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OPERATOR

SWING-2500



Installation and Operating Manual

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1. GENERAL INFORMATION

The electromechanical linear operator Swing-2500 is intended for automation of a street double-leaf swinging gate with a load-bearing structure.

The body of the operator, which consists of two silumin parts, houses a motor, a reducer and a lead screw.

A self-blocking system, consisting of a worm gear and a planetary gearbox blocks the gate leaves, if the motor is off. The easy-to-use and safe release system allows the gate leaves to be opened/closed manually, in case of a power cut or control unit failure. Operation of the automatic system is controlled from a remote control unit in a shockproof hermetic case.

1.1. TECHNICAL SPECIFICATIONS

Specifications	Units
Supply voltage	220–240 V/50 Hz
Rated power	150 W
Consumption current	1,8 A
Rod speed	1,8 cm/s
Maximal wing length	2,5 m
Maximal wing weight	350 kg
Thermal protection	150°
Protection rating	IP 44
Use intensity	50 %
Operating temperature range	–20...+55 °C

1.2. OPERATOR PACKAGE

Upon receiving the operator, unpack it and inspect carefully. If any signs of damage are observed, please contact your supplier.

The operator components included in the standard package are listed in the following table.

#	Name	Quantity
1	Operator	2
2	Control block unit	1
3	Release	2
4	Rear fastening bracket	2
5	Front fastening bracket	2
6	Set of fasteners	1
7	User manual	1

2. SAFETY INSTRUCTIONS



WARNING! IMPORTANT SAFETY INSTRUCTIONS! It is important for the safety of persons to follow safety instructions. Save these instructions.

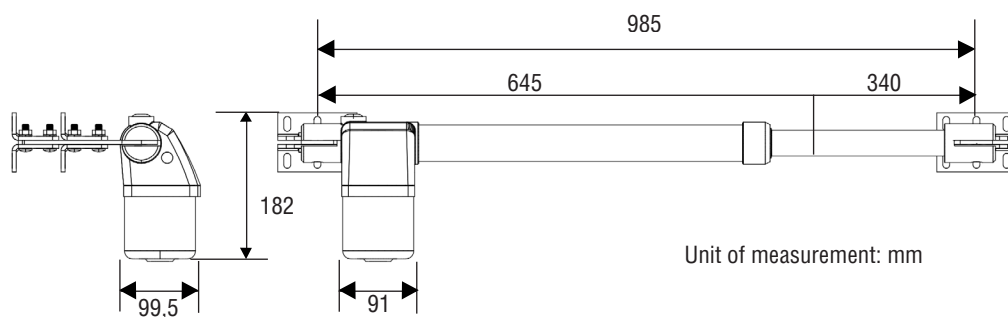
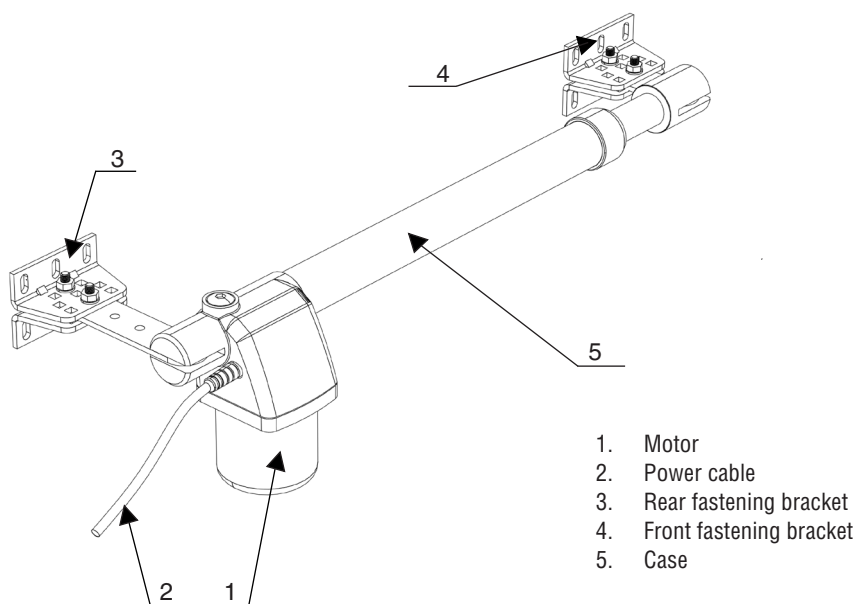
- Follow all instructions since incorrect installation can lead to severe injury.
- Swing-2500 was designed for automation of a street doubleleaf swinging gate with a loadbearing structure. Do not use the operator for other than intended purposes.
- DoorHan shall not be held responsible in case of injury caused by misuse of the product.
- Prior to installation make sure that the gate moves smoothly.
- Installation must be performed in accordance with the standards EN12453 and EN 12445. For countries, which are not EC members, these requirements are to be met.

- Check if the gate conforms to the standards EN12604 and EN 12605 (see documentation accompanying the gate). For countries, which are not EC members, the above mentioned requirements shall be met in order to obtain an appropriate safety level.
- Mechanical units of the gate shall conform to the standards EN12604 and EN 12605.
- Prior to installation, check that the location of operator installation is suitable by its climatic conditions to technical specifications of the operator.
- Do not install the operator in premises containing quick inflammable substances or other dangerous environments as it can cause explosion or fire.
- During assembly, installation and adjustment use tools specified in section “Tools” of this manual.
- When performing operation at height, use a stable support.
- The operator is not intended for installation at a height exceeding 2,5 m.
- When drilling holes, use protection for hands and eyes.
- For fastening of the item, use hardware supplied with the operator or other analogous one.
- Disconnect the supply when cleaning or other maintenance is being carried out, if the appliance is automatically controlled.
- If the operator is installed on the gate with a wicket door an additional safety device should be used to prevent operator activation when the wicket door is open.
- Ensure that entrapment between the driven part and the surrounding fixed parts due to the opening movement of the driven part is avoided.
- It is highly recommended to use DoorHan optional equipment as the accessories produced by other manufacturers can damage the automated system.
- DoorHan is not responsible for unstable work of the automatic system when using safety devices and accessories, which are produced by other manufactures without agreement with DoorHan.
- Never leave the electric motors in released condition. This may cause uncontrolled movement of the gate leaves and, consequently, their breakdown.
- Do not use the operator if it needs repair or adjustment as installation defects or unbalanced door can cause injury.
- DoorHan shall not be held liable in case of improper installation of the item and damage arisen during operation.
- Since the operator does not have a power cord with a plug it shall be connected to the mains supply via automatic switch with a minimal distance of 3 mm between the neighboring contacts. It is recommended to use a 6A double-pole circuit-breaker.
- Be sure there are no obstructions to door travel.
- Do not make any changes in the automatic system not specified in this manual.
- Remove package of the item and dispose of it. Keep the package materials away from children.
- Always keep remote controls out of reach of children. Never permit children to operate or play with garage door control push buttons or remote controls.
- No one should cross the pass of the moving door.
- The content of the manual shall not be basis for any claim.
- The manufacturer reserves the right to modify the design of the product described in this manual without preliminary notice.
- After installation, ensure that the mechanism is properly adjusted and that the protection system and any manual release function correctly.
- The Installation and configuration of the actuator must only be carried out by qualified specialists.
- After installing the drive, test force according to standards EN 12445 and EN 12453.



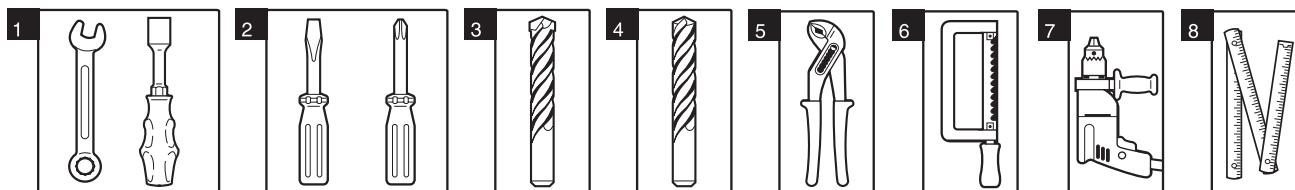
WARNING! For safe and correct operation of the operator put stoppers to limit the gate wing travel.

3. OPERATOR UNIT



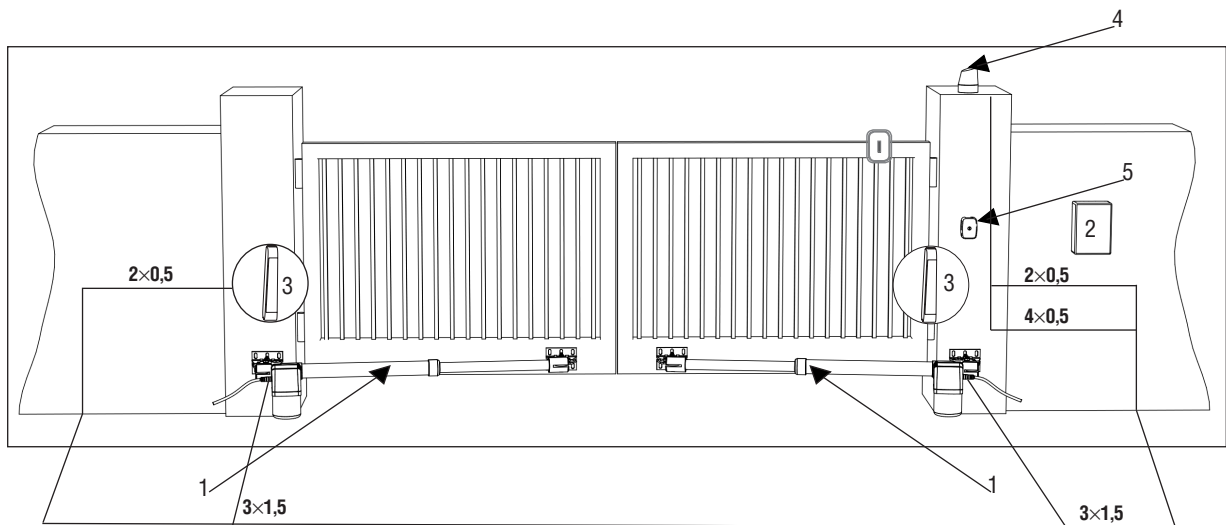
4. INSTALLATION

4.1. TOOLS



- | | |
|--|--------------------------------|
| 1. Set of spanners | 5. Pliers |
| 2. Set of slotted and cross screwdrivers | 6. Hacksaw for metal |
| 3. Set of drills for metal | 7. Electric drill |
| 4. Set of drills for concrete | 8. Tape measure (folding rule) |

4.2. INSTALLATION LAYOUT



1. Operator
2. Control unit
3. Photocell (optional)
4. Signal lamp (optional)
5. Key-switch (optional)



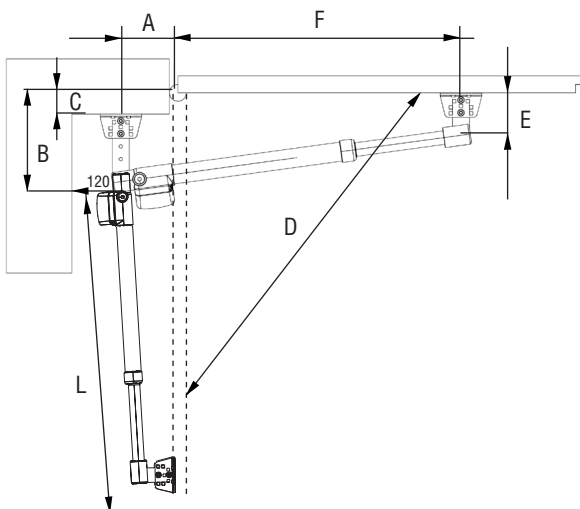
WARNING! RISK OF INJURY!

Have a qualified technician lay the cables 220–240 V AC. The cables must be laid in protective corrugated tubes. Avoid contact of cables and moving parts of the door. In case of supply cable damage, use the suitable type of the cable.

Cables needed for installation of Swing-2500 operator and accessories (if available).

- Cable 2×0.5 mm² (photocell transmitter, stepped control button).
- Cable 4×0.5 mm² (photocell receiver).
- Cable 3×1.5 mm² (power supply).
- The cables should be appropriately insulated.

4.3. INSTALLATION DIMENSIONS

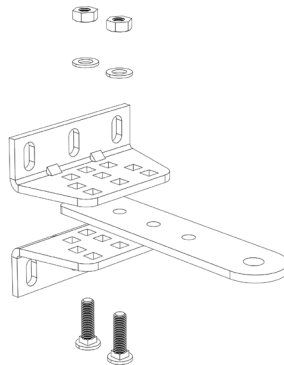


A, mm	B, mm	C, mm	D, °	E, mm	F, mm	L, mm
100	188	30	90	98	843	655
90	198	40	90	98	853	655
98	188	30	95	98	849	655

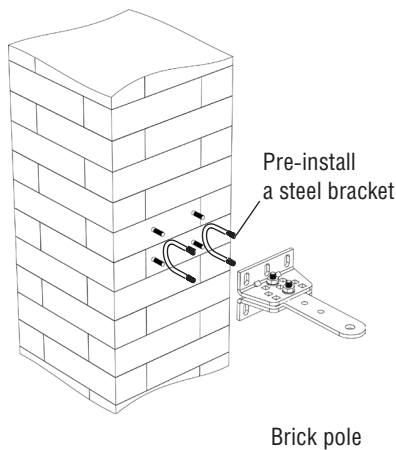
4.4. OPERATOR INSTALLATION

! **WARNING!** Before installation make sure, that the gate moves freely and it is possible to install the operator on the pole and the leaf securely.

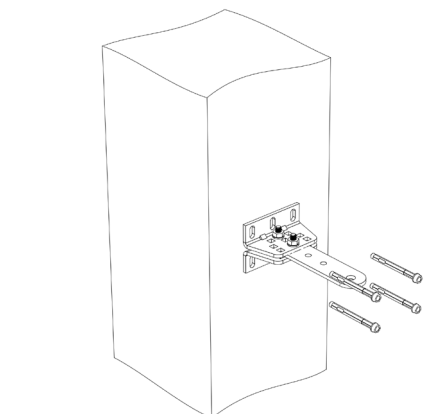
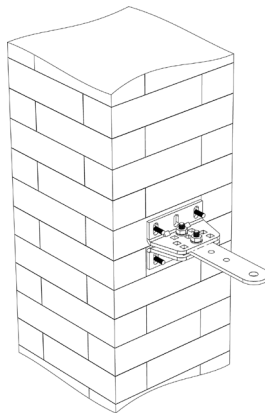
Fasten rear bracket to the pole.



Rear bracket is fastened differently depending on the pole structure and material. When fastening to a brick pole it is necessary to prepare the pole surface and install embedded concrete fittings. Mind that anchor bolts should be screwed between the bricks. When fastening to a concrete pole use anchor bolts as shown in the picture below.



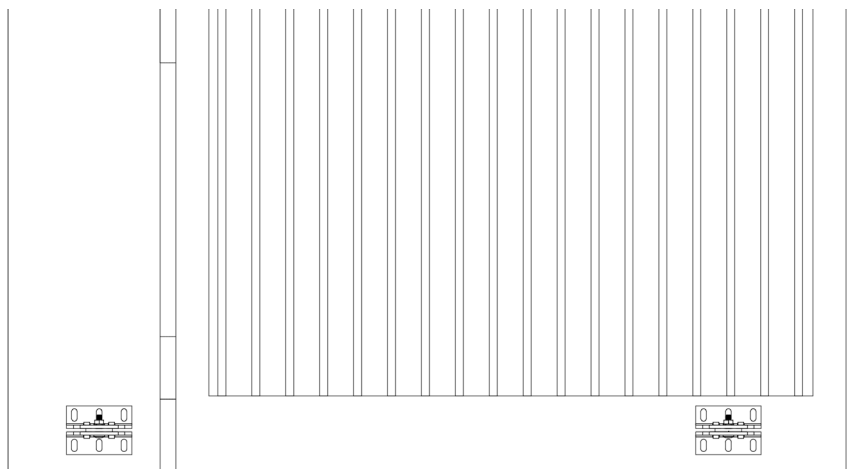
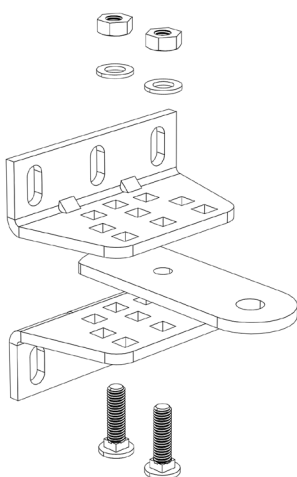
Brick pole



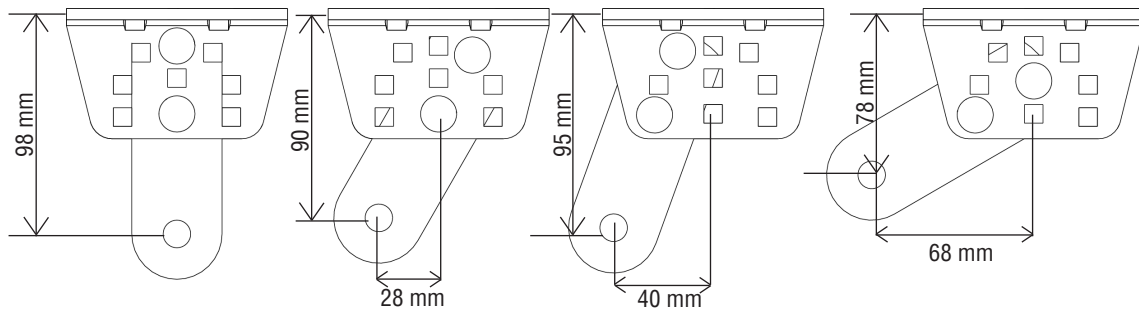
Concrete pole

Fasten front bracket to the gate wing.

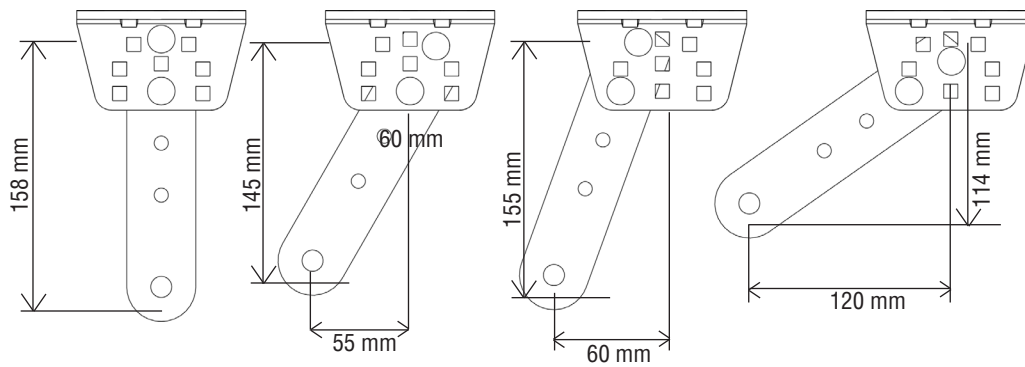
When fastening rear and front brackets make sure they are fixed on the same level.



The angle of bracket fastening depends on the opening parameters and is adjusted during installation.

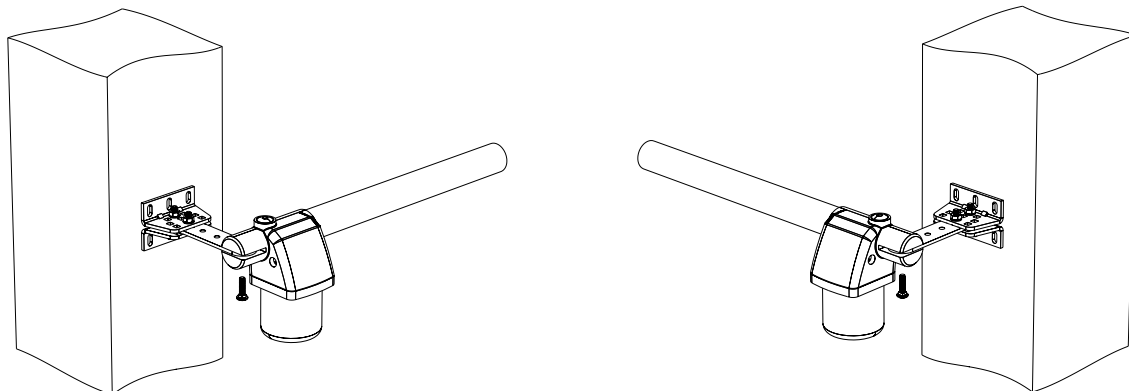


Fastening angle of front bracket

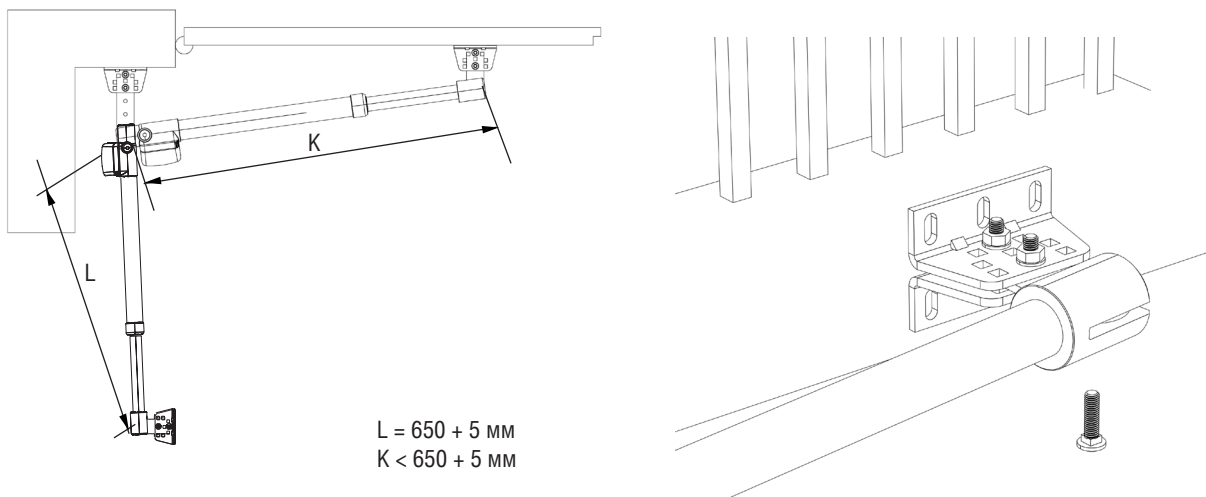


Fastening angle of rear bracket

Fasten the operators.



Fasten the operator arm to the front bracket.

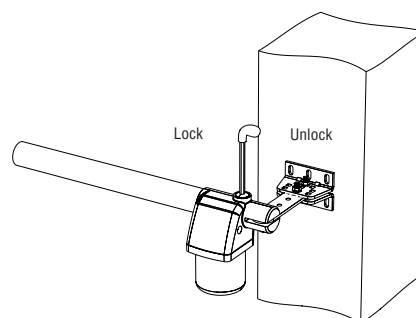
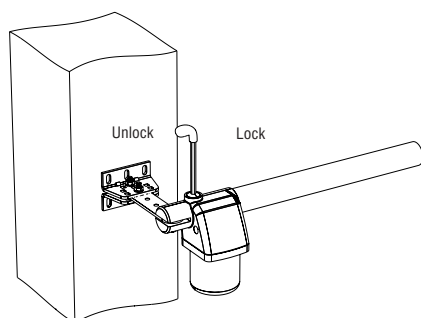


5. EMERGENCY RELEASE OPERATION

Emergency release is used to release the motor in case of power cut. To release the motor, turn the handle by 90 degrees.



WARNING! Before releasing (linking) the operator, disconnect power supply.



WARNING! After the operator was installed check the emergency release for correct operation. Use of the release may cause uncontrolled movement of the driven part due to mechanical failures or an out-of-balance condition.

6. MAINTENANCE

- The Swing-2500 automatic system does not require any special servicing.
- Repairs may be carried out only by a qualified technician trained and certified at an authorized DoorHan centre.
- Be sure that after completion of installation the installer has shown the user how to release the door in case of emergency and has given instructions on proper operation and maintenance of the automated system.
- When carrying out maintenance, it is recommended to use DoorHan original spare parts.
- Carry out maintenance of the automatic system at least every six months.
- Regularly check if the door is properly balanced and moves smoothly when automatically operated.
- Regularly check if the extreme positions of door travel are properly adjusted and safety devices are in good working condition.
- In case of power failure you may need to restore operator's settings. Once the power supply is restored, check the automatic system for proper operation. If the operator settings have changed reprogram them following the instructions given in the corresponding paragraph of this manual (pay special warning to Operation time programming).
- In case of power failure the door will stop. As soon as power supply is restored you can control the operator as usual.
- After expiration of life time, the item shall be delivered in a specialized disposal point!
- If you have lost this Manual, you may request for the duplicate copy to the following address: Kralovsky VRCH 2018, Kadan, 43201, Czech Republic, or by email: europe@doorhan.com.
- The producer (DoorHan) does not supervise the installation of operators, or carry out their maintenance, thus DoorHan cannot be held liable for safety of installation, operation and maintenance of the equipment.

7. TROUBLESHOOTING

Symptom	Possible reason	Solution
Operator does not run	Power is off	Make sure, that the power is on
	Obstruction at gate's movement	Remove the obstruction
	Bad wiring connection	Check reliability of electric wiring connection
	Operator is released	Engage the operator
Operator stops suddenly	Thermal protection is active	Let the operator cool
The gate does not open or close completely	Wrong operator programming	Reprogram the operator

DOORHAN[®]

We very much appreciate that you have chosen the product manufactured by our company and believe that you will be satisfied with its quality.

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