



## VELOCE Series Sliding Door Machine



# Instruction manual

## 1. Safety precautions and precautions

### **VELOCE series door opening machine needs professional installation**

1, Pay attention! Please follow the instructions carefully, which is very important for personal safety; Incorrect installation or incorrect use of the product can result in serious damage to persons and property;

2, Please read the instructions carefully before installing the product;

3, The installation must strictly abide by the relevant national standards, mechanical parts must meet the relevant national standards;

4, The voltage of the power supply should meet the requirements of the machine, and have good grounding, the power supply should be equipped with leakage and short circuit protection;

5, Before system maintenance, the power supply should be cut off to check whether the grounding system is correct;

6, It is strongly recommended to install safety devices (such as infrared beam protection), and should be regularly checked to ensure normal operation;

7, The Company is not responsible for the consequences caused by inappropriate or beyond the prescribed scope of use;

8, If the process requirements of precision components are ignored during construction or the problems caused by deformation of these components, the company will not be responsible;

9, This product is designed and manufactured in strict accordance with the use guidelines shown in this document, and any use or operation not in accordance with the guidelines may damage the product or cause danger:

10, The company shall not be responsible for safety problems or abnormal operation caused by parts not produced by the company;

11, Do not make any changes to the components of the system;

12, The installer must introduce the operation method and the relevant provisions under the emergency state to the user in detail, and provide the user with the product manual;

13, When installing the product, children and other irrelevant personnel are strictly prohibited near, and the surrounding environment should be safe;

14, Before electric control operation, obstacles within the operating range of the door body should be removed, and vehicles and pedestrians are prohibited during operation;

15, The main control box installation position and height should be appropriate, the environment should be ventilated, avoid rain, sun, children play, operate the remote control and control board switch;

16, If it is necessary to install the outer box, it should be considered that the outer box (metal products) has a shielding effect on the remote control reception, so as not to

affect the function of the product to inconvenience you;

17, The remote control is placed in the place where children can not get, in case of accidents;

18, users are strictly prohibited to try to repair or adjust the system, should contact professionals;

19, Keep the instructions for future use.

## 2.Main functions and working conditions:

This door opener is used on the sliding door, its operating speed is 13 meters per minute AC, 15 meters per minute DC, VELOCE-300 series of sliding door opener is suitable for 120V-240V AC or 12V or 24V DC. It has the characteristics of strong current when starting and overloading in a short time. When the current overload, the door has the role of protecting the current and the motor, in order to prevent the inconvenience caused by power failure, the special key can also be used to release the door and manually make it operate.

Moreover, the door machine can be installed on the inside or outside of the door, the model is small in size, easy to install and easy to operate.

## 3. Main specifications and technical parameters:

Technical parameter			
Model number	VELOCE-05M	VELOCE-08M	VELOCE-12M
Input power supply	AC 120V/220V-240V OR DC120V/24V		
Maximum gate weight	500KG	800KG	1200KG
Rated power	150W	200W	250W
Dimension	330×210×450mm		
Colour	Black, Gray		

## 4. working principle and main structure, performance:

The dimensions of the door engine are shown in Figure 1. The door engine is composed of high-strength aluminum alloy housing, high-quality single-phase motor, overrunning friction clutch, worm gear reducer, tooth clutch and output gear. When working, the motor spindle drives the reducer and the output gear through the transcendent friction clutch, and then the output gear drives the special rack installed

on the translation door, so that the door body moves horizontally to realize the electric opening and closing of the door.

The DC motor can be equipped with spare batteries, and the standby UPS can be automatically started (standby for 5 days). When the power is cut to the battery power is used up or not through, the special key can be used to open, and move the handle to achieve manual opening and closing of the clutch.

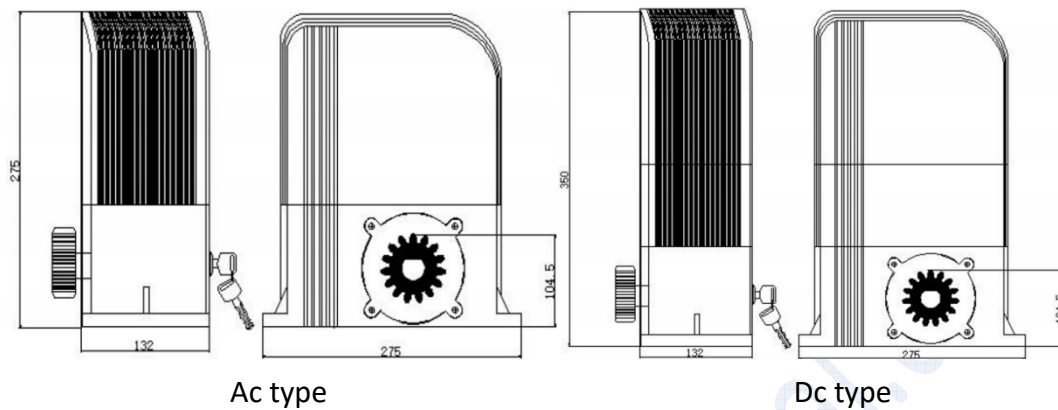


Figure 1

## 5. Installation and commissioning:

1, The installation of the door opening machine and the sliding door can be referred to Figure. 2, and can be controlled by remote control to ensure safety. We recommend installing a limiting device to prevent the door from falling off the track when moving. The rails must be mounted horizontally and straight.

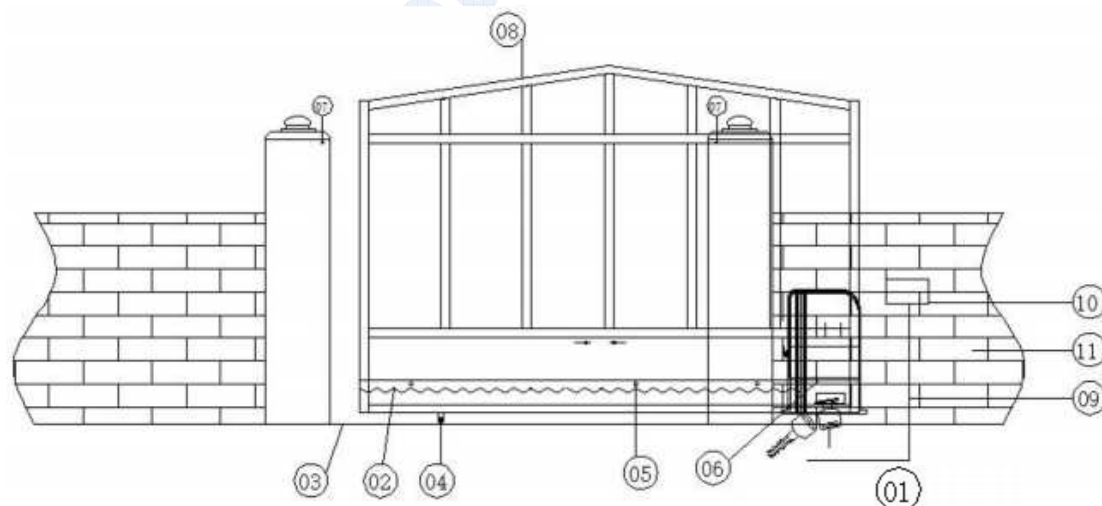


Figure 2

- |  |                      |
|--|----------------------|
| ① Intelligent translation door machine | ⑦ Goalpost           |
| ② Gear rack                            | ⑧ Gate               |
| ③ Running track                        | ⑨ Electric wire      |
| ④ Action roller                        | ⑩ Power source       |
| ⑤ Rack fixation                        | ⑪ wall               |
| ⑥ Door engine output gear              | ⑫ Remote transmitter |

## 2, Installation of door opening machine

The basic installation of the door opening machine is shown in Figure 3, and the position relationship between the door opening machine and the translation door is shown in Figure 4. After the cement is solidified, place the door opener on the installation base plate. The installation base plate should be horizontal and adjusted to the appropriate position according to the direction shown in Figure 4. Then, the nut on the installation foot should be tightly protected to make the door opener firmly connected to the base.

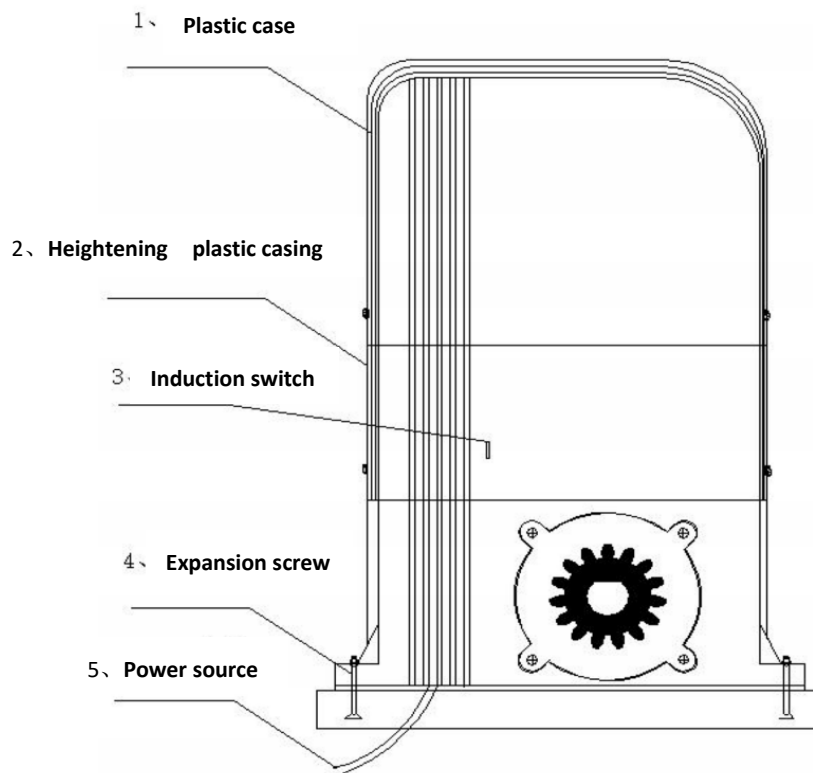


Figure 3

## 3, Installation of bracket:

(1) In the position where the output gear and rack can be reliably meshed, the cylindrical nut is welded in the appropriate position at the lower part of the translation door and then the rack is bolted on the round bolt nut.

(2) Adjust the position of the rack to ensure the engagement between the rack and the gear gap, and the engagement gap should be maintained at 1 mm.

(3) Install the magnetic switch as shown in Figure 4 and Figure 5. The main engine is equipped with a magnetic induction (or spring) switch. Control the correct position for opening and closing doors. Use the special key to open the clutch control compartment, and then use the clutch handle to unload the clutch of the door opener (make the handle straight to 90 degrees); Push the translation door to the appropriate limit position at both ends manually, and preliminarily fix the assembled translation door limiter on the rack at both ends; (As shown in Figure 5) Please refer to the circuit

board manual for details of the circuit installation and debugging.

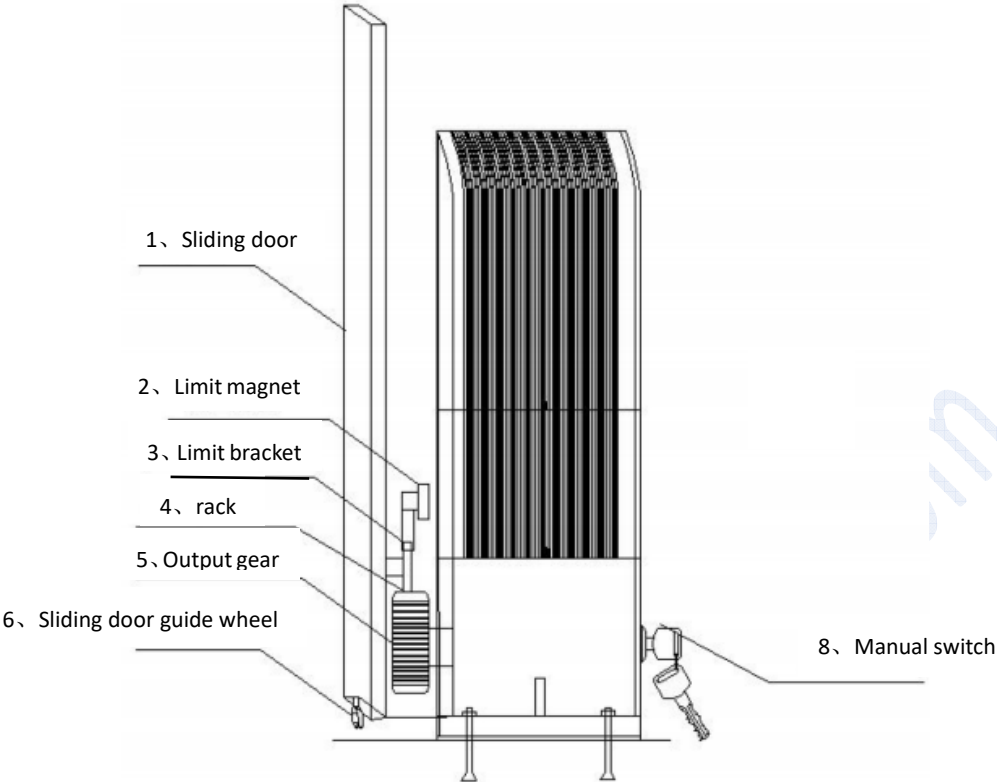


Figure 4

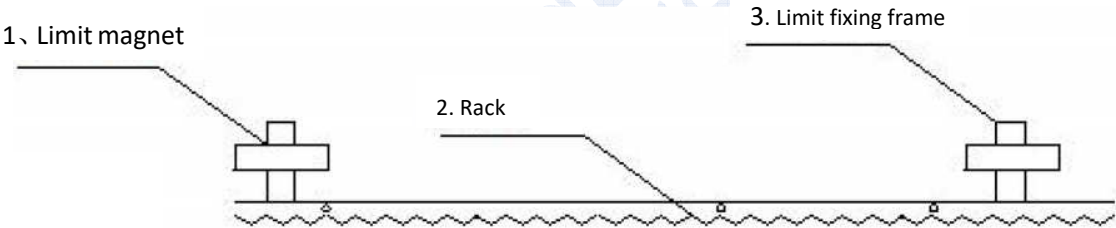


Figure 5

6. split wiring diagram

Motor Terminal					
CL	COM	OP	V	W	U
Closed in place	Positive electrode	Drive into place	Close the door	Open the door	commonality
Close in place CL	Positive electrode V+	Drive into place OP	Close the door L2	Open the door L1	Commonality COM
Remote control controller terminal					

Note :1, Open the door, close the door direction is opposed to the adjustment L1, L2.  
2, Open or close in place non-stop switching OP, CL.

### Main structure of DC motor (as shown below)

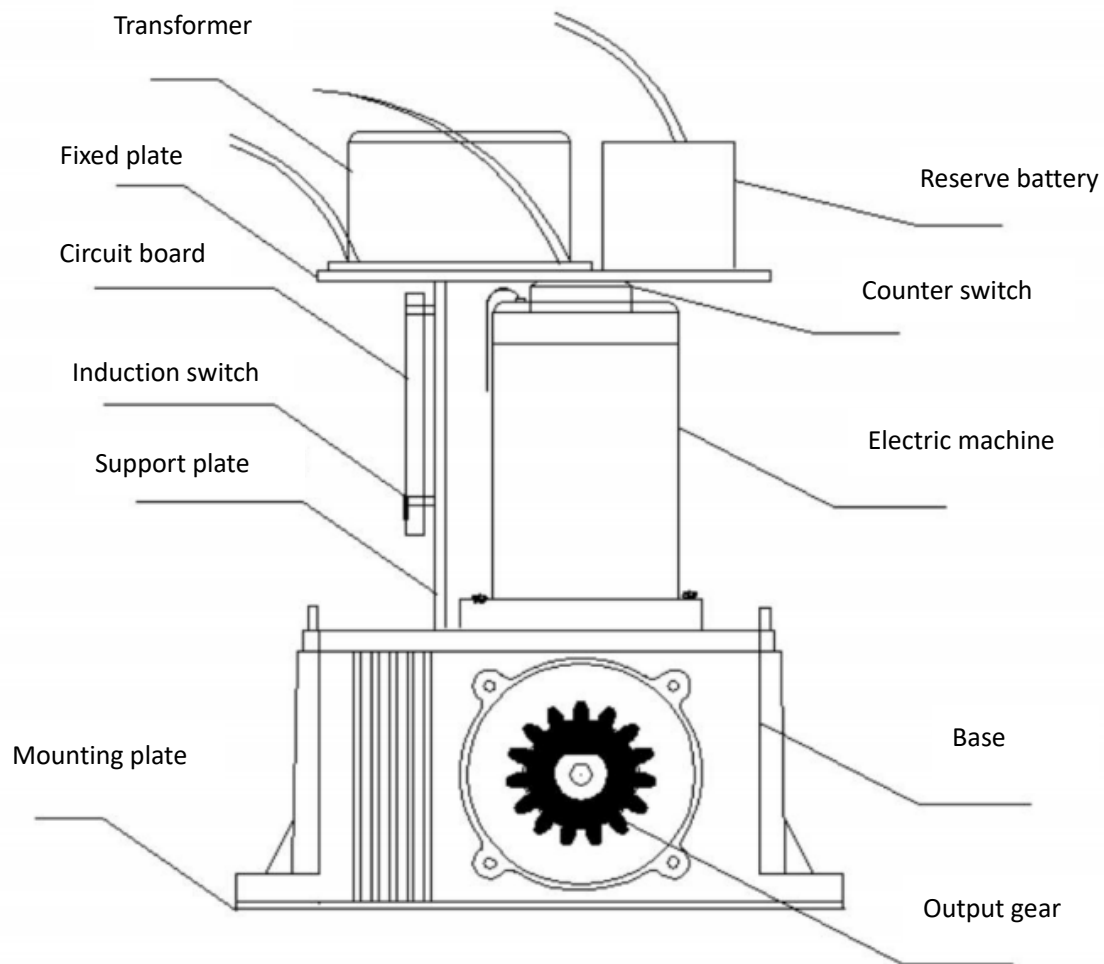


Figure 6: DC motor schematic

## 7.operation

- 1, Before use, should carefully check whether the power supply voltage, frequency and other data meet the requirements, check whether the grounding is good, electrical wiring is correct;
- 2, First use the random special key to unlock, and then turn the handle straight to release the clutch, push the translation door, so that the door opening machine idling, if the door opening machine is running normally, and then reset the handle to close the clutch;
- 3, Turn on the power, start the door opening machine, observe the operation of the translation door;
- 4, Adjust the position of the magnet until the door opens and closes in accordance with your Settings.

## **8. Maintenance and maintenance;**

- 1, The connection between the special ejecting rod and the shaft should be covered with a small amount of anti-rust grease to prevent rust;
- 2, Often check whether the electrical grounding is good;
- 3, The machine adopts advanced lubrication grease, no need to replace or add lubricating oil.

## **9. Possible obstacles and elimination**

- 1, After opening or closing the door machine, the translation door fails to return to the original position;
  - (1) Please check whether there are obstacles on the gear or door rail.
  - (2) Check whether the position of the magnetic switch is correct.
  - (3) Open the manual clutch, push the door back to the original position or adjust the position of the magnetic switch.
- 2, The door can not be moved under the operation of the control board and remote control: in the case of top death.
  - (1) Lift the door away from the output gear and push the door back.
  - (2) Use special tools to unload the fixed motor screws, remove the motor, and push the door back.

[www.autoglideglobal.com](http://www.autoglideglobal.com)