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user manual

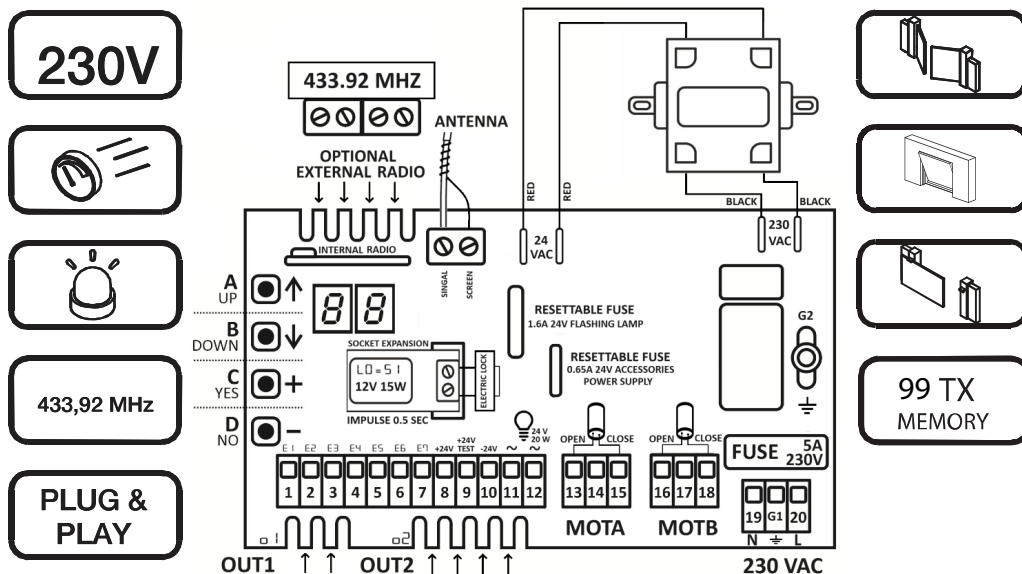
QK-CE2204UNI

CONTROL BOARD FOR 1/2 230V MOTORS

IMPORTANT NOTICE:

This user manual can be used also for the same version of control board for 110V motors. Item code of the board becomes **QK-CE1104UNI** and:

- all 230/220V within this manual to be read as 110V
- Fuse is 10A
- QK-CE1104UNI control board is equipped with a 110V transformer



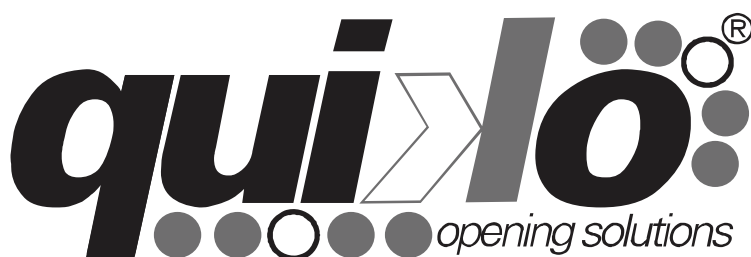
230V



433,92 MHz

PLUG & PLAY

99 TX
MEMORY



SAFETY INSTRUCTIONS

Important: Read carefully this manual before the installation. This manual is integral part of your product, keep it for reference.

Warnings: First of all verify that this product is suitable for the installation. Read carefully technical characteristic before the installation.

Installation of this control unit must be properly done by qualified installers, following rules and regulations of installation country.

It's mandatory to do periodic maintenance each 6 month. Maintenance or repairing must be done by qualified Technicians. Turn power off before maintenance or repairing.

This device is intended for gate automation, any other applications is strongly advised.

Not respecting of rules may cause serious damage to people, animals, things. Quiko Italy Srl discharges all responsibility for missed respect of rules.

Don't let this control unit unattended or where children can reach.

Preliminary checking: Before installing this control unit, verify that all the connected devices respect the technical characteristics mentioned in the table which follows. Verify that a working and suitable life switch is installed upline the installation. Verify that cables composing the installation, are suitable for it.

PURSUANT TO LEGISLATION FOR THE IMPLEMENTATIONS OF DIRECTIVE 2012/19/EU ON “WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)”



It is forbidden to dispose of electrical items and electronic equipment as municipal waste, as evidenced also by the symbol shown on the product and/or its packaging. These forms of waste are subject to separate collections organised by municipal authorities, or may be returned to the retailer when buying a new appliance of the same type. Improper disposal or misuse of such equipment or its component parts can damage the environment and human health due to the presence of hazardous substances. Illegal disposal of this waste is forbidden of the legislation currently in force.

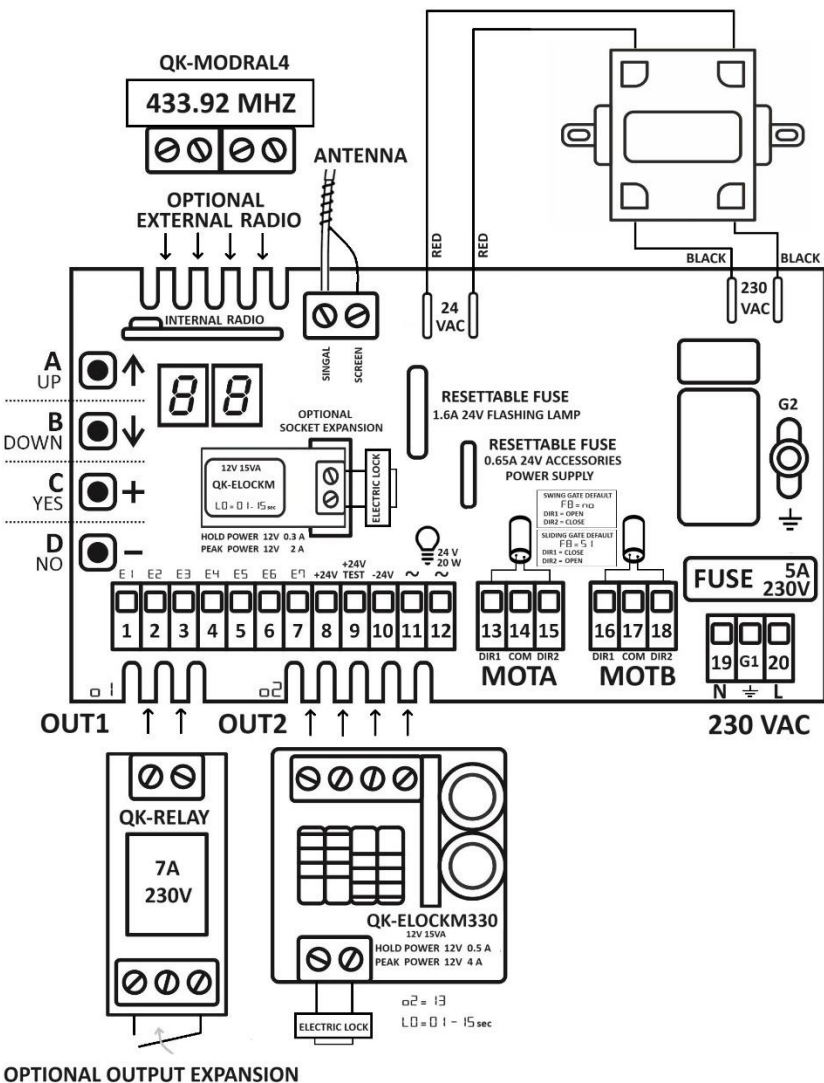


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CONTROL BOARD LAYOUT



INPUTS	HS <i>sliding</i>	Hb <i>swing</i>	HH <i>dual sliding</i>
E1 1-8	Go START N.O.	Go START N.O.	Go START N.O.
E2 2-8	*no DISABLED	*no DISABLED	UC MOTB. CLOSING LIMIT SWITCH N.C.
E3 3-8	*no DISABLED	*no DISABLED	*no DISABLED
E4 4-8	*no DISABLED	*no DISABLED	*no DISABLED
E5 5-8	FC MOT A. CLOSING LIMIT SWITCH NC	oP OPEN ONLY N.O.	FC MOTA. CLOSING LIMIT SWITCH NC
E6 6-8	FA MOT A. OPENING LIMIT SWITCH NC	CL CLOSE ONLY NO	FA MOTA. OPENING LIMIT SWITCH NC
E7 7-8	PE PEDESTRIAN NO	PE PEDESTRIAN NO	UA MOTB. OPENING LIMIT SWITCH NC

*Auto-Enable → when NC contacts are wired, control board set its function to: 2-8 → STOP 5t, 3-8 → CLOSING PHOTOCELL t d, 4-8 → OP. PHOTO. t A

ACCESSORIES POWER SUPPLY			FLASHING LAMP		
8 +24 VDC	10 GND	11 ~	12 ~		
Max 400 mA			24 VAC MAX 20 W		
MOTOR A			MOTOR B		
13 DIR1	14 COMMON	15 DIR2	16 DIR1	17 COMMON	18 DIR2

MAX 1200W (Sliding) MAX 600W (Swing and Dual sliding)

* Sliding mode DIR1 = CLOSE – DIR2 = OPEN (see L B Page 13)

* Swing mode DIR1 = OPEN – DIR2 = CLOSE

CONTROL BOARD MODE

The control board has three operating modes for different kinds of gate: **SLIDING**, **SWING**, or **DUAL SLIDING**. When powered up the display shows the operating mode set followed by the firmware version. The operating mode can also be viewed by selecting d t parameter (see **HOW TO CHANGE CONTROL BOARD MODE** section).

DISPLAY MESSAGE	GATE SYSTEM
HS <i>sliding</i>	21 <i>firmware</i>
Hb <i>swing</i>	25 <i>firmware</i>
HH <i>dual sliding</i>	25 <i>firmware</i>

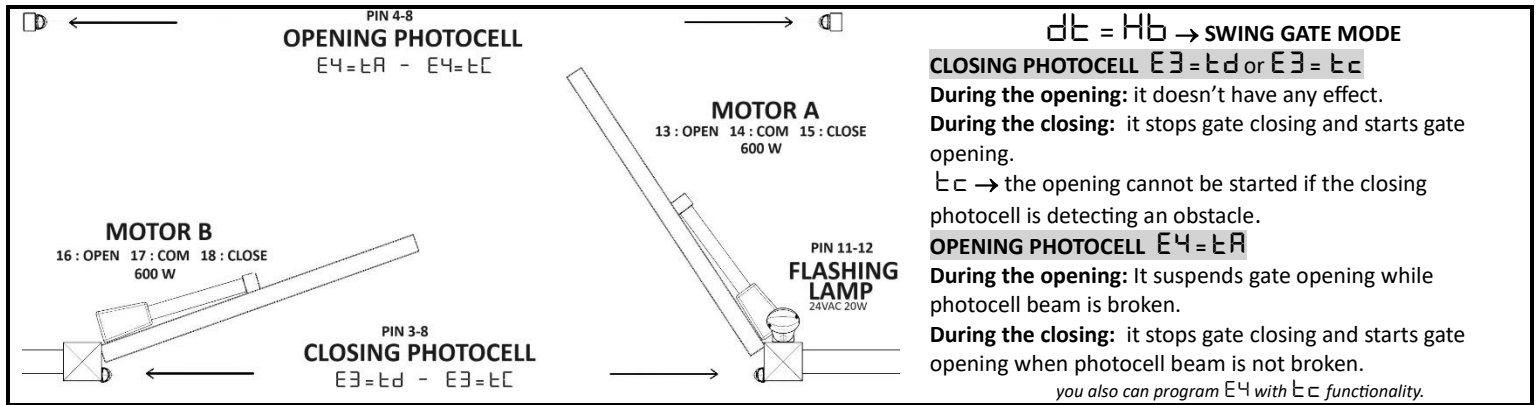
HOW TO CHANGE CONTROL BOARD MODE

The control board is pre-configured with one of these settings: **HS** SLIDING, **Hb** SWING, or **HH** DUAL SLIDING. If you need you can modify this settings by following these steps:

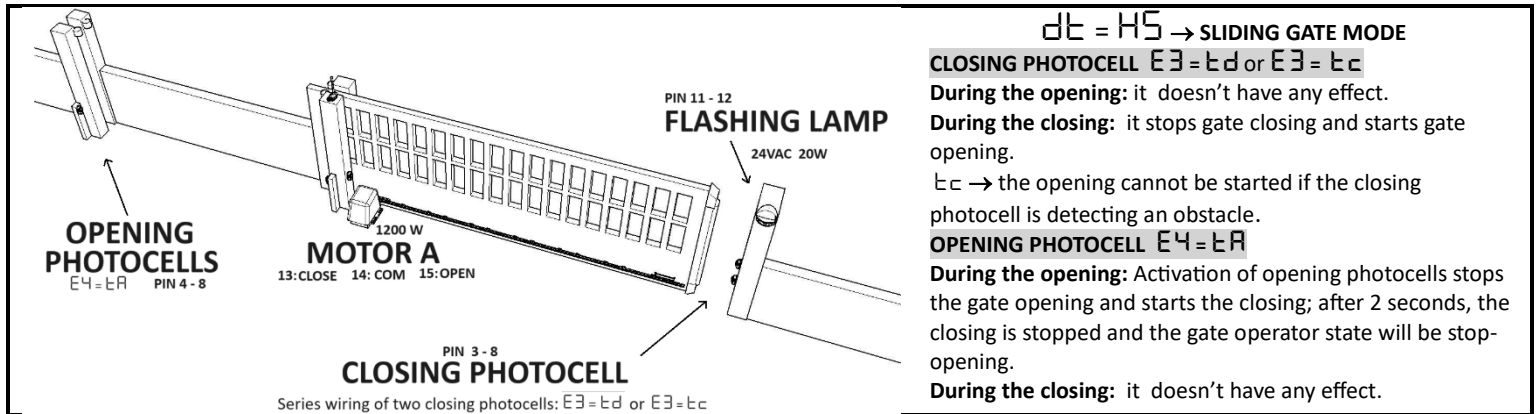
- Hold down or keep pressing **BUTTON UP** ↑ or **DW** ↓ until display shows d t .
- After about one second, the display shows the current opening mode:
Hb SWING **HS** SLIDING **HH** DUAL SLIDING
- Hold down **BUTTON C +** or **D -** of the control board. The display blinks showing the operating mode you are setting.
- When the display stops blinking, the configuration has been set.

TYPICAL INSTALLATION

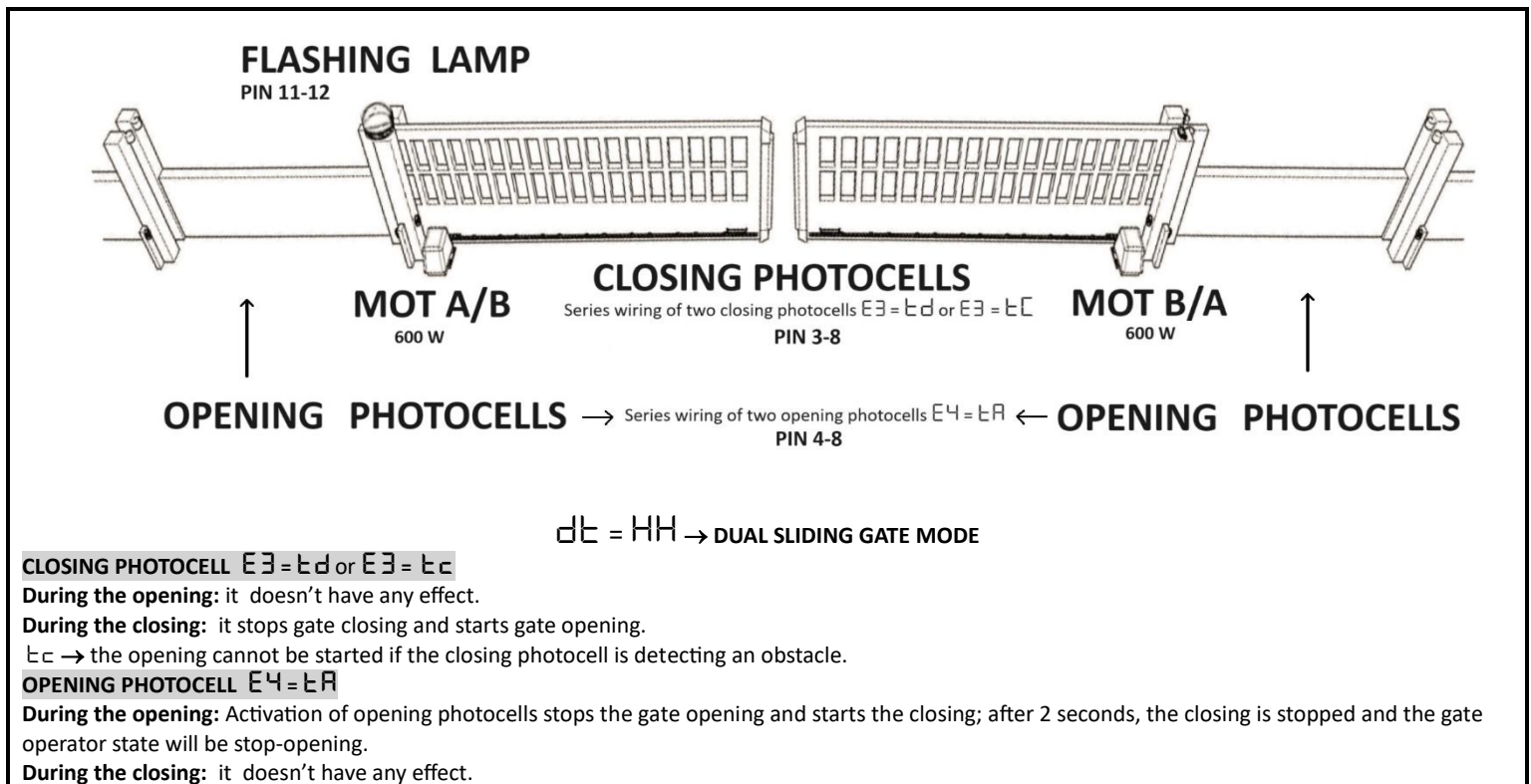
SWING GATE



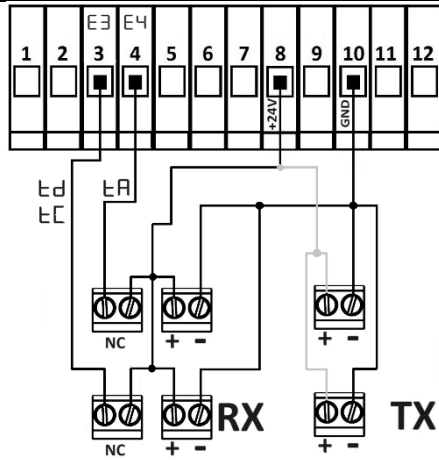
SLIDING GATE



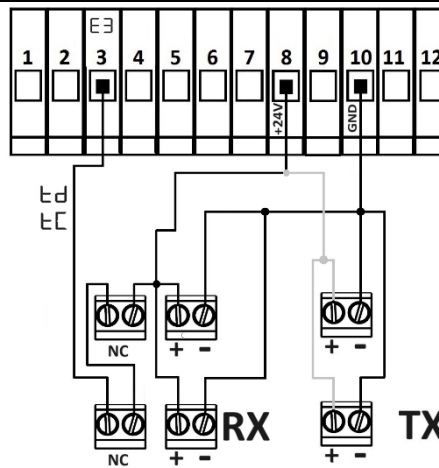
DUAL SLIDING GATE



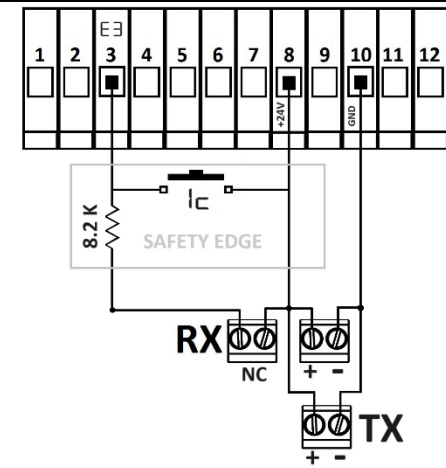
COMMON TERMINAL BLOCK CONNECTIONS



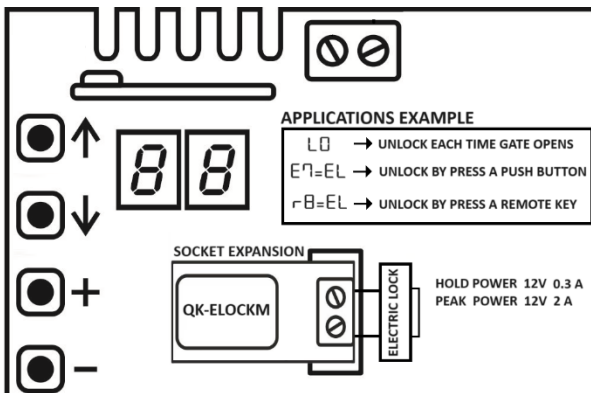
Closing photocells: $E3 = \epsilon d$ or $E3 = \epsilon C$
Opening photocells: $E4 = \epsilon A$



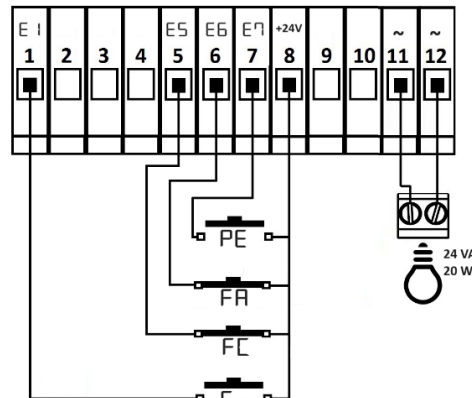
Series wiring of two closing photocells: $E3 = \epsilon d$ or $E3 = \epsilon C$



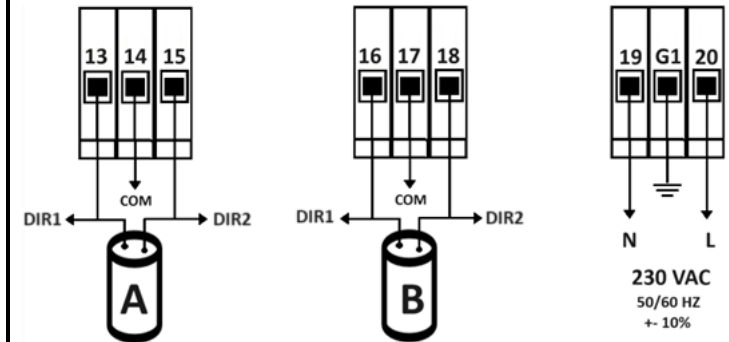
Series wiring of: 1x Closing Safety Edge 8K2 and NC contact (I.E. Photocell): $E3 = \epsilon C$



Wiring of electric lock module **QK-ELOCKM** in the expansion socket.



NC motor A limit switches: $E5 = FA$ open $E6 = FC$ close.
NO push buttons: $E1 = GO$ start and for $E7 = PE$ pedestrian start



$LB = \alpha 0 \rightarrow DIR1 = \underline{OPEN}$ $DIR2 = \underline{CLOSE}$ (SWING GATE DEFAULT)
 $LB = 5 1 \rightarrow DIR1 = \underline{CLOSE}$ $DIR2 = \underline{OPEN}$ (SLIDING GATE DEFAULT)

E1 INPUT 1 AND E7 INPUT 7

Normally Open functions: *Start GO (*only input 1) – *Pedestrian PE (*only input 7) – Fast Closure FG – Only Open/Close OP/CL – Dead Man Open/Close PO/PC – Electric Lock EL – *Dummy $E\alpha$.
Motor B limit switches:
 UA open/ UC close $\rightarrow NC$
 HA open/ HC close $\rightarrow NO$

E2 INPUT 2

Normally Close functions:
Stop SE
Motor B limit switches:
 UA open/ UC close $\rightarrow NC$
 HA open/ HC close $\rightarrow NO$

E3 INPUT 3

Normally Close functions:
Closing photocell $\epsilon d/\epsilon C$
8K2 safety Edge:
Closing $\epsilon C / \epsilon C / \epsilon C$
Motor A limit switches:
 FA open/ FC close $\rightarrow NC$
 LA open/ LC close $\rightarrow NO$

E4 INPUT 4

Normally Close functions:
Op./Cl. photocell $\epsilon A / \epsilon C$
8K2 safety Edge:
Opening $\epsilon 0 / \epsilon 0 / \epsilon 0$
Motor B limit switches:
 UA open/ UC close $\rightarrow NC$
 HA open/ HC close $\rightarrow NO$

E5 INPUT 5 AND E6 INPUT 6

Motor A limit switches:
 FA open/ FC close $\rightarrow NC$
 LA open/ LC close $\rightarrow NO$
Motor B limit switches:
 HA open/ HC close $\rightarrow NC$
 UA open/ UC close $\rightarrow NO$
Normally Open functions
Only Open/Close OP/CL – Dead Man Open/Close PO/PC – Electric Lock EL

FUNCTIONS SUMMARY

menu	Hb	HS	HH	MOTOR A SETTINGS
A1	14	30	14	Standard Working time
A2	7.0	10	7.0	Slowdown working time
A3	0.8	0.1	0.1	Start up time
A4	06			Displacement time on closure
A5	06	07	06	Standard force
A6	08	08	08	Slowdown force
A7	na	na	na	Standard obs. detection threshold
A8	na	na	na	Slowdown obs. detection threshold
A9		12		Motor brake
AA	na			Final release
Ab		03		Motor brake Power
menu	Hb	HS	HH	MOTOR B SETTINGS
b1	14		14	Standard Working time
b2	7.0		7.0	Slowdown working time
b3	0.8		0.1	Start up time
b4	03			Displacement time on opening
b5	06		06	Standard force
b6	08		08	Slowdown force
b7	na		na	Standard obs. detection threshold
b8	na		na	Slowdown obs. detection threshold
menu	Hb	HS	HH	WORKING TIME PROGRAMMING
P1		✓		1 motor working time programming
P2	✓		✓	2 motors working time programming
P6	✓			Obstacle detection threshold programming

menu	Hb	HS	HH	FUNCTIONS
F0	10	10	10	Automatic closure time
F1	07	07	07	Pedestrian working time
F2	0.0	0.0	00	Kick-back function during closing
F3	0.0	0.0	00	Pre-blinking time
F4	na	na	na	Kick-back function during opening
F5	01	01	01	Logic: Standard 01-community 02-step by step 03
F7	5.0	5.0	50	Fast closure delay
F8	na	51		Safety devices as sliding
L0	na	na	na	Electric lock
L1	na	na	na	Cold winter function
L3		na		Swap motor output from A to B
L5	na	na	na	Assistance request from cycle counter
L6	✓	✓	✓	Working cycles counter
L7	00	00	00	Flashing lamp operating mode
L8	na	51	na	Swap motors direction
t1	na	na	na	Photocells test
t2	51	51	51	Motors thermal protection test 51 = enabled
o1	07	07	07	Output 1 function
o2	13	13	13	Output 2 function
menu	Hb	HS	HH	LOGS
t=	✓	✓	✓	Errors Log
r=	✓	✓	✓	Radio Log
E=	✓	✓	✓	Input Log

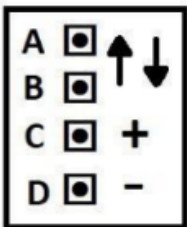
menu	Hb	HS	HH	TERMINAL BLOCKS FUNCTIONS
E1	00	00	00	Terminal block input 1
E2	na	na	00	Terminal block input 2
E3	na	na	na	Terminal block input 3
E4	na	na	na	Terminal block input 4
E5	oP	FC	FC	Terminal block input 5
E6	EL	FA	FA	Terminal block input 6
E7	PE	PE	UR	Terminal block input 7
menu	Hb	HS	HH	REMOTE KEY CONFIGURATIONS
r0	✓	✓	✓	Erase a remote control key
r1	✓	✓	✓	Save a remote control key as START
r2	✓	✓	✓	Save a remote control key as STOP
r3	✓	✓	✓	Save a remote control key as PEDESTRIAN START
r4	✓	✓	✓	Save a remote control key as FAST CLOSURE
r5	✓	✓	✓	Erase all remotes control keys.
r6	Pa	Pa	Pa	Save a remote as PROGRAMMABLE FUNCTION . You can change the function linked to these remotes.
r7	PC	PC	PC	
r8	EL	EL	EL	
rb	✓	✓	✓	01 Internal Radio – 02 External Radio Module
menu	Hb	HS	HH	CONTROL BOARD MODE
d0	Hb	HS	HH	Restore factory setting selected by dt.
dt	← D BUTTON C →			Change control board mode and set its factory setting.

TEST AND GATE FUNCTIONS DISPLAY REPORT	
9A/9b	Motor A/B is in thermal protection
7A/7b	Motor A/B has detected an obstacle
1t	Photocells test error
5L	Assistant request function

SAFETY DEVICE DISPLAY REPORT	
tA	Opening photocells
tD/tE	Closing photocells mode 2/1
FH	Opening+Closing photocells
oo/EE	Opening/Closing 8K2 Saftey Edge
5t	Stop

LIMIT SWITCHES DISPLAY REPORT	
FC/LC	Motor A closing limit switch NC/NO
FA/LA	Motor A opening limit switch NC/NO
UB/UA	Motor B closing limit switch NC/NO
UC/HC	Motor B opening limit switch NC/NO
Ab	Motor A+B limit switches
IH	Motor A limit switches error
2H	Motor B limit switches error
3H	Motor A+B limit switches error

START AND SERVICE COMMAND DISPLAY REPORT	
00/PE/FG	Start/ Pedestrian / Fast Closure
oP/CL	Open/Close
Pa/Pc	Open/Close Dead man
EL	Electric lock
do	Remote key dummy function
EO	Terminal block dummy function



HS SLIDING
Hb SWING
HH DOUBLE SLIDING

WORKING TIME PROGRAMMING

The motors working time programming functions are $P1$ (SLIDING) and $P2$ (SWING or DUAL SLIDING). These procedures are an easy way to program the working time parameters of the control board. To ensure a proper operation, make sure the gate is closed, the terminal block inputs are connected, the motor directions are verified and that you have a **START** input before beginning. You can save a remote key as **START** by following these steps:

SAVING A REMOTE KEY AS START

Step 1 	Step 2 	Step 3 	Step 4 	<p>STEP1: Hold down or keep pressing BUTTON A ↑ or B ↓ until the display shows $P1$.</p> <p>STEP2: The display shows $P1$.</p> <p>STEP3: Hold down the remote key and press BUTTON C + of the control board.</p> <p>STEP4: The display shows the KEYID (I.E = 1).</p>
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SLIDING GATE PROGRAMMING

Step 1 Gate programming 	Step 2 Start programming 	Step 3 Standard Working time 0.0 - 240 Sec 	Step 4 Slowdown Working time 0.0 - 240 Sec 	Step 5 Automatic Closure time 0 - 240 Sec 	
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STEP1: Hold down or keep pressing **BUTTON A** ↑ or **B** ↓ until the display shows $P1$.

STEP2: The display shows $P1$. To go to next step press any **START** input.

STEP3: The **STANDARD WORKING TIME** of the motor ($R1$) is being programmed. The gate is opening. To change the programming phase:

- STEP 3.1:** To go to **STEP 4** press any **START** input.
- STEP 3.2:** To go to **STEP 5** wait until the gate reaches the opening limit switch. An extra time of 30 seconds will be added to $R1$. The slowdown phase will be disabled $R2 = 00$.

STEP4: The **SLOWDOWN WORKING TIME** of the motor ($R2$) is being programmed. The gate is slowing down. To change the programming phase:

- STEP 4.1:** To go to **STEP 5** wait until the gate reaches the opening limit switch. An extra time of 45 seconds will be added to $R2$.
- STEP 4.2:** To go to **STEP 5** press any **START** input.

STEP5: The **AUTOMATIC CLOSURE TIME** ($F0$) is being programmed. The gate is stopped. The flashing lamp is on. After a few seconds the display shows the counting time. To finish the programming press any **START** input and wait until the gate is completely closed.

SWING AND DUAL SLIDING GATE PROGRAMMING

Step 1 Gate programming 	Step 2 Start programming 	Step 3 Motor A Standard Working Time 0.0 - 240 Sec 	Step 4 Motor A Slowdown Working time 0.0 - 240 Sec 	Step 5 Motor B Standard Working time 0.0 - 240 Sec 	Step 6 Motor B Slowdown Working time 0.0 - 240 Sec 	Step 7 Automatic Closure time 0 - 240 Sec
---------------------------------------	--	---	---	---	---	--

STEP1: Hold down or keep pressing **BUTTON A** ↑ or **B** ↓ until the display shows $P2$.

STEP2: The display shows $P2$. To go to next step press any **START** input.

STEP3: The **STANDARD WORKING TIME** of the motor A ($R1$) is being programmed. Motor A is opening. To go to next step press any **START** input.

STEP4: The **SLOWDOWN WORKING TIME** of the motor ($R2$) is being programmed. Motor A is slowing down. To go to next step press any **START** input.

STEP5: The **STANDARD WORKING TIME** of the motor B ($b1$) is being programmed. Motor A stays off. Motor B is opening. To go to next step press any **START** input.

STEP6: The **SLOWDOWN WORKING TIME** of the motor B ($b2$) is being programmed. Motor B is slowing down. To go to next step press any **START** input.

STEP7: The **AUTOMATIC CLOSURE TIME** ($F0$) is being programmed. The gate is stopped. The flashing lamp is on. After few seconds the display shows the counting time. To finish the programming press any **START** input and wait until the gate is completely closed.

WORKING TIME RANGE

You can set $R1$, $R2$, $b1$, $b2$, and $F0$ to any value from **0.0 to 240 seconds**. After programming, you can change the programmed value in the menu, only if its value is less than **100 seconds**. Otherwise, you can change the parameter in the range 00 to 99 seconds, after 99, the display shows $P0$. This is the value programmed by the $P1$ or $P2$ procedure. $P0$ will be cleared or overwritten by execution of $P1$ or $P2$ procedure again.

REMOTE CONFIGURATION

SAVING A REMOTE KEY

Step 1 **Step 2** **Step 3** **Step 4** **STEP1:** Hold down or keep pressing **BUTTON A** ↑ or **B** ↓ until the display shows one of the following functions: **r 1** START (GO), **r 2** STOP (SE), **r 3** PEDESTRIAN (PE), **r 4** FAST CLOSURE (FC), **r 5** PROGRAMMABLE FUNCTION 1 (*), **r 7** PROGRAMMABLE FUNCTION 2 (*), or **r 8** PROGRAMMABLE FUNCTION 3 (*).

STEP2: The Display shows = _ .

STEP 3-4: Press and hold down an unsaved remote key. The display shows = _ . To save press **BUTTON C**. After saving, the display shows the remote key identification number **KEYID**. The control board holds up to 99 remotes key. If the memory is full, the display shows **FF** when trying to save the remote key.

* **OP** Open Only, **CL** Close Only, **PO** Dead Man Open, **PC** Dead Man close, **EL** Electric lock, **DO** dummy output, **r 5** radio range.

ERASING A REMOTE KEY

Step 1 **Step 2** **Step 3** **Step 4** **Step 5** **Step 6** **STEP 1:** Hold down or keep pressing **BUTTON A** ↑ or **B** ↓ until the display shows **r 0**.

STEP 2-3: After a few seconds, the control board starts scanning for saved codes. Each code showed is **KEYID**.

STEP 4-5-6: To erase a displayed code, hold down **BUTTON C +** the display blinks then turns off. The remote key has been erased.

ERASING ALL REMOTE CONTROLS

Step 1 **Step 2** **Step 3** **Step 4** **Step 5** **STEP 1:** Hold down or keep pressing **BUTTON A** ↑ or **B** ↓ until the display shows **r 5**.

STEP 2: After a few seconds, the display shows **r 0**.

STEP 3-4-5: To erase all saved codes, hold down **BUTTON C +** until display stops flashing **5 1** (YES).

HOW TO CHANGE A PROGRAMMABLE RADIO FUNCTION

Step 1 **Step 2** **Step 3** **Step 4** **Step 5** **Step 6** **STEP 1:** Hold down or keep pressing **BUTTON A** ↑ or **B** ↓ until the display shows the programmable radio function you wish to change: **r 5**, **r 7**, or **r 8**.

STEP 2: After a few seconds, the display shows = _ .

STEP 3-4-5: Hold down **BUTTON D -**. The display blinks showing **r 5**, **r 7**, or **r 8**. When the display stops blinking, release **BUTTON D -**.

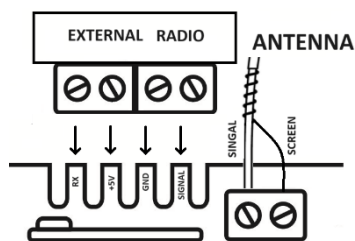
STEP 6: Selecting the function by pressing **BUTTON C +** or **D -**. The function you can select is one of the following: **OP** Open Only, **CL** Close Only, **PO** Dead Man Open, **PC** Dead Man Close, **EL** Electric lock, **DO** dummy output, **r 5** radio range.

HOW TO STORE A NEW REMOTE KEY USING A STORED REMOTE KEY

You can add a remote key to the control board memory without opening the protective housing. You need a remote previously stored. Proceed as follows:

1. Open the gate completely giving a start input.
2. Interrupt the photocell beam.
3. Hold down the remote key previously stored. After 5 seconds the flashing lamps blinks and the relay starts clicking.
4. Release the remote key. The flashing lamp stays on and the relay stops clicking.
5. Within 10 seconds press the new remote key. The flashing lamp blinks three times and the relay clicks three times. The remote key has been saved as **START** (**r 1**).

INTERNAL OR EXTERNAL RADIO MODULE SELECTION



When an external radio module **QK-MODRAL4** is connected to the dedicated pins of the control board, the control board will switch automatically from the internal radio module to the external one. The parameter **r 5** shows which radio module the control board is using: **0 1** internal radio module - **0 2** external radio module.

REMOTE AND TERMINAL BLOCKS COMMANDS

G0	START	E 1	NORMALLY OPEN	REMOTE KEY STORED AS r 1
If the gate is closed a START command opens the gate. If the gate is opening the START commands stop the gate. When the gate is closing, START commands inverts gate movement from closing to opening. If the gate has been stopped during opening/closing the START commands close/open the gate. This functionality depends on selected logic F5.				
F0	FAST CLOSURE	E 1 - E7	NORMALLY OPEN	REMOTE KEY STORED AS r 4
Swing mode dt = Hb or FB = n0		Sliding/Dual Sliding mode dt = H5 /HH		
During the opening: once all photocells have been activated, both opening (E4 = EA or EC) and closing (E3 = Ed or EC), the gate starts closing after F7 seconds.		During the opening: once closing photocell have been activated (E3 = Ed or EC), the gate starts closing after F7 seconds.		
PE	PEDESTRIAN	E7	NORMALLY OPEN	REMOTE KEY STORED AS r 3
PEDESTRIAN command opens only Motor A for F 1 seconds. The slowdown phase is skipped during gate opening while performed during gate closing. In a swing gate system you can open leaf A fully by setting F 1 = FF, in this scenario motor A opens doing the slowdown phase.				
0P/CL	OPEN/CLOSE ONLY	E 1 - E5 - E6 - E7	NORMALLY OPEN	REMOTE KEY STORED AS r 6, r 7 r 8
OPEN/CLOSE ONLY commands open/close the gate.				
P0/PC	DEAD MAN OPEN/CLOSE	E 1 - E5 - E6 - E7	NORMALLY OPEN	REMOTE KEY STORED AS r 6, r 7 r 8
The DEAD MAN OPEN/CLOSE functions allow the opening/closing of the gate even if the safety inputs are activated (I.E. stop input) and the programmed input is kept activated (I.E. a push button kept pressed).				
EL	ELECTRIC LOCK	E 1 - E5 - E6 - E7	NORMALLY OPEN	REMOTE KEY STORED AS r 6, r 7 r 8
ELECTRIC LOCK command activates the electric lock while remote key or push button wired to terminal block is pressed. For instance it may be useful when you want to unlock an electric-lock installed on a pedestrian door beside the electric gate. When EL function is used set L0 = n0.				
00/E0	DUMMY	E7	NORMALLY OPEN	REMOTE KEY STORED AS r 6, r 7, r 8
DUMMY commands (00 for remotes, E0 for terminal block inputs) don't have any effect on the gate status. They are useful for output expansions. For instance you can turn on/off a relay, wired to output 1 (0 1 = 09), by pressing a button wired to input 7-8 (E7 = E0) of terminal block. This input has no effects on the gate status. See HARDWARE EXPANSIONS AND OUTPUT FUNCTIONS section of the user manual.				
S0	STOP	E2	NORMALLY CLOSE	REMOTE KEY STORED AS r 2
Stop commands stop the gate movement.				
r0	RADIO RANGE TEST			REMOTE KEY STORED AS r 6, r 7, r 8
Radio range test turns on the flashing lamp while remote key is pressed. Range test function helps you to find best antenna location.				
EC/Ed	CLOSING PHOTOCELLS	E3 - E4	NORMALLY CLOSE	
During the opening: photocells activation doesn't have any effect.		During the closing: photocells activation opens the gate completely.		
EC → the opening cannot be started if the closing photocell is detecting an obstacle.				
EA	OPENING PHOTOCELLS	E4	NORMALLY CLOSE	
Swing mode dt = Hb		Sliding/dual Sliding mode dt = H5 /HH		
During the opening: While the opening photocell is activated the control board stops the opening. When the internal photocell is deactivated the control board continues the opening.		During the opening: The opening photocell stops the opening and starts the closing. After 2 seconds the closure is stopped. A start command resumes the closing.		
During the closing: If the opening photocell is activated the control board stops the closing and waits for the opening. The opening starts only when the internal photocell is deactivated.		During the closing: The opening photocell does not have any effect.		
FA/LA	MOTOR A LIMIT SWITCHES	E3 - E5 - E6	NORMALLY CLOSE	
FC/LC	OPEN N.C./N.O. - CLOSE N.C./N.O.			
The activation of motor limit switches ends the current working phase, stopping the motor. You can choose between normally open or normally close contacts: FA/LA motor A Opening limit switch N.C. / N.O. FC/LC : Motor A Closing limit switch N.C./N.O.				
UA/HA	MOTOR B LIMIT SWITCHES	E 1 - E5 - E6 - E7	NORMALLY CLOSE	
UC/HC	OPEN N.C./N.O. - CLOSE N.C./N.O.			
The activation of motor limit switches ends the current working phase, stopping the motor. You can choose between normally open or normally close contacts: UA/HA : Motor B Opening limit switch N.C. / N.O. UC/HC : Motor B Closing limit switch N.C./N.O.				
10/20/30	1/2/3 OPENING - CLOSING	E3 - E4	8.2 Kohm	
1c/2c/3c	8K2 SAFETY EDGE			
The opening safety edge works like opening-closing photocells. You can wire up to 3 safety edges on the same terminal block input.				
10 / 20 / 30 → One, two, or three 8.2 Kohm opening safety edges are installed on terminal block 4.				
1c / 2c / 3c → One, two, or three 8.2 Kohm closing safety edges are installed on terminal block 3.				
The display shows 00 /LC when 8k2 opening/closing safety edge is activated.				

MOTOR A SETTINGS

A1	STANDARD WORKING TIME	From 0.0 to 240 Sec	Sliding ✓	Swing ✓	Dual Sliding ✓
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Motor A works for **A1** seconds. During this time the motor power is **A5**. After this time motor A starts the slowdown for **A2** seconds. This is for both phases: opening and closing. In the menu you can adjust **A1** in these range:

from 0.0 to 9.9 seconds (step +- 0.1 sec).

from 10 to 99 seconds (step +- 1.0 sec).

Programming working time using **P1** or **P2** procedure allow you to have an extended range: **from 100 to 240 seconds**. This range is useful in special gate systems. When this parameter has a value greater than 99, display shows **PC**. This special value is always accessible after value 99. It is overwritten only if a new working time programming procedure is performed.

A2	SLOWDOWN WORKING TIME	From 0.0 to 240 Sec	Sliding ✓	Swing ✓	Dual Sliding ✓
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A2 is the slowdown working time. During this time the motor force is **A6**. You can program this parameter in the same range of **A1**. To disable the slowdown phase set this parameter to **00**. If you disabled this parameter before using **P1** or **P2** procedure, the linked phase will be skipped during programming, allowing you to program only **STANDARD WORKING TIME**.

A3	START UP TIME	From 0.0 to 1.5 Sec	Sliding ✓	Swing ✓	Dual Sliding ✓
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During this time the force of the motor increases constantly until it reaches the maximum power. During this phase the obstacle detection sensor is disabled. Each time the motor starts, the first **A3** seconds are the start-up time.

A4	DISPLACEMENT TIME ON CLOSURE	From 0 to 99 Sec		Swing ✓	
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Motor B begins closing **A4** seconds before motor A. This parameter is useful to avoid leaf overlap during the closing.

A5	STANDARD FORCE	From 1 to 10 [10%step]	Sliding ✓	Swing ✓	Dual Sliding ✓
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It is the force of **motor A** during the standard working time **A1**.

A6	SLOWDOWN FORCE	From 1 to 10 [10%step]	Sliding ✓	Swing ✓	Dual Sliding ✓
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It is the force of **motor A** during the slowdown working time **A2**.

A7	STANDARD OBSTACLE DETECTION THRESHOLD	From 00 to 99 - r0	Sliding ✓	Swing ✓	Dual Sliding ✓
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During the **standard working time A1**, if **motor A stress** is higher than **A7**: the motor behaves in 2 different ways depending if the slowdown obstacle detection is enabled or not and if limit switches are installed:

If the slowdown obstacle detection is enabled or limit switches are installed: the motor reverses its direction. If the direction was closure, the gate opens completely. If the direction was opening, the gate closes for 2 seconds. After this time, it stops. A start command will restart the closing. This functionality is active 3 times per working cycle. For additional times during the cycle the sensor works as a limit switch and finishes the working phase: from Opening to Pause, from Closing to Stand by.

If the slowdown obstacle detection is disabled and limit switches are not installed: then **motor A** complete its working phase. The stress of motor A is showed as a number by the display during the opening phase. 00 is the minimum, 99 is the maximum. The maximum value depends on the motor and can be lower than 99. To disable the obstacle detection sensor during the standard working time **A1**, set **A7** = r0. To set **A7** = r0 hold down or keep pressing **button C**.

A8	SLOWDOWN OBSTACLE DETECTION THRESHOLD	From 00 to 99 - r0	Sliding ✓	Swing ✓	Dual Sliding ✓
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During the **slowdown working time A2**, if the **motor A stress** is higher than **A8**, the motor behaves as follows:

If the limit switches are installed: the motor reverses its direction (as during standard obs. det.) for a maximum of 3 times.

If the limit switches are not installed: the motor ends its working phase and stops.

During the opening, for the slowdown working time **A2**, the display shows motor A stress. 00 is the minimum, 99 is the maximum. The maximum value depends on the motor and can be lower than 99. To disable the obstacle detection sensor during the slowdown working time **A2**, set **A8** = r0. To set **A8** = r0 hold down or keep pressing **button C**.

A9	MOTOR BRAKE	From 00 to 99 centiseconds	Sliding ✓		
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Motor brake in centiseconds. Useful to avoid gate getting stuck due to inertia. The motor brake is settable from r0 (disabled) to 99 (0.99 seconds). To set **A9** = r0 hold down or keep pressing **button D**.

AA	FINAL RELEASE	From 00 to 99 centiseconds		Swing ✓	
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Motor A opens for **AA** centiseconds at the end of closing to better meet European safety standards. The function is executed only when motor A finishes the closing phase and after an obstacle has been detected (generally the ground stop). To work the obstacle detection thresholds must be enabled.

Ab	MOTOR BRAKE POWER	From 1 to 10 [10%step]	Sliding ✓		
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The motor brake power during the braking time is programmed by **Ab**. Increasing the motor brake power will stop the gate more suddenly when reaching the limit switches. **Ab** value is applied to motor B in case the motor output is swapped to motor B by means of function **L3**.

MOTOR B SETTINGS

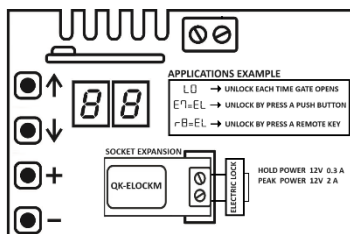
b1	STANDARD WORKING TIME	From 0.0 to 240 Sec	Swing ✓	Dual Sliding ✓
<p>Motor B opens after motor A. Motor B works for b1 seconds. After this time motor B starts the slowdown for b2 seconds. This is for both phases: opening and closing. In the menu you can adjust b1 in these range: from 0.0 to 9.9 seconds (step +- 0.1 sec). from 10 to 99 seconds (step +- 1.0 sec).</p> <p>Programming working time using P1 or P2 procedure allow you to have an extended range: from 100 to 240 seconds. This range is useful in special gate system. When this parameter has a value greater than 99, display shows P0. This special value is always accessible after value 99. It is overwritten only if a new working time programming procedure is performed.</p>				
b2	SLOWDOWN WORKING TIME	From 0.0 to 240 Sec	Swing ✓	Dual Sliding ✓
<p>b2 is the slowdown working time. During this time the motor force is b6. You can program this parameter in the same range of b1. To disable the slowdown phase set this parameter to 00. If you disabled this parameter before using P1 or P2 procedure, the linked phase will be skipped during programming, allowing you to program only STANDARD WORKING TIME.</p>				
b3	START UP TIME	From 0.0 to 1.5 Sec	Swing ✓	Dual Sliding ✓
<p>During this time the force of the motor increases constantly until it reaches the maximum power. During this phase the obstacle detection sensor is disabled. Each time the motor starts, the first b3 seconds are the start-up time.</p>				
b4	DISPLACEMENT TIME ON OPENING	From 0 to 99 Sec	Swing ✓	
<p>Motor B begins opening b4 seconds before motor A. This parameter is useful to avoid leaf overlap during the opening.</p>				
b5	STANDARD FORCE	From 1 to 10 [10%step]	Swing ✓	Dual Sliding ✓
<p>It is the force of motor B during the standard working time b1.</p>				
b6	SLOWDOWN FORCE	From 1 to 10 [10%step]	Swing ✓	Dual Sliding ✓
<p>It is the force of motor B during the slowdown working time b2.</p>				
b7	STANDARD OBSTACLE DETECTION THERESHOLD	From 00 to 99 - 00	Swing ✓	Dual Sliding ✓
<p>During the standard working time b1, when motor B stress is higher than b7, the motor behaves in 2 different ways depending if the slowdown obstacle detection is enabled or not and if limit switches are installed: <i>If the slowdown obstacle detection is enabled or limit switches are installed:</i> the motor reverses its direction. If the direction was closure, the gate opens completely. If the direction was opening, the gate closes for 2 seconds. After this time, it stops. A start command will restart the closing. This functionality is active 3 times per working cycle. For additional times during the cycle the sensor works as a limit switch and finishes the working phase: from Opening to Pause, from Closing to Stand by. <i>If the slowdown obstacle detection is disabled and limit switches are not installed:</i> then motor B finishes its run.</p> <p>The stress of motor B is showed as a number by the display during the closing phase. 00 is the minimum, 99 is the maximum. The maximum value depends on the motor and can be lower than 99. To disable the obstacle detection sensor during the standard working time b1 set b7 = 00. To set b7 = 00 hold down or keep pressing button C.</p>				
b8	SLOWDOWN OBSTACLE DETECTION THERESHOLD	From 00 to 99 - 00	Swing ✓	Dual Sliding ✓
<p>During the slowdown working time b2, when the motor B stress is higher than b8, the motor behaves as follows: <i>If the limit switches are installed:</i> the motor reverses its direction (as during standard obs. det.) for a maximum of 3 times. <i>If the limit switches are not installed:</i> the motor ends its working phase and stops.</p> <p>During the closing, for the slowdown working time b2, the display shows motor B stress. 00 is the minimum, 99 is the maximum. The maximum value depends on the motor and can be lower than 99. To disable the obstacle detection sensor during the slowdown working time b2 set b8 = 00. To set b8 = 00 hold down or keep pressing button C.</p>				

FUNCTIONS

F0	AUTOMATIC CLOSURE TIME	From 0.0 to 240 Sec	Sliding ✓	Swing ✓	Dual Sliding ✓
<p>After the opening the gate waits for F0 seconds before beginning the closure. To disable the automatic closure set F0 = 5E. To set 5E hold down or keep pressing button C until the display shows 5E. When F0 = 5E the gate stops after the opening. The closing begins when a start command is received. You can program a time higher than 99 seconds using procedures P1 or P2. In this case after value 99, the display shows PC. It is the value has been programmed using procedures P1 or P2. The automatic closure time can be programmed up to 240 sec.</p>					
F1	PEDESTRIAN WORKING TIME	From 0.0 to 99 [sec] - FF	Sliding ✓	Swing ✓	Dual Sliding ✓
<p>The pedestrian commands (r3 or E1 = PE) open just Motor A for F1 seconds. The slowdown phase is bypassed during the gate opening and it is executed during the closing phase. If you wish to completely open motor A set F1 to FF. This can be achieved by holding down or keep pressing Button C until the display shows FF. In this scenario, Motor A will perform the slowdown phase during the opening as well.</p>					
F2	KICK BACK FUNCTION DURING CLOSING	From 0.0 to 2.5 [sec]	Sliding ✓	Swing ✓	
<p>When the gate is closing and the slowdown is finished, a ramp pulse is executed by motor A. This pulse is F2 seconds long and the obstacle detection sensor is disabled for the same amount of time. After the pulse the closing phase is finished.</p>					
F3	PRE-BLINKING TIME	From 0.0 to 4.0 [sec]	Sliding ✓	Swing ✓	Dual Sliding ✓
<p>Before starting the motors, the flashing lamp blinks for F3 seconds. After this time the flashing lamp keeps blinking and the motors start moving.</p>					
F4	KICK BACK FUNCTION DURING OPENING	51 enabled/ n0 disabled	Sliding ✓	Swing ✓	
<p>Before opening motor A closes for 0.5 seconds. The force of motor A is set to maximum power and the obstacle detection is disabled. This function can be useful when the electric lock is installed and opening is difficult.</p>					
F5	CONTROL BOARD'S LOGIC	STANDARD – COMMUNITY – STEP BY STEP	Sliding ✓	Swing ✓	Dual Sliding ✓
01 STANDARD MODE		02 COMMUNITY MODE	03 STEP BY STEP MODE		
<p>Opening: start commands stop the gate. Closing: start commands open the gate.</p>		<p>Opening: the start commands don't have any effect Closing: start commands open the gate</p>	<p>Opening: start commands stop the gate. Closing: start commands stop the gate.</p>		
F7	FAST CLOSURE DELAY	From 1.5 to 5.0 sec	Sliding ✓	Swing ✓	Dual Sliding ✓
SWING MODE dE = Hb		SLIDING dE = H5 AND DUAL SLIDING MODE dE = HH			
<p>During the opening: once all photocells have been activated, both opening (wired to terminal block input 4) and closing (wired to terminal block input 3), the gate starts closing after F7 seconds. The fast closure is allowed only if gate has been started by a fast closure function by remote or by terminal blocks.</p>			<p>During the opening: once closing photocells (wired to terminal block input 3), have been activated, the gate starts closing after F7 seconds. The fast closure is allowed only if gate has been started by a fast closure function by remote or by terminal blocks.</p>		
FB	SAFETY DEVICES AS SLIDING	51 enabled/ n0 disabled	Sliding ✓	Swing ✓	
FB = 51 Sliding mode		FB = n0 Swing mode			
<p>Opening: Activation of opening safety devices stops the gate opening and starts the closing; after 2 seconds, the closing is stopped and the gate operator state will be stop-opening; activation of closing safety devices doesn't have any effect. Closing: Activation of closing safety devices stops the gate closing and starts the opening; activation of opening safety devices doesn't have any effect.</p>			<p>Opening: Activation of opening safety devices stops the gate opening; when the safety devices are deactivated the gate continues the opening; activation of closing safety devices don't have any effect. Closing: Activation of closing safety devices stops the gate closing and starts the opening; activation of opening safety devices doesn't have any effect.</p>		

OPENING SAFETY DEVICE → photocell **E1** or 8K2 safety edge **1a/2a/3a** **CLOSING SAFETY DEVICE** → photocell **E2** or 8K2 safety edge **1c/2c/3c**

L0	ELECTRIC LOCK	From n0 (disabled) to 99 sec	Sliding ✓	Swing ✓	Dual Sliding ✓
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This function sets the hold time of electric lock module **QK-ELOCKM** and expansion modules **QK-ELOCKM330 / QK-RELAY** (see function **02 = 13** at page 15). When **QK-ELOCKM** module is installed on the expansion socket of the control board and **L0** is set from **01** to **99**, the gate electric unlock function is enabled. Each time the gate opens, **QK-ELOCKM** unlocks and holds the electric lock for **L0** seconds. When the gate changes state, **QK-ELOCKM** stops unlocking the electric lock and releases it, even if **L0** seconds has not expired. You can use the module for other applications (I.E. pedestrian gate) in this case, set **L0 = n0** and see **EL** function (see page 9).

L1	COLD WINTER FUNCTION	From n0 to 10	Sliding ✓	Swing ✓	Dual Sliding ✓
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The cold winter function is useful in countries with very cold winters. The motor is activated with the minimum power for **L1** minutes out of 10 minutes to keep the control board box and the motor warm. When the motor is activated with the minimum power, the gate doesn't move. The function runs when the gate is completely open or in stand-by only. When **L1** is set to **n0** the function is disabled.

L3	SWAP MOTOR OUTPUT FROM A TO B	51 enabled/ n0 disabled	Sliding ✓		
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In a sliding gate, **dE = H5**, you can swap the motor output from motor A to B by setting **L3 = 51**. Once enabled, the motor settings will still be parameters from **A1** to **Ab**. This function is useful in case of motor A output terminal failure.

FUNCTIONS

L5	ASSISTANCE REQUEST FROM CYCLE COUNTER	Sliding ✓	Swing ✓	Dual Sliding ✓
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Set to **no** to disable this function. When the gate has completed **L5** working cycles, the display shows **5L**. Each 20 minutes the flashing lamp is on for 1 minutes. This function is useful for programming assistance request. **L5** is programmable from **A 1** to **G9**. The letter is the multiplier of the number **A (x 1)**, **b (x 10)**, **C (x 100)**, **d (x 1 000)**, **E (x 10 000)**, **F (x 100 000)** and **G (x 1 000 000)**. In this way you can program assistance request function from: 1-9 (**A**), 10- 90(**b**) , 100 – 900 (**C**) , 1000 – 9000 (**d**) , 10 000 – 90 000 (**E**) , 100 000 – 900 000 (**F**) , 1 000 000 – 9 000 000 (**G**) working cycles. To restore this counter after an assistance request:

- 1) Set **L5** = **no** : The counter will set to **00** 2) Set **L5** at the new value. The next assistance request will be after **L5** cycles.

L6	WORKING CYCLE COUNTER	From 0.0 to 240 Sec	Sliding ✓	Swing ✓	Dual Sliding ✓
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It is the total working cycle counter. The display shows a letter and a number. The letter is the multiplier of the number: **A (x 1)**, **b (x 10)**, **C (x 100)**, **d (x 1 000)**, **E (x 10 000)**, **F (x 100 000)** and **G (x 1 000 000)**. For instance if a gate has completed **1365** working cycle then **L6** shows **d. l**. Pressing **button D** the display shows the next value:

d. l D → C.3 D → b.6 D → A.5

L7	FLASHING LAMP MODE	STANDARD-BLINKING	Sliding ✓	Swing ✓	Dual Sliding ✓
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L7 = **00 STANDARD MODE**: the flashing lamp blinks fast during opening, slow during closing and it stays on during pause.
L7 = **0 1 FIXED MODE**: the flashing lamp is on during opening, closing and pause.

L8	SWAP MOTORS DIRECTION	Sliding ✓	Swing ✓	Dual Sliding ✓
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It changes motors direction.

	MOTOR A TERMINAL BLOCK	MOTOR B TERMINAL BLOCK
L8 = no → DIR1 = OPEN DIR2 = CLOSE →	13 : OPEN 14 : COM 15 : CLOSE	16 : OPEN 17 :COM 18 : CLOSE
L8 = 5 1 → DIR1 = CLOSE DIR2 = OPEN →	13 : CLOSE 14 : COM 15 : OPEN	16 : CLOSE 17 :COM 18 : OPEN

TEST FUNCTIONS

L1	PHOTOCELLS TEST	5 1 enabled/ no disabled	Sliding ✓	Swing ✓	Dual Sliding ✓
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Each time the gate starts, the control board checks the photocells. If no errors are detected the motor can be started. Vice versa the motor cannot start and the control board display shows **1E**.

L2	MOTOR THERMAL TEST	5 1 enabled/ no disabled	Sliding ✓	Swing ✓	Dual Sliding ✓
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Before starting a working cycle the motors are tested. When the display shows **9A/9B** the motor **A/B** is in thermal protection. This test may fail if the motor is not correctly connected. When the motor is in thermal protection, the working cycle cannot be started.

FACTORY SETTINGS

d0	DEFAULT RESTORE	5 1 enabled/ no disabled	Sliding ✓	Swing ✓	Dual Sliding ✓
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To restore the factory default settings, keep pressing **button A** or **B** until the display shows **d0**. After a few seconds the control board shows **no**. To execute hold down **button C** until the display shows **- -**. The factory default has been set and the control board state is in stand by state. This function doesn't have any effect on radio programming.

dE	CONTROL BOARD MODE	Hb swing – H5 sliding – HH dual sliding	Sliding ✓	Swing ✓	Dual Sliding ✓
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This control board can manage three types of gate: **SWING – SLIDING – DUAL SLIDING**. Once selected **dE**, the display shows the current mode : **Hb SWING** , **H5 SLIDING**, and **HH DUAL SLIDING**. **TO CHANGE MODE** : Hold down **BUTTON C+** or **D-** of the control board. The display blinks showing the operating mode you are setting. When the display stops blinking, the configuration showed has been set.

OBSTACLE PROGRAMMING

P6	OBSTACLE DETECTION THERESHOLD PROGRAMMING	Swing ✓
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P6 helps you to program the obstacle detection sensor automatically. It works only in swing mode **dE** = **Hb**. This procedure sets the obstacle detection parameters: **A7**, **AB**, **b7**, and **b8**. **HOW TO**: The gate must be closed. Keep pressing **BUTTON A** or **B** until display shows **P6**. When display show **- -** press a **START** command.

- 1 → Motors close pushing on the mechanical stops. The control board hence detects the maximum motors stress.
- 2 → Motor A opens for 4 seconds. Motor A stops. Motor B opens for 4 seconds. Motor B stops.
- 3 → The Gate returns to initial position.

If the display shows **9P**, an error has occurred during the procedure. One or more obstacle detection parameters (**A7**, **AB**, **b7**, and **b8**) are left disabled. For these parameters, you can set the value manually. Any command during programming stops **P6** programming and the display will show **9P**.

HARDWARE EXPANSIONS AND OUTPUT FUNCTIONS

QUIKO code	QK-ELOCKM	QK-ELOCKM330	QK-RELAY
Output 1	X	X	✓
Output 2	X	✓	✓
Socket	✓	X	X
Applications	<p>ELECTRIC LOCK 12V Hold power: 0.3 A 12V Peak power: 2 A 12V Suggested activation time: 1 -99 seconds Examples of setting : 1) L0 from 01 to 15 2) L0 = r0 and a remote key stored (suggested settings rB = EL).</p>	<p>ELECTRIC LOCK 12V Hold current: 0.5 A 12V Peak power: 4 A 12V Suggested activation time: 1-15 seconds Examples of setting : 1) o2 = 13 and L0 from 01 to 15. 2) o2 = 06 and remote key stored as r6 (suggested setting r6 = d0).</p>	<p>GENERAL PORPOUSE RELAY Coil input: 24VDC Max Ratings: 7A / 230VAC Examples of setting : 1) o1 = 01 Relay is on when the gate is open. 2) o1 = 07 Relay is toggled by pressing a remote key stored as r7 (suggested setting r7 = d0).</p>

o1/o2

OUTPUT 1 / OUTPUT 2

01 to 13

Sliding ✓

Swing ✓

Dual Sliding ✓

These functions are useful when outputs expansion are used. The list below describes the output functions:

o1-o2	FUNCTION NAME	OUTPUT FUCNTIONS DESCRIPTION
01	GATE OPEN	The output is on when the gate is open.
02	GATE CLOSED	The output is on when the gate is completely closed.
03	FLASHING LIGHT	The output is ON-OFF intermittently during the opening and closing phases. During the closing phase the OFF state is longer than opening. During the automatic closure time the output is ON for the same amount of time. In all other states, output is OFF.
04	COURTESY LIGHT	The output is ON for 3 minutes each time gate starts opening.
05	ON/OFF BY REMOTE KEY STORED AS r6	The output switches its state (from ON to OFF, from OFF to ON) when a remote key stored by the r6 function is pressed.
06	ON AS LONG AS A REMOTE KEY STORED AS r6 IS PRESSED	The output is ON as long as a remote key stored by the r6 function is pressed. The output is off when the remote key has been released.
07	ON/OFF BY REMOTE KEY STORED AS r7	The output switches its state (from ON to OFF, from OFF to ON) when a remote key stored by the r7 function is pressed.
08	ON AS LONG AS A REMOTE KEY STORED AS r7 IS PRESSED	The output is ON as long as a remote key stored by the r7 function is pressed. The output is off when the remote key has been released.
09	ON/OFF BY REMOTE KEY STORED AS r8 OR BY A PUSH BUTTON WIRED TO TERMINAL BLOCK INPUT 7-8 E7	The output switches its state (from ON to OFF, from OFF to ON) in these cases: a remote key stored by the r8 function is pressed, or a push button wired to input 7 is pressed.
10	ON AS LONG AS A REMOTE KEY STORED AS r8 IS PRESSED OR BY A PUSH BUTTON WIRED TO TERMINAL BLOCK INPUT 7-8 E7	The output is ON in these cases: as long as a remote key stored by the r8 function is pressed or as long as a push button wired to input 7 is pressed. The output is OFF when both remote key and push button have been released.
11	ON DURING GATE OPENING	The output is ON only when the gate is opening.
12	ON DURING GATE CLOSING	The output is ON only when the gate is closing.
13	ELECTRIC LOCK	The output is ON for L0 seconds, each time gate starts opening. It is useful for ELECTRIC LOCK module QK-ELOCKM330 and QK-RELAY . Remark: QK-ELOCKM330 is compatible with output 2 only.

INPUT / RADIO / ERROR LOGs

The control board records the last ten events from these sources: terminal block inputs, remote control commands and errors.

- $E=$ → Displays the status of the last ten terminal block inputs.
- $r=$ → Displays the last ten remote control inputs.
- $E=$ → Displays the last ten errors.

For each of these parameters, you can scroll up or down the list by pressing **BUTTON C+** or **D-** of the control board. Each time you press them, the display shows a number and then the status (**input E**, **remote r**, or **errors E**). The numbers range from 01 to 10. The number 10 is the oldest status and the last one stored. After selecting $E= / r= / E=$, the first status shown is 01, the most recent.

TERMINAL BLOCK INPUTS LOG

After selecting $E=$, display shows the last inputs status in this way:

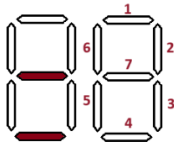


Figure 1

Each led of the second display shows the status of an input. The input has been activated if the corresponding led is on.

Figure 1 shows how each input is linked to a led. The input 1 is linked to top led, while input 4 is linked with bottom led and so on.

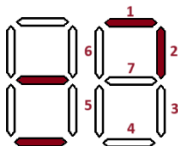


Figure 2

Figure 2 shows **input 1** and **input 2** have been activated. If you want to know which function are linked to **input 1** and **input 2**, you can select $E1$ and $E2$ parameters. For instance, you can find $E1 = 00$ **START**, it means that normally open push button wired from terminal block 1 to 8 has been pressed (closing pin 1 to 8); and $E2 = 5E$ **STOP**, it means that normally closed switch wired from terminal block input 2 to 8 has been switched (opening pin 2 from 8). In this case, display shows that an user has tried to move the gate without success because the stop input was active at the same time.

RADIO LOG

After selecting $r=$, display shows the last remote codes received. The remotes key are showed as a number, called **KEYID**. The **KEYID** is the position of remote key in the control board's memory. To view a KEY ID of remote button, select one of the following functions: $r1$, $r2$, $r3$, $r4$, $r6$, $r7$, or $r8$. After having selected one, the display shows button KEY ID once you are press it; if it is not stored it shows $=.$.

ERROR LOG

After selecting $E=$, the display shows the last ten errors. The errors showed are:

7A	Motor A has detected an obstacle
9A	Test Motor A failed. Motor A is in thermal protection state or there is a connection error.
7B	Motor B has detected an obstacle
9B	Test Motor B failed. Motor B is in thermal protection state or there is a connection error.
9P	An error occurred during programming procedure ($P1$, $P2$ or $P6$)
1E	Photocells test failed
0E	Main power supply (230VAC) failure occurred

EU Declaration of Conformity

and Declaration of Incorporation of "quasi-machines" (pursuant to the Machinery Directive 2006/42/CE, Att.II, B)



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declare that the DoC is issued under our sole responsibility and belongs to the following product:

Apparatus model/Product:	QK-CE2204UNI
Type:	CONTROL BOARD INCLUDING RADIO MODULE FOR SLIDING AND SWING GATE OPERATORS (220V)


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

- Directive 2014/53/EU (RED Directive)
- Directive 2011/65/EU (RoHS)

The following harmonised standards and technical specifications have been applied:

Title:	Date of standard/specification
EN 61000-6-2	2005 + AC:2005
EN 61000-6-3	2007 + A1:2011+AC:2012,
EN 301 489-1 V2.2.3	2019
EN 301 489-3 V2.1.1	2017
EN 60335-2-103	2015
EN 12453	2017
EN 62479	2010
EN 300 220-2 V3.1.1	2017
EN IEC 63000	2018

Additional information

Signed for and on behalf of:		
Revision:	Place and date of issue:	Name, function, signature
01.00	Sossano, 01/03/2024	(Borinato Luca, Legal Officer)
		



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