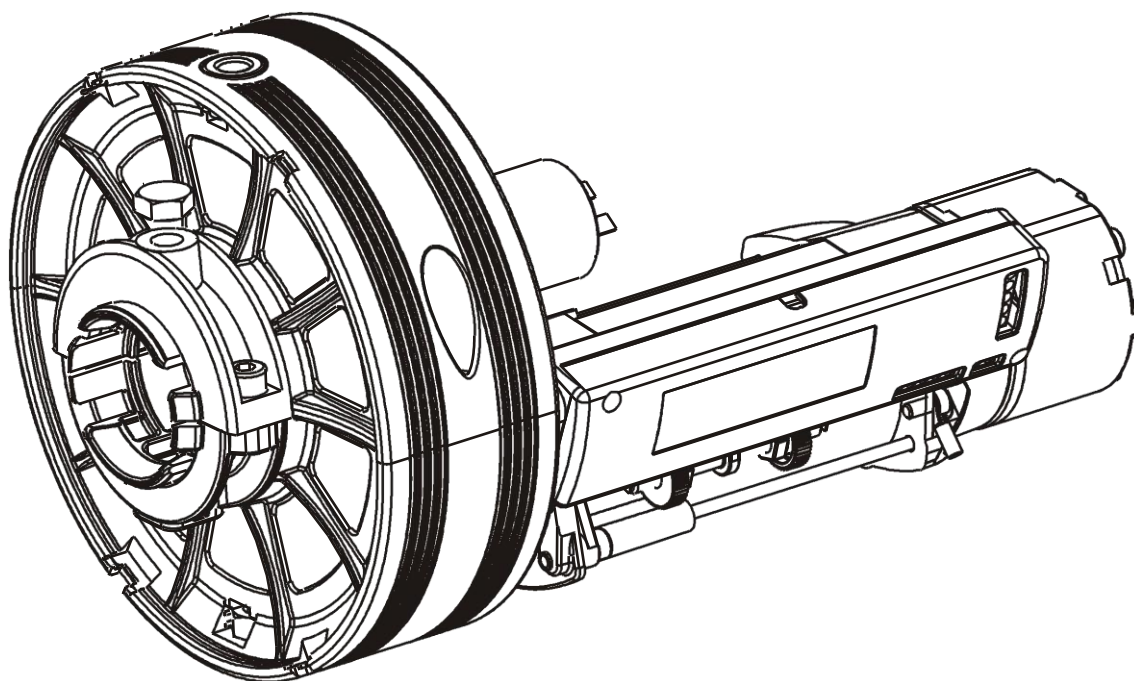


Operator for roll-up doors



Operator for roll-up doors

2140121400

Serial number



fig.1

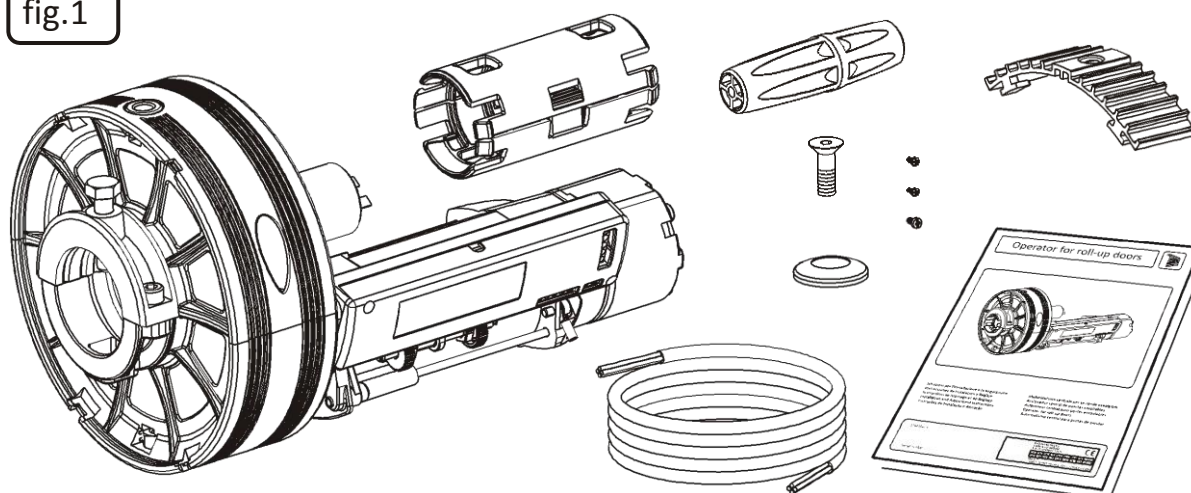


fig.2

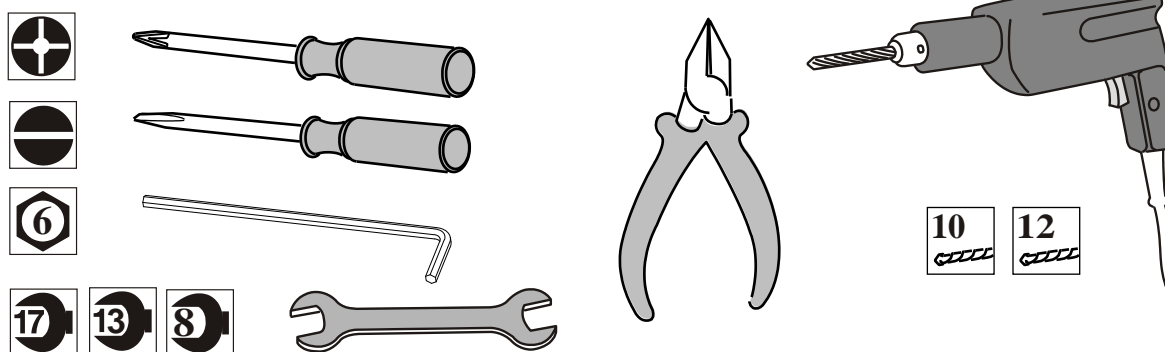


fig.3

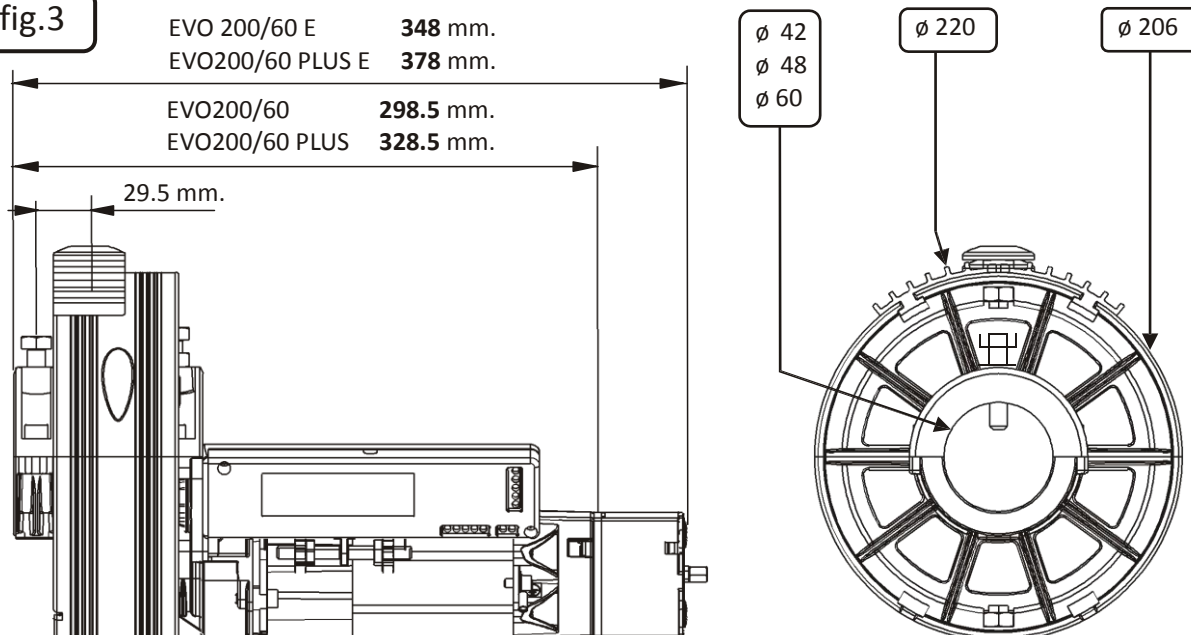
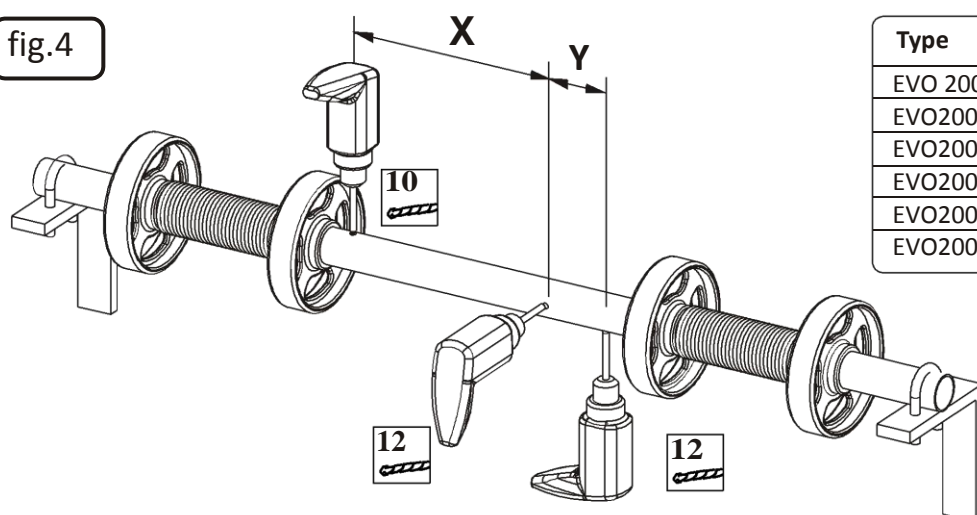




fig.4



Type	X	Y
EVO 200/60 E	340	90
EVO200/60 PLUS E	370	90
EVO200/60 BME	370	90
EVO200/60	340	-
EVO200/60 PLUS	370	-
EVO200/60 BM	370	-

fig.5A

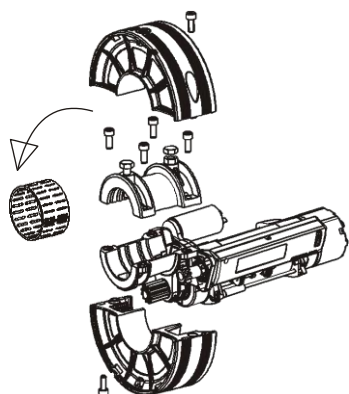


fig.5B

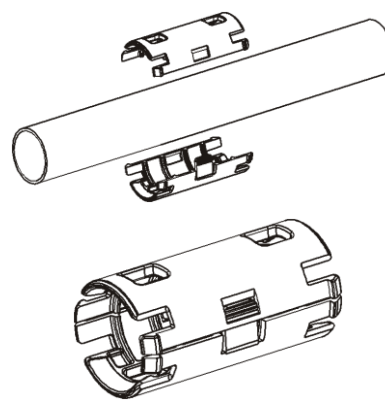


fig.6

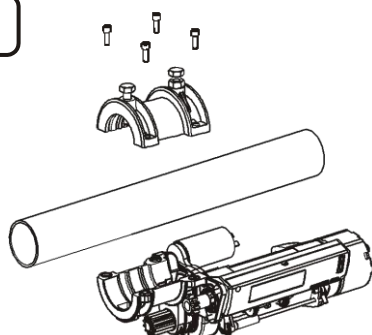


fig.7

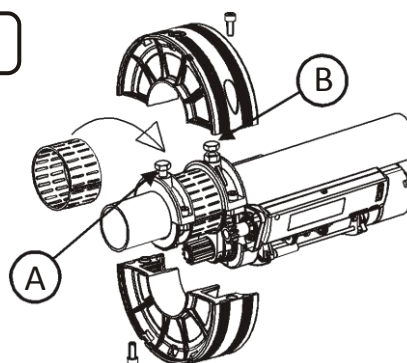


fig.8

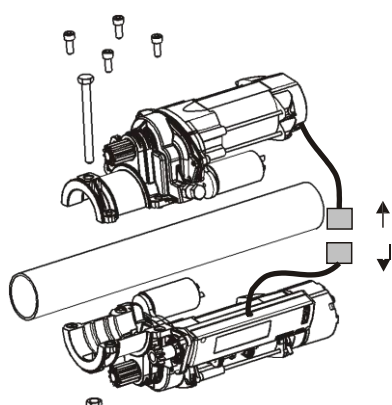


fig.9

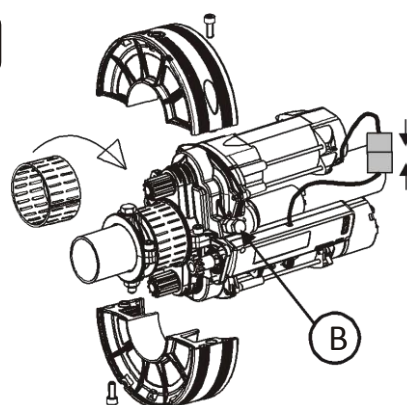




fig.10

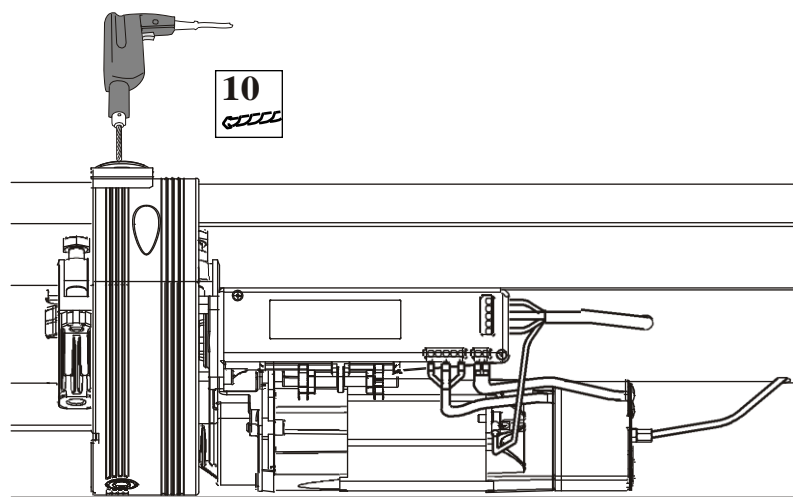


fig.11

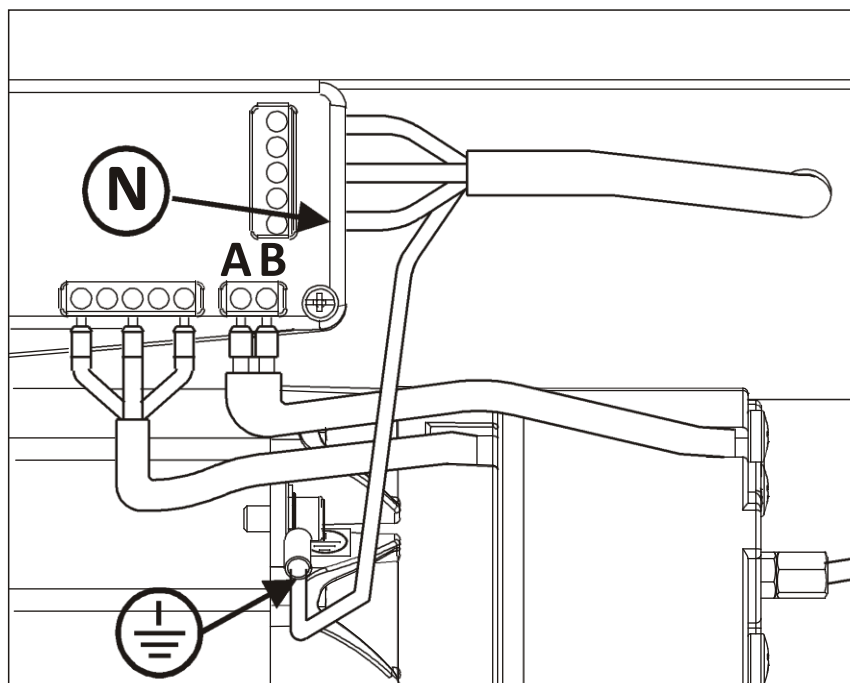


fig.12

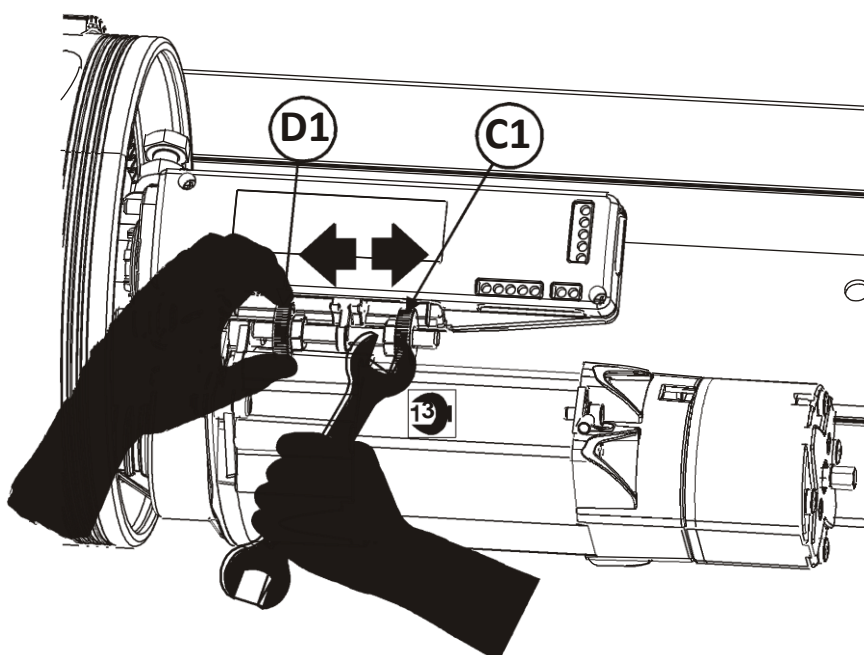




fig.13

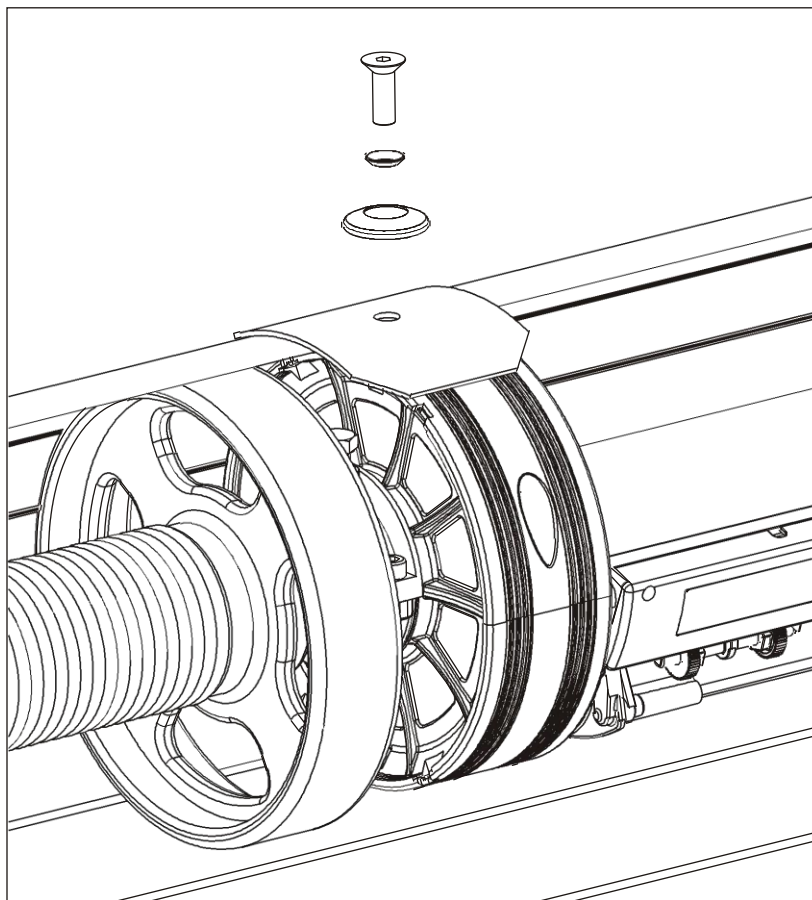
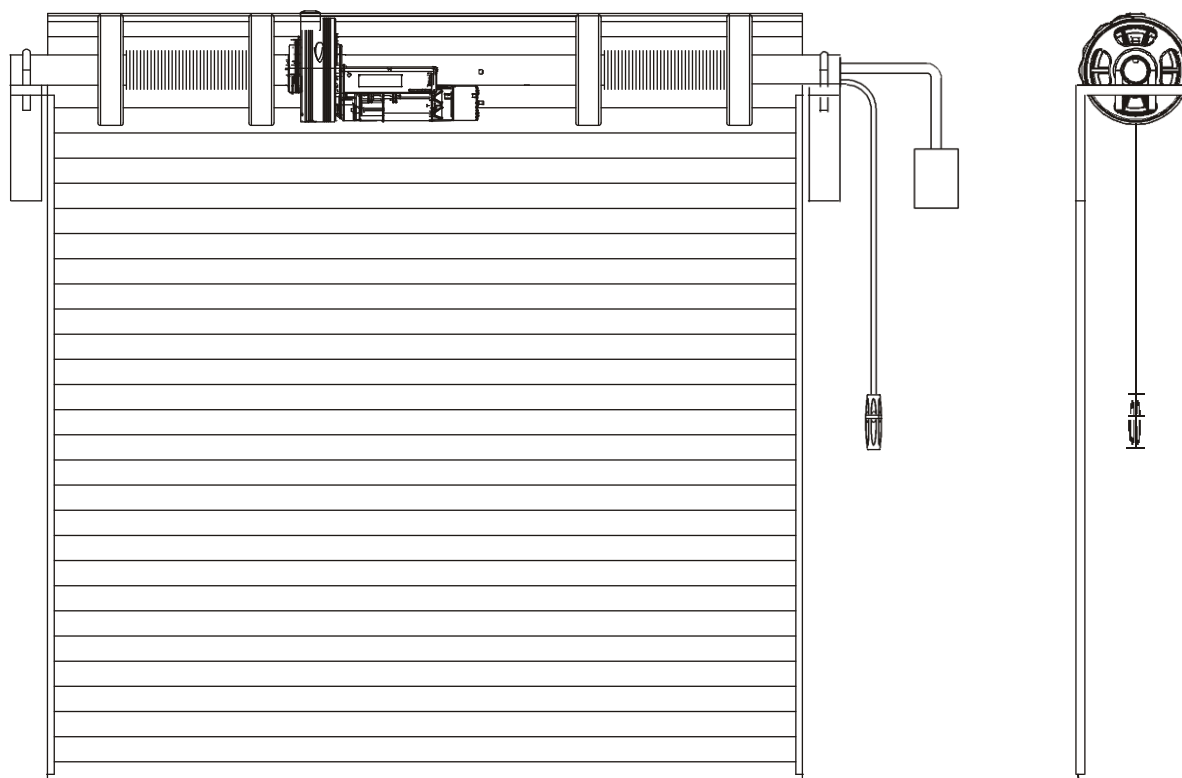


fig.14





INSTRUCTIONS FOR THE INSTALLER

General safety warnings

ATTENTION

- 1** For the safety of the people it is extremely important to follow these instructions.
Improper installation or misuse of the product may cause serious injury.
- 2** Read the instructions carefully before installing the product
- 3** Store instructions for future use
- 4** This product has been designed exclusively for the use indicated herein. Any other use may affect the operation of the product or be a source of danger.
- 5** Do not install the equipment in explosive atmosphere: the presence of flammable gases or fumes is a serious safety hazard.
- 6** The mechanical parts must be in accordance with EN 12604 and EN 12605.
- 7** The manufacturer is not responsible for the proper manufacturing of doors that must be automated, as well as deformations that might occur while using
- 8** The manufacturer disclaims any responsibility derived from the inappropriate use of the product.
- 9** For each installation, we recommend using at least one flashing light signal or a signpost on the structure permanently fixed, in addition to the devices referred to in paragraph 21
- 10** We accept no responsibility for the safety of operator and the malfunctioning if you use components that are not original from factory
- 11** For maintenance, strictly use original parts
- 12** Do not make any changes in the components that are part of the automatism
- 13** The installer must provide all information relating to the operation of the system in case of emergency and provide the user the "User Manual" which is attached to the product.
- 14** Packing materials (plastic, polystyrene, etc..) should not be within the reach of children as they are potential sources of danger
- 15** Do not allow children or persons standing in the vicinity of the installation during its operation
- 16** Keep out of reach of children any remote controls or pulse transmitters to prevent the automatism from being operated accidentally.
- 17** Remove the power supply before performing any installation
- 18** Have the automated system's mains power supply fitted with a switch or Omni polar thermal-magnetic circuit breaker with a contact separation of at least 3 mm. We recommend the use of a 6A with pole switch.
- 19** Make sure that up line from the mains power supply there is a residual current circuit breaker that trips at 0.03A.
- 20** Make sure that the earth system has been installed correctly.
- 21** The safety devices such as photocells, safety edges or flashing lights (EN 12978) allow you to protect areas from possible dangers of crushing, dragging, and shearing.

RULES TO AVOID ACCIDENTS DURING INSTALLATION

The connection of the motor to the power line should be performed only after completion of the installation described below and only before the operation direction test and check of the limit. The operation direction test and check of the limit switch should be carried out while maintaining at a safe distance from the crumple zone of the door.



RULES TO AVOID ACCIDENTS DURING INSTALLATION

The connection of the motor to the power line should be performed only after completion of the installation described below and only before the operation direction test and check of the limit. The operation direction test and check of the limit switch should be carried out while maintaining at a safe distance from the crumple zone of the door.

SPECIFICATIONS FOR INSTALLATION

The motor must be installed in a space provided with protection so that special tools only are needed for assembly. This protection will prevent contact with the crumple zone of the door itself. The protection would not be necessary if the installation is done at a height exceeding 2.7 meters. In case of Dead Man functioning, the command position must be installed near the gate, in a position to allow the direct and complete visualization of the same. In case of doors with empty elements, you must verify the absence of fixed structures near the door, which can create zones of crushing. Photocells or sensors will be installed when required by applicable laws. The use of photocells or sensors is required when you install more than one centralized automated door or in case door is automated in an area that is not under direct control.

RULES TO AVOID ACCIDENTS DURING THE MAINTENANCE

Maintenance should be performed only after the motor has been prepared in safety mode. This is achieved by activating the switch pole, making sure it does not turn off during the maintenance operation (lock, signalling, etc.).

NOTE TO THE USER The maintenance or testing of the gear is prohibited to unauthorized personnel.

DESCRIPTION OF THE PRODUCT Content (Fig. 1). Tools required (Fig. 2)

CONDITIONS OF USE

The EVO range 200/60 motors are intended for installation of doors winding systems by qualified personnel. The EVO range 200/60 motors are designed and constructed for the installation of roller shutters provided with a compensation system (by springs) according to the weight limits indicated in the table related to the technical specifications. It is prohibited the use of the motor in applications other than those mentioned above.

TECHNICAL DATAS	EVO 200/60	EVO 200/60E	EVO 200/60 PLUS	EVO 200/60 PLUS E	EVO 200/60 BM	EVO 200/60 BME
Absorbed power	400 W		600 W		1200 W	
Lifting	140 Kg.	130 Kg.	170 Kg.	160 Kg.	305 Kg.	300 Kg.
Power supply	II 230 V. 50/60 Hz +7%					
Current	1.8 A.		2.8 A.		5.6 A.	
Nominal torque	145 Nm.	135 Nm.	175 Nm.	165 Nm.	300 Nm.	295 Nm.
Pulley speed	10 r.p.m.					
Working temperature	-20° C +50° C					
Maximum door travel	6 m.					
Operation time	5 '		4.5 '		5 '	
Weight of the motor	6.67 Kg.	7.65 Kg.	7.42 Kg.	8.4 Kg.	9.5 Kg.	10.5 Kg.

MOUNTING OPERATIONS

Drill in the shutter's central shaft (Fig. 4) one hole \varnothing 10 mm. in order the operator doesn't turn, and another \varnothing 12 mm. for the electric wire. If possible, place the operator in the centre of the shutter's shaft in an easy position for opening the micro-switches lid to make the wire and the regulation of the limit switches. In case of electric brake, make another drill of \varnothing 10 mm. for the cable of the manual release.

Open the pulley unscrewing the M8x25 screws remove the plastic roller band without folding it and keep it in a clean place. Separate the gear-motor's body removing the 4 screws with the 6mm. (fig. 5A). hexagonal wrench.

Couple the two parts of the gear-motor around the door's shaft and joint them screwing the 4 screws on the gear-motor's support (fig. 5B)

Tighten the M10x40 screw (Fig. 7 A) entering it into the \varnothing 10 mm. hole of the shutter's shaft.

Put again the plastic roller band in its place.

Apply again the pulley by coupling the two parts and tighten the screws.

Screw also the M10x40 (Fig. 7 B), bi-motor (fig. 9 B). Pressing on the shaft till the gear-motor is blocked and tighten the nut.



The operator should be fixed, lined and the pulley must turn freely.

Make a hole \varnothing 12 mm. in the last canvas of the shutter at the same location of the hole and nut M10 of the pulley (Fig. 10). If the shutter is waved or not regular, it is necessary to couple a flat metal piece of 1 meter to the pulley.

Travel the electric cable through the shaft's hole \varnothing 12 mm. (Fig. 11), avoiding any contact with the rotating parts and make the wires. In case of motor with electric brake travel also the brake cable through the hole of \varnothing 12 mm. drilled in the shaft, and mount the manual release.

For a proper release the flexible cable of the brake should not do any exaggerated curve.

ELECTRIC WIRE (Fig. 11)

It is very important to respect the connection of the common of the motor (N) and the earth connection. The model with electro brake comes already wired. If the automatism is not provided with electro brake, bridge the contacts (A, B fig 11). With electro brake, remove the bridge and on the same terminals connect the reel.

SECURITY STANDARD: The connection wires should come from a differential switch.

CHECKING THE OPERATION DIRECTION (Fig. 12)

Place the closing stop collar (C1) until the click of the opening micro-switch is heard (fig. 12) Give power, if the motor stops at closing it's correct. If not, cut the power and change the position of the phase wires, or the two wires that go to the control unit, or activate it manually by means of the push button or the key switch. Continue respecting the common jumper of the motor (N).

REGULATION OF THE OPENING LIMIT-SWITCH (Fig. 12)

Fix the door to the pulley with the supplied pulley fixing ring, fan-type lock washer and M10x25 countersunk bolt. If the pulley of the door and the pulley of the motor are not the same size, apply the 220 mm adaptor. Move manually the opening stop collar (D1) up to the regulation of the opening of the door. [Fig.12]. Check the travel and adjust it if necessary.

REPLACEMENT OF THE ELECTRIC WIRE

For a correct replacement of the electric wire respect the following indications:

Cut out the electric connection

Take out the lid that covers the micro switch removing the 2 screws.

Unscrew the 3 wires and the ground.

Remove the stuffing box and take out the cable (if does not slide cut it).

Loosen all the wire fixings to the electronic board.

Unwire the cable from the board.

Substitute the wire for another cable with standard (4x1HO5 VVF) in case of bi-motor (4x1.5 HO5 VVF).

Wire the new cable doing the same operations in the inverse sense.

Switch on the motor and check its correct direction. If not, change the black wire and the brown one. Make reference to the connection board indicated in the assembling instructions paying attention to the position of the common motor (N).

GUARANTEE

The Company guarantees all products against any production fault for a period of 2 years following the supply date.

LIABILITIES

The Company is obliged to undertake repairs of the equipments under guarantee, following revision by the technical department.

All the equipments that, due to emergency, are delivered before the decision they are actually under guarantee, will be considered as a standard order to be paid. Faulty equipment replaced under guarantee will remain of property of the Company. The replacement of such equipments will be on the installer's account and charge.

CANCELLATION

The equipment will not be under guarantee in the following cases:

- incorrect choice of the equipment given the door's characteristics
- the mounting and connecting instructions have not been followed
- payment has not been settled

