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di Apertura Porte e Cancelli
International registered trademark n. 804888

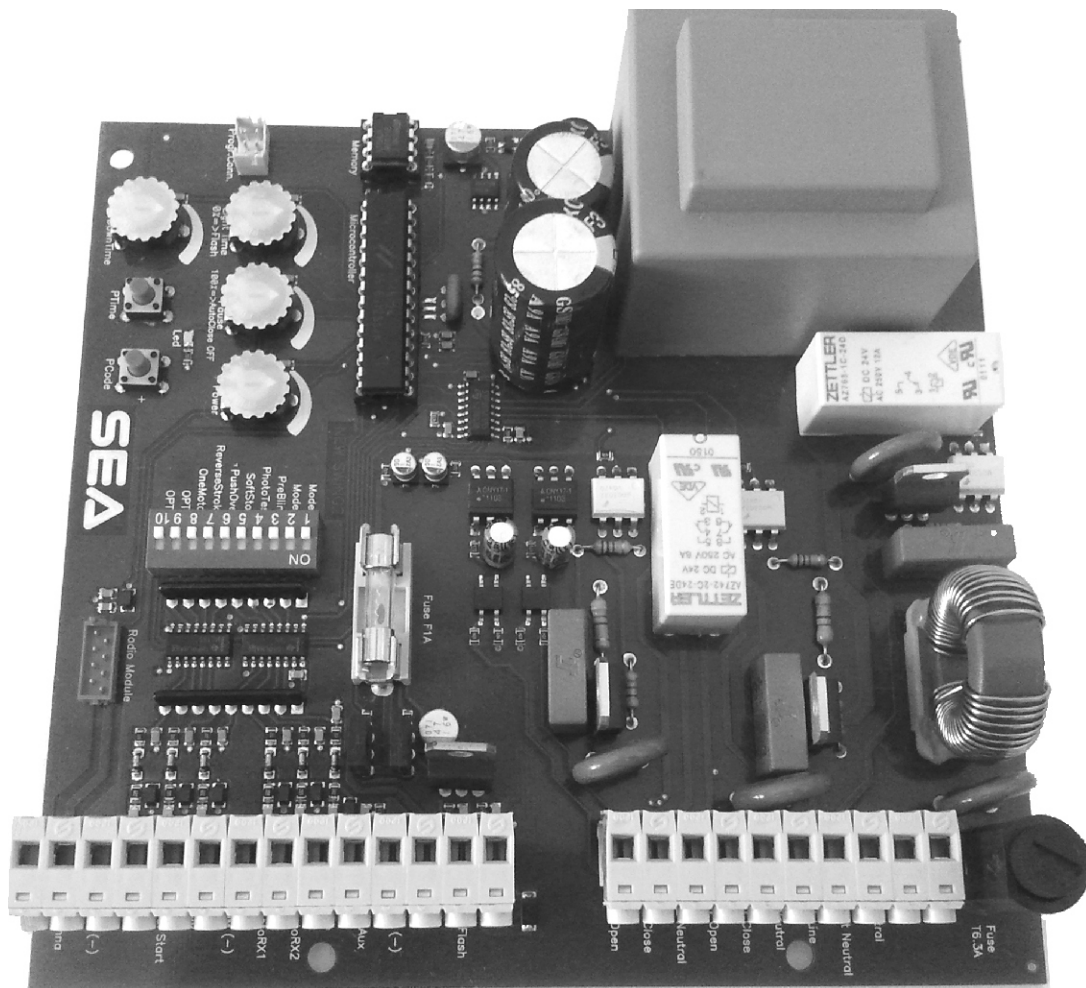
CE

English

SWING 2 MG

23021093MG

ELECTRONIC CONTROL UNIT FOR SWING GATES



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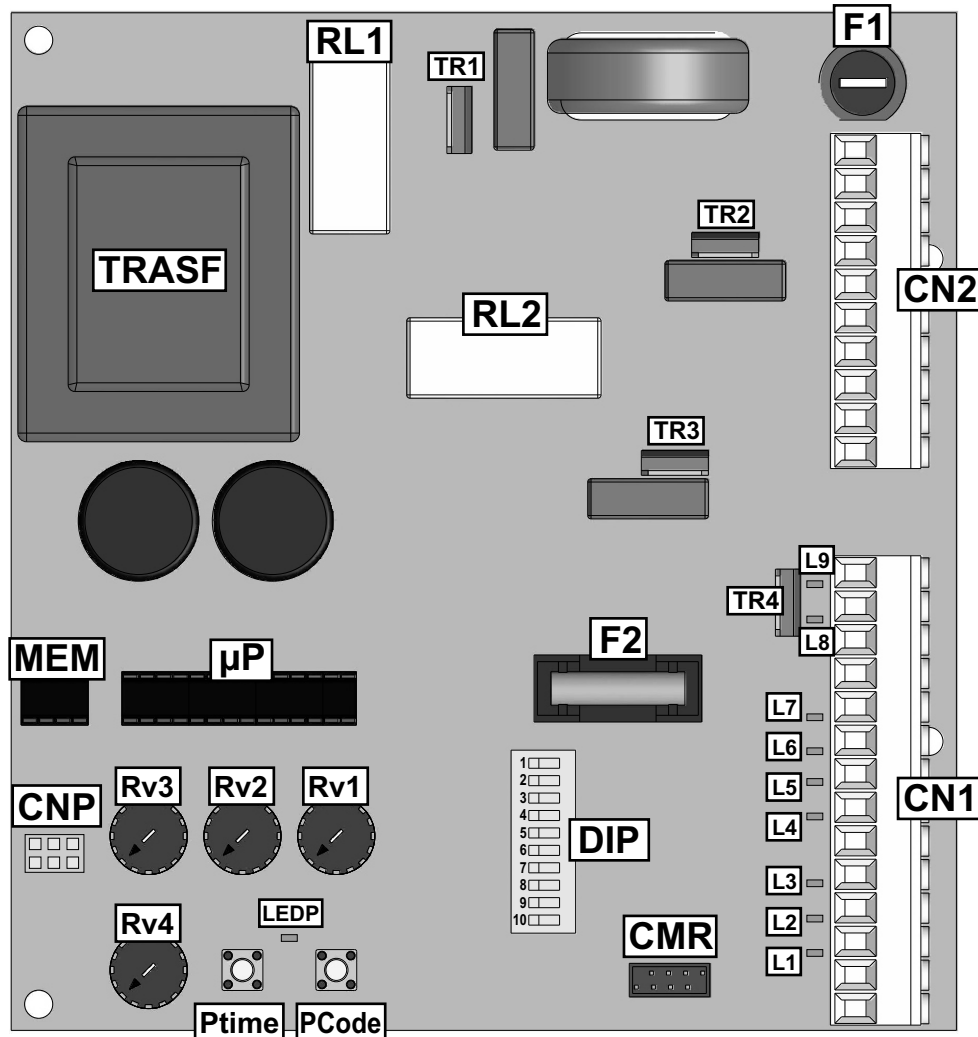


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COMPONENTS DESCRIPTION



CN1 = 24 V input/output connector

CN2 = Motors and power supply connector

CMR = Radio Receiver connector

CNP = Connector PALM

L1 = Start

L2 = Pedestrian Start

L3 = Stop

L4 = Photocell 1

L5 = Photocell 2

L6 = Safety edge

L7 = 24V Aux

L8 = 24V Flash

L9 = Electro-lock

LEDP = Programming

F1 = Power supply and motor 6.3AT fuse

F2 = Accessories Fuse 1A

Rv1 = Motor torque adjustment

Rv2 = Pause time adjustment

Rv3 = Courtesy light or flashing lamp delay adjustment

Rv4 = Slowdown times adjustment

PTime = Working times learning push-button

Pcode = Radio transmitters learning push-button

DIP = Function Dip-switch setting

RL1 = Motor power supply relay

RL2 = Motor direction relay

µP = Microprocessor

MEM = Memory

TRASF = Transformer

TR1 = Triac courtesy light

TR2 = Triac motor 1 piloting

TR3 = Triac motor 2 piloting

TR4 = Tip 127 electro-lock piloting



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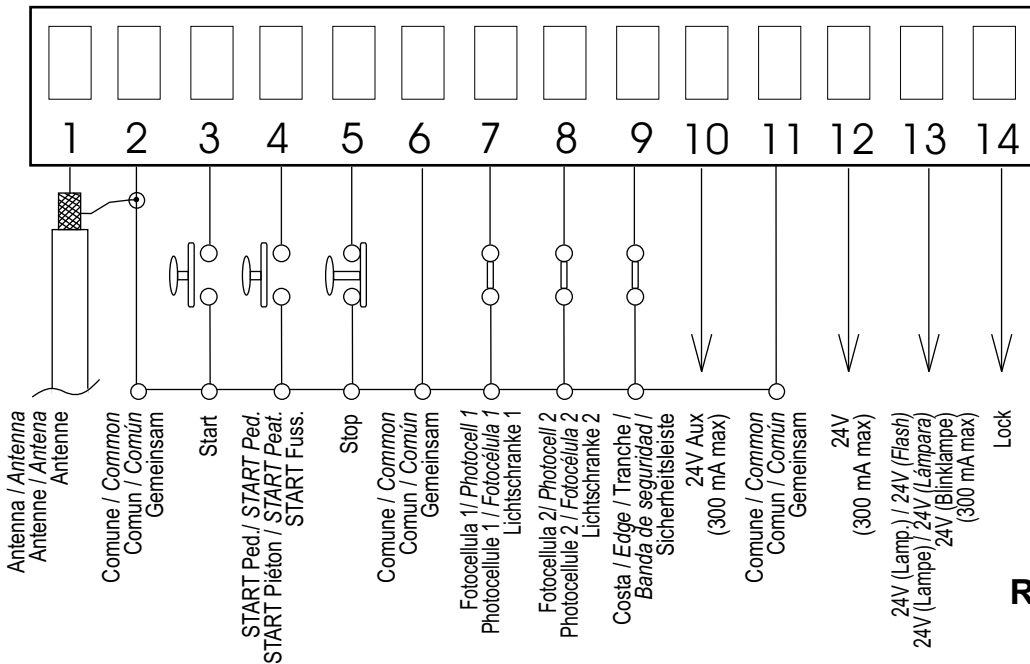
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SWING 2 MG

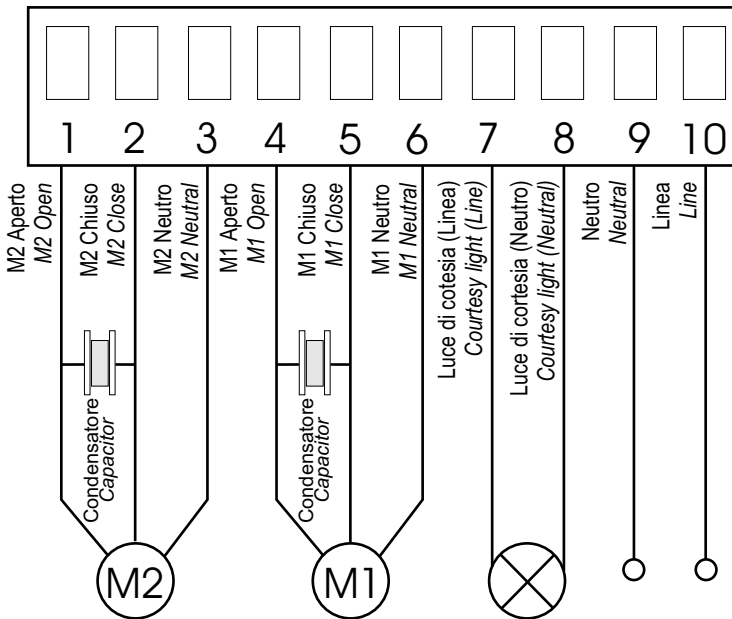
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CONEXIONES / VERBINDUNGEN

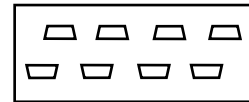
CN1



CN2

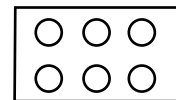


RADIO MODULE (CNA)



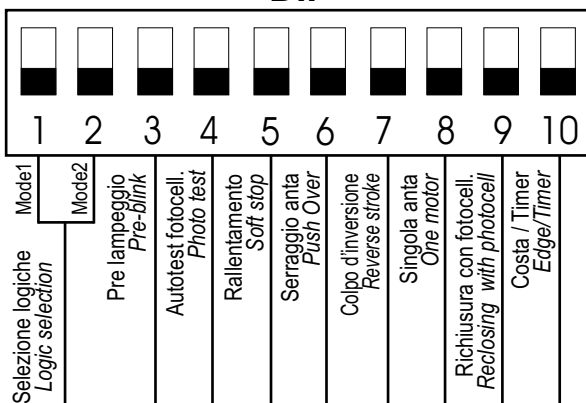
Connettore modulo ricevente
Receiver module connector
Connecteur module récepteur
Conector modulo receptor
Verbindungsmodul Empfänger

CNP

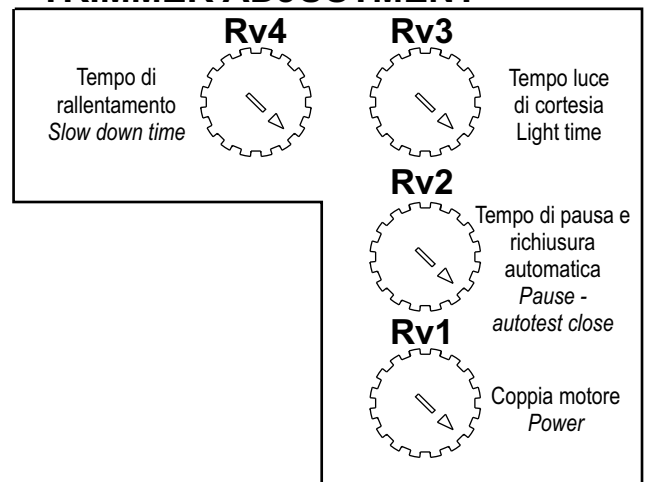


Connettore Programmatore PALM COPY
Connector programmer PALM COPY
Connecteur programmer PALM COPY
Conector Programador PALM COPY
Anschluss Programmierer PALM COPY

DIP



REGOLAZIONE TRIMMER TRIMMER ADJUSTMENT





GENERAL INFORMATION

GENERAL FEATURES

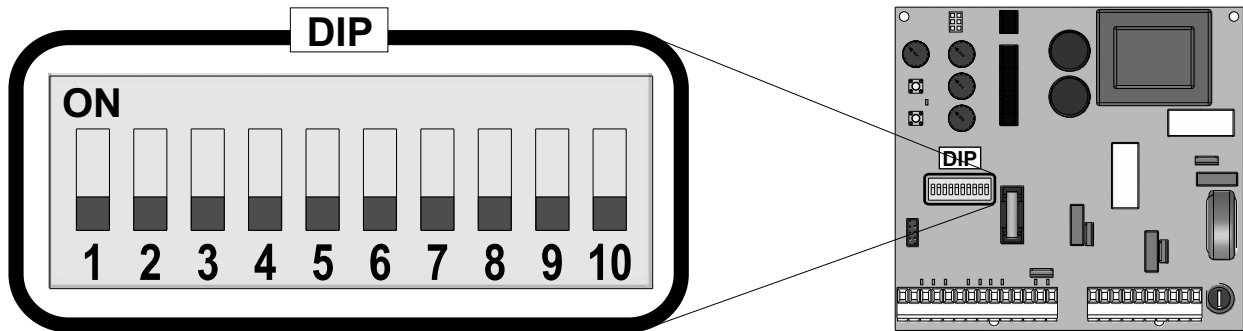
SWING 2 MG control unit has been designed in order to manage one or two swing operators without limit switch. Its dimensions are very small, four different operation modes, possibility to adjust many parameters using the trimmer and dip switch.

TECHNICAL FEATURES

Control unit power supply	230V ~ (±10%) - 50/60 Hz / 115V~ (±10%) 50/60 Hz
Transformer 230V/115V	P1: Vn=230V~, Io=43.3 mA; S1: Vnom=17.5V~, Vo=20.2V~, I=0.69A P1: Vn=115V~, Io=43.3 mA; S1: Vnom=17.5V~, Vo=20.2V~, I=0.69A
Absorbed power	7,5 W
Max. motor charge	500 W x 2
Max. accessories charge	24V=== 300mA
Max. charge flashing lamp or Courtesy light	230V~ 50W max.
Max. flashing light charge 24V	24V=== 4V Led
Environment temperature	-20°C↕ +50°C↕
Protection fuses (24V accessories)	1 A
Programming modes	Selflearning page 12
Operating logics	Automatic / Safety / St.by St.1 / St. by St. 2 / Dead man / 2 Butons
Opening / closing time	Adjustable in autoprogramming
Pause time	Adjustable with trimmer from 0 to 120 s
Courtesy light delay	Adjustable with trimmer from 0 to 2 min.
Thrust force	Adjustable with trimmer
Slowdowns	Adjustable with trimmer
Leaf delay	In selflearning
Connecting terminal entries	Antenna / Stop / Start / Pedestrian Start / Photocells 1 and 2 / Edge
Connecting terminal exits	Power supply accessories 24V / Motors 230V 500W x 2 / Flashing lamp or courtesy light 230V 50W / Electro-lock12V=== 15VA max/ TX photocell power supply 24V / Capacitors
Board dimensions	150,7 x 141 x 47,5 mm
Outside box features	305 x 225 x 125 mm - IP55



OPERATING LOGICS (DIP-SWITCH)



WORKING LOGICS

Four different working logics can be selected.
The programming takes place using DIP1 and DIP2.

- MANUAL LOGIC

A START command opens the gate. A second START while it is opening stops the motor.
A START command while it is closing stops the motor.

Important note: To obtain the semi-automatic reclosing turn the trimmer Rv2 completely clockwise.

- SAFETY LOGIC

A START command opens the gate. A second START while it is opening reverses the motor, a start closes the gate.
A START command while it is closing reverses the motor.

Important note: To obtain the semi-automatic reclosing turn the trimmer Rv2 completely clockwise.

- AUTOMATIC LOGIC 1 (with automatic closing)

A START command opens the gate. A second START while it is opening is not accepted. A START while in pause is not accepted, at the end of the pause the automation closes, a START while it's closing reverses the motor.

Important note: To obtain the semi-automatic reclosing turn the trimmer Rv2 completely clockwise.

- AUTOMATIC LOGIC 2

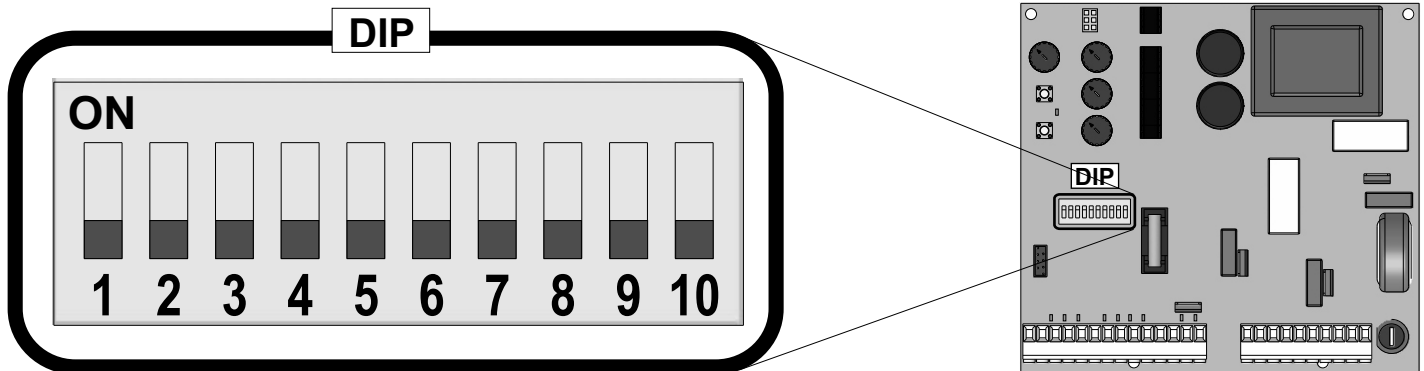
A START command opens the gate. A second START while it is opening is not accepted. A START during the pause time closes the gate immediately. A START while it is closing reverses the direction.

Important note: To obtain the semi-automatic reclosing turn the trimmer Rv2 completely clockwise.

DIP	OPENED CLOSED	DIP1 AND DIP2 PROGRAMMING FOR THE SELECTION OF THE WORKING LOGIC
1 / 2	OFF / OFF	If Dip1 and Dip2 are programmed in this way, the control unit will work with Manual Logic
1 / 2	ON / OFF	If Dip1 and Dip2 are programmed in this way, the control unit will work with Safety Logic
1 / 2	OFF / ON	If Dip1 and Dip2 are programmed in this way, the control unit will work with Automatic 1 Logic
1 / 2	ON / ON	If Dip1 and Dip2 are programmed in this way, the control unit will work with Automatic 2 Logic



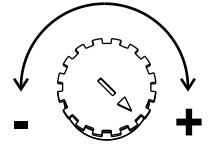
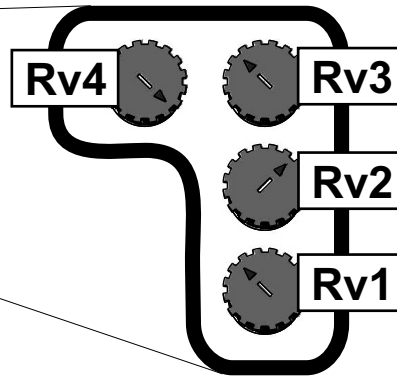
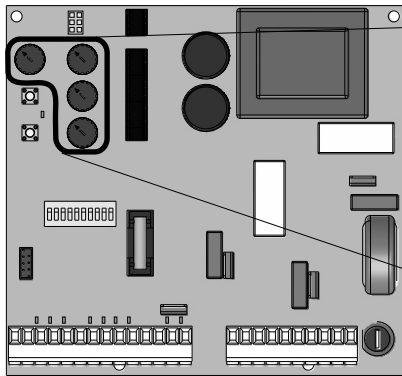
ADDITIONAL FUNCTIONS (DIP-SWITCH)



DIP	POSITION	SETTING OF THE OTHER FUNCTIONS THROUGH DIP-SWITCH
3	ON	PRE - FLASHING When this function is activated the flashing lamp begins flashing about 3 seconds before the motor starts to work, both in closing and opening.
4	ON	SELFTEST PHOTOCELL When this function is activated a test is executed on the photocells before the gate starts to move. In order to enable this function the photocells transmitters must be connected to terminals 10 (24VAux) and 6 (Negative) of connector CN1. The selftest can be exclusively used with the input photocell 1.
	OFF	On the 24V Aux it is possible to connect the TX and the Rx of the photocell.
5	ON	SLOWDOWN AND LIMIT SWITCH When this function is activated motor speed reduces slowly before the gate reaches the limit switch stop or before the operating time ends. This function is designed in order to get the leaf gently closer to the mechanical stops, avoiding any noisy clash. The closing speed is fixed, while the slowdown time can be adjusted using the trimmer Rv2.
6	ON	LEAF LOCKING When this function is activated, at the end of slowdown phase, and when the leaf has reached the mechanical stop, the motor is supplied at maximum power for 1 second approximately. This increases the oil pressure in the motor and makes the hydraulic lock more effective. WARNING: this function must not be activated on a sliding gate since it could cause the over - running of the limit switches, with following block of the automation. (Through the PALM it is possible to exclude the PUSHOVER in opening).
7	ON	REVERSING STROKE This function (to be used exclusively on swing gates) is useful to facilitate the electric lock release. At the start impulse the leaves in closing phase are powered for 1 second approximately, before the opening cycle starts..
8	ON	SINGLE LEAF On ON activates the single leaf function.
9	ON	RECLOSING WITH PHOTOCELL On ON activates the reclosing with photocell .
10	ON	EDGE/TIMER On ON changes the EDGE input into TIMER.



TRIMMER ADJUSTMENTS



NOTE:
ROTATING THE
TRIMMER
CLOCKWISE
THE TIMES / VALUES
INCREASE

Rv1 **MOTOR TORQUE ADJUSTMENT**

This trimmer allows to adjust the thrust force of the motor reducer. This kind of adjustment is required for operators without mechanical / hydraulic device for power limitation. The adjustment must be executed so that there is no crushing danger for people or objects and in any case in accordance with the law in force on the matter.

Rv2 **PAUSE TIME ADJUSTMENT**

This trimmer allows the linear adjustment of pause time from 0 to 120 s (If you rotate it completely clockwise, you can adjust the working logics setting it in half-automatics).

Rv3 **COURTESY LIGHT DELAY ADJUSTMENT**

Timer with double function: adjusts the lighting time of the courtesy light from 0 to 2 min. If completely turned anti-clockwise it changes the output into a flashing lamp output.

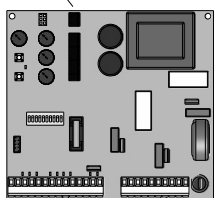
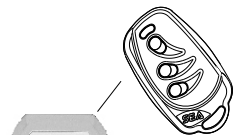
Rv4 **SLOWDOWN DELAY ADJUSTMENT**

ALARMS INDICATION TABLE

The flashes sequence, spaced with a pause, is showed on the flashing lamp (for about 20 seconds) and on the control lamp.

Number of flashes	Alarm type
1	Trial Test
2	Photocell in closing
3	Photocell in opening

Number of flashes	Alarm type
5	Safety edge
6	Stop
7	Phototest
8	Number max. Cycles



PALM FUNCTIONS

Control unit SWING 2 MG with PALM administration

- Visualisation and modification of the following parameters:
- Working times
- Leaf delay
- Partial opening time
- 2 n. maintenance cycles adjustment
- PhotoStop
- PhotoClose
- PushOpen (excludes the pushover during opening phase)



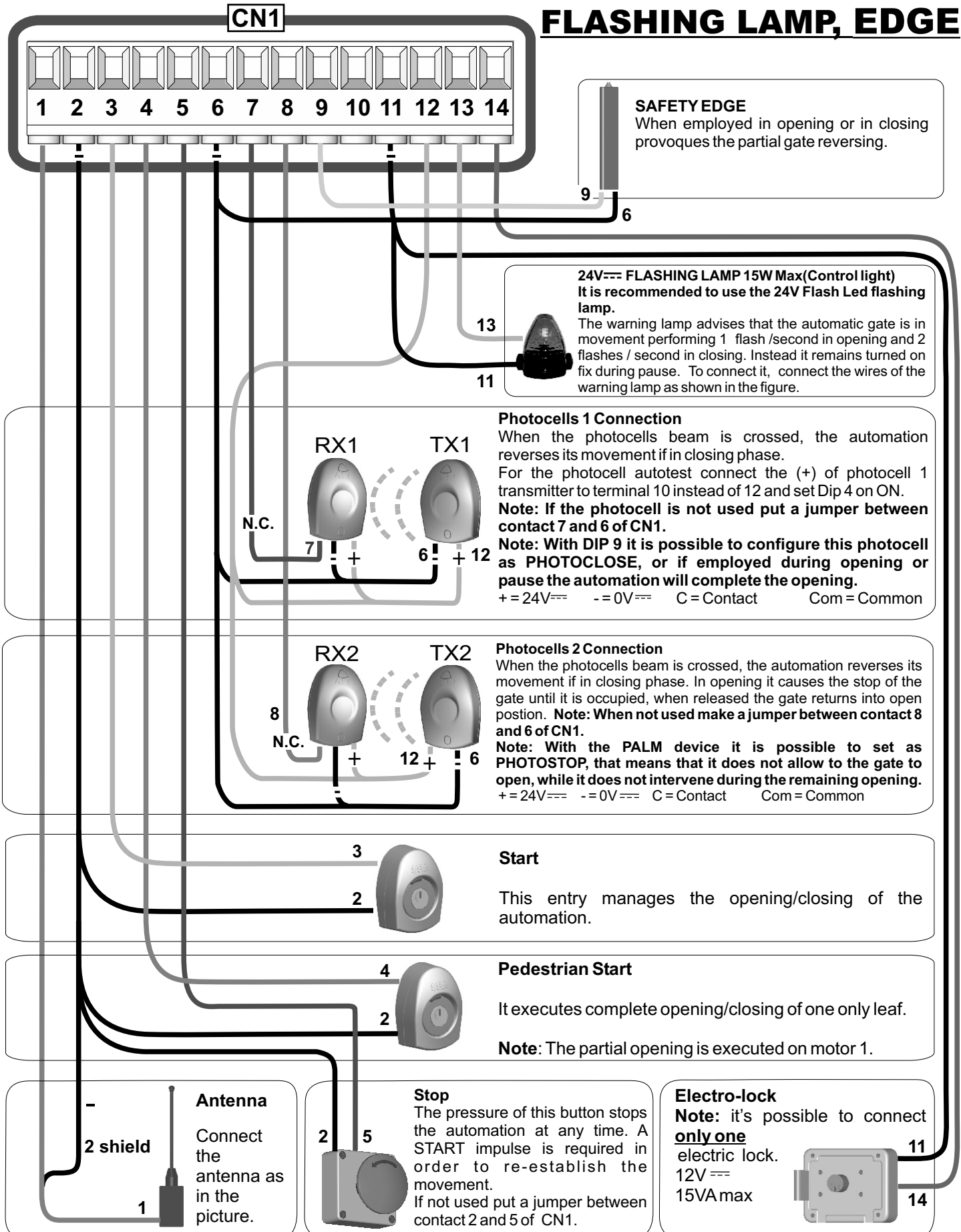
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English

SWING 2 MG

START, PEDESTRIAN START, STOP, ANTENNA PHOTOCELLS 1 AND 2, ELECTRO-LOCK, FLASHING LAMP, EDGE



SAFETY EDGE
When employed in opening or in closing provoques the partial gate reversing.

24V $\overline{=}$ FLASHING LAMP 15W Max(Control light)
It is recommended to use the 24V Flash Led flashing lamp.
The warning lamp advises that the automatic gate is in movement performing 1 flash /second in opening and 2 flashes / second in closing. Instead it remains turned on fix during pause. To connect it, connect the wires of the warning lamp as shown in the figure.

Photocells 1 Connection
When the photocells beam is crossed, the automation reverses its movement if in closing phase.
For the photocell autotest connect the (+) of photocell 1 transmitter to terminal 10 instead of 12 and set Dip 4 on ON.
Note: If the photocell is not used put a jumper between contact 7 and 6 of CN1.
Note: With DIP 9 it is possible to configure this photocell as PHOTOCLOSE, or if employed during opening or pause the automation will complete the opening.
+= 24V $\overline{=}$ -= 0V $\overline{=}$ C = Contact Com = Common

Photocells 2 Connection
When the photocells beam is crossed, the automation reverses its movement if in closing phase. In opening it causes the stop of the gate until it is occupied, when released the gate returns into open position. **Note: When not used make a jumper between contact 8 and 6 of CN1.**
Note: With the PALM device it is possible to set as PHOTOSTOP, that means that it does not allow to the gate to open, while it does not intervene during the remaining opening.
+= 24V $\overline{=}$ -= 0V $\overline{=}$ C = Contact Com = Common

Start
This entry manages the opening/closing of the automation.

Pedestrian Start
It executes complete opening/closing of one only leaf.
Note: The partial opening is executed on motor 1.

Stop
The pressure of this button stops the automation at any time. A START impulse is required in order to re-establish the movement.
If not used put a jumper between contact 2 and 5 of CN1.

Electro-lock
Note: it's possible to connect **only one** electric lock.
12V $\overline{=}$
15VA max

Antenna
Connect the antenna as in the picture.



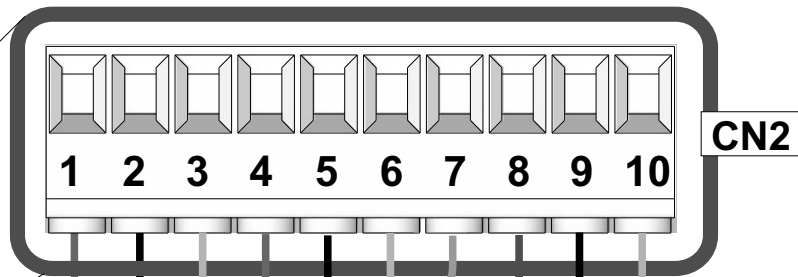
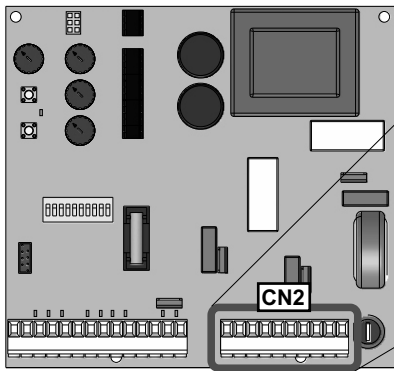
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SWING 2 MG

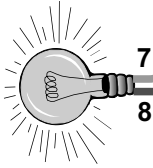
MOTORS, CAPACITORS, POWER SUPPLY



Courtesy light

Timeable from 0 to 2 min. through Rv3.

If Rv3 is completely in anti-clockwise position it is possible to connect a 230V Max 50W flashing lamp on the courtesy light output performing 1 flash in opening, 2 flashes in closing and stays on during pause.



Capacitor 2

Capacitor 1

1
2

4
5

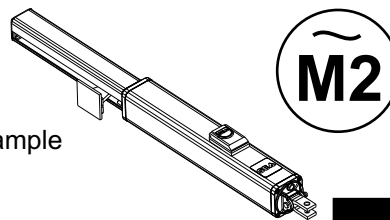
Motor 2

Motors 2 outputs

M = OPENING/CLOSING

Com = COMMON

Example



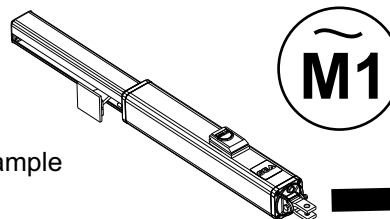
Motor 1

Motor 1 outputs

M = OPENING/CLOSING

Com = COMMON

Example

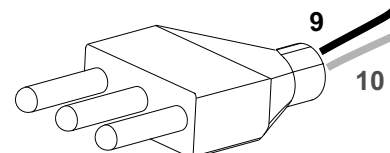


Power supply

Power supply connection:

P = PHASE

N = NEUTRAL





WORKING TIMES SELFLEARNING ON SWING GATE

1 PHASE 1

Make all the electrical connections and take care to bridge all the unused N.C. contacts.

If you are installing a motor reducer equipped with mechanical / hydraulic anticrushing device, set the motor torque (trimmer Rv1) at maximum value and make the motor torque adjustment using the appropriate by-pass valves or clutch adjustment screws located on the operators.

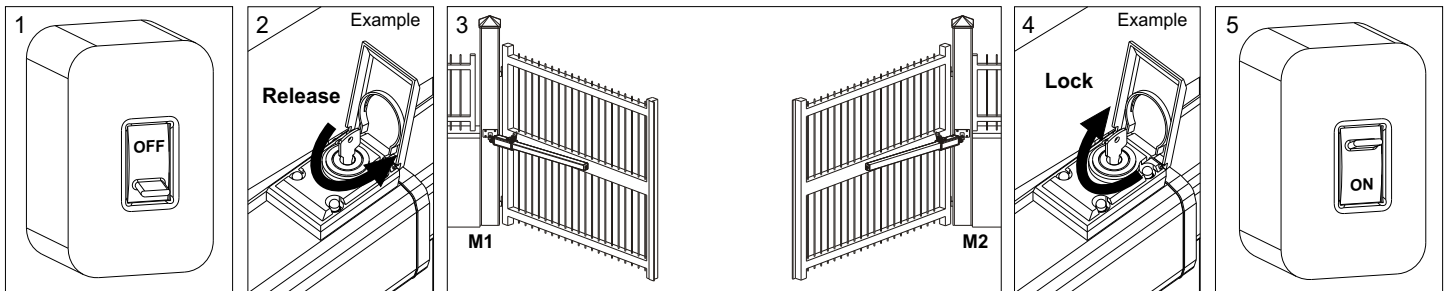
If you are installing a motor reducer not equipped with mechanical / hydraulic power limitaiton device, set the motor torque at maximum value **ONLY** during the selflearning phase. Immediately afterwards set a motor torque value which can assure the anticrushing safety, in accordance with the law in forcei.

WARNING!

THIS PROCEDURE IS POTENTIALLY DANGEROUS AND MUST BE EXECUTED EXCLUSIVELY BY SPECIALIZED STAFF UNDER SAFETY CONDITIONS.

2 PHASE 2

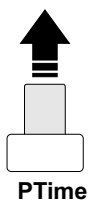
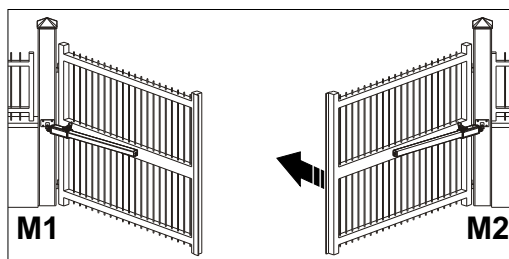
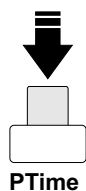
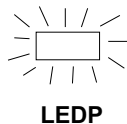
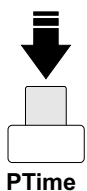
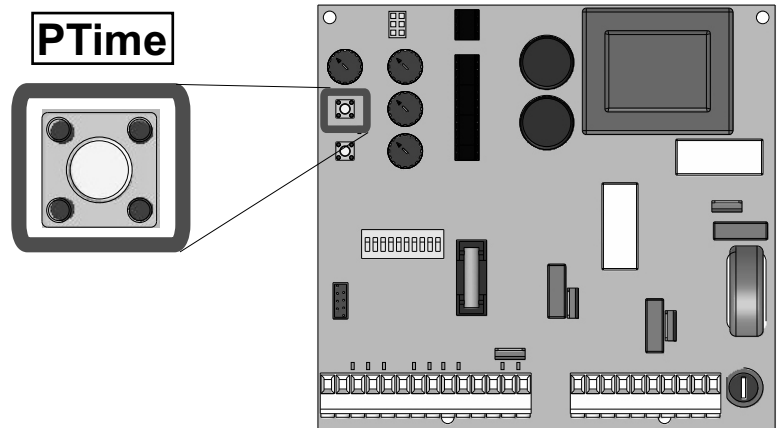
Disconnect the power supply (Fig. 1), release the gate (Fig. 2) and place the leaves at half-open position (Fig. 3). Re-lock the motor (Fig. 4) and connect again the power supply (Fig. 5).



- Keep pressed PTime button, LEDP will switch on.

Keep pressed PTime until the motor M2 starts to close*.

Release Ptime.

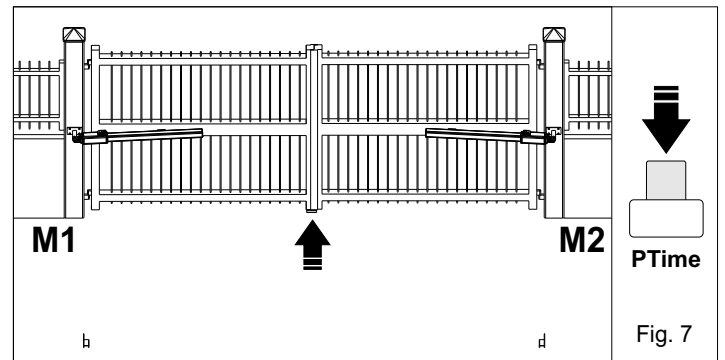
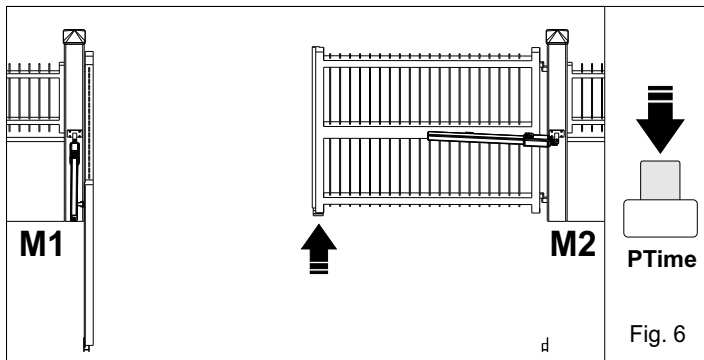




WORKING TIMES SELFLEARNING ON SWING GATE

- * If the motor starts to open the gate, disconnect the power supply again, and reverse the motor phases. Execute the same kind of connection on motor M1. Repeat the programming procedure (phase 2).

3 PHASE 3
Motor M2 closes (from step 2), when the leaf reaches the closing mechanical stop press the button PTime (Fig. 6). Motor M1 will also start a closing cycle. When the leaf reaches the closing mechanical stop press again the button PTime (Fig. 7).

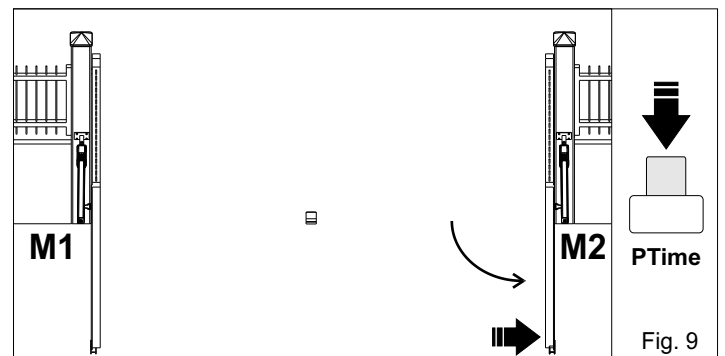
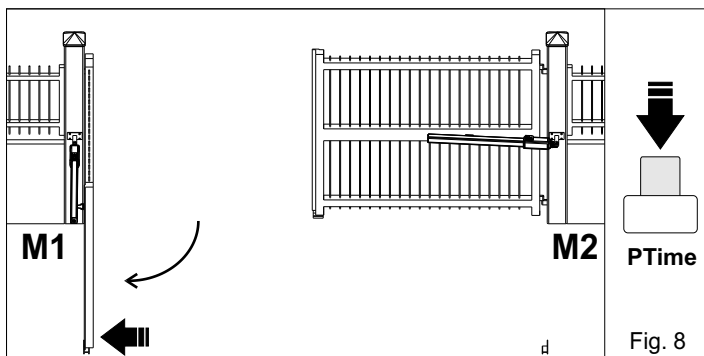


The gate stops and motor M1 starts an opening cycle. Press again PTime in the point where you desire to set the leaf delay in opening.

When the leaf reaches the mechanical stop in opening press once again PTime (Fig. 8).

At this point motor M2 also will start an opening cycle.

When the leaf will reach the mechanical stop in opening push once again PTime (Fig. 9).





WORKING TIMES SELFLEARNING ON SWING GATE

Motor M2 will start automatically a closing cycle. Press again PTime in the point where you desire to set the leaf delay in closing.

When the leaf reaches the mechanical stop in closing press once again PTime (Fig. 10).

At this point motor M1 will also start a closing cycle.

When the leaf reaches the mechanical stop in closing press once again PTime (Fig. 11).

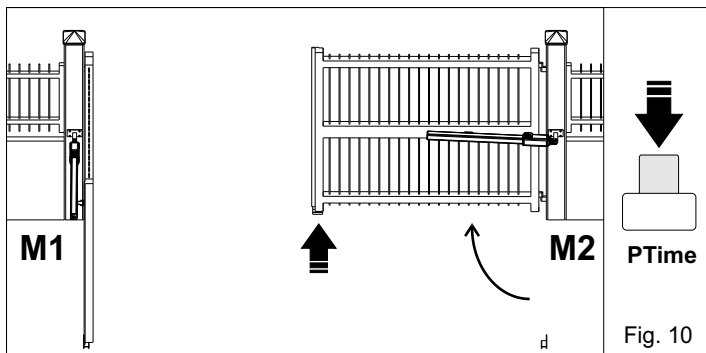


Fig. 10

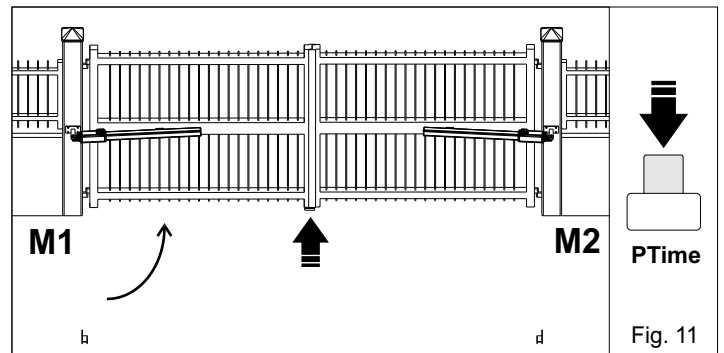


Fig. 11

Programming is finished.

Check the correct times memorizing giving a start impulse or pressing the button PTime. If necessary repeat the same learning procedure from step 2.

4 PHASE 4

In case of use with motor reducer without mechanical / hydraulic device for motor torque limitation, adjust trimmer Rv1 on values which can assure the anti-crushing safety in accordance with the law in force. If after adjusting the motor torque the working time is not enough (the leaf doesn't open / close completely), repeat STEP 2 setting the motor torque value as for the usual use of the automation.

Adjust the slowdown time (if enabled), using trimmer Rv2.

SINGLE LEAF MODE

- 1) Connect the motor cables to the terminals 4,5,6 of the CN2 terminal.
 - 2) Set on ON DIP8 (single leaf mode).
 - 3) Start the times programming by holding pressed Ptime button.
 - 4) Make sure that the leaf starts closing (if not, remove the power supply).
 - 5) On stop position in closing wait for 3 seconds and press Ptime, the leaf will automatically open.
 - 6) On stop position in opening wait for 3 seconds and press PTime, the leaf will automatically close.
 - 7) On stop position in closing wait for 3 seconds and press Ptime.
- Selflearning completed.



RADIO TRANSMITTERS MEMORIZING

⚠ WARNING: Make the radio transmitters programming before you connect the antenna and insert the receiver into the special CMR connector (if available) with turned off control unit. (The control unit automatically recognizes if the receiver is a RF, RF Roll, RF Roll Plus or RF UNI module).

With RF Roll or RF Roll Plus module it will be possible to use only Coccinella Roll or Coccinella Roll Plus radio transmitters. or Smart Dual Roll or Smart Dual Roll Plus.

With the RF UNI module it will be possible to use both the transmitters of the Roll Plus series and those with fixed code. The first memorized transmitter determines the type of the remaining radio transmitters.

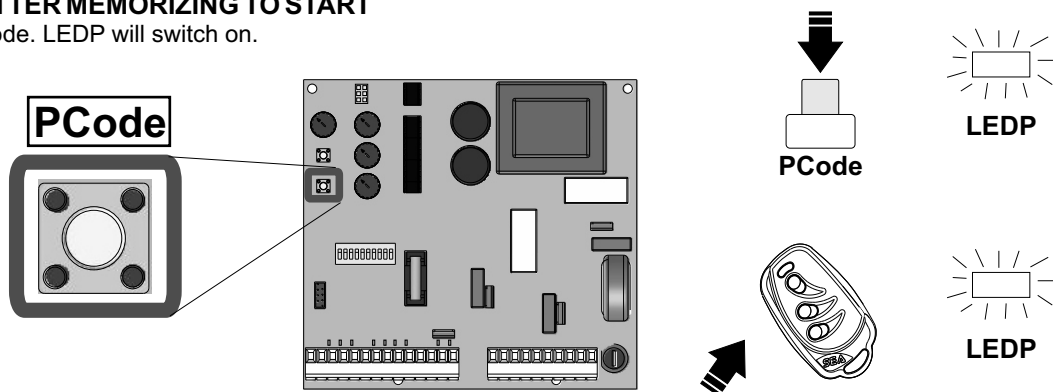
Make sure that on CMR connector is installed the receiver with the same frequency of the radio transmitter that you want to use.

Notes:

- Enter radio transmitters learning only when the working cycle stops and the gate is closed.
- If the radio transmitters are Rolling Code it's possible to memorize up to 800 codes (buttons).
- If the radio transmitters are with fixed code it will be possible to memorize up to max. 30 codes (buttons).

RADIO TRANSMITTER MEMORIZING TO START

Press the button PCode. LEDP will switch on.

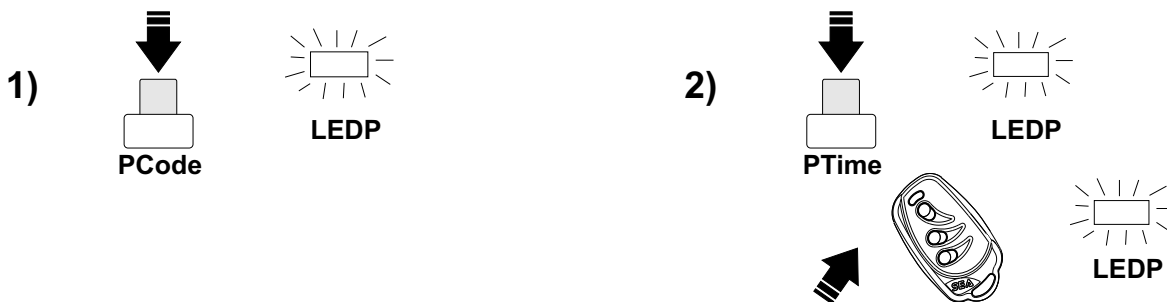


Give an impulse with the radio transmitter, using the button which will be linked to the START impulse. The led will execute two flashes Tx code and afterwards it will keep switching on waiting for new transmitters. If no further code is memorized within 10 s the led will switch off automatically, getting out of the memorizing procedure.

WARNING: if you enter a code which is already memorized, it will be deleted.

RADIO TRANSMITTER MEMORIZING TO PEDESTRIAN START

- 1) Press the button PCode. LEDP will switch on.
- 2) Press the button PTime. LEDP will start to flash quickly.



Give an impulse with the radio transmitter, using the button which will be linked to the pedestrian start impulse. The Led will execute 2 long flashes in order to confirm the correct memorizing of Tx and afterwards it will keep switching on waiting for new transmitters.

If no further code is memorized within 10 s the led will switch off automatically, getting out of the memorizing procedure.

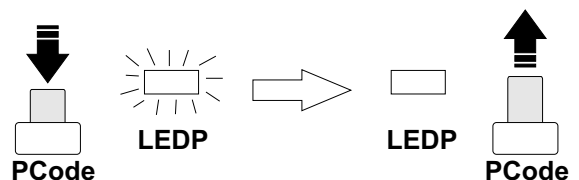
WARNING: If a code is entered which already has been memorized, the transmitter will be deleted.

ALL RADIO TRANSMITTERS DELETING

Press and keep pressing the button PCode.

LEDP will start a sequence of flashes.

Wait that the led stops to flash and release the button PCode.



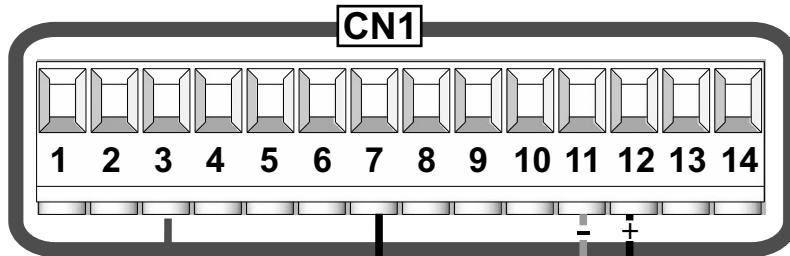
CANCELLATION OF SINGLE TRANSMITTER

Delete a single transmitter retransmitting the stored transmitter.



SAFETY LOOP CONNECTION

THIS SCHEME IS AN EXPAMPLE FOR HOW TO CONNECT EVENTUAL MAGNETIC LOOPS.



C1 = CONTACT OPEN
C2 = CONTACT CLOSED
12 = 24 V⁼⁼⁼
11 = 0 V⁼⁼⁼

Loop exit 1

Connecting scheme of loop 1

3 = Contact start (n.o.)
2 = Common

Loop exit 2

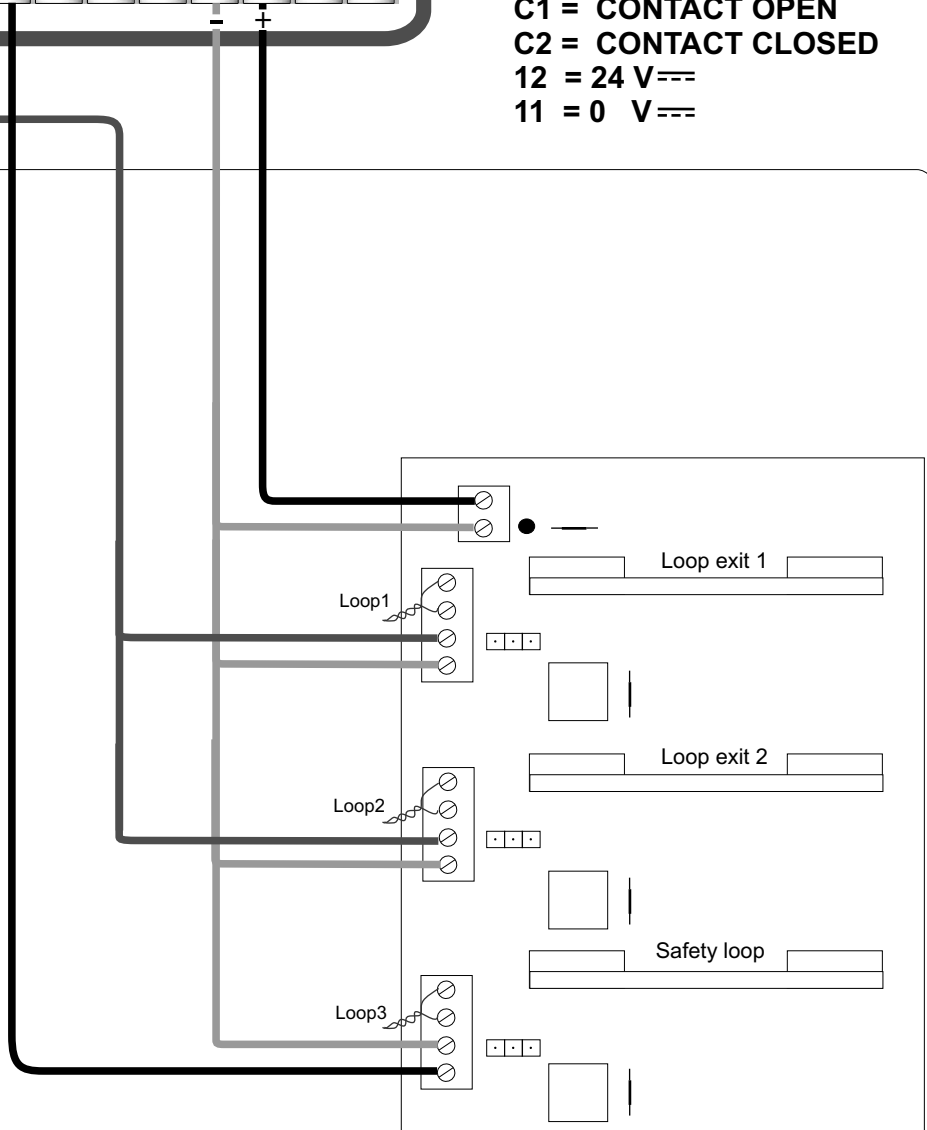
Connecting scheme of loop 2

3 = Contact start (n.o.)
2 = Common

Safety loop

Connecting scheme of loop 3

7 = Contact photocell (n.c.)
2 = Common



Note: In reality all contacts can be set as N.O. or N.C.



TROUBLE SHOOTING

Advises		
Make sure all Safety LED are turned ON All not-used N.C. Contacts must be bridged		
Problem Found	Possible Cause	Solutions
The motor doesn't respond to any START impulse	a.) Bridge missing on one of the N.C. contacts b.) Burnt fuse	a.) Check the connections or the jumpers on N.C. Contacts. b.) Replace burnt fuse on the board
Gate doesn't move while the motor is running	a.) The motor is in the released position b.) Trimmer Rv1 is at minimum	a.) Re/lock the motor b.) Rotate Trimmer Rv1 at maximum (rotate clockwise)
Gate doesn't reach the complete open/close position	a.) Programming error b.) Gate is stopped by an obstacle c.) The fitting geometry is inadequate	a.) Repeat the programming b.) Remove the obstacle c.) Check fitting geometry following the operator installation manual.
Gate opens but doesn't close	a.) The photocell or edge contacts 2/7, 2/8 and 2/9 are open.	a.) Check LED or bridges
Gate doesn't close automatically	a.) Pause time is too long b.) The settled operating logic doesn't include it	a.) Adjust the pause time using Trimmer Rv3 b.) Check dip1 and Trimmer Rv2 in order to verify the settled logic

Page for both installer and user

WARNINGS

The electric installation and the functioning logic choice must agree with the laws in force. In any case you must foresee a 16A and threshold 0.030A differential switch. Keep the power cables (motors, power supply) separate from the command cables (push buttons, photocells and so on). In order to avoid any interference it's preferable to foresee and use two separate sheaths

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}
- 40°C	+ 85°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.



TERMS OF SALES

EFFICACY OF THE FOLLOWING TERMS OF SALE: the following general terms of sale shall be applied to all orders sent to SEAS.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, or if the label affixed by the manufacturer has been removed including the SEA registered trademark No. 804888. 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. The repair of products under warranty and out of warranty is subject to compliance with the procedures notified by SEA.

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 num.804888 affixed on product labels and / or on manuals and / or on any other documentation, 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 LOW



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. SEAS.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. SEAS.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. SEAS.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.



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electronic opening system

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