

# Z06 - SWING GATE MOTOR SUPPLY 230-24V





Z06.REV01.2018

USER MANUAL AND CONFIGURATION



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#### **01. SAFETY INSTRUCTIONS**

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 can cause physical injury and material damage.

•Keep these instructions in a safe place for future reference.

•This product was designed and produced strictly for the use indicated in this manual. Any other use, not expressly indicated here, could compromise the good condition/ operation of the product and/or be a source of danger.

•ZERO SRLS. is not responsible for the improper use of the product, or other use than that for which it was designed.

•ZERO SRLS. is not responsible if safety standards were not taken into account when installing the equipment, or for any deformation that may occur to it.

•ZERO SRLS. is not responsible for the safety and proper operation when using components not sold by them.

•Do not make any modifications to the operator components and / or their accessories.

•Before installation unplug the automatism from the source of power.

•The installer must inform the client how to handle the product in case of emergency and provide this manual to user.

•Keep remote controls away from children, to prevent the automated system from being activated involuntarily.

•The customer shall not, under any circumstances, attempt to repair or tune the operator .Must call qualified technician only.

•Connect the automatism to a 230V plug with ground wire.

•Operator for outdoor and indoor use.

## 02. OPERATOR

## TECHNICAL SPECIFIATIONS

# Z02 specifications are as follow:

	Z06	Z06.24	
Power Supply	230Vac 50/60Hz	24Vdc	
Power	280W	50W	
Current	1,4 A	3 A	
Capacitor	12.5µF	-	
RPM	1400	1800	
Maximum gate weight/leaf	500 kg		
Torque	250 Nm		
Operating temperatures	-25°C to 65°C		
Thermal protection	120°C	-	
Protection class	IP67		
Working frequence	25%	INTENSIVE	
Opening time	16 seconds		

### DIMENSIONS

Z06 dimensions are the following:



#### 03. INSTALLATION

#### INSTALLATION STEPS

GATE LEAF OPENING ANGLE: Establish the required opening angle.







1. Dig a hole big enough to hold the box containing the operator (C1).



3. Cement so that the box cannot be moved, wait for it to dry and then assemble the operator and levers.



2. Insert the tube for water drainage in the prepared hole (F1). Insert the sheath for laying the power cables (F2).

**Note**: while positioning the box, keep in mind the minimum distance there must be between the pillar and the centre of rotation of the gate hinge.



It is important to respect this installation order!

Otherwise, it is not possible to ensure correct installation and operators may not work properly! zero



and fixit with nuts and washers supplied.



1. Insert the motor into the foundation case 2. Insert the ball in the pin located on the box and fit the gate anchorage lever (L1).



- 3. Put the connection lever(L2) between the levers (L3) and (L1) and block it with screws and washers supplied.
- 4. Insert the cover and fasten it with the screws provided position





It is very important that these dimensions are respected! Only this way can be as- sured the correct functioning and durability of the operators! It is also very important to have a levelled ground/terrain!

#### LIMIT SWITCHES ASSEMBLY (OPTIONAL)



Insert, regulate and block the mechanical limit switches in the desired position.



It is important to use mechanical stoppers in the opening and closing position of the gate. If not respected, components of the automation may suffer efforts for which they were not prepared, and as a result will be damaged.

It is important to use junction boxes for connections between motors, components and control unit. All cables must enter and exit on the bottom of the junction and control board box.

#### 04. MAINTENANCE



Check motor supports: Make sure that supports remain well fixed on the pillars and gate to ensure proper functioning of the equipment.

These maintenance measures must be applied every year in order to insure proper functioning of the automated system.



#### MANUAL RELEASE

To open manually the gate in case of electric power failure or in case of damage, follow the below steps:

Insert the key C provided into the appropriate hole on the lever L1 and turn the key.

# 05. TROUBLESHOOTING

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Problem	Procedure	Behavior	Procedure II
Door doesn't work	Make sure you have 230V power supply connected to control board and if it is working properly.	Still not working.	Consult a qualified ZERO technician.
		Encountered problems?	Consult an experienced gate expert.
Motor doesn't move but makes noise	Unlock motor and move the gate by hand to check for mechani cal problems on the movement	The gate moves easily?	Consult a qualified ZERO technician.
Motor opens but doesn't close	Unlock motor and move the gate by hand to closed position. Lock motor again and turn off power supply for 5 se- conds. Reconnect it and send start signal using transmitter.	Gate opened but didn't clo- se again.	Check if there is any obsta- cle in front of the photo- cells;
			Check if any of the control- devices (key selector, push button, video intercom, etc.) of the gate are jam- med and sending perma- nent signal to control unit;
			Consult a qualified ZERO technician.
Gate doesn't make complete route	Unlock motor and move ate by hand to check for mechanical problems on the gate	Encountered problems?	Consult an experienced gate expert.
		The gate moves easily?	Consult a qualified ZERO technician.

Discovering the origin of the problem						
<ol> <li>Open control board and check if it has 230V power supply</li> <li>Check input fuses</li> </ol>	3. Disconnect the motor from control board and test them by connecting directly to power supply in order to find out if they have problems.	4. If the motor works, the problem is on the control board. Pull it out and send it to our ZERO technical services for diagnosis.	5. If the motor doesn't work, remove them from installation site and send to our ZERO technical services for diagnosis.			
Check all motion axis and associated motion systems related with the motor and the gate to find out what is the problem.						
1. Check capacitors, testing operator with new capacitors;	2. If capacitors are not the problem, disconnect mo- tors from control board and test them by con- necting directly to power supply in order to find out if they have problems.	3. If the motors work, the problem is from control board. Pull it out and send it to our ZERO technical services for diagnosis;	4. If the motors don't work, remove them from installation site and send to our ZERO technical services for diagnosis			
All ZERO control boards have LEDs that indicate the functioning of connections to allow easy diagnosis of faults. All safety devices LEDs (DS) in normal situations remain On. All "START" circuits LEDs in normal situations remain Off. If LEDs devices are not all On, there is some security systems malfunction (photocells, safety edges), etc. 1 • Close with a shunt all safety systems on the control board (check manual of the control board in question). If the automated system starts working normally check for the problematic device. 2 • Remove one shunt at a time until you find the malfunction device . 3 • Replace it for a functional device and check if the motor works correctly with all the other devices. If you find another one defective, follow the same steps until you find all the problems.						
<ol> <li>Check capacitors, testing with new ca- pacitors;</li> <li>If capacitors are not the problem, discon- nect motor from con- trol board and test it by connecting directly to power supply in or- der to find out if it is broken;</li> </ol>	3. If the motor doesn't work, remove it from in- stallation site and send to our ZERO technical servi- ces for diagnosis.	4. If motor work well and move gate at full force during the entire course, the problem is from controller. Set force using P1 button on the board. Make a new wor- king time programming, giving sufficent time for opening and closing with appropriate force.	5. If this doesn't work, remove control unit and send it to ZERO techni- cal services services.			
Check all motion axis and associated motion systems related with the motor and the gate to find out what is the problem.						
NOTE: Setting force of the controller should be sufficient to make the gate open and close without stop- ping, but should stop and invert with a little effort from a person. In case of safety systems failure, the gate shall never cause physical damaged to obstacles (vehicles, people, etc.).						

NOTE:








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