

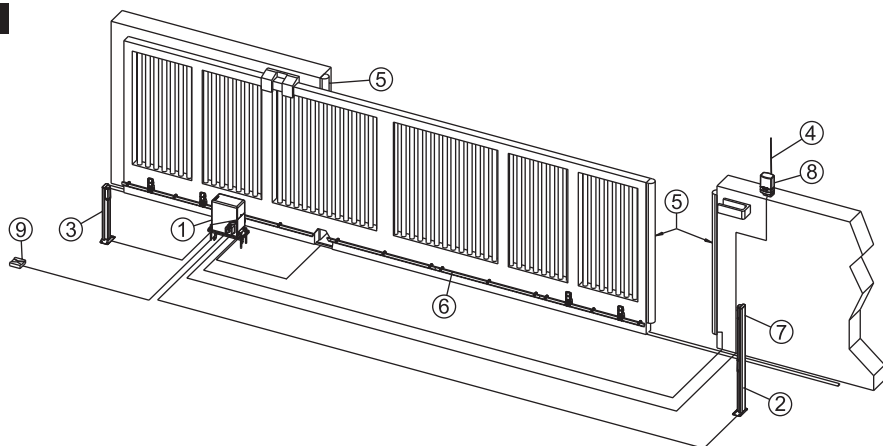
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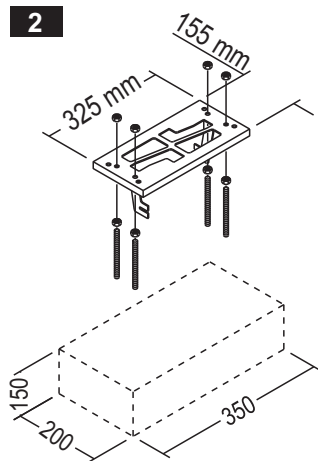
**PASS (1200 - 1800 - 2500)**

**Electromechanical gearmotors**  
**INSTRUCTIONS FOR INSTALLATION**

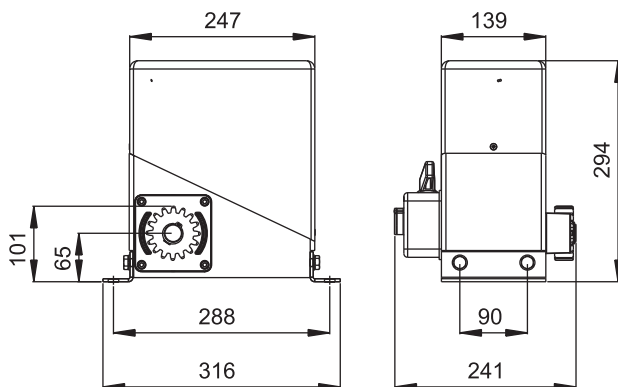
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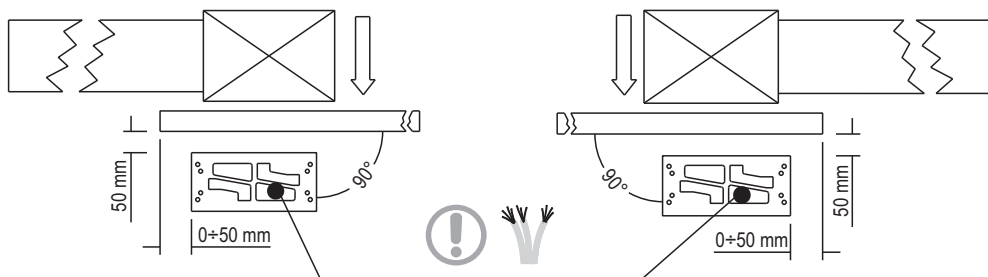
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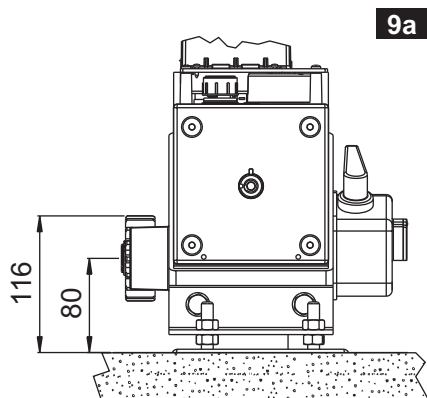
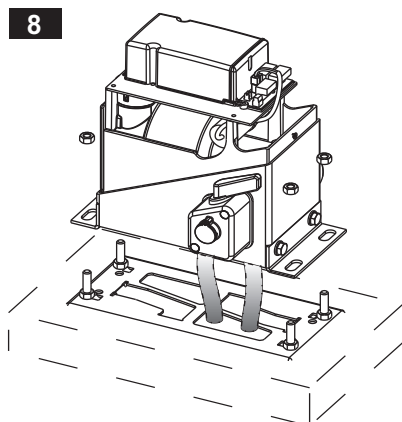
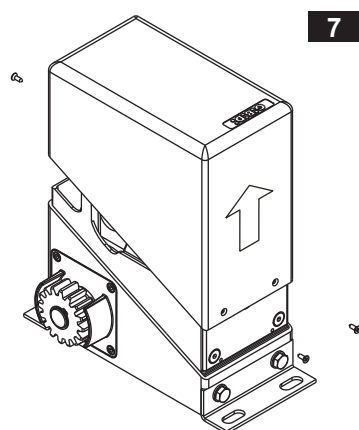
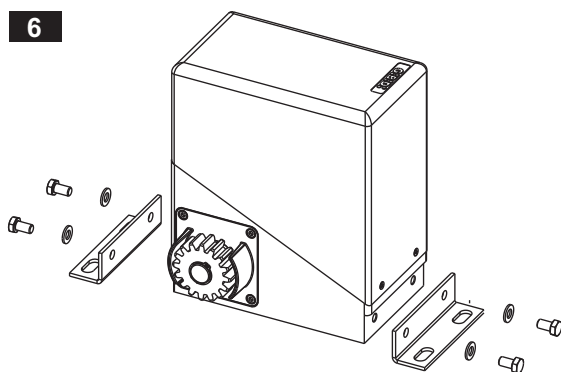
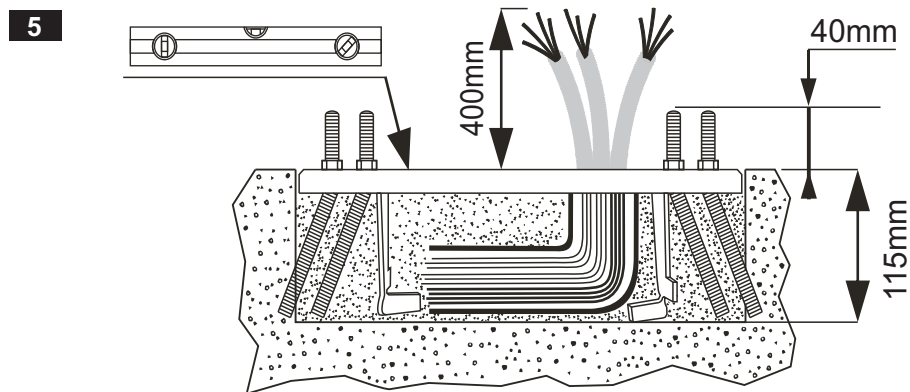


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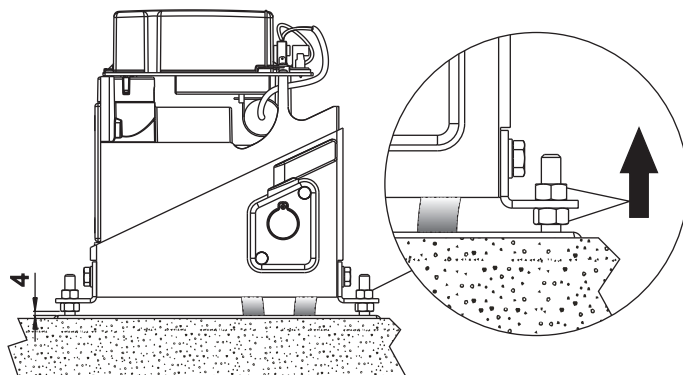


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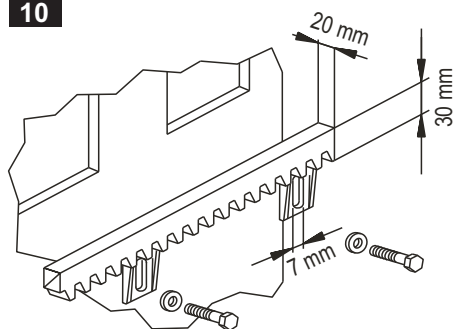




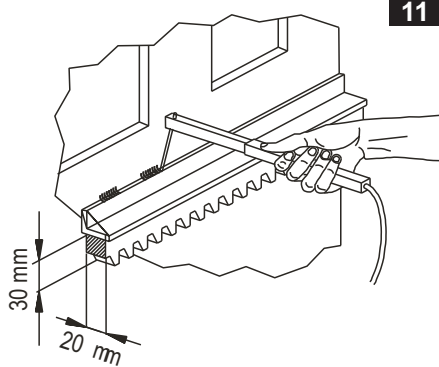
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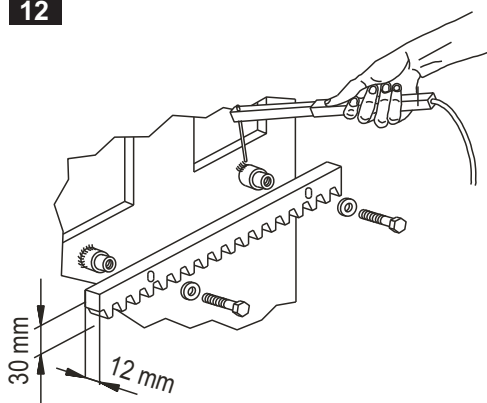
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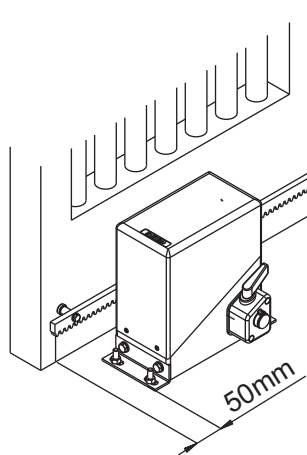
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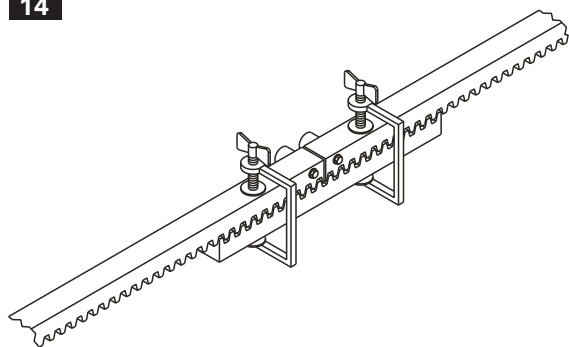


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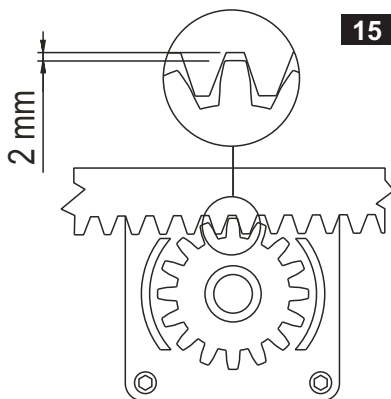




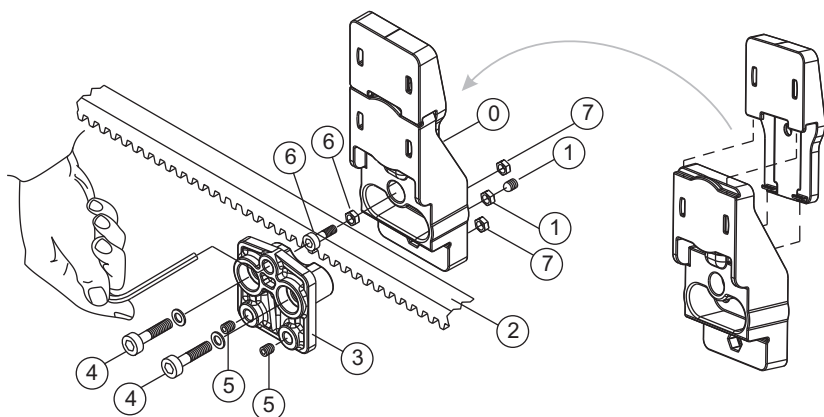
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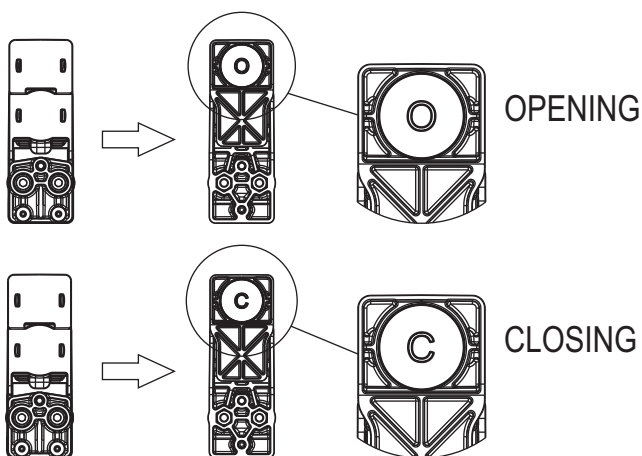
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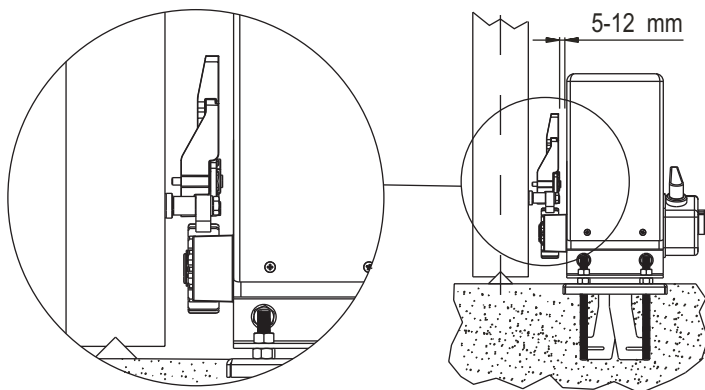
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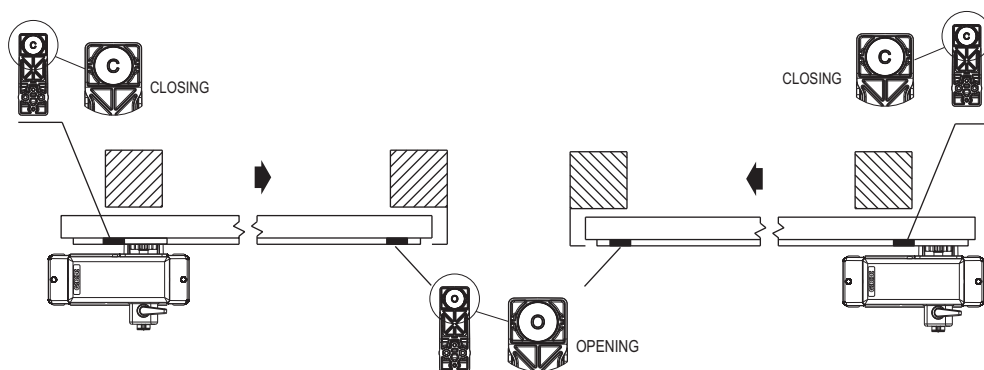
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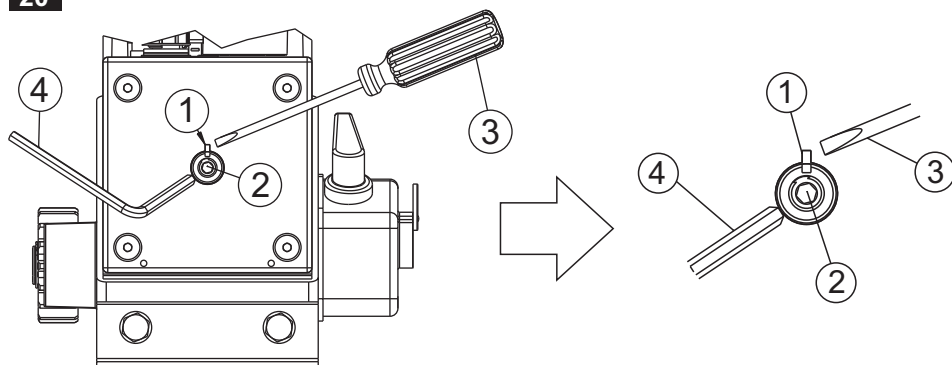
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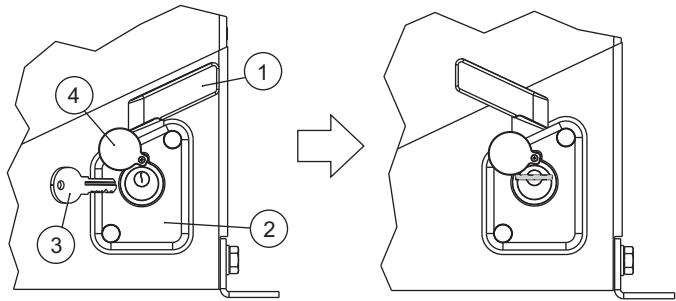
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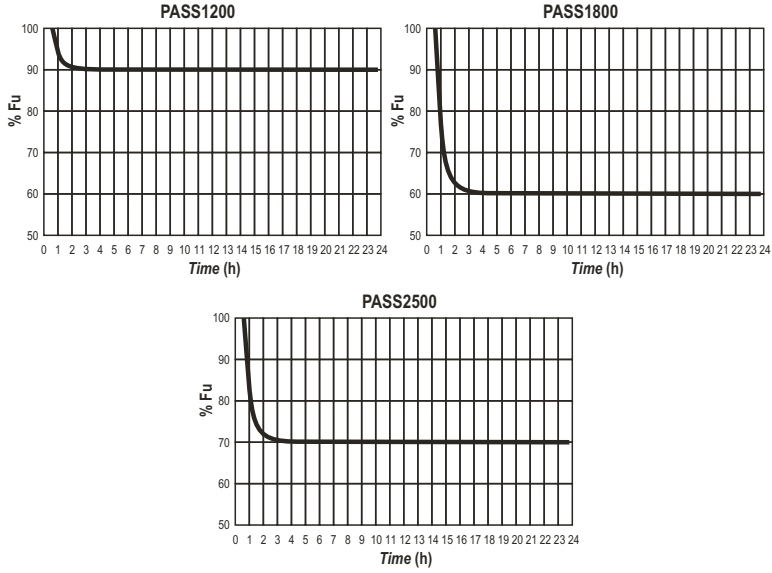
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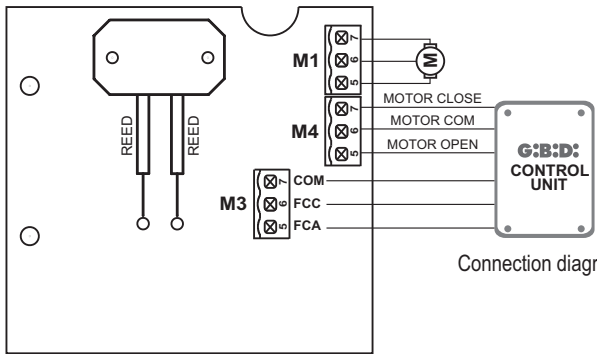
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Connection diagram for limit switch card AS05770

## UK

Thank you for choosing GIBIDI.



**READ CAREFULLY THESE INSTRUCTIONS BEFORE PROCEEDING WITH INSTALLATION.**

**WARNINGS:**

This product has been tested by GIBIDI for full compliance with the requirements of the directives in force. GIBIDI S.r.l. reserves the right to change the technical data without prior notice in relation to product development.

**INTRODUCTION**

The gearmotors PASS 1200-1800-2500 allow automating, easily and fast, gates of large and medium size up to 2,500 kg. They are suitable for heavy and residential use. Available with or without control unit, it is easy to adapt the system to meet the EN 12453 standards.

**WARNINGS FOR THE INSTALLER**

- Before proceeding with installation, fit a magnetothermal and differential switch with a maximum capacity of 10A upstream of the system. The switch must guarantee omnipolar separation of the contacts with an opening distance of at least 3mm.
- All the packaging materials must be kept out of reach of children since they are potential sources of danger.
- The manufacturer declines all responsibility for proper functioning of the automated device if failing to use original GIBIDI components and accessories suitable for the intended application.
- When installation has been completed, always carefully check proper functioning of the system and the devices used.
- This instruction manual addresses persons qualified for installation of "live equipment", therefore, good technical knowledge is required exercised as profession in compliance with the regulations in force.
- Maintenance must be performed by qualified personnel.
- Before carrying out any cleaning or maintenance operation, disconnect the control unit from the mains.
- This product has been designed and constructed solely for the use indicated in this document. Any other use may cause damage to the product and be a source of danger.
- Verify the intended end use and take the necessary safety precautions.
- Use of the products for purposes different from the intended use has not been tested by the manufacturer and the operations performed are therefore on full responsibility of the installer.
- Mark the automated device with visible warning plates.
- Warn the user that children and animals must not play or stand near the gate.
- Adequately protect the danger points, for example, using a sensitive frame.
- Check proper installation of the earthing system; connect all the metal parts of doors, gates, etc. and all the system components equipped with earthing plate.
- Exclusively use original spare parts for any maintenance or repair.
- Do not make any modification to the components of the automated device unless expressly authorised by GIBIDI.

**WARNING: IMPORTANT SAFETY INSTRUCTIONS.**

It is important for the safety of persons to follow these instructions.  
Keep this instruction manual.

**ELECTRICAL EQUIPMENT [1]**

- 1- Gearmotor: power supply, 3x1.5mm<sup>2</sup> (PASS1200-1800) - 4x1.5mm<sup>2</sup> (PASS2500) cable (comply with the current standards))
- 2- Photocell transmitter 2x0.5mm<sup>2</sup> cable
- 3- Photocell receiver 4x0.5 mm<sup>2</sup> cable
- 4- Antenna screened coaxial cable.
- 5- Frame 4x0.5mm<sup>2</sup> cable
- 6- Rack
- 7- Key selector 3x0.5mm<sup>2</sup> cable
- 8- 230 Vac flashing light signaller 2x0.75mm<sup>2</sup> cable
- 9- Omnipolar magnetothermal switch with minimum contact opening of 3 mm. Power supply line to the control unit: 220-230V, 50-60Hz, 3x1.5mm<sup>2</sup> cable (PASS1200-1800) - 380V, 50-60Hz, 5x1,5mm<sup>2</sup> cable (PASS2500) (comply with the current standards).

**TECHNICAL DATA**

Operator	PASS 1200	PASS 1800	PASS 2500
Type	Irreversible electromechanical gearmotor		
Supply Voltage	220/230Vac 50-60Hz		380Vac three-phase
Power absorbed	MAX 700W		MAX 750W
Current absorbed	MAX 3A		
Thermal cutout	140°C		
Capacitor	16µF	25µF	-
Max speed	0,15 m/s		
Max torque	50 Nm	60 Nm	90 Nm
Operating temperature	-20°C + 60°C		
Degree of protection	IP 55		
Max leaf weight	1200 Kg	1800 Kg	2500 Kg
Operating frequency (%)	90% (at 20°C)	60% (at 20°C)	70% (at 20°C)
Olio	GBD PH-02		
Formula to calculate the operating frequency [22]	$\%Fu = \frac{A + C}{A + C + P} \times 100$ <p> A = Opening time  C = Closing time  P = Overall pause time  A+C+P = Time between two openings </p>		

**PRELIMINARY WARNINGS**

Check that the gate structure is in conformity with the regulations in force and that leaf movement is linear without friction.

**Preliminary checks:**

- check that the gate structure is sufficiently robust. In any case, check that the weight and dimensions of the gate fall within the limits of use of the operator;

## UK

- check that the leaf can be moved manually without force (points of greatest friction) for the entire travel of the gate during both opening and closing;
- Check that the area where the gearmotor will be fitted is not exposed to flooding. If so, install the gearmotor in a position raised from the ground;
- if the gate is not a new installation, check the state of wear of all the components, repair or replace the defective or worn parts and perform any other operations necessary.
- Use mechanical limits to handle leaf travel excess situations.

The reliability and safety of the automated device is directly dependent on the condition of the gate structure.

**EMBEDDING THE PLATE**

- 1- Make the hole for the foundation plate respecting the dimensions [2] and arrange the plate according to the closing direction of the gate [4]. The hole depth must be at least equal to the length of the cramp-irons [5].
  - 2- Fit the flexible hoses through which the electric cables will run so that they lead out of the plate [4] and protrude from the hole by about 30-40 mm [5].
  - 3- Make sure that the plate is level [5] and start filling the hole with concrete.
  - 4- Wait for the concrete to dry.
  - 5- Run the electric cables (for connection of the accessories and electrical power supply) through the flexible hoses.
- To make it easier to make the electrical connections to the control unit, it is advisable to keep a cable length of 400 mm from the foundation plate hole [5].

**INSTALLING THE GEARMOTOR**

- 1 – Put the fixing brackets [6] and remove the gearmotor's cover unscrewing the lateral screws [7];
- 2 – Put the gearmotor on the foundation plate and pass the pins through the suitable slots [8];
- 3 – Keep the gearmotor 2/4 mm up and lower it after finishing fixing the rack [9a - 9b];
- 4 – Screw the 4 nuts to fix the gearmotor parallel to the gate [9a - 9b];

**FITTING THE RACK**

- 1- Manually move the gate to the closed position;
- 2- unlock the gearmotor (see paragraph Unlocking Device);
- 3- arrange the rack (optional) [10 - 11 - 12];
- 4- place the first element of the rack on the pinion in such a way that it protrudes 50 mm from the gearmotor [13] creating the space required for the limit switch bracket;
- 5- secure the element in the slot with a screw or spacer depending on the type of rack chosen [10 - 11 - 12]. It is advisable to tighten the rack retaining screws at the top of the slot so that the gate can be raised and the necessary clearance between the rack and pinion maintained should the gate lower;

- 6-continue fitting the rack, aligning the modules one after another; to properly secure the modules, use a piece of rack of about 150 mm to allow for tooth timing [14]. Once the last module has been secured, cut off the protruding part with a saw.
- 7- when all the modules have been fitted, manually carry out various gate opening and closing manoeuvres to check that it slides smoothly without friction;
- 8- lower the operator and lock the gearmotor leaving a clearance of 2 mm between the pinion and the rack [15] to ensure that the weight of the gate does not negatively affect the gearmotor shaft.

### FITTING THE LIMIT SWITCHES [16]

- 1-insert the nuts ⑦ in the hexagonal seats on the magnet holder ⑩;
- 2- insert the grub screw and nut ① in the magnet holder ⑩ making sure that it protrudes towards the rack ② by at least 1-1.5 mm;
- 3- insert the adjusting screw and nut ⑥ in the hexagonal seat of the magnet holder ⑩;
- 4- assemble the bracket ③ using the screws provided ④ and insert the grub screws ⑤.

**NOTE:** at this stage, it is sufficient to assemble the unit to then position it on the rack without having to tighten the screws.

- 5- Position the complete limit switches on the rack in the appropriate positions.

**NOTE:** the limit switch marked on the cover with the letter "O" must be secured in correspondence to the gate-open position and the one marked "C" in the gate-closed position [19].

- 6- To fasten the limit switch, first tighten the two screws ④, then act on the screw ⑥ to adjust the clamp distance depending on the type of rack and then act on the grub screws ⑤ to securely lock the bracket to the rack.

**WARNING:** Do not overtighten the grub screws ⑤ so as not to deform the bracket.

- 7- Should the limit switch not yet be sufficiently integral with the rack, you can adjust it by unscrewing the screw ⑥.

**WARNING:** Do not exceed in this adjustment since you may deform the bracket.

### ADJUSTING THE CLUTCH [20]

**ATTENTION:** Before beginning to adjust the clutch, disconnect the power supply by turning off the main switch.

- Insert the size 6 Allen wrench into the socket ②. Remember that turning the wrench clockwise increases the thrust and turning it counterclockwise decreases the thrust.
- If the shaft also rotates when you turn the Allen wrench, line the two sockets ① up (the one on the shaft with the one on the flange). Then insert a screwdriver ③ and use the Allen wrench to adjust the clutch.

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## MANUAL UNLOCKING OPERATION [21]

You can manually operate the gate if a problem occurs or if the power supply fails. To manually operate the gate, carry out the following procedure:

- Rotate the cover ④, insert the key ③, and turn it clockwise (to the right) without forcing it. The key ③ will be pushed out a few millimeters by a spring.
- Then completely turn the handle ① 180° towards the left. You can now manually open and close the gate.
- To automatically reset it, turn the handle ① to its initial position, push the key ③ forward, turn it counterclockwise (to the left), and then remove it.

**NOTE:** If the key ③ is not completely pushed forward, it will not turn and cannot be removed. The handle ① can even be locked in the manual position by following the above procedure with the key ③.

## FINAL TESTS

Close the gearmotor casing. Power the system and run a complete opening and closing cycle checking that:

- the gate moves smoothly;
- the safety devices function properly;
- the foundation plate is firmly in place;
- the gate assembly is in compliance with the current EN 12453 EN 12445 standards;

For further details and information on the reference standards, visit our site: [www.gibidi.com](http://www.gibidi.com)

## MAINTENANCE

Periodically check the gate structure, in particular:

- check perfect functioning of the rails;
- check that the rack has not lowered with the weight of the gate, since it would weigh down on the gearmotor. Should this be the case, raise the rack and retighten the screws lower down in the slot, or lower the gearmotor using the adjusting nuts [9b];
- every 6 months check good functioning of the safety devices;
- unlock the operator and check that there are no points of friction along the entire travel of the gate;
- check proper functioning of the unlocking device (see the relative paragraph);
- check that there is no dirt or fragments on the pinion.

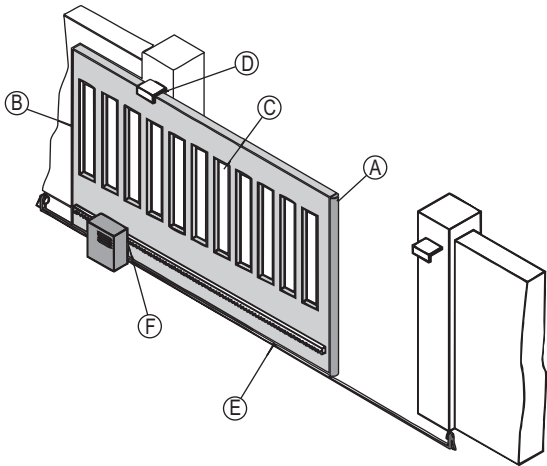
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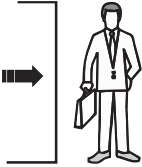
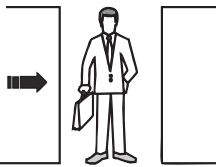
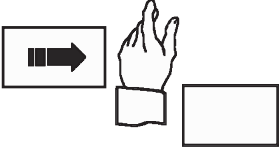
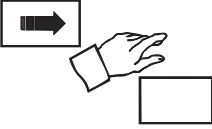
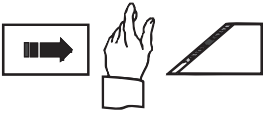
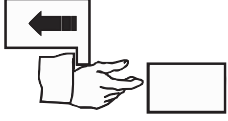


INSTALLATION COMPLIANCE WITH THE REGULATION

When an existing door / gate is automated it becomes a machine, the installer becomes the builder, He is responsible for the safety of the automated device and has to comply with the provisions provided by the 2006/42/CE Directive and by the EN13241-1 product standard.

SLIDING GATE RISK AREAS



 <p>Impact</p> <p>(A)</p>	 <p>Crushing</p> <p>(B)</p>	 <p>Shearing</p> <p>(C)</p>
 <p>Dragging</p> <p>(D)</p>	 <p>Cutting</p> <p>(E)</p>	 <p>Hooking</p> <p>(F)</p>

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PERIODIC MAINTENANCE BY A TECHNICIAN

Date:		Installer company stamp:
Technician sign:		
Date	Notes	Technician sign

Date:		Installer company stamp:
Technician sign:		
Date	Notes	Technician sign

WARNINGS FOR THE USER

- In the event of an operating fault or failure, cut the power to the system and call the technical service.
- Do not allow people or objects to stay in the range of action of the automation.
- Keep children far from the control devices.
- Do not obstruct the automation's movement willingly.
- To move the gate by hand it is necessary to unlock the operator and cut the power to the installation.
- Before restoring the automatic movement, it is necessary to re engage the gate.
- Any repairs must be carried out by specialised personnel using original and certified materials.
- The product is not to be used by children or people with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.
- Do not touch the control board for adjustments and / or maintenance.
- The end user is responsible for the periodical checking of safety devices efficiency and must make the operational maintenance every six months.
- The user must respect the special maintenance plan received by the installer.

USER'S OPERATIONAL MAINTENANCE

- Check periodically the operation of the safety devices: do not use yourself or other people to do it, but only some objects.
- Check periodically that the structure of the gate, hinges and guides do not have signs of failure or instability.
- Cut the power from the installation and check the correct operation of the unlocking device.

Date	Notes	Sign

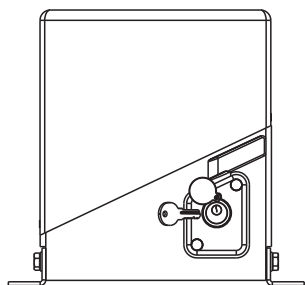
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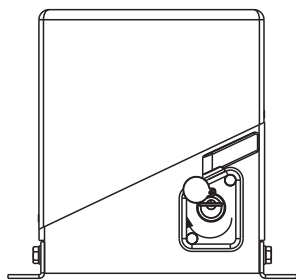


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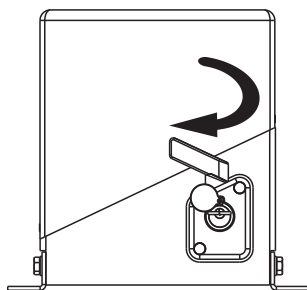
## MANUAL OPERATION



Rotate the unlocking device cover and put the key into the cylinder



Rotate the key of 90° clockwise



Rotate the unlocking device of 180°

## DISPOSAL

GI.BI.DI. advises recycling the plastic components and to dispose of them at special authorised centres for electronic components thus protecting the environment from polluting substances.



GIVE THE USER THIS SHEET

GIVE THE USER THIS SHEET



## EU Declaration of conformity

The manufacturer:

**GI.BI.DI. S.r.l.**  
Via Abetone Brennero, 177/B,  
46025 Poggio Rusco (MN) ITALY

declares that the products:

### **ELECTROMECHANICAL GEARMOTORS PASS 1200 - 1800 - 2500**

are in conformity with the following Directives:

- **2014/30/UE;**
- **2014/35/UE;**

and that the following harmonised standards have been applied:

- **EN 61000-6-2:2005; EN 61000-6-3:2007 + A1:2011**
- **EN 60335-1:2002 + A1:2004 + A11:2004 + A12:2006 + A2:2006 + A13:2008  
+ A14:2010 + A15:2011; EN 60335-2-103:2003 + A11:2009;**

The product, with limitation to the applicable parts, also complies with the following standards:

- **EN 13241-1:2003 + A1:2011; EN 12445:2002; EN 12453:2002; EN 12978:2003  
+ A1:2009.**

Moreover declares that the product must not be used until the machine in which it has been incorporated has not been declared in accordance with 2006/42/CE Directive..

Date 02/04/2021

The legal Representative  
Michele Prandi



The UKCA declaration of conformity is available at <http://conformity.gibidi.com>

# GIBIDI

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