



ALPHA 200 PLUS ALPHA 330 PLUS

INSTALLATION MANUAL

The **ALPHA** is provided with a mechanical locking system that grants the operator locking in the opened and closed position avoiding any needs for electric locks and/or magnetic locks. The torque intensity and the anti-crushing safety are adjustable through the control board.

ALPHA PLUS is provided with mechanical limit switches which are located and protected in aluminum housing. It is also provided with a manual releasing system by a lever

Key-locked that must be used only in case of emergency and/or power failure to manually operate the gate.

MAIN PARTS

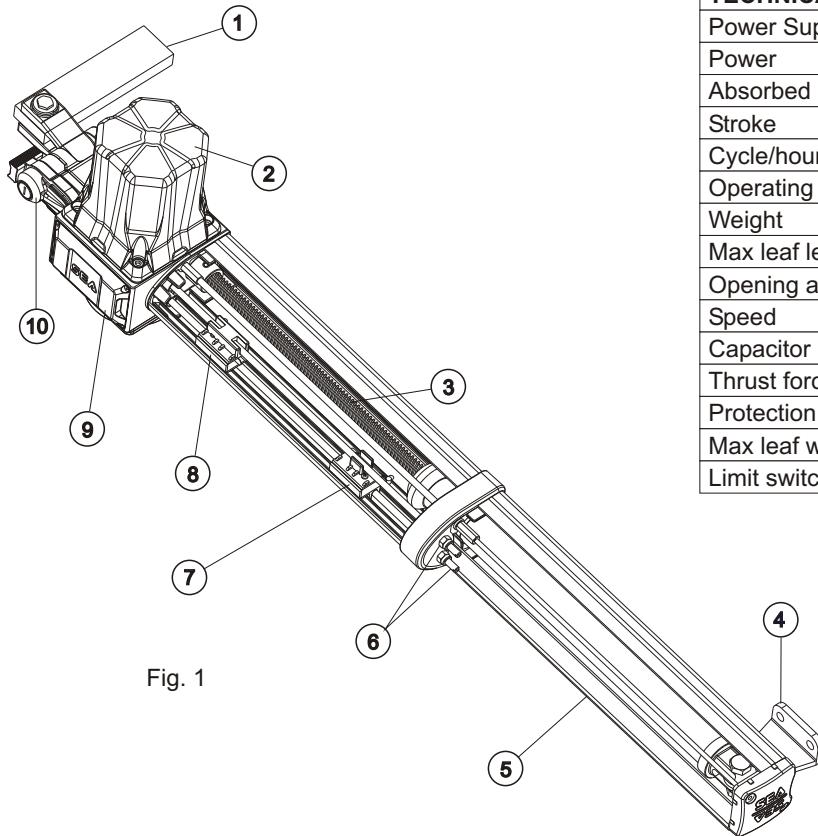


Fig. 1

TECHNICAL FEATURES	Alpha 200	Alpha 330
Power Supply	230Vac (±5%) 50/60 Hz	
Power	70W (24V) - 260W (230V)	
Absorbed current	1,2 A (24V) - 3 A (230V)	
Stroke	290 mm	400 mm
Cycle/hour	40 (24V) - 20 (230V)	
Operating temperature	-20°C +55°C	
Weight	9 Kg	9,5 Kg
Max leaf lenght	2,0 m	3,3 m
Opening angle	90° - 110°	90° - 120°
Speed	1,7 cm/sec.	
Capacitor	4 uF (230V)	6,3 uF (230V)
Thrust force	250 daN (24V) - 350 daN (230V)	
Protection class	IP44	
Max leaf weight	200 Kg	300 Kg
Limit switch		

- 1 Back bracket
- 2 Electric motor
- 3 Endless screw
- 4 Front bracket
- 5 Aluminum shaft-cover
- 6 Limit switches adjusting screws
- 7 Micro-switch for limit switch
- 8 Micro-switch for limit switch
- 9 Capacitor housing (230V version)
- 10 Manual Releasing lever

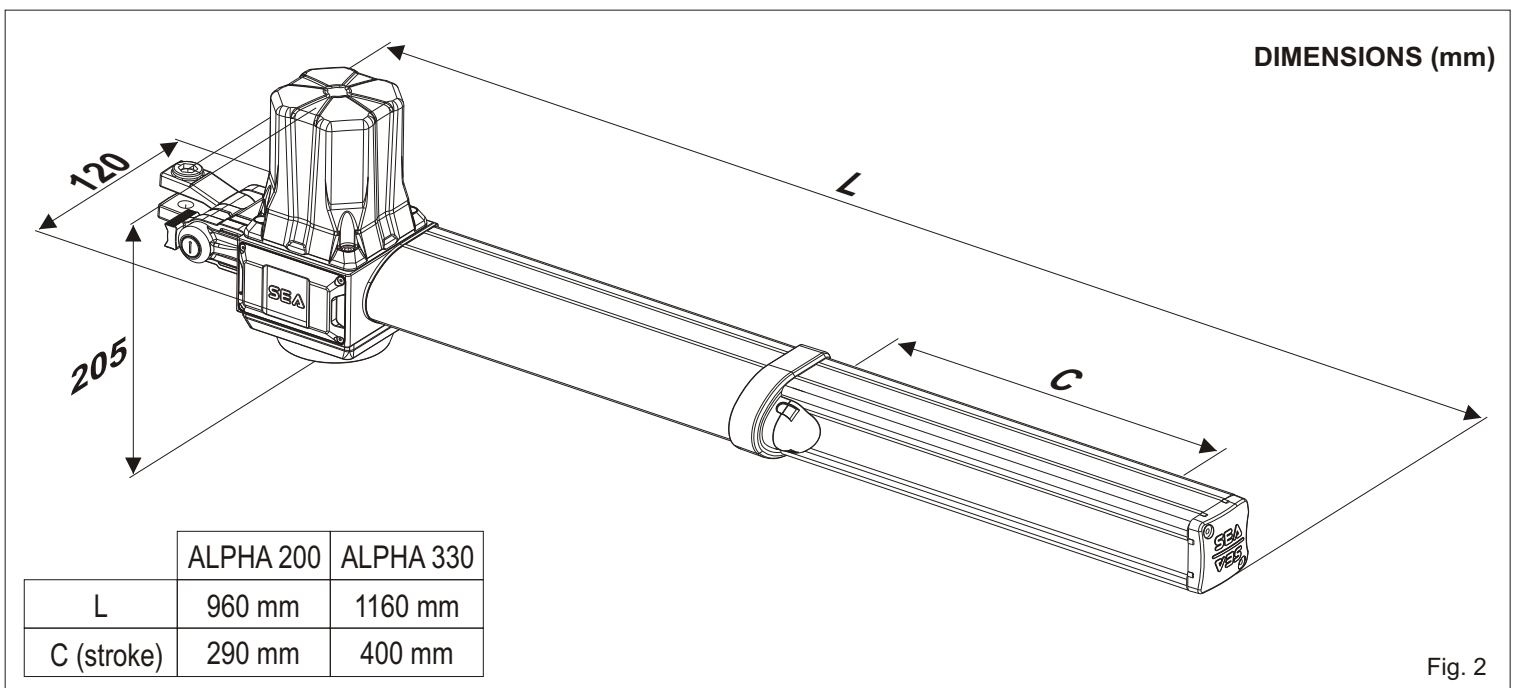
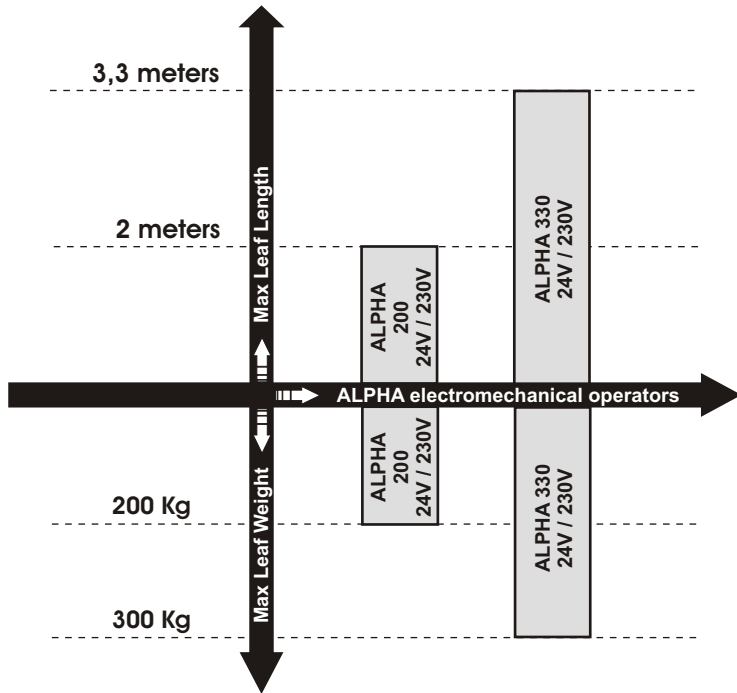


Fig. 2

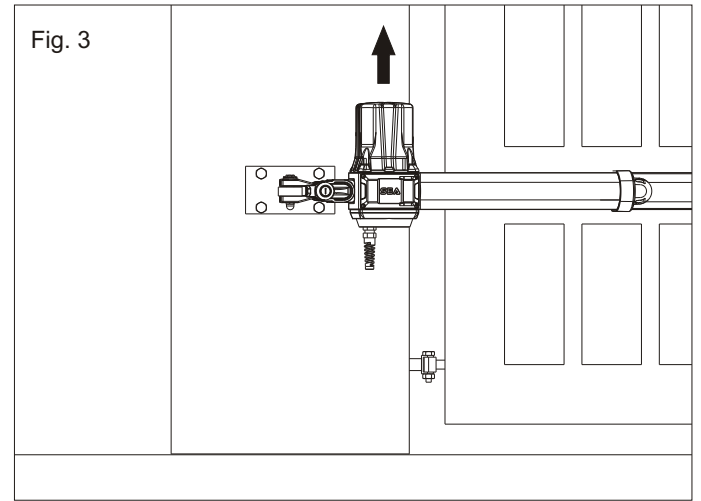


DIAGRAM FOR THE USE OF ALPHA 200 AND ALPHA 330



Notice:

The operator must be installed with the motor facing upward (Fig. 3)



STANDARD INSTALLATION

- 1) Operator
- 2) Warning Plate
- 3) Electronic Unit
- 4) Warning Lamp
- 5) Tx Photocell
- 6) Differential switch 16A 0,03A
- 7) Rx Photocell
- 8) Key Switch
- 9) Radio Receiver
- 10) Antenna
- 11) Column for photocells
- 12) Mechanical Stop

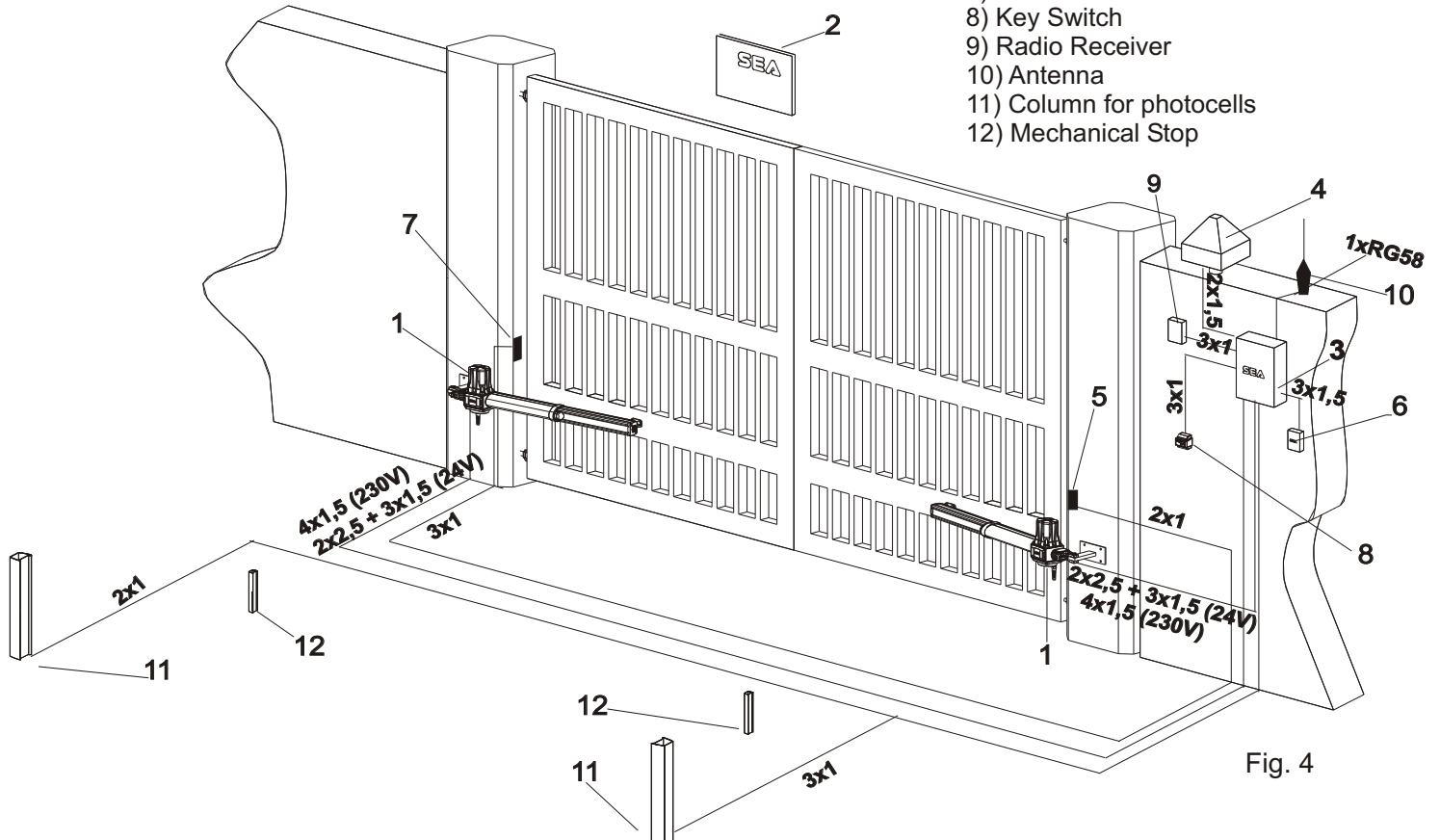


Fig. 4



1. GATE ARRANGEMENT

It is necessary to make controls on the gate to make sure the application of ALPHA automation can be possible.

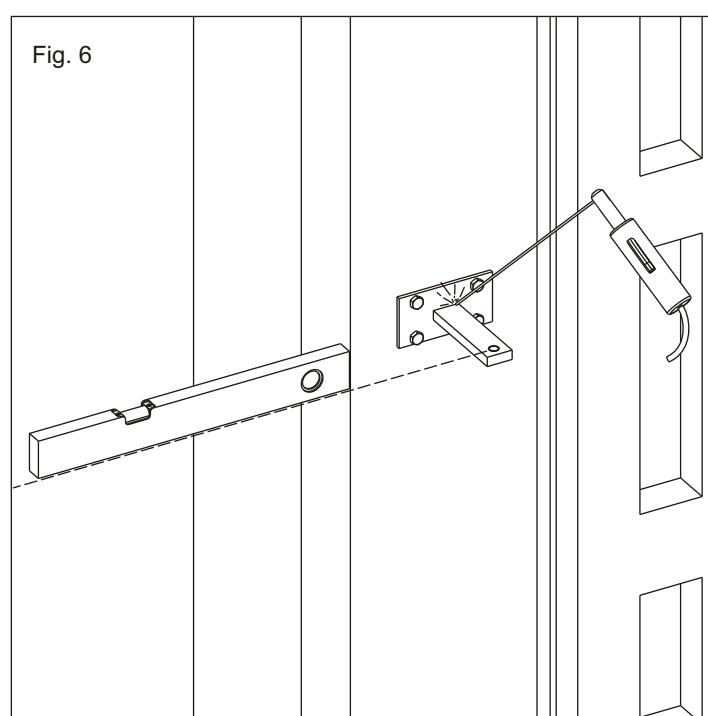
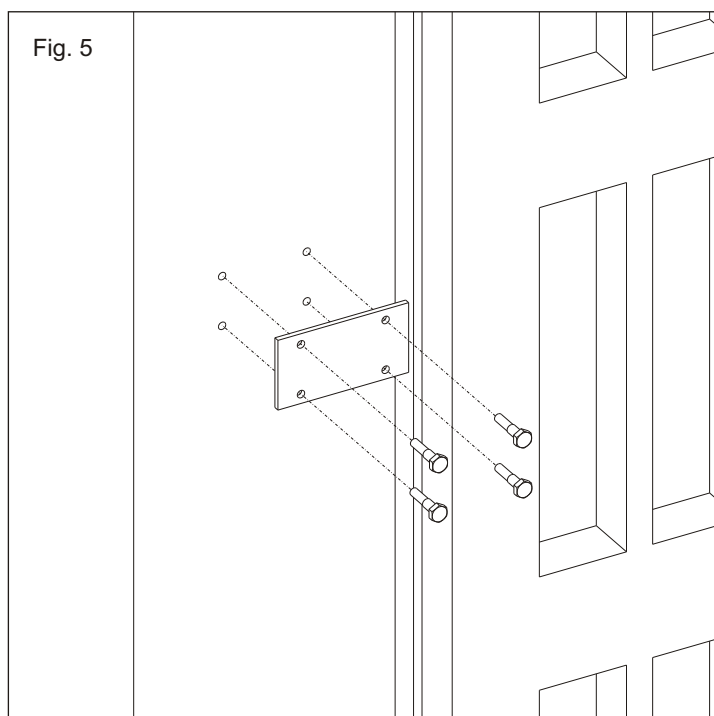
Make sure that:

- A.** the gate fixed and moving parts have a strong and crush-proof structure;
- B.** the length of each leaf is not over 2,0 meters (Alpha 200), 3,3 meters (Alpha 330);
- C.** the weight of each leaf is not over 200 Kg (Alpha 200), 300 Kg (Alpha 330);
- D.** the hinges are hardly anchored and are able to support the torque of the operator; they do not have irregular movements and/or any friction during the whole movement of the leaf;

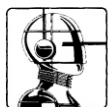
2. INSTALLATION OF THE OPERATORS

2.1. Fix the holed mounting plate to the post using screws as shown in Fig 5. The plate must be positioned perfectly horizontal and perpendicular to the post,

2.2. Weld the back bracket to the plate (Fig 6) following the dimensions shown in Fig 7 and 8. If it is necessary, cut the bracket without going over the minimum limit of 60 mm (Fig 9).



NOTICE:
ALPHA operator is not provided with mechanical torque regulation. The control board must be provided with electronic torque regulation (unless presence detectors are installed) to install it in conformity with the DIRETTIVA EN12453 and EN12445.



DIMENSIONS FOR INSTALLATION

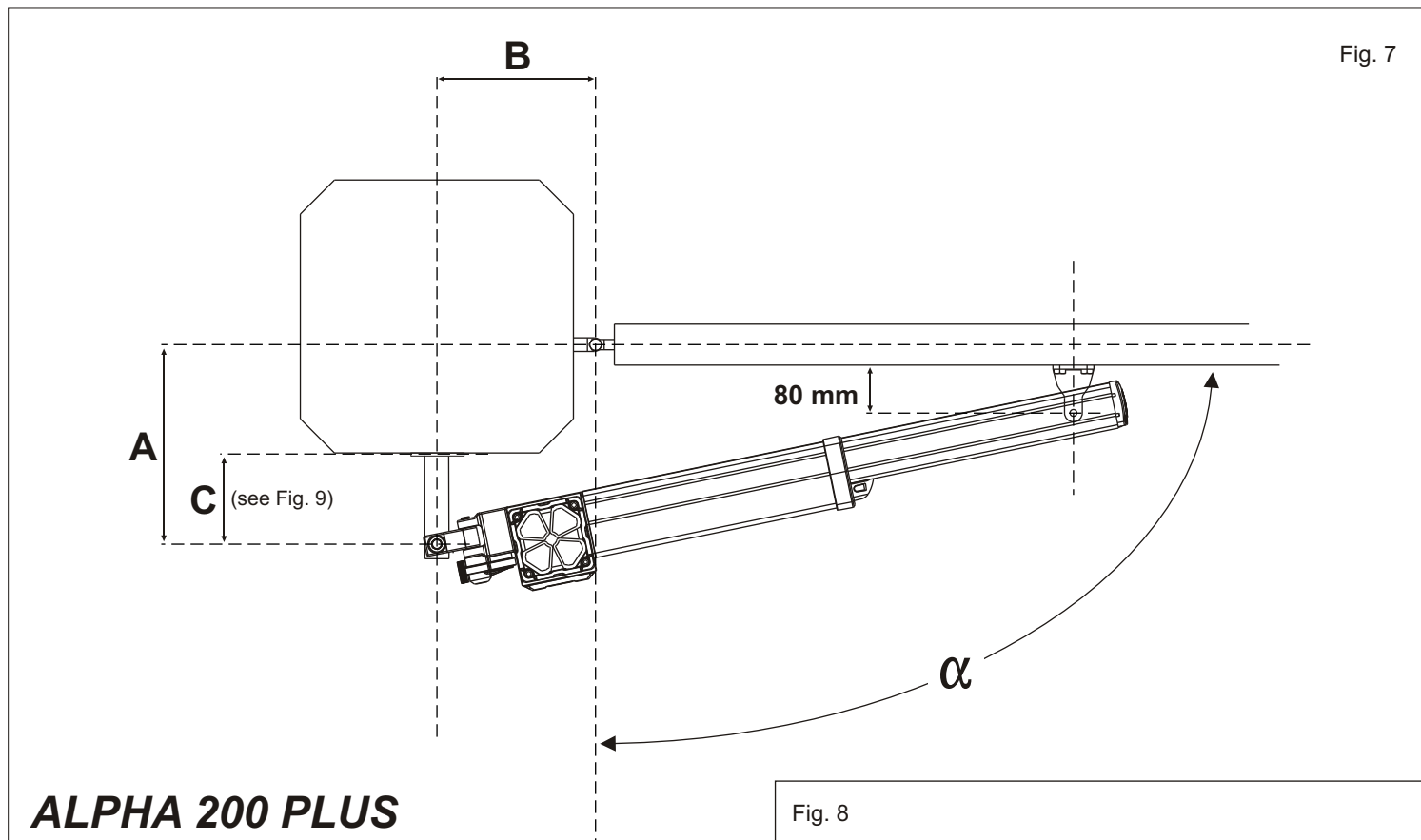


Fig. 7

ALPHA 200 PLUS

Opening angle α				
90°	A	160	140	120
	B	110	130	150
110°	A	110	110	120
	B	110	120	110

ALPHA 330 PLUS

Opening angle α					
90°	A	150	190	200	220
	B	150	190	170	160
120°	A	140	150	160	
	B	180	170	160	

The above mentioned dimensions are in mm.

During selection, prefer the higher dimensions of A and B.

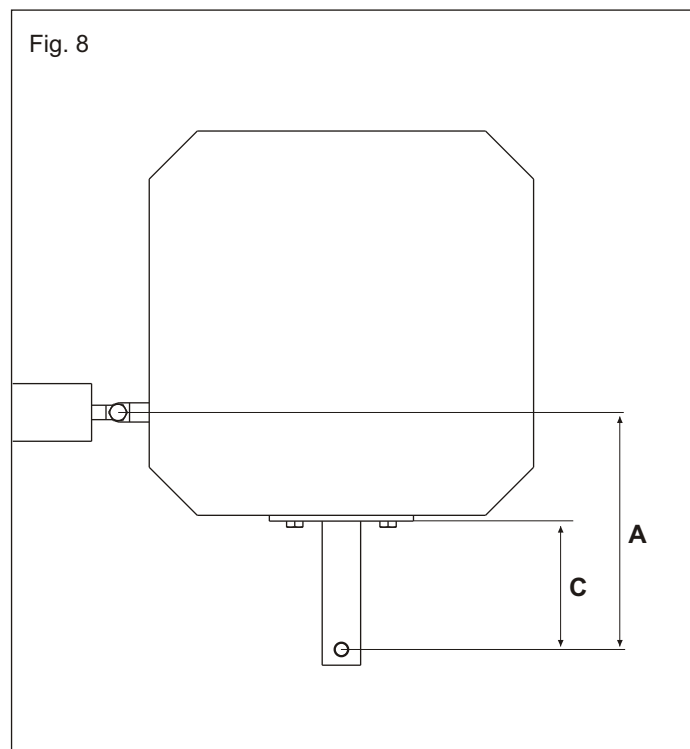


Fig. 8

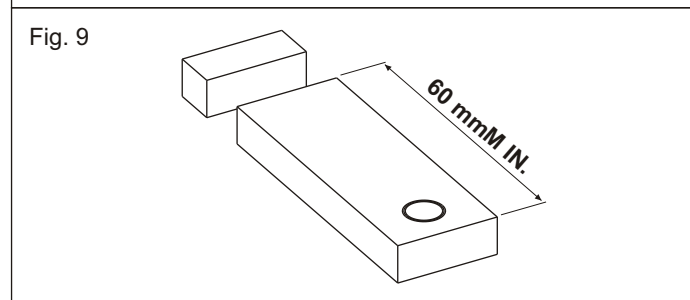
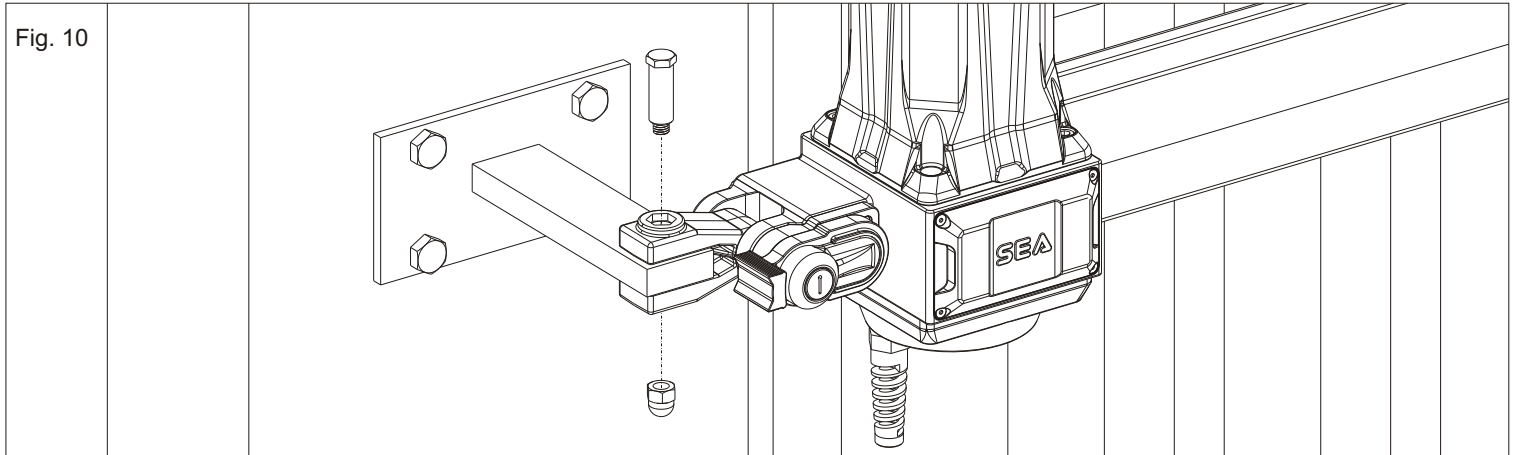


Fig. 9

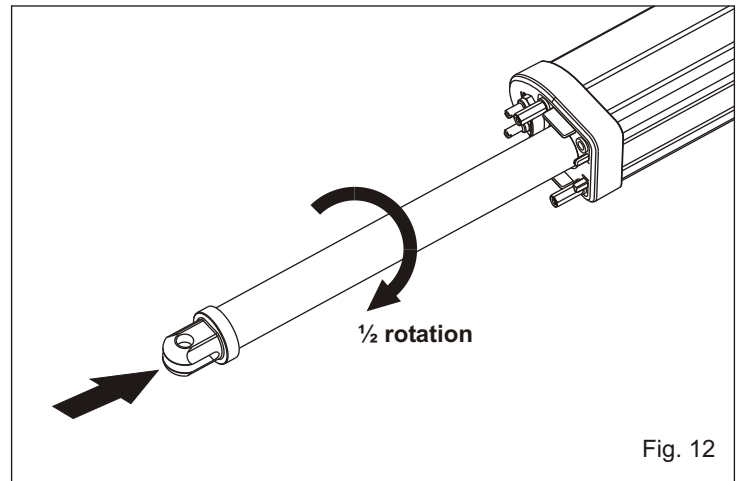
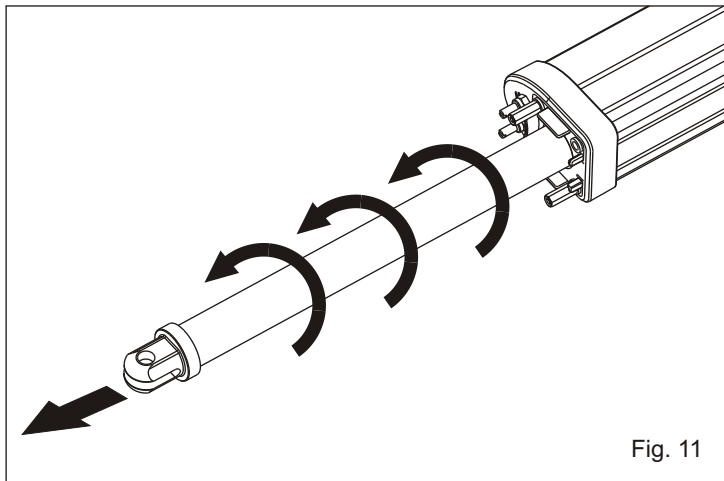


2.3. Attach the operator on the previously installed back-bracket and fix it with the provided pivot (Fig 10)



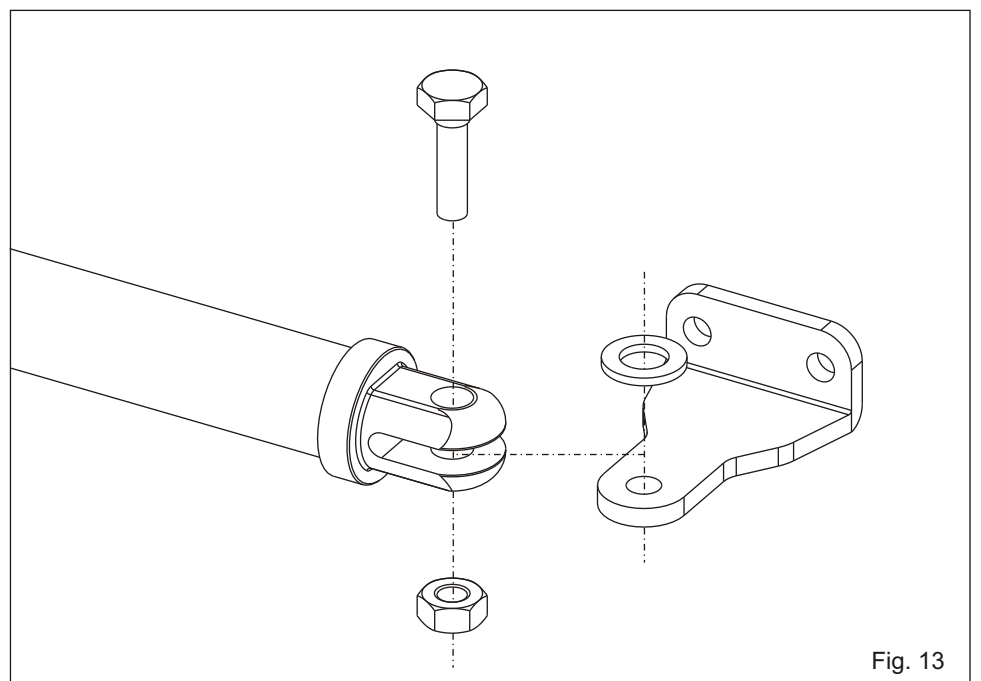
2.4. Release the arm (see paragraph 3)

2.5. Rotating it pull-off completely the shaft and then push-it in for half turn in the opposite direction (screw it) see Fig. 11 and 12.



2.6. Attach the front bracket to the extremity of the shaft (Fig 13)

2.7. Close the gate





2.8. Drill a hole into the gate (Fig 14) to be able to attach the front bracket with the supplied bolts being careful to place the operator perfectly horizontal (Fig 15).

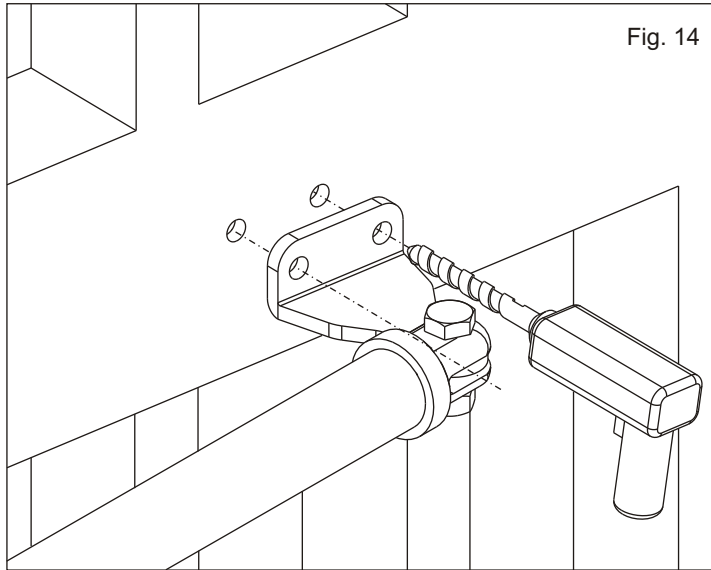


Fig. 14

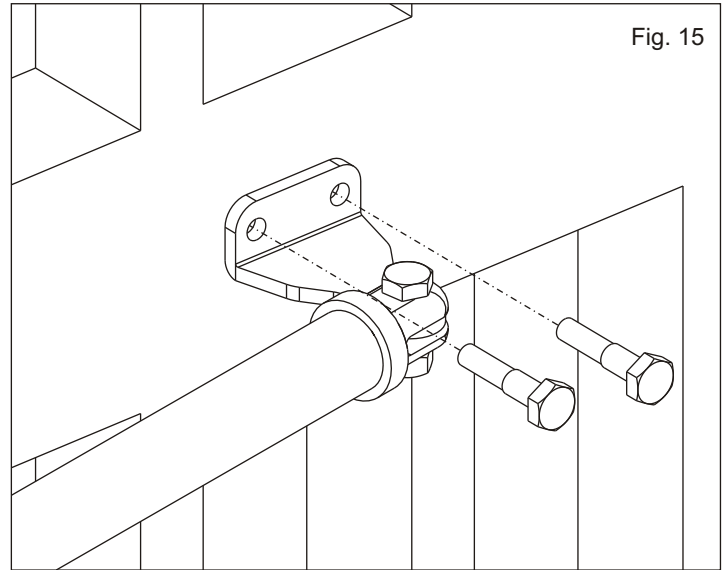


Fig. 15

NOTE:

if it is not possible to attach the front bracket with the bolts, weld it to the gate (Fig 16), being careful to protect the shaft from welding waste.

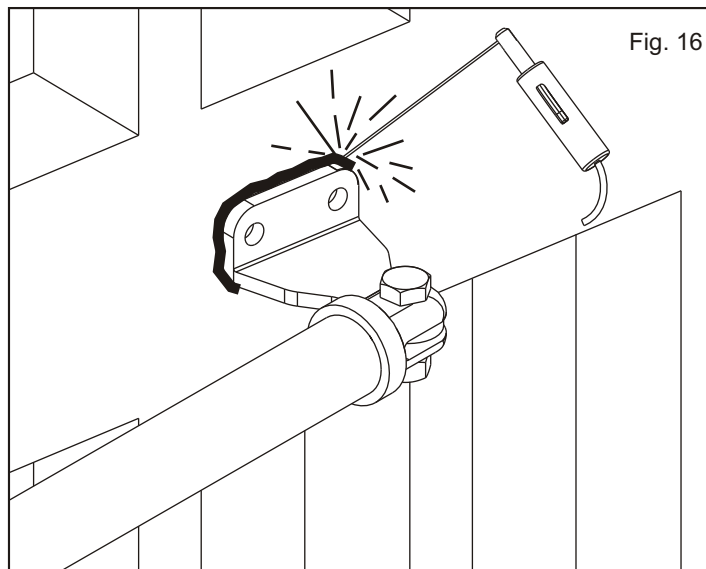


Fig. 16

2.9. Release the arm (see paragraph 3)

2.10. Remove the pull tongue from the shaft-cover (Fig 17) and mount it on the operator through the two tie-rods without excessively tightening the two cover-nuts (Fig 18).

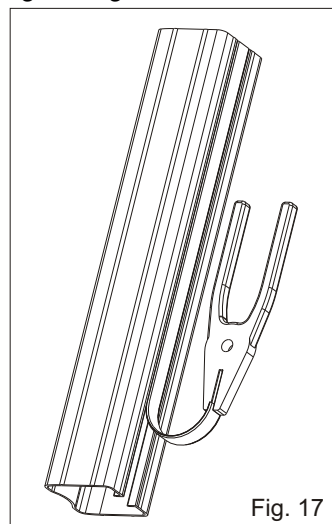


Fig. 17

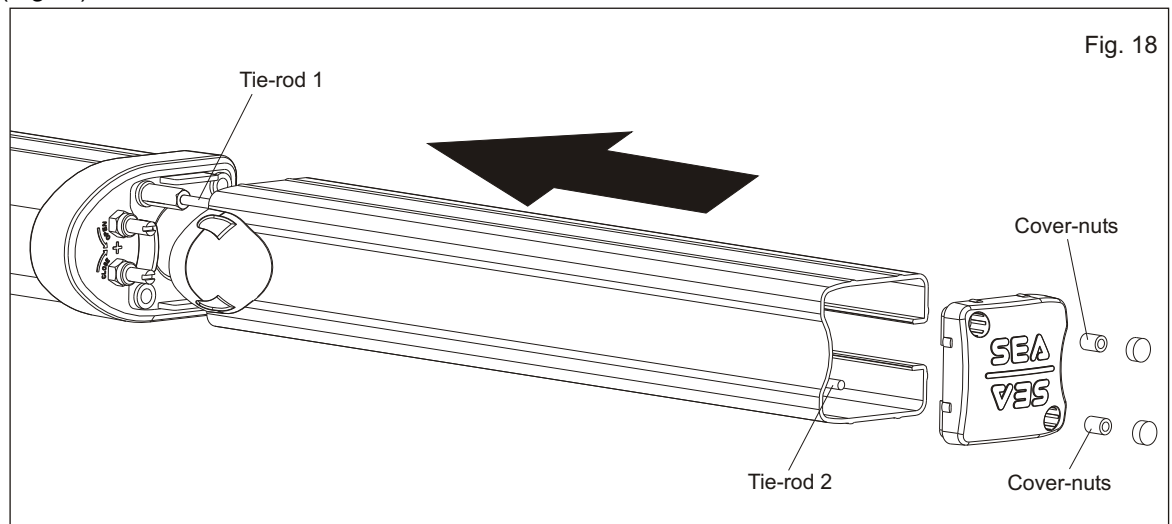
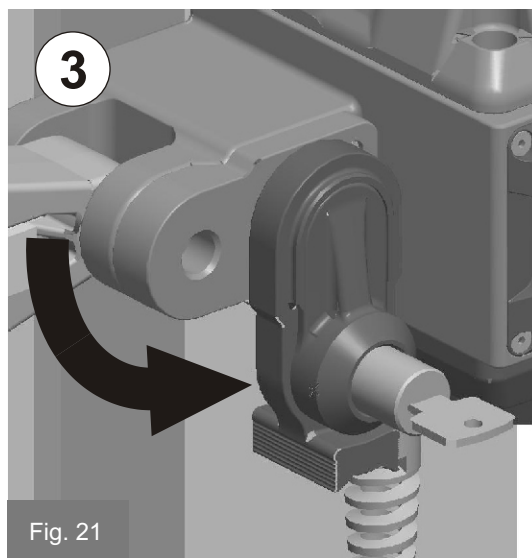
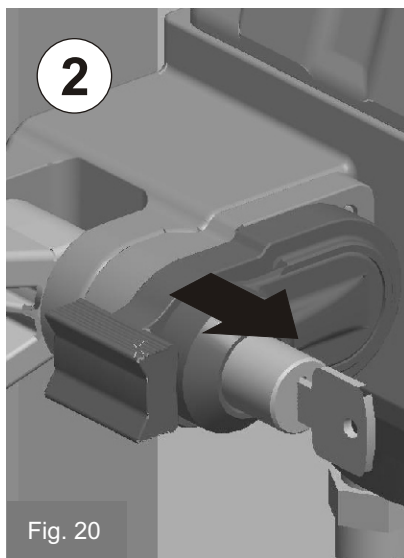
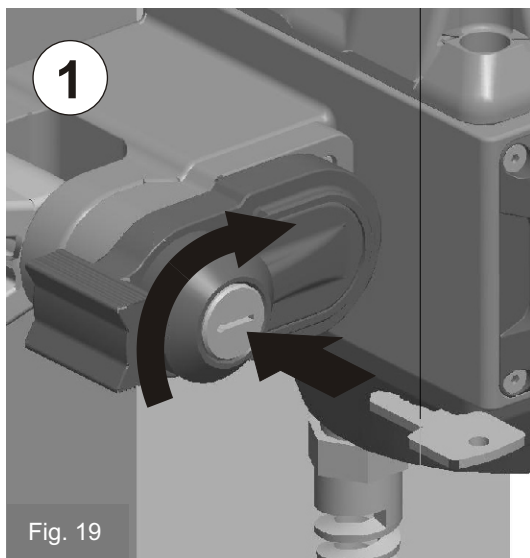


Fig. 18

3. RELEASING SYSTEM OF THE OPERATOR

3.1. To release the operator follow the instruction below

1. Insert the key in lock and turn it 90° to the right as on Fig. 19
2. be sure that the lock cylinder is completely out (Fig. 20).
3. Turn the releasing lever towards the bottom as (Fig. 21).

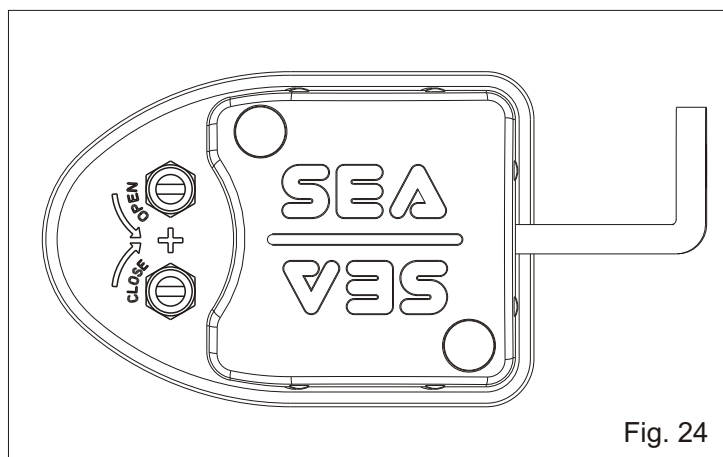
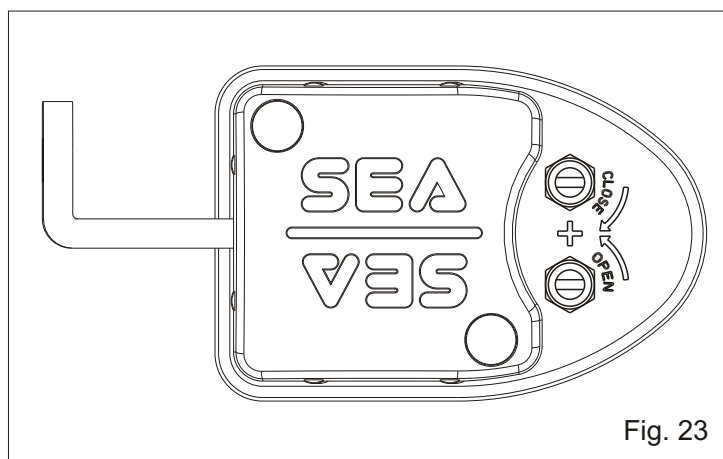
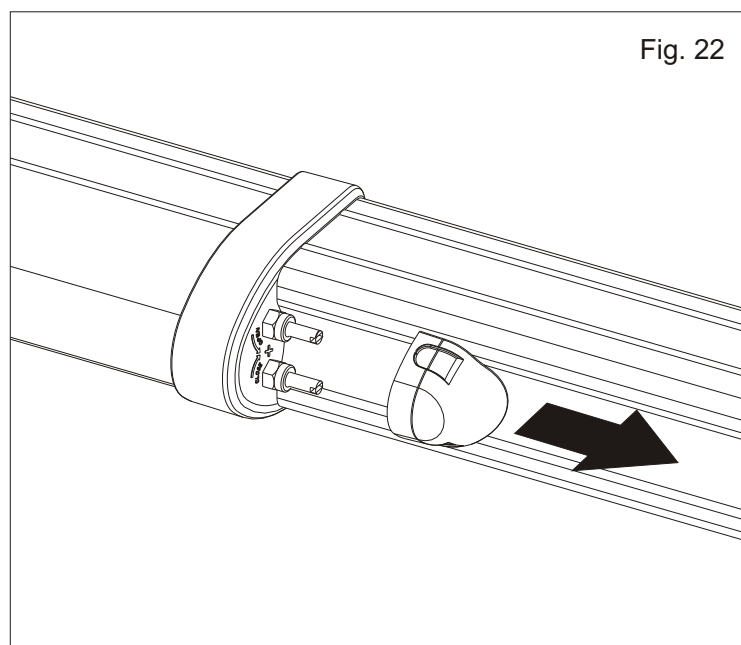


3.2. To lock back the operator take back the lever to the position as (Fig. 19), turn the key pushing the cylinder back in and move the gate leaf until you hear the operator gears to hook-up.

4. LIMIT SWITCHES ADJUSTMENTS

4.1. Remove the plastic cover as shown below. (Fig. 22)

4.2. Use a screw-driver to rotate the screw (Fig. 23 and 24) knowing that rotating each screw toward the (+) it will increase the stroke in opening (OPEN) and in closing (CLOSE).





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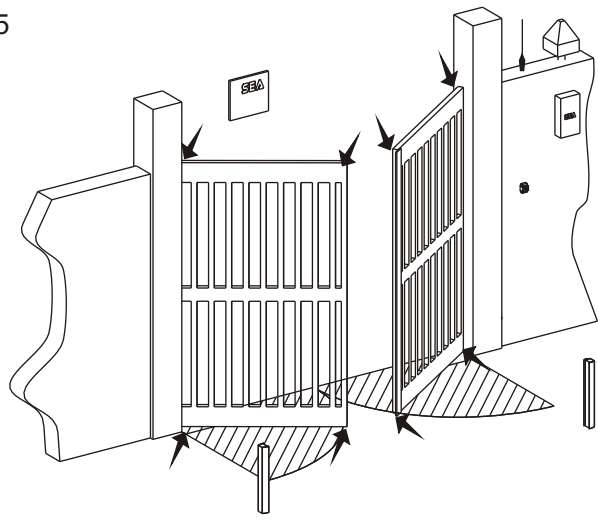
ALPHA 200 PLUS
ALPHA 330 PLUS



RISK EXAMINATION

The points pointed by arrows in Fig. 25 are potentially dangerous. The installer must take a thorough risk examination to prevent crushing, conveying, cutting, grappling, trapping so as to guarantee a safe installation for people, things and animals (Re. Laws in force in the country where installation has been made.).

Fig. 25



NOTICE

SEA s.r.l can not be deemed responsible for any damage or accident caused by product breaking, being damages or accidents due to a failure to comply with the instructions herein. The guarantee will be void and the manufacturer responsibility (according to Machine Law) will be nullified if SEA Srl original spare parts are not being used.

The electrical installation shall be carried out by a professional technician who will release documentation as requested by the laws in force. This is a quotation from the GENERAL DIRECTIONS that the installer must read carefully before installing.

Packaging materials such as plastic bags, foam polystyrene, nails etc must be kept out of children's reach as dangers may arise.

DECLARATION OF CONFORMITY

SEA declares under its responsibility that the products *ALPHA 200 and ALPHA 330*

meets the essential requisites provided for by the following European Directive and following changes:

89/392/CEE (Machine Directive)

89/336/CEE (Electromagnetic Compatibility Directive)

73/23/CEE (Low Tension Directive)

SAFETY PRECAUTIONS:

All electrical work should conform to current regulations. A 16 A 0,030 A differential switch must be incorporated into the source of the operators main electrical supply and the entire system properly earth bonded. Always run mains carrying cables in separate ducts to low voltage control cables to prevent mains interference.

INTENDED USE:

Alpha operator has been designed to be used only for the automation of swing gates.

SPARE PARTS:

To obtain spare parts contact:

SEA S.r.l. - Zona Ind.le S.Atto, 64020 S. Nicolò a Tordino - Teramo - ITALIA

SAFETY AND ENVIRONMENTAL COMPATIBILITY:

Don't waste product packing materials and/or circuits.

When being transported this product must be properly packaged and handled with care.

MAINTENANCE AND OUT OF SERVICE:

The decommission and maintenance of this unit must only be carried out by specialised and authorised personnel.

NOTE: THE MANUFACTURER CAN NOT BE DEEMED RESPONSIBLE FOR ANY DAMAGE OR INJURY CAUSED BY IMPROPER USE OF THIS PRODUCT.

SEA reserves the right to do changes or variations that may be necessary to its products with no obligation to notice.



SEA
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