

Quadro comando programmabile

Istruzioni d'uso ed avvertenze

Programmable control board

Operating instructions and warnings

Armoire de commande programmable

Notice d'emploi et avertissements

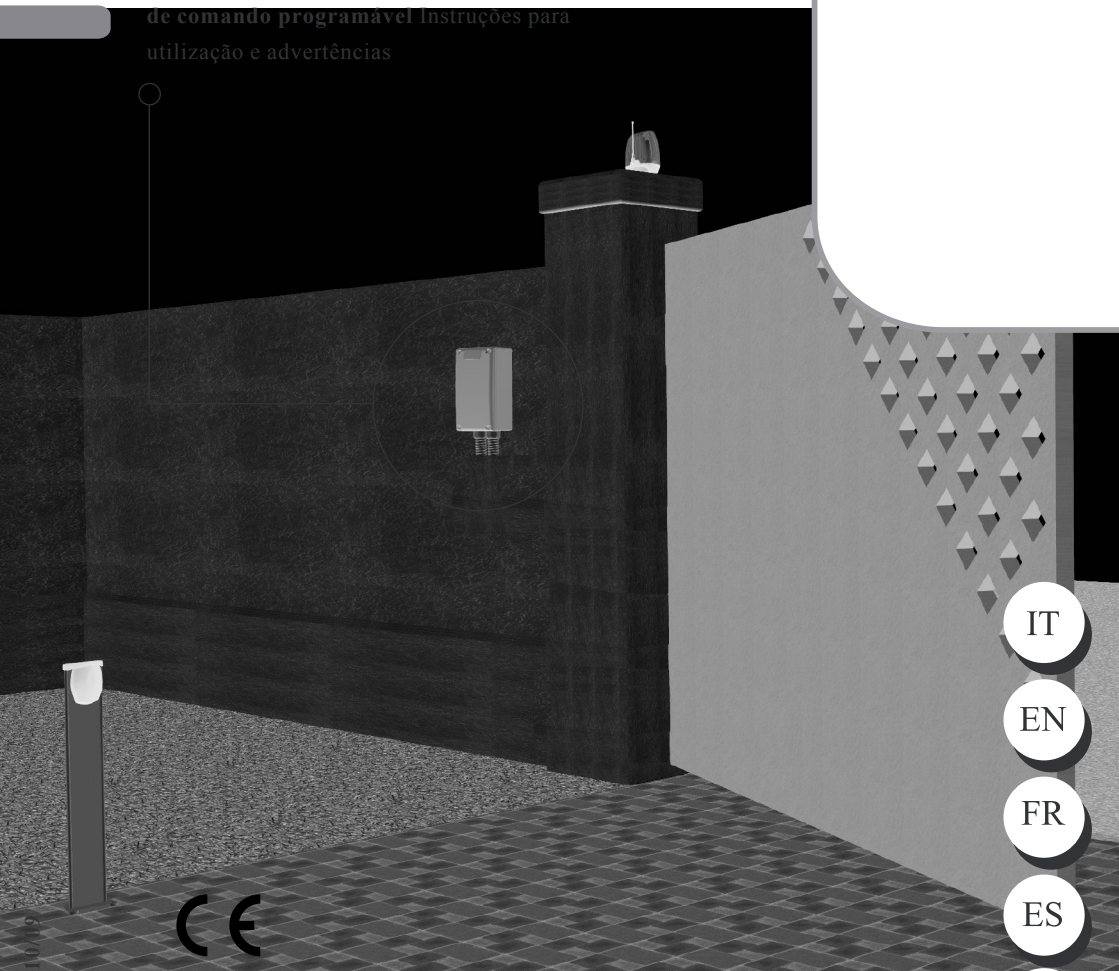
Cuadro de maniobra programable

Instrucciones de uso y advertencias **Quadro**

de comando programável Instruções para

utilização e advertências

DEA®



IT

EN

FR

ES

PT

224RR

IT UTILIZZO DEL LIBRETTO

Per facilitare la comunicazione e la rintracciabilità di particolari importanti informazioni all'interno del testo DEA System adotta la simbologia riportata.

EN USE OF THIS BOOKLET

In order to facilitate communication and the traceability of particularly important parts of the text, DEA System adopts the symbols provided.

FR UTILISATION DE CE LIVRET

Pour faciliter la communication et le repérage de renseignements spéciaux et importants à l'intérieur du texte, DEA System a adopté la symbolologie indiquée.

ES UTILIZACIÓN DEL MANUAL

Para facilitar la comunicación y la trazabilidad de informaciones de particular importancia, DEA System adopta, en el interior del texto, la simbología reproducida.

PT UTILIZAÇÃO DO FOLHETO

Para facilitar a comunicação e localizar pormenores importantes de informações no interior do texto, a DEA System adoptou os símbolos apresentados.

	Avvertimen to Warning Avertisseme nt Advertencia
	Pelico lo Danger Danger Peligro
	Consultazio ne Consultation Consultation Consultation
	Osservazio ne Observation Observation Observación
	Ispezione Inspection Inspection Inspección Inspeção
	Certificazio ne Certification Certification Certificación

Control board 24V for gate automation operating

Instructions and warnings

ENGLI

INDEX

OVERVIEW	12
1 PRODUCT CONFORMITY	12
3 MODELS AND CONTENTS OF THE PACKAGE	13
6 OPERATING CONDITIONS	13.5
7 ASSEMBLY AND WIRING	14
8 USE INSTRUCTIONS	15
8.1 Visualization of inputs status	15
Setup and memorization of the motor stroke	16
8.3 Built-in radio receiver	17
8.4 Personalization of working parameters	18
8.5 Reset of default parameters (p.007)	18
8.6 Safety devices	18
8.7 Messages shown on the display	19
9 MAINTENANCE	20
10 PRODUCT DISPOSAL	20
11 COMPLETE CLOSING ASSEMBLY	20

OVERVIEW

These instructions were prepared by the manufacturer and are an integral part of the product. The operations described are designed for adequately trained and qualified personnel and must be carefully read and kept for future reference.



1 PRODUCT CONFORMITY

The 224RR programmable control board bears the CE label. DEA SYSTEM guarantees the conformity of the product to European Directives 2004/108/CE (concerning electromagnetic compatibility), 2006/95/CE (low voltage electrical equipment)



2 WARNINGS



Read these warnings carefully. Failure to respect the following warnings may cause risk situations.

⚠ WARNING DEA System reminds all users that the selection, positioning and installation of all materials and devices which make up the complete automation system, must comply with the European Directives 2006/42/CE (Machinery Directive), 2004/108/CE (electromagnetic compatibility), 2006/95/CE (low voltage electrical equipment). In order to ensure a suitable level of safety, besides complying with local regulations, it is advisable to comply also with the above mentioned Directives in all extra European countries.

A1

⚠ WARNING Using the product under unusual conditions not foreseen by the manufacturer may cause dangerous situations; this is the reason why all the conditions prescribed in these instructions must be followed.

A2

⚠ WARNING Under no circumstance must the product be used in an explosive environment or surroundings that may prove corrosive and damage parts of the product.

A3



 **WARNING** To ensure an appropriate level of electrical safety always keep the 230 V power supply cables apart from low voltage cables (motors power supply, controls, electric locks, aerial and auxiliary circuits power supply), and fasten the latter with appropriate clamps near the terminal boards. A4

 **WARNING** Any installation, maintenance or repair operation on the whole system must be carried out exclusively by qualified personnel. All these operations must be performed only after disconnecting the power supply, and operating in strict compliance with the electrical standards and regulations in force in the nation of installation. A5

 **WARNING** Install the control board according to the instructions given in “F3 Installation”. Drill only the holes foreseen by the manufacturer to allow for wires passage, and use the specified clamps. Failure to comply with these instructions may jeopardize the level of electrical safety. A6

 **WARNING** During the motors stroke memorization, the control board detects automatically the presence and type of photocells, safety devices and limit switches which are installed. It is therefore essential that during this phase the latter be properly connected and working. In case only one motor works, P29=1 must be programmed immediately. A7

 **WARNING** Wrong assessment of impact forces may cause serious damage to people, animal and things. DEA System reminds all personnel that the installer must ascertain that these impact forces, measured according to EN 12445 prescriptions, are actually below the limits indicated by EN12453 regulation. A8

 **WARNING** Any external safety device installed in order to conform to the limits set for impact forces must comply with EN12978. A9

 **WARNING** Using spare parts not indicated by DEA System and/or incorrect re-assembly may endanger people, animals and property, and may also cause malfunctioning of the product: always use parts provided by DEA System and follow assembly instructions. A10

 **WARNING** Disposal of packaging materials (such as plastic, card board, etc.) must be done according to regulations in force locally. Do not leave plastic bags and polystyrene within the reach of children A11

 **WARNING** Dumping batteries in the ordinary litterbin or leaving them just anywhere is extremely dangerous for the environment. Always use the differentiated waste disposal bins and comply with local regulations in force. A12



3 MODELS AND CONTENTS OF THE PACKAGE

The control board 224RR is available also in the 224RR/B model complete with backup batteries in case of power failure.



4 PRODUCT DESCRIPTION

224RR control board has been designed for the automation of swing gates operated by 24 V $\equiv$ motors. It is extremely versatile, easy to install and fully complies with European regulations concerning electromagnetic compatibility and electric safety

Main features of the product:

1. setting all parameters by 3 keys and a 4-digit display;
2. possibility of fine tuning of motor speed both during its complete stroke and during the last phase of it (slow-down). It keeps motor torque even at very low speed;
3. possibility to set at will the slow-down duration of each of the two motors separately;
4. Internal anti-crash safety device whose sensitivity can be adjusted (according to a 70-level scale) separately for the two motors and in both operating directions;
5. inputs to connect both normal and powered external safety devices (mechanical ribs or photo-cell barriers), with the possibility to run a self-test before each operation. Controlled photocells;
6. built-in 433,92MHz radio receiver for both HCS and HT12E coding offering the possibility to search and delete each transmitter separately.



⚠ WARNING DEA System reminds all users that the selection, positioning and installation of all materials and devices which make up the complete automation system, must comply with the European Directives 2006/42/CE (Machinery Directive), 2004/108/CE (electromagnetic compatibility), 2006/95/CE (low voltage electrical equipment). In order to ensure a suitable level of safety, besides complying with local regulations, it is advisable to comply also with the above mentioned Directives in all extra European countries.

A1



5 TECHNICAL DATA

Power supply	230 V ~ +/- 10%
50Hz Flashing light output	30 V max 10W art. Lumy 24S
Auxiliary power supply output (+24VAUX)	24 V === max 200mA
Safety devices power supply output (+24VSIC)	24 V === max 200mA
Electric lock output	max 1 electric lock art. 110
LC/SCA contact capacity	max 5A
Max motor capacity	2 X 80Wmax
Protection level	IP54
Fuse F1	T2A 250V (retarded) Fuse F2
.....	T20A 250V (retarded) Radio receiver
frequency	433,92 MHz rolling code / dipswitch coding
Max. number of transmitter controlled	100



6 OPERATING CONDITIONS

224RR control board is designed for the automation of swing gates operated by 24 V === motors. This control board has been designed and tested for operation under “normal” conditions for both residential and industrial use. The level of protection against dust and water and other data are illustrated in “5 Technical Data”.

⚠ WARNING Using the product under unusual conditions not foreseen by the manufacturer may cause dangerous situations; this is the reason why all the conditions prescribed in these instructions must be followed.

A2

⚠ WARNING Under no circumstance must the product be used in an explosive environment or surroundings that may prove corrosive and damage parts of the product.

A3



7 ASSEMBLY AND WIRING INSTRUCTIONS

⚠ WARNING To ensure an appropriate level of electrical safety always keep the 230V power supply cables apart from low voltage cables (motors power supply, controls, electric locks, aerial and auxiliary circuits power supply), and fasten the latter with appropriate clamps near the terminal boards.

A4

⚠ WARNING Any installation, maintenance or repair operation on the whole system must be carried out exclusively by qualified personnel. All these operations must be performed only after disconnecting the power supply, and operating in strict compliance with the electrical standards and regulations in force in the nation of installation.

A5

⚠ WARNING Install the control board according to the instructions given in “F3 Installation”. Drill only the holes foreseen by the manufacturer to allow for wires passage, and use the specified clamps. Failure to comply with these instructions may jeopardise the level of electrical safety.

A6

Connect to the power supply 230 V ~ ± 10% 50 Hz through a multi pole switch or a different device that can ensure multi pole disconnection from the power supply, with a contact opening of 3,5 mm. Use a cable with a minimum section of 3 x 1,5 mm² (e.g. a H07RN-F type).

Make all connections to the terminal board and remember to short-circuit, whenever necessary, all unused inputs. (See table 1 terminal board connection and Fig. 1 basic and complete wiring diagram)



Table 1 Terminal board connection

1-2	Free contact max. capacity 5 A : this contact can be used to control an open gate warning light (P27=0) or a courtesy lamp (P27≠0)
3-4	Electric lock output art. 110 12V=== 15
VA 5-6	Flashing light output 24 V === max 15W art. Lumy 24S (the intermittent output does not demand the use of a flashing light card)
7-8	Motor 2 output 24 V === max 70W
9-10	Motor 1 output 24 V === max 70W
11	N.C. leaf nr. 1 safety device input. In case of activation it reverses the movement (P18=0) or it stops (P18=1). If unused, short circuit to the terminal n°16
12	N.C. leaf nr. 2 safety device input. In case of activation it reverses the movement (P18=0) or it stops (P18=1). If unused, short circuit to the terminal n°16
13	N.C. Photocell input. In case of activation it reverses the movement only while closing (P26=0) or it reverses the movement while closing and stops while opening (P26=1). If unused, short circuit to the terminal n°16
14	+24 V === power supply output for controlled safety devices. To be used as power supply of photocell transmitters (in all cases) and of safety devices when testing these latter before each operation
15	+24 V === power supply output for auxiliary circuits and uncontrolled safety devices. To be used as power supply of any auxiliary devices, photocell receivers (in all cases), and of safety devices when not testing these latter before each operation
16 COM	Common safety devices
17 FCC2	N.C. motor nr. 2 closing limit switch input. If unused, it may remain disconnected
18 FCC1	N.C. motor nr. 1 closing limit switch input. If unused, it may remain disconnected
19 FCA2	N.C. motor nr. 2 opening limit switch input. If unused, it may remain disconnected
20 FCA1	N.C. motor nr. 1 opening limit switch input. If unused, it may remain disconnected
21 START	N.O. open input. If activated, it opens or closes both motors. It can work in "reversal" mode (P25=0) or "step-by-step" mode (P25=1)
22 PEDON	N.O. pedestrian opening input. If activated, it opens motor nr. 1 only.
23 STOP	N.O. stop input. If activated, it stops the movement of both motors during any operation. If unused, short circuit to the terminal n°24
COM	Common inputs
25	Aerial signal input
26	Aerial ground input
27-28 24VBatt	24 V === battery power supply input (Follow carefully polarity indications)
29-30 24Vac	24 V === transformer power supply input

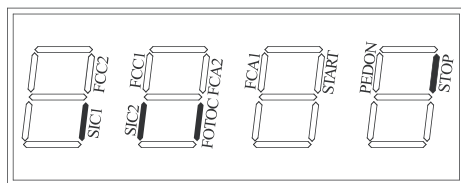


8 USE INSTRUCTIONS

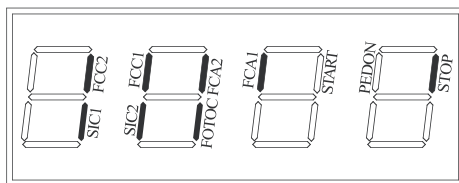
After making all connections to the terminal board, remember to short-circuit, whenever needed, any unused input (see "connection to the control board") and power the card: on the display you will read for a few seconds "rES-" followed by the symbol "----" which stands for gate closed.

8.1 Visualisation of inputs status

Press on the "OK" key to check that all inputs have been properly connected.



Basic installation



Complete installation

By pressing the “OK” key when the control board awaits further instructions (“---”) the display shows some vertical segments: each one of them is associated to one of the control board inputs (see the picture above). When the segment is lighted it means that the contact associated to it is closed, on the contrary, when it is switched off the contact is open. In order to do this: 8.2

Setup and memorization of motor stroke

⚠ WARNING During motors stroke memorisation, the control board detects automatically the presence and type of photocells, safety devices and limit switches which are installed. It is therefore essential that during this phase the latter be properly connected and working. In case only one motor works, P29=1 must be programmed immediately.

A7

Instructions	Function	Display
	The control board is ready to receive instructions	----
Leaf 1 positioning		
	Scroll down the parameters until you visualize procedure P001	P001
	Confirm! The control board is ready for the positioning of leaf 1	OP-1
	Position leaf 1 in its standstill position while opening ¹	
	Confirm! The control board has memorized the leaf position	P001
Leaf 2 positioning		
	Scroll down the parameters until you visualize procedure P002	P002
	Confirm! The control board is ready for the positioning of leaf 2	OP-2
	Position leaf 2 in its standstill position while opening ¹	
	Confirm! The control board has memorized the leaf position	P002
Motors stroke memorization		
	Scroll down the parameters until you visualize procedure P003	P003
	Confirm! The control board awaits a further confirmation	APP-
	Confirm by pressing on the OK key for a few seconds! The procedure start s	APP-
	Now motor 2 starts to close in the slow down phase until it reaches the stroke end while closing (or the limit switch, if used), shortly after that, motor 1 also starts to close in the slow down phase until it reaches the stroke end while closing (or the limit switch, if used).	
	On the display you will read “----”. Motor stroke memorization done!	----

¹ By pressing on the key the leaf must open, by pressing on the key the leaf must close. If this does not happen, you must swap the two motor cables. Only if you use limit switches, first position the leaf where you want it to stop in closing and then adjust the closing cam so that it presses on the limit switch associated to it in that point. Then position the leaf in the opening position and adjust the opening cam so that it presses on the limit switches associated to it in that point.



8.3 Built-in radio receiver

DEA 224RR control board includes a 433,92MHz built-in radio receiver accepting both transmitters with HCS coding (complete rolling code or just fixed part), and HT12E dip-switch coding.

- The type of coding is selected by programming the working parameter n° 8 “type of coding” (see Table 2 Parameters)

- The receiver memory capacity can contain up to 100 different transmitters.
- When receiving a pulse from the transmitter, depending on your channel selection and linking, the start or the pedestrian inputs are activated. In fact, by programming one of the working parameters it is possible to choose,

Instructions	Function	Display
	The control board is ready to receive instructions	----
Deletion of all transmitters		
	Scroll down the parameters until you visualize P004	P004
	Confirm! The control board awaits a further confirmation	CRnC
	Confirm by pressing on the OK key for a few seconds! The procedure starts	CRnC
	Done! The transmitters memory has been deleted	P004
	Scroll down the parameters until you visualize “----”. The control board awaits a further confirmation	----
Memorization of transmitters ¹		
	Scroll down the parameters until you visualize P005	P005
	Confirm! The receiver enters in memorization mode the flashing light flickers!	LEAr
	Press on any key of the transmitter	
	Memorization done! The flashing light goes out for 2 seconds the display visualizes the number of the transmitter just memorized (es. “r001”)	r001
	The receiver reverts automatically to memorization mode The flashing light flickers!	LEAr
	Memorize all necessary transmitters	
	Wait 10 seconds before quitting the memorization mode The receiver will now receive all the memorized transmitters	----
How to activate the memorization mode without operating on the control board ¹		
	Press simultaneously on key CH1 and CH2, or on the hidden key of a transmitter already memorized	LEAr
How to search and delete a transmitter		
	Scroll down the parameters until you visualize P006	P006
	Confirm! You can now select the transmitter	r001
	Scroll down the transmitter numbers until you reach the transmitter to be deleted (eg. “r003”)	r003
	Confirm the deletion by pressing the OK key for a few seconds	r003
	OK! The transmitter is deleted	----
	You can now select the parameter	P006
	Scroll down the parameters until you visualize “----”. The control board awaits further instructions	----



¹ Make sure that the receiver is set to receive the type of coding of the transmitter you wish to memorize: visualize and, if necessary, update parameter n° 8 “type of coding” (see “8.4 Personalization of working parameters”)

Channel selection and linking on the transmitter

The built-in receiver can control both the start input and the pedestrian one. By setting the correct value of the parameter “P009 Selection and linking of radio channels” it is possible to decide which key of the transmitter will activate each input. If you check on the “working parameters” table you will realize that the P009 parameter allows you to choose among 16 different combinations. If, for instance, you attribute value “3” to the parameter P009, all memorized transmitters will activate the start input through CH1 and the pedestrian input through CH4. Please refer to chapter “8.4 Personalization of working parameters” in order to select the right combination.

8.4 Personalization of working parameters

Instructions	Function	Display
	The control board is ready to receive instructions	----
→	Scroll down the parameters until you visualize the one you wish to set (ex. P010)	P010
	Confirm! The display shows the set parameter value	d 100
	Increase or decrease the value until you reach the value you wish to define	d080
	Confirm! The display shows again the parameter	P010
	Scroll down the parameters until you visualise “----”.The control board awaits further instructions	----
The automation is now ready to work according to the new working parameters.		

8.5 Resetting of default parameters (p.007)

DEA 224RR control board software includes a reset procedure to restore default values (the one set by the maker) of all settable parameters, see Table 2 Parameters. The value originally set for each parameter is shown in the “working parameters table”. In case you should reset all values and restore all default values, proceed as follows:

Instructions	Function	Display
	The control board is ready to receive instructions	----
	Scroll down the parameters until you visualize P007	P007
	Confirm! The control board awaits a further confirmation	dEF-
	Confirm by pressing on the OK button. The procedure starts	dEF-
	All parameters are now set at their original value	P007
	Scroll down the parameters until you visualise “----”. The control board awaits further instructions	----

8.6 Safety devices

DEA 224RR control board allows installers to set up installations that truly comply with European regulations concerning automated garage doors and gates. More specifically, this control board allows you to comply with the limits set by the same regulations as to impact forces in case of collision with obstacles. DEA 224RR control board is equipped with a built-in anti-crush safety device that, associated to the possibility of tuning up the motors' speed, allows you to comply with the limits imposed by the above mentioned regulations in most installations.

In particular, you can adjust the anti-crush safety device sensitivity by properly setting the value assigned to the following parameters (see also “8.4 Personalization of working parameters”):

- P014 motor
 - 1 force in opening from 30 (min. force, max sensitivity) to 100 (max force, neutralized sensitivity)
 - y) 1 force in closing from 30 (min. force, max sensitivity) to 100 (max force, neutralized sensitivity)
 - y) 2 force in opening from 30 (min. force, max sensitivity) to 100 (max force, neutralized sensitivity)
 - y) 2 force in closing from 30 (min. force, max sensitivity) to 100 (max force, neutralized sensitivity)



In case the gate structural features do not allow you to comply with the above force limits, it is possible to use external safety devices inputs (terminals no. 11 and no. 12). “SIC1” and “SIC2” inputs can be configured by setting properly parameter no. 18:

•P018 = 0 “rib” mode functioning: SIC1 = motor
 1 rib input, SIC2 = motor 2 rib input.
 When one of the two inputs is activated the movement direction of both motors is inverted. If one of the two inputs is activated during the slow-down phase, the activation is interpreted as stroke end thus stopping the movement of the motor associated to that input.

•P018 = 1 “photoelectric barriers” mode functioning: you
 can use either “SIC1” or “SIC2” or both of
 them, but remember to short-circuit the unused input. When one of the two inputs is activated, the movement of both motors is stopped.

If you power external safety devices through + 24VSIC output (terminal no.14), their proper working is tested before each manoeuvre.

8.7 Messages shown on the display

Message	Description	
MESSAGES CONCERNING WORKING		
----	Gate is closed	
⌋	Gate is open	
OPEN	Opening under way	
CLOS	Closing under way	
STEP	While in step-by-step mode, the control board awaits further instructions after a start command	
BLCK	Stop command received	
BAR-	Sic1 or sic2 activated while working in barrier mode	
ERROR MESSAGES		
Message	Description	Possible solutions
Err1 Err2	They point out that the gate has exceeded: - (Err1), the max allowed number of reversals (50) without ever reaching the end of stroke(or stop)while closing; - (Err2) the max number of uninterrupted operations (10) of the anti-crush safety device;therefore an “emergency maneuver” is under way: the control board sets the motors in a slow down phase and searches the stops (or ends of stroke) in order to reset the positioning system. Once the stops (or ends of stroke) while closing are found again the message disappears and the control board awaits further instructions “----” and then resumes working normally.	In case the gate is not properly closed after the emergency maneuver (maybe because of false stops or obstacles due to mechanical frictions), proceed as follows: - Disconnect the power supply, check manually that no particular frictions and/or obstacles are present during the complete stroke of both leafs. Leave both leafs half-open. - Connect the power supply again and subsequently give a start pulse. At this point both leafs will start to close in slow down phase until reaching the stop (or end of stroke). Make sure that the maneuver is properly completed. Adjust force and motor speed values, if need be. If the gate keeps working inappropriately try to repeat the motor stroke memorization procedure (see paragraph 8.2)
Err3	External photocells and/or safety devices are activated or out of order	Make sure that all safety devices and/or photocells installed are working properly.
Err4	The motors are not connected or it signals control board failure	Make sure that the motors are properly connected. If the message reappears change the control board.
Err5	The control board power supply voltage has exceeded the allowed range	Make sure the power supply voltage on the faston connect. no. 29-30 is 22 V +/-10% and on faston no. 27-28 is 27 V +/-10%.
Err6	Possible motor overheating due to obstacles hindering the doors movement. The control board does not respond to instructions	Remove any obstacle and wait until the message “Err6” is replaced by message “bLOC” and the control board responds to instructions again (a few seconds)



9 MAINTENANCE

⚠ WARNING Any installation, maintenance or repair operation on the whole system must be carried out exclusively by qualified personnel. All these operations must be performed only after disconnecting the power supply, and operating in strict compliance with the electrical standards and regulations in force in the nation of installation. A5

⚠ WARNING: With control boards range “RR” disconnect the power supply wires before unlocking the operator manually. When you start the operator again the first operation will bring the door to a complete closing. If you do not follow this procedure the door will lose its right positioning.



10 PRODUCT DISPOSAL



In line with EU Directive 2002/96/EC for waste electrical and electronic equipment (WEEE), this electrical product must not be disposed of as unsorted municipal waste. Please dispose of this product by returning it to your local municipal collection point for recycling.



11 COMPLETE CLOSING ASSEMBLY

Remember that everyone who sells and/ or motorises doors/gates becomes the manufacturer of the automated door/gate machine, and must therefore prepare and preserve a technical folder containing the following documents (see Machinery Directives Enclosure V).

- Assembly drawing of the automatic door/gate.
- Electrical connection and control circuit diagram.
- Risk analysis including: a list of the essential safety requirements provided in machine Directive

Enclosure I; a list of the risks posed by the door/gate and a description of the implemented solutions. The installer must also:

- Keep these operating instructions and the instructions for all other components in a safe place.
- Prepare the operating instructions and general safety warnings (by filling up these operating instructions) and hand a copy to the end user.
- Fill in the maintenance handbook and hand a copy to the end user.

⚠ WARNING DEA System reminds all users that the selection, positioning and installation of all materials and devices which make up the complete automation system, must comply with the European Directives 2006/42/CE (Machinery Directive), 2004/108/CE (electromagnetic compatibility), 2006/95/CE (low voltage electrical equipment). In order to ensure a suitable level of safety, besides complying with local regulations, it is advisable to comply also with the above mentioned Directives in all extra European countries.

⚠ WARNING Wrong assessment of impact forces may cause serious damage to people, animal and things. DEA System reminds all personnel that the installer must ascertain that these impact forces, measured according to EN 12445 prescriptions, are actually below the limits indicated by EN12453 regulation.

⚠ WARNING Any external safety device installed in order to conform to the limits set for impact forces must comply with EN12978.



PROCEDURE DESCRIPTION		SETTABLE VALUES										USER ²
PROCEDURE	P001	Positioning of leaf M1	HCS fixed part only									
	P002	Positioning of leaf M2	HCS rolling code									
	P003	Memorization of the motors' stroke	HT 12E dip switch									
	P004	Deletion of the radio receiver memory		start	pedes- trian		start		pedes- trian			
	P005	Transmitters memorizing	001	CH1	CH2	009	CH3	CH4	CH3	CH4	CH4	
	P006	Search and deletion of a transmitter	002	CH1	CH3	010	CH4	CH1	CH1	CH4	CH2	
	P007	Resetting of default parameters	003	CH1	CH4	011	CH4	CH4	CH2	CH4	CH3	
PARAMETRES	PARAMETER DESCRIPTION		004	CH2	CH1	012	CH4	CH1	CH2	CH1	CH2	
	P008	Type of coding of the radio receiver	005	CH2	CH3	013	CH4	CH2	CH2	CH2	CH2	
	P009	Channel selection and linking to "start" and "pedestrian" inputs	006	CH2	CH4	014	CH4	CH2	CH2	CH2	CH2	
			007	CH3	CH1	015	CH4	CH2	CH2	CH2	CH2	
			008	CH3	CH2	016	CH4	CH4	CH4	CH4	CH4	
	P010	Motors' speed during normal stroke (calculated as % of max speed)	50.....100									
	P011	Motors' speed during slow-down phase (calculated as % of max speed)	30.....50	50	100	100	100	100	100	100	100	
	P012	Slow-down duration of M1 (expressed as % of total stroke)	10.....25	50								
	P013	Slow-down duration of M2 (expressed as % of total stroke)	10.....25	50								
	P014	Motor 1 force while opening	30.....90	100								
	P015	Motor 1 force while closing	30.....90	100								
	P016	Motor 2 force while opening	30.....90	100								
	P017	Motor 2 force while closing	30.....90	100								
	P018	Selection of type of external safety device: rib / barrier. If the ribs are activated the movement direction of both motors is inverted; during slow-down phase, the activation is interpreted as stroke end. If the barrier is activated the movement of both motors is stopped.	000	safety ribs								
	P019	Time of automatic closing (expressed in sec). If = 0 the automatic closing is deactivated	001	photoelectric barriers								
			0 10	255								

P020	Time of pre-flashing (expressed in sec)	<u>P</u> <u>2</u>!5
P021	Time of phase displacement in opening (expressed in sec) ATTENTION: if=0 the exit which controls the electric lock is automatically deactivated	<u>P</u>!0
P022	Time of phase displacement in closing (expressed in sec)	<u>P</u> <u>3</u>!0
P023	Collectivity function: if it is activated it deactivates both start and pedestrian inputs for the whole duration of automatic opening and closing	<u>000</u> <u>001</u> deactivated
P024	Ram blow function: if it is activated, it pushes the motors close for one second before each opening movement, so as to ease the releasing of any electric lock	<u>000</u> <u>001</u> deactivated <u>001</u> activated
P025	Operating program: reversal (start->open, start->close, start->open ...), step-by-step (start->open, start->stop, start->close...)	<u>000</u> inversione <u>001</u> step-by-step
P026	PHOTO input functioning: if=0 photocells are activated while closing and at start when gate is closed; if=1 photocells are always activated; if=2 photocell is activated while closing only PHOTO input activation, when activated, provokes: the inversion (while closing), the stop (while opening) and prevent the starting (when gate is closed).	<u>000</u> photocells are activated while closing and when gate is closed <u>001</u> photocells are always activated <u>002</u> fotocells are activated at closing only
P027	Clean contact operation : - If = 0, open gate warning light, the contact is always closed when the gate is opened, it opens again only when the closing movement is completed - If different from 0, courtesy light, the contact is closed during every movement, it opens again when the motor stops according to a pre-settable delay (expressed in sec)	<u>P</u>255
P028	Short reversal at end of stroke: when each leaf reaches the end of stroke, it reverses shortly the movement so as to "release" the mechanical stress due to the leaf's pressure on the end of stroke itself.	<u>000</u> deactivated <u>001</u> activated
P029	One motor function: if it is activated, the control board controls motor 1 only ATTENTION: activate this function before memorizing motor's stroke. ATTENTION: When 1 motor is working (P029=1) set P022=0	<u>000</u> deactivated <u>001</u> activated
P030	Searches for end of stroke while opening: when activated, operators stop only at their arrival at the end of stroke. If deactivated, operators stop on the point memorized during the learning procedure. Its activation assures a complete opening even in the presence of the operator inertia and/or in case of many inversions during the stroke.	<u>000</u> deactivated <u>001</u> activated
P031	PED input operation: If=0 PED input starts the pedestrian opening (operator n.1 only) If=1 PED input starts the closing. START input starts the opening.	<u>000</u> Pedestrian <u>001</u> Separated Open/Close
P032	Unused parameter	
P033	Unused parameter	
P034	Unused parameter	

¹ The default value, set by manufacturer at the factory, is written in bold and underlined.

² Column reserved to the installer to fill in with the automation personalized parameters

³ Inactive channel.

Table 2 Parametres

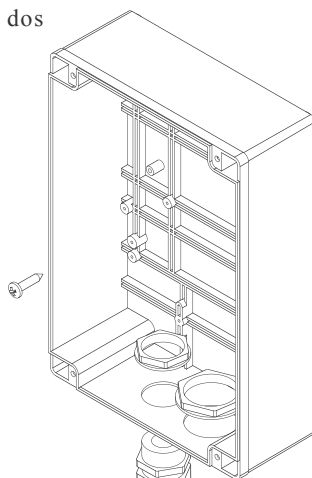
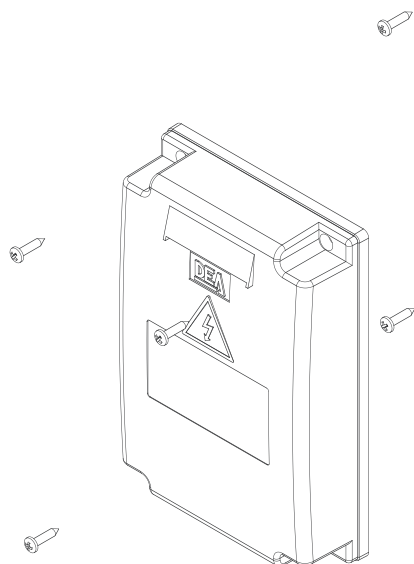
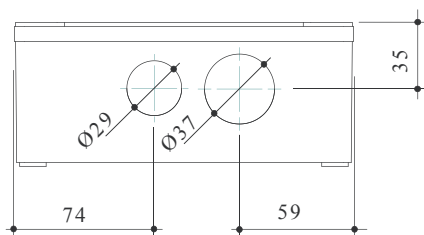


VISTA DA "A" Fori da eseguire sul fondo della scatola con seghe a tazza $\varnothing 29$ e $\varnothing 37$ per l'inserimento dei pressacavi.

VIEW FROM "A" Holes to be drilled on the bottom of the box with a hole saw $\varnothing 29$ and $\varnothing 37$ to introduce cable clamps

VUE DE "A" Trous à percer au fond du boîtier avec une scie-cloche $\varnothing 29$ et $\varnothing 37$ afin d'introduire des colliers pour câble.

VISTA DESDE "A" Agujeros que deben hacerse en la base de la caja con sierras cilíndricas de $\varnothing 29$ y $\varnothing 37$ para la introducción de los pasacables. **VISTA DE "A"** Furos pra executar no fundo da caixa com serra a xícara $\varnothing 29$ e $\varnothing 37$ para inserimento dos prensacabos.



Passaggio cavi 230V all'interno di una canaletta $\varnothing 16$ raccordata con pressacavo PG21 (non forniti)

Pass 230V cables inside a grommet $\varnothing 16$ connected with a cable clamp PG21 (items not included)

Passage des fils 230V dans un passe-fil $\varnothing 16$ raccordée avec un collier pour câble PG21 (ces outils ne sont pas inclus)

Paso de los cables 230V por el interior de una canaletta de $\varnothing 16$ unida con pasacable PG21 (no incluidos)

Passagem cabos 230V ao interno de um cano $\varnothing 16$ com prensacabo PG21 (não fornecidos)

VISTA DA "A"
VIEW FROM "A"
VUE DE "A"
VISTA DESDE
"A" VISTA DE



Pos	Descrizione	Description	Description	Description	Descrição
1	Porta scheda	Porte carte	Circuit card holder	Soporte tarjeta	Suporte ficha
2	Coperchio	Couvercle	Cover	Tapón	Tampa
3	Supporto scheda	Card support	Support carte	Soporte tarjeta	Suporte quadro 4
	PCS	PCS	PCS	PCS	PCS
5	Scheda elettronica	Control board	Armoire de	Central de mando	Quadro de comando
6	O-ring	O-ring	O-ring	Empaquetadura de anillo	O-ring
7	Trasformatore	Transformer	Transformateur	Transformador	Transformador
8	Disco in gomma	Rubber disc	Disque en gomme	Disco de goma	Disco em borracha 9
	Disco in lamiera	Sheet disk	Disc en tôle	Disco de chapa	Disco em folha
10	Vite	Screw	Vis	Tornillo	Parafuso
11	Morsetto	Terminal	Bornier	Borne	Terminal
12	Piastrina terra	Earth wire clamp	Plaque fil mise à terre	Plaquita tierra	Placa terra
13	Rondella	Washer	Rondelle	Arandela	Arruela
14	Vite	Screw	Vis	Tornillo	Parafuso
15	Vite	Screw	Vis	Tornillo	Parafuso
16	Cavi batterie	Wire	Câble	Cable	Cabo
17	Batteria	Battery	Batterie	Batería	Bateria
18	Vite	Screw	Vis	Tornillo	Parafuso

Eseguire il fissaggio alla parete usando opportuni tasselli per viti Ø5 (non fornite)

Fix the box on the wall with appropriate bushings to anchor screws Ø5 (not included)

Le fixer au mur en utilisant des douilles à expansion pour vis adéquates Ø5 (pas incluses)

Efectuar la fijación a la pared utilizando adecuados tacos para tornillos de Ø5 (no incluidos) **Executar** a fixação a parede usando apropriadas rolhas para parafusos Ø5 (não fornecidas)

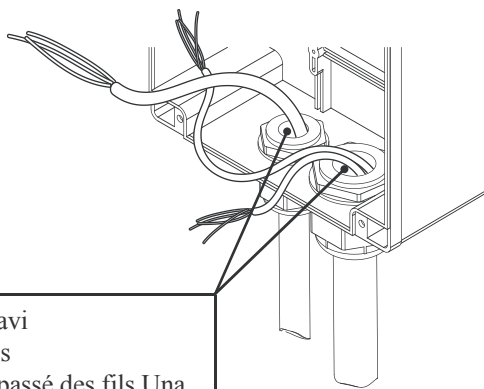
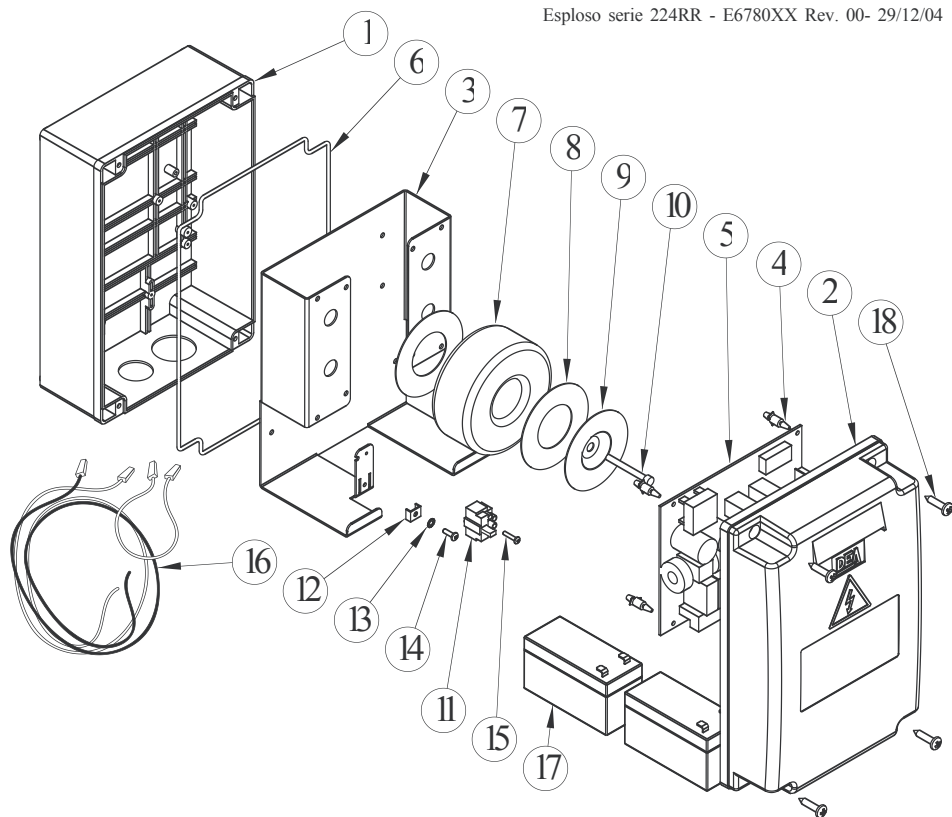
Passaggio cavi a bassissima tensione all'interno di una canaletta Ø20 raccordata con pressacavo PG29 (non forniti)

Pass very low tension cables inside a grommet Ø20 connected with a cable clamp PG29 (items not included)

Passage des fils à très basse tension dans un passe-fil Ø20 raccordée avec un collier pour câble PG29 (ces outils ne sont pas inclus)

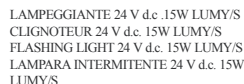
Paso de los cables de tensión muy baja por el interior de una canaletta de Ø20 unida con pasacable PG29 (no incluidos)

Passagem cabos a baixíssima tensão ao interno de um cano Ø20 com prensacabo PG29 (não fornecidos)



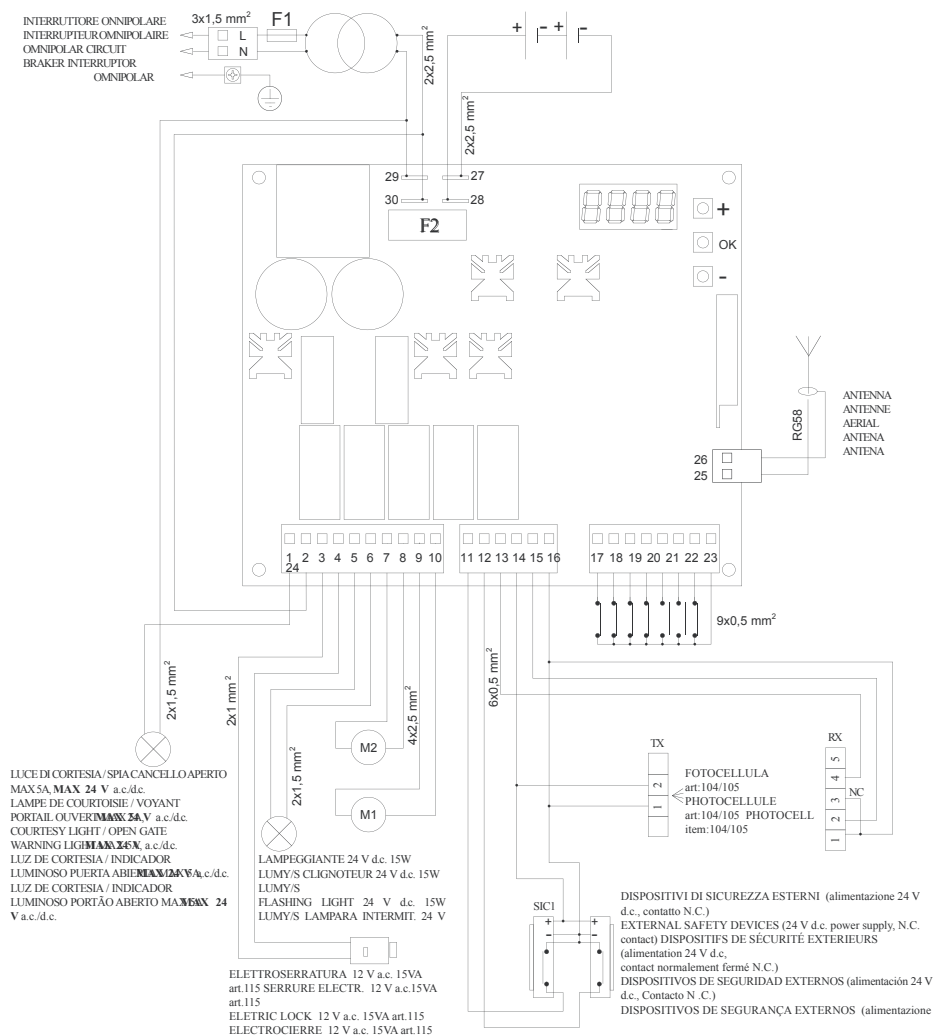
Sigillare le canalette dopo il passaggio dei cavi
Seal the tubing trays after installing the wires
Étanchez les passe-fils après que vous avez passé des fils
Una vez colocados los cables, tapar las canaletas
Tapar os cabos depois de passar os fios eléctricos

INTERRUTTORE ONNIPOLARE
INTERRUPTEUR OMNIPOLAIRE
OMNIPOLAR CIRCUIT
BRAKER INTERRUPTOR
OMNIPOLAR





Schema elettrico “impianto completo” - Wiring Diagram “complete installation” - Schéma électrique “installation complète” - Esquema eléctrico “instalación completa” - Schema elettrico “impianto completo”





**DICHIARAZIONE DI CONFORMITA'DE
CLARATION OF CONFORMITY
DECLARATION DE CONFORMITÉ
DECLARACIÓN DE CONFORMIDADDE
CLARAÇÃO DE CONFORMIDADE**

Il sottoscritto, rappresentante il seguente costruttore
The undersigned, representative of following manufacturer
Le soussigné, représentant le fabricant suivant
El abajo firmante, representante el fabricante siguiente
O abaixo-assinado, representando o seguinte construtor

**DEA SYSTEMS S.p.A.
Via Della Tecnica, 6
36013 PIOVENE ROCCHETTE (VI) - ITALY**

dichiara che gli apparecchi denominati
hereby certifies that the equipment known as
déclare que les appareils nommés
declara que los equipos denominados
declara que os aparelhos denominados

CENTRALE DI COMANDO 224RR

sono conformi alle disposizioni legislative che traspongono le seguenti Direttive
conform to the laws and regulations that comply with the following Directives
sont conformes aux termes des lois qui respectent les Directives suivantes
são conformes com as disposições legislativas que incorporam las siguientes Directivas:
são em conformidade as disposições de lei que respeitam as Directivas seguintes

- | | | | | | | |
|---|-----------|-------------|------------|--------|-----------|------------------------|
| • | Direttiva | 2006/95/CE | (Direttiva | Bassa | Tensione) | |
| • | Direttiva | 2004/108/CE | (Direttiva | EMC) | | |
| • | Direttiva | 99/5/CEE | (Direttiva | Radio) | e | successivi emendamenti |

e che sono state applicate le norme e/o specifiche tecniche di seguito indicate
and that the following norms and/or technical specification have been applied
et que les normes et/ou prescriptions techniques suivantes ont été appliquées
y que se han aplicado las normas y/o especificaciones técnicas indicadas a continuación:
e que foram aplicadas as normas e/ou especificações técnicas indicadas a seguir:

EN	60335-1:2002	+	A11:2004	+	A1:2004	+	A12:2006	+
	A2:2006.							
EN	61000-6-2 :2005;	EN	61000-6-3 :2007.					
EN	300	220-2	V2.1.2	+	;	EN	301	489-01 V1.8.1.

Il sottoscritto dichiara che i prodotti elencati sopra non possono essere messi in funzione prima che la macchina sulla quale sono installati sia stata marcata CE in conformità a tutte le Direttive applicabili.

The underwritten declares that the above-mentioned products cannot be put into service unless the machinery they are installed on carry the EC Mark in conformity to all applicable Directives.

Le soussigné déclare que les produits énumérés ci-dessus ne peuvent pas être mis en service avant que la machine sur la quelle ils sont installés soit marquée CE en conformité à toutes les Directives applicables.

El suscrito declara que los productos arriba mencionados pueden ponerse en funcionamiento exclusivamente después de que la máquina en la que han sido instalados haya sido marcada CE en conformidad con todas las Directivas de aplicación.

O abaixo-assinado declara que os produtos citados acima, não podem ser colocados em função antes que a máquina na qual estão instalados foram marcada CE em conformidade a todas as Directivas aplicáveis.

PIOVENE ROCCHETTE (VI) ITALY, 04/02/09

LIEVORE TIZIANO



**DEA SYSTEM S.p.A. - Via Della Tecnica, 6 - ITALY - 36013 PIOVENE ROCCHETTE
(VI) tel. +39 0445 550789 - fax +39 0445 550265 - Internet <http://www.deasystem.com> - e-mail: deasystem@deasystem.com**