ISO 9001:2008
Cert. n. 3614/2
Quality System Certified

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Italian Openings & Automation
SINCE 1954

Cancelli Automatici Shed Infissi Telecomandati **MADE IN ITALY**

GB

KEQ013

firmware 2138

OPERATION PROGRAMS

Using display is possible to program the gate's operation and of the auxiliary services.:
STEP BY STEP, SEMIAUTOMATIC, AUTOMATIC, DEAD-MAN, PEDESTRIAN, SHORT CLOSING IMPULS, TIMER, SLOW-DOWN MOTORS, POWER STARTING, TEST PHOTOCELLS, MOTORS INDIPENDENT OR UNIFIED, MEMORISATION OF WORK'S TIME, OBSTACLE DETECTION.

FUNCTIONS:

QUICK REVERSE each command START reverses: open - close. Then Automatically closes.
CONDOMINIUM The START command can only open or reload the pause time. Automatically closes.
STEP-BY-STEP Each START command follows the logic **open-stop-close-stop-open** ... Do not automatically closes.
STEP BY STEP WITH CLOSING AFTER PAUSE each ***START*** command follows the logic of ***open-stop-close-stop-open*** ... Automatically closes.
INDUSTRIAL command ***PEDESTRIAN*** becomes closes while ***START*** command opens. If **T11 is 0**, there is no automatic reclosing.
DEAD MAN The ***START*** command opens, the ***PEDESTRIAN*** command closes. The motors stop when you release the command.
CLOSING TO RESTART Performs full cycle of opening stop and closing, ***ONLY*** if when a lack of power supply happened, automation was in the open position.
PASSING DETECTION When passing is detected by the photocells, in open if **S19 is 0** set pause time to 2 s.
REVERSE ON PASSING DETECTION Set **S04 to 1**. When the following function is on to the passing detected by the photocells in opens, the control panel reverses the motion of the motors and closes.
SOFT-START In opening there will be a gradual increase in the speed of the motors.

TECHNICAL SPECIFICATIONS:

Control unit power: 230VAC 50/60Hz
Motor output: 2 x 350W
Accessories power: 24 VAC - 400 mA
Electrolock power: 12 VAC - 1 A
Environmental operatine temperature: -15°C / + 60°C
Ricevente radio integrata
Fusibile linea F1 5A F2 200mA
Box standard version dimensions: 255x200x105mm (size of the special version could change)
IP Grad: 54

WARNING!

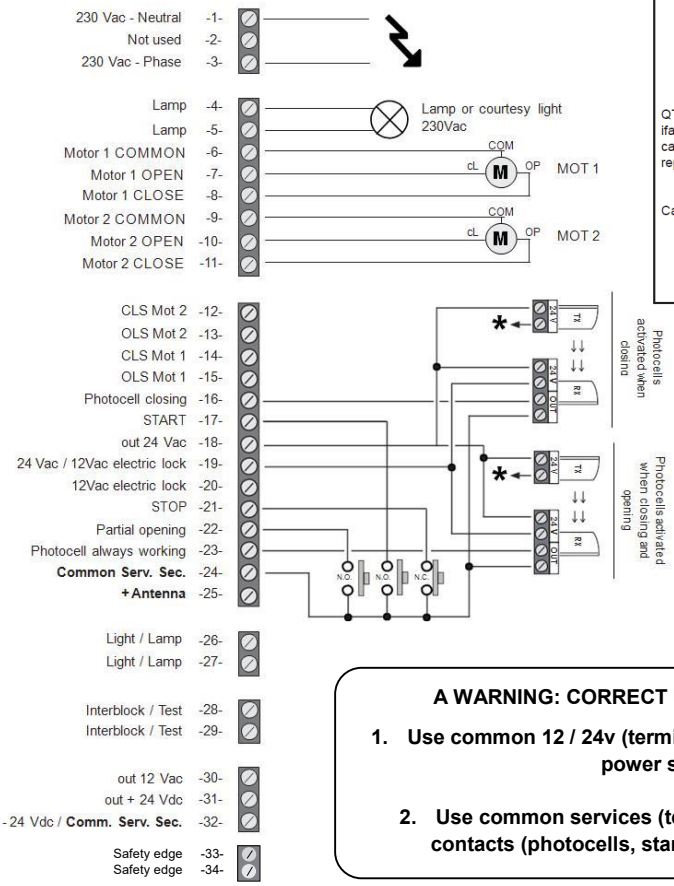
Before installing, carefully read this manual.
We declines every responsibility in case of not observance of the normative in force in the Country where the installation is made.

Check the software version and compatibility with the operating manual

When the control unit is turn on, you can see 4 numbers in the display. This is the software number. We suggest to check this number with the version on the manual.

Small Legend:

OLS	open limit switch
CLS	close limit switch
START	control to drive the gate
PEDESTRIAN	in sliding units: control partial opening
Vac	alternate current
Vdc	direct current
NC	normally closed contact
NO	normally open contact
Isolated contat	isolated from tensions



DECLARATION OF CONFORMITY

The undersigned, representative of the following manifacturer, hereby certifies that the equipment known as

KEQ013

complies with all technical requirements concerning this product within the domain of application of the EC Directives 73/23/CEE, 89/336/CEE and 99/5/CEE

CASIT
Strada Pietra Alta 1
10040 Caselette (To)
Italia

QThis declaration is rendered under the manifactu-rer's sole responsability, and if applicable, under responsability of his authorized representative.

Caselette (To) - Italia, 5/06/2012

CARLO RAMELLA

ER 01 = damged TRIAC . Cause defect: non-compliant motor/s connection (short circuit) with consequent burning of the TRIAC.

A WARNING: CORRECT USE OF COMMONS.

1. **Use common 12 / 24v (terminal 19) only for photocells power supply.**

2. **Use common services (terminal 24) for common contacts (photocells, start, stop, pedestrian, etc.)**

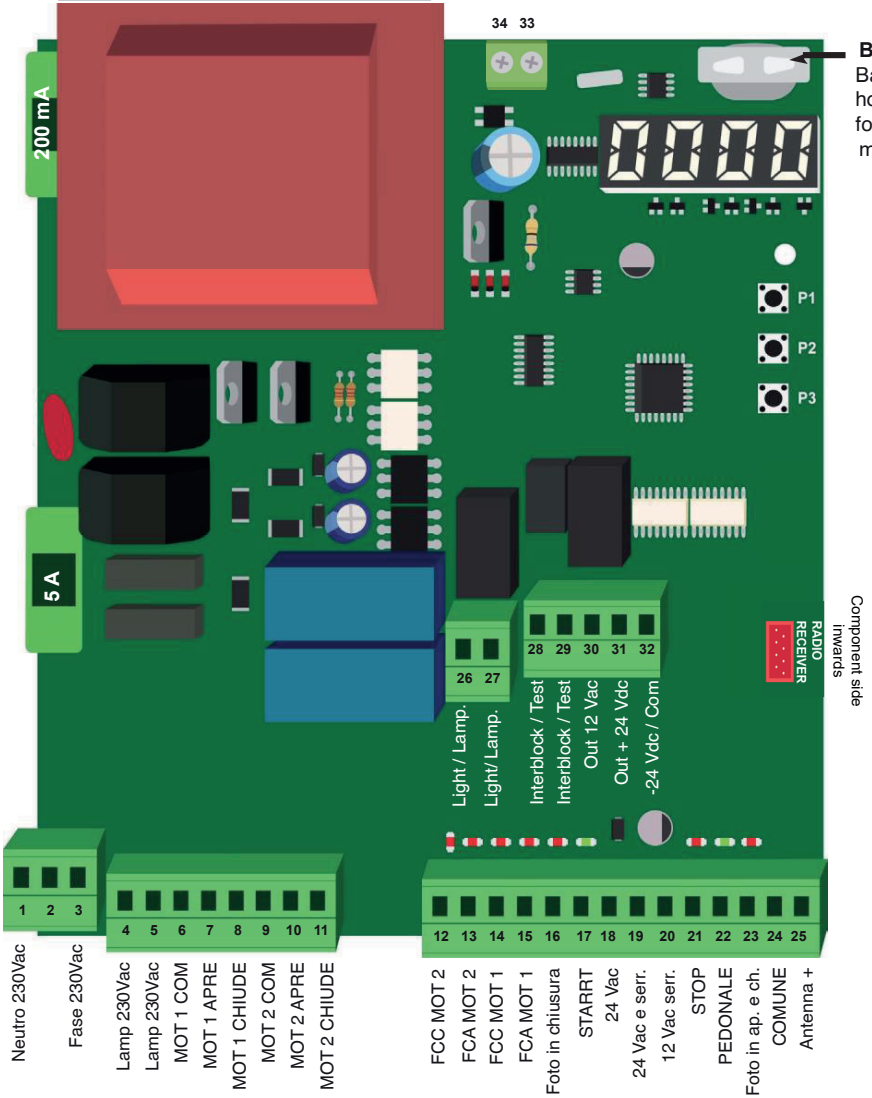
Notes on connections

To guarantee operator safety and to prevent damaging the components, never make connections or insert wireless receiver boards while the control unit is powered.

- Power the control unit through a 3 x 1.5 mm2 cable. If the distance between the control unit and the ground sy stem connection is more than 30 m, a ground plate must be installed in proximity to the control unit.
- If the motors do not have a cable, use the 4 x 1.5 mm2 cable (open + close + common + ground).
- In connecting the part with an extremely low safety voltage, use cables with a minimum section of 0.5 or 0.75 mm2.
- Use shielded cables if the length exceeds 30m and connecting the ground braid only from the side of the control unit
- Do not connect the cables in underground cases even if they are water-tight.
- **Note: the N.C. not used, STOP LIMIT SWITCHES AND PHOTOCELLS, must not be short-circuited towards the common of the inputs but must be set to 0**
- If the same input has more than one contact (NC), they are placed in series.
- If they are not used, the inputs to the Normally Open (NO) contacts are left loose.
- If the same input has more than one contact (NO), they are to be placed in series.
- The contacts must be mechanical and free of any potential.

Remember that systems for automatic gates and doors must be installed by highly qualified technicians only and in full compliance with current law.

1 Scheme of the control unit



Normally the red led in the inputs **OLS - CLS - STOP - FOTO** are **always lit on.**
Normally the **green light** in the inputs **START - PEDESTRIAN** are normally **switched off.**

CLS2 OLS2 CLS1 OLS1 PHOTO-A START STOP PEDESTRIAN PHOTO-B

1.1 Electrical connections

Neutral 230 Vac	**1**	230 Vac power supply 50Hz Neutral
Do not used	**2**	Do not used
Phase 230 Vac	**3**	230Vac power supply 50Hz Phase

Lamp	**4**	Output for lamps (with flashing electronic card) or Courtesy light. Maximum power of the lamp with 40.
	5	
M 1 Com	**6**	Output for the connection of motor 2 COMMON pole
M 1 Open	**7**	Output for the connection of motor 1 pole OPEN
M 1 Close	**8**	Output for the connection motor 1 pole CLOSE
M 2 Com	**9**	Output for the connection of motor 2 COMMON pole
M 2 Open	**10**	Output for the connection of motor 2 pole OPEN
M 2 Close	**11**	Output for the connection motor 2 pole CLOSE

CLS M2	**12**	Input close limit switch motor 2
OLS M2	**13**	Input open limit switch motor 2
CLS M1	**14**	Input close limit switch motor 1
OLS M1	**15**	Input open limit switch motor 1
Photo A	**16**	Input photo-beam A activated when closing
START	**17**	Input bi-stable START
24Vac	**18**	Output 24Vac
Com. 12/24Vac	**19**	Common 12/24 Vac
12Vac elec.lock	**20**	Output for electrical lock 12Vac 50Hz 1A (active only when opened)
STOP	**21**	Input STOP
PEDESTRIAN	**22**	Imput bi-stabile command for partial opening
Photo B	**23**	Imput photocell B activated when closing and openig
Common 1 -	**24**	Common for all input: services, safeties, coaxial cables
Antenna +	**25**	Input for antenna

LIGHT o Lamp.	**26**	Contact for LIGHT (for lamps without electronic card) o 2° canale radio - S25
LIGHT o Lamp.	**27**	

PHOTOTEST	**28**	Isolated contact for interlock or test
PHOTOTEST	**29**	Isolated contact for interlock or test
12 Vac	**30**	Output 12 Vac 1,1A (including electrical lock) **Common plug 19**
+ 24 Vdc	**31**	Output + 24 Vdc + max.500 mA
- 24 Vdc / **Comm.**	**32**	Output - 24 Vdc / **Common, services and safeties**

2 Use and functions of the control panel

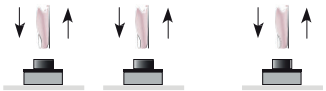
The inputs N.C. not used, LIMIT SWITCHES STPO AND PHOTO, must not be short-circuited toward the commune of the inputs, but set them to 0.

It's posible to set only when the gate is closed.

ADVISE: KEEP DE DEFAULT SETTINGS (FACTORY) AND CHANGE THEM ACCORDING TO THE SITUATIONS IN THE VARIOUS SECTIONS OF FUNCTIONS

2.1 Settings and parameters

ACCESS TO THE FUNCTIONS
Press **P1** when the gate is closed



SELECTION OF THE ADJUSTMENT
Press button **P2** and **P3** to select the group and press **P1** to confirm.

Set up T
Set up of the Time programming

Set up L
Set up of the programm (Speed, power...)

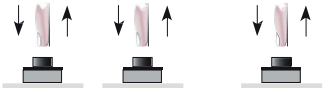
Set Up C
Remote Controls MANAGING

Set Up S
Logic of function

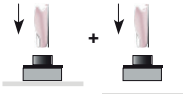
Set up R
Activation of the outputs.

Set Up P
Settings Clock

Set up E
Back to the standard functions



SELECTION OF THE SET UP
Press **P2** and **P3** to select the group
Press **P1** to confirm

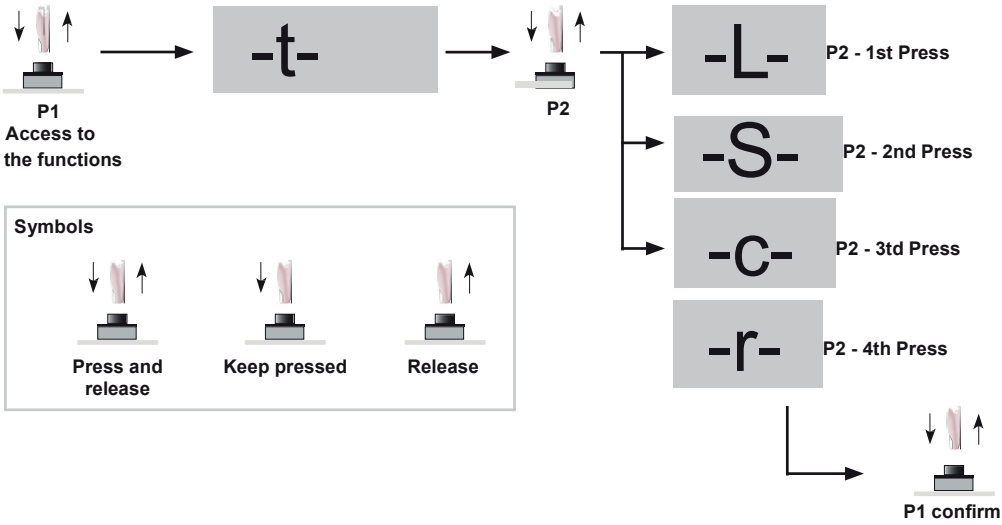


GO BACK
To go back to the previous group press **P2 and P3**

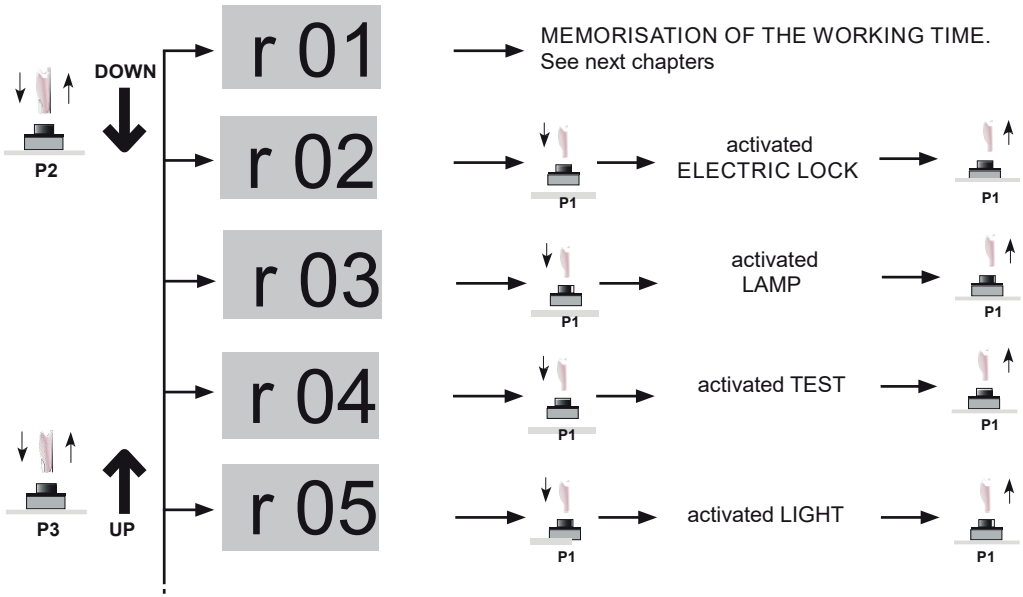
SELF-RESET
If the control unit is not used for more than one minute, the control unit go out from the programming without saving any programs and all changes will be cancelled.

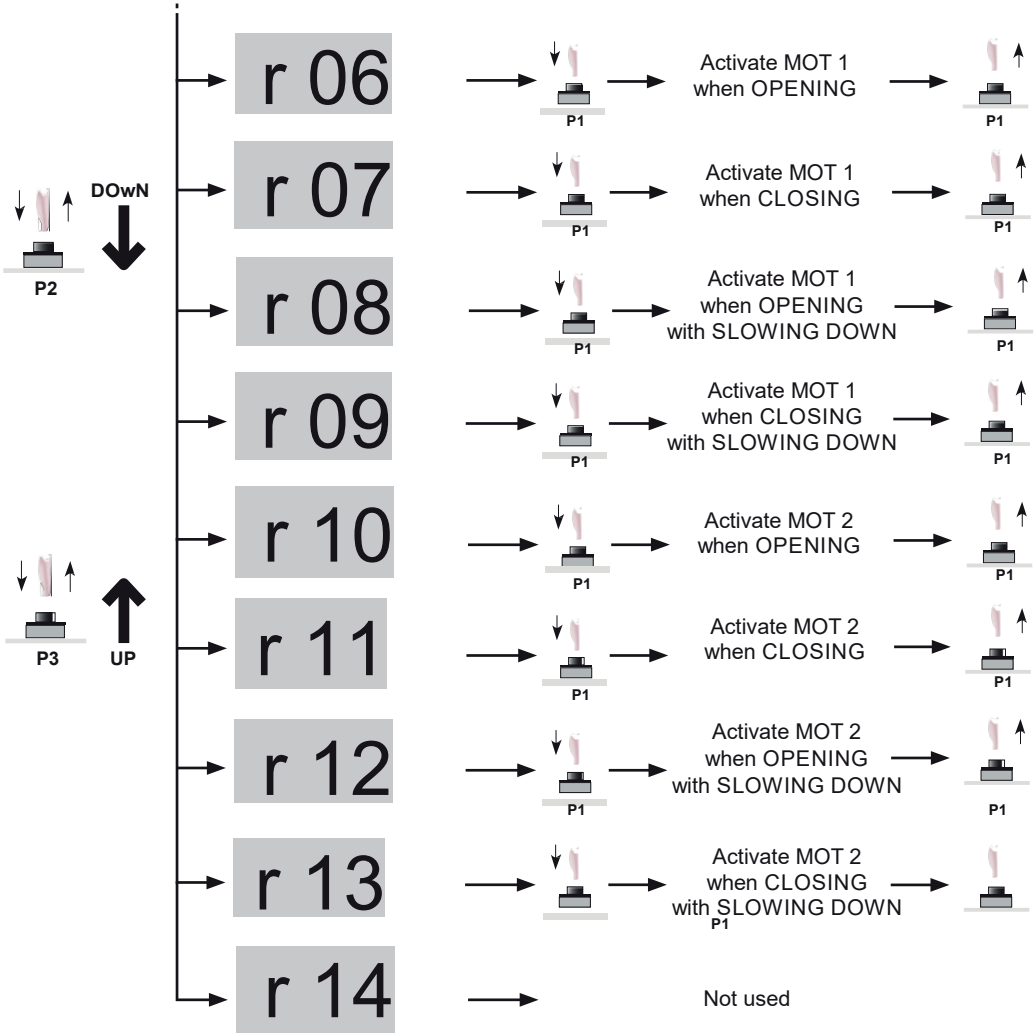
2.2 Example how to use the MENU and reading of information

KEQ013 can activate separately, until **P1** will be released, opens, closes and the output of lamps and test. This is can be useful in case to check the correct function of the outputs and the correct function of the devices.



Confirm with **P1** in the set up **R** and you can go to the “subfunction”, choosing with the buttons **P2** and **P3** and then confirm with **P1**. Now we are in the function **R01**, **R02**, **R…**





2.3 Maintenance Counter

Through the function **R14** is possible to display the MAINTENANCE COUNTER. This counter is incremented a each opening maneuver and can not be reset by the user. The display shows the number of openings in hundreds of operations (example 010.0 indicates 10000 operations).

S 29

Through the function **S29** you can set the LIMIT OF MAINTENANCE (always expressed in hundreds of operations). If the maintenance counter exceeds the set value, for each opening you will have an increase in the pre-flashes for 5 seconds compared to the set up through the **T15.**

3 Timer function

KEQ013 has an optional timer for the following functions:

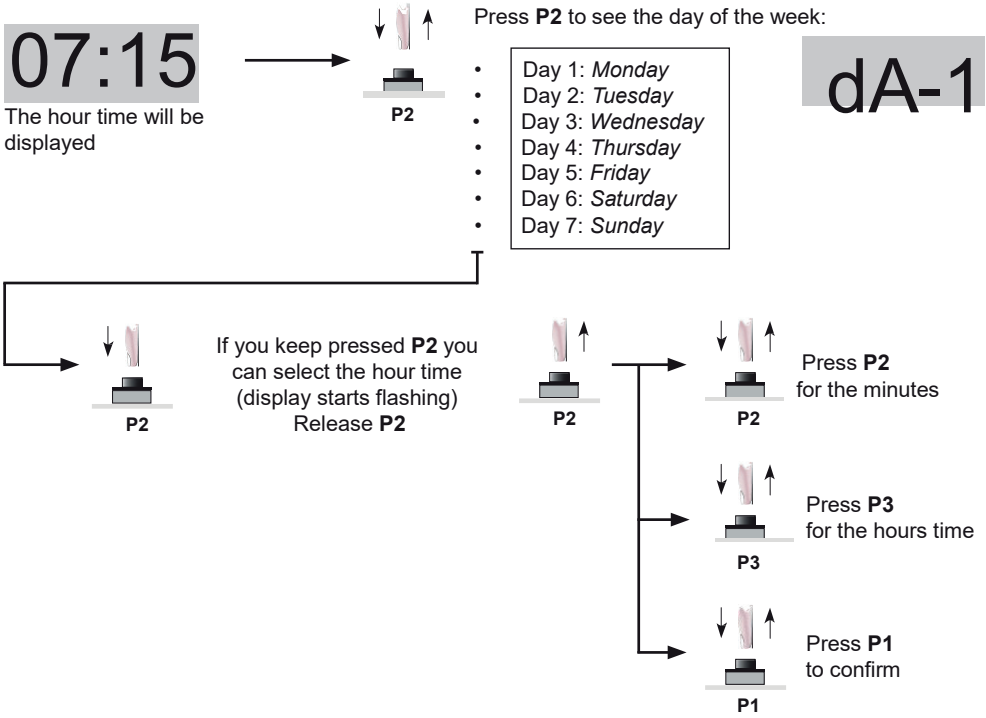
- **Automatic opening**

Automatic opening means that the door can be opened for such a period of time, it is a week programm of maximum 28 time slots.

- **Inibition of the radio receiver**

This function stops the automation and it can inihibte any radio signal, in thi time the control unit accepts only commands START(terminal board no.16) and PEDESTRIAN (partial opening, terminal board no.22).

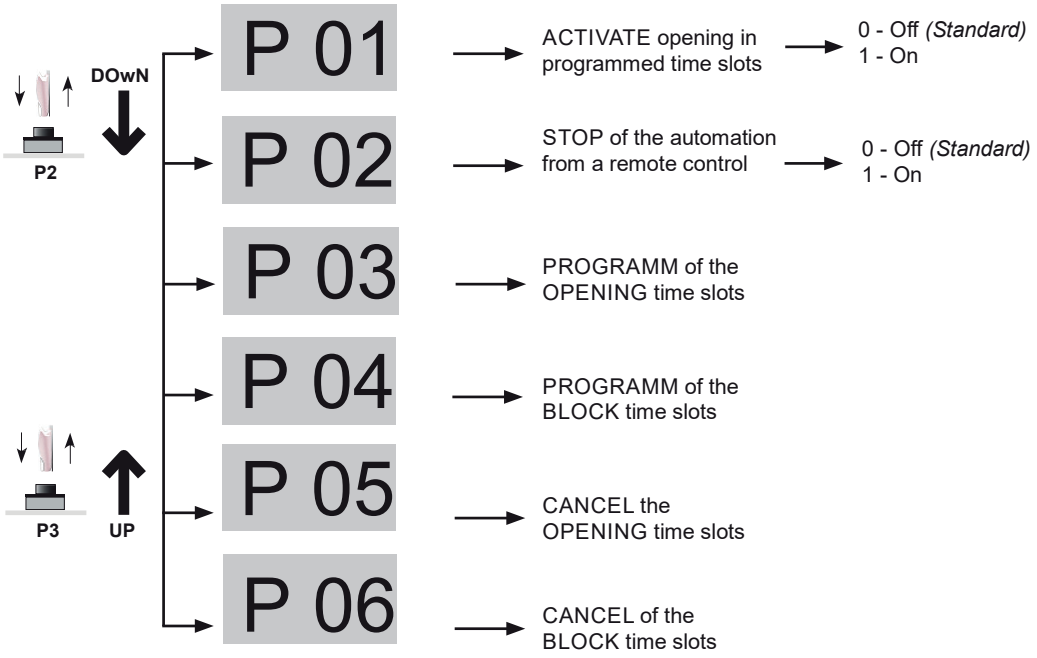
3.1 Set up of hour and day



The day will be displayed (see table above), select the day with **P2** and the confirm with **P1**.

3.2 List of the functions P

This function can cancel the time slots, when you need to re-programm the time slots. Go to function **P**:



3.3 Activation/Deactivation of the automatic opening and block

If the parameters **P01** or **P02** are activated (function no.1) the control unit will manage the automatic opening and block in the programmed time slots.

The display shows alternatively the following notes. Opening and block time slots can be activated in the same period of time.

tr.AP. AUTOMATIC OPENING of the time slots ACTIVATED

tr.bL. BLOck time slot ACTIVATED

3.4 Program of the time slots

This function can cancel the time slots, when you need to re-programm the time slots.
Go to function **P**:

P 03
inserimento fasce
orarie di APERTURA

P 04
inserimento fasce
orarie di BLOccO

Select **P03** for the automatic opening time slots and **P04** for the block time slots.

P1 Confirm

Press **P1** for the start of opening hour or block

dA-1

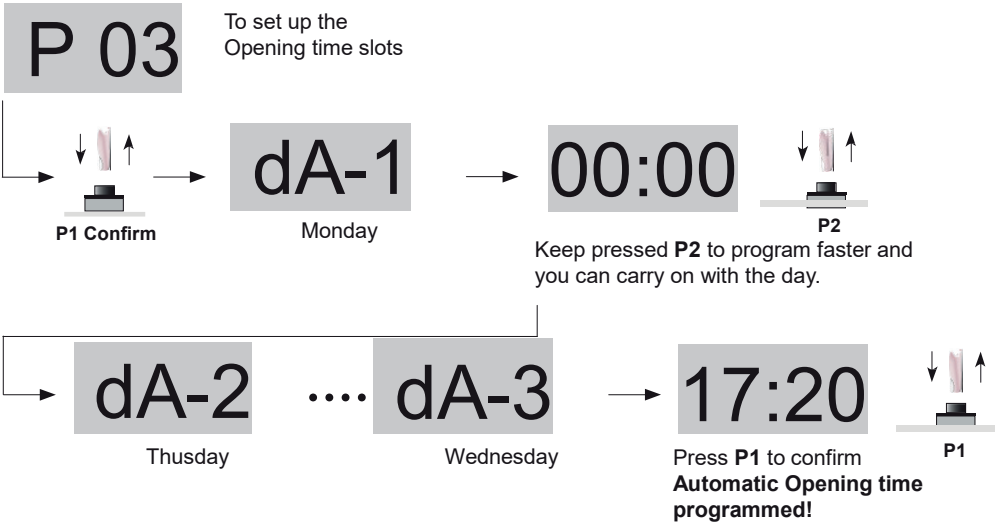
Start **from day 1 (Monday)** and with **P2** and **P3** you can adjust and change the hour time. Keep pressed **P2** for a faster selection and change the day. Confirm with **P**, repeat this operation for the closing time or stop block time

During the program of opening and starting block hour the display lit on while it flashes when you program the closing and block time.

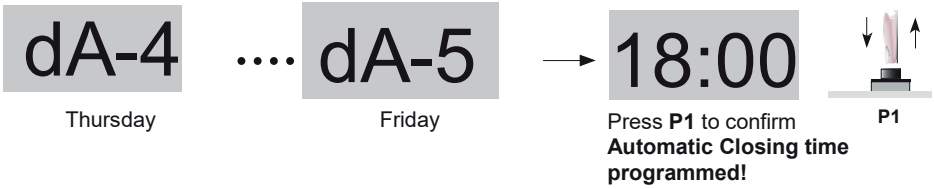
It can be selected until 28 different time slots (ex. 4 a day). If you exceed the display shows some dashes and you can't go on. Once finished press P2 and P3 to go back to the P function.

- **EXAMPLE OF THE PROGRAM: automatic opening and closing**

We try to set up an automatic opening on Wednesday afternoon at 17.20 (5.20pm) and automatic closing on Friday at 18.00 (6 pm).



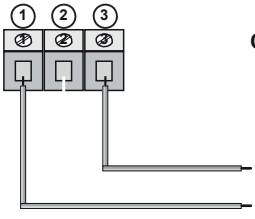
Once the opening hour time has been confirmed, the display starts flashing. Press **P2** to programm the hour and the day. The set up starts from the last programmed hour.



> ***During the program of opening and starting block hour the display lit on while it flashes when you program the closing and block time.***

4 Installation of the control unit

4.1 Connection of the TENSION



Connection to the electric network 230 Vac

230 Volt Single-phase alternate current. The control unit power supply line must always be protected with a magnetothermal switch or a pair of 5A fuses.

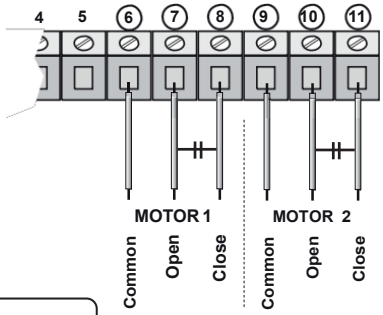
A differential switch is recommended but not indispensable if one is already installed on the plant.

4.2 Connection of the MOTOR

Pay particular attention not to invert the OPEN and CLOSE poles.

When in doubt as to the correct connection, if possible, manually position the automation at the midpoint of its stroke. Be ready to stop the system using the STOP control!

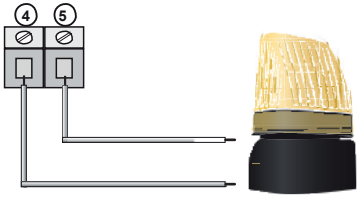
To be sure that the opening is really “opening”, try to block the photocells: if the gate begins to close, the connection is incorrect and the motor OPEN and CLOSE wires must be inverted.



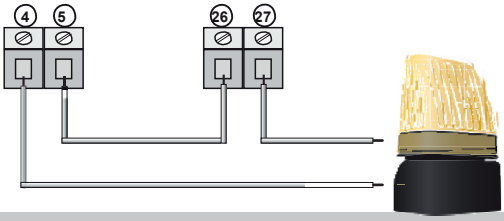
ER 01 = damged TRIAC . Cause defect: non-compliant motor/s connection (short circuit) with consequent burning of the TRIAC.

4.3 Connection of the LAMP

Here is the connection of a 230Vac lamp with or without flashing card.



with flashing card



without flashing card

- **LAMP IN PAUSE TIME**

To activate a function in **the pause time**, see **S05** as shown:

S 05

LAMP IN PAUSE TIME
1 - Activated
0 - Deactivated

4.4 PRE-LIGHTING time

It is possible to increase and reduce the pre-lighting time in case the gate is open or closed, use the function **T15** and **T16** as shown.

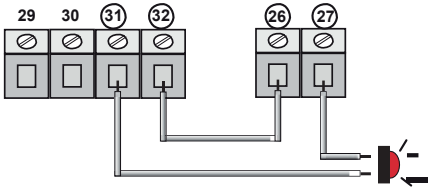
t 15

PRE-LIGHTING TIME WHEN THE GATES IS CLOSED.
From 0 to 10 s
Standard value 1 s

t 16

PRE-LIGHTING TIME IN CASE THE GATE IS OPEN.
From 0 to 10 s
Standard value 1 s

4.5 Connection of one 24V gate open and moving LIGHT

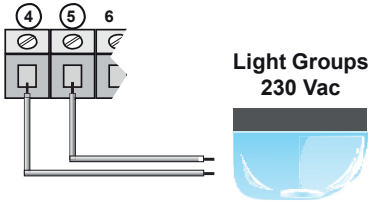


If you prevue to use the test in the photo-beam of for the lamp, you cannot connect in this way.

S 07

FIXED LIGHT
1 - Activated
0 - Not activated *(Default)*

4.6 Connection of a COURTESy LIGHT



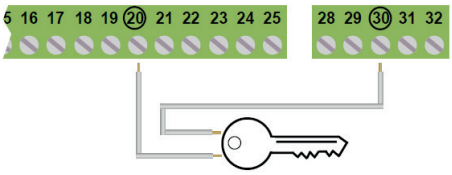
S 03

COURTESY LIGHT
1 - Activated
0 - Not activated *(Default)*

t 18

FUNCTIONS TIME
From 0 to 255 s
Standard value 120 s

4.7 12Vac ELECTRICAL LOCK connection



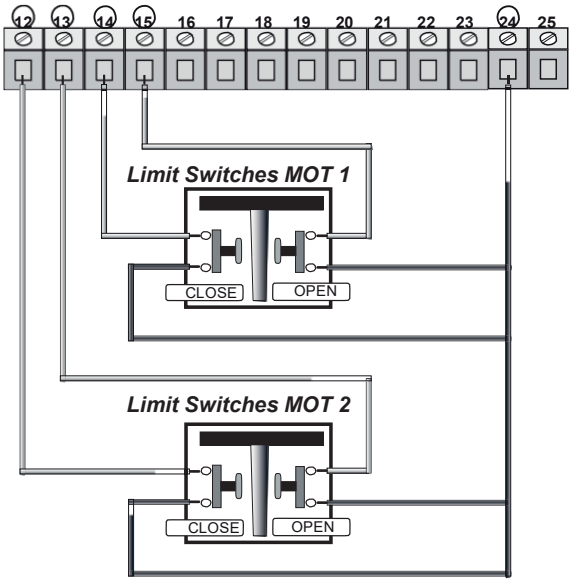
t 17

FUNCTIONS TIME
From 0 to 10 s
Standard value 2 s

We recommend to set up 0 at function S26

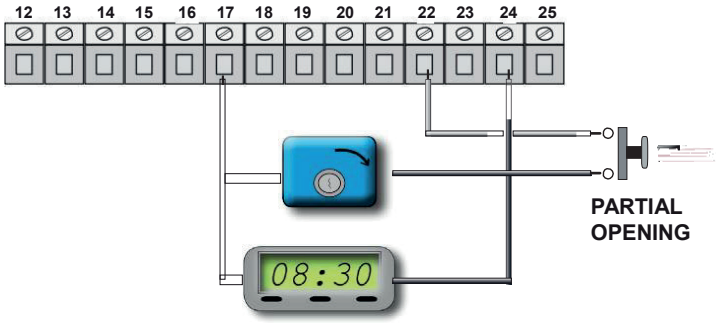
4.8 Connection of LIMIT SWITCHES

You can see the connection of both limit switches, in this control unit they can be connected separatelly. So you can use only the OLS or CLS.



S 11	**Input OLS1** 1 - Activated 0 - Deactivated
S 12	**Input CLS1** 1 - Activated 0 - Deactivated
S 13	**Input OLS2** 1 - Activated 0 - Deactivated
S 14	**Input CLS2** 1 - Activated 0 - Deactivated
S 27	**Ricerca FINECORSA CHIUDE 1** 1- Activated 0 - Deactivated

4.9 Connection of a command OPEN: START / PARTIAL OPENING

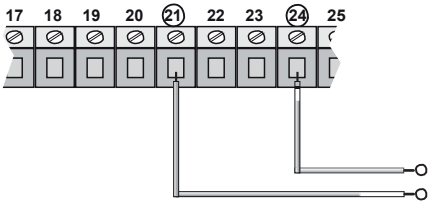


The connection of the PARTIAL OPENING can be done with every button or a normally open contact.

The connection of a START command can be done with every button or normally close contact N.O.

If more devices are available they should be connected in serial. Connect a timer in the terminal board no. 17 and 22 to programm the opening time of the gate. The timer contact shoudl be no. (normally open) and it should be closed when the gate is opening. If the it is available the connection in the terminal board no.17, connect it in serial

4.10 STOP connection



- **Button:** stop until a new command.
- **Switch:** it keep the automation closed until a new command.

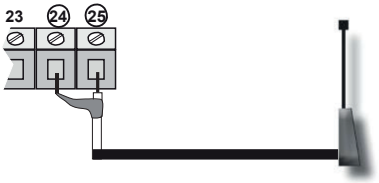
The connection of the safety devices is due to a button or a normally closed contact. More devices should be connected in parallel.

S 15	STOP Input 1 - Activated 0 - Deactivated

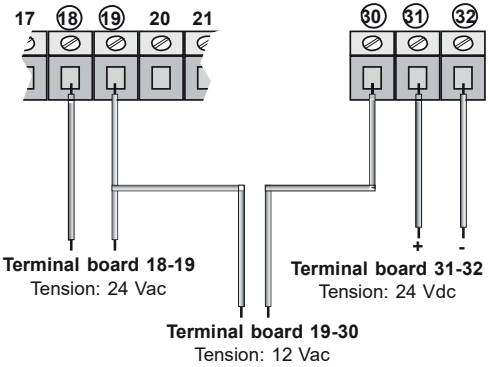
If the input STOP is not connected, bring S15 into 0

4.11 Connection of the ANTENNA

If a wire is used as antenna, cut it to 17 cm for a frequency of 433MHz and connect it to terminal.



5.12 Power of the ACCESSORIES

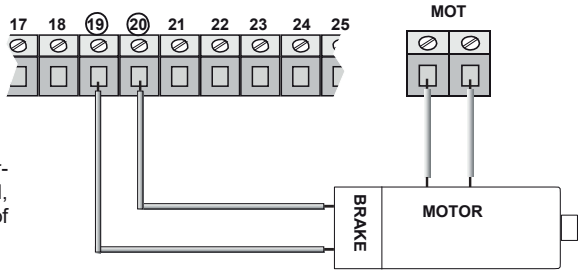


4.13 Connection of the motor with ELECTRO-MAGNETICAL BLOCK

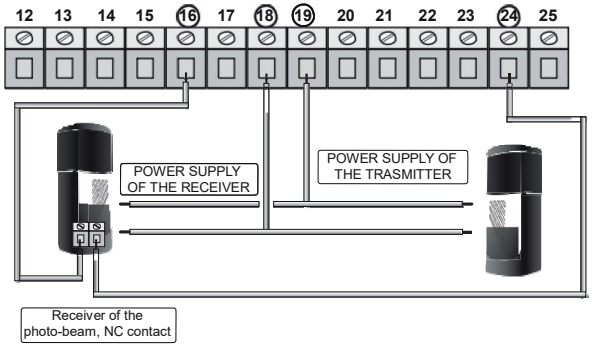
If a electrical-magnetic block is available, bring **S26** into **1** and make as follow:

S 26	Work function RELEASE of the BRAKE 1 - Activated 0 - Deactivated

If you use this function for all time the motor is working, the output for the electrical lock is powered, this release the brake and the correct functon of the motor.



4.14 Connection of the PHOTO A 24 Vac (only when closing)

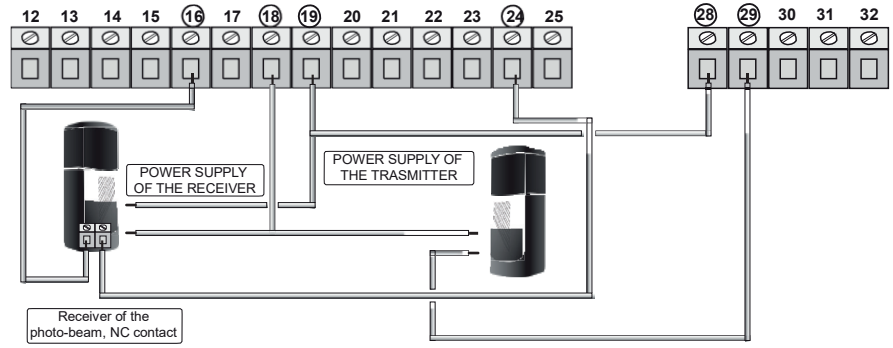


The contact of the receiver should be:
- Isolated
(isolated from tensions)
- Normally closed

If you use more photo-beams, the connections should be serial.

If the input PHOTO A is not used, put S16 in 0

4.15 Connection of the PHOTO A (activated when closing) with TEST



The TEST of the photo-beam works only if the photo-beams are installed properly. The control unit will check all connections before opening!

In case the photo-beam are not working properlym the control unit will lit on for 5 seconds and the gate is not working.

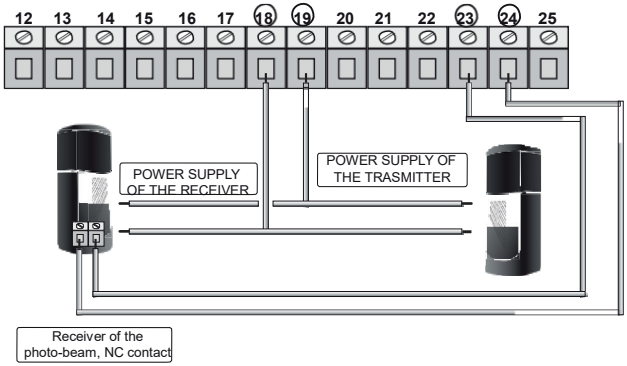
To activate the TEST put 1 in the PHOTO-A:

S 22 TEST in PHOTO-A
1 - Activated
0 - Deactivated

S 06 TEST in the INPUT of the SAFETIES
1 - Activated
0 - Deactivated

If you want to go back to the function WITHOUT TEST, connect the photo-cells like in the Par. **5.14** and bring **0** to the set up **S22** and **S06** (deactivate this function only in case other inputs are under TEST).

4.16 Connection of the PHOTO-B (opening and closing)



The contact of the receiver should be:
- Isolated
(isolated from tensions)
- Normally closed

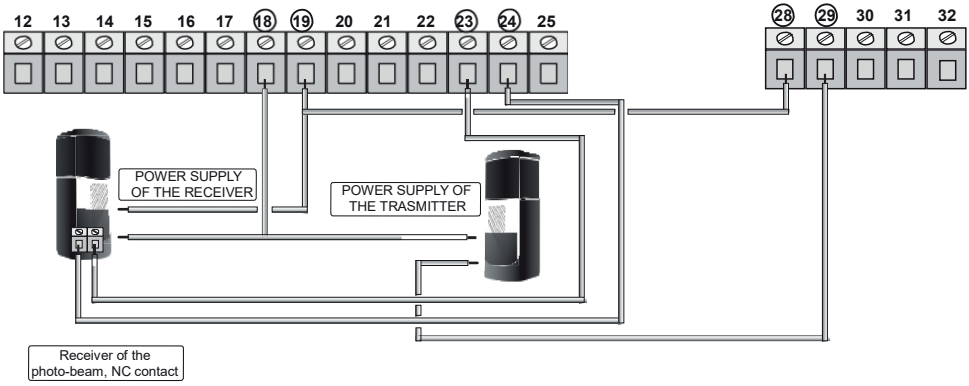
If you use more photo-beams, the connections should be serial.

! If the input PHOTO-STOP is not used, put S17 in 0

S 21

0 - Disabled
1 – Activated

4.17 Connection of a PHOTO-B with TEST



The TEST of the photo-beam works only if the photo-beams are installed properly. The control unit will check all connections before opening!

In case the photo-beam are not working properlym the control unit will lit on for 5 seconds and the gate is not working.

To activate the TEST put 1 in the PHOTO-B:

S 23

TEST in PHOTO-B
1 - Activated
0 - Deactivated

S 06

TEST in the INPUT of the SAFETIES
1 - Activated
0 - Deactivated

If you want to go back to the function WITHOUT TEST, connect the photo-cells like in the Par. **5.16** and bring **0** to the set up **S23** and **S06** (deactivate this function only in case other inputs are under TEST).

5 Function and adjustment

5.1 Logic of functions

S 01

01 → **RENVERSE**
Each command START reverse ***opens-closes***
Automatic reclosing.

02 → **COLLECTIVE USE**
The ***START*** *command can open or recharge the pause time. Recloses automatically.*

03 → **BI-STABLE FUNCTION**
Each START has the following procedure:
open-stop-close-stop-open...
It doesn't reclose automatically.

04 → **BISTABLE FUNCTION**
WITH AUTOMATIC RECLOSING
Each START has the following procedure:
open-stop-close-stop-open...
It doesn't reclose automatically.

05 → **INDUSTRIAL USE**
The Partial Opening became a closes contact and the START follow the logic of **S01-S02-S03-S04**

06 → **"DEATH MAN" FUNCTION**
The command ***START*** *open, the* ***PARTIAL OPENING*** *closes. Motors stops immediatelly when the button will be released.*

S 02 → **01** → **RECLOSE WHEN THE CONTROL BOARD wILL BE SwITCHED ON** *It makes a complete open and close cycle only in cas of lack of tension the gate was open.*

S 04 → **01** → **ACCESS CONTROL**
When the photo-beams identify the passage, if **S19** *is at* **"0"** *the pause time is 2 sec.*

S 19 → **00** → **RENVERSE ON PASSAGE**
Bring **S04** *at* **1***. The control unit renverse and closes.*

S 09 → **01** → **SOFT-START**
When the gate is opening, the speed increases

6 Force and slow down adjustment

We suggest you to check the correct function of the accessories and motors with **R** function as shown in Par. 3.2. Adjust the force, slowing down, obstacle detection and ckeck the parameters. After adjust the slowing down position and the working time. At the end program the working time. It is possible to change the values after the learning of the working time.

6.1 Impostazione Forza e rallentamenti

L 01
FORCE LEVEL MOT 1
From 0 to 100
(0 = min / 100 = max)
Standard Value 70

L 02
SLOWING DOWN MOT 1
From 0 to 100 / 100 = OFF
Standard Value 10

L 04
SLOWING DOWN MOT 2
From 0 to 100 / 100 = OFF
Standard Value 10

L 03
FORCE LEVEL MOT 2
From 0 to 100
(0 = min / 100 = max)
Standard Value 70

! Try the correct force and speed adjustment with function R as shown in Par. 3.2

6.2 Obstacle detection

L 05
Level of detection obstacle or LS of motor 1
From 0 to 100 / 0 = OFF
Standard Value 30

L 06
Level of detection obstacle or LS of motor 2
From 0 to 100 / 0 = OFF
Standard Value 30

L 07
Level of detection obstacle or LS of motor 1 slowing down
From 0 to 100 / 0=OFF
Standard Value 0

L 08
Level of detection obstacle or LS of motor 2 slowing down
From 0 to 100 / 0 = OFF
Standard Value 0

! we recommend not to increase the sensitivity, the gate cannot work properly.

S 20 Logic of the obstacle detection

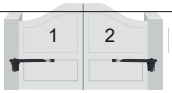
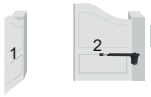
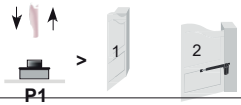
- **01** → considered as LS *(Standard)*
- **02** → Considered as STOP
- **03** → Considered as STOP with motor renverse 2s

! WARNING. Try the correct force and speed adjustment with fucntion R as shown in Par. 3.2

6.3 Memorization of the **START** times

It is possible to program the working time separatelly. If limit switches are available or it is programmed the obstacle detection, the control boards makes automatically a complete cycle.

> **This operation is possible only when the gate is closes.**
> **If during a memorization of the working times,**
> **will work a security contact, make this operation again.**

1		Close the gate..
2		Go to the function **R01.** Bring to the function **P1**, **P2** and **P3**
3		Press button **P1** and the motor 1 starts opening .
4		That you are memorizing the working time. The displays confirm
5		Wait until the first leaf is completelly open.
6	**Opening time MOT1 Memorized**	If the **OLS1** is not installed press **P1**, otherwise if the **OLS1** is connected don't do nothing because the limit switch gives a drive to the memorization.
7		**In case the function S10 is activated go to the point no.13 of the table, otherwise the second leaf opens.**
8	**Openig time MOT2 Memorized**	If the **OLS2** is not installed press **P1**, otherwise if the **OLS2** is connected don't do nothing because the limit switch gives a drive to the memorization.
9		The pause time should be set up manually with **T11**, the standard value is 10 sec.

10		**Mot 2 closes.**
11		Wait until the second leaf is completelly closed.
12	**Closing time MOT2 Memorized**	If the **CLS2** is not installed press **P1**, otherwise if the **CLS2** is connected don't do nothing because the limit switch gives a drive to the memorization.
13		**First motor starts closing.**
14		Wait until first motor is completelly closed.
15	**Closing time MOT1 Memorized**	If the **CLS1** is not installed press **P1**, otherwise if the **CLS1** is connected don't do nothing because the limit switch gives a drive to the memorization.
16		Memorization of the START times correct! The control unit exits from all function.

A WARNING: CORRECT USE OF COMMONS.

3. Use common 12 / 24v (terminal 19) only for photocells power supply.

4. Use common services (terminal 24) for common contacts (photocells, start, stop, pedestrian, etc.)

ER 01 = damged TRIAC . Cause defect: non-compliant motor/s connection (short circuit) with consequent burning of the TRIAC.

7 Remote Controls MANAGING

To memorize the remote controls, the control board is already equipped with a radio receiver Fq. 433,92 MHz. The memory capacity is about 190 rolling code remote controls.
This receiver can manage standard codes from 12 till 64 bit and rolling codes HCS©. The first learned transmitter establish the code's type taht the receiver has to manage, it means that the transmitter has to have the same code's type. Concerning the rolling codes it is possible to activate or disactivate the key'scontrol and the rolling counter. With this function you can choose the security level of the receiver.

7.1 CANCELLATION of the MEMORY CODE

This operation cancel all codes previously memorized. If you need to cancel one single code, see next chapter. The cancellation of the memory is possible only when the gate is **CLOSED**.

> **We recommend to cancel the memory before the memorization of the first remote control, this to be sure that no other codes are inside.**

1	c 03	go to the function **C03.** With buttons **P1, P2** and **P3**
2	 **P1 confirm**	To confirm, press and hold the button **P1 down until appear dashes**
3	P110	
4	----	Reset successfullt done!

7.2 ROLLING CODE activated

If you bring **S08** on 1, the control unit will accept only HCS codes and it will control the rolling code counter. The remote controls cannot be copied. If the rolling code counter is not activated, it will accepted only the fixed part of the code.

S 08

ROLLING CODE COMPLETE
1 - Activated
0 - Deactivated *(Standard)*

7.3 CODES memorization

This function can memorize one or more remote controls, the receiver is integrated and it is compatible with the most branded remote controls in the market. Once you memorize a remote control ,the reciever can manage only code of the same type. So if we have to memorize a 12 Bit remote control (dip switch), it will be memorized only code with the same bit.

- **START COMMAND**

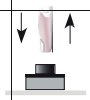
1	c 01	goes to **C01** With **P1, P2** and **P3**
2	 **P1 confirm**	Press **P1** to confirm
3	----	to the START The display is wating for the code to be associated
4		Press the remote control which should be memorized
5	SUcc	The display confirm the correct memorization

- **PARTIAL OPENING COMMAND**

1	c 02	goes to **C02** With **P1, P2** and **P3**
2	 **P1 confirm**	Press **P1** to confirm
3	----	The display is wating for the code to be associated to the PARTIAL OPENING
4		Press the remote control which should be memorized
5	SUcc	The display confirm the correct memorization

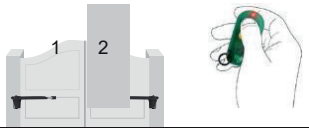
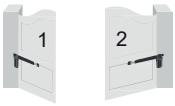
7.4 Cancellation of the memory CODE

This setting allows to delet one code by one

1	c 04	With **P1, P2** and **P3** Go to the function **C04**
2	 **P1 conferma**	Press **P1** to confirm
3		Press the button of the remote control which souhld be cancelle
4	cAnc	Operation successfully done!

8 Changing of the working time and adjustment

As the working time are programmed we try to adjust them.

1		When the gate is closed, give a START command with a remote control
2		Check if the working time, slowind down and pause time are correct.
3		Once the gate is closed, it is possible to change the working time and the set up of group T.

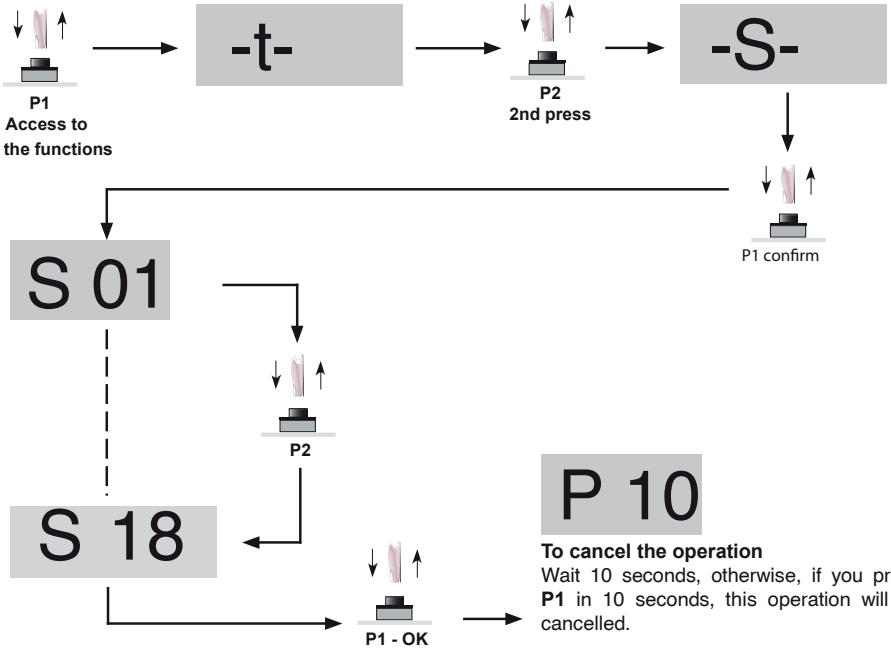
You can see the parameters of group **T** which can change the working time.

Make this operation also for the PARTIAL OPENING command.

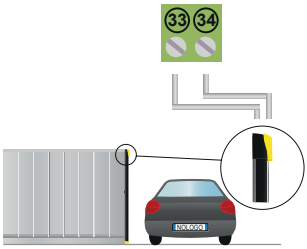
9 Reset

WARNING:
This operation cancel all data.

KEQ013 can be programmed to the standard production values **(See Par. 11)**.
Select function **S18** as shown:



CONNECTION SAFETY EDGE



Connection of the ALT control:
Stops the automation and activates an inversion of direction for approximately 1.5 seconds.

Safety edge - Contact terminal board 33-34	
S30 = 0	Safety edge deactivated
S30 = 1	N.C. contact *Normally closed*
S30 = 2	8K2 Contact

10 Resume of the functions of KEQ013 Group functions T

Set up	Description	Val. Accepted	Standard	Memo
T 01	Opening time MOT1	da 2 a 127.5 s	22 s	
T 02	Closing Time MOT1	da 2 a 127.5 s	22 s	
T 03	Opening time MOT2	da 2 a 127.5 s	22 s	
T 04	Closing Time MOT2	da 2 a 127.5 s	22 s	
T 05	Position of the slow down MOT1 opens *(advanced sec)*	da 2 a 127.5 s	2 s	
T 06	Position of the slow down MOT2 opens *(advanced sec)*	da 2 a 127.5 s	2 s	
T 07	Position of the slow down MOT1 closes *(advanced sec)*	da 2 a 127.5 s	3 s	
T 08	Position of the slow down MOT2 closes *(advanced sec)*	da 2 a 127.5 s	3 s	
T 09	Desplacement time OPENS	da 2 a 127.5 s	2 s	
T 10	Desplacement time CLOSES	da 2 a 127.5 s	5 s	
T 11	Pause Time for START command	da 2 a 127.5 s	10 s	
T 12	Opening Time MOT1 PARTIAL OPENING	da 2 a 127.5 s	8 s	
T 13	Closing Time MOT1 PARTIAL OPENING	da 2 a 127.5 s	8 s	
T 14	Pause Time for PARTIAL OPENING	da 2 a 127.5 s	10 s	
T 15	Pre-lighting time when the gate is closes	da 0 a 10 s	1 s	
T 16	Pre-lighting time when the gate is open	da 0 a 10 s	1 s	
T 17	Electrical Key Lock	da 0 a 10 s	2 s	
T 18	Courtesy Light	da 2 a 127.5 s	120 s	
T 19	Reversing Stroke *(0 to disable)*	da 0 a 10 s	0 s	
T 20	Motor Starting MOT1 *(When the motor is starting, the obstacle detection is not activated)*	da 0 a 10 s	2 s	
T 21	Motor Starting MOT2 *(When the motor is starting, the obstacle detection is not activated)*	da 0 a 10 s	2 s	
T 22	Delayed obstacle deteciton in cent. sec.	da 5 a 200	0.30 s	

T19 (functional details) With T19 activated, the operation is different in case of limit switches activated or deactivated: **LIMITS SWITCHES ACTIVATED:** reversing stroke (when the motors are opening) on the motor 1 and the motor 2 (duration of reversing stroke according to the value selected on T19: value 10 max). To have the final push closing on motor 1 and motor 2, activate S28. With S28 activated: final push closing for 3/4 seconds on the motor 1 (push force according to the adjusted tension), the motor 2 starts to push for a few seconds (push force according to the adjusted tension)

LIMITS SWITCHES DEACTIVATED: reversing stroke (when the motors are opening) on the motor 1 and the motor 2 (duration of reversing stroke according to the value selected on T19: value 10 max) + final push closing for 2 seconds on the engine 1 (push force according to the adjusted tension)

S28 (functional details)

Activate S28 only if the limit switches are connected and activated. With S28 activated: Motor 2 (on closing) slows down and stops when its limit switch closing is activated. Motor 1 (on closing) slows down and, when it activates its limit switch closing, it continues to push for 3/4 seconds (push force according to the adjusted tension); at the same time, the motor 2 continues to push for a few seconds (push force according to the adjusted tension)

Group functions L

Set up	Description	Val. Accepted	Standard	Memo
L 01	Force level of MOTOR 1	da 1 a 100	70	
L 02	Level of slow down MOTOR 1	da 1 a 100	10	
L 03	Force level of MOTOR 2	*(100 Off)* da 1 a 100	70	
L 04	Level of slow down MOTOR 2	*(100 Off)* da 1 a 100	10	
L 05	Level of obstacle detection of MOT 1	*(0 not activated)* da 1 a 100	30	
L 06	Level of obstacle detection of MOT 2	*(0 not activated)* da 1 a 100	30	
L 07	Level of obstacle det. of MOT 1 slwoing down	*(0 not activated)* da 1 a 100	0	
L 08	Level of obstacle det. of MOT 2 slwoing down	*(0 not activated)* da 1 a 100	0	

Group functions C

Imp.	Description		Memo
C 01	TX learning for START command	Press P1	
C 02	Tx learning for PARTIAL OPENING	Press P1	
C 03	Cancellation of the memory code	Press P1	
C 04	Cancellation of the code	Press P1	

Group functions P

Imp.	Description	Val. Accepted	Standard	Memo
P 01	Activation opening in time slots	0 Off - 1 On	0	
P 02	Activation of the stop gates (from transmitter) in time slots	0 Off - 1 On	0	
P 03	Insert the opeing time slot	Press P1		
P 04	Insert of block time slots	Press P1		
P 05	Cancellation of the opening time slots	Press P1		
P 06	Cancellation of the block time slots	Press P1		

Group functions S

Set up	Description	Val. Accepted	Standard	Memo
S 01	Logic of function: 1 - Fast renverse 2 - Collective use 3 - Bistable function 4 - Bistable function with automatic reclosing 5 - Industrial use 6 - “Death man” function	from 1 to 6	1	
S 02	Activation of SELF-CYCLE when the tension is coming again	0 Off - 1 On	0	
S 03	Activation of COURTESY LIGHT on the lamp output	0 Off - 1 On	0	
S 04	Activation of ACCESS CONTROL	0 Off - 1 On	0	
S 05	Activation of LAMP IN PAUSE TIME	0 Off - 1 On	0	
S 06	Activation of TEST in the inputs - OFF interblock	0 Off - 1 On	0	
S 07	Activation of FIXED LIGHT	0 Off - 1 On	0	
S 08	Activation of the safety management codes: 0 - The control panel accepts all codes managed independently of the first learned 1 - The control panel accepts only the codes of the same type as the first learned.	0 Off - 1 On	1	
S 09	Activation of the SOFT START	0 Off - 1 On	0	
S 10	Activation of the MOTOR FUNCTION (1 On)	0 Off - 1 On	0	
S 11	Activation of input OLS1	0 Off - 1 On	1	
S 12	Activation of input CLS1	0 Off - 1 On	1	
S 13	Activation of input OLS2	0 Off - 1 On	1	
S 14	Activation of input CLS2	0 Off - 1 On	1	
S 15	Activation input STOP	0 Off - 1 On	1	
S 16	Activation input PHOTO	0 Off - 1 On	1	
S 17	Activation of the input PHOTO-STOP	0 Off - 1 On	1	
S 18	RESET of the standard programmed values			
S 19	Activation of the RENVERSE by access control (S 04 = 1)	0 Off - 1 On	0	
S 20	Logic of the OBSTACLE DETECTION: 1 - Works as LIMIT SWITCH 2 - Works as STOP 3 - Considered as STOP but before the motors renverse	from 1 to 3	1	

Set up	Description	Val. Accepted	Standard	Memo
S 21	**PHOTO B (TERMINAL.23)** **S21 in o OFF:** **It works in opening and closing**, stop and reopen when obstacle has been removed (function folding door) **S21 in 1 ON:** **When the gate is closed** and foto B obscurated ,the gate not open. **During the opening** and foto B obscurated, the gate stop and reverse for 2 sec. and reopen when the foto B is liberated. (In this operation is activated also the electrolock). **During the closing** and foto B obscurated, the gate stop and reopen when the foto B is liberated. (In this operation is activated also the electrolock).	0 Off - 1 On	0	
S 22	Test in the input PHOTO A when closing	0 Off - 1 On	0	
S 23	Test in the input PHOTO B when CLOSING/OPENING	0 Off - 1 On	0	
S 24	Test in the input STOP	0 Off - 1 On	0	
S 25	Enable 2nd CHANNEL RADIO OUTPUT INDICATOR This output becomes STEP BY STEP if the parameter S07 = 1	0 Off - 1 On	0	
S 26	LOCK with BRACK INTERLOCK	0 Off - 1 On	0	
S 27	Enable SEARCH LIMITSWITCH CLOSE 1	0 Off - 1 On	0	
S 28	Enable the PUSH in CLOSE on the MOT1 when it detects the LIMITSWITCH CLOSE1	0 Off - 1 On	0	
S 29	THRESHOLD setting MAINTENANCE			
S 30	Safety Edge	0 - Deactivated 1- NC / 2- 8K2		

S28 (functional details)

Activate S28 only if the limit switches are connected and activated.
With S28 activated: Motor 2 (on closing) slows down and stops when its limit switch closing is activated. Motor 1 (on closing) slows down and, when it activates its limit switch closing, it continues to push for 3/4 seconds (push force according to the adjusted tension); at the same time, the motor 2 continues to push for a few seconds (push force according to the adjusted tension)

Group functions R

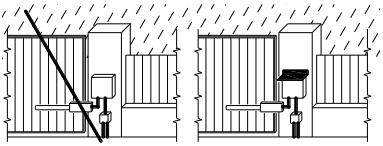
Set up	Description		Memo
R 01	Learning OF WORKING TIME OF MOTOR	Press P1	
R 02	Activate the LOCK until P1 will be released	Press P1	
R 03	Activate LAMP until P1 will be released	Press P1	
R 04	Activate TEST until P1 will be released	Press P1	
R 05	Active the LIGHT until P1 will be released	Press P1	
R 06	Activate OPEN MOT1 until P1 will be released	Press P1	
R 07	Activate CLOSE MOT1 until P1 will be released	Press P1	
R 08	Activate OPEN MOT1 when slow down until P1 will be released	Press P1	
R 09	Activate CLOSE MOT1 when slow down until P1 will be released	Press P1	
R 10	Activate OPEN MOT2 until P1 will be released	Press P1	
R 11	Activate CLOSE MOT2 until P1 will be released	Press P1	
R 12	Activate OPEN MOT2 when slow down until P1 will be released	Press P1	
R 13	Activate CLOSE MOT2 when slow down until P1 will be released	Press P1	
R 14	View METER MAINTENANCE (in hundreds)	Press P1	

SAFETY WARNINGS FOR INSTALLATION AND USE

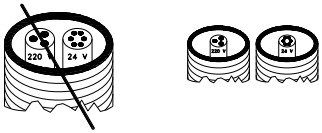
These warnings are an essential, integral part of the product and must be given to the user. They provide important indications on the installation, use and maintenance and must be read carefully. This form must be preserved and passed on to subsequent users of the system. The incorrect installation or improper use of the product may be dangerous.

WARNINGS FOR THE INSTALLER

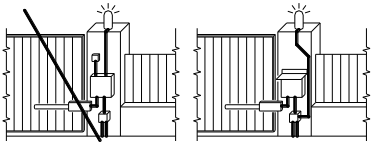
- The installation must be performed by professionally skilled personnel and in compliance with current local, state, national and European legislation.
- Before beginning the installation, check the integrity of the product.
- The laying of cables, electrical connections and adjustments must be workmanlike performed.
- The packing materials (cardboard, plastic, polystyrene, etc.) are a potential hazard and should be disposed of correctly and not left within reach of children.
- Do not install the product in potentially explosive environments or environments disturbed by electromagnetic fields. The presence of inflammable gases or fumes is a grave danger to safety.
- Set up a safety device for overvoltage, a disconnecting and/or differential switch suitable for the product and conforming to current standards.
- The control should be installed as near the gate as possible, 2) If this is not possible, you should:
  - Use cables with proper sizes.
  - **NEVER** use multiwire cable to connect either the motor or all the services (open, photocell, block, end-run), but ALWAYS SEPARATE THE POWER FROM THE LOW TENSION (controls and securities) by using more cables.
- The manufacturer declines any and all responsibility for product integrity, safety and operation in the event incompatible devices and/or components are installed.
- Solely original spare parts should be used for repairs and replacements.
- The installer must provide all the information relative to the operating, maintenance and use of the individual components and the complete system as specified in the MACHINE DIRECTIVE.



- Protect the upper side of the control box if it is installed outside in all weathers.



- Never use cable with several wires and always separate the power from the low tension.



- Connect wires to the control box from the bottom through pass-cables only.

MAINTENANCE

- To ensure product efficiency, it is essential that professionally skilled personnel carry out maintenance within the times established by the installer, the manufacturer and by current legislation.
- All installation, maintenance, repairs and cleaning operations must be documented. This documentation must be preserved by the user, and made available to the personnel responsible for the control.

WARNINGS FOR THE USER

- Read the instructions and enclosed documentation carefully.
- The product must be used for the express purpose for which it was designed. Any other use is considered improper and therefore hazardous. In addition, the information given in this document and in the enclosed documentation may be subject to modifications without prior notice. It is given as an indication only for product application. **Casit** declines any responsibility for the above.
- Keep products, devices, documentation and anything else provided out of reach of children.
- In the event of maintenance, cleaning, breakdown or faulty operation of the product cut off the power and do not attempt to operate on the product except when indicated. Contact professional personnel, competent and suitable for the task. Failure to adhere to the above indications may be dangerous.

WARRANTY LIMITS

The warrantee is valid for 12 months from the date indicated in the sales document and its validity is limited to the original purchaser. It does not cover the following eventualities: negligence, incorrect or improper use of the product, use of accessories not conforming to the manufacturer's specifications, tampering by the customer or third parties, natural causes (lightning, floods, fire, etc.), riots, vandalism, modifications to the environmental conditions of the installation site. Nor does the warranty cover parts subject to wear (batteries, oil etc.). Products returned to Casit for repair shall only be accepted carriage paid. Casit shall return the repaired product to the sender carriage forward. Otherwise the goods will be refused on receipt. The purchase of the product implies the full acceptance of all the general terms of sale. Any dispute shall be submitted for judgement to the Court of Torino, Italy.