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CE

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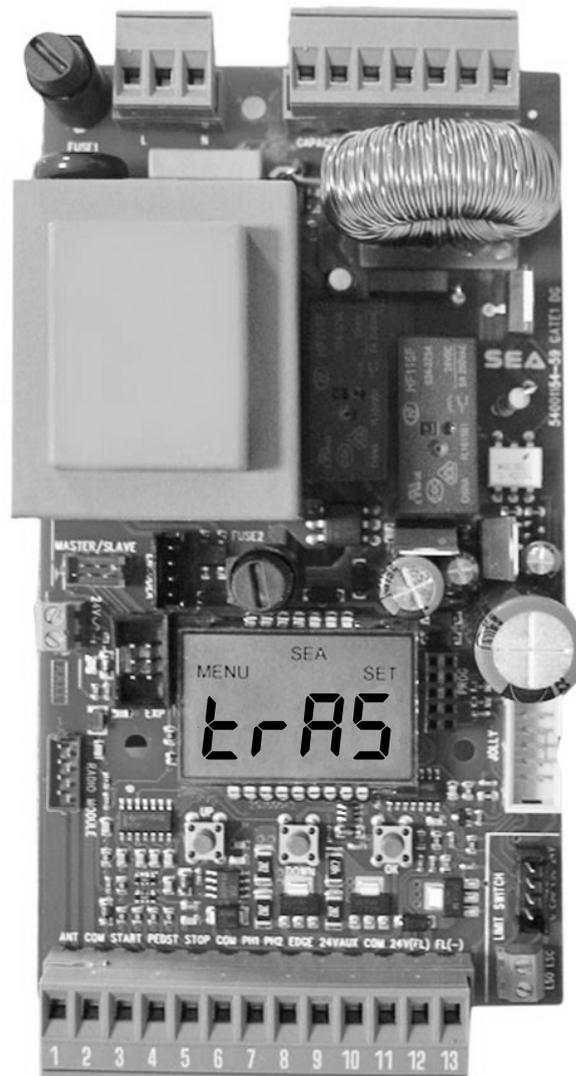
Français

Español

GATE 1 DG R1

CENTRALE DI COMANDO PER CANCELLI SCORREVOLI, BATTENTI, BARRIERE E PORTE DA GARAGE
CONTROL UNIT FOR SLIDING GATES, SWING GATES, BARRIERS AND GARAGE DOORS
ARMOIRE DE COMMANDE POUR PORTAILS COULISSANTS, BATTANTS, BARRIERES ET PORTES DE GARAGE
CENTRAL ELECTRÓNICA PARA CANCELAS CORREDIZAS, ABATIBLES, BARRERAS Y PUERTAS BASCULANTES

(Cod. 23001158)



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CONNESSIONI / CONNECTIONS / CONNEXIONS/ CONEXIONES / VERBINDUNGEN

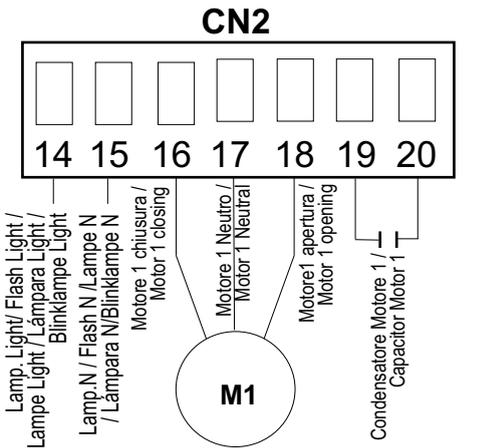
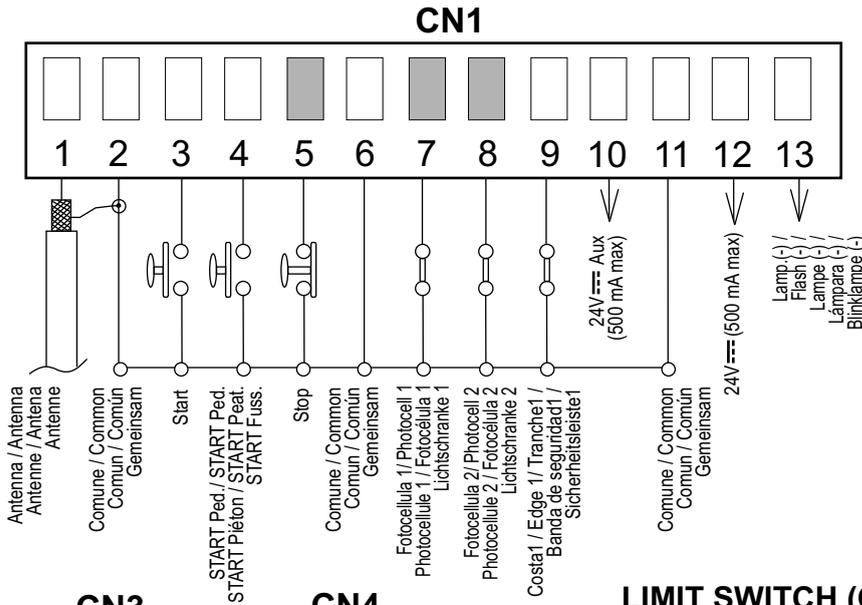
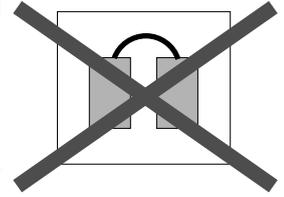
ATTENZIONE: la scheda è predisposta con il riconoscimento automatico degli ingressi N.C. non utilizzati (fotocelle, Stop e finecorsa) ad eccezione dell' ingresso COSTA DI SICUREZZA.

WARNING: The control unit is designed with the automatic detection of not used N.C. inputs (photocells, Stop and Limit switch) except the SAFETY EDGE input.

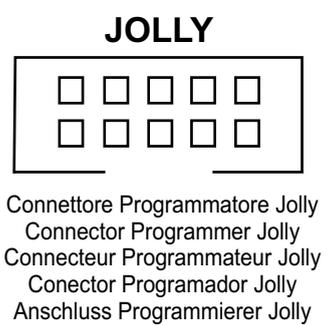
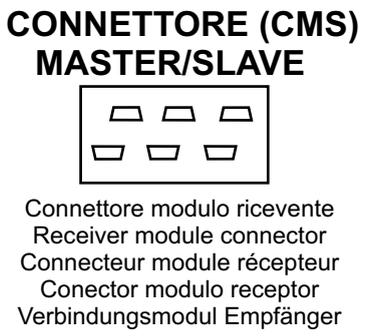
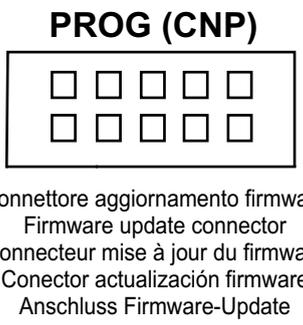
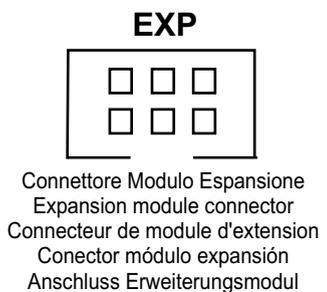
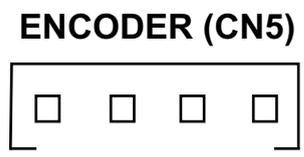
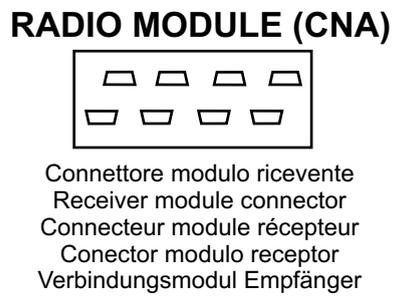
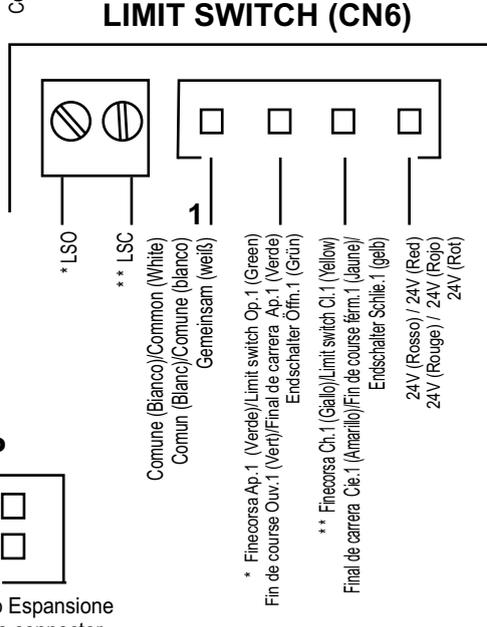
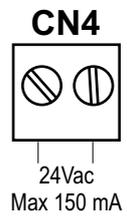
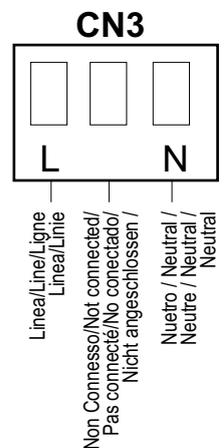
AVERTISSEMENT: L'armoire est conçue avec la détection automatique des accès N.C. pas utilisés (photocellules, Stop et fins de course), à l'exception des accès BARRE PALPEUSE DE SECURITE.

ATENCIÓN: la tarjeta está predispuesta con el reconocimiento automático de las entradas N.C. no utilizados, fotocélulas, stop y fin de carrera, con excepción de la entrada COSTA DE SEGURIDAD.

ACHTUNG: Die Steuerung ist mit der automatischen Erkennung der nicht verwendeten N.C. Eingänge, ausgestattet (Lichtschranken, Stop-und Endschalter) ausgenommen des Sicherheitsleisten Eingangs.



Uscita Luce di cortesia temporizzabile Max 50W /
Timed courtesy light output Max 50W
Sortie lumière de courtoisie temporisée Max 50W /
Salida Luz de cortesia temporizable Max 50W
Ausgang zeiteinstellbare Aussenbeleuchtung Max 50W



Nota: Il carico massimo di 500 mA si riferisce alla somma dei carichi sulle uscite 24V~, 24Va e Flash.
Note: The maximum load of 500 mA refers to the sum of the loads on the 24V~, 24Va and Flash outputs.
Remarque: La charge maximale de 500 mA correspond à la somme des charges sur les sorties 24V~, 24Va et Flash.
Nota: La carga máxima de 500 mA se refiere a la suma de las cargas sobre las salidas 24V~, 24Va y Flash.
Hinweis: Die maximale Belastung von 500 mA bezieht sich auf die Summe der Lasten auf den 24V~, 24Va und Flash Ausgängen.



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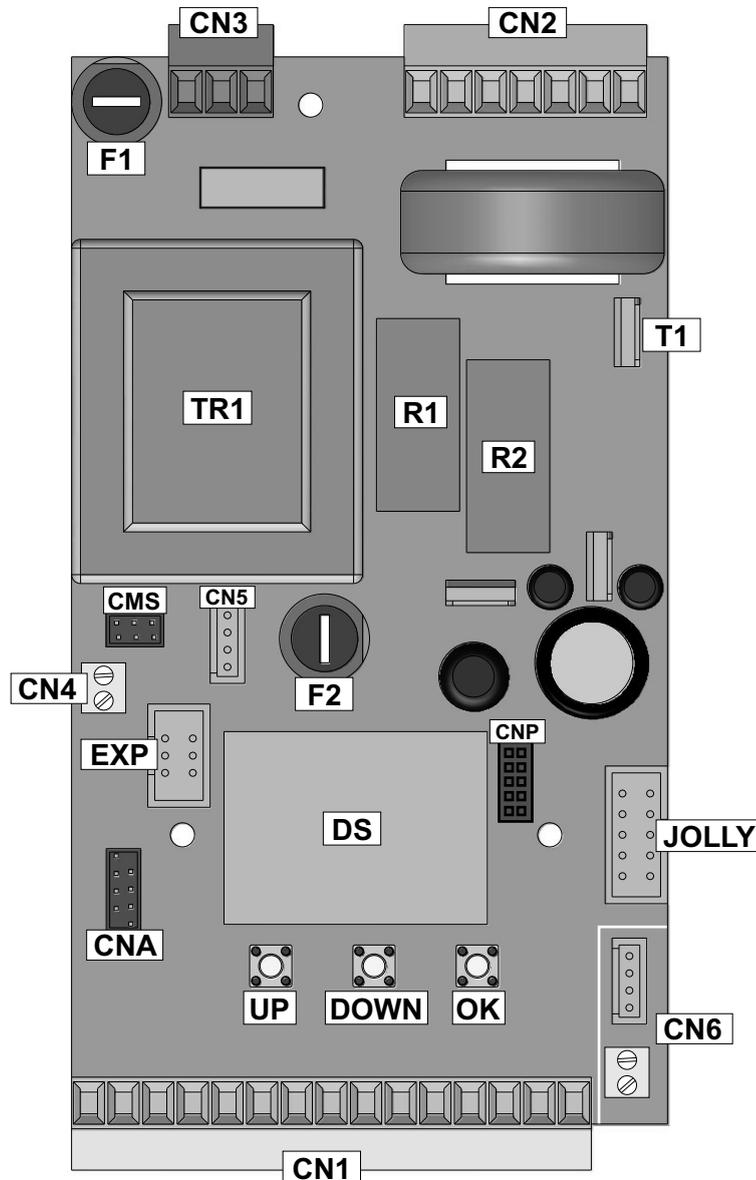
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COMPONENTS



CN1 = Input/output connectors

CN2 = Motor and capacitors and
courtesy light connector

CN3 = Power connector

CN4 = 24V~ connector

CN5 = Encoder connector

CN6 = Limit switch connector

CNA = Receiver connector

CNP = Programming connector

EXP = Expansion module connector

JOLLY = Jolly and Jolly 2 connector

DS = Programming display

CMS = MASTER/SLAVE connector

OK = Programming button

DOWN = Programming button

UP = Programming button

T1 = Motor piloting Triac

R1 = Relay C motor command
Courtesy light

R2 = Relay motor exchange

F1 = 6.3AT fuse on 230V/10AT on 115V

F2 = Accessories 1A fuse

TR1 = Power transformer



GENERAL INFORMATION

The information on this page are only for technicians or for qualified or authorized installers.

GENERAL DESCRIPTION

The GATE 1 DG R1 control unit has been designed to control one 230V/115V 50/60 Hz motor with or without electronic limit switches.

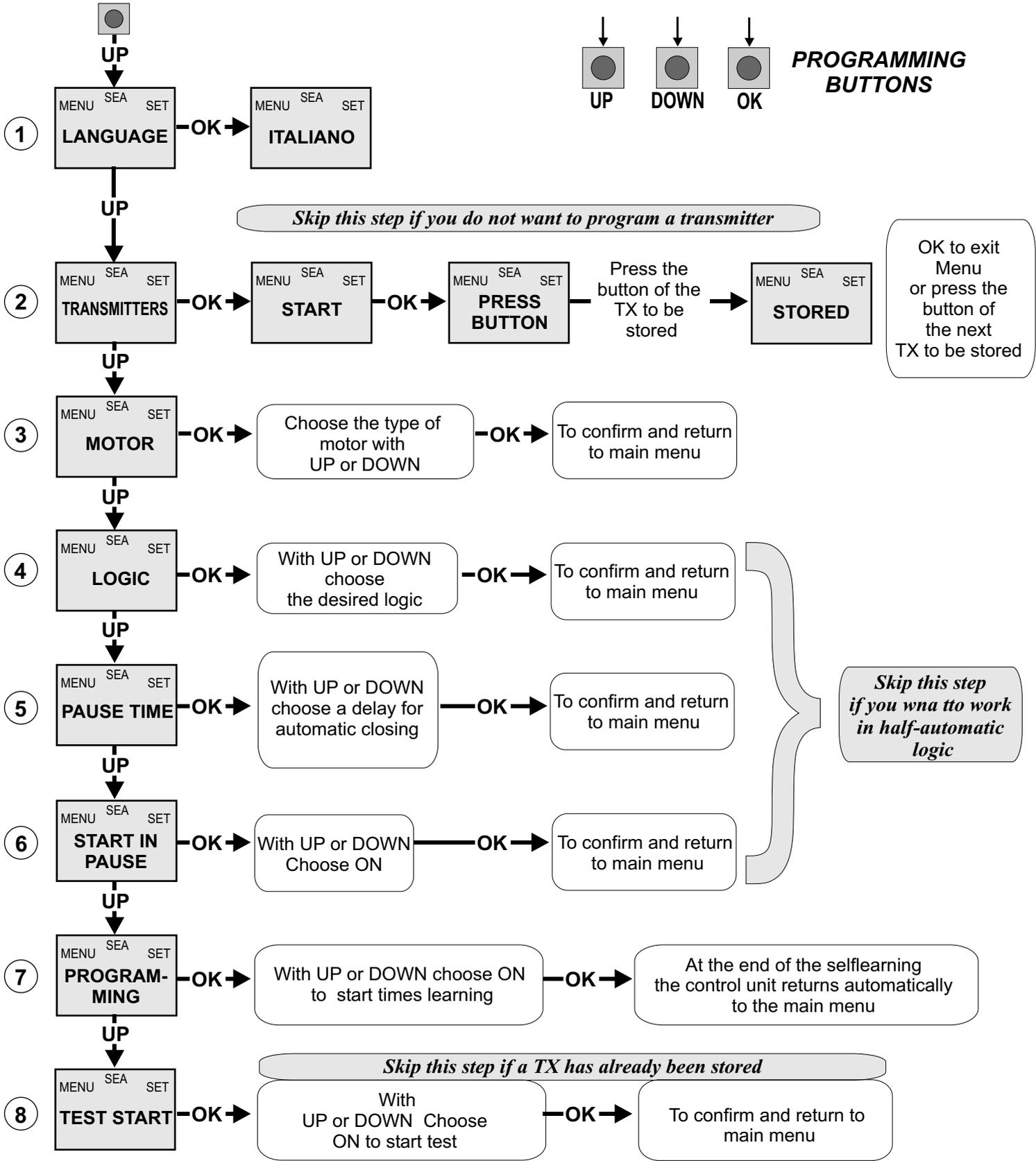
The great news is the LCD display on board through which you can see and set in a simple and complete way all functions of the control unit.

TECHNICAL SPECIFICATIONS

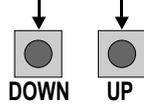
Control unit power supply	230 Vac 50/60 Hz - 115Vac 50/60 Hz
Absorption in stand by	30 mA
Max. motor charge	800 W
Max. accessories charge 24V (24VA)	24V $\overline{=}$ 500mA
Max. Flash light charge	24V(FL) 15W max. We recommend to use 24V Flash (Led)
Environment temperature	-20°C \downarrow +50°C \downarrow
Power protection / Accessories	F1 (6.3 AT) / F2 (1AT) F1 (10AT on 115V power supply)
Function logic	Automatic/S.by Step1/S.By Step2/Sec./Dead man/2Butt.
Opening/closing time	In selflearning in programming phase
Time of pause	Adjustable (from \overline{OFF} to 4 min)
Thrust	Adjustable Opening and Closing
Slowdown space	Adjustable Opening and Closing
Input	Total opening / Pedestrian opening adjustable / Balanced edge / Stop / Limit switch opening and closing / Photocell 1 and Photocell 2/ Encoder
Output	(FLS) Flash 24V $\overline{=}$ / LAMP $\overline{=}$ (Max 50W) / 24V \sim / Motor / 24VA $\overline{=}$ (Max 500 mA)
Board dimensions	85 X 155 X 50 mm
Specifications of external enclosure	183 X 238 X 120
Special accessories:	
<ul style="list-style-type: none"> - Traffic light card on AUX connector - Programmer on Jolly connector - OPEN on Prog. Connector for firmware upgrating - Master/Slave Kit - Optional Display BINGO 	Relay card for traffic light management (SEM Cod. 23021100), Programmer JOLLY (cod.23105276), Programmer OPEN (cod.23105290) MASTER/SLAVE KIT (cod.23001220) Optional Display BINGO (cod.23101131)



QUICK START



ALL OTHER PARAMETERS HAVE DEFAULT SETTINGS WHICH ARE USEFUL FOR THE 90% OF THE APPLICATIONS BUT CAN BE HOWEVER SET THROUGH THE SPECIAL MENU. FOR ENTERING INTO THE SPECIAL MENU PRESS THE UP AND DOWN BUTTONS AT THE SAME TIME FOR 5 S.





WORKING TIMES SELF LEARNING

The control unit is pre-set with the default settings, to start the control unit with the DEFAULT settings just keep pressed the UP and DOWN buttons at the same time power supplying the control unit the display shows the message *In It.*

The DEFAULT settings are shown in the Menues table.

LEARNING WITH LIMIT SWITCH (WITH OR WITHOUT ENCODER)

When limit switches are mounted, the gate executes automatically the following cycle: CLOSING - OPENING - CLOSING.

Before starting the learning, make sure (through the test menu), that the relative limit switches of every opening are employed.

WORKING TIMES SELFLEARNING THROUGH IMPULSES

ATTENTION: This procedure is potentially dangerous and should only be performed by qualified people in safety conditions.

NOTE: The card is preset with the standard working times, therefore the automation can be started even without the times programming, simply by adjusting the timing on the display (see default times).

1) Turn off electricity, release the motors and manually position the leaves on halfway.

Reset the mechanical lock.

2) Connect the control board to the power supply

3) Select on the on-board display or JOLLY programmer, the type of motor that you are using as indicated in the display management.

4) If necessary also set the operation logic and the other parameters. If you want to program with a transmitter, store a transmitter before programming.

5) Select *Pr o g r a m m i n g* on the display, press OK and than one of the UP or DOWN buttons.

(If the motor starts in opening, remove and re-put power supply, select on the display *r E U E r S E f i a t o r*. And through the UP and DOWN button put it on ON, or if you have the Jolly programmer, activate the motor exchange function.)

6) At this point the gate will start the following cycle: CLOSING - OPENING - CLOSING.

During cycle, to store the respective stops, press UP or DOWN or START at every point of stop of the leaf.

7) The self-learning is done.

SELFLEARNING OPERATION TIME WITH ENCODER

When an encoder is installed, it is necessary to select On in the *E n c o d e r* menu, start programming and make sure that leaf starts as first in closing. The gate will automatically execute the following cycle: CLOSING - OPENING - CLOSING.

Note: For stop detection sensitivity setting refer to the special menu.

SELFLEARNING OPERATION TIME WITH AMPEROMETRIC SENSOR (For electromechanical motors only)

The times learning can be done only on electromechanical gates, taking advantage of the automatic detection of the stops.

Once the programming has been started just make sure that the gate executes the following cycle: CLOSING - OPENING - CLOSING.

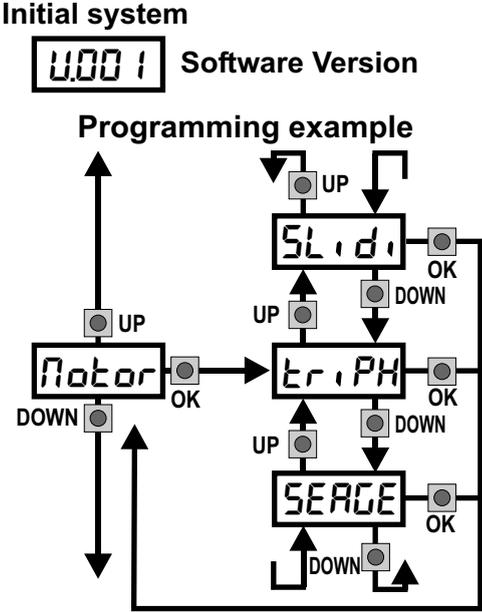
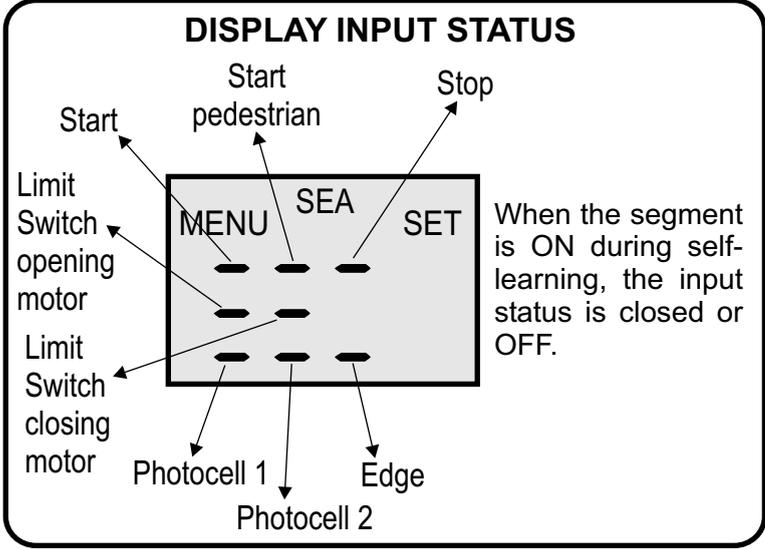
Note: For stop detection sensitivity setting refer to the special menu.



SELECTION OF THE SETTINGS

The settings of the control unit are made through the UP, DOWN and OK buttons. The UP and DOWN buttons to scroll through the MENUS and SUBMENUS. By pressing OK you enter from MENU into SUBMENU and confirm the choice.

Pressing the UP and DOWN buttons at the same time you access the SP MENU for special settings. Pressing the OK button for 5 seconds, you enter the TEST MENU, where you can check the operating status of all inputs.



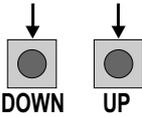
MENU FUNCTION board GATE 1 DG R1 INPUT TESTS
To access the Menu for input TESTS keep pressed OK for about 5 seconds.

MENU	Description	Description
StArt	Start test	The contact must be a N.O. Contact . When activating the related command on the display SET lights up, the input works. If SET is always on, check the wirings.
StoP	Stop test	The contact must be a N.C. Contact. When activating the related command on the display SET lights up, the input works. If SET is always on, make sure that the contact is a N.C. Contact
PEdEstrian StArt	Pedestrian start test	The contact must be a N.O. Contact. When activating the related command on the display SET lights up, the input works. If SET is always on, check the wirings.
EdGE	Safety edge test	The contact must be a N.C. Contact. When activating the related command on the display SET lights up, the input works. If SET is always on, make sure that the contact is a N.C. Contact
Photo 1	Photocell 1 test	The contact must be a N.C. Contact. When activating the related command on the display SET lights up, the input works. If SET is always on, make sure that the contact is a N.C. Contact
Photo2	Photocell 2 test	The contact must be a N.C. Contact. When activating the related command on the display SET lights up, the input works. If SET is always on, make sure that the contact is a N.C. Contact
LiMit SWitCh oPEning	Opening limit switch test	The contact must be a N.C. Contact. When activating the related command on the display SET lights up, the input works. If SET is always on, make sure that the contact is a N.C. contact or that the related limit switch is not occupied.
LiMit SWitCh CLoSing	Closing limit switch test	The contact must be a N.C. Contact. When activating the related command on the display SET lights up, the input works. If SET is always on, make sure that the contact is a N.C. Contact or that the related limit switch is not occupied.
End		Exit menu



MENU FUNCTIONS TABLE GATE 1 DG R1				
MENU	SET	Description	Default	Set value
1 - LANGUAGE	ITALIANO	Italian	ITALIANO	
	ENGLISH	English		
	FRENCH	French		
	ESPAÑOL	Spanish		
2 - TRANSMITTERS	START	Start	START PED START.	
	PEDESTRIAN START	Pedestrian Start		
	EXTERNAL MODULE	External module		
	STOP	Stop		
	UNLOCK	Storing of a command for unlocking an electric brake		
	DELETE A TRANSMITTER	Delete single transmitter		
	CLEAR MEMORY	Delete transmitter memory		
3 - MOTOR	ELECTROHYDRAULIC	Electrohydraulic	MECHANIC	
	SLIDING	Sliding		
	REVERSIBLE SLIDING GATE	Reversible sliding gate		
	MAGNETIC SLIDING GATE	Sliding gate with magnetic limit switch		
	THREE-PHASE	Three-phase		
	SEAGEAR	Seagear		
	MECHANIC	Hydraulic motors		
4 - LOGIC	AUTOMATIC	Automatic	AUTOMATIC	
	OPEN-STOP-CLOSE-STOP-OPEN	Step by step type 1		
	OPEN-STOP-CLOSE-OPEN	Step by step type 2		
	2 buttons	Two buttons		
	SAFETY	Safety		
	DEADMAN	Dead man		
5 - PAUSE TIME	OFF	OFF (semi-automatic logics)	OFF	
	1 240	Setting from 1s to 4min.		
6 - Start in PAUSE	OFF	In pause start is not accepted	OFF	
	ON	In pause start is accepted		
7 - PROGRAMMING	OFF ON	Times learning start	OFF	
8 - TEST START	OFF ON	Start command	OFF	
End	Select END and press OK to exit the menu. The menu deactivates automatically after 2 minutes			

Note 1: The * indicates that the default value may change depending on the selected motor type.



PRESS AT THE SAME TIME FOR 5 SECONDS TO ENTER OR TO EXIT THE SPECIAL MENU

SPECIAL MENU FUNCTIONS TABLE GATE 1 DG R1

To enter the Special Menu keep pressed UP and DOWN at the same time for 5 seconds.
To exit the Special Menu pressed END or keep pressed UP and DOWN at the same time for 5 seconds.

MENU SP	SET	Description	Default	Set value
1 - oPENing torq 1 *	10 100	Opening torque Note: with hydraulic motors the torque will be on 100%	75	
2 - CLoSing torq 1 *	10 100	Closing torque Note: with hydraulic motors the torque will be on 100%	75	
3 - PuShoUeR	oFF	Disabled	oFF	
	oPENing And CLoSing	Opening an closing		
	onLY oPENing	Opening only		
	onLY CLoSing	Closing only		
4 - PuSHing StroKt	oFF 3	From OFF to 3 seconds	oFF	
5 - oPENing SLowdoWn	oFF 50	From OFF to 50% of the stroke	20	
6 - CLoSing SLowdoWn	oFF 50	From OFF to 50% of the stroke	20	
7 - PrEFLASHing	onLY CLoSing	Pre-flashing only active before closing	oFF	
	00 50	Pre-flashing time		
8 - FLASHing LiGHt	norMAL	Normal	norMAL	
	LiGHt	Control lamp		
	ALwAYS	Always ON		
	buZZEr	Buzzer		
9 - rEUERSE Motor	oFF	Synchronized right motor	oFF	
	on	Synchronized left motor		
10 - EnCodEr	on oFF	In ON enables the Encoder, in OFF it's disabled	oFF	
11 - EnCodEr tot.		Encoder impulses stored in programming	0	
12 - EnCodEr PR.		Encoder impulses during operation	0	
13 - CoUrteSY LiGHt	in CYCLE	Courtesy light in cycle	20	
	1 240	Courtesy light setting from 1s to 4min.		
14 - tRAFFiC LiGHt rESErVAtion	oFF on	When setting this function the pedestrian input will be activated to work on the auxiliary board SEM (traffic light management).	oFF	

Note: If the encoder is off, the menus 11 and 12 will indicate the "Opening time" and the "Closing Time".



MENU SP	SET	Description	Default	Set value
15 - PEDESTRIAN OPENING	20 100	Setting from 20 to 100	100	
16 - PEDESTRIAN PAUSE	= Start	Pause in pedestrian opening same as in total opening	= Start	
	oFF	Disabled		
	1 240	Setting from 1s to 4 min.		
17 - ACCELERATION	0 100	Acceleration ramp	100%	
18 - PRINTED ROLL CYCLES	100 10E4	Setting from 100 to 100000	10E4	
19 - PERFORMED CYCLES	0 10E9	Reports the executed cycles. Keep pressed OK to reset the cycles	0	
20 - TIMER	oFF	Disabled	oFF	
	on PHoto2	Timer function active on photocell 2		
	on PEDESTRIAN ENTRY	Timer function input active on pedestrian input		
21 - FIRE SWITCH	oFF	Disactivated	oFF	
	on PHoto2	Active on Photo 2		
	on PEDESTRIAN ENTRY	Active on pedestrian		
22 - EDGE	oPENING And CLoSING	Active in opening and closing	oPENING And CLoSING	
	onLY oPENING	Active only in opening		
	onLY CLoSING	Active only in closing		
23 - EDGE	norMAL	Normal N.C. contact	norMAL	
	8K2	Edge is active and protected by a 8k2 resistor		
24 - PHoto 1	CLoSING	Photocell active in closing	CLoSING	
	oPENING	Photocell active in opening		
	StoP	Photocell active before opening		
	StoP And CLoSE	The photocell stops in closing and closes when released		
	CLoSE	The photocell gives a command to close during opening, pause and closing		
	PAUSE rELoAd	The photocell charging the pausing time		
	SHARdU Loop	Until occupied, with open gate, it prevents reclosing. It is switched off during closing.		



MENU SP	SET	Description	Default	Set value
25 - PHoto2	CLoSiNG	Photocell active in closing	oPEniNG	
	oPEniNG	Photocell active in opening		
	StoP	Photocell active before opening		
	StoP And CLoSE	The photocell stops in closing and closes when released		
	CLoSE	The photocell gives a command to close during opening, pause and closing		
	PRoUSE rELoAd	The photocell charging the pausing time		
	SHAdoU Loop	Until occupied, with open gate, it prevents reclosing. It is switched off during closing.		
26 - 24V RuH *	ALWAYs	24Vaux output always power supplied	ALWAYs	
	in CYCLE	24V output active only during cycle		
	oPEniNG	24Vaux output power supplied only during opening		
	CLoSiNG	24Vaux output power supplied only during closing		
	in PRoUSE	24Vaux output power supplied only during pause		
	RuToKESt	Security test		
	in CYCLE And RuToKESt	Security test with power supply only during cycle		
	PosiTiVE brAKE PARAGENEnt	Positive Electrobrake		
	NEGAtiVE brAKE PARAGENEnt	Negative Electrobrake		
27 - PositiOn rECoUeRY	0 20	Retrieves the inertia of the motor after Stop or reversing from 0 to 20 s	1	
28 - Motor rELeASE	oFF	Disabled	0.1	
	0.1 30	Setting from 1 to 3		
29 - brAKE *	oFF 100%	Adjusts the braking on the limit switches	0	
30 - PEriodICAL PuShoUeR	oFF 8	Allows the repetition of the Pushover function at a distance of time adjustable from 0 to 8 hours at hourly intervals	oFF	



MENU SP	SET	Description	Default	Set value
31 - Anti intrusion	only opening	Only on limit switch in opening	OFF	
	only closing	Only on limit switch in closing		
	opening And closing	On limit switches in closing and in opening		
	OFF	If the limit switch is freed manually it forces the reclosing of the gate		
32 - FLASHING LIGHT And timer	OFF	The flashing light remains OFF with the active timer and open gate	OFF	
	on	The flashing light remains ON with active timer and open gate		
33 - diagnosis	1 10	Shows last event (See alarms table)		
34- Slowdown ramp for 9 *	0 100	Adjusts the transition between max. torque and slowdown	100	
35 - opening tolerance	0 100	Adjust the tolerance between stop and obstacle motor opening.	0	
36 - closing tolerance	0 100	Adjust the tolerance between stop and obstacle motor closing.	0	
37 - opening sensitivity *	10 99	Motor sensitivity adjustment in opening	OFF	
	OFF	Disabled		
38 - closing sensitivity *	10 99	Motor sensitivity adjustment in closing	OFF	
	OFF	Disabled		
39 - Slow down sensitivity	10 99	Reversing sensitivity adjustment during slowdown	OFF	
	OFF	Disabled		
40 - Autotest	OFF	Disabled	OFF	
	Photo 1	Autotest only on photo 1		
	Photo 2	Autotest only on photo 2		
	Photo 1-2	Autotest only on photo 1 and 2		
	EDGE	Autotest only on safety edge		
	PHoto 1 And EDGE	Autotest photo 1 and safety edge		
	PHoto 2 And EDGE	Autotest photo 2 and safety edge		
	ALL SAFE	Autotest photo 1, photo 2 and safety edge		



MENU SP	SET	Description	Default	Set value
41 - SELECT LIMIT SWITCH	<i>AutoNRE,C</i>	Limit switch in automatic recognition	<i>AutoNRE,C</i>	
	<i>only OPENING</i>	Only limit switch in opening present		
	<i>only CLOSING</i>	Only limit switch in closing present		
42 - MASTER-SLAVE	<i>MASTER</i>	For applications with two motors in master-slave, it allows to set the control unit as master	<i>OFF</i>	
	<i>SLAVE</i>	For applications with two motors in master-slave, you can set the control unit as slave		
	<i>OFF</i>	Disabled		
43 - PASSWORD	----	Allows the entering of a password blocking the control unit parameters modification (see page 36)	----	
<i>End</i>	Select END and press OK to exit the special menu. The special menu switches off automatically after 20 minutes.			

Note 1: The * indicates that the default value may change depending on the selected motor type.

Note 2: After initialization the parameters "motor type" and "limit switch type" remain on the value chosen in the setup program.



FUNCTION LOGIC

AUTOMATIC LOGIC

A start impulse opens the gate. A second impulse during the opening will not be accepted.

A start impulse during closing reverses the movement.

NOTE 1: To have the automatic closing it is necessary to set a pause time, otherwise all the logic will be semi-automatic.

NOTE2: It is possible to choose, whether to accept or not, the start in pause, selecting in the MENU the item *Start in PAUSE* and choosing ON or OFF. By default, the parameter is OFF.

SECURITY LOGIC

A start impulse opens the gate. A second impulse during opening reverses the movement.

A start impulse during closing reverses the movement.

NOTE 1: To have the automatic closing it is necessary to set a pause time, otherwise all the logic will be semi-automatic.

NOTE2: It is possible to choose, whether to accept or not, the start in pause, selecting in the MENU the item *Start in PAUSE* and choosing ON or OFF. By default, the parameter is OFF.

STEP BY STEP TYPE 1 LOGIC

The start impulse follows the OPEN-STOP-CLOSE-STOP-OPEN logic.

NOTE 1: To have the automatic closing it is necessary to set a pause time, otherwise all the logic will be semi-automatic.

NOTE2: It is possible to choose, whether to accept or not, the start in pause, selecting in the MENU the item *Start in PAUSE* and choosing ON or OFF. By default, the parameter is OFF.

STEP BY STEP TYPE 2 LOGIC

The start impulse follows the OPEN-STOP-CLOSE -OPEN logic.

NOTE 1: To have the automatic closing it is necessary to set a pause time, otherwise all the logic will be semi-automatic.

NOTE2: It is possible to choose, whether to accept or not, the start in pause, selecting in the MENU the item *Start in PAUSE* and choosing ON or OFF. By default, the parameter is OFF.

DEAD MAN LOGIC

The gate opens as long as the **START** button of opening is pressed; releasing it the gate stops. The gate closes as long as the button connected to the **PEDESTRIAN START** is pressed; releasing it the gate stops. To execute complete opening and/or closing cycles the related pushbuttons must be constantly pressed.

2 PUSHBUTTONS LOGIC

One start opens, one pedestrian start closes. In opening the closing will not be accepted. In closing a start command reopens, a pedestrian start command (closes) will be ignored.

PASSWORD ENTERING MANAGEMENT

With a new control unit all menus can be displayed and set and the password will be disabled.

Selecting one of the Menus and keeping UP and DOWN pressed at the same time for 5 seconds, you will access the SP Menu containing the *Password* Submenu.

Pressing OK in the *Password* Menu, you will proceed with the entering of the numeric code of the 4-digit PASSWORD.

Use UP and DOWN to increase or decrease the number, press OK to confirm it and you will pass automatically to the entering of the next number. Pressing OK after the last entered number the word *Sur P* appears, confirm the activation of the PASSWORD and the message *OK* appears, pressing UP or DOWN instead you can cancel the operation and *no operation* will appear on the display.

Once entered the PASSWORD, it will be definitively activated, once the display switch off timeout has expired, or by turning off and on again the control unit. Once the PASSWORD has been activated, the menus of the display can be only displayed but not set. To unlock them you must enter the correct PASSWORD in the *Password* menu, if the password is wrong the message *Error* will appear.

At this point, if the password has been entered correctly, the menus will be unlocked and it will be possible to change the parameters of the control unit again.

If the control unit has been unlocked through *Password* Menu, it is possible to enter a new and different password, using the same entering process as for the first one; at this point, the old password will no longer be valid.

If the password has been forgotten, the only way to unlock the control unit is to contact the SEA technical assistance, which will assess whether to provide the procedure to unlock the control unit or not.

Note: The password cannot be set through the Jolly or Jolly 2 terminal.



START - STOP - PEDESTRIAN START - ANTENNA - PHOTOCELL

Photocell 1 and Photocell 2 Connections

Note: If the photocells are not connected, it is not necessary put a jumper between the clamps (6 and 7 and/or 6 and 8 of the CN1 terminal)

+ = 24V $\overline{\text{---}}$ COM = 0V PH1 = Photocell contact 1 PH2 = Photocell contact 2

Note: For the autotest in the *Autotest* (Safety test) menu select the photocell or the photocells on which you want to perform it. Auto-test is possible only when the transmitter of the photocell is powered on 24V $\overline{\text{---}}$ Aux. The default setting of the photocell 1 is FOTO CLOSE and the one of the photocell 2 is FOTO OPEN. The photocell 2 can also be set as TIMER (see TIMER function).

OPTIONS ON FOTO1 and FOTO2 adjustable on on-board display or with JOLLY terminal.

FOTO CLOSE activation (*FotoClose*): if occupied, reverses the movement in closing, during pause it prevent the closing.

Activation repeat pause (*PauseRepeat*): If occupied, during pause it recharges the timer of pause. In closing it reverses the movement.

FOTO OPEN activation (*FotoOpen*): If activated the photocell blocks the movement as long as it's busy, when released the opening continues.

FOTO PARK activation (*FotoPark*): in opening it is not active; in pause are activated it commands the closing when released, otherwise it's not active; in closing it stops the movement as long as it is busy, when released the closing continues.

FOTO STOP activation (*FotoStop*): When activated before the opening the photocell blocks the automation as long as it is busy, during the opening it will be ignored. In closing the intervention of the photocell causes the reopening.

Activation PHOTO CLOSE IMMEDIATELY (*FotoCloseImmediate*): The photocell stops the gate as long as it is occupied in both opening and closing, when released it gives a closing command (Closing one second after release of the photocell).

SHRDLU Loop Activation: Photocell active only during pause.

Options 24VA $\overline{\text{---}}$ can be set with on-board Display or with Jolly device.

It is possible to chose when having tension on the 24V $\overline{\text{---}}$ Aux output. The options are: **always, only during opening, only during cycle, only before opening or only during pause or for the management of the positive or negative electrobrake, as security test Autotest and as test for economic securities in CYCLE And Fototest.**

PEDESTRIAN START (N.O.) The pedestrian start can be connected between the connectors 2 and 4 of the CN1 terminal.

This input allows a partial opening, the opening space can be set through the on-board display or through the JOLLY device.

Note1: The contact for partial opening is a N.O. Contact (Normally open). Holding START starts the TIMER function, releasing the pedestrian start, the operator repeats the pause and then performs the closing. In the case of triggering a safety device the timer will automatically reset after 6 seconds.

Note2: In 2 BUTTONS logic it is necessary to keep pressed the Start Ped. to re-close the automation.

Note3: In deadman logic this button executes the re-closing if you keep it pressed.

Note4: When closed during pause, the gate will reclose only after this input has been reopened.

TIMER activation: This input can be transformed into TIMER (See TIMER).

Note5: When using the Sem card, the pedestrian input can be used as priority in closing through the *trRFF* *IL* *IGH* *rESEUR* *ion* function.

STOP (N.C.) The STOP is connected between the clamps 2 and 5 of the CN1 terminal.

When pressing this button the motor immediately stops in any condition/position. To re-start the movement give a start command. After a stop the motor always re-starts in closing.

START (N.O.) The START is connected between connector 2 and 3 of the CN1 terminal.

An impulse given to this contact opens and closes the automation depending on the selected logic, it can be given by a keyswitch, a keypad, etc. Holding START starts the TIMER function, releasing the start, the operator repeats the pause and then performs the closing.

To connect the other devices refer to the related instructions leaflets. (ie. loop detectors and proximity switches). In the case of triggering a safety device the timer will automatically reset after 6 seconds.

Note1: In DEADMAN logic keep pressed the Start for the opening of the automation.

Note2: In 2 BUTTONS logic this button performs the opening.

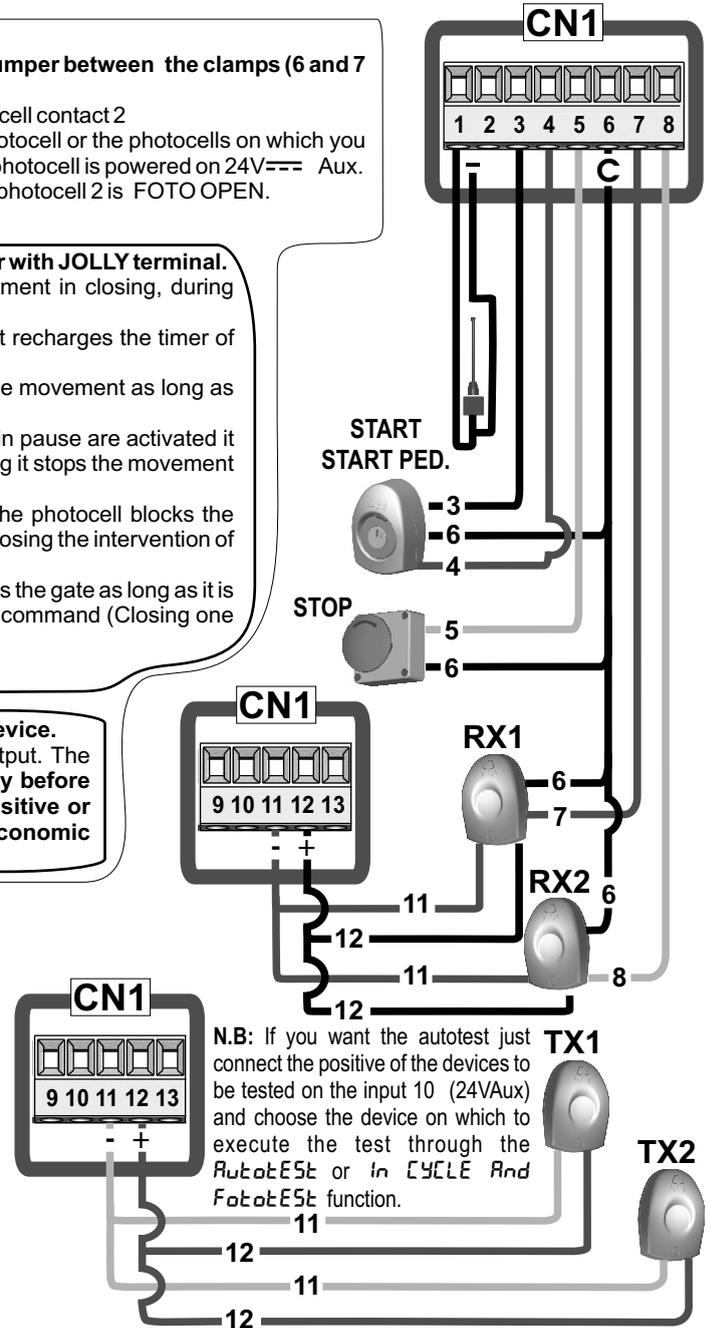
TIMER

Can be activated through the on-board display or through the Jolly programmer. In both cases it's a N.O. contact which provokes the opening of the automation keeping it open as long as it is activated. When it's released, after having paused for the set pausing time the gate recloses. The TIMER can be activated on the inputs FOTO2, PEDESTRIAN START or keeping busy the START input.

Note1: When activated on the pedestrian entry, the pedestrian will be OFF also on the radio transmitter.

Note2: In the event of an intervention of a security device during the timer (Stop, amperometric, Edge), a start impulse restores the movement.

Note3: In case of no power supply with open gate and active Timer the control unit will restore its function, otherwise if during restoring of the power supply the TIMER is not activated it will be necessary to give a start impulse for the reclosing.



N.B: If you want the autotest just connect the positive of the devices to be tested on the input 10 (24VAux) and choose the device on which to execute the test through the *Autotest* or in *CYCLE* And *Fototest* function.



ENCODER OR AMPEROMETRIC MANAGEMENT

AMPEROMETRIC DEVICE FOR ELECTROMECHANICAL OPERATORS

This control unit comes with an obstacle detection system working only on electromechanical operators allowing to have the reversing on obstacles and the automatic detection of the stops.

Sensitivity adjustable from OFF to 99% inside the special menu. The more the percentage is high the more the obstacle detection will be difficult. On hydraulic unit this parameter will be always OFF.

ENCODER (CN5 Connector)

The Encoder, unlike the amperometric sensor, can be used both on electromechanical and hydraulic operators.

The Encoder allows the detection of the gate position and its reversing in case of obstacles. To use the ENCODER it is necessary to enable it inside the special *Encoder* Menu. The sensitivity on the obstacle is adjustable from 0 - 99%. The higher the percentage is the more it will be difficult to detect the obstacle.

NOTE: If the Encoder is activated it is possible to visualize in the special menu the total memorized impulses and the partial impulses executed by the motor.

ATTENTION: The first operation, after power failure will be for searching the mechanical stops at the end of the run.

SAFETY EDGE AND FLASHING LAMP

SAFETY EDGE

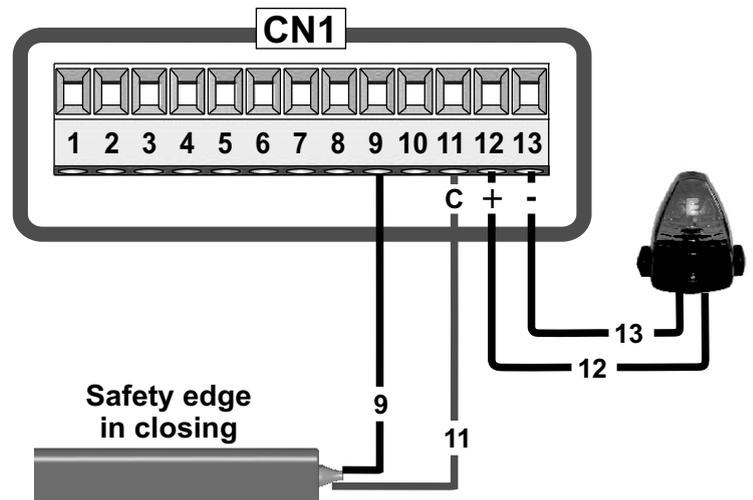
Safety edges (*EDGE*) can be connected between the contacts 9 and 11 of CN1.

Pressing EDGE, the contact opens, causing a partial reversing of the gate in closing and opening.

Note1: If the edge contact is not used it must be bridged. The EDGE input can be set: only in closing, only in opening or in both directions.

Note2: It is possible to activate a balanced edge 8K2 through the on board display or through the Jolly programmer, in such case the edge contact will be controled by a specific resistance value, detecting the possible involuntary short circuit of the device. In case of an imbalanced device a special alarm will show on the on board display or on the JOLLY programmer.

Note: it is possible to perform an Autotest also on the powered radio edge.



Warning lamp Flash Led 24V⁼⁼ 4W Max (Control lamp)

The warning lamp can be connected between the terminals 24V(FL) and FL(-) of CN1

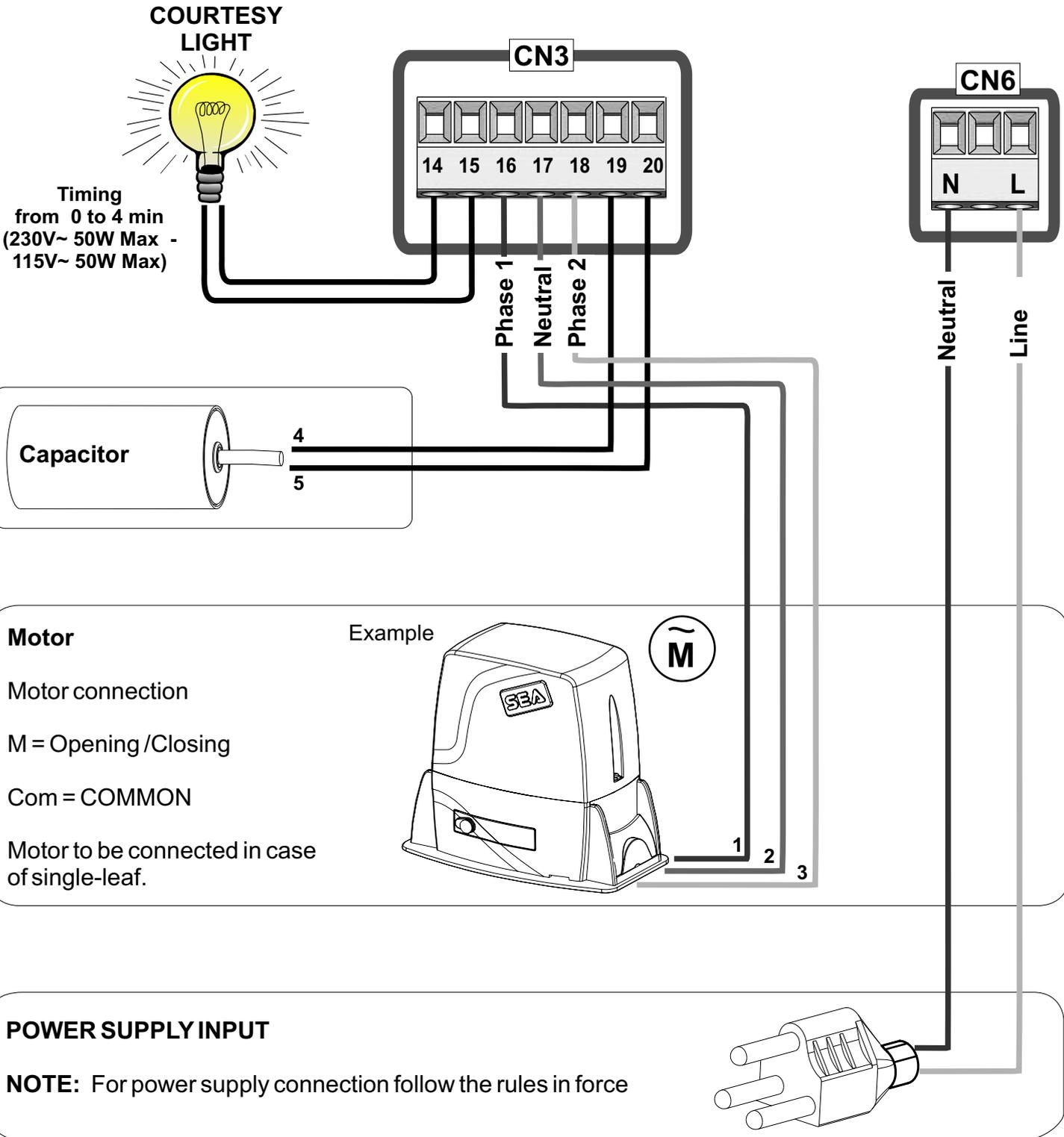
It blinks once per second during opening and twice per second during closing, while it remains lit during pause.

Through the warning lamp it is also possible to identify alarm signals coming from the STOP, PHOTOCELL 1, PHOTOCELL2 and EDGE devices. Through the on board display or the Jolly programmer it is possible to activate the pre-flashing function and/or to modify the flashing light function choosing between fixed flashing, control lamp or Buzzer.

The pre-flashing can be set from 0 to 5 s. or it is possible to have it only before closing.



COURTESY LIGHT, MOTORS, CAPACITY AND POWER SUPPLY CONNECTIONS



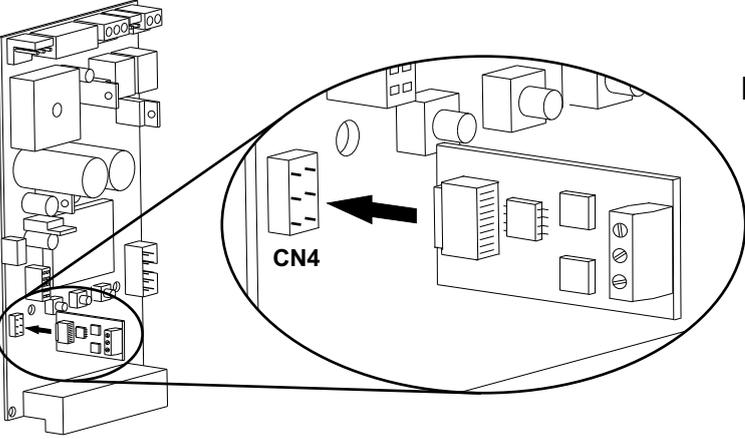


MASTER-SLAVE FUNCTION

To set an installation with two motors in **MASTER-SLAVE** function it is recommended to do as follows:

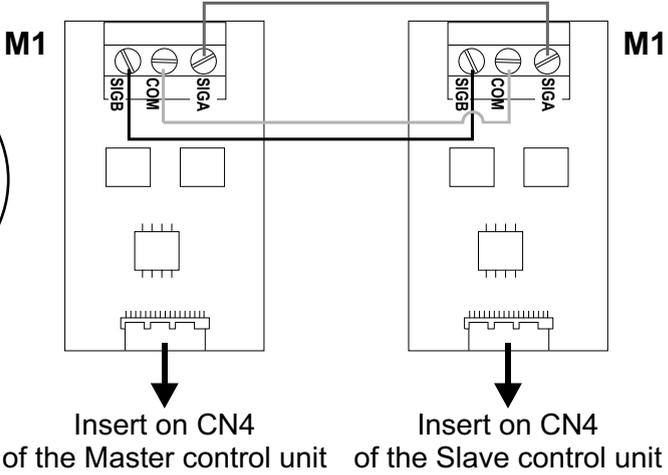
- 1) Set the two motors as if they were two independent installations, make sure that the individual motor works properly and that the limit switches (when present) are read properly.
- 2) Once sure of the correct functioning connect the control unit MASTER to the control unit SLAVE through the special clamp (Code SEA23001220).
- 3) Now set the control unit, which has to manage the commands and motor 1 (photocell, keyswitch, STOP, safety edge etc.) as MASTER and the other one which will move motor 2 as SLAVE.
- 4) Follow up the selflearning of the times of the MASTER control unit.

Note 1: The master and slave settings on the control unit are present in the special menu selecting *MASTER-SLAVE*.
Note 2: All these operations can also be managed through the JOLLY programmer).
Note 3: On the SLAVE it is possible to set the following functions only: torque, speed, motor type, slowdown speed, acceleration, deceleration, position recovery, 24V aux and motor inversion. All other parameters will be set only by the MASTER control unit.

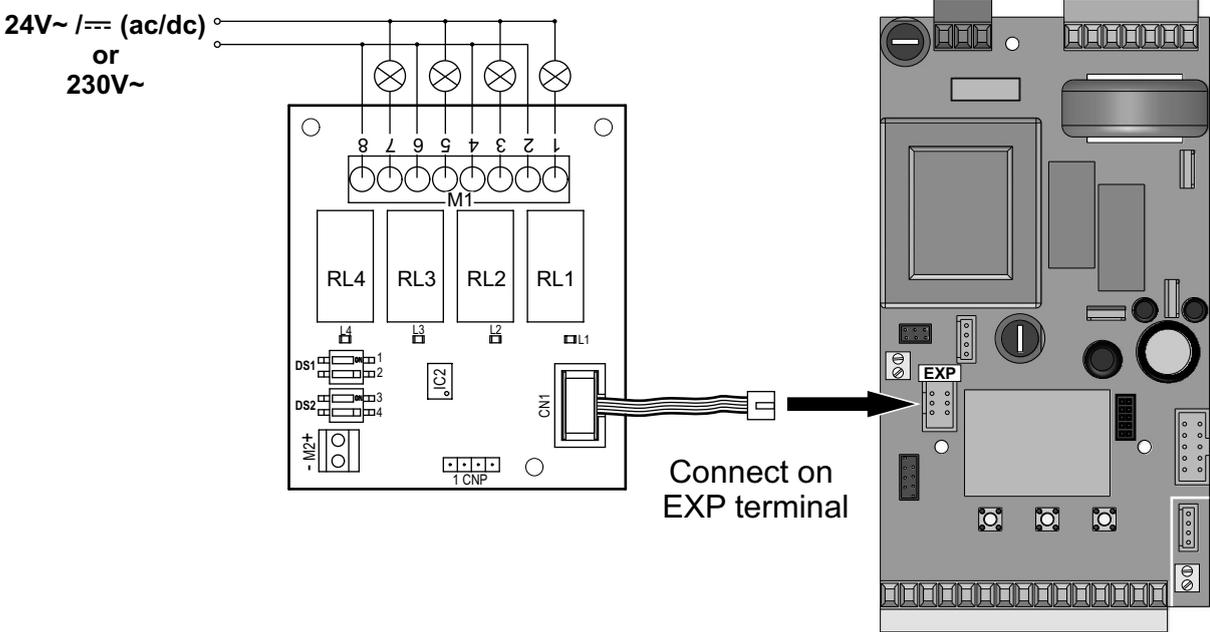


It is recommended to use a two twisted pairs shielded cable with less than 0.5 mm² section.

Note: respect the polarity of the cables.

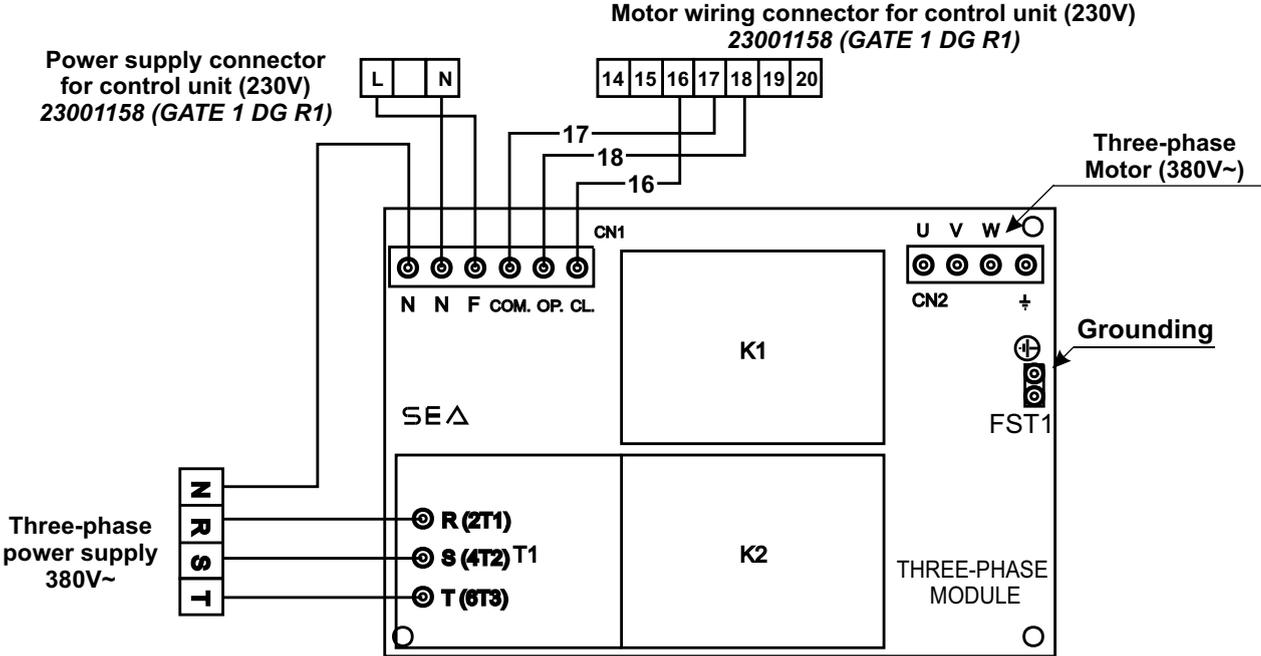


TRAFFIC LIGHT CARD CONNECTION





THREE-PHASE MODULE CONNECTION



- K1-K2 = Terminals 230V~ 16A
- T1 = Thermal switch (limit 3,7A)
- CN1 = Power supply connector for elect. control unit (220V)
- CN2 = Power supply connector for three-phase motor (380V)
- FST1 = Grounding faston

Important note: select in the settings of the motor menu the configuration "t-r IPHASE", ref.. Pag.29.

ALARM DESCRIPTION

Signals	Kind of alarm	Solutions
FRiLurE Motor	Motor current failure	Sure there are no short circuits on the motor or on the control unit.
FRiLurE24	24V Power supply failure	Make sure there are no short circuits on the wiring or on the control unit and no overloads.
FRiLurE24URuH	24VA output voltage	Make sure there are no short circuits on wiring or control unit and no overload.
FRiLurE nEt	Power supply failure	Check the network or the F2 fuse
FRiLurE SELF tEtE	Self-test photocells failure	Check the photocells operation and / or connections on the control unit.
FRiLurE L.iN.i.t S.U.i.t.C.H	Limit switch activation failure	Check the operation of both limit switches and / or correspondence between movement direction of the motor and engaged limit switches.
FRiLurE FLASH.iNG L.i.G.H.t	Flashing lamp failure	Check connections and / or conditions of the lamp.

Note 1: If in the diagnostics shows "Max. cycles reached", do the maintenance and / or reset the number of cycles performed.
Note2: To exit from the error messages, press OK. If the error persists, make all required checks for the specific error and / or disconnect the device that generates the error to see if the error disappears.

At each opening and closing of the automation the flashing light will blink. It blinks once per second during opening and twice per second during closing, while it remains lit during pause.
 It is possible to view the alarms also on the flashing light or on the control lamp, simply by observing the number of flashes emitted and verifying the reference in the table below:

Blinks	Cause of alarm
9	Motor failure
2	Photocell in closing
3	Photocell in opening
6	Collision in opening
4	Safety edge

Blinks	Cause of alarm
5	Stop
7	Max. Cycles reached
6	Collision in closing
4 fast	Limit switch fault



TROUBLE SHOOTING

Advices

Make sure all Safeties are turned ON
All N.C. contacts must have jumpers

Problem Found	Possibile Cause	Solutions
Motor doesn't respond to any START impulse	a.) Jumper missing on one of the N.C. Contacts b.) Burnt fuse	a.) Check the connections or the jumpers on the connections of the safety edge, of the stop and of the photocell b.) Replace the burned fuse on the control unit
Gate doesn't move while the motor is running	a.) The motor is in the released position b.) There is an obstacle	a.) Re-lock the motor b.) Remove obstacle
Gate doesn't reach the complete Open / Closed position	a.) Wrong setting of the limit switches b.) Error on programming c.) Gate is stopped by an obstacle d.) Torque too low	a.) Set limit switches b.) Repeat programming c.) Remove obstacle d.) Increase torque parameter
The gate opens but doesn't close	a.) The contacts of the photocells are open. b.) The stop contact is open c.) The edge contact is open d.) Ammeter alarm	a.) b.) c.) Check the jumpers or the signals indicated on the warning lamp d.) Check if the ammeter alarm has intervened and eventually increase the torque parameter.
The gate doesn't close automatically	a.) Pause time set to high b.) Control unit in semi-autom. logic	a.) Adjust pause time b.) Set the pause parameter on a different value from the αFF

Page for both instaler and user

MAINTENANCE

Considering the number of working cycles and the kind of gate, if the gate has changed the clutches and doesn't work it's necessary to periodically proceed, with **the learning times reprogramming on the electronic control unit**.
Periodically clean the optical systems of the photocells.

REPLACEMENTS

Any request for spare parts must be sent to:
SEA S.p.A. - Zona Ind.le, 64020 S.ATTO - Teramo - Italia

SAFETY AND ENVIRONMENTAL COMPATIBILITY

Disposal of the packaging materials of products and/or circuits should take place in an approved disposal facility.



REGULAR PRODUCT DISPOSAL (electric and electronic waste)
(It's applicable in EU countries and in those ones provided with a differential waste collection)

The brand that you find on the product or on documentation signals that the product must not be disposed off together with other domestic waste at the end of life cycle. In order to avoid any possible environmental or health damage caused by irregular waste disposal, we recommend to separate this product from other forms of waste and to recycle it in a responsible way in order to provide the sustainable re-use of material resources. Domestic users are invited to contact the retailer where the product has been purchased or the local office in charge of all the information related to differential waste collection and recycling of this kind of product.

STORING

WAREHOUSING TEMPERATURES			
T _{min}	T _{Max}	Dampness _{min}	Dampness _{Max}
- 20°C	+ 65°C	5% <i>Not condensing</i>	90% <i>Not condensing</i>

Materials handling must be made with appropriate vehicles..

WARRANTY LIMITS

For the guarantee see the sales conditions on the official SEA price list.

SEA reserves the right to make any required modification or change to the products and/or to this manual without any advanced notice obligation.



CONDIZIONI DI VENDITA

EFFICACIA DELLE PRESENTI CONDIZIONI GENERALI DI VENDITA: Le presenti condizioni generali di vendita si applicano a tutti gli ordini indirizzati a SEA S.p.A. Tutte le vendite fatte da SEA ai clienti sono regolate secondo le presenti condizioni di vendita che costituiscono parte integrante del contratto di vendita ed annullano ogni clausola contraria o pattuizioni particolari presenti nell'ordine o in altro documento proveniente dall'acquirente (cliente)

AVVERTENZE GENERALI Gli impianti di automazioni porte e cancelli vanno realizzati esclusivamente con componenti SEA, salvo accordi specifici. L'inosservanza delle norme di sicurezza vigenti (Norm. EUROPEE EN 12453 - EN 12445 e altro) e di buona tecnica esclude la SEA da ogni responsabilità. La SEA non risponde del mancato rispetto della corretta e sicura installazione secondo le norme.

1) PROPOSTA D'ORDINE La proposta d'ordine si intenderà accettata solo dopo la sua approvazione da parte della SEA. Conseguenza della sua sottoscrizione, l'acquirente sarà vincolato alla stipula di un contratto d'acquisto, secondo quanto contenuto nella stessa proposta d'ordine e nelle presenti condizioni di vendita. Viceversa, la mancata comunicazione all'acquirente dell'approvazione della proposta d'ordine, non comporta la sua automatica accettazione da parte della SEA

2) VALIDITÀ OFFERTA Le offerte proposte dalla SEA o dalla sua struttura commerciale periferica, avranno una validità di 30 giorni solari, salvo diversa comunicazione in merito.

3) PREZZI I prezzi della proposta d'ordine sono quelli del listino in vigore alla data della redazione della stessa. Gli sconti applicati dalla struttura commerciale periferica della SEA si intenderanno validi solo dopo la loro accettazione da parte della SEA. I prezzi si intendono per merce resa franco ns. stabilimento in Teramo, esclusi IVA ed imballaggi speciali. La SEA si riserva il diritto di modificare in qualsiasi momento il listino, dando opportuno preavviso alla rete di vendita. Le condizioni speciali riservate agli acquisti con formula agevolata Qx, Qx1, Qx2, Qx3 sono riservate ai distributori ufficiali dietro accettazione scritta da parte della direzione SEA.

4) PAGAMENTI Le forme di pagamento ammesse sono quelle comunicate o accettate di volta in volta dalla SEA. Il tasso di interesse sul ritardo da pagamento è del 1,5% mensile e comunque non oltre il tasso massimo legalmente consentito.

5) CONSEGNA La consegna avverrà indicativamente ma non tassativamente entro 30 giorni lavorativi dalla data di ricezione dell'ordine, salvo diverse comunicazioni in merito. Il trasporto degli articoli venduti sarà effettuato a spese ed a rischio dell'acquirente. La SEA si libera dall'obbligo della consegna rimettendo la merce al vettore, sia esso scelto dalla SEA oppure dall'acquirente. Eventuali smarrimenti e/o danneggiamenti della merce dovuti al trasporto, sono a carico dell'acquirente.

6) RECLAMI Eventuali reclami e/o contestazioni dovranno pervenire alla SEA entro 8 giorni solari dalla ricezione della merce, supportati da idonei documenti provanti la loro veridicità.

7) FORNITURA L'ordine in oggetto viene assunto da SEA senza alcun impegno e subordinatamente alle possibilità di approvvigionamento delle materie prime occorrenti alla produzione; eventuali mancate esecuzioni totali o parziali non possono dar luogo a reclami e riserve per danni. La fornitura SEA è strettamente limitata alla sola merce di sua produzione, esclusi il montaggio, l'installazione ed il collaudo. La SEA declina pertanto ogni responsabilità per danni che dovessero derivare, anche a terzi, dall'inosservanza delle norme di sicurezza e della buona regola d'arte nelle fasi dell'installazione e dell'impiego dei prodotti venduti.

8) GARANZIA La garanzia minima è di 12 mesi e può essere estesa, come di seguito, in caso di riconsegna del certificato di garanzia.

SILVER: Le parti meccaniche degli operatori rientranti in tale categoria sono garantite per 24 mesi dalla data di fabbricazione riportata sull'operatore.

GOLD: Le parti meccaniche degli operatori rientranti in tale categoria sono garantite per 36 mesi dalla data di fabbricazione riportata sull'operatore.

PLATINUM: Le parti meccaniche degli operatori rientranti in tale categoria sono garantite per 36 mesi dalla data di fabbricazione riportata sull'operatore. La garanzia di base (36 mesi) sarà estesa per ulteriori 24 mesi (fino ad un totale di 60 mesi) qualora venga acquistato il certificato di garanzie che dovrà essere compilato e rispedito alla SEA S.p.A. entro 60 giorni dall'acquisto. L'elettronica e le centrali di comando sono garantite per 24 mesi dalla data di fabbricazione. Nell'eventualità di difettosità del prodotto, la SEA si impegna alla sua sostituzione gratuita oppure alla sua riparazione, previa restituzione al proprio centro di riparazione. La definizione di stato di garanzia è ad insindacabile giudizio della SEA. I pezzi sostitutivi restano di proprietà della SEA. In modo vincolante, il materiale dell'acquirente ritenuto in garanzia deve essere spedito al centro di riparazione della SEA in porto franco e sarà rispedito dalla SEA in porto assegnato. La garanzia non si estende alla manodopera eventualmente accorsa. I difetti riconosciuti non produrranno alcuna responsabilità e/o richiesta di danni, di qualsiasi natura essi siano, da parte dell'acquirente nei riguardi della SEA. La garanzia non è in ogni caso riconosciuta qualora sia stata apportata alla merce qualsivoglia modifica, oppure vi sia stato un uso improprio, oppure si sia in presenza di una qualsivoglia sua manomissione o di un montaggio non corretto, oppure se sia stata rimossa l'etichetta apposta dal produttore comprensiva del marchio SEA registrato n° 804888. La garanzia non è inoltre valida nel caso la merce SEA sia stata in parte o in toto accoppiata a componenti meccanici e/o elettronici non originali, ed in particolare in assenza di una specifica autorizzazione in merito, ed inoltre nel caso in cui l'acquirente non sia in regola con i pagamenti. La garanzia non comprende danni derivati dal trasporto, materiale di consumo, avarie dovute al mancato rispetto delle specifiche prestazionali dei prodotti indicate nel listino. Non è riconosciuto alcun indennizzo durante il tempo di riparazione e/o sostituzione della merce in garanzia. La SEA declina ogni responsabilità per danni a cose o persone derivanti dall'inosservanza delle norme di sicurezza e della non conforme installazione o dall'impiego errato dei prodotti venduti. La riparazione dei prodotti in garanzia e fuori garanzia è subordinata al rispetto delle procedure comunicate da SEA.

9) RISERVATO DOMINIO Sulla merce venduta è valida la clausola del riservato dominio, della quale la SEA deciderà autonomamente se avvalersi o meno, in virtù della quale l'acquirente acquisisce la proprietà della merce, solo dopo che il suo pagamento sia stato completamente effettuato.

10) FORO COMPETENTE Per qualsiasi controversia avente per oggetto l'applicazione di questo contratto, viene eletto competente il Foro di Teramo. La lingua valida nell'interpretazione di cataloghi, manuali di installazione, condizioni di vendita o altro è quella italiana. La SEA si riserva la facoltà di apportare modifiche tecniche atte a migliorare i propri prodotti, presenti o meno in questo Listino, in qualsiasi momento senza preavviso. La SEA declina ogni responsabilità derivante da possibili inesattezze contenute nel presente listino, derivanti da errori di stampa e/o trascrizione. Il presente Listino annulla e sostituisce quelli precedenti. L'acquirente ai sensi della legge 196/2003 (codice privacy) acconsente all'inserimento dei propri dati personali derivanti dal presente contratto negli archivi informatici e cartacei della SEA S.p.A. al loro trattamento per motivi commerciali ed amministrativi.

Diritti di proprietà industriale: il cliente, con l'acquisto, accetta le presenti condizioni di vendita e riconosce in capo a SEA la titolarità esclusiva del marchio internazionale SEA registrato n. 804888 apposto sulle etichette dei prodotti e/o sui manuali e/o su ogni altra documentazione, e si impegna ad utilizzare il medesimo nella propria attività di rivendita e/o installazione secondo modalità che non ne riducano in alcun modo i diritti, a non rimuovere, sostituire o alterare marchi o altri segni distintivi di qualsiasi genere apposti ai prodotti.

E' vietata ogni forma di riproduzione o utilizzo del marchio SEA e di ogni altro segno distintivo presente sui prodotti, salvo autorizzazione scritta di SEAS.p.A..

Agli effetti dell'articolo 1341 del C.C. si approvano specificatamente per iscritto le clausole di cui ai numeri:

4) PAGAMENTI - 8) GARANZIA - 10) FORO COMPETENTE



TERMS OF SALES

EFFICACY OF THE FOLLOWING TERMS OF SALE: the following general terms of sale shall be applied to all orders sent to SEA S.p.A. All sales made by SEA to all costumers are made under the prescription of this terms of sales which are integral part of sale contract and cancel and substitute all apposed clauses or specific negotiations present in order document received from the buyer.

GENERAL NOTICE The systems must be assembled exclusively with SEA components, unless specific agreements apply. Non-compliance with the applicable safety standards (European Standards EM12453 – EM 12445) and with good installation practice releases SEA from any responsibilities. SEA shall not be held responsible for any failure to execute a correct and safe installation under the above mentioned standards.

1) PROPOSED ORDER The proposed order shall be accepted only prior SEA approval of it. By signing the proposed order, the Buyer shall be bound to enter a purchase agreement, according to the specifications stated in the proposed order.

On the other hand, failure to notify the Buyer of said approval must not be construed as automatic acceptance on the part of SEA.

2) PERIOD OF THE OFFER The offer proposed by SEA or by its branch sales department shall be valid for 30 solar days, unless otherwise notified.

3) PRICING The prices in the proposed order are quoted from the Price List which is valid on the date the order was issued. The discounts granted by the branch sales department of SEA shall apply only prior to acceptance on the part of SEA. The prices are for merchandise delivered ex-works from the SEA establishment in Teramo, not including VAT and special packaging. SEA reserves the right to change at any time this price list, providing timely notice to the sales network. The special sales conditions with extra discount on quantity basis (Qx, Qx1, Qx2, Qx3 formula) is reserved to official distributors under SEA management written agreement.

4) PAYMENTS The accepted forms of payment are each time notified or approved by SEA. The interest rate on delay in payment shall be 1.5% every month but anyway shall not be higher than the max. interest rate legally permitted.

5) DELIVERY Delivery shall take place, approximately and not peremptorily, within 30 working days from the date of receipt of the order, unless otherwise notified. Transport of the goods sold shall be at Buyer's cost and risk. SEA shall not bear the costs of delivery giving the goods to the carrier, as chosen either by SEA or by the Buyer. Any loss and/or damage of the goods during transport, are at Buyer's cost.

6) COMPLAINTS Any complaints and/or claims shall be sent to SEA within 8 solar days from receipt of the goods, proved by adequate supporting documents as to their truthfulness.

7) SUPPLY The concerning order will be accepted by SEA without any engagement and subordinately to the possibility to get it's supplies of raw material which is necessary for the production; Eventual completely or partially unsuccessful executions cannot be reason for complains or reservations for damage. SEA supply is strictly limited to the goods of its manufacturing, not including assembly, installation and testing. SEA, therefore, disclaims any responsibility for damage deriving, also to third parties, from non-compliance of safety standards and good practice during installation and use of the purchased products.

8) WARRANTY The standard warranty period is 12 months. This warranty time can be extended by means of expedition of the warranty coupon as follows:

SILVER: The mechanical components of the operators belonging to this line are guaranteed for 24 months from the date of manufacturing written on the operator.

GOLD: The mechanical components of the operators belonging to this line are guaranteed for 36 months from the date of manufacturing written on the operator.

PLATINUM: The mechanical components of the operators belonging to this line are guaranteed for 36 months from the date of manufacturing written on the operator. The base warranty (36 months) will be extended for further 24 months (up to a total of 60 months) when it is acquired the certificate of warranty which will be filled in and sent to SEA S.p.A. The electronic devices and the systems of command are guaranteed for 24 months from the date of manufacturing. In case of defective product, SEA undertakes to replace free of charge or to repair the goods provided that they are returned to SEA repair centre. The definition of warranty status is by unquestionable assessment of SEA. The replaced parts shall remain propriety of SEA. Binding upon the parties, the material held in warranty by the Buyer, must be sent back to SEA repair centre with fees prepaid, and shall be dispatched by SEA with carriage forward. The warranty shall not cover any required labour activities.

The recognized defects, whatever their nature, shall not produce any responsibility and/or damage claim on the part of the Buyer against SEA. The guarantee is in no case recognized if changes are made to the goods, or in the case of improper use, or in the case of tampering or improper assembly. Furthermore, the warranty shall not apply if SEA products are partly or completely coupled with non-original mechanical and/or electronic components, and in particular, without a specific relevant authorization, and if the Buyer is not making regular payments. The warranty shall not cover damage caused by transport, expendable material, faults due to non-conformity with performance specifications of the products shown in the price list. No indemnification is granted during repairing and/or replacing of the goods in warranty. SEA disclaims any responsibility for damage to objects and persons deriving from non-compliance with safety standards, installation instructions or use of sold goods.

9) RESERVED DOMAIN A clause of reserved domain applies to the sold goods; SEA shall decide autonomously whether to make use of it or not, whereby the Buyer purchases propriety of the goods only after full payment of the latter.

10) COMPETENT COURT OF LAW In case of disputes arising from the application of the agreement, the competent court of law is the tribunal of Teramo. SEA reserves the faculty to make technical changes to improve its own products, which are not in this price list at any moment and without notice. SEA declines any responsibility due to possible mistakes contained inside the present price list caused by printing and/or copying. The present price list cancels and substitutes the previous ones. The Buyer, according to the law No. 196/2003 (privacy code) consents to put his personal data, deriving from the present contract, in SEA archives and electronic files, and he also gives his consent to their treatment for commercial and administrative purposes. Industrial ownership rights: once the Buyer has recognized that SEA has the exclusive legal ownership of the registered SEA brand, he will commit himself to use it in a way which does not reduce the value of these rights, he won't also remove, replace or modify brands or any other particularity from the products. Any kind of replication or use of SEA brand is forbidden as well as of any particularity on the products, unless preventive and expressed authorization by SEA.

In accomplishment with art. 1341 of the Italian Civil Law it will be approved expressly clauses under numbers:

4) PAYMENTS - 8) GUARANTEE - 10) COMPETENT COURT OF LAW

Italiano AVVERTENZE GENERALI PER INSTALLATORE E UTENTE

1. Leggere attentamente le **Istruzioni di Montaggio** e le **Avvertenze Generali** prima di iniziare l'installazione del prodotto. Conservare la documentazione per consultazioni future
2. Non disperdere nell'ambiente i materiali di imballaggio del prodotto e/o circuiti
3. Questo prodotto è stato progettato e costruito esclusivamente per l'utilizzo indicato in questa documentazione. Qualsiasi altro utilizzo non espressamente indicato potrebbe pregiudicare l'integrità del prodotto e/o rappresentare fonte di pericolo. L'uso improprio è anche causa di cessazione della garanzia. La SEA S.p.A. declina qualsiasi responsabilità derivata dall'uso improprio o diverso da quello per cui l'automatismo è destinato.
4. I prodotti SEA sono conformi alle Direttive: Macchine (2006/42/CE e successive modifiche), Bassa Tensione (2006/95/CE e successive modifiche), Compatibilità Elettromagnetica (2004/108/CE e successive modifiche). L'installazione deve essere effettuata nell'osservanza delle norme EN 12453 e EN 12445.
5. Non installare l'apparecchio in atmosfera esplosiva.
6. SEA S.p.A. non è responsabile dell'inosservanza della Buona Tecnica nella costruzione delle chiusure da motorizzare, nonché delle deformazioni che dovessero verificarsi durante l'uso.
7. Prima di effettuare qualsiasi intervento sull'impianto, togliere l'alimentazione elettrica e scollegare le batterie. Verificare che l'impianto di terra sia realizzato a regola d'arte e collegarvi le parti metalliche della chiusura.
8. Per ogni impianto SEA S.p.A. consiglia l'utilizzo di almeno una segnalazione luminosa nonché di un cartello di segnalazione fissato adeguatamente sulla struttura dell'infisso.
9. SEA S.p.A. declina ogni responsabilità ai fini della sicurezza e del buon funzionamento della automazione, in caso vengano utilizzati componenti di altri produttori.
10. Per la manutenzione utilizzare esclusivamente parti originali SEA.
11. Non eseguire alcuna modifica sui componenti dell'automazione.
12. L'installatore deve fornire tutte le informazioni relative al funzionamento manuale del sistema in caso di emergenza e consegnare all'Utente utilizzatore dell'impianto il libretto d'avvertenze allegato al prodotto.
13. Non permettere ai bambini o persone di sostare nelle vicinanze del prodotto durante il funzionamento. L'applicazione non può essere utilizzata da bambini, da persone con ridotte capacità fisiche, mentali, sensoriali o da persone prive di esperienza o del necessario addestramento. Tenere inoltre fuori dalla portata dei bambini radiocomandi o qualsiasi altro datore di impulso, per evitare che l'automazione possa essere azionata involontariamente.
14. Il transito tra le ante deve avvenire solo a cancello completamente aperto.
15. Tutti gli interventi di manutenzione, riparazione o verifiche periodiche devono essere eseguiti da personale professionalmente qualificato. L'utente deve astenersi da qualsiasi tentativo di riparazione o d'intervento e deve rivolgersi esclusivamente a personale qualificato SEA. L'utente può eseguire solo la manovra manuale.
16. La lunghezza massima dei cavi di alimentazione fra centrale e motori non deve essere superiore a 10 m. Utilizzare cavi con sezione 2,5 mm². Utilizzare cablaggi con cavi in doppio isolamento (cavi con guaina) nelle immediate vicinanze dei morsetti specie per il cavo di alimentazione (230V). Inoltre è necessario mantenere adeguatamente lontani (almeno 2,5 mm in aria) i conduttori in bassa tensione (230V) dai conduttori in bassissima tensione di sicurezza (SELV) oppure utilizzare un'adeguata guaina che fornisca un isolamento supplementare avente uno spessore di almeno 1 mm.

English GENERAL NOTICE FOR THE INSTALLER AND THE USER

1. Read carefully these **Instructions** before beginning to install the product. Store these instructions for future reference
2. Don't waste product packaging materials and /or circuits.
3. This product was designed and built strictly for the use indicated in this documentation. Any other use, not expressly indicated here, could compromise the good condition/operation of the product and/or be a source of danger. SEA S.p.A. declines all liability caused by improper use or different use in respect to the intended one.
4. The mechanical parts must be comply with Directives: Machine Regulation 2006/42/CE and following adjustments), Low Tension (2006/95/CE), electromagnetic Consistency (2004/108/CE) Installation must be done respecting Directives: EN12453 and EN12445.
5. Do not install the equipment in an explosive atmosphere.
6. SEA S.p.A. is not responsible for failure to observe Good Techniques in the construction of the locking elements to motorize, or for any deformation that may occur during use.
7. Before attempting any job on the system, cut out electrical power and disconnect the batteries. Be sure that the earthing system is perfectly constructed, and connect it metal parts of the lock.
8. Use of the indicator-light is recommended for every system, as well as a warning sign well-fixed to the frame structure.
9. SEA S.p.A. declines all liability as concerns the automated system's security and efficiency, if components used, are not produced by SEAS.p.A..
10. For maintenance, strictly use original parts by SEA.
11. Do not modify in any way the components of the automated system.
12. The installer shall supply all information concerning system's manual functioning in case of emergency, and shall hand over to the user the warnings handbook supplied with the product.
13. Do not allow children or adults to stay near the product while it is operating. The application cannot be used by children, by people with reduced physical, mental or sensorial capacity, or by people without experience or necessary training. Keep remote controls or other pulse generators away from children, to prevent involuntary activation of the system.
14. Transit through the leaves is allowed only when the gate is fully open.
15. The User must not attempt to repair or to take direct action on the system and must solely contact qualified SEA personnel or SEA service centers. User can apply only the manual function of emergency.
16. The power cables maximum length between the central engine and motors should not be greater than 10 m. Use cables with 2,5 mm² section. Use double insulation cable (cable sheath) to the immediate vicinity of the terminals, in particular for the 230V cable. Keep an adequate distance (at least 2.5 mm in air), between the conductors in low voltage (230V) and the conductors in low voltage safety (SELV) or use an appropriate sheath that provides extra insulation having a thickness of 1 mm.

Français CONSIGNES POUR L'INSTALLATEUR ET L'UTILISATEUR

1. Lire attentivement les **instructions** avant d'installer le produit. Conserver les instructions en cas de besoin.
2. Ne pas dispenser dans l'environnement le matériel d'emballage du produit et/ou des circuits
4. Ce produit a été conçu et construit exclusivement pour l'usage indiqué dans cette fiche. Toute autre utilisation non expressément indiquée pourraient compromettre l'intégrité du produit et/ou représenter une source de danger. SEA S.p.A. décline toute responsabilités qui dériverait d'usage impropre ou différent de celui auquel l'automatisme est destiné. Une mauvaise utilisation cause la cessation de la garantie.
5. Les composants doivent répondre aux prescriptions des Normes: Machines (2006/42/CE et successifs changements); Basse Tension (2006/95/CE et successifs changements); EMC (2004/108/CE et successifs changements). L'installation doit être effectuée conformément aux Normes EN 12453 et EN 12445.
6. Ne pas installer l'appareil dans une atmosphère explosive.
7. SEA S.p.A. n'est pas responsable du non-respect de la Bonne Technique de construction des fermetures à motoriser, ni des déformations qui pourraient intervenir lors de l'utilisation.
8. Couper l'alimentation électrique et déconnecter la batterie avant toute intervention sur l'installation. Vérifier que la mise à terre est réalisée selon les règles de l'art et y connecter les pièces métalliques de la fermeture.
9. On recommande que toute installation soit doté au moins d'une signalisation lumineuse, d'un panneau de signalisation fixé, de manière appropriée, sur la structure de la fermeture.
10. SEA S.p.A. décline toute responsabilité quant à la sécurité et au bon fonctionnement de l'automatisme si les composants utilisés dans l'installation n'appartiennent pas à la production SEA.

11. Utiliser exclusivement, pour l'entretien, des pièces SEA originales.
12. Ne jamais modifier les composants d'automatisme.
13. L'installateur doit fournir toutes les informations relatives au fonctionnement manuel du système en cas d'urgence et remettre à l'Usager qui utilise l'installation les "Instructions pour l'Usager" fournies avec le produit.
14. Interdire aux enfants ou aux tiers de stationner près du produit durant le fonctionnement. Ne pas permettre aux enfants, aux personnes ayant des capacités physiques, mentales et sensorielles limitées ou dépourvues de l'expérience ou de la formation nécessaires d'utiliser l'application en question. Eloigner de la portée des enfants les radiocommandes ou tout autre générateur d'impulsions, pour éviter tout actionnement involontaire de l'automatisme.
15. Le transit entre les vantaux ne doit avoir lieu que lorsque le portail est complètement ouvert.
16. L'utilisateur doit s'abstenir de toute tentative de réparation ou d'intervention et doit s'adresser uniquement et exclusivement au personnel qualifié SEA ou aux centres d'assistance SEA. L'utilisateur doit garder la documentation de la réparation. L'utilisateur peut exécuter seulement la manoeuvre manuel.
17. La longueur maximum des câbles d'alimentation entre la carte et les moteurs ne devrait pas être supérieure à 10 m. Utilisez des câbles avec une section de 2,5 mm². Utilisez des câblage avec câble à double isolation (avec gaine) jusqu'à proximité immédiate des terminaux, en particulier pour le câble d'alimentation (230V). Il est également nécessaire de maintenir une distance suffisante (au moins 2,5 mm dans l'air), entre les conducteurs en basse tension (230V) et les conducteurs de très basse tension de sécurité (SELV) ou utiliser une gaine ayant une épaisseur d'au moins 1 mm, qui fournisse une isolation supplémentaire.

Español ADVERTENCIAS GENERALES PARA INSTALADORES Y USUARIOS

- 1 Leer las **instrucciones de instalación** antes de comenzar la instalación. Mantenga las instrucciones para consultas futura
2. No desperdiciar en el ambiente los materiales de embalaje del producto o del circuito
3. Este producto fue diseñado y construido exclusivamente para el uso especificado en esta documentación. Cualquier otro uso no expresamente indicado puede afectar la integridad del producto y ser una fuente de peligro. El uso inadecuado es también causa de anulación de la garantía. SEA S.p.A. se exime de toda responsabilidad causadas por uso inapropiado o diferente de aquel para el que el sistema automatizado fue producido.
4. Los productos cumplen con la Directiva: Maquinas (2006/42/CE y siguientes modificaciones), Baja Tension (2006/95/CE, y siguientes modificaciones), Compatibilidad Electromagnética (2004/108/CE modificada). La instalación debe ser llevada a cabo de conformidad a las normas EN 12453 y EN 12445.
5. No instalar el dispositivo en una atmósfera explosiva.
6. SEAS.p.A. no es responsable del incumplimiento de la mano de obra en la construcción de la cancela a automatizar y tampoco de las deformaciones que puedan producirse durante el uso.
7. Antes de realizar cualquier operación apagar la fuente de alimentación y desconectar las baterías. Comprobar que el sistema de puesta a tierra sea diseñado de una manera profesional y conectar las partes metálicas del cierre.
8. Para cada instalación se recomienda utilizar como mínimo una luz parpadeante y una señal de alarma conectada a la estructura del marco.
9. SEAS.p.A. no acepta responsabilidad por la seguridad y el buen funcionamiento de la automatización en caso de utilización de componentes no producidos por SEA.
10. Para el mantenimiento utilizar únicamente piezas originales SEAS.p.A..
11. No modificar los componentes del sistema automatizado.
12. El instalador debe proporcionar toda la información relativa al funcionamiento manual del sistema en caso de emergencia y darle al usuario el folleto de adjunto al producto.
13. No permita que niños o adultos permanecen cerca del producto durante la la operación. La aplicación no puede ser utilizada por niños, personas con movilidad reducida de tipo físico, mental, sensorial o igual por personas sin experiencia o formación necesaria. Tener los radiomandos fuera del alcance de niños así como cualquier otro generador de impulsos radio para evitar que el automación pueda ser accionada accidentalmente.
14. El tránsito a través de las hojas sólo se permite cuando la puerta está completamente abierta.
15. Todo el mantenimiento, reparación o controles deberán ser realizados por personal cualificado. Evitar cualquier intento a reparar o ajustar. En caso de necesidad comunicarse con un personal SEA calificado. Sólo se puede realizar la operación manual.
16. La longitud máxima de los cables de alimentación entre motor y central no debe ser superior a 10 metros. Utilizar cables con 2,5 mm². Utilizar cables con doble aislamiento (cables con vaina) hasta muy cerca de los bornes, especialmente por el cable de alimentación (230V). Además es necesario mantener adecuadamente distanciados (por lo menos 2,5 mm en aire) los conductores de baja tensión (230V) y los conductores de baja tensión de seguridad (SELV) o utilizar una vaina adecuada que proporcione aislamiento adicional con un espesor mínimo de 1 mm.

Deutsch ALL GEMEINE HINWEISE FUER DEN INSTALLATEUR UND DEN NUTZER

1. Lesen Sie die **Installierungsanweisungen** sorgfältig durch bevor Sie mit der Installation beginnen. Diese Anweisungen an einem leicht zugänglichen Ort aufbewahren.
2. Verpackungsmaterial des Produkts und/oder der Schaltkreise umweltgerecht entsorgen.
3. Dieses Produkt wurde speziell und ausschließlich für den, in den Unterlagen beschriebenen Zweck, geplant und hergestellt. Jede andere Verwendung, die nicht ausdrücklich angegeben wurde kann die Integrität des Produkts schädigen und/oder eine Gefahrenquelle darstellen. Die nicht fachgerechte Nutzung des Produkts bewirkt die Erlöschung der Garantie. SEA S.p.A. lehnt jegliche Haftung, für unsachgemäße oder andere Nutzung, als die wofür das Produkt bestimmt ist, ab.
4. SEA Produkte entsprechen den folgenden Richtlinien: Maschinenrichtlinie (2006/42/EG und nachträglich geänderten Fassungen), Niederspannungs-Richtlinie (2006/95/EG und nachträglich geänderten Fassungen), EMV (2004/108/EG und nachträglich geänderten Fassungen). Installation gemäß Standard EN12453 und EN12445 durchführen.
5. Installieren Sie das Gerät nicht in explosionsgefährdeten Umgebungen, das Vorhandensein von brennbaren Gasen oder Dämpfen stellt ein ernstes Sicherheitsrisiko dar.
6. SEA S.p.A. ist nicht für die Nichtbeachtung der Guten Technik bei der Herstellung von zu motorisierenden Toren und für deren eventuellen Verformungen, die während des Gebrauchs auftreten könnten, haftbar.
7. Vor allen Eingriffen, das Gerät ausschalten und die Batterien trennen. Sicherstellen, dass die Erdung fachgerecht hergestellt wurde und die Metallteile des Tores daran anschließen.
8. Für jede Anlage wird empfohlen, mindestens ein Blinklicht zu montieren und ein Warnschild auf der Torstruktur anzubringen.
9. SEAS.p.A. übernimmt keine Haftung für Sicherheit und reibungslosen Betrieb des Antriebs, bei Verwendung von Komponenten, die nicht von der SEA Produktion stammen.
10. Für die Wartung nur SEA Originalteile verwenden.
11. Keinerlei Änderungen auf Komponenten der Automation vornehmen.
12. Der Installateur muss den Nutzer des Antriebs über den manuellen Betrieb des Systems im Notfall unterrichten und ihm, das, dem Produkt beiliegende, Handbuch übergeben.
13. Der Aufenthalt von Kindern oder Erwachsenen in der Nähe des Tores während seines Betriebes ist nicht gestattet. Die Anlage darf nicht von Kindern, Personen mit eingeschränkten körperlichen, geistigen oder sensorischen Fähigkeiten oder von Menschen ohne notwendige Erfahrung oder Anweisungen benutzt werden. Fernbedienungen oder andere Impulsgeber außerhalb der Reichweite von Kindern halten, um die versehentliche Aktivierung der Anlage zu verhindern.
14. Die Durchfahrt zwischen den Flügeln ist nur bei vollständig geöffnetem Tor zulässig.
15. Sämtliche Wartungs- und Reparaturarbeiten oder periodische Kontrollen, müssen von qualifiziertem Fachpersonal durchgeführt werden. Der Endverbraucher muss davon absehen eigenständig Reparaturen oder Eingriffe jeder Art an der Anlage durchzuführen und muss sich ausschliesslich an qualifiziertes SEA Fachpersonal wenden. Der Endverbraucher darf nur die manuelle Notfunktion durchführen.
16. Die maximale Länge der Stromkabel zwischen Steuerung und Motoren ist 10 Meter. Verwenden Sie Kabel mit 2,5 mm² Querschnitt und Doppelisolierung (Kabelmantel) in der unmittelbaren Nähe von Klemmen, insbesondere für das Speisungskabel (230V). Die Speisungskabel (230V) und die Sicherheits-Niederspannungskabel (SELV) müssen in einem Abstand von mindestens 2,5 mm gehalten werden, oder eine geeignete Hülse von 1mm Dicke, für eine zusätzliche Isolierung verwenden..



SEA[®]
electronic opening system

Questo articolo è stato prodotto seguendo rigide procedure di lavorazione ed è stato testato singolarmente al fine di garantire i più alti livelli qualitativi e la vostra soddisfazione. Vi ringraziamo per aver scelto SEA.

This item has been produced following strict production procedures and has been singularly tested for the highest quality levels and for your complete satisfaction. Thanks for choosing SEA.

Cet article a été produit suivant des procédures d'usinage strictes et il a singulièrement été testé afin de garantir les plus hauts niveaux de qualité pour votre satisfaction. Nous vous remercions d'avoir choisi SEA.

Este artículo ha sido producido siguiendo rigidos procedimientos de elaboracion y ha sido probando singolarmente a fin de garantizar los mas altos niveles de calidad y vuestra satisfaccion. Le agradecemos por haber escogito SEA.



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Sistemi Elettronici
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International registered trademark n. 804888



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