SISTEMI AUTOMATICI DI APERTURA

MOTOR FOR SLIDING GATES
SERIE GR6 – 220V

SAFETY

Our compliments for your excellent choice. Your new electromechanical gear motor has been produced according to a high quality and a strict reliability, that's why it will assure you long-lasting performances.
This booklet will offer you all the pieces of information you may need to install your gear motor and to safeguard your safety.
However, the caution is unquestionably indispensable and nothing is better than preventing accidents.
All our products have been made in conformity with the regulations in force.
WARNING: any repair or adjustment of the working machinery is strictly prohibited unless all the necessary precautions (electrical supply disconnected and motor off) have been taken in order to avoid possible accidents.
WARNING: The feeder line has to be protected for the max. current in blocked rotor condition.
WARNING: Install the motor on gate who are in conformity with the EN 12604
WARNING: Execute the measurement of the force produced by the motor and take the measures expected by the EN 12445
WARNING: any repair must be carried out by qualified people.
All moving mechanisms must be provided with suitable protections.
WARNING: Keep the automatic controls out of the reach of childrens. The controls must be installed at a minimum high of 1,5 mt. from the ground surface and out of the work of mobile parts.
WARNING: command pulses must be given from positions where the gate is visible.
WARNING: use the transmitters only if you can see the gate.
WARNING: GR Srl is not responsible for possible damages or injuries to people, objects or animals, caused by any unauthorised modification of the product.
Keep scrupulously this booklet in a suitable place well known by all the interested people.
In order to make the automation work efficiently; the gate to automate must have the following characteristics:
- it must be balanced;
- it must oscillate fluently;
- you have to carry out the manual closing and opening the gate without any effort;
- remember that the motorization has been planned in order to help you use the gate. This means that it does not resolve the problems caused by an inadequate installation or by a poor upkeep of the gate.

SAFETY RULES

During the installation and the use of the automation, you have to pay attention to the following safety rules:
- Security distance!
- Mechanism in movement!
- Do not install the automation in places with presence of iniammable gasses!
- Electric shock!
- Use the gloves!
- Use glasses for welding!
- Keep the protection carter!

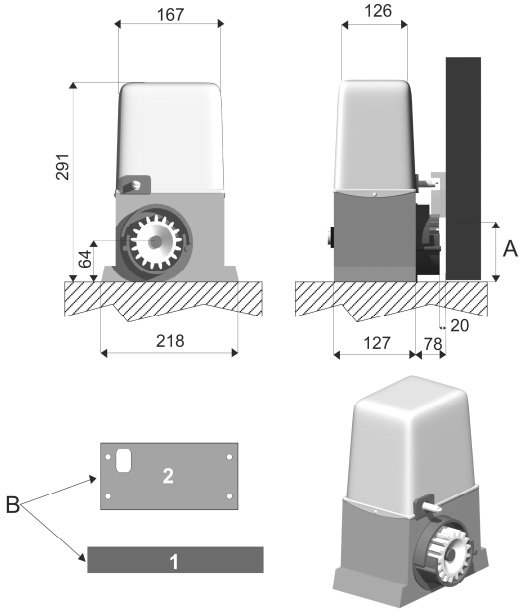
EQUIPMENT

In order to install the automation you have to provide yourself with keys, screwdriver, metre, slope detector (water level), saw, drilling machine and welding machine.

TECHNICAL DATA

	GR6 220-230 Volt
Power supply	220-230 Vac
Current absorbed	1,5 Ampere
Capacitor	12,5 μFarad
Power absorbed	350 Watt
RPM	1400 rpm
Thermal protection	150°
Torque	20,5 Nm
Max. thrust	600 N
Wotking temperature	-25+75°C
Lubrication	Grease
Motor weight	6,3 – 7,5 Kg.
Max. wing weight	600 Kg.
Speed	10 m/ min.
Protection level	IP55

DIMENSIONS



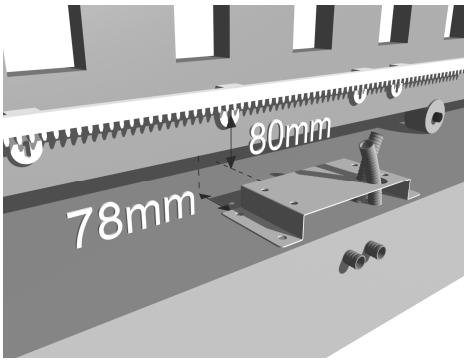
A = 80 = DISTANCE BETWEEN THE FIXATION HOLE OF THE RACK AND THE SURFACE OF THE BASEMENT PLATE OF THE MOTOR.
1 - GATE
2 - BASEMENT PLATE
B – POSITION OF BASEMENT PLATE WITH THE CORRECT ORIENTATION OF THE HOLE FOR THE CABLES

CONFORMITY DECLARATION:

It's in accordance with Machine Directive 39/89/CE and following modify.
It's in accordance with the following directive CE:
Electromagnetic compatibility Directive 89/336/CEE and following modify.
Low tension Directive 73/23/CEE and following modify.
Have been applied the following harmonized norms:
EN292/1/2, EN 294, EN60335-1, UNI EN 12453, and what applicable of the EN12445-2000.

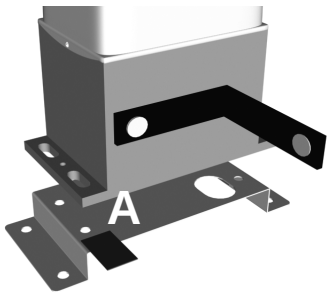
POSITIONING OF BASEMENT PLATE

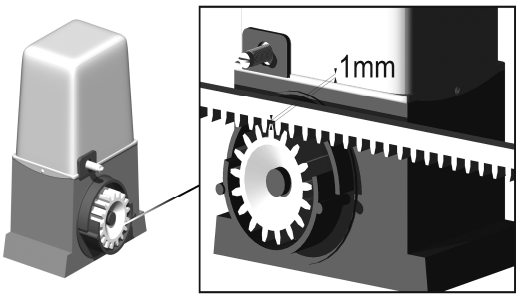
- Make a foundation pit in order that the foundation plate is 78 mm far from the GATE (not from the slide).
- Put the plate in the foundation pit (protect the inferior part of the camping screws holes).
- In positioning the foundation pit, make sure that the plate hole for passage of cables is in opposite side of the gate (see photo).



- Make a foundation pit in order that the foundation plate is 78 mm far from the GATE (not from the slide).
- Put the plate in the foundation pit (protect the inferior part of the camping screws holes).
- In positioning the foundation pit, make sure that the plate hole for passage of cables is in opposite side of the gate (see photo).

POSITIONING OF THE MOTOR

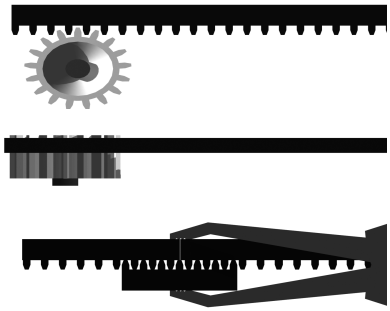




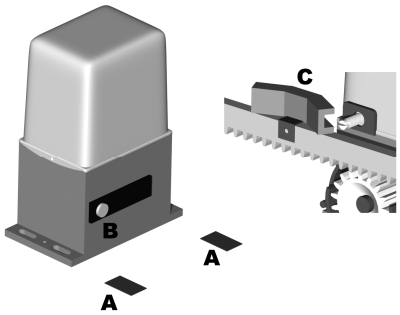
- Put the motor on the plate.
- Put 4 little shims between the motor and the plate to keep provisionally the motor 1 mm higher.
- Unclamp the motor by using lever (B). (Turn the lever of 1**00°).**
  Leave the lever open until the end of installation.

FIXING OF THE RACK

-Put the first piece of the rack on top of the spur wheel. And make it run until point 1 (see Fig. 1)
-Weld or screw the first pin of the rack to the gate.
-Add all the other pieces of the rack in order they are perfectly aligned to the first.

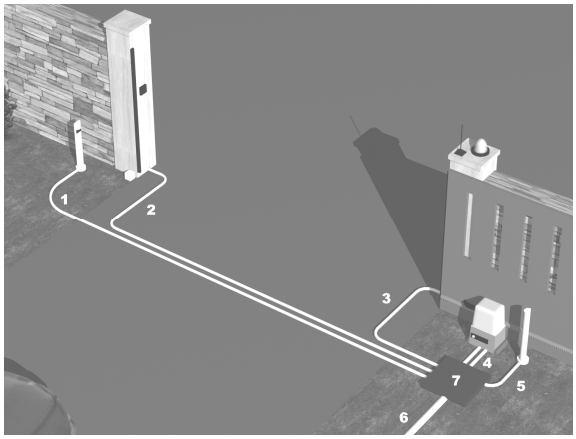


FINAL OPERATION



- Take out from the bottom of the motor the 4 shims and fix the motor to the foundation plate using screws.
- Shift manually the gate and fix on the rack the end run cams (C).
- Clamp the lever. (A)
- Apply the electric connections.
- Fix the carter.
- Control the perfect working of the motor.

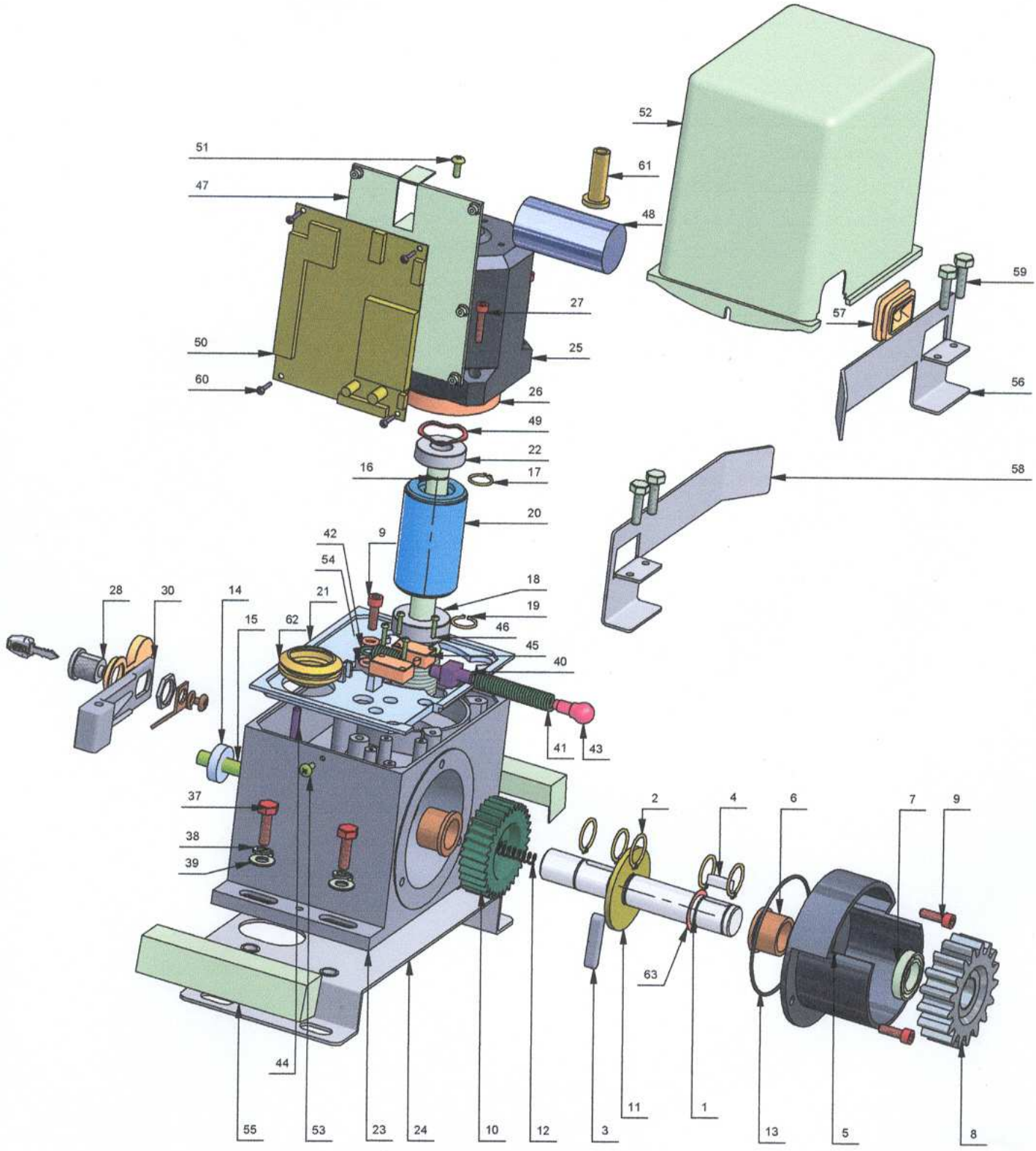
ELECTRICAL CONNECTIONS



1 - tube d. 20 mm. – cable for rx photocell 2x0.5 mm.
2 - tube d. 20 mm. – cable for rx photocell 2x0.5 mm. - Cable for electromechanical sensing device 2x0,5 mm.
3 - tube d. 0.25 mm – cable for tx photocell 4x0,5 - Cable for flashing light 3x0,5 – cable for Electromechanical sensing device 2x0,5 mm. - Cable for key switch 3x0,5 mm. - Cable for antenna Rg59
4 - 2 tube d. 0.25 mm. For cables to the motor
5 - tube d. 0.20 mm. – cable for tx photocell 4x0.5 mm.
6 - tube d. 0.60 – alimentation cable 3x1.5 mm.
7 - shaft

LIST OF COMPONENTS

ELEM.	QTY	COD. ART.	DESCRIPTION	ELEM.	QTÀ	COD. ART.	DESCRIPTION
1	1	100863	SHAFT	37	4	100025	CAP SCREW M8x25
2	5	100009	HELASTIC RING	38	4	100027	SPRING WASHER
3	1	100012	FEATHER KEY 8X7X40	39	4	100026	WASHER Ø8x16
4	1	100006	FEATHER KEY 8X7X40	40	1	100784	SPRING INSERT
5	1	100812	FLANGE	41	1	100514	PRIMARY END RUN SPRING
6	2	100005	BRONZE BUSH	42	1	100514	SECONDARY END RUN SPRING
7	1	100004	PACKING RING Ø22/35-7	43	1	100858	END RUN BALL
8	1	100007	TOOTHED WHEEL M4 Z17	44	1	100887	HELASTIC PIN Ø5x50
9	4	100837	CAP SCREW M6,3X19	45	2	100886	MICROSWITCH
10	1	100852	WORM WHEEL M2 Z32 FIBRE	46	4	100586	THREAD FORMING SELF TAPPING SCREW M2.9x16
11	1	100839	SPACER	47	1	100772	SUPPORT FOR ELECTRONIC PANEL
12	1	100010	UNCLAMPING SPRING	48	1	100783	CAPACITOR 12.5µF
13	1	100876	O-RING 2350	49	1	100706	Not in use
14	1	100490	PACKING RING Ø10/26-7	50	1		ELECTRONIC CARD
15	1	100857	UNCLAMPING PIN	51	1	100102	THREAD FORMING SELF TAPPING SCREW M4.8x13
16	1	100767	MAIN SHAFT WITH ENDLESS SCREW	52	1	100773	COVER h.160 mm. BLACK
17	1	100706	HELASTIC RING	53	2	100775	THREAD FORMING SELF TAPPING SCREW M4.2x13
18	1	100130	BEARING 6203 2RS	54	2	100787	WASHER Ø6x12
19	1	100786	INCREASED HELASTIC RING E17	55	2	100774	BASE COVERS
20	1	100643	ROTOR 70mm.	56	1	100911	METALLIC END RUN CAM LF
21	1	100771	PLASTIC COVER FOR FRAME	56	1	100776	PLASTIC END RUN CAM LF
22	1	100278	BEARING 6202 ZZ	57	1	100777	RUBBER BELLOWS
23	1	100002	FOUNDATION FRAME GREY ALUMINIUM	58	1	100776	PLASTIC END RUN CAM RG
23	1	100811	FOUNDATION FRAME – FIBRE	59	4	100028	HEXAGON HEAD CAP SCREW M6x16
24	1	100927	BASEMENT PLATE	60	4	100586	CAP SCREW M2,9x16
25	1	100647	MOTOR CASING – ALUMINIUM	61	1	100748	CABLE PRESS
25		100907	MOTOR CASING BLACK – FIBRE	62	1	GW50431	RUBBER CAP FOR CABLES
26	1	100642	STATOR Ø80/45x70 24C 4 POLES 220V	63	1	100915	RING Ø29,7/22x1
27	4	100313	CAP SCREW M5x16	64	1	100707	BEARING 6003 Z
28	1	100900	UNCLAMPING KEY LOCK SET	65	2	100903	SCREW M6x16
30	1	100813	LATCH				



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