please refer to RADIO menu, parameter **R3**.

Select the AUX module settings with SW1 dip-switch-block:

- **STABLE switch**
  Electric contact closes every time you press the remote control.  
  To select this mode, please set the dip-switches on the module as shown:  
  1= ON   2= OFF   3= OFF   Dip-switch 4 is non influential.

- **BISTABLE switch – Toggle Mode**
  Electric contact closes or opens every time you press the remote control.
  To select this mode, please set the dip-switches on the module as shown:  
  1= OFF   2= ON   3= OFF   Dip-switch 4 is non influential.

- **TIMER mode**
  Electric contact closes when you press the remote control and stays closed for 90 seconds.
  To select this mode, please set the dip-switches on the module as shown:  
  1= ON   2= ON   3= OFF   Dip-switch 4 is non influential.

3.9.2 CONTROL LIGHT settings

You can use the MRX01 module to control an indicator light.

The electric contact stays closed, so the light stays on, during all the opening-closing cycle.

To select this mode, please set the dip-switches on the module as shown:  
1= OFF   2= OFF   3= ON   Dip-switch 4 is non influential.

3.9.3 COURTESY LIGHT settings

You can also use the MRX01 module to control a courtesy light when the gate is operating. The electric contact closes since the gate starts operating till 90 seconds after the gates stops.

To select this mode, please set the dip-switches on the module as shown:  
1= ON   2= OFF   3= ON   Dip-switch 4 is non influential.
4. PROGRAMMING

4.1 RADIO menu

This control panel can be used with standard fix code radio transmitters as well as with rollig-code radio transmitters. Transmitter's version musts be choosen before starting any commissioning procedure.

Once the first radio radio code has been stored into the receiver the control panel will work with such type of radio transmitter only (fix-code OR rolling code). Reset will not be possible.

You can store up to 64 different radio codes on this control panel.

Press button and use to select menu then press button to enter the RADIO menu: display will show

Use buttons to scroll the lower level menu and select:

<table>
<thead>
<tr>
<th>Display</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>RADIO menu</td>
</tr>
<tr>
<td>CC</td>
<td>PROGRAMMING menu</td>
</tr>
<tr>
<td>FF</td>
<td>FORCE menu</td>
</tr>
<tr>
<td>HH</td>
<td>FUNCTIONS menu</td>
</tr>
<tr>
<td>LL</td>
<td>TIMES menu</td>
</tr>
<tr>
<td>PP</td>
<td>ACCESSORIES menu</td>
</tr>
<tr>
<td>UU UI</td>
<td>Counter (number of cycles from 00.00.00 to 99.99.99)</td>
</tr>
</tbody>
</table>

4. Saving a new remote control code – standard START command

1. Use buttons to move inside the menu, till the display shows:

2. Now press and hold the remote control and simultaneously press button on the control panel.
   The display shows the radio code position.

3. If the display shows
   It means that memory is full and no further code can be stored.

Repeat steps 1) and 2) to save another remote control as START command.

4. Press button to go back to the top level menus, then press button again till the display shows:

Or wait the timeout (20 seconds) to exit.
### Saving a new remote control code – PEDESTRIAN START command

1. Use buttons to move inside the menu, till the display shows:

2. Now press and hold the remote control and simultaneously press button on the control panel. The display shows the radio code position.

3. If the display shows It means that memory is full and no further code can be stored.

   Repeat steps 1) and 2) to save another remote control as PEDESTRAIN START command.

4. Press button to go back to the top level menus, then press button again till the display shows:

   Or wait the timeout (20 seconds) to exit.

---

### Saving a new radio code for the 2ND RADIO CHANNEL

AUX optional radio module is needed to get a 2nd Radio Channel

1. Use buttons to move inside the menu, till the display shows:

2. Now press and hold the remote control and simultaneously press button on the control panel. The display shows the radio code position.

3. If the display shows It means that memory is full and no further code can be stored.

   Repeat steps 1) and 2) to save another remote control for the 2ND RADIO CHANNEL

4. Press button to go back to the top level menus, then press button again till the display shows:

   Or wait the timeout (20 seconds) to exit.

---

### Deleting an existing remote control code

1. Use buttons to move inside the menu, till the display shows:

2. Press button to confirm

3. Use buttons to select the position of the code you want to delete

4. Press and hold button for about 5 seconds till the display shows

5. Release button, control unit returns to stand-by

   Repeat steps 1) to 5) to delete other existing remote control codes

6. Press button to go back to the top level menus, then press button again till the display shows:

   Or wait the timeout (20 seconds) to exit.
Deleting ALL stored radio codes

1 Use buttons to move inside the menu, till the display shows:

2 **Press and hold button** for about 10 seconds till the display shows

3 Release button ; control unit returns to stand-by

4 Press button to go back to the top level menus, then press buttons again till the display shows:

or wait the timeout (20 seconds) to exit

### 4.2 PROGRAMMING menu

Press button and use buttons to select menu , then press button to enter the PROGRAMMING menu: display will show

Use buttons to scroll the lower level menu.

#### 4.2.1 Selecting the PROGRAMMING MODE

**AUTOMATIC programming mode, with OBSTACLE DETECTION**

**IMPORTANT:**

Please check first that motors force (default setting level is 7 in a 1 to 10 range) is suitable to the leaf weight. In case of very light or very heavy gates please adjust and settings in FORCE menu accordingly before carry-out any programming procedure: the leaf shouldn’t stop if a light force is opposed.

- If possible is better to program the control unit when motors are cold (not after repeated use)

1 Use buttons to move inside the menu, till the display shows:

2 **Press and hold button** for about 10 seconds.
   The control panel starts the automatic programming procedure, the gate will:
   - If open, it start closing till the limit switch bracket meets the motor
   - Then it opens till the opening limit position
   - Stops and reverses till the fully closed position
   - The control unit automatically sets deceleration about 50cm before the fully closed/open positions

3 Now working times, deceleration times and the level of sensibility for obstacle detection have been automatically set.

If further adjustments of the sensibility level for obstacle detection are needed, please refer to setting in the FORCE menu.

If and settings are changed once programming is completed, you need to re-start AUTOMATIC programming procedure again.

**NOTE:**

In AUTOMATIC programming mode C1, working times of the motors ( and settings) can’t be changed.
SEQENTIAL programming mode

This step-by-step programming procedure allows you full control of each setting and finer professional adjustments.

1. The control unit is preset to be programmed by SEQUENTIAL programming mode. Before starting this programming procedure make sure that the TORQUE/POWER is not set too high: in that case please adjust parameter \( F_1 \) in \( FF \) menu to reduce it.

**IMPORTANT:**
Please check first that motors force (default setting level is 7 in a 1 to 10 range) is suitable to the leaf weight. In case of very light or very heavy gates please adjust \( F_1 \) and \( F_2 \) settings in \( FF \) FORCE menu accordingly before carry-out any programming procedure: the leaf shouldn't stop if a light force is opposed.

- If possible is better to program the control unit when motors are cold (not after repeated use)

You can program the control panel with the sequential procedure using button \( \bullet \) on the control panel or using a remote control previously saved.

1. Use \( \bullet \) buttons to move inside the menu, till the display shows:

2. Press button \( \bullet \) to confirm. The display shows:

3. Press the remote control (or button \( \bullet \) on the control panel).
   • The gate starts closing (if open) and then opens again till the fully open position

4. When the gate is about to 90% of the opening path, press again the remote control (or button \( \bullet \) on the control panel).
   • The gate decelerates and continues opening.

5. When the gate has reached the fully open position, wait 2-3 seconds and then press again the remote control (or button \( \bullet \)) the gate starts closing till the fully closed position

6. Now working times, deceleration times and the level of sensibility for obstacle detection have been automatically set.

If further adjustments of the motors force are needed, please refer to setting \( F_1 \) in the \( FF \) FORCE menu.

If \( F_1 \) settings are changed once programming is completed, you need to re-start AUTOMATIC programming procedure again.

4.2.2 Restoring DEFAULT SETTINGS

The control panel comes with pre-set working parameters according to the automation model used. You can reset the control panel to the default settings as follows:

**Gear motor default settings**

1. Use \( \bullet \) buttons to move inside the menu, till the display shows:

2. Press and hold button \( \bullet \) for about 5 seconds.

3. Press button \( \bullet \) to go back to the top level menus, then press button \( \bullet \) again till the display shows:
   or wait the timeout (20 seconds) to exit.
### 4.2.3 OPENING DIRECTION of the motor

The control unit is preset for use on gate opening from Left to Right:

#### Opening direction of the motor can be changes as follows (paragraph 3.1)

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Use buttons to move inside the menu, till the display shows:</td>
<td>C6</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Press and hold button for about 5 seconds.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Use buttons to select: Gate opening from Left to Right (view from inside courtyard) Gate opening from Right to Left (view from inside courtyard)</td>
<td>00</td>
<td>01</td>
</tr>
<tr>
<td>4</td>
<td>Press button to go back to the top level menus, then press button again till the display shows: or wait the timeout (20 seconds) to exit.</td>
<td>Sd</td>
<td></td>
</tr>
</tbody>
</table>

### 4.2.4 LIMIT SWITCHES mode selecting

This control unit can be used with ELECTROMECHANICAL LIMIT SWITCHES (N.C. contact) or with MAGNETIC LIMIT SWITCHES (N.O. contact)

#### LIMIT SWITCHES mode

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Use buttons to move inside the menu, till the display shows:</td>
<td>C7</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Press and hold button for about 5 seconds.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Use buttons to select: Use with ELECTROMECHANICAL Limit Switches (N.C. contact) Use with MAGNETIC Limit Switches (N.O. contact)</td>
<td>00</td>
<td>01</td>
</tr>
<tr>
<td>4</td>
<td>Press button to go back to the top level menus, then press button again till the display shows: or wait the timeout (20 seconds) to exit.</td>
<td>Sd</td>
<td></td>
</tr>
</tbody>
</table>
### 4.3 FORCE menu

Use this menu to adjust the **sensibility level of the obstacle detection** in case of AUTOMATIC Programming mode (C1) or to adjust the **motors force** in case of SEQUENTIAL Programming mode (C2).

Press button **A** and use **UP** and **DOWN** to select menu **FF**. Then press button **A** to enter the FORCE menu: display will show **F -**.

Use **UP** and **DOWN** buttons to scroll the lower level menus:

<table>
<thead>
<tr>
<th>1. Use <strong>UP</strong> and <strong>DOWN</strong> buttons to move inside the menu, till the display shows:</th>
<th>F1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Press button <strong>A</strong> to confirm. The display now shows the current torque/power level for motor:</td>
<td>01 (min) 02 .... 10 (max)</td>
</tr>
<tr>
<td>3. Use <strong>UP</strong> and <strong>DOWN</strong> buttons to change the motor torque/power level.</td>
<td></td>
</tr>
<tr>
<td>4. Press button <strong>B</strong> to go back to the top level menus, then press button <strong>A</strong> again till the display shows:</td>
<td>Sd</td>
</tr>
<tr>
<td>or wait the timeout (20 seconds) to exit.</td>
<td></td>
</tr>
</tbody>
</table>

#### F3 OBSTACLE DETECTION adjustment

<table>
<thead>
<tr>
<th>1. Use <strong>UP</strong> and <strong>DOWN</strong> buttons to move inside the menu, till the display shows:</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Press button <strong>A</strong> to confirm. The display now shows the current sensibility level for the obstacle detection of motor:</td>
<td>00 (OFF) 01 (min) .... 10 (max)</td>
</tr>
<tr>
<td>3. Use <strong>UP</strong> and <strong>DOWN</strong> buttons to change the motor sensibility level.</td>
<td></td>
</tr>
<tr>
<td>4. Press button <strong>A</strong> to go back to the top level menus, then press button <strong>A</strong> again till the display shows:</td>
<td>Sd</td>
</tr>
<tr>
<td>or wait the timeout (20 seconds) to exit.</td>
<td></td>
</tr>
</tbody>
</table>

**N.B.:**

**NOTE:** If OBSTACLE DETECTION is too sensitive, causing unexpected stops or reversal of leaves, you need to re-adjust **F 3** setting to a lower level.
### 4.4 FUNCTIONS menu

Use this menu to enable/disable special settings.

- **1**: function is **ON**
- **0**: function is **OFF**

Press button A and use ▲ ▼ to select menu H H, then press button A to enter the FUNCTIONS menu; display will show H. Use ▲ ▼ buttons to scroll the lower level menus:

<table>
<thead>
<tr>
<th>1</th>
<th>Use ▲ ▼ ▼ buttons to move inside the menu, till the display shows:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Press button A to confirm.</td>
</tr>
<tr>
<td>3</td>
<td>Use ▲ ▼ ▼ buttons to select:</td>
</tr>
<tr>
<td>4</td>
<td>Press button ▼ to go back to the top level menus, then press button ▼ again till the display shows:</td>
</tr>
</tbody>
</table>

### H1 MULTI-OCCUPATION Function

This function grants **priority to the opening command**; when two people activate the gate at the same time the first opening command prevails, while opening the control panel ignores any further command.

| 1 | Use ▲ ▼ ▼ buttons to move inside the menu, till the display shows: |
| 2 | Press button A to confirm. |
| 3 | Use ▲ ▼ ▼ buttons to select: |
| 4 | Press button ▼ to go back to the top level menus, then press button ▼ again till the display shows: |

### H2 PRE-BLINKING Function

This function makes the flashing light **pre-blinking** for **4-5 seconds** before the gate starts opening.

| 1 | Use ▲ ▼ ▼ buttons to move inside the menu, till the display shows: |
| 2 | Press button A to confirm. |
| 3 | Use ▲ ▼ ▼ buttons to select: |
| 4 | Press button ▼ to go back to the top level menus, then press button ▼ again till the display shows: |

or wait the timeout (20 seconds) to exit.
**DECELERATION Function**

This function decelerates the leafs at the end of the opening/closing cycle. Two modes for deceleration can be chosen:

- **Standard DECELERATION**
  (the gate directly slows down from standard travel to decelerated speed)
- **Soft DECELERATION**
  (the gate gradually slows down from standard travel to decelerated speed)

1. Use buttons to move inside the menu, till the display shows:  
2. Press button to confirm.  
3. Use buttons to select:  
   - DECELERATION Function **OFF**  
   - DECELERATION Function **ON**  
   - Soft DECELERATION function **ON**  
4. Press button to go back to the top level menus, then press button again till the display shows:  
   - or wait the timeout (20 seconds) to exit.

**PHOTOCELLS TEST Function**

If this function is enabled, the control panel performs a quick start-up test with the photocells to make sure that they are in operation.

1. Use buttons to move inside the menu, till the display shows:  
2. Press button to confirm.  
3. Use buttons to select:  
   - PHOTOCELLS TEST Function **OFF**  
   - PHOTOCELLS TEST Function **ON**  
4. Press button to go back to the top level menus, then press button again till the display shows:  
   - or wait the timeout (20 seconds) to exit.

**START-UP /SOFT START**

When starting an opening cycle the control unit gives full power to both motors for **1.5 seconds** in order to overcome the gate’s inertia (due to cold weather or long time inactivity).

If **SOFT START** is on the control unit gives full power to the motors gradually to prevent the gate from flapping/slamming

1. Use buttons to move inside the menu, till the display shows:  
2. Press button to confirm.  
3. Use buttons to select:  
   - START PULSE Function **OFF**  
   - START PULSE Function **ON**  
   - SOFT START Function **ON**  
4. Press button to go back to the top level menus, then press button again till the display shows:  
   - or wait the timeout (20 seconds) to exit.
### QUICK CLOSING Function

Quick closing after the car has gone through the photocells beam: the gate will complete opening and close immediately after the car without waiting for the entire pause time to elapse.

If another car arrives in the meanwhile, the gate will wait the standard pause time before closing.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Use buttons to move inside the menu, till the display shows: QUICK CLOSING Function OFF QUICK CLOSING Function ON</td>
</tr>
<tr>
<td>2</td>
<td>Press button to confirm.</td>
</tr>
<tr>
<td>3</td>
<td>Use buttons to select:</td>
</tr>
<tr>
<td>4</td>
<td>Press button to go back to the top level menus, then press button again till the display shows: or wait the timeout (20 seconds) to exit.</td>
</tr>
</tbody>
</table>

### SEPARATE PUSH-BUTTONS Function

This allows to use different push-buttons/controls for opening and closing.

To use this function, you need to wire:
- opening push-button/control to START terminals
- closing push-button/control to PEDESTRIAN START terminals

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Use buttons to move inside the menu, till the display shows:</td>
</tr>
<tr>
<td>2</td>
<td>Press button to confirm.</td>
</tr>
<tr>
<td>3</td>
<td>Use buttons to select: SEPARATE PUSH-BUTTONS Function OFF SEPARATE PUSH-BUTTONS Function ON</td>
</tr>
<tr>
<td>4</td>
<td>Press button to go back to the top level menus, then press button again till the display shows: or wait the timeout (20 seconds) to exit.</td>
</tr>
</tbody>
</table>

### MOTOR TEST Function

If this function is enabled, the control panel performs a quick start-up test with the motor to make sure that they are in operation.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Use buttons to move inside the menu, till the display shows:</td>
</tr>
<tr>
<td>2</td>
<td>Press button to confirm.</td>
</tr>
<tr>
<td>3</td>
<td>Use buttons to select: MOTOR TEST Function OFF MOTOR TEST Function ON</td>
</tr>
<tr>
<td>4</td>
<td>Press button to go back to the top level menus, then press button again till the display shows: or wait the timeout (20 seconds) to exit.</td>
</tr>
</tbody>
</table>
## FLASHING LIGHT mode selection

Use these settings to select the signal mode of the flashing light according to the blinker model you have.

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Use buttons to move inside the menu, till the display shows:</td>
</tr>
<tr>
<td>2</td>
<td>Press button to confirm</td>
</tr>
<tr>
<td>3</td>
<td>Use buttons to select:</td>
</tr>
<tr>
<td>4</td>
<td>Press button to go back to the top level menus, then press button again till the display shows:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signal Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLINKING</td>
<td>signal (Standard Flashing Light)</td>
</tr>
<tr>
<td>FIX</td>
<td>signal (LED Flashing Light)</td>
</tr>
</tbody>
</table>

or wait the timeout (20 seconds) to exit.

## DEAD MAN’S SWITCH Mode

Use these settings to control the gate by a DEAD MAN’S SWITCH. The gate opens/closes only if the button is held pressed, as soon as the button is released the gate stops opening/closing. Wirings to the push-buttons have to be separated as follows:

- **START** plug
- **OPENING** push-button
- **PEDESTRIAN START** plug
- **CLOSING** push buttons

If this function is enabled any other radio command will be ignored and all safety systems (obstacle detection, photocells, sensitive edges,..) are not working.

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Use buttons to move inside the menu, till the display shows:</td>
</tr>
<tr>
<td>2</td>
<td>Press button to confirm</td>
</tr>
<tr>
<td>3</td>
<td>Use buttons to select:</td>
</tr>
<tr>
<td>4</td>
<td>Press button to go back to the top level menus, then press button again till the display shows:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mode Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>STANDARD</td>
<td>opening/closing mode</td>
</tr>
<tr>
<td>DEAD MAN’S SWITCH</td>
<td>opening/closing mode</td>
</tr>
</tbody>
</table>

or wait the timeout (20 seconds) to exit.
4.5 TIMES menu

Use this menu to adjust motors operating time and pause time before automatic closing.

Press button and use to select menu , then press button to enter the TIMES menu; display will show .

Use buttons to scroll the lower level menus:

### L3 AUTOMATIC CLOSING Pause time

Use this menu set the pause time for the Automatic Closing (from 0 to 99 seconds).

1. Use buttons to move inside the menu, till the display shows: 
2. Press button to confirm.
3. Use buttons to set the pause time for automatic closing:
4. Press button to go back to the top level menus, then press button again till the display shows: or wait the timeout (20 seconds) to exit.

### L4 PEDESTRIAN AUTOMATIC CLOSING Pause time

Use this menu set the pause time for the Pedestrian Automatic Closing (from 0 to 99 seconds).

1. Use buttons to move inside the menu, till the display shows: 
2. Press button to confirm.
3. Use buttons to set the pause time for Pedestrian automatic closing:
4. Press button to go back to the top level menus, then press button again till the display shows: or wait the timeout (20 seconds) to exit.

**OPERATING TIME**

Motor’s operating time is controlled by limit switches.

In case of fault of the limit switches the motor will stop running in any case after 120 seconds.
**DECELERATION TIME**

Use this setting to adjust opening/closing deceleration time for motor (from 1 to **10 seconds**).

- **Use only with the AMPEROMETRIC \( C1 \) or SEQUENTIAL \( C2 \) Programming mode.**

- **Before adjusting this setting, please make sure that parameter \( H3 \) in **FUNCTIONS** menu is:**
  - **Deceleration ON**

1. Use buttons to move inside the menu, till the display shows:
2. Press button \( \) to confirm.
3. Use buttons to reduce/increase motor deceleration time:
   - Press button \( \) to go back to the top level menus, then press button \( \) again till the display shows:
   - or wait the timeout (20 seconds) to exit.

---

**WORKING Time**

The working time of the gate is established by the intervention of the mechanical limit switch. The gate stops when meeting opening/closing limit brackets (maximum travel path 120 seconds).

This setting can’t be adjusted by control unit programming.

---

**PEDESTRIAN OPENING TIME**

Use this setting to adjust operating time for **Pedestrian Opening for gate** (from 1 to **20 seconds**).

1. Use buttons to move inside the menu, till the display shows:
2. Press button \( \) to confirm.
3. Use buttons to set Motor 1 Pedestrian opening time:
   - Press button \( \) to go back to the top level menus, then press button \( \) again till the display shows:
   - or wait the timeout (20 seconds) to exit.

---
### 4.6 P P ACCESSORIES menu

Use this menu to manage terminals for wiring the accessories (controls and safety devices).

Press button **A** and use **UP** **N** buttons to select menu **P P**, then press button **P** to enter the ACCESSORIES menu: display will show **P**.

Use **A** **N** buttons to scroll the lower level menus:

---

#### P1 EMERGENCY STOP terminals

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Use <strong>A</strong> <strong>N</strong> buttons to move inside the menu, till the display shows:</td>
<td><strong>P1</strong></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Press button <strong>P</strong> to confirm.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Use <strong>A</strong> <strong>N</strong> buttons to select:</td>
<td>STOP Push-button - <strong>NOT WIRED</strong> STOP Push-button - <strong>WIRED</strong></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Press button <strong>P</strong> to go back to the top level menus, then press button <strong>P</strong> again till the display shows:</td>
<td><strong>Sd</strong></td>
<td></td>
</tr>
</tbody>
</table>

or wait the timeout (20 seconds) to exit.

---

#### P2 CLOSING PHOTOCELLS terminals

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Use <strong>A</strong> <strong>N</strong> buttons to move inside the menu, till the display shows:</td>
<td><strong>P2</strong></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Press button <strong>P</strong> to confirm.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Use <strong>A</strong> <strong>N</strong> buttons to select:</td>
<td>CLOSING Photocells - <strong>NOT WIRED</strong> CLOSING Photocells - <strong>WIRED</strong> 8K2 Safety Edge</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Press button <strong>P</strong> to go back to the top level menus, then press button <strong>P</strong> again till the display shows:</td>
<td><strong>Sd</strong></td>
<td></td>
</tr>
</tbody>
</table>

or wait the timeout (20 seconds) to exit.

---

#### P3 OPENING PHOTOCELLS / SAFETY EDGE terminals

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Use <strong>A</strong> <strong>N</strong> buttons to move inside the menu, till the display shows:</td>
<td><strong>P3</strong></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Press button <strong>P</strong> to confirm.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Usare i tasti <strong>A</strong> <strong>N</strong> per selezionare:</td>
<td>Opening Photocells/Safety Edges - <strong>NOT WIRED</strong> Opening Photocells - <strong>WIRED</strong> Standard Safety Edge (NC contact) - <strong>WIRED</strong> 8K2 Safety Edge - <strong>WIRED</strong></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Press button <strong>P</strong> to go back to the top level menus, then press button <strong>P</strong> again till the display shows:</td>
<td><strong>Sd</strong></td>
<td></td>
</tr>
</tbody>
</table>

or wait the timeout (20 seconds) to exit.
### 4.7 CYCLE COUNTING menu

You can use this function to check how many complete cycles (opening-closing) the system has performed from first installation.

Press button \[\text{[up]}\] and use \[\text{[up]}\] \[\text{[down]}\] to select menu \[\text{[up]}\], then press button \[\text{[enter]}\] to enter the CYCLE COUNTING menu: display will show \[\text{[Enter]}\].

Use \[\text{[up]}\] \[\text{[down]}\] buttons to scroll the lower level menus:

<table>
<thead>
<tr>
<th>EMERGENCY STOP terminals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> Use [\text{[right]}] [\text{[right]}] buttons to move inside the menu, till the display shows:</td>
</tr>
<tr>
<td><strong>2</strong> Press button [\text{[select]}] to confirm. The display shows the number of complete opening and closing cycles of the gate.</td>
</tr>
<tr>
<td><strong>4</strong> Press button [\text{[cancel]}] to go back to the top level menus, then press button [\text{[cancel]}] again till the display shows:</td>
</tr>
<tr>
<td>or wait the timeout (20 seconds) to exit.</td>
</tr>
</tbody>
</table>
### 5. TROUBLE-SHOOTING

<table>
<thead>
<tr>
<th>Display</th>
<th>Issue</th>
<th>Possible Reasons</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DISPLAY OFF</strong></td>
<td>Power-cut</td>
<td>Check main power supply</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Burnt fuses</td>
<td>Replace the fuses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transformer problem</td>
<td>Check all connections and input/output voltage</td>
<td></td>
</tr>
<tr>
<td><strong>CLOSING PHOTOCELLS</strong></td>
<td>Misalignment of the photocells</td>
<td>Check transmitter and receiver position/alignment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Obstacle disturbing the photocells beam</td>
<td>Check and remove the obstacle. Also check the photocells eye and remove any dust or dirty deposit.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Incorrect wiring</td>
<td>Check all electrical wirings following the diagram</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Photocell not powered</td>
<td>Check power and voltage both on receiving and transmitting photocell</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Closing photocells not wired</td>
<td>Wire the photocells or disable corresponding parameter (please refer to paragraph 3.6.1)</td>
<td></td>
</tr>
<tr>
<td><strong>OPENING PHOTOCELLS</strong></td>
<td>Misalignment of the photocells</td>
<td>Check transmitter and receiver position/alignment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Obstacle disturbing the photocells beam</td>
<td>Check and remove the obstacle. Also check the photocells eye and remove any dust or dirty deposit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Incorrect wiring</td>
<td>Check all electrical wirings following the diagram</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Photocell not powered</td>
<td>Check power and voltage both on receiving and transmitting photocell</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Opening photocells not wired</td>
<td>Wire the photocells or disable corresponding parameter (please refer to paragraph 3.6.2)</td>
<td></td>
</tr>
<tr>
<td><strong>PHOTOCELLS TEST FAILED</strong></td>
<td>Incorrect wiring</td>
<td>Check all electrical wirings following the diagram</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unfitting photocells</td>
<td>Please install original photocells</td>
<td></td>
</tr>
<tr>
<td><strong>EMERGENCY STOP</strong></td>
<td>Incorrect wiring</td>
<td>Check all electrical wirings following the diagram (paragraph 3.5)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emergency STOP push-button not wired</td>
<td>Wire the STOP push-button or disable corresponding parameter (please see paragraph 3.5)</td>
<td></td>
</tr>
<tr>
<td><strong>START COMMAND</strong></td>
<td>The control panel is receiving a continuous START command</td>
<td>Make sure that all START controls connect are properly working and correctly wired (N.O. contact)</td>
<td></td>
</tr>
<tr>
<td><strong>PEDESTRIAN START COMMAND</strong></td>
<td>The control panel is receiving a continuous PEDESTRIAN START command</td>
<td>Make sure that all PEDESTRIAN START controls connect are properly working and correctly wired (N.O. contact)</td>
<td></td>
</tr>
<tr>
<td><strong>MOTORS TEST FAILED</strong></td>
<td>Motors not wired</td>
<td>Wire the motors as shown in the diagram</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Incorrect wiring</td>
<td>Check motors electrical wiring (please see paragraph 3.3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electrical coil broken</td>
<td>Use a tester to check the coil status</td>
<td></td>
</tr>
<tr>
<td><strong>LIMIT SWITCHES</strong></td>
<td>Faulty limit switch</td>
<td>Replace the limit switch</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lack in wirings</td>
<td>Check wirings to control unit and limit switch</td>
<td></td>
</tr>
<tr>
<td><strong>RADIO</strong></td>
<td>The control panel is continuously receiving a radio command</td>
<td>Check all keys of the remote controls. Make sure that there is no stuck key. If needed remove the battery from the remote control and check that the error message disappears from the display</td>
<td></td>
</tr>
</tbody>
</table>

### 6. DISPOSAL

Do not pollute the environment

Some electronic components may contain polluting substances. Ensure materials are passed to the authorised collection centres, according to the laws and the regulations on force, for safe disposal.
### ANNEX 1 - Table for PROGRAMMING

#### RADIO MenU

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>SAVING a new remote control – START command</td>
<td>01......64 (max)</td>
</tr>
<tr>
<td>A2</td>
<td>SAVING a new remote control – PEDESTRIAN START command</td>
<td>01......64 (max)</td>
</tr>
<tr>
<td>A3</td>
<td>SAVING a new remote control – 2° RADIO CHANNEL</td>
<td>01......64 (max)</td>
</tr>
<tr>
<td>A4</td>
<td>DELETING an existing remote control code</td>
<td>01......64</td>
</tr>
<tr>
<td>A5</td>
<td>DELETING ALL stored remote controls</td>
<td></td>
</tr>
</tbody>
</table>

#### PROGRAMMING Menu

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>AUTOMATIC Programming Procedure with OBSTACLE DETECTION</td>
<td></td>
</tr>
<tr>
<td>C2</td>
<td>SEQUENTIAL Programming Procedure</td>
<td></td>
</tr>
<tr>
<td>C3</td>
<td>Reset to Default Settings for RAM openers</td>
<td></td>
</tr>
<tr>
<td>C6</td>
<td>OPENING DIRECTION of the motor</td>
<td>0 0 = RIGHT 0 1 = LEFT</td>
</tr>
<tr>
<td>C7</td>
<td>LIMIT SWITCHES mode selection</td>
<td>0 0 = ELECTROMECHANICAL 0 1 = MAGNETIC</td>
</tr>
</tbody>
</table>

#### FORCE Menu

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>TORQUE/POWER adjustment</td>
<td></td>
</tr>
<tr>
<td>F3</td>
<td>OBSTACLE DETECTION level adjustment - Motor 1 With C1 AUTOMATIC Programming procedure only</td>
<td></td>
</tr>
</tbody>
</table>

#### SPECIAL FUNCTIONS Menu

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>MULTI-OCCUPATION Function</td>
<td>0 0 = OFF 0 1 = ON</td>
</tr>
<tr>
<td>H2</td>
<td>PRE-BLINKING Function</td>
<td>0 0 = OFF 0 1 = ON</td>
</tr>
<tr>
<td>H3</td>
<td>DECELERATION Function</td>
<td>0 0 = OFF 0 1 = ON</td>
</tr>
<tr>
<td>H4</td>
<td>PHOTOCELLS TEST Function</td>
<td>0 0 = OFF 0 1 = ON</td>
</tr>
<tr>
<td>H5</td>
<td>START-UP Function</td>
<td>0 0 = OFF 0 1 = ON</td>
</tr>
<tr>
<td>H6</td>
<td>SOFT START Function</td>
<td>0 2 = ON</td>
</tr>
<tr>
<td>H7</td>
<td>PRE-BLINKING Function</td>
<td>0 0 = OFF 0 1 = ON</td>
</tr>
<tr>
<td>H8</td>
<td>SEPARATE PUSH-BUTTONS Function</td>
<td>0 0 = OFF 0 1 = ON</td>
</tr>
<tr>
<td>H9</td>
<td>SEPARATE PUSH-BUTTONS Function</td>
<td>0 0 = OFF 0 1 = ON</td>
</tr>
<tr>
<td>H10</td>
<td>MOTORS TEST Function</td>
<td>0 0 = OFF 0 1 = ON</td>
</tr>
<tr>
<td>H11</td>
<td>FLAShING LIGHT mode</td>
<td>0 0 = flashing 0 1 = FIX (LED)</td>
</tr>
<tr>
<td>H12</td>
<td>DEAD MAN’S SWITCH mode</td>
<td>0 0 = STANDARD mode 0 1 = DEAD MAN’S SWITCH mode</td>
</tr>
</tbody>
</table>
### TIMES Menu

<table>
<thead>
<tr>
<th></th>
<th>AUTOMATIC CLOSING pause time</th>
<th>PEDESTRIAN CLOSING pause time</th>
<th>DECELERATION TIME</th>
<th>PEDESTRIAN OPENING time</th>
</tr>
</thead>
<tbody>
<tr>
<td>L3</td>
<td>00 = OFF</td>
<td>00 = OFF</td>
<td>00 = OFF</td>
<td>00 = OFF</td>
</tr>
<tr>
<td></td>
<td>01 (min).... 3</td>
<td>01 (min).... 7</td>
<td>01 (min).... 7</td>
<td>01 (min).... 7</td>
</tr>
<tr>
<td></td>
<td>9 (max).... 9</td>
<td>9 (max).... 9</td>
<td>9 (max).... 10</td>
<td>9 (max).... 20</td>
</tr>
</tbody>
</table>

### ACCESSORIES Menu

<table>
<thead>
<tr>
<th></th>
<th>EMERGENCY STOP terminals</th>
<th>CLOSING PHOTOCELLS terminals</th>
<th>OPENING PHOTOCELLS/ SAFETY EDGE terminals</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>00 = DISABLED</td>
<td>00 = DISABLED</td>
<td>00 = DISABLED</td>
</tr>
<tr>
<td></td>
<td>01 = ENABLED/WIRED</td>
<td>01 = ENABLED/WIRED</td>
<td>01 = Safety Edge (NC) WIRED</td>
</tr>
<tr>
<td>P2</td>
<td></td>
<td></td>
<td>02 = Safety Edge 8K2 WIRED</td>
</tr>
<tr>
<td>P3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### CYCLE COUNTING menu

### Display MESSAGES

- **Stand-by. Control Panel ready to work**
- **FC** Closing PHOTOCELLS operating
- **FA** Opening PHOTOCELLS operating
- **SP** STOP command operating
- **ST** START command operating
- **Pd** PEDESTRIAN START command operating
- **r d** Receiving a radio code (12/24 bit)
- **A** Obstacle detection intervention
- **Sd** Programming settings have been saved
- **Quick spinning = motors running in standard speed**
- **Slow rotating = motors running in deceleration**
- **Small dots: brightness of the dot is proportional to the force settings**
CE COMPLIANCE DECLARATION

Manufacturer: PROTECO S.r.l.
Address: Via Neive, 77 – 12050 Castagnito (CN) – ITALIA

declares that

The product type: Q80A electronic controller for sliding gate automation (1 motor), 220V
Models: PQ80S
Accessories: MRX01

Is built to be integrated into a machine or to be assembled with other machinery to create a machine under provisions of 2006/42/EC Machinery Directive.

It complies with the essential requirements of EEC Directives:
2006/95/EC Low Voltage Directive
R&TTE 99/5 Radio & Telecommunications Terminal Equipments Directive

The manufacturer declares that the start-up of the machinery is not permitted unless the machine, in which the product is incorporated or of which is becoming a component, has been identified and declared as conformed to 2006/42/EC Machinery Directive.

Note: These products have undergone test in a typical uniform configuration

Castagnito, January 26th 2016

Marco Gallo
Managing Director