# G:B:D:



# **SNAPPER**

# **CER**

**SNAPPER 250** 

Electromechanical gearmotor INSTRUCTIONS FOR INSTALLATION

# **TYPICAL INSTALLATION**





#### **OPERATOR DIMENSIONS**



# PARTS

3



1	Straight arm	1pce
2	Curved arm	1pce
3	U-shaped fixing plate	1pce
4	Mechanical stopper	2pcs
5	Front-end fixing bracket	1pce
6	M6 Screws	4pcs
7	M10 nuts	2pcs
8	M8 cup square screws	2pcs
9	M10 Washer	2pcs
10	M8 Shoulder screw	2pcs
11	M6 spring washer	
12	M8 nut	4pcs
13	G3/8" Cable gland	1pce

# BRACKETS









# INSTALLATION DIMENSIONS



	unit: mm	В		
	С 🔪	50	100	150
A	50	625	575	545
	100	615	565	540
	150	600	550	/
	200	585	535	/
	250	565	515	/
	300	540	/	/

**OPERATOR INSTALLATION** 

6a 6b **\_ \_D** -**C**D \_ -----<del>(</del>+) <u></u> <u>-+-</u> **⊕** ÷. 6 mm Т 



# 6d



# **OPERATOR INSTALLATION**

6e





6f





# **UNLOCK MANEUVRE**

7



## **ELECTRICAL CONNECTIONS**





#### WIRING WITH ENCODER

9

#### LEFT OPERATOR-MOTOR 1

**RIGHT OPERATOR-MOTOR 2** 



# WIRING WITHOUT ENCODER

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#### LEFT OPERATOR-MOTOR 1

**RIGHT OPERATOR-MOTOR 2** 



# **ELECTRIC LOCK INSTALLATION**

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# **BACKUP BATTERIES**

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UK

## INTRODUCTION

The SNAPPER 250 operator for swing gates is an electromechanical device that transmits motion to the gate by means of an articulated arm. It is locked when the motor is not running, it is necessary to install locks if fitted on blind/flush panel doors.

#### 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.
- Gi.Bi.Di. Srl reserves the right to change the technical data without prior notice in relation to product development.

# UK

# WARNINGS FOR THE USER

• In the event of an operating fault or failure, cut the power upstream of the control unit and call Technical Service.

• Periodically check functioning of the safety devices. Any repairs must be carried out by specialised personnel using original and certified materials.

• The product may not be used by children or persons with reduced physical, sensorial or mental capacities, or lacking experience and knowledge, unless appropriately instructed.

• Do not access the circuit board for adjustments and/or maintenance.



**CAUTION: IMPORTANT SAFETY INSTRUCTIONS.** It is important to follow these instructions in order to safeguard persons. Keep this instruction booklet

# UK

### **TECHNICAL DATA**

SNAPPER 250		
Irreversible electromechanical with worm screw		
230Vac		
100 W (~1000 N)		
24 Vdc		
250Nm		
2.5 m		
If fitted on blind/flush panel doors		
it is mandatory to use an electric lock		
250 Kg		
10 °/s		
-20°C + 60°C		
IP 44		
Intensive		
Integrated into the motor		

## **ELECTRICAL EQUIPMENT**

#### Electric system setup

Set up the electric system as shown in **fig.1** referring to the electric system regulations and other national regulations in force. Keep the mains power connections clearly separated from the service connections (photocells, sensitive frames, control devices, etc.).

The main components are:

- 1- Antenna; screened coaxial cable
- 2- Electronic control unit container
- 3- Electric lock; 1 mm<sup>2</sup>2-core (2x1) cable
- 4- Key selector; 0,5 mm<sup>2</sup> 3-core (3x0,5) cable
- 5- 24Vdc operators:
  - 1,5 mm<sup>2</sup> 2-core (2x1,5) cable power supply WHITE = + YELLOW = for a cable length of 6 m max., over it's necessary increase the cable section. -0,5mm<sup>2</sup> 3-core (3x0,5) encoder cable.
- 6- Omnipolar magnetothermal and differential switch with minimum contact opening of 3 mm 220-230V/50-60Hz control unit power line: min. 1,5 mm<sup>2</sup> 3-core cable (3x1,5) (adhere to the regulations in force)
- 7- 24V flashing light; 0,75 mm<sup>2</sup> 2-core (2x0,75) cable
- 8- Connector blocks
- 9- Photocell transmitter; 0,5 mm<sup>2</sup> 2-core (2x0,5) cable
- 10- Photocell receiver; 0,5 mm<sup>2</sup> 4-core (4x0,5) cable
- A- Opening mechanical end-stop.
- B- Closing mechanical end-stop.



CAUTION: It is important that an omnipolar magnetothermal and differential switch with a minimum contact opening of 3 mm be fitted upstream of the control unit.

### PRELIMINARY WARNINGS

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

#### Preliminary checks:

- · Check that the gate structure is sufficiently robust.
- · In any event, the actuator must push the leaf at a reinforced point.
- Manually check that the leafs move without force along their entire travel.
- If the gate is not a new installation, check the state of wear of all the components, and repair or replace the defective or worn parts.

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

### INSTALLATION DIMENSIONS

Refer to fig.5 for possible installation dimensions.

### **OPERATOR INSTALLATION**

#### Preliminary checks:

For proper functioning of the automated device, the existing or new gate structure must meet the following requirements:

- The individual leafs must have a maximum length of 2.5m
- The leaf structure must be robust and rigid
- · The leafs must move smoothly and uniformly without irregular friction along their entire travel
- The existing hinges must be in a good condition

#### Installing the operators

- · Find the most suitable point where to fasten the front bracket of the operator and mark it.
- Using a spirit level mark the point on the pillar where to fasten the rear bracket .
- Identify the point where to fasten the rear bracket in relation to the dimensions A-B fig.5 and in relation to fig.2.
- Fasten the rear bracket to the pillar fig.6a-6b.
- Fit the operator on the rear bracket using the screws provided fig.6c.
- · Fasten the arms and the front bracket on the operator fig.6d.
- · Unlock the operator (see unlocking device).
- · Move the leaf to closed position.
- Fix the front bracket to the leaf.
- · Use a spirit level to check that the arm is perfectly level.
- Manually open and close the gate to its full opening and closing travel. The gate must move smoothly without friction.
- Fix the mechanical stoppers fig.6e-6f.

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# UNLOCKING DEVICE

If the gate needs to be operated manually because of a power failure or operator malfunctioning:

- Insert the release key to the release slot fig. 7.
- Turn the release key .
- Pull out the release bar and keep it pulled out .

#### Move the gate manually only in the event of a power failure.

### INSTALLING THE ELECTRIC LOCK

If you need to install an electric lock, refer to figures fig.11 and fig.12.

- 1) ELECTRIC LOCK
- 2) ELECTRIC LOCK FASTENING PLATE
- 3) BUSHING
- 4) END-STOP FOR BUSHING
- 5) SPRING LATCH
- 6) THROUGH CYLINDER (ON REQUEST)
- 7) GATE

## **FINAL CHECKS**

Power the system and run a complete opening and closing cycle checking that:

- The safety devices function properly;
- · The gate moves smoothly;
- · Good hold of the fastening brackets;
- · That the power cable moves freely;
- The gate assembly conforms to EN 12453 and EN 12445;

### MAINTENANCE

Periodically check the gate structure, in particular:

- · Check functioning of the hinges;
- Check that the leafs are correctly balanced. Do the test by unlocking the operator and checking that the leafs do not move on their own;
- · Check good functioning of the safety devices;
- Unlock the operator and check that there are no points of friction along the entire travel;
- Periodically check proper adjustment of the operator thrust force and the efficiency of the unlocking device for manual operation (see the relative paragraph).
- The safety devices installed on the system must be checked every six months.

### MALFUNCTIONING

For any unresolved malfunction, cut the power to the system and call in a qualified technician (installer). In the period when the gate is out of service, activate the manual unlocking device to allow manual opening and closing.



# **EU Declaration of conformity**

The manufacturer:

GI.BI.DI. S.r.I.

Via Abetone Brennero, 177/B,

46025 Poggio Rusco (MN) ITALY

declares that the products:

# **ELECTROMECHANICAL GEARMOTOR SNAPPER 25**

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 parts of the product which are subject to the following standards complyWwith them:

•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 01/03/2021

The legal Representative Michele Prandi

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



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