



AUTOMATIC ENTRANCE SPECIALISTS

CE

Silver 1B / 40B



Manuale di installazione e manutenzione per automazioni per cancelli a battente.

Installation and maintenance manual for swing gates.

Manuel d'installation et d'entretien pour portes à battant.

Montage und Wartungshandbuch für Drehflügeltore

Manual para la instalación y la manutención para automatización para cancelas batientes

- I** Impianto tipo
- GB** Standard installation
- F** Installation type
- D** Standard Montage
- E** Instalaciòn tipo

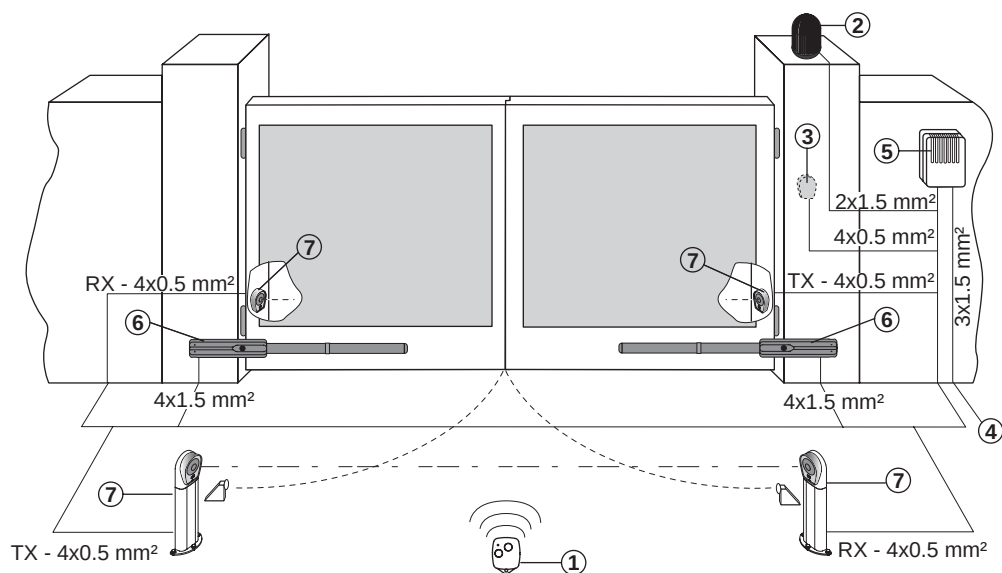


Fig. 1

SILVER PF

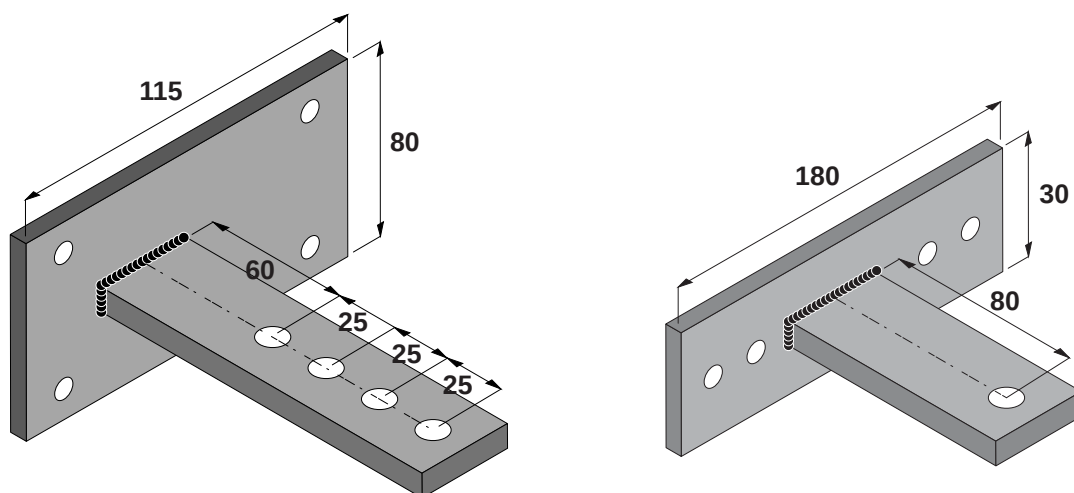


Fig. 2

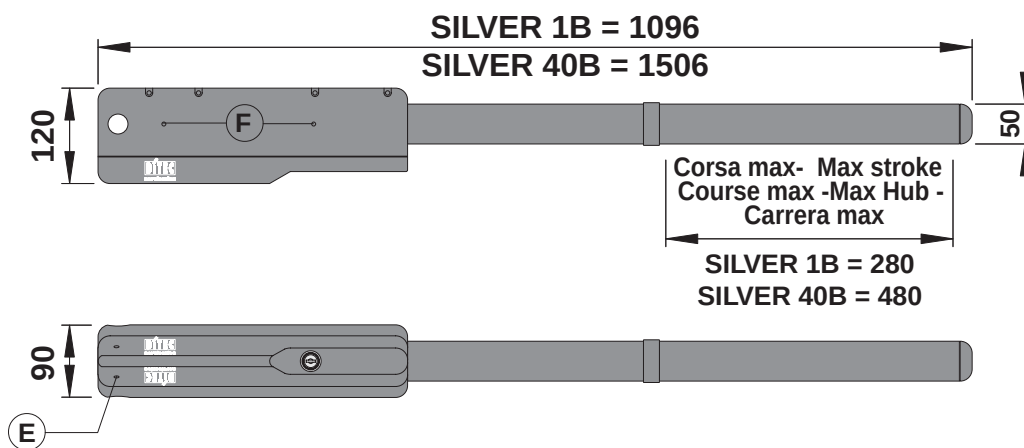


Fig. 3

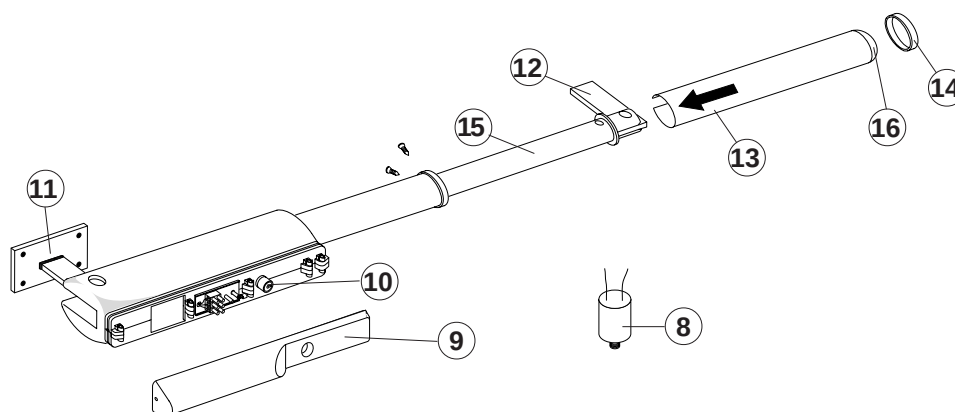


Fig. 4

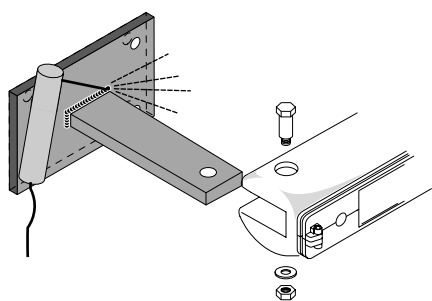


Fig. 5

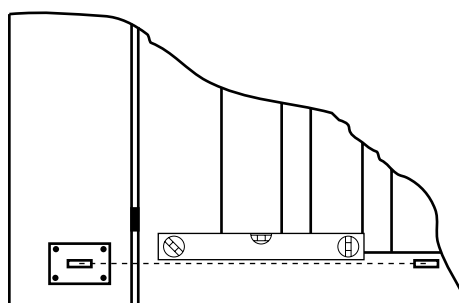


Fig. 6

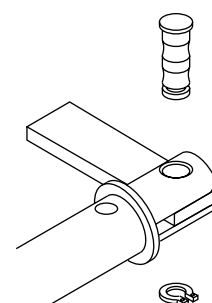


Fig. 7

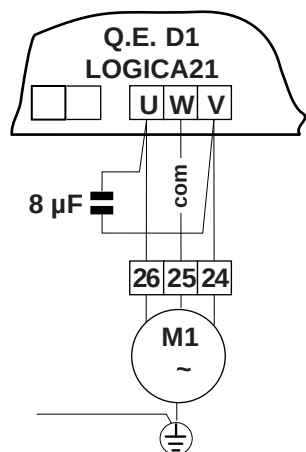


Fig. 8

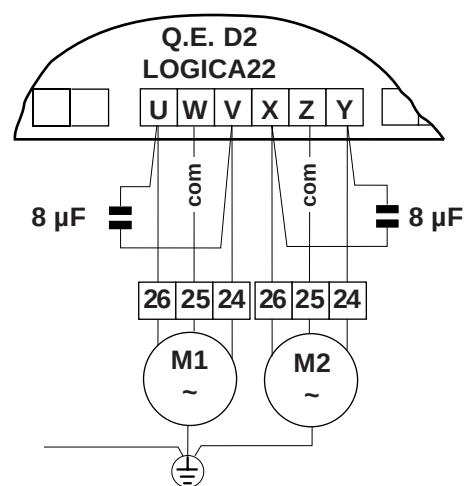
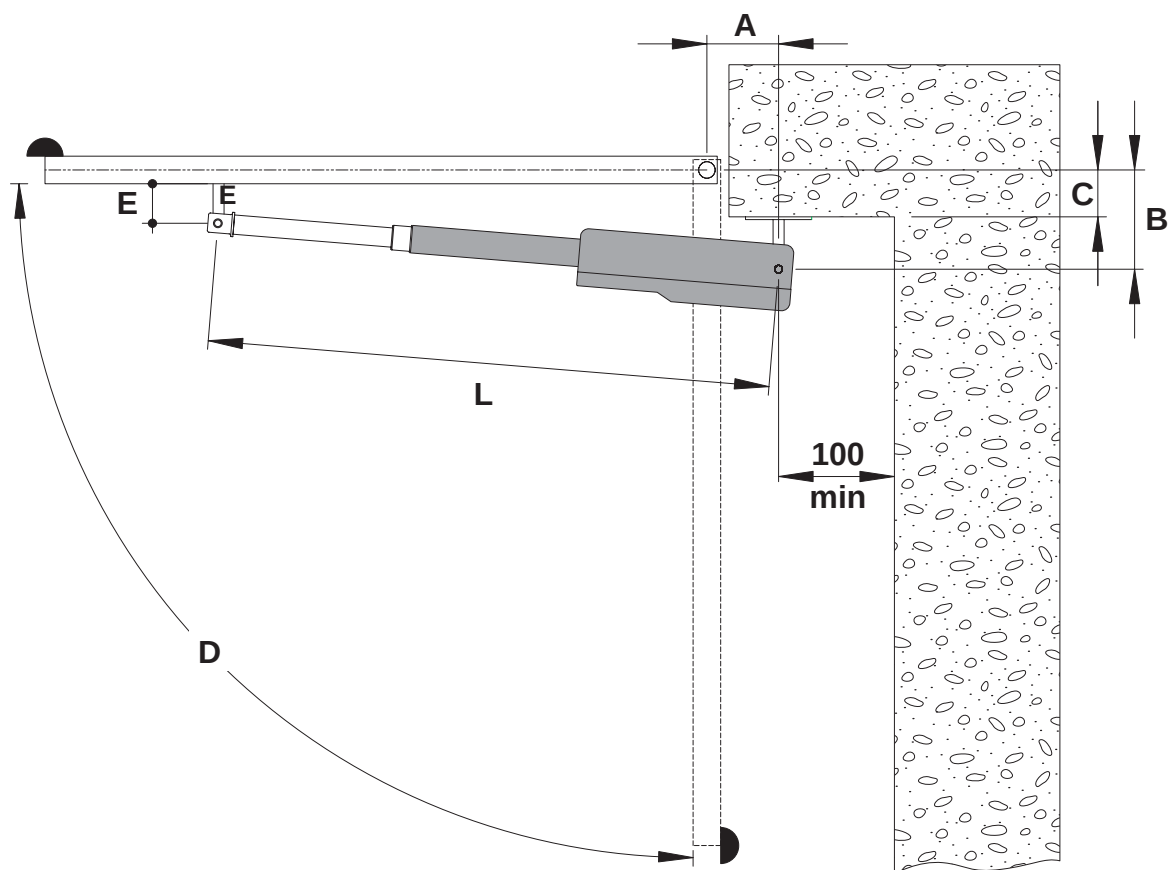


Fig. 9



	A	B	C max (90°)	D	E	L
SILVER 1B	120	120	60	90°	70	1020
	120	100	40	100°	70	1020
SILVER 40B	220	220	160	90°	90	1430
	140	240	180	90°	90	1430
	200	200	140	100°	90	1430
	180	180	120	100°	90	1430
	160	220	160	100°	90	1430
	200	180	120	110°	90	1430
	220	140	80	120°	90	1430

Fig. 10



GENERAL SAFETY PRECAUTIONS

This installation manual is intended for professionally competent personnel only.

The installation, the electrical connections and the settings must be completed in conformity with good workmanship and with the laws in force. Read the instructions carefully before beginning to install the product. Incorrect installation may be a source of danger. Packaging materials (plastics, polystyrene, etc) must not be allowed to litter the environment and must be kept out of the reach of children for whom they may be a source of danger. Before beginning the installation check that the product is in perfect condition. Do not install the product in explosive areas and atmospheres: the presence of flammable gas or fumes represents a serious threat to safety.

Before installing the motorisation device, make all the structural modifications necessary in order to create safety clearance and to guard or isolate all the compression, shearing, trapping and general danger areas. Check that the existing structure has the necessary strength and stability. The manufacturer of the motorisation device is not responsible for the non-observance of workmanship in the construction of the frames to be motorised, nor for deformations that may occur during use.

The safety devices (photoelectric cells, mechanical obstruction sensor, emergency stop, etc) must be installed taking into account: the provisions and the directives in force, good workmanship criteria, the installation area, the functional logic of the system and the forces developed by the motorised door or gate.

The safety devices must protect against compression, shearing, trapping and general danger areas of the motorized door or gate.

Display the signs required by law to identify danger areas.

Each installation must bear a visible indication of the data identifying the motorised door or gate.



Before connecting to the mains check that the rating is correct for the destination power requirements.

A multipolar isolation switch with minimum contact gaps of 3 mm must be included in the mains supply.

Check that upstream of the electrical installation there is an adequate differential switch and a suitable circuit breaker.

When requested, connect the motorized door or gate to an effective earthing system carried out as indicated by current safety standards. During installation, maintenance and repair operations, cut off the power supply before opening the cover to access the electrical parts.



The electronic parts must be handled using earthed antistatic conductive arms.

The manufacturer of the motorising device declines all responsibility in cases where components which are incompatible with the safe and correct operation of the product only original spare parts must be used. For repairs or replacements of products only original spare parts must be used. The fitter must supply all information concerning the automatic, the manual and emergency operation of the motorised door or gate, and must provide the user the device with the operating instructions.

It is recommended that antistatic conductive earthed arm bands be worn when manipulating electronic parts.

MACHINERY DIRECTIVE

Pursuant to Machinery Directive (98/37/EC) the installer who motorises a door or gate has the same obligations as the manufacturer of machinery and as such must:

- prepare the technical file which must contain the documents indicated in Annex V of the Machinery Directive; (The technical file must be kept and placed at the disposal of competent national authorities for at least ten years from the date of manufacture of the motorised door);
- draft the EC declaration of conformity in accordance with Annex II-A of the Machinery Directive and to release same to the customer;
- affix the CE marking on the power operated door in accordance with point 1.7.3 of Annex I of the Machinery Directive.

For more information consult the "Technical Manual Guidelines" available on Internet at the following address: <http://www.ditec.it>

DECLARATION BY THE MANUFACTURER

(Directive 98/37/EC, Annex II, sub B)

Manufacturer: DITEC S.p.A.

Address: via Mons. Banfi, 3 - 21042 Caronno Pertusella (VA) - ITALY

Herewith declares that the electromechanical automatic system series SILVER

- is intended to be incorporated into machinery or to be assembled with other machinery to constitute machinery covered by Directive 98/37/EC, as amended;
- is in conformity with the provisions of the following other EEC directives:
Electromagnetic Compatibility Directive 89/336/EEC, as amended;
Low Voltage Directive 73/23/EEC, as amended;

and furthermore declares that it is not allowed to put the machinery into service until the machinery into which it is to be incorporated or of which it is to be a component has been found and declared to be in conformity with the provisions of Directive 98/37/EC and with national implementing legislation.

Caronno Pertusella, 26/02/1997.

Fermo Bressanini
Fermo Bressanini

APPLICATIONS

Maximum permissible weight and recommended weight: see TECHNICAL DATA

Service life: 3 (minimum 10÷5 years of working life with 30÷60 cycles a day)

Applications: FREQUENT (For vehicle or pedestrian accesses to town houses or small condominiums with frequent use).

Minimum number of consecutive cycles: 20

- Performance characteristics are to be understood as referring to the recommended weight (approx. 2/3 of maximum permissible weight). A reduction in performance is to be expected when the access is made to operate at the maximum permissible weight.
- Service class, running times, and the number of consecutive cycles are to be taken as merely indicative having been statistically determined under average operating conditions, and are therefore not necessarily applicable to specific conditions of use. During given time spans product performance characteristics will be such as not to require any special maintenance.
- The actual performance characteristics of each automatic access may be affected by independent variables such as friction, balancing and environmental factors, all of which may substantially alter the performance characteristics of the automatic access or curtail its working life or parts thereof (including the automatic devices themselves). When setting up, specific local conditions must be duly borne in mind and the installation adapted accordingly for ensuring maximum durability and trouble-free operation.

All right reserved

All data and specifications have been drawn up and checked with the greatest care. The manufacturer cannot however take any responsibility for eventual errors, omissions or incomplete data due to technical or illustrative purposes

1 TECHNICAL DATA	SILVER 1B	SILVER 40B
Power supply	230 V~ 50 Hz	230 V~ 50 Hz
Absorption	1.1 A	1.1 A
Motor power	180 W	180 W
Geared motor torque	3000 N	3000 N
Speed	22 s / 90°	38 s / 90°
Jogging	S2=15min,S3=25%	
Temperature	-15 °C / +50 °C	
Degree of protection	IP45	
Applications		

2. REFERENCE TO ILLUSTRATIONS

2.1 Standard installation references (fig. 1)

ATTENTION: Only use DITEC's safety devices and accessories for installation.

- | | | |
|--------------------|--|--------------------|
| [1] Radio | [4] Connect power supply to an type-approved | [5] electric board |
| [2] Flashing light | omnipole switch with a contact opening | [6] Geared motor |
| [3] Key selector | gap of no less that 3 mm (not supplied by | [7] Photocells |
| | us) | |

2.2 Accessories (fig. 2): SILVER PF

Plates with anchoring brackets for weld-free mounting

2.3 Geared motor references (fig. 4)

- | | | |
|---------------|-------------------|--------------------------|
| [8] Condenser | [11] Tail bracket | [14] Screw covering ring |
| [9] Cover | [12] Head bracket | [15] Piston rod |
| [10] Release | [13] Shaft cover | [16] Plug |

3. INSTALLATION

3.1 Preliminary checks

Check that the structure is sufficiently sturdy and that the hinge pivots are properly lubricated. Provide an opening and closing stop.

Attention: SILVER 1B can only be installed if distance C is less than 60 mm (see Fig. 10)

3.2 Installing the geared motor

- Remove the geared motor from its package. **Attention:** Cover [9] is not secured.
 - Position tailplate [11] on to the pillar to check installation measurements (see Figs. 10) and secure.
- Note:** The installation measurements given in the table in Figure 10 permit to select the values for [A] and [B] according to the desired opening angle and with reference to existing room and spaces. **Compliance with the measurement given in the table is recommended.** In order to ensure smooth gate movement, check that measurements [A] and [B] are the same. Increasing [A] reduces the coming up speed during opening. Increasing [B] diminishes the coming up speed during closing and improves burglar-proofing. Reducing [B] increases the extent of gate opening. Measurements [A] and [B] must in any case be compatible with the useful travel of the piston so that; if [A] is increased, [B] must be diminished and vice versa.
- Mount the piston on tail bracket [11] (see Fig. 5).
 - Pull piston drive shaft [15] out to its full length and shorten it of approx. 20 mm (see dimension L of fig 10).
 - When the gate is completely closed, position the head bracket in proximity to the attachment of the piston. Check that head and tail brackets are perfectly level (see Fig. 6). Secure the head bracket to the gate.
 - Secure the piston to the head bracket (see Fig. 7).
 - Fit and secure shaft cover [13] on to the drive shaft by means of the screws provided (before fitting, greasing of the inside of the shaft cover with a thin film of grease is recommended).
 - Release the piston (see operating instructions).
 - Manually move the gate to check for free and smooth movement.
 - Fit in the screw covering ring [14] and the plug (securing of plug to shaft cover by means of silicone gel is advisable).
 - Seal off the two top holes [F] of the half casing by means of the two plugs provided (or with silicone gel) (see Fig. 3).
- Attention: Check that the two bottom holes of the half-casing are not clogged thus preventing water to drain off properly.**

4. ELECTRICAL CONNECTIONS

Drill a hole in cover [9] in correspondence with [E] (facing downwards) to route the cable (see Fig. 3).

Attention: Cable must be secured by means of a cable fitting (not supplied).

The SILVER 1B/40B geared motors can be connected to electric panels D1, D2, LOGIC A21, LOGIC A22.

Connect the geared motors SILVER 1B / 40B as shown in fig. 8 (1 wing) other in fig. 9 (2 wings).

5. MAINTENANCE PROGRAM (each 6 month)

Power off (230 V~ mains and batteries, if installed):

- Clean and lubricate the pivot pins.
- Check that fastening points are properly tightened.

Power on (230 V mains and batteries, if installed):

- Check the power adjustments.
- Check the operation of all command and safety functions (photocells).
- Check the good operation of the release.

ATTENTION: For spare parts, see the spares price list.

TEAR OFF AND DELIVER TO USER



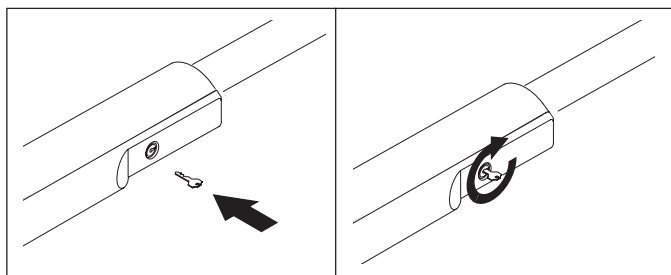
AUTOMATIC ENTRANCE SPECIALISTS

Operating instruction SILVER 1B / 40B



Electromechanical automatic system for swing gates.

ENGLISH



RELEASE INSTRUCTION

In case of faulty operation or power failure, insert and rotate the key clockwise. Unlock the electric lock, if mounted. Manually slide the gate open.

To relock the wings, turn the key anticlockwise.

Attention: Lock and release operations must be performed with motor not running.

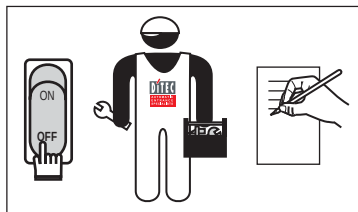
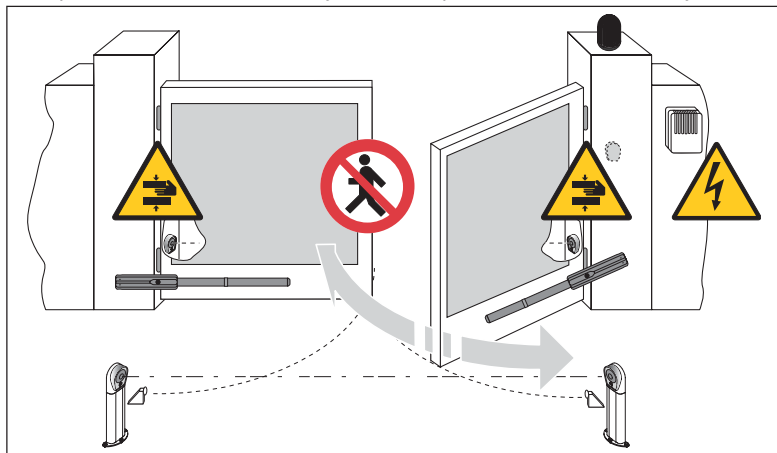


GENERAL SAFETY PRECAUTIONS

The following precautions are an integral and essential part of the product and must be supplied to the user. Read them carefully as they contain important indications for the safe installation, use and maintenance. These instructions must be kept and forwarded to all possible future user of the system. This product must be used only for that which it has been expressly designed. Any other use

is to be considered improper and therefore dangerous.

The manufacturer cannot be held responsible for possible damage caused by improper, erroneous or unreasonable use. Avoid operating in the proximity of the hinges or moving mechanical parts. Do not enter the field of action of the motorised door or gate while in motion. Do not obstruct the motion of the motorised door or gate as this may cause a situation of danger. Do not allow children to play or stay within the field of action of the motorised door or gate.



Keep remote control or any other control devices out of the reach of children, in order to avoid possible involuntary activation of the motorised door or gate. In case of break down or malfunctioning of the product, disconnect from mains, do not attempt to repair or intervene directly and contact only qualified personnel. Failure to comply with the above may create a situation of danger.

All cleaning, maintenance or repair work must be carried out by qualified personnel.

In order to guarantee that the system works efficiently and correctly it is indispensable to comply with the manufacturer's indications thus having the periodic maintenance of the motorised door or gate carried out by qualified personnel.

In particular regular checks are recommended in order to verify that the safety devices are operating correctly.

All installation, maintenance and repair work must be documented and made available to the user.

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ISO 9001 - Cert. n° 0957/1

Installer:



CARONNO P. ILLA - VA
QUARTO D'ALTINO - VE



ISO 9001
Cert. n° 0957/1

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AUTOMATIC ENTRANCE SPECIALISTS

D2

Manuale di installazione quadro elettrico per cancelli a battente con 2 motori a 230 V~
electrical board installation handbook for 230 V~ two motors swing gate

Manuel d'installation armoire électrique pour portails à battants à 2 moteurs 230 V~

Steuerung Montagehandbuch für Schwingtore mit 2 Motoren 230 V~

Manual para la instalación cuadro eléctrico para cancelas batientes con 2 motores a 230 V~

DATI TECNICI	TECHNICAL DATA	DONNEES TECHNIQUES	TECHNISCHE DATEN	DATOS TECNICOS	D2
Alimentazione	Power supply	Alimentation	Stromzufuhr	Alimentación	230 V~ 50 Hz
Uscita motori	Motors output	Sortie moteurs	Motoren Ausgang	Salida motores	230 V~ 2x2.5 A
Alimentazione accessori (nominale) (picco)	Accessories power supply (nominal) (peak)	Alimentation accessoires (nominale) (mât)	Zubehöre Stromzufuhr (Nominal) (Spitze)	Alimentación accessorios (nominale) (pico)	24 V $\overline{\text{=}}$ / 0.15A 24 V $\overline{\text{=}}$ / 0.3A
Temperatura	Temperature	Temperature	Temperatur	Temperatura	-15 °C/+50 °C
Grado IP	Degree IP	Degré IP	Schutzart	Grado IP	IP54
Dimensioni	Dimensions	Dimensions	Abmessungen	Dimensiones	180x250x100

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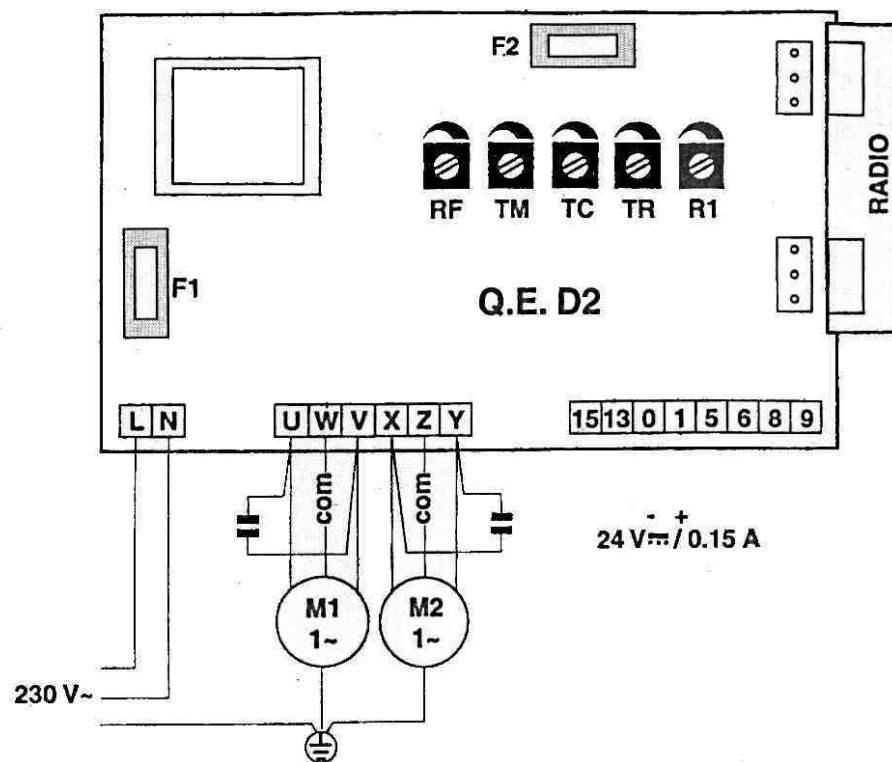
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ICIM

ISO 9001 - Cert. n° 0957/0

novotecnica



F1 = F5A
F2 = F315mA

Linea / Line / Secteur / Linea / Linea
Accessori / Accessories / Accessoires /
Zubehöre / Accesorios



GENERAL SAFETY PRECAUTIONS

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Packaging materials (plastics, polystyrene, etc) must not be allowed to litter the environment and must be kept out of the reach of children for whom they may be a source of danger.

Before beginning the installation check that the product is in perfect condition.

Do not install the product in explosive areas and atmospheres: the presence of flammable gas or fumes represents a serious threat to safety. The safety devices (photoelectric cells, mechanical obstruction sensor, emergency stop, etc) must be installed taking into account: the provisions and the directives in force, good workmanship criteria, the installation area, the functional logic of the system and the forces developed by the motorised door or gate. Before connecting to the mains check that the rating is correct for the destination power requirements. A multipolar isolation switch with minimum contact gaps of 3 mm must be included in the mains supply.

Check that upstream of the electrical installation there is an adequate differential switch and a suitable circuit breaker.

Ensure that the motorised door or gate has an earth terminal in accordance with the safety regulations in force.

The manufacturer of the motorising device declines all responsibility in cases where components which are incompatible with the safe and correct operation of the product only original spare parts must be used.

For repairs or replacements of products only original spare parts must be used.

INSTALLATION WARNING

Secure the electric board permanently. Drill the lower side of the container so as to run the cables through it. Secure the cables, if they are accessible, by means of appropriate gland plates (not provided by us). Keep the line and motor conductors separate (at least 8 mm.) from the control conductors at the terminal board connection points (for example, by means of clamps). Connect the line and motor protection conductors (yellow-green) by means of the terminal provided.

1. ELECTRICAL CONNECTION

Link up all N.C. contacts (if not used) by means of jumpers.

The terminal bearing the same number are equivalent.

The given operating and performance features can only be guaranteed with the use of DITEC accessories and safety devices.

1.1 Controls

CONTROL	FUNCTION	DESCRIPTION
1 — 5 N.O.	STEP BY STEP	With automatic closing not enabled (TC set to maximum), the sequence is: open-stop-close-open. With automatic closing enabled: only open (closes only with gate not moving).
1 — 6 N.C.	STOPPING SAFETY CONTACT	It stops or prevents any operations.
1 — 8 N.C.	REVERSAL SAFETY CONTACT	Reverses movement (re-opens) during closing. When door is not moving, inhibits all operations.
1 — 9 N.C.	STOP	By opening the contact the gate stops or remains still and the automatic closing is disabled. By using a switch, the gate totally stop until 1-9 is reset. By using a push-button it stops temporarily until the first voluntary control signal is given (1-5 or remote control).
RADIO	STEP BY STEP	It has the same function as the 1-5 control.

1.2 Output and accessories

Output	Value	Description
1 — + 0 — -	24V $\overline{\text{---}}$ / 0.15 A (nominal) 0.3 A (peak)	Accessories power supply. Output for power external accessories including the gate-open signal lamp.
W —  — N	230 V ~ / 50 W max.	Flashing light (LAMP). Flashes during door opening and closing. With door closing automatically, light begins flashing 3 s before the time set via TC has elapsed. When TC is set to less than 3 s, preflashing continues throughout the whole period the door is not moving.
0 —  — 15	12 V $\overline{\text{---}}$ / 15 W	Electric lock. Impulsive output for an electric lock. Is activated upon start of each opening command. Attention: The electric lock release is not enabled.
1 —  — 13	24V $\overline{\text{---}}$ / 1.5 W max.	Gate open signal lamp. Turn on a light that goes off when the gate is closed.

1.3 Settings and adjustment

- TC Automatic closure time.** From 0 to 120 s, from minimum to 3/4 turn. Count down initiates or starts up again:
- according to the time set by TC at the end of opening;
 - for half of the time set by TC after triggering a safety device (1-6 / 1-8).
- With TC at max. or 1-9 open, automatic closing is disabled. If disabled from 1-9, automatic closing is once again enabled, by contacts 1-9 being reclosed, **only after the first opening operation.**
- TM Max. operating time.** From 10 to 90 s with TM from minimum to maximum.
- TR Delay time motor 1 adjustment.** Controls the delay time of motor 1 during closing, from 0 to 30 s. During opening the delay of motor 2 is fixed at 3 s.
- RF Power adjustment.** With RF from minimum to maximum. At start-up the motor is powered at full mains power for 1 s before switching over to the power set via RF
- R1 Obstacle detection adjustment.** A safety device is located on the electric panel the purpose of which is to stop door opening and closing in case of an obstacle being detected. With R1 set to a minimum, obstacle detection is at a maximum. With R1 set to a maximum, obstacle detection is disabled.

2. STARTING



WARNING The operations regarding point 2.2 are without safety devices.
The trimmer can only be adjusted with gate not moving (RF excluded).

- 2.1 Set TC, RF and R1 at maximum. Short circuit the safety devices (1-6 and 1-8) and the stop (1-9).
- 2.2 Give power supply. Check the gate function correctly with a sequence step-by-step command. Set the TM trimmer so that the manoeuvring time is 2 to 3 seconds longer than that actually taken by the gate and trimmer TR so that, once closed, wings are correctly overlapped.
- 2.3 Remove the jumpers and connect the safety devices (1-6 and 1-8) and the stop (1-9) and check their function.
- 2.4 If desired, adjust the automatic closure with TC. **Warning:** the automatic closure time after the operation of one of the safety devices is half the set time.
- 2.5 Put RF in the position which ensure functioning and the safety of the user.
- 2.6 After having set RF, set the obstacle detection sensitivity with R1.
- 2.7 Connect any accessories and check their function.
- 2.8 Re-close the container by means of the 4 screws, taking care to properly position the cover (lower side = Devoid of gasket).

All right reserved

All data and specifications have been drawn up and checked with the greatest care. The manufacturer cannot however take any responsibility for eventual errors, omissions or incomplete data due to technical or illustrative purposes.

DO IT SLL

Collegamenti elettrici
Electrical connections

