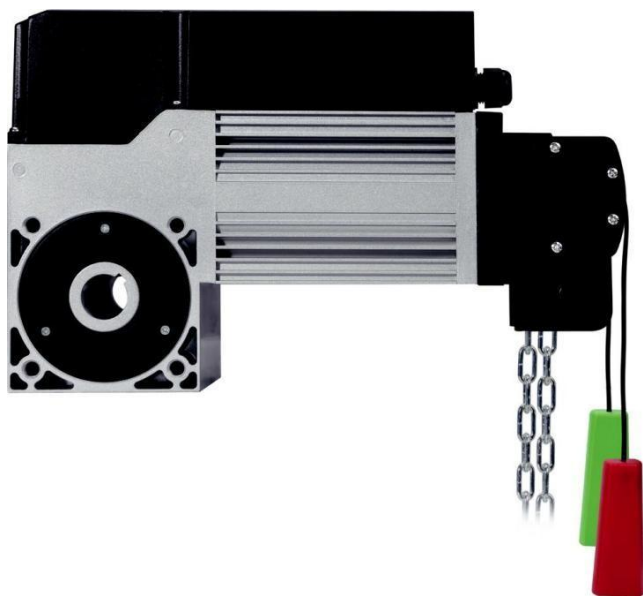


Instruction Manual



For —Sectional door operators

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1. General Safety Information



- The door operator may only be used under the conditions described in these instructions. Any other use will be considered improper usage and therefore dangerous. The manufacturer is not liable for damage resulting from improper, incorrect, or inappropriate usage.
- Failure to observe the information contained in these instructions may lead to personal or material damage. The instructions must be passed on to all future users and operators of the door operator.
- Only use the door operator if no maintenance or adjustment measures are required to do so. Disconnect the operator from the power supply for cleaning or maintenance.
- Only use the door operator if the entire area of movement is fully visible. During operation, be aware of other people who may be within the operating range of the product or who may enter this area. Do not drive or walk underneath the door while it is moving.
- Do not use the door operator to lift objects and/or people.
- Ensure that children are kept away from the area around the door.
- Children over the age of 8 and persons with reduced physical, sensory, or mental capabilities may operate the door operator when supervised or if they have been instructed in the safe handling of the equipment and are aware of the associated risks.
- Keep remote controls and/or other controls out of reach of children to prevent the accidental activation of the door operator.
- Cleaning work on the door operator or the door or any maintenance measures may only be performed by children when supervised.

2. Product Description

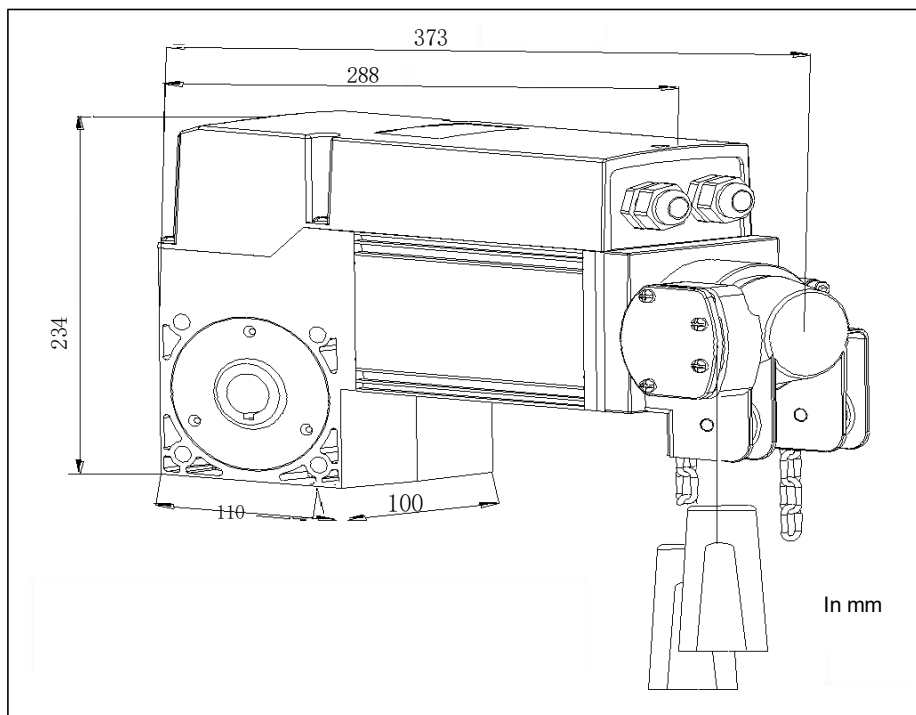
- The door operator has been developed for industrial doors.
- The door operator can be equipped with the following additional safety devices, such as:
 - Photocells, Safety edges
 - Radar
 - Loop detector
 - Remote control, Push buttons
 - Traffic light
- The door operator is operated via the control unit.
- You can choose different operating settings for the operator (e.g., automatic or hold to run).

3. Technical Data

AC380V industrial door operator:

Door type	Balanced sectional industrial door				
Model	GET60S	GET100S	GET120S	GET150S	GET180S
Motor power in W	550	750	900	1100	1500
Rated output torque in Nm	50	70	80	100	145
Max. output torque in Nm	60	100	120	150	180
Rated voltage/ frequency	3N~400V 50/60Hz				
Speed in RPM	24				
Max. cycles per hour	30				
Stroke limit in revolution	20				
Limit setting of door travel	Digital encoder				
Operating environment	-20°C~+55°C				
Max. Door area in m ²	25	35	40	45	55

4. Drawing of appearance and dimension



5. Warnings – Symbols

 Note: Technical information must be observed

Fig. 1 Number of a figure

 **Caution: Warns of a risk to a person / risk of injury**

 **Warning: Warns of a risk to material / risk of damage**

6. Safety information of operation

 **The door may only operate if:**

- Conformity in accordance with Machinery Directive 2006/42/EC was declared following assembly.
- The door complies with the standards EN 12605, EN 12604 and DIN EN 13241-1.
- The door operator has been assembled in accordance with EN 12453, EN 12445 and EN 12635.
- Any additionally installed safety equipment is functioning properly.
- There is an internally operated emergency release for garages that have no second access.
- Any pass door set within the door is equipped with a safety device that prevents switch-on while the door is open.
- The emergency release cannot be caught on any vehicle parts (e.g. roof structures).
- It is insured that the installation is conform with the national safety regulations.

Keep the instruction manual at a safe place!

7. Safety information for installation

Important:

- The door must move easily and be functional and well-balanced in accordance with the manufacturer's specifications.
- It must be possible to open and close the door by hand easily.
- Assembly must be carried out by trained and specialized personnel.
- Electrical installation work must only be performed by authorized and specialized personnel.
- The suitability and bearing capacity of the supporting structure of the building in which the door operator is to be installed must be checked and confirmed by expert personnel.



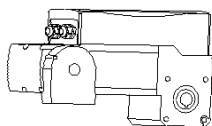
- The door operator must be securely fastened at all the mounting points provided. The mounting material must be chosen according to the material characteristics of the supporting structure to ensure that a minimum tensile force of 900 N can be withstood.
- If these requirements are not fulfilled, the door operator may fall, or the door may move without control. This means there is a risk of personal injury or material damage.
- When mounting the door operator, it must be secured by appropriate means against falling until it is completely and safely attached.
- Observe the relevant occupational health and safety regulations during the installation.

8. Proper Use

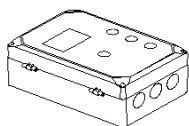
This door operator is suitable for use with balanced sectional/ high speed doors and sectional/ high speed doors equipped with spring-break protection and/or safety catch.

- The maximum dimensions given in the technical data must be complied with.
- Before installing the door operator, any existing locking mechanisms for the door must be disassembled or taken out of operation.
- Use in an explosion-proof environment is not permitted.
- Any other use above and beyond this is considered as improper use.
- All of the below activities performed without the express written approval of the manufacturer:
 - (1) Expansions or modifications
 - (2) Use of non-original replacement parts
 - (3) Performance of repairs by persons or operators that have not been authorized by the manufacturer may result in the loss of the warranty.
- No liability can be accepted for damages that result from the following causes:
 - (1) Technical defects on the door to be operated and structural deformations occurring during operation
 - (2) Improper maintenance of the door
 - (3) Failure to observe the operating instructions

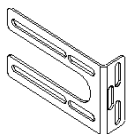
9. Scope of delivery



1



2



3



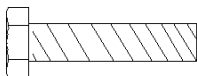
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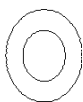
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1 Door operator with emergency release	2 Control unit
3 Torque bracket	4 Fixed ring x 2
5 Key for shaft	

10. Table of components



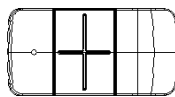
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7



8



9

Item	Quantity
6 M10X20 bolt	4
7 Washer	4
8 M8X15 Set screw	2
9 Remote control (optional)	2

11. Installation



The door operator shown is similar to sectional door operators type with chain drive.

Preparation for installation



Risk of personal injury and/or material damage due to electrical voltage. Have a specialized electrician open and close the cover for the motor controller.

Determine the installation location of the door operator



The door operator must be positioned 100% above the door drive shaft.



Make sure that neither the emergency manual operation chain nor crank (depending on version) can impair the normal operation of the door (clearance) and that they can be used at any time.

11.1 Install the torque bracket

Install the torque bracket as shown in Fig. 1. Make sure that the drive shaft for the door can extend at least 135 mm (dimension A) in the door operator to be installed.

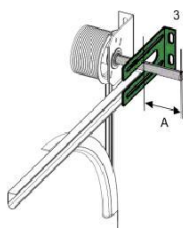


Fig. 1

11.2 Install the feature key

Install the key in the groove of the drive shaft for the door so that is secured against movement in Fig2.

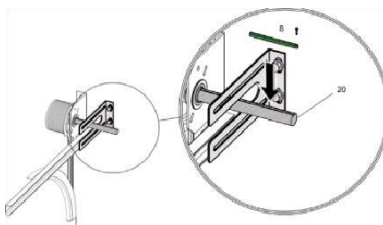


Fig. 2

 The door operator is heavy, which may fall and causes personal injury and/or material damage. A suitable hoist must be used to bring it into the installation location.

- Do not supply power to the door operator yet. Do not connect any plugs.
- Position the drive shaft for the door operator such that it is suitable for the position of the anti-twist device (key, position 8 in Fig. 2). To do this, turn the transmission via the emergency operation.
- Grease the drive shaft for the door such that the door operator can be easily connected.

11.3 Secure the door operator

Slide the door operator onto the door drive shaft in Fig. 2. Secure the door operator with the 4 screws and washers.

11.4 Install the emergency release cord

Emergency release with chain

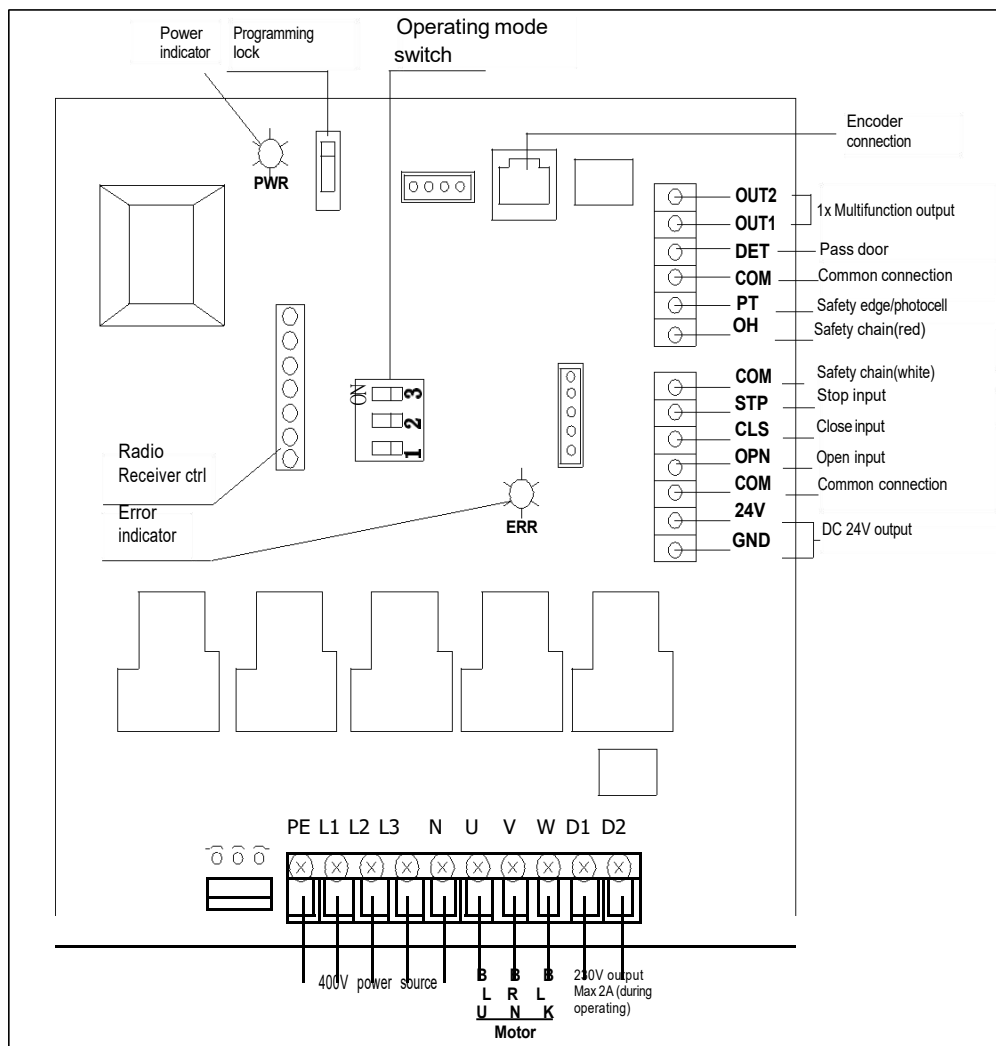
- Secure the emergency release cord such that the emergency release can be activated by using the red emergency release handle.
- The emergency release is activated by pulling the red emergency release handle.
- Make sure that the emergency release can be deactivated again by pulling the green handle.

11.5 Check the emergency operation

Emergency release with chain

Make sure that the door can be opened and closed without any problems by pulling on the chain.

12. Wiring



12.1 Wiring guideline

Connect blue, brown, and black wires from motor to port **U**, **V** and **W** respectively. (if the motor rotates in opposite direction, swap the connection between **V** and **W**)

Connect the green-yellow wire to port **PE** in 380V power source terminal.

Connect red and white wires to port **OH** and **COM** respectively.

Connect the encoder wire to circuit board refer to the circuit diagram.

Connect power source to the circuit board refer to the circuit diagram.

12.2 Additional accessories wiring guideline

Push buttons

For opening and closing you can use different types of push buttons or key switches.

For defined OPEN please connect the button to port **OPN** and **COM**

For defined STOP please connect the button to port **STP** and **COM** For

defined CLOSE please connect the button to port **CLS** and **COM**

Safety devices



Note:

Highly suggested to use **NC mode** safety devices.

Connect safety devices to port **PT** and **COM**. The safety device could be powered by **DC 24V output** on the circuit. (if the safety device is NO mode, please refer to the **operator programming** section about its setting)

Pass door protection

Connect output from pass door safety device to **DET** and **COM** to enable function, the function ensure that the door can't be opened until the small passing door is closed. The door pannel won't be damaged. the default setting for **DET** is NO

Multifunction output

Connect other devices to **OUT1** and **OUT2** to activate additional function. The output paradigm could be found at 13.2 Advanced setting.

Radio receiver control

Plug the radio receiver board to the **Radio receiver ctrl** terminal.

230V output

You can connect additional 230V device to port **D1** and **D2**. Note: it will only function during door operating.

13. Operator Programming

13.1 Door Positions

1. Press and hold **STOP** and **OPEN** buttons at the same time for at least 2 seconds.
2. After the screen displaying "L0", release buttons, then press **STOP** again. You should see the screen displays a four-digit number.
3. Press and hold the **OPEN** button until the door reaches its open end-position, then press **STOP**. Press **OPEN** or **CLOSE** to switch menu to "L1", then press **STOP**.
4. Press and hold the **CLOSE** button until the door reaches its close end-position, then press **STOP**. Press and hold the **STOP** button for at least 2 seconds to save the door position and exit setting process.

13.2 Advanced setting

1. Press and hold **STOP** and **CLOSE** buttons at the same time for at least 2 seconds.
2. After the screen displaying "0000", enter the password "8861" to enter "P1-***" menu (press **OPEN** will change the digit from 0 to 9. Press **CLOSE** to switch to the next digit.), or enter the password "3721" to enter "P0-***" menu, then press **STOP** to enter the programming interface.
3. Press **OPEN** or **CLOSE** buttons to select the desired item, then press **STOP** to confirm. Please refer to the table below regarding code representations and details of programming.

Displayed code	Represented function	Adjustable range	Default setting
P1-00	Safety device nullified position	1-6000	20
P1-01	Pre-stop-position	1-1000	30
P1-02	Open-end-position exceeding tolerance	1-500	300
P1-03	Close-end-position exceeding tolerance	1-500	300
P1-04	Motor stuck threshold	1-100	6s
P1-05	Multifunction output (OUT1 and OUT2)	0- close end-position trig 1- open end-position trig 3- error detected trig 4- door operating trig	1
P1-06	Auto-close	0-600	10s
P1-07	Pass door protection	0- NO 1- NC	0
P1-08	Safety device mode	0- NO 1- NC	1
P0—00	Password change for P0 section		3721
P0—01	Allowed operating period (days)		36500
P0---02	Viewing operating intervals		
P0—03	Viewing operating cycles (maximum 9999 cycles)		
P0—04	Viewing operating cycles (number that exceeds 4 digits)		

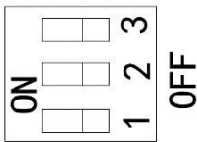
4. After modifying, press **STOP** to confirm the modified item
5. Press and hold **STOP** for at least 2 seconds to exit setting process.

13.3 Programming lock

Programming lock is designed to avoid the change of setting by mistake. Push the switch to the upper position will enable the modification of the door 's end-position and advanced settings. Push the switch to the lower position will disable the modification.

13.4 Operating mode switch

The operating mode switch allows user to switch the operating mode between automatic and hold to run. Also, it allows user to enable/disable the auto-close function. Refer to the chart below to see details of programming.



	ON	OFF
3	Hold to close	Automatic close
2	Hold to open	Automatic open
1	Auto-close enabled	Auto-close disabled

 Note:

If the motor runs into error when Auto-close function is enabled, press **OPEN**, **STOP**, or **CLOSE** to reboot the operator **upon ensuring resolve of the issue**.

13.5 Remote control

Pair the remote control:

Press the button on the radio receiver control board. The indicator will light up.
Double-click any button on remote control to begin pairing.
After the indicator stops blinking, pairing process is complete.

Unpair the remote control:

Press and hold the button on the radio receiver control board until the indicator lights off. (All paired remote control will be unpaired)

14. Error Code Tablet

Error Code	Issue	Description
Err11	Low voltage during operating	Insufficient power supply
Err20	Missing encoder signal	The encoder wire is unconnected loosen, or broken
Err24	Low voltage while stational	Insufficient power supply
Err25	Motor is stuck	Check the door for obstacles.
Err26	Safety chain	The thermal fuse of the motor is triggered, or the emergency release is activated. Let the motor cool down and check emergency release mechanism.
Err28	End-position	Setting the end-positions incorrectly. Resetting end-positions.
Err30	Wrong connection order of power source	Swap the connection between L1, L2, and L3 until the indicator lights off.
Err32	End-position	At least one end-position is missing. Resetting end-positions.
Err33	System maintenance is required	Contact supplier
Err34	Wrong rotation direction	Swap the wires connected to V and W
Err35	Signal disrupted	The wire for screen is not plugged in or is loosely connected.

Screen code	Code representation	description
oPEN	OPN port receives signal	Door opening
CLoSE	CLS port receives signal	Door closing
SLoP	STP port receives signal	Door stops
SAFE	PT port receives signal	Safety devices is triggered
LoC	DET port receives signal	Airlock is triggered