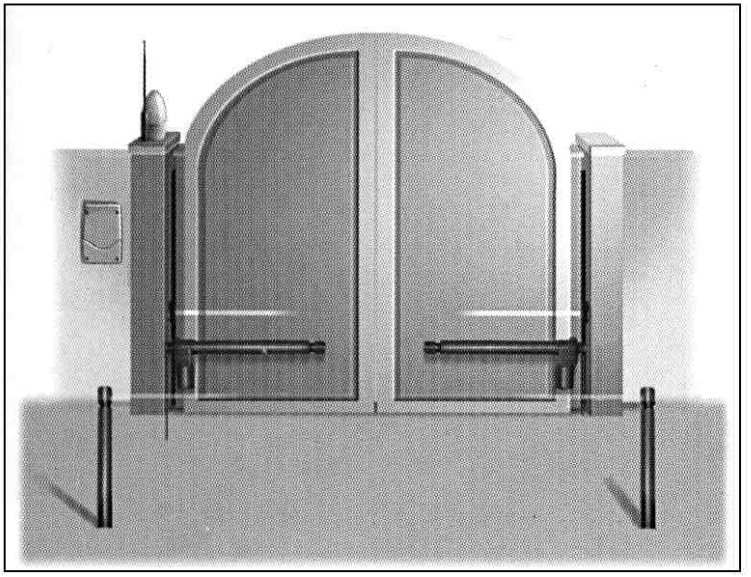
VIDUE ELETTRONICA
Alta Tecnologia dell'Automazione

KIT BATTENTE



(I)
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INSTRUCTIONS

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NOTICES

(D)
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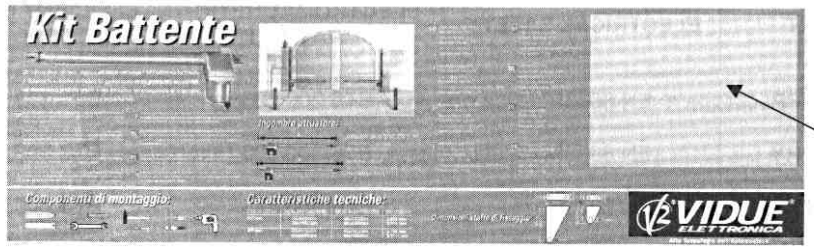
IL. n. 88 - A
EDIZ. 14 / 05 / 01

TABLE OF CONTENTS

LIST OF PARTS IN THE KIT

REF.	DESCRIPTION	PHOTOGRAPH	Q.TY
1	ELECTROMECHANICAL OPERATORS 230 VAC 50 Hz		2
2	MOTOR FASTENING PINS		4
3	MOTOR-COLUMN FASTENING BRACKET		2
4	MOTOR-SHUTTER FASTENING BRACKET		2
5	MOTOR UNLOCK KEY		2
6	SEEGER		8
7	CAPACITORS 8uF		2

ALL THE CONTROL, SIGNAL AND SAFETY TOOLS INCLUDED IN THE KIT ARE SHOWN ON THE PACKAGE LABEL.



CAREFULLY READ ALL THE SYMBOL EXPLANATIONS FOR THE DEVICES INCLUDED AND FOLLOW THE RELEVANT INSTRUCTIONS IN THIS MANUAL.

SIGNS USED IN THE SAFETY NOTES

THE WARNING SIGN BELOW INCLUDES INFORMATION THAT MUST BE READ CAREFULLY TO PROTECT PEOPLE FROM ACCIDENTS.

Warns against general danger situations,
or gives a very important piece of information.

CONFORMITY TO REGULATIONS

V2 ELETTRONICA S.p.a. declares that the components included in the kit conform to the regulations in the table below.

PART	ELECTRICAL SAFETY	ELECTROMAGNETIC COMPATIBILITY	EFFICIENT USE OF THE SPECTRUM
PRGU433PP	EN 60335 – 1	ETS 300 683	ETS 300 220
PRGU433RY	EN 60335 – 1	ETS 300 683	ETS 300 220
PD7 + MT433	EN 60335 – 1	ETS 300 683	ETS 300 220
TXC-2, TXC-4, TRC-4, TSC-4, TOV-4	EN 60950	ETS 300 683	EN 300 220 – 1
TRR2/43, T2SAW433, TSR-4	EN 60950	ETS 300 683	EN 300 220 – 1
RIF50		EN 50082 – 1 EN 50082 – 2	
MA414S2305 MA414D2305 MA309S2305 MA309D2305	EN 60335 – 1	EN 60555 – 2 EN 55014 – 1 EN 55014 – 2	
EGG220	EN 60598 – 2 – 1	EN 50082 – 1 EN 50082 – 2	

Racconigi, May 14th, 2001

AUTOMATION MUST BE IMPLEMENTED IN COMPLIANCE WITH THE EUROPEAN REGULATIONS IN FORCE:

EN 60204 –1	(MACHINERY SAFETY. ELECTRICAL EQUIPMENT OF MACHINES, PART 1: GENERAL RULES)
EN 12445	(SAFE USE OF AUTOMATED LOCKING DEVICES, TEST METHODS)
EN 12453	(SAFE USE OF AUTOMATED LOCKING DEVICES, REQUIREMENTS)

PREPARATORY STEPS

The automatism has been devised to serve gates up to 5 meters wide with 400mm-actuators and gates up to 4 meters with 300mm-actuators. It can be used on light, heavy, wood, metal, PVC, or aluminum gates; the actuator's thrust mechanism make the system effective and reliable.
Before proceeding with the installation, please make sure that your gate opens and closes freely, and that:

- hinges and pins are in optimum condition and properly greased
- no obstacles are within the moving area
- there is no friction with the ground or between the leaves (minimum 7÷8 mechanical expansion)
- your gate is equipped with a central latch and two side ones – they are essential for a good system behavior.

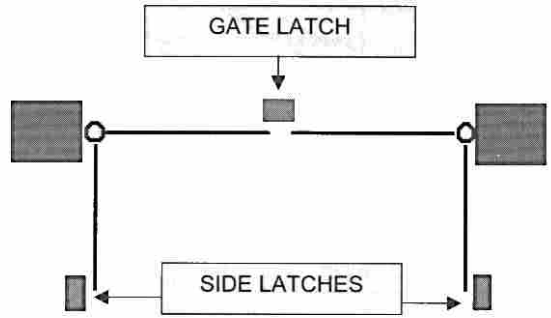
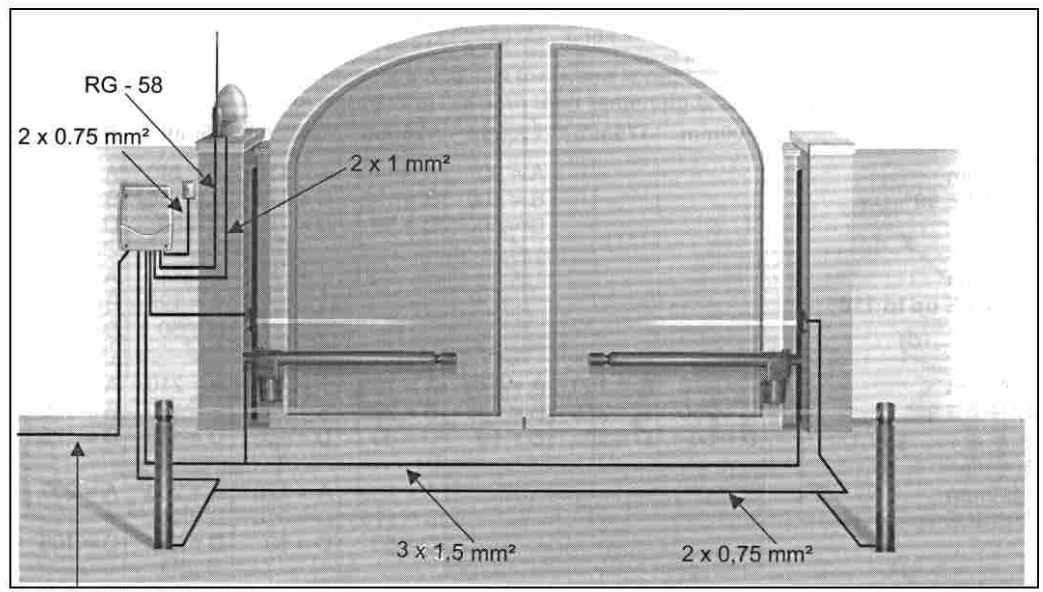


Fig. 2

CABLE CONNECTIONS



POWER SUPPLY 230V – 50Hz
Cable 3 x 1,5 mm²

ASSEMBLING THE ACTUATORS

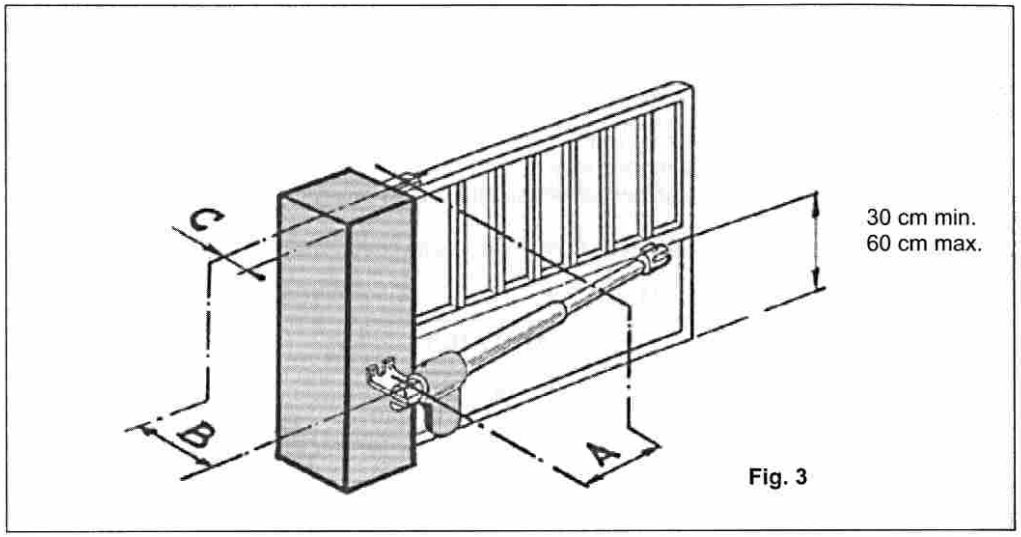
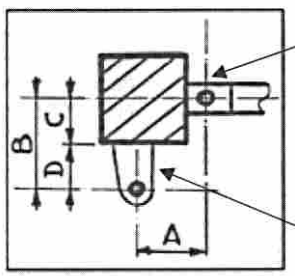


Fig. 3



Gate pin

Bracket 3

For a correct assemblage of the actuators, and in order to achieve the best operation of the automation, the values shown in the table below must be observed.
If necessary, change the gate structure so as to conform it to one of the cases provided for in the table.

C	200mm	175mm	150mm	125mm	100mm	75mm	50mm
300mm ANGLE 90°			A = 90 B = 200 D = 50	A = 110 B = 175 D = 50	A = 130 B = 170 D = 70	A = 140 B = 155 D = 80	A = 150 B = 155 D = 105
300mm ANGLE up to 110°						A = 140 B = 125 D = 50	A = 140 B = 125 D = 75
400mm ANGLE 90°	A = 130 B = 250 D = 50	A = 150 B = 225 D = 50	A = 170 B = 220 D = 70	A = 190 B = 205 D = 80	A = 200 B = 205 D = 105	A = 210 B = 180 D = 105	A = 200 B = 175 D = 125
400mm ANGLE up to 110°				A = 160 B = 175 D = 50	A = 170 B = 150 D = 50	A = 200 B = 155 D = 80	A = 200 B = 155 D = 105

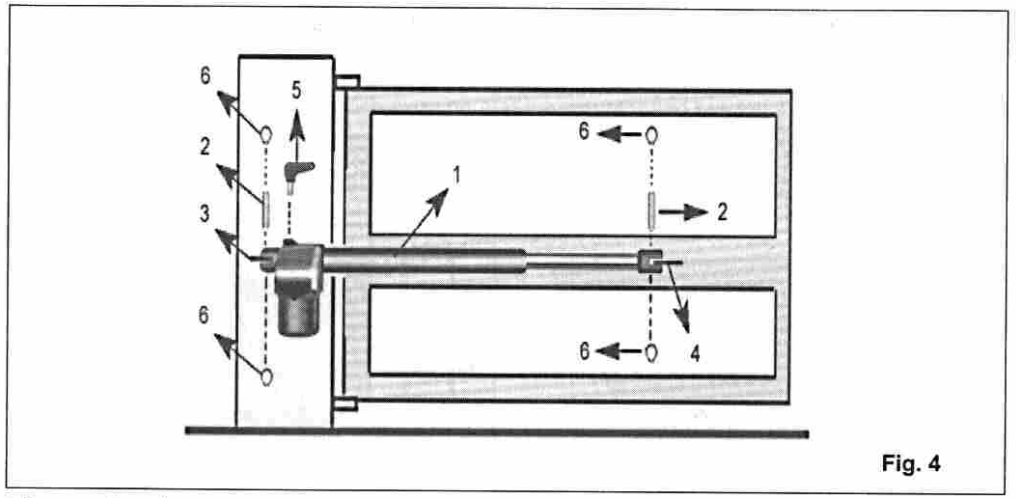


Fig. 4

After reporting the most suitable measures A and B on the columns, proceed with the following actions:

- Close the leaf
- Release actuator 1 by means of unlock key 5
- Fasten bracket 4 on the ram of actuator 1
- Pull the ram out, leaving 1 cm in
  (110 cm max. for 400mm / 90 cm max. for 300mm)
- Mark position of bracket 4 on the leaf
- Check that the actuator ram is fully retracted but 1 cm, when the leaf is open. The leaf must lay on the side pin, which is fixed to the ground
- Fasten bracket 3 on the column by means of a wrench M8*60 (Fig. 6)
- Fasten bracket 4 on the gate by using 8 mm bolts (Fig. 7) or, in case of a steel gate frame, solder the bracket directly on the gate (Fig. 8)
- Mount actuator 1 on brackets 3 and 4.

IMPORTANT: **1 Place brackets 3 and 4 at the same level.**
2 Do not tighten the rams on their fastening brackets; leave a functional play as shown in the picture below.

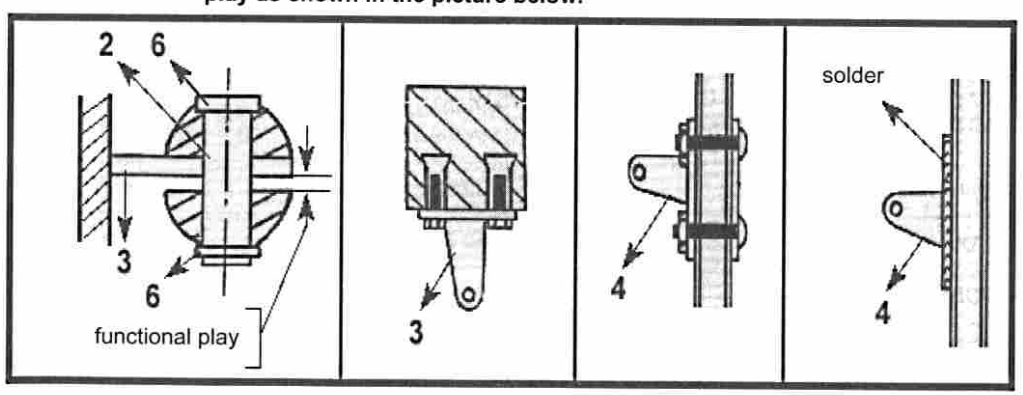


Fig. 5 Fig. 6 Fig. 7 Fig. 8

COMPONENT DIMENSIONS AND TECHNICAL SPECIFICATIONS

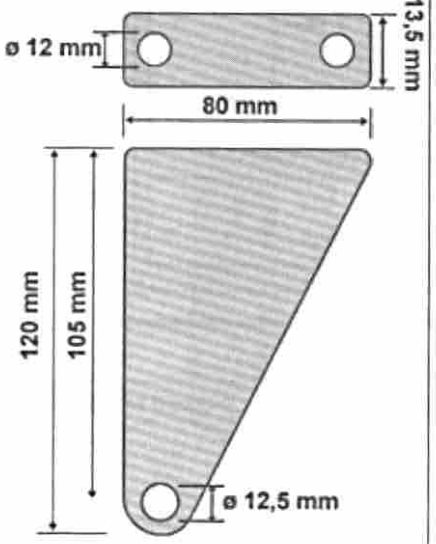


Fig.9 MOTOR-COLUMN FASTENING BRACKET

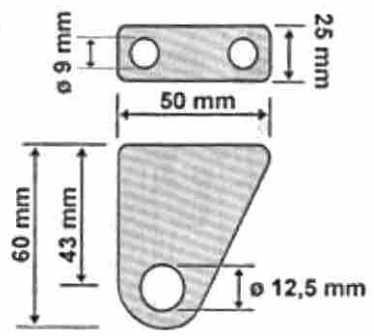
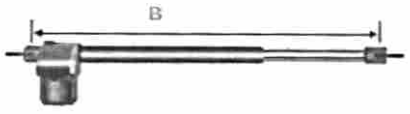
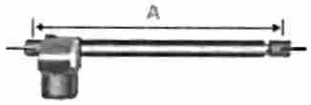


Fig.10 MOTOR-LEAF FASTENING BRACKET



COMPLETELY OPEN



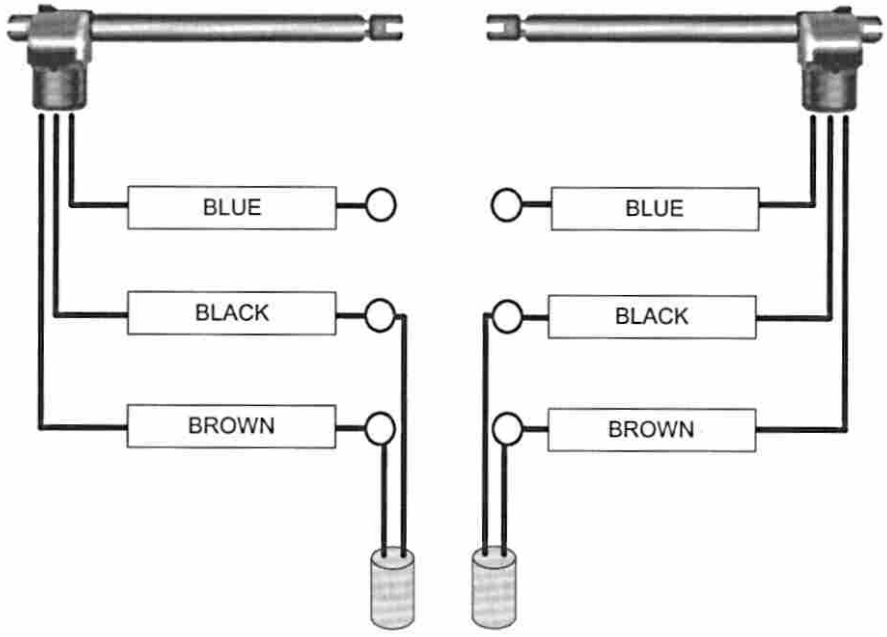
COMPLETELY CLOSED

MOTOR 400mm – MODEL 1400 rpm	MA414S2305 MA414D2305	A = 715mm B = 1105mm
MOTOR 300mm – MODEL 900 R.P.M.	MA309S2305 MA309D2305	A = 615mm B = 915mm
POWER SUPPLY	230 VAC 50 Hz 350 W	
MAXIMUM THRUST	350 daN	
WORK CYCLE	20 %	
WORK TEMPERATURE	- 20 ÷ 55 °C	
IP	44	
WEIGHT	6,5 Kg	

MOUNTING THE MOTORS ON THE BRACKETS

After securing brackets 3 and 4 on the column and on the leaf respectively, place the actuator onto them by letting bracket 3 slide through extreme A of the actuator and bracket 4 through extreme B (to release the motor, use key 5).
To fix extreme A of actuator 1 to bracket 3, use pin 2, by inserting it into the hole. Insert pins in the proper grooves at both extremes by using the two seegers 6.
To fix extreme B of actuator 1 to bracket 4, use pin 2, by inserting it into the hole. Insert pins in the proper grooves at both extremes by using the two seegers 6.

CONNECTING THE MOTORS TO THE CONTROL UNIT



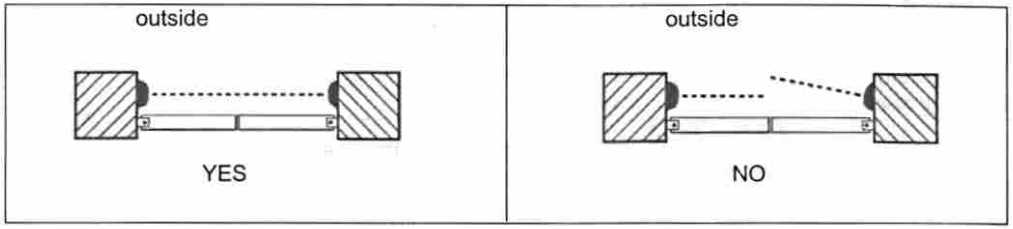
THE LEAF ACTUATOR THAT OPENS FIRST MUST BE CONNECTED TO THE TERMINAL BOARD WITH SILKSCREEN **M1**.

COLOR	FUNCTION
BLUE	MOTOR COMMON
BLACK	MOTOR OPENING
BROWN	MOTOR CLOSING

IMPORTANT: THE GROUND CABLE OF THE ACTUATORS AND THE GROUND CABLE OF THE POWER SUPPLY MUST BE CONNECTED TOGETHER

ATTACHMENTS

PHOTOCELL



Photocells are placed externally facing one another, at a distance of ca. 40 cm from the ground and 10 cm from the gate.
Operation: if someone walks through the photocells when the gate is closing, the gate stops and opens again to prevent touching the obstacle.

FLASHING LIGHT

The flashing light must be placed in a way that it can be seen from both the outside and the inside; it must be mounted on the column or on its external face.

EXTERNAL ANTENNA

Long-range 433.92-MHz antenna with a mounting support and a 2,5-m RG58 coaxial cable.

OPENING KEY

Activates the gate opening manually. It must be installed on the column, internally or externally.
CAUTION: It cannot be used to open the gate when there is no electricity. If this is the case, release the motors with the specially provided unlock key.

WHEN CONNECTING ATTACHMENTS TO THE CONTROL STATION, REFER TO THE RELEVANT TABLE IN SECTION **BOARD TERMINAL CONNECTIONS**, IN THE NEXT CHAPTER.

CONTROL UNIT PRGU433PP

The new programmable unit **PRGU433PP** (only compatible with Personal-Pass-series **TXC-2**, **TXC-4**, **TRC-4**, **TOV-4**, **TSC-4** model transmitters) can be employed in automation systems for double leaves swing gates, where a prompt functional installation is guaranteed.
Programming the operation logic processes and the working times is extremely fast and straightforward; besides, the five control LEDs placed aboard the unit allow a continuous monitoring of the input statuses. Thanks to an automatic electronic check, the outputs toggle with no current absorption, therefore removing any sparkling effect on the relay.

RADIO STORAGE OF CODES

This version of the PRGU433PP allows storing up to 83 different codes, deleting all the memory-resident codes and thereafter inputting new ones.
To store the code correctly, a minimum distance of 1.5 meters between the transmitter and the receiver's antenna. To radio-storing the required codes, proceed as follows:

- Press and hold the key PROG. RX, until LED L1 lights up.
- Press and hold the transmitter key until LED L1 goes out: the LED keeps off for half a second, thus showing that the code has been stored correctly; immediately after this, the LED starts flashing again, and the number of flashes is a measure of the space occupied by the code in the memory.

After the flashes, the system is ready for use.
IMPORTANT: every stored code is only associated with the START command.

DELETION OF ALL THE CODES IN THE MEMORY

The following steps need to be performed:

- Disconnect the power supply from the control unit.
- Press and hold the program mode key PROG. RX.
- At the same time, reconnect the power supply: the program mode LED L1 will flash and the key PROG. RX can be released.

Now, 83 memory zones are empty and available for a new programming process.
A partial deletion of codes is not possible.

TRYING TO INPUT A CODE ALREADY PRESENT IN THE MEMORY

If an attempt is made to store a code that is already present in the memory, the program mode LED L1 performs a number of flashes that equals that of the already occupied memory zone. Differently from the normal programming function, in this case the LED flashes more rapidly and, during the last flash, remains on for about 2 seconds. The user can take advantage of this function to identify, at any time, the zone of memory where each single transmitter that has access to the system has been stored.

INSTALLATION

The installer must arrange for the installation of a device (e.g. circuit breaker) that ensures the omnipolar isolation of the PRGU433PP equipment from the power supply network.
The regulations in force require the contacts at each pole to be spaced at least 3 mm from each other (EN 60335-1).
For the connection of pipes, hoses, and fairleaders, use fittings in keeping with protection grade IP55.

ADJUSTING THE OPERATING POWER AND THE WORKING TIMES

The operating power and the working times can be adjusted through four potentiometers that are located on the control unit:

POWER: motor power.

T. WORK: motor working time.

T.PAU.: time-out (only when the control unit is programmed to close again automatically).

T.DELAY: time elapsing between the openings of leaf 1 and leaf 2.

PROGRAMMING THE OPERATION LOGIC

Several operation logic options are available for the control unit, by properly selecting the position of the dipswitch positions on the board. The following table illustrates the functions that pertain to every single dipswitch.

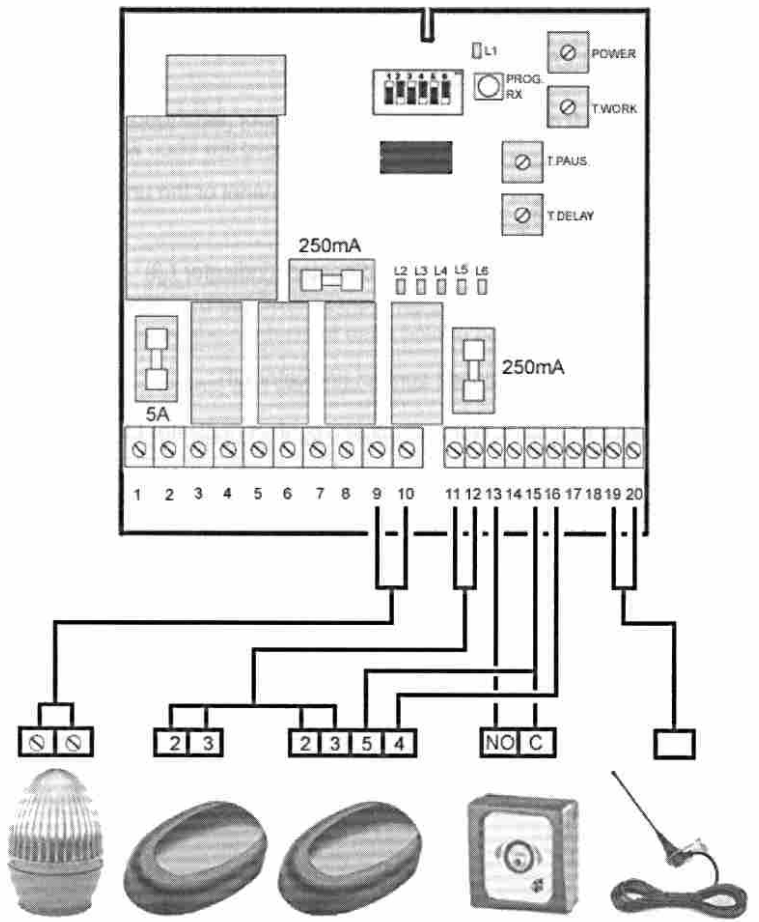
	PRGU433PP	**ON**	**OFF**
DIP 1	PREFLASH (the flasher activates 2 sec. before the motors start)	Active	Inactive
DIP 2	AUTOMATIC RECLOSURE (the gate closes again after the set time-out T.PAU has elapsed)	Active	Inactive
DIP 3	START COMMAND DURING THE OPENING	The unit does not sense the START command during the opening	The unit senses the START command during the opening
DIP 4	START COMMAND LOGIC	The START pulse train commands a step-by-step operation: open – stop – close – stop…	The START pulse during the opening, causes an immediate closing
DIP 5	ROLLING CODE	Active This function prevents any duplication or cloning attempt, by means of a complex mathematical algorithm that recognizes the variable portion of the received code.	Inactive
DIP 6	PHOTOCELL	Active also during the opening	Inactive during the opening

IMPORTANT: In this version, the motor starting is always active.
The photocell can never be disabled during the closing.
When using the automatic closing function (dip switch 2 ON) it is advisable to set dipswitch 4 in OFF position. This prevents a START command to stop the automation during the closing process.

SPECIFICATIONS

Power supply	230 VAC, 50 Hz
Motor maximum load	700 W
24-VAC attachment maximum load	3 W
Room work temperature	-20 ÷ +60 °C
Fuses	5 A delayed for 220 VAC line 250 mA delayed for 24 VAC line 250 mA delayed for 12 VAC line
Dimensions	170 x 145 x 90 mm
Weight	765 g
IP	55

CONNECTIONS TO THE TERMINAL BOARD



TERMINAL	CONNECTION
1.	Power supply phase wire 230 VAC
2.	Power supply neutral wire 230 VAC
3.	Motor common wire 1
4.	Power supply output 230 VAC for motor 1 during the opening
5.	Power supply output 230 VAC for motor 1 during the closing
6.	Motor common wire 2
7.	Power supply output 230 VAC for motor 2 during the opening
8.	Power supply output 230 VAC for motor 2 during the closing
9.-10.	Flasher 230 VAC, 40W
11.-12.	Power supply output 24 VAC for photocell and other accessories
13.	Opening command for connecting the key panel or the unlock key. Normally open contact (indicator L2)
14.	STOP command. Normally closed contact (indicator L3)
15.	Common wire (-)
16.	Photocell. Normally closed contact (indicator L4)
17.	Opening limit switch. Normally closed contact (indicator L5)
18.	Closing limit switch. Normally closed contact (indicator L6)
19.	Antenna cable shield
20.	Antenna cable core

CAUTION: UNUSED INPUTS THAT ARE NORMALLY CLOSED SHOULD BE CONNECTED TO THE COMMON WIRE (-).

CONTROL UNIT PRGU433RY

The new programmable unit **PRGU433RY** (only compatible with Royal-series **TRR2/43-**, **T2SAW433-** , and **TSR-4**-model transmitters) can be employed in automation systems for double leaves swing gates, where a prompt functional installation is guaranteed. Programming the operation logic processes and the working times is extremely fast and straightforward; besides, the five control LEDs placed aboard the unit allow a continuous monitoring of the input statuses. Thanks to an automatic electronic check, the outputs toggle with no current absorption, therefore removing any sparkling effect on the relay.

RADIO STORAGE OF THE REMOTE CONTROLLER CODE

To store the code correctly, a minimum distance of 1.5 meters between the transmitter and the receiver's antenna. To radio-storing the required codes, proceed as follows:

- Code the transmitter dipswitch
- Press and hold the key PROG. RX, until LED L1 lights up.
- Press and hold the transmitter key until LED L1 goes out.

IMPORTANT: the stored code is only associated with the START command.

CODE CHANGE

A stored remote controller code can be replaced by a new code, with the same procedure as for the storage. This way, the new code will overwrite the old one.

INSTALLATION

The installation engineer must arrange for the installation of a device (e.g. circuit breaker) that ensures the omnipolar isolation of the PRGU433RY equipment from the power supply network.
The regulations in force require the contacts at each pole to be spaced at least 3 mm from each other (EN 60335-1).
For the connection of pipes, hoses, and fairleaders, use fittings in keeping with protection grade IP55.

ADJUSTING THE OPERATING POWER AND THE WORKING TIMES

The operating power and the working times can be adjusted through four potentiometers that are located on the control unit:

POWER: motor power.

T. WORK: motor working time.

T.PAU.: time-out (only when the control unit is programmed to close again automatically).

T.DELAY: time elapsing between the openings of leaf 1 and leaf 2.

PROGRAMMING THE WORKING LOGIC PROCESSES

Several operation logic options are available for the control unit, by properly selecting the position of the dipswitch positions on the board. The following table illustrates the functions that pertain to every single dipswitch.

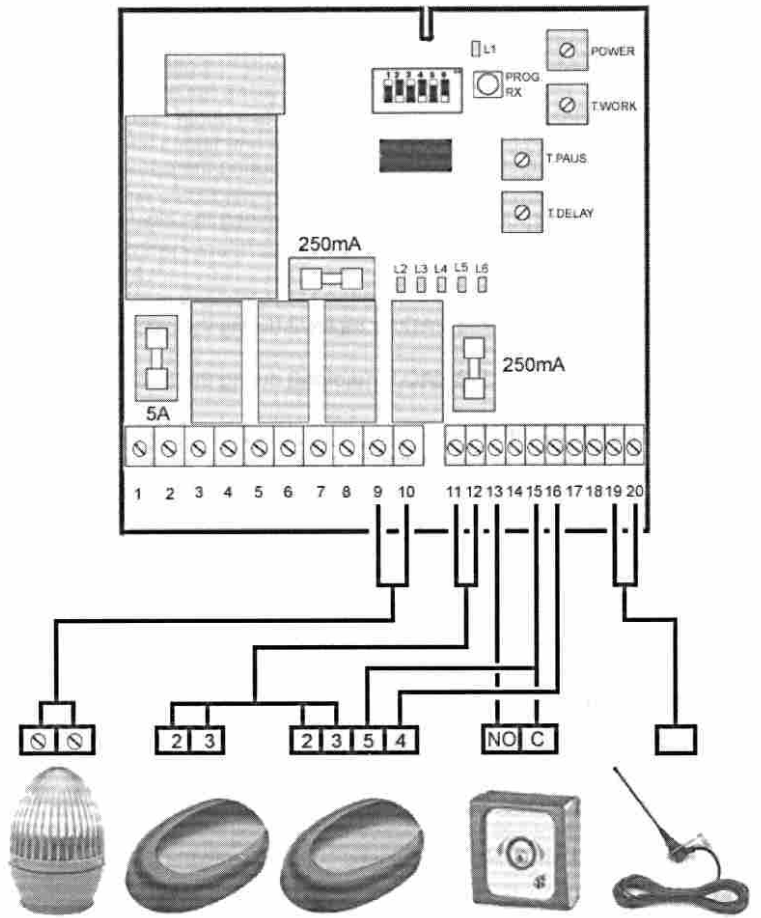
	PRGU433RY	ON	OFF
DIP 1	PREFLASH (the flasher activates 2 sec. before the motors start)	Active	Inactive
DIP 2	AUTOMATIC RECLOSURE (the gate closes again after the adjusted time-out T.PAU)	Active	Inactive
DIP 3	START COMMAND DURING THE OPENING	The unit does not sense the START command during the opening	The unit senses the START command during the opening
DIP 4	START COMMAND LOGIC	The START pulse train commands a step-by-step operation: open – stop – close – stop…	The START pulse during the opening, causes an immediate closing
DIP 5	STARTING (2 sec.)	Active	Inactive
DIP 6	PHOTOCELL	Active also during the opening	Inactive during the opening

IMPORTANT: The photocell can never be disabled during the closing.
When using the automatic closing function (dip switch 2 ON) it is advisable to set dipswitch 4 in OFF position. This prevents a START command to stop the automation during the closing process.

SPECIFICATIONS

Power supply	230 VAC, 50 Hz
Motor maximum load	700 W
24-VAC attachment maximum load	3 W
Room work temperature	-20 ÷ +60 °C
Fuses	5 A delayed for 220 VAC line 250 mA delayed for 24 VAC line 250 mA delayed for 12 VAC line
Dimensions	170 x 145 x 90 mm
Weight	765 g
IP	55

CONNECTIONS TO THE TERMINAL BOARD



TERMINALS	CONNECTIONS
1.	Power supply phase wire 230 VAC
2.	Power supply neutral wire 230 VAC
3.	Motor common wire 1
4.	Power supply output 230 VAC for motor 1 during the opening
5.	Power supply output 230 VAC for motor 1 during the closing
6.	Motor common wire 2
7.	Power supply output 230 VAC for motor 2 during the opening
8.	Power supply output 230 VAC for motor 2 during the closing
9.-10.	Flasher 230 VAC, 40W
11.-12.	Power supply output 24 VAC for photocell and other accessories
13.	Opening command for connecting the key panel or the unlock key. Normally open contact (indicator L2)
14.	STOP command. Normally closed contact (indicator L3)
15.	Common wire (-)
16.	Photocell. Normally closed contact (indicator L4)
17.	Opening limit switch. Normally closed contact (indicator L5)
18.	Closing limit switch. Normally closed contact (indicator L6)
19.	Antenna cable shield
20.	Antenna cable core

CAUTION: UNUSED INPUTS THAT ARE NORMALLY CLOSED SHOULD BE CONNECTED TO THE COMMON WIRE (-).

CONTROL UNIT PD7

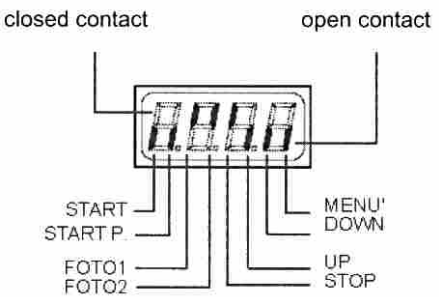
The digital unit PD7 is a VIDUE ELETTRONICA innovatory product, which guarantees a safe and reliable automation of one- and two-leaf swing gates.
PD7 has been designed to be suitable to all needs, being an extremely versatile unit that meets all the necessary requirements for a functional and efficient installation.
PD7 is provided with a display that, not only makes programming simple, but also allows a continuous monitoring of the input statuses; in addition, thanks to a menu structure, the working times and the operation logic can be set easily.
Being built with a reliable technique called *surface assembly*, PD7 is characterized by a complete isolation between the digital circuit and the power circuit, in accordance with the electrical safety rule EN 60335 - 1 and the compatibility rule ETS 300 683.
The unit is provided with an electronic torque regulator and a control for zero-current relay switching, which prevents sparkling between the contacts.
This unit works solely with Personal-Pass 433.92-MHz remote controllers, models **TXC-2**, **TXC-4**, **TRC-4**, **TSC-4**, and **TOV-4**.
The PD7 unit can perform a completely automatic photocell operation test during each normal working cycle. In case of a fault, the flashing light remains active and the gate stops.

INSTALLATION

The installation engineer must arrange for the installation of a device (e.g. circuit breaker) that ensures the omnipolar isolation of the PD7 equipment from the power supply network.
The regulations in force require the contacts at each pole to be spaced at least 3 mm from each other (EN 60335-1).
For the connection of pipes, hoses, and fairleaders, use fittings in keeping with protection grade IP55.

CONTROL PANEL

Perform the electrical connections to the terminal board, then supply power to the system: the unit will check the operation status of the display, by turning all the segments on for 1,5 seconds (*8.8.8.8*); after this, the display will show the firmware version for 1,5 seconds, for instance *Pr 1.0*.
Now, the display will show a control panel:



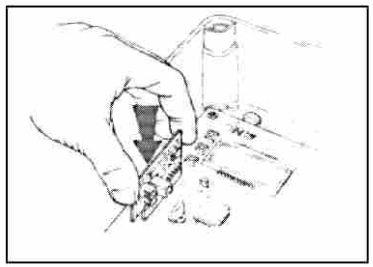
The control panel represents the physical status of the terminal board contacts and of the program mode keys: if the upper vertical segment is on, the contact is closed; if the lower vertical segment is on, the contact is open (the above picture shows an instance where the inputs START, START P, PHOTO1, PHOTO2, and STOP have all been correctly connected).

PROGRAMMING

The PD7 unit presents a programming structure with menus, each of which corresponds to a function in the unit (function menu) or to a working time setting (time menu).
Time menus allow adjusting the unit working times (e.g.: leaf opening or closing time, locking time, preflashing time, etc.), which can be set from 0 to 120 seconds with a ±0,5 seconds interval.
On the other side, the function menu are used to activate the required functions (e.g. timed lights, PHOTO1 active as a traveling edge, PHOTO2 inactive, etc.).

Some time menus depend on certain function menus (e.g.: if the AUTOMATIC CLOSING is activated – but only in this case – a TIME-OUT need to be set); then, to simplify the programming, these time menus have been placed in the function menus on which they depend. Specifically, menus AUTOMATIC CLOSING (Ch.AU), ANTISKID (ASM), and PHOTOCELL TIME-OUT (Ft.PA) offer some "time menus" among the selectable options.

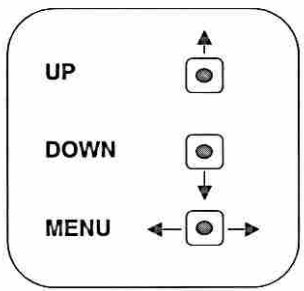
INSERTING THE RECEIVER MODULE



FUNCTION OF KEYS: MENU, UP, DOWN

When the program mode function is activated, press key UP or DOWN to select the menus, thus performing a forward or backward shift (for a fast shift, press and hold). Press key MENU to access the settings in order to change them through keys UP and DOWN.

- Pressing the UP key, the menu functions can be scrolled from below.
- Pressing the DOWN key, the menu functions can be scrolled from above.
- Pressing the MENU key, the settings to be changed can be accessed and selected by pressing again.



ATTENTION: when the program mode function is not activated, pressing of the UP key corresponds to the START command, pressing of the DOWN key corresponds to the PEDESTRIAN START command: this way, the service engineer is enabled to perform the test and the set-up.
To activate the program mode, proceed as follows.
After powering the unit, the display should show the control panel (therefore, check that the connections made are correct).
Press and hold key *MENU* until the display shows **dEF**.
Now the program mode is activated: if no action is performed within 1 minute, the unit will exit the program mode and show the control panel again. The PD7 unit can be set up in two different program modes: DEFAULT PROGRAM MODE or CUSTOM PROGRAM MODE.

DEFAULT PROGRAM MODE

This type of programming allows loading the V2 ELETTRONICA default program in the memory: the standard data that will be inserted automatically are shown in the table below (in the column DEFAULT DATA).
The display should show **dEF**.

- Press MENU: the display will show **no**.
- Press UP or DOWN: the display will show **sì**
- Press MENU to confirm: the display will show **dEF**.

Now, to memory-store the standard data, exit the program mode: follow the instructions in the "end of programming" menu.

CUSTOM PROGRAM MODE

This type of programming allows changing the working times and the unit functions, according to the user's needs: by means of the UP and DOWN keys, the required menus can be selected (for a fast scrolling, the key must be held). When the changes are completed, select the "END OF PROGRAMMING" menu and exit: the new data are stored in the memory.
CAUTION: if, during the programming, no actions are performed within 1 minute, the unit automatically exits the program mode and any changes made are discarded.

TABLE OF PROGRAMMING FUNCTIONS

DISPLAY	DATA	DESCRIPTION	DEFAULT DATA	STO. DATA
Def	**no / sì**	Loading V2 standard data	**no**	
t.AP I	0 – 120 s	Opening time leaf 1	**22.5**	
t.AP 2	0 – 120 s	Opening time leaf 2	**22.5**	
t.aPP	0 – t.AP1	Opening time pedestrian leaf	**6.0**	
t.Ch i	0 – 120 s	Closing time leaf 1	**23.5**	
t.Ch 2	0 – 120 s	Closing time leaf 2	**23.5**	
t.Chp	0 – t.Ch1	Closing time pedestrian leaf	**7.0**	
t.C2p	0 – t.ChP	Closing time leaf 2 during pedestrian closing	**0.0**	
r.AP	0 – 120 s	Leaf opening delay	**1.0**	
r.Ch	0 – 120 s	Leaf closing delay	**3.0**	
t.SEr	0 – 120 s	Locking time	**3.0**	
t.ASE	0 – t.SEr	Locking advance time	**0.0**	
t.inv	0 – 120 s	Ram stroke time	**0.0**	
t.PrE.	0 – 120 s	Preflashing time	**1.0**	
Pot	30 – 100%	Motor power	**40**	
SPUn	**no / sì**	Maximum power motor starting	**sì**	
St.AP	**no** **ChiU** **PAUS**	Opening start - The START command is not sensed - The gate closes again - The gate stops	**PAUS**	
St.Ch	**StoP** **APEr**	Closing start - The gate finishes the cycle - The gate opens again	**StoP**	
St.PA	**no** **ChiU**	Stopping start - The START command is not sensed - The gate closes again	**ChiU**	

SP.AP	**no** **ChiU** **PAUS**	Opening pedestrian start - The PEDESTRIAN START command is not sensed - The gate closes again - The gate stops	**PAUS**	
Ft.PA	**rPAU** **t.PCh**	Photocell in pause - Resets the pause time - The gate closes again after the set time (0–120 s)	**rPAU**	
Ch.AU	**no** **t.PAU**	Automatic closing - Not active - Active with a pause from 0 to 999 sec.	**no**	
LP.PA	**no / sì**	Flashing light in pause	**no**	
In.LP	**no / sì**	Intermittent flashing light	**no**	
1) ASM	**no** **t.AAS**	Motor antiskid - Not active - Active with opening or closing added time with time adjustable from 0 to 120 seconds	**t.AAS = 2.0 sec.**	
St	**Cod** **Cont**	START input function - Digital code - Contact	**Cont**	
St.P	**Cod** **Cont**	START P input function. - Digital code - Contact	**Cont**	
St.Co	**tiP.A** **tiP.b**	START / START P input code type. - Input enabled for VRD device - Input enabled for TTNC device	**tiP.A**	
2) Ft.tE	**no / sì**	Photocell operational test	**sì**	
StoP	**no** **invE** **ProS**	STOP input - The input is disabled: the STOP command is not sensed - The STOP command stops the gate: the next START reverses the motion - The STOP command stops the gate: the next START does not reverse the motion	**no**	
Fot 1	**no** **APCh** **CoSt**	PHOTO 1 input - Disabled - Operates as a photocell that is active during the opening and the closing - Operates as a photocell that is active only during the closing	**no**	
Fot 2	**no** **CFCh** **Ch**	PHOTO 2 input - Disabled - Operates as a photocell that is active during the closing and when the gate is stopped - Operates as a photocell that is active only during the closing	**CFCh**	
roLL	**No / sì**	Rolling Code mode Function that prevents any copying or cloning attempts, by means of a complex mathematical algorithm that recognizes the variable portion of the received code	**sì**	
CanC	**No / sì**	Deletion of all the codes: during the deletion process, the display shows **oCC** When the deletion is complete, the display shows again the writing **CanC**	**no**	

3) tEL 1		Radio input associated to the START command		
tEL 2		Radio input associated to the START P command.		
tEL 3		Radio input associated to the STOP command		
4) fine	**no / sì**	End of programming	**no**	

1) MOTOR ANTISKID

The antiskid function prevents a generation of time delays caused by the frequent stops during the opening and closing cycles.

Example: t.AP1 = t.AP2 = 25 s t.CH1 = t.CH2 = 26 s

The START command opens the gate, after 10 seconds the STOP command stops it.
The next START command closes the gate again for 26 seconds, that is 16 seconds more than needed, this might cause a motor overheating.
The antiskid function cuts overtimes and guarantees the completion of cycles, thanks to the t.AAS time adjustment. This is an added time during the opening and the closing, which is adjustable from 0 to 120 seconds (±0,5).

- Press UP or DOWN, until **ASM** appears on the display
- Press MENU, the display will show one of the following writings:
  - **no** the motor antiskid function is not active.
  - **t.AAS** the motor antiskid function is active with overtime, during the opening or the closing, which is adjustable from 0 to 120 seconds.
- Press UP or DOWN to select a function.
- Press MENU to confirm.

If the selected function is **t.AAS**, the display will show **2.0**

- Press UP or DOWN to set the time.
- Press MENU to confirm, the display will show **ASM.**

If the selected function is **no**, the display will show **ASM.**

2) PHOTOCELL OPERATIONAL TEST

In order to achieve a safer operation for the user, the unit performs a photocell operational test, before a normal working cycle.
If no operational faults are found, the gate starts moving. Otherwise, it will stand still while the flashing light will stay on. The whole test cycle lasts less than one second.

- Press UP or DOWN, until the display shows **Ft.tE**
- Press MENU, the display will show either one of the following writings:
  - **no** the test function is not active
  - **sì** the test function is active
- Press UP or DOWN to select a function.
- Press MENU to confirm: the display will show **Ft.tE.**

3) STORING A REMOTE CONTROL CODE

To store a remote control code, carefully observe the following instructions.

- Press UP or DOWN and select a radio input, the display will show (e.g.): **tEL 1**
- Press MENU, the display will show: **1.0.0.0**

The first digit represents the selected radio input (in this case, tEL1), the next three digits represent the selected memory zone. The dots after the second and the third digits represent the status of the memory zone: these dots are on if the zone is occupied, off if the zone is free.

- Press UP or DOWN to select a memory zone, making sure it is free (for a fast scrolling, hold the key pressed).

The unit is ready for the radio teaching:

- Press a key on the remote controller, until the display shows **rEC**

Release the remote controller key: if the code has been correctly stored, the display will show the next memory zone **1.0.0.1**
Now the unit is ready for a new code teaching. When the storage process is finished, press and release the MENU key: the display will show **tEL 1.**
CAUTION: when attempting to insert a code already present in the memory, the display shows the memory zone that is occupied by the transmitted code and its associated radio channel.

4) END OF PROGRAMMING

This menu allows ending the programming (in both default and custom cases) by memory-saving the changed data.

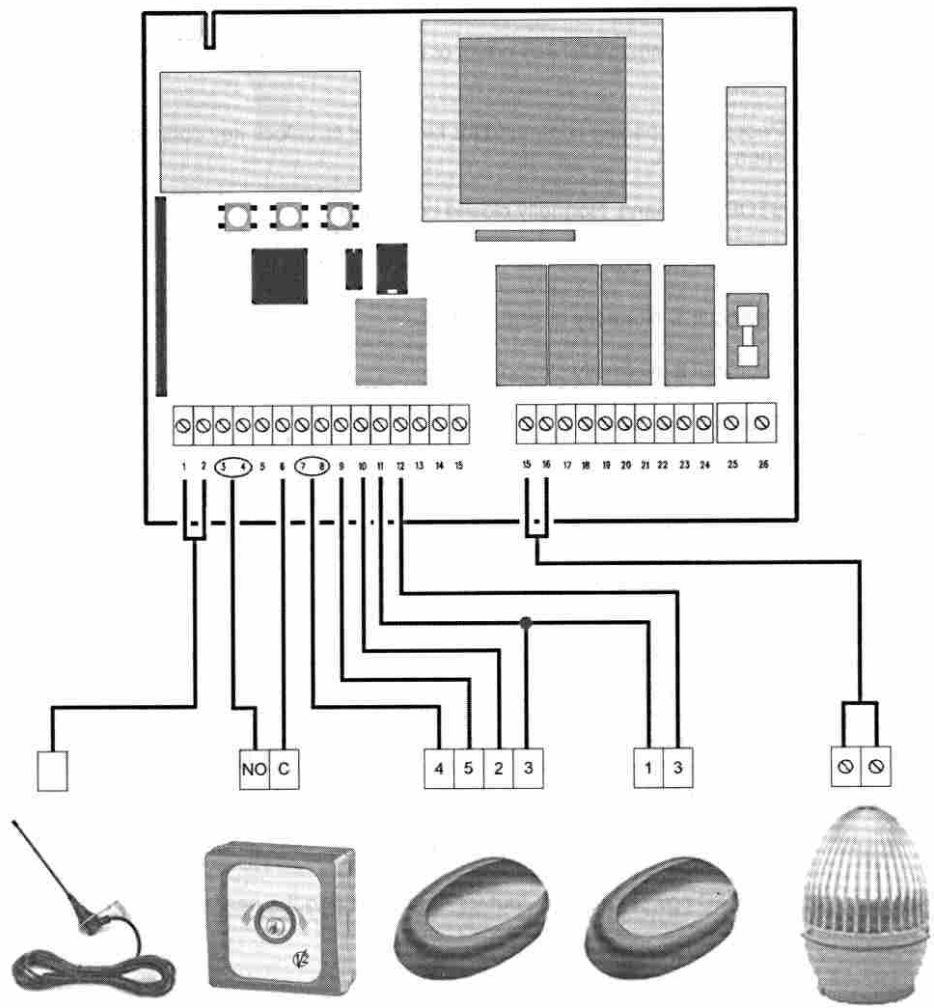
- Press UP or DOWN, until the display shows **FinE**
- Press MENU: the display will show either one of the writings:
  - **no** further changes need to be done – do not exit the program mode.
  - **sì** changes are complete – end of programming.
- Press UP or DOWN to select a function.
- Press MENU to confirm.

If **no** is selected, the display will show **FinE**
Pressing UP or DOWN will scroll the menu upwards or downwards in order to select any items to change.
If **sì** is selected, the display shows the control panel.
THE SET UP DATA HAVE BEEN SAVED IN THE MEMORY: NOW THE UNIT IS READY TO BE USED

SPECIFICATIONS

Power supply	230 VAC 50 Hz
Maximum load for motors	700 W
Maximum load for 24 V attachments	10 W
Room temperature	-20°C / 60°C
Fuses	5 A for 230 VAC lines
Dimensions	160 x 135 x 77 mm
Weight	800 g
IP	55

CONNECTIONS TO THE TERMINAL BOARD



TERMINALS	CONNECTIONS
1.	Antenna core.
2.	Antenna shield.
3.	Opening command for key panel or unlock key connection. Normally open contact.
4.	Pedestrian opening command for key panel or unlock key connection. Normally open contact.
5.	STOP command. Normally closed command.
6.	Common wire (-).
7.	Photocell 1. Normally closed contact.
8.	Photocell 2. Normally closed contact.
9.	Photocell common wire (-).
10. – 11.	24VAC power supply output for photocells and other attachments.
11. – 12.	Photocell TX power supply for functional tests.*
13. – 14.	Electrolocking 12 VAC
15. – 16. – 17.	UNUSED
18. – 19.	230 VAC flashing light
20.	230 VAC power supply output for motor 2 during the opening.
21.	Motor 2 common wire.
22.	230 VAC power supply output for motor 2 during the closing.
23.	230 VAC power supply output for motor 1 during the opening.
24.	Motor 1 common wire.
25.	230 VAC power supply output for motor 1 during the closing.
26.	230 VAC power supply neutral wire
27.	230 VAC power supply phase wire

* To perform the photocell functional test, the photocell TX power supply terminal must be connected to terminals 11 and 12 and the proper function Ft.tE in the menu must be selected.

Per chiarimenti tecnici o problemi di installazione la V2 ELETTRONICA dispone di un servizio di assistenza clienti attivo durante le ore di ufficio TEL. (+39) 01 72 81 24 11

For any installation problems please contact V2 ELETTRONICA TEL. (+39) 01 72 81 24 11

Pour tout précision technique ou problème d'installation V2 ELETTRONICA dispose d'un service d'assistance clients actif pendant les horaires de bureau TEL. (+39) 01 72 81 24 11

Für tecnische Erläuterungen oder Installtionsprobleme verfûgt die Firma V2 ELETTRONICA über einen Kundendienst, der zu Bûrozeiten unter der Telefonnummer (+39) 01 72 81 24 11 erreicht werden kann.

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Alta Tecnologia dell'Automazione

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