

WARNING

- 1. This door machine must be installed and debugged by professional installer.
- 2. Corresponding installation and wiring shall be in accordance with the Construction Criteria, and wires diameter $\geq 1.5~\text{mm}^2$. Ensure the power source has sound earth grinding, and the grinding wire shall tightly connect into grounding plate. Cutting away the grinding lead wire is prohibited. Earth leakage protection device fulfilling corresponding national criteria shall be firmly set at the front end of the inlet power source.
- 3. This Industrial Door Machine is only applicable for door with sound balance and Spring-Balanced, or the Machine would likely be destroyed by overloading.
- 4. The door shall run freely and without any seizure wear. Each end of the door rail shall have one restrictor or a buffer booster to avoid the door slipping from the guide rail.
- 5. Control box shall be installed on wall or volume from where the door's operation condition can be visually observed, and with at least 1.4 meters distance above floor level so that children could no longer touch it. For the sake of children's safety, remoter shall be kept away from kids. Operating the door remoter at a place invisible of the door's running condition is prohibited.
- 6. Electricity supply system of both door-opening machine and control box shall be cut off if maintenance and removal required. Door shall be checked before maintenance and removal to ensure it is in lock-up condition and there is no any sign of falling risk.
- 7. No any entrance or stay is allowed once the door is running.
- 8. Pulling the hand chain of this machine is prohibited when the door machine is in operation, since it will easily damage the door.
- 9. For equipment with shift clutches, pulling ropes of the shift clutches is prohibited unless otherwise the door is in definite close status; and no any other conditions are allowed for rope drawing.
- 10. For the sake of safety of people and cars passing by, infrared safeguard device and gasbag preventative devices shall be available.

Instruction for the Installation and Use of Industrial Door Machines

Welcome to use our product.

Thank you for your trust

Please read this instruction manual before installation.

And keep it properly after the installation is done.

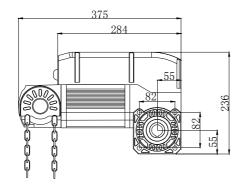
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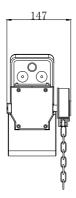
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Industrial Door Machine's Performance Parameter List

| TYPE (AC220V) | GYM50Y | GYM7OY | |
|--------------------------------|--|--------|--|
| Rated Power | 300W | 500W | |
| Starting Torque | 35N. m | 60N. m | |
| No-load Operation Time | 10min | | |
| Thermal Protection Temperature | 120°C | | |
| Reducing Units | 1:58 reducing units of worm wheel and roller | | |
| No-Load Rotating Speed | 24r/min | | |
| Type of Lubricate | Oil Immerged | | |
| Noise | ≤55dB | | |
| Type of Manual Chain | Standard chain type | | |
| Maxi Limiting Distance | 20 rounds by output shaft | | |
| Diameter of the Hole of | Ф25.4mm | | |
| Output Shaft | | | |
| Use Environment | -20°C~+45°C | | |
| Duty Cycle | S2 20% (continuous running with load no more than 10min) | | |
| Protection Classification | IP54 | | |

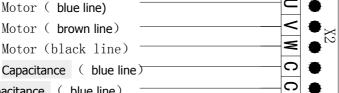
Dimension of Industrial Door Machine





GYM50Y, GYM 70Y All-in-one wiring instructions

- 1. fuse: 10A, Ø5X20
- 2. AC220V Power Input (X1): E(ground electrode), L(Live), N(Neutral)
- 3. Motor port(X2): U(com), V(positive), W(reverse), E(ground electrode)



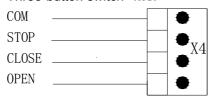
Capacitance (blue line)

- 4. Capacitance port (X2): 20uF (GYM50Y-1), 25uF (GYM70Y-1)
- 5. Power transformer: 220V/24V
- 6. Power light: LED1
- 7. Limit and ground sensors and infrared power input (X6):

| ground sensors and infrared powerport | 24VDC | | • | |
|--|-------------|-----|-------------|---|
| ground sensors and infrared and <code>airbag switch</code> | common port | GND | • | |
| Airbag switch port | PT | | ● X3 | 3 |
| Closed limit port (limit green line) | CL | | • | |
| Limit the common line (white line) | CO | | • | |
| Closed limit port (pick up limit red line) | OP | · | • | |

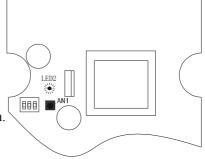
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8. Three-button switch (X4)



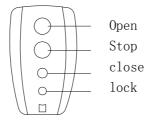
- 9. Study of remote control button AN1
- 1. Press the button AN1 located on the main control board. The indicator LED2 will flash once.

 Press the remote control button (usually it should be Button 1) on the remote control transmitter and the indicator LED2 will flash once again. Immediately press the same remote control button one more time to make the indicator LED2 flash for 4 seconds



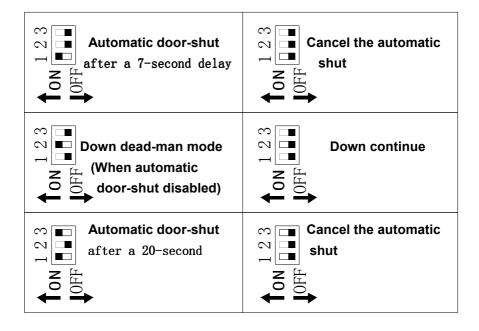
at a frequency of 1/2 Hz. Afterwards, the indicator goes out and the learning process of the remote control transmitter is finished.

2. If it is required to make another transmitter learn, repeat the above step. It is possible to allow maximum 25 remote controller to learn. This remote controller is of a 3-button mode (i.e., Button 1 for on, Button 2 for off and Button 3 for stop).



10. Selection of dialing switches:

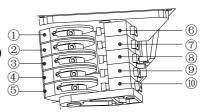
Through setting of the dialing switches, you can set the function options desirable (see the following table):



Adjustment to the limit switches

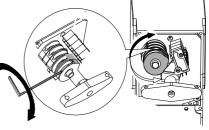
Structure of limit switches

- 1.Cam outputting passive signals
- 2. 3. Cams for open limit switch (green) ②
- 4. 5. Cams for close limit switch (red)
- 6. Passive signal sensitive switch
- 7.8. Open limit sensitive switch
- 9.10. Close limit sensitive switch



1) Setting of the door-shut limit

Close the door electrically to the desired position and press the button "STOP" on the control box to stop the door. Observe the rotational direction of the red cam during the door-shut (see the following picture) and, when the door stops, manually turn the two red cams alongside



that direction until the limit switch is pressed and a "click" is heard. Fasten with an inner-hex spanner the screw located in the center of the copper nut to secure the red cams in position.

2) Setting of the door-open limit

Using the same method, open the door electrically to the desired position and press the button "STOP" on the control box to stop the door. Observe the rotational direction of the green cam during the door open and, when the door stops, manually turn the green cams alongside that direction

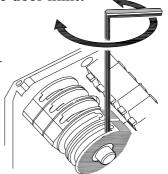
until the limit switch is pressed and a "click" is heard. Fasten with an inner-hex spanner the screw located in the center of the copper nut to secure the green cams in position.

3) Precise adjustment to the limit

Commission the door and check whether the limits for open and close meet the requirements. Readjustment or fine adjustment can be done if the desired effect is not realized.

2) Precise adjustment to the close-door limit:

turn the fine-tune screw for the red cams clockwise or counter clockwise (see in the right-hand picture). Observe the direction of the cam's slight movements. The conformity of the direction of the slight movement and the original direction of the cam indicates earlier door-close limit and



the door-close position will be higher. Otherwise, the door-close position will be lower. Generally, a 90 degree turn of the inner-hex spanner will result in a difference in door-close position of approx. 25mm.

Precise adjustment to the open-door limit: with the same method, turn the fine-tune screw for the green cams with an inner-hex spanner until the desired door-open position is obtained.

Use of manual operating chain

When it is necessary to operate the door machine manually, the loop chain will be used. It is advisable to operate the chains with even and continuous

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force. Sudden jerk of the chain shall beavoided to avoid the damage to the manual mechanism. Pull the chain to realize the opening and closing of the door. During the pull, the protective switches located in the manual chain mechanism automatically cuts off the power to avoid accidents. Once the chain is released, the manual chain mechanism will automatically restore to its original position and the industrial door machine is restored to the normal power-driven status. When the loop chains are not in use, please secure the chains on the wall as per the following picture.

After a period of use, if the manually operated chain can't smoothly open or close the door, finely tune the adjusting handle on the manual chain mechanism clockwise (shown in the above picture) to increase the friction until the chain can normally open the door.



Notes:

- 1. After use of the chain, if the door-close indicator on the control box keeps flashing, the door can't be opened or closed with electric driven method. This is because the protective switch in the manual chain mechanism has not yet restored to its normal position. To tackle this problem, simply pull the chain slightly up and down until the said indicator goes out to enable normal functioning of the control box.
- 2. During the power-driven door-close, it is prohibited to pull the chain, so as to avoid occurrence of any accidents.
- 3. The manual operating chain can be used only in specific circumstances such as power failures and can't never be used as a long-term normalized practice.

Frequently occurred problems and troubleshooting

| | Phenomenon | Possible Cause | Solution |
|---|--|--|--|
| 1 | Stop indicator or indicator LED1 doesn't | 1,Power disconnected Loose terminal connection | Connect the power. Fasten the screws at the terminal |
| | light up. | 2.Emergency switch isn't restored. Loose terminal connection | Let the emergency button restore to its normal opposition. |
| | | 3. No voltage output, input power, transformer transportation | Replacement of circuit board |
| | | damage 4. The fuse single-phase control box | replace fuse |
| 2 | In contrast to the control box | 1. Motor line U, V, W wiring is wrong | V, W two line in the switch control box |
| | button open and close direction | 2. Door of wire around direction contrary to state machine factory. | Two line. Switch control cabinet V, W exchange limit red and green two wires at the same time. |
| 3 | Machine stops suddenly in the middle of the run.Button down light is flashing incessantly. | Motor running too frequently, causing the motor overheating, jumped thermal protector. | Stay for a period of time for motor cooling after use; |

<u>Instruction for the Installation and Use of Industrial Door Machines</u>

| 4. | Door can' t be opened or closed completely | Unreasonable adjustment or loose of the limit switch | Adjust the limit switch again. |
|----|--|---|---|
| 5. | Remote control fails to work | Remote control indicator doesn't light up. Transmitter and receiver do not match. | Change the batteries. Do the setting of the remote control password again. |

Packing List

| S/N | Name | Quantity | Remarks |
|-----|---------------------------|----------|--|
| 1 | Main unit | 1 set | |
| 2 | Installation bracket | 1 PCS | |
| 3 | Securing sleeve | 2 PCS | |
| 4 | Specific purpose spanner | 1 PCS | |
| 5 | Flat key | 1 PCS | |
| 6 | External hex. blot M10X20 | 4 PCS | |
| 8 | Set screw M8X10 | 2 PCS | Mounted on the securing sleeves upon delivery. |
| 9 | Instruction for Users | 1 COPY | |