



GEARMOTOR FOR SWING GATES

ARACHNE 12V-24V-220V

INSTRUCTIONS MANUAL

We congratulate you on the excellent choice entrusted to us. Your new electro-mechanical gearmotor is manufactured in accordance with high quality and reliability; this will guarantee you performance and safety over time. In this booklet you will find all the information you need to install your gearmotor and to protect your safety.

CAUTION IS IN ANY CASE IRREPLACEABLE AND THERE IS NO BETTER RULE TO PREVENT ACCIDENTS.

All our products are manufactured in accordance with current regulations.

This instruction booklet is intended exclusively for professional installers who are experts in the construction criteria and safety and accident protection devices for gates, doors, and motorized gates (comply with the regulations and laws in force).

- The installer must provide the appropriate explanations and issue the end user with an instruction manual in accordance with EN 12635.
- Before proceeding with the installation, the installer must carry out a risk analysis of the final automated closing and safety of the entire system (following EN 12453 and EN 12445 standards).
- The wiring of the various electrical components forming part of the automated closing system (e.g. photocells, flashing lights, etc.) must be carried out in accordance with EN 60204-1 and the modifications made by the latter in point 5.2.2 of EN 12453.
- Any repair or adjustment of the equipment is prohibited unless all precautions have been taken to avoid possible accidents (e.g. power supply disconnected, engine block). All moving parts must be fitted with appropriate guards.
- The power supply line must be protected for maximum current in blocked rotor condition.
- Install the gearmotor on gates in accordance with EN 12604.
- Have the force measurement developed by the operator carried out and take the measures provided for in EN 12445.
- Positioning of a possible pair of photocells: the radius of the photocells must be at a height not exceeding 70cm above the ground and at a distance from the plane of movement of the leaf not exceeding 20cm. Their correct functioning must be verified at the end of installation in accordance with point 7.2.1 of EN12445.
- All repair operations must be carried out by qualified personnel.

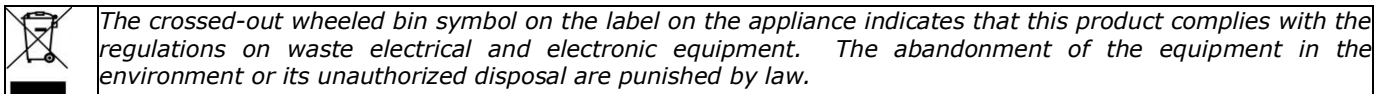
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- Keep the controls of the machine out of the reach of children. The controls must be installed at a minimum height of 1.5 m above the ground and out of reach of moving parts.
- Operate the remote control only in view of the automation. All control operations must be carried out only in places where the automation is completely visible.
- Any arbitrary modification made to this product releases the manufacturer from any liability for damage or injury to property, persons or animals.
- Non-observance of the safety regulations listed herein and the regulations in force releases the manufacturer from any liability for damage or injury to property, persons or animals.
- Please keep this manual in a suitable place known to all concerned.
- The automation must be coupled to a control unit equipped with a torque adjustment that provides intrinsic safety against crushing as indicated in standard EN 12453 -EN 12445..

This product falls within the scope of Directive 2012/19/EU on the management of waste electrical and electronic equipment (WEEE). The appliance must not be disposed of with household waste as it consists of different materials that can be recycled at appropriate facilities. Inform yourself through the municipal authority regarding the location of the ecological platforms suitable to receive the product for disposal and its subsequent proper recycling. Please also note that in exchange for the purchase of an equivalent appliance, the distributor is required to take back the product to be disposed of free of charge. The product is not potentially dangerous for human health and the environment, as it does not contain harmful substances, but if abandoned in the environment it has a negative impact on the ecosystem. Read the instructions carefully before using the appliance for the first time.



SAFETY REGULATIONS

During installation-use of the automation follow the following safety regulations very carefully:

- **Safety distance moving mechanisms!**
- **Do not install the automation in environments saturated with explosive mixtures!**
- **Electrical shock!**
- **Use gloves!**
- **Use welding goggles!**
- **Keep protective covers on!**

DECLARATION OF CONFORMITY

- The ARACHNE gearmotor meets the following standards:
 - It complies with the conditions of the EEC Machinery Directive 89/392 al.II par B and subsequent amendments.
 - It complies with the conditions of the following other EC Directives:
 - Electromagnetic Compatibility Directive EEC 89/336 and subsequent amendments;
 - Low Voltage Directive 73/23/EEC, as amended..
- The following harmonised standards have



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MAINTENANCE

- Before any maintenance work, disconnect the power supply via the main switch.
- The equipment must be maintained in such a way as to maintain the conditions that guarantee safety and correct operation.
- Always use original spare parts
- Do not carry out interventions that modify the machine
- Modified machine needs new CE marking
- The adjustment of the automation function must be carried out by specialised personnel, in compliance with the reference standards. During these operations the presence of two operators is foreseen.

DISMANTLING

To dismantle automation elsewhere you have to:

- 1 - Turn off the power supply and disconnect the electrical system.
- 2 - Remove the control panel and all the components of the installation. If any of the components are damaged or cannot be removed, take care of the following to their replacement.

been applied:

- EN292/1/2, EN 294, EN60335-1, UNI EN 12453, as far as EN12445-2000 is applicable.

USE OF AUTOMATION

The ARACHNE geared motor has been designed and built for the opening of gates with a maximum leaf of 2.5 m or a maximum weight. Of 300kg. The manufacturer assumes no responsibility for any use other than that intended by the gearmotor. Since the automation can be remotely controlled, it is essential to frequently check the perfect efficiency of all safety devices. It is advisable to check periodically (every six months) the adjustment of the electronic clutch with which the control unit must be equipped.

PRELIMINARY CHECKS

- 1 - Read the manual carefully.
- 2 - For the gate to be automated to work properly, the gate to be automated must have the following characteristics: good balance and absence of friction points.
- 3 - Make sure that the gate is well balanced, even after mounting the gear motor.
- 4 - Check that the electrical system complies with the characteristics required by the geared motor.



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TECHNICAL DATA

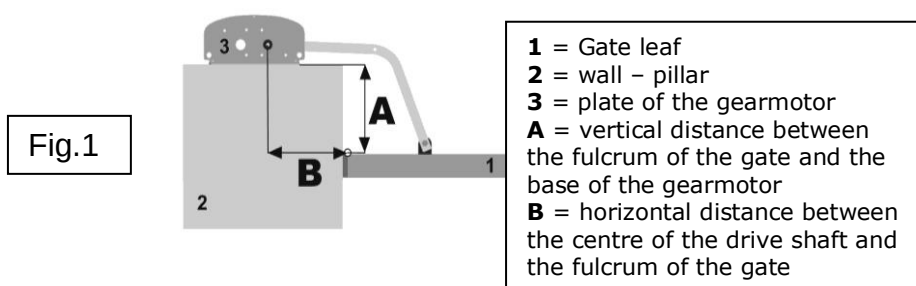
	12V	24V	220V
MAX. door length	2,0m	2,0m	3,0m
MAX. gate weight	200Kg	200Kg	300Kg
Power supply	12Vdc	24Vdc	220V
Power	70W	70W	350W
Capacitor	-	-	8,0μF
Absorption	1,4 – 8,3A	1,4 – 5,3A	1,1A
RPM	1500	1500	1400
Maximum thrust	260N	260N	320N
Working temperature	-25°C +60°C	-25°C +60°C	-25°C +60°C
Thermal protection	–	–	150°C
Frequency of use	80%	80%	15%
Lubrication	Grasso	Grasso	Grasso
Fixing plate dimensions	380x180x155	380x180x155	380x180x155



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INSTALLATION

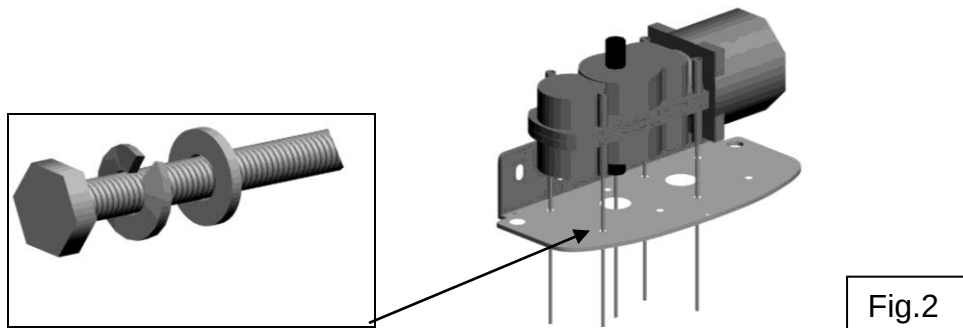
- 1) Open the packaging and remove the gear motor, taking care to check that it has not been damaged during transport.
- 2) Make sure the gate leaf is perfectly horizontal.
- 3) Position the support plate of the gearmotor following the parameters of the table (Tab.1) taking care to verify that the gate completely open according to the desired angle does not interfere with the gearmotor.



A	B	Alfa	A	B	Alfa	A	B	Alfa	A	B	Alfa
0 cm	16-20cm	90°	5 cm	25-35cm	110°	15 cm	16-20cm	90°	20 cm	16-35cm	90°
0 cm	20-35cm	120°	10 cm	16-20cm	90°	15 cm	20-25cm	100°	25 cm	16-30cm	90°
5 cm	16-20cm	90°	10 cm	20-25cm	110°	15 cm	25-30cm	90°	30 cm	20cm	90°
5 cm	20-25cm	120°	10 cm	25-30cm	90°	15 cm	30-35cm	100°	35 cm	20cm	90°
5 cm	25-35cm	110°	10 cm	30-35cm	100°	15 cm	35 cm	90°			

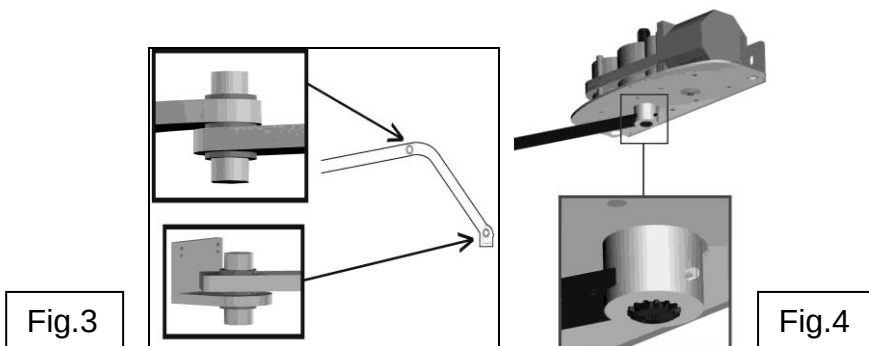
Tab.1

- 4) Mount the gearmotor on the plate with the appropriate screws as shown in Figure 2.

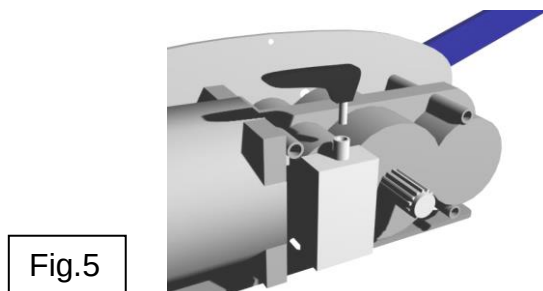




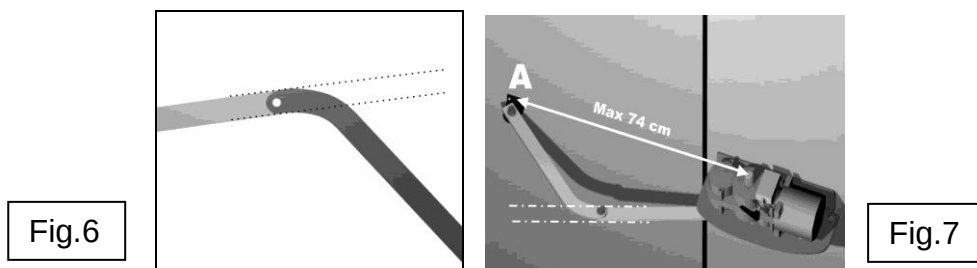
5) Mount the articulated arm and secure it to the gear motor as in Figures 3-4.



6) Unlock the geared motor by unlocking it with the supplied A key until you hear the first click. (Fig.5)

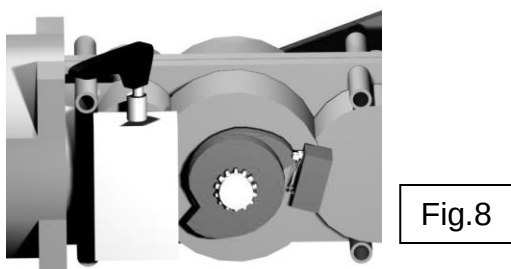


7) Using the articulated arm, position bracket **A** on the gate so that the angle of the two elements of the articulated arm does not exceed the values shown in Fig. 6-7. Fix plate **A** checking that the measurement between the centre of plate **A** and the centre of the drive shaft does NOT exceed the measurement of 74 cm. (Fig.6-7)





- 8) Make a complete movement of the sash by checking the correct arm movement.
- 9) Check the fixings and proceed with the electrical connections, adjust the **A-B** cams of the limit switches as indicated in the control unit manual. (Fig.8)



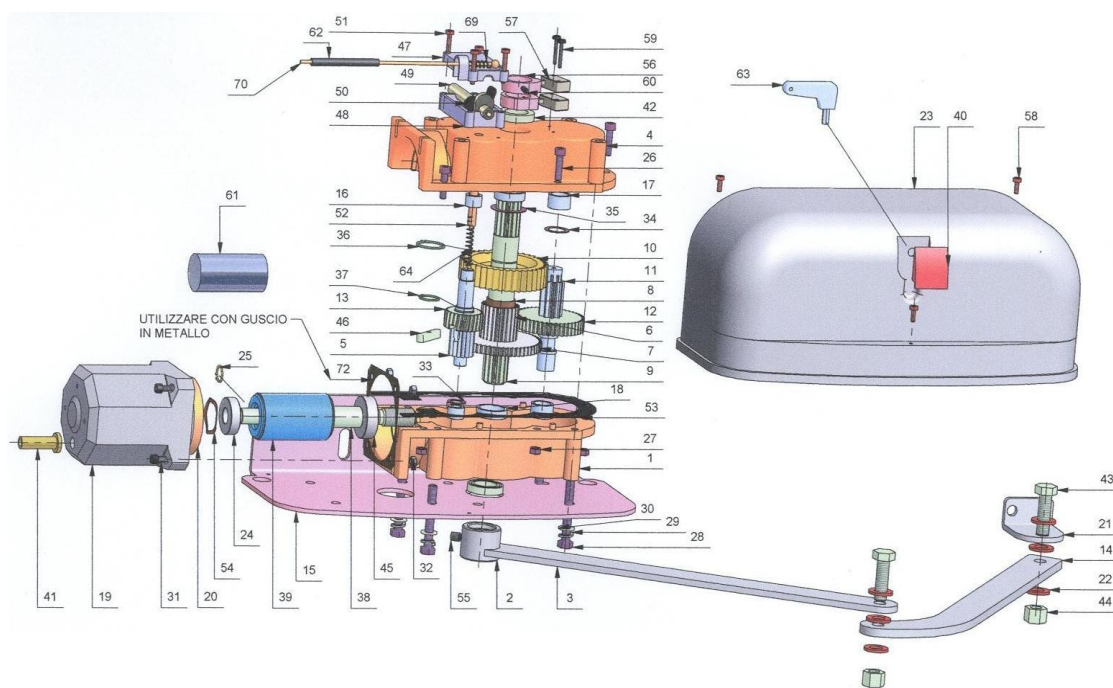
- 10) Mount the protective covers.
- 11) Install the mechanical stops.



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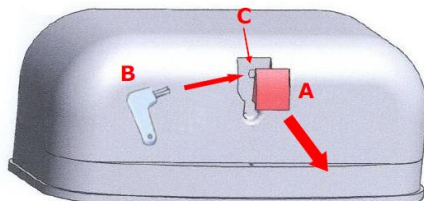
PLANNED MAINTENANCE

DESCRIPTION	FREQUENCY	IN CHARGE	OPERATING INSTRUCTION
Photocell cleaning and verification of all safety features	Monthly	User	Clean with a damp cloth and test the safety features
Control of gate hinges and supports, gate balancing	As required	User	Check the condition of the welds and corrosion. Disengage the motor and check the balance and any friction points of the sash.
Electronic clutch sensitivity control (torque adjustment) of the control unit	Semiannual	Electrician	Check the torque setting as indicated in EN 12453 - EN 12445.
Protection degree control	Semiannual	Electrician	Check that there are no traces of moisture or water inside the electrical enclosures.
Leakage current control	Annual	Electrician	Check that it is 7.5A lower
Check the tightening of the bolts of the articulated arm. Checking the connection to the motor	Semiannual	User	Check that the bolts are tightened well and that the arm has no abnormal play. Check the coupling with the motor.
Signage control	Semiannual	User	Check that it is complete and intact



EMERGENCY RELEASE

Remove cap A, insert the supplied key B into hole C, turn the key (left or right) until you hear the first click.



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