

ÍNDICE

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IMPORTANT NOTICE FOR THE INSTALLER GENERAL SAFETY REGULATIONS

- 1) ATTENTION! To ensure the safety of people, it is important that you read all the following instructions. Incorrect installation or incorrect use of the product could cause serious harm to people.
- 2) Carefully read the instructions before beginning to install the product.
- 3) Do not leave packing materials (plastic, polystyrene, etc.) within reach of children as such materials are potential sources of danger.
- 4) Store these instructions for future reference.
- 5) 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.
- 6) We decline all liability caused by improper use or use other than that for which the automated system was intended.
- 7) Do not install the equipment in an explosive atmosphere: the presence of inflammable gas or fumes is a serious danger to safety.
- 8) The mechanical parts must conform to the provisions of Standards EN 12604 and EN 12605. For non-EU countries, to obtain an adequate level of safety, the Standards mentioned above must be observed, in addition to national legal regulations.
- 9) We are not responsible for failure to observe Good Technique in the construction of the closing elements to be motorised, or for any deformation that may occur during use.
- 10) The installation must conform to Standards EN 12453 and EN 12445. The safety level of the automated system must be C+D.
- 11) Before attempting any job on the system, cut electrical power.
- 12) The main power supply of the automated system must be fitted with an all-pole switch with contact opening distance of 3mm or greater. Use of a 6A thermal breaker with all-pole circuit break is recommended.
- 13) Make sure that the earthing system is perfectly constructed, and connect metal parts of the means of the closure to it.
- 14) The automated system is supplied with an intrinsic anti-crushing safety device consisting of a torque control. Nevertheless, its tripping threshold must be checked as specified in the Standards indicated at point 10.
- 15) The safety devices (EN 12978 standard) protect any danger areas against mechanical movement risks, such as crushing, dragging, and shearing.
- 16) Use of at least one indicator-light is recommended for every system, as well as a warning sign adequately secured to the frame structure.
- 17) We decline all liability as concerns safety and efficient operation of the automated system, if system components not produced by us are used.
- 18) For maintenance, strictly use original parts by us.
- 19) Do not in any way modify the components of the automated system.
- 20) The installer shall supply all information concerning manual operation of the system in case of an emergency, and shall hand over to the user the warnings handbook supplied with the product.
- 21) Do not allow children or adults to stay near the product while it is operating.
- 22) Keep remote controls or other pulse generators away from children, to prevent the automated system from being activated involuntarily.
- 23) Transit is allowed only when the gate is fully open.
- 24) The user must not attempt any kind of repair or direct action whatever and contact qualified personnel only.

1. DESCRIPTION

Automated system for residential sliding gates with leaves up to 7m long and 500 kg in weight. It consists of a reversing electro-mechanical gearmotor, powered by 230 Vac, transformer through toroidal and power supply board.

The automated system houses a programmable electronic control board that enables setting of function logics, work times (by self-learning) and pause times, gate speed, anti-crushing sensitivity as well as partial-opening width.

The reversing system guarantees the gate will automatically lock when the motor is not operating.

A release system enables the gate to be moved by hand in case of malfunction.

The automated system was designed and built for controlling vehicle access. Do not use for any other purpose.

1.1 Description of the structure

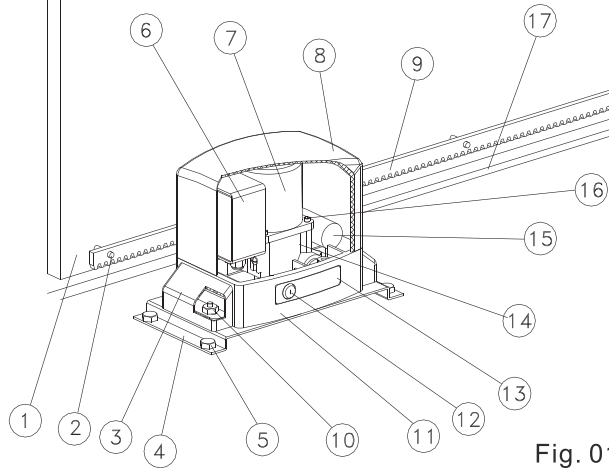


Fig. 01

- | | | |
|---------------------|-------------------|--------------------|
| 1. Gate | 7. Motor | 13. Manual release |
| 2. Pin | 8. Cover | 14. Up gear box |
| 3. Protective cover | 9. Rack | 15. Capacitor |
| 4. Foundation plate | 10. Screw | 16. Screw |
| 5. Screw | 11. Down gear box | 17. Track |
| 6. Control box | 12. Lock | |

1.2 Dimension (mm)

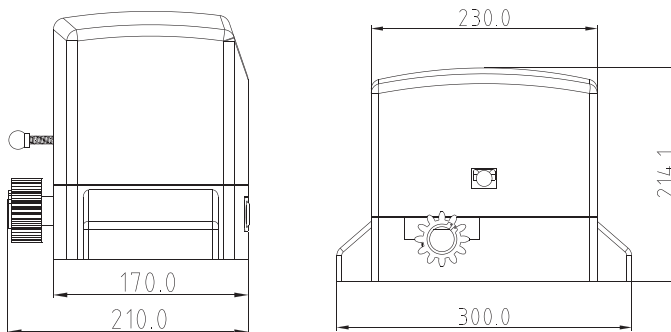


Fig. 02

Fig. 03

2. TECHNICAL SPECIFICATIONS

Technical specifications of the automated operator

Technical specification	Data
Power supply (V)	230V, 50Hz
Rated absorbed power (W)	330W
Max linear load free speed (m/sec)	0.16m/s
Push force (N)	1200N
Consecutive cycles (s)	30s
Recovery time	2min. p/ complete cycle
Operating temperature (°C)	>-20°C, <+55°C
Use frequency at 20°C	30%
Protection class	IP54
Thermal protection (°C)	140°C
Leaf max length (m)	7m
working frequency	25%
Capacitor (uF)	12uF

3. DESCRIPTION OF SYSTEM

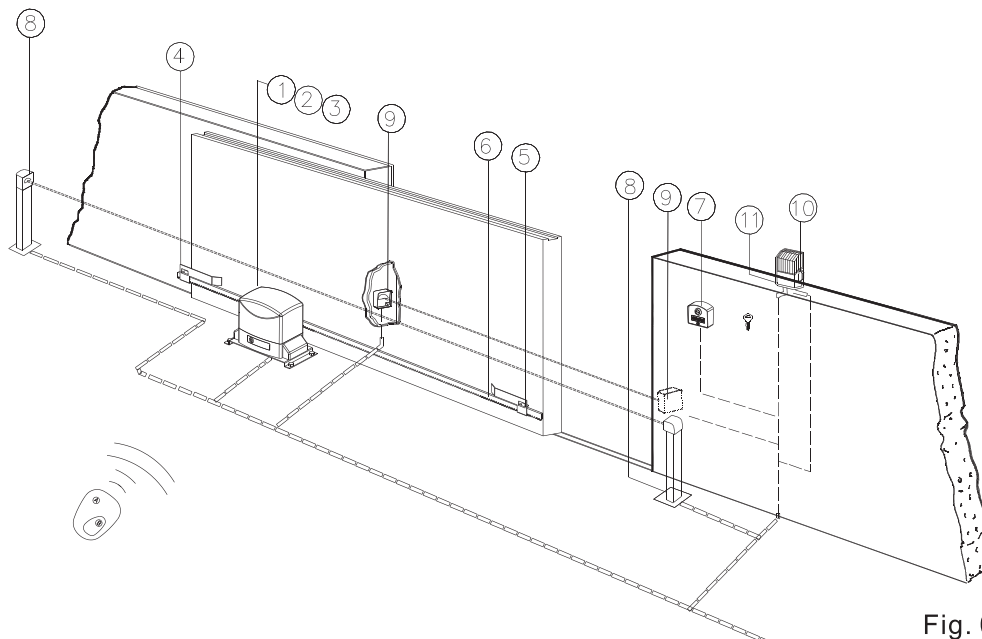


Fig. 04

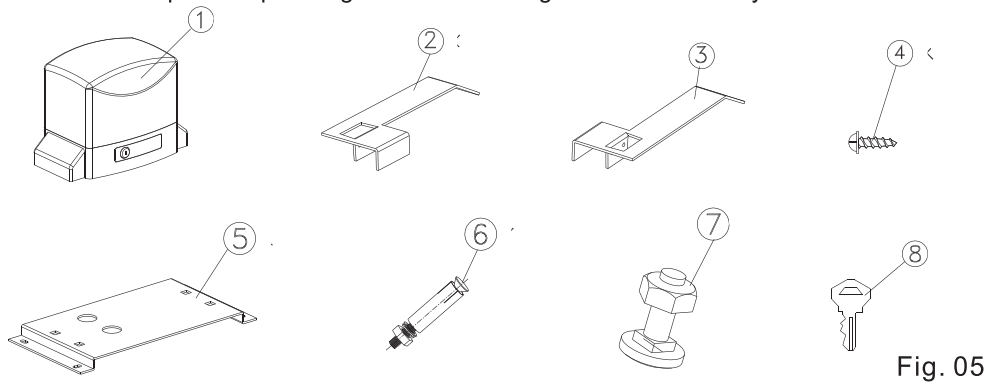
- | | |
|---------------------------|---|
| 1. Drive unit | 7. Key-operated selector switch |
| 2. Control panel | 8. Photocell column |
| 3. Radio receiver | 9. Safety photocells |
| 4. Left limit-switch tabs | 10. Antenna |
| 5. Right limit-switch tab | 11. Flashing light indicating door movement |
| 6. Rack | |

Note:

- 1) To lay electric cables, use adequate rigid and/or flexible tubes.
- 2) To avoid any kind of interference always separate low voltage connection cables from 230Vac power cables
- 3) The description of system is standard system, but we did not provide all parts. If you want system accessories, please contact us.

4. THE PACKING LIST

You must check the operator packing before installing the automated system.



N°	NOME	QUANT.	N°	NOME	QUANT.
1	Motor	1	6	Expanded screw	4
2	Left limit-switch tab	1	7	Screw	4
3	Right limit-switch tab	1	8	Key	2
4	M6 Screw	4	9	Manual	1
5	Foundation plate	1			

5. INSTALLATION TOOLS

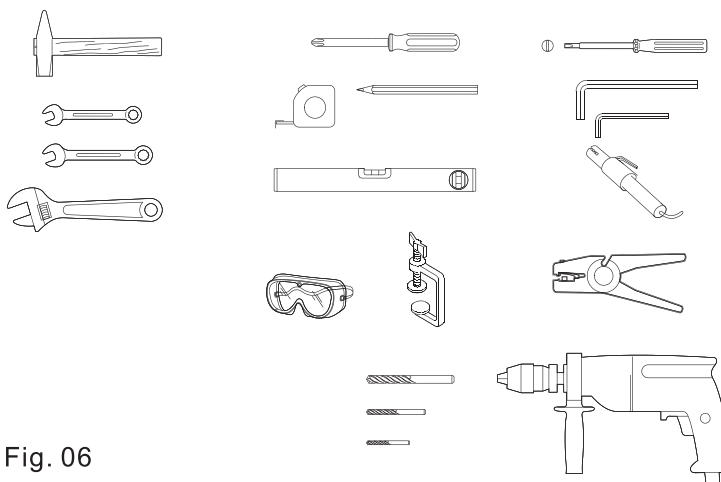


Fig. 06

6. INSTALLING

6.1. Preliminary checks

To ensure safety and an efficiently operating automated system, make sure the following conditions are applied:

- The structure of the gate must be suitable for being automated. In particular, check that the structure is sufficiently strong and rigid, and that its dimensions and weight conform to those indicated in the technical specifications;
- Make sure that the gate slides without any inclination;
- Make sure that the gate moves uniformly and correctly, without any irregular friction during its entire travel;
- The soil must permit sufficient stability for the expansion plugs securing the foundation plate;
- Check if the upper guide and travel limit mechanical stops are installed;
- Remove any locks and lock bolts. We advise you to have any metalwork carried out before the automated system is installed.

6.2. Preparing the foundation plate

Fit the 4 supplied nuts, as shown in Fig. 07 and Fig. 08, in the 4 holes of the plate.

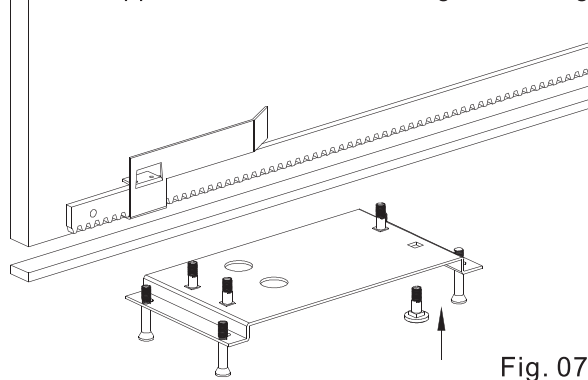


Fig. 07

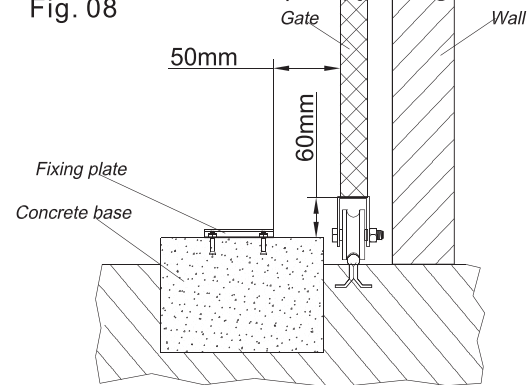


Fig. 08

6.3. Positioning the foundation plate

1) The foundation plate must be located as shown in Fig. 9 (right closing) or Fig. 10 (left closing) to ensure the rack and pinion match correctly.

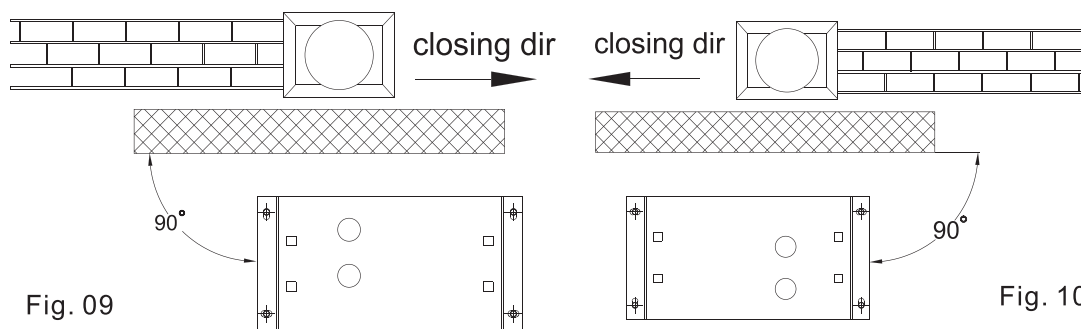


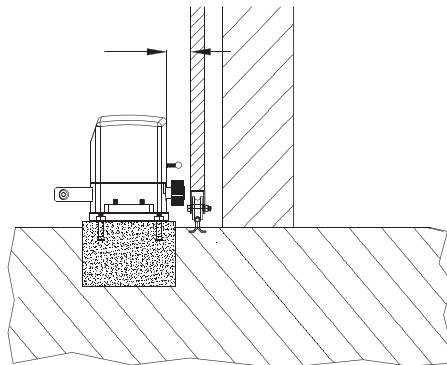
Fig. 09

Fig. 10

6.5. Adjusting the operator

Adjust the distance of the operator from the gate by referring to Fig.14.

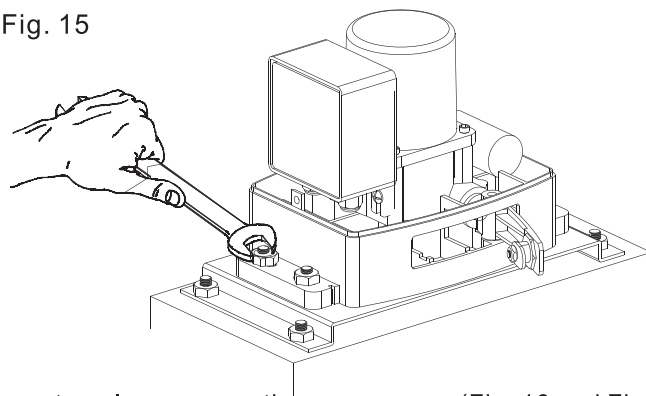
Fig. 14



6.6. Positioning the operator

Fix the operator slightly tightening the screws as shown in Fig. 15.

Fig. 15



After fixed the operator, please screw the upper-cover (Fig. 16 and Fig. 17).

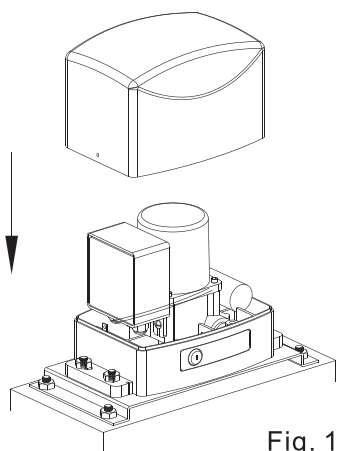


Fig. 16

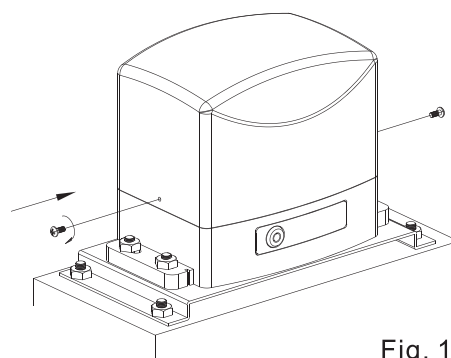
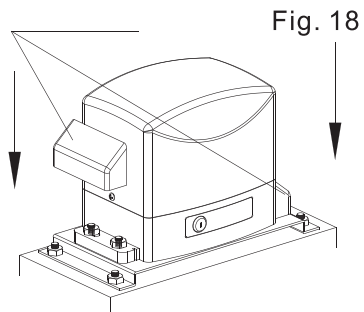


Fig. 17

After fixed the upper-cover, please install the side-cover (Fig. 18).



6.7. Releasing the operator

Prepare the operator for manual operating mode as described below:

Take the key and insert the lock, turn it clockwise 90°, pull and open the manual release.

Fig. 19

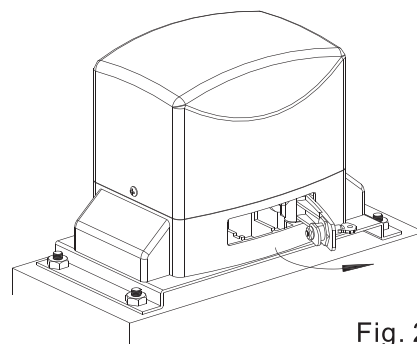
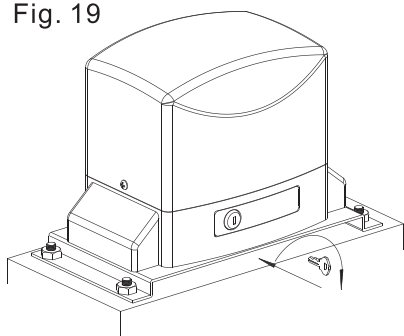


Fig. 20

After opened the manual release, you can operate the door manually.

6.8. Installing the rack

6.8.1. Steel rack to be screwed (Fig. 21):

- 1) Manually take the leaf into its closing position;
- 2) Lay the first piece of rack at the appropriate level on the pinion and place the spacer between rack and positioning it at the top of the slot;
- 3) Mark the whole position on the gate. Drill a $\phi 6.5$ mm hole and thread with a M8 mm tap. Screw the bolt;
- 4) Move the gate manually, checking if the rack is match on the pinion, and repeat the operations at point 3.

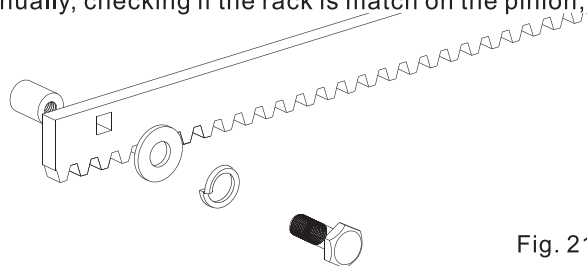


Fig. 21

- 5) Bring another rack element near to the previous one, using a piece of rack (as shown in Fig. 22) to synchronise the teeth of the two elements.
- 6) Using a level, check if the plate is perfectly horizontal
- 7) Move the gate manually and carry out the securing operations as for the first element, proceeding until the gate is fully covered.

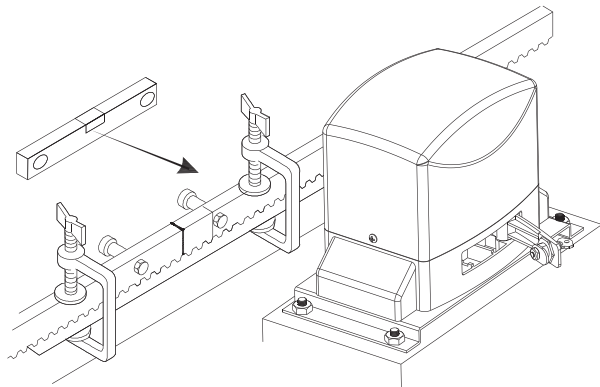


Fig. 22

6.8.2. Steel rack to be welded

- 1) Place the three threaded spacer on the rack element, positioning them at the top of the slot. In this way, the slot play will enable any adjustments to be made (Fig. 23).
- 2) Manually take the leaf into its closing position.
- 3) Lay the first piece of rack at appropriate level on the pinion and weld the threaded spacer on the gate as shown in Fig. 24.
- 4) Move the gate manually, checking if the rack is resting on the pinion, and weld the second and third spacer.

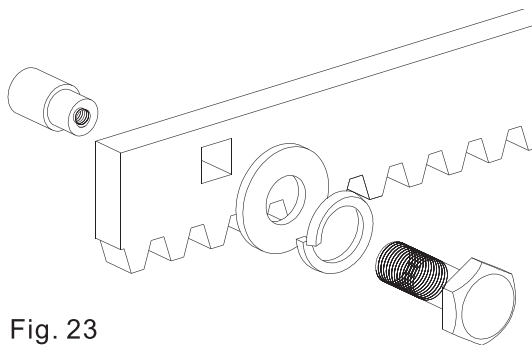


Fig. 23

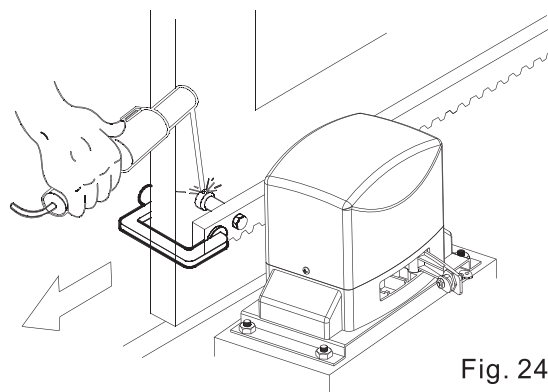


Fig. 24

- 5) Bring another rack element near to the previous one, using a piece of rack (as shown in Fig. 22) to synchronise the teeth of the two elements.
- 6) Move the gate manually and weld the three threaded pawls, so proceeding until the gate is fully covered.



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