

# Automatic Sliding Door Operator

Installation and operating instructions

ES90 Easy/ES200 Easy

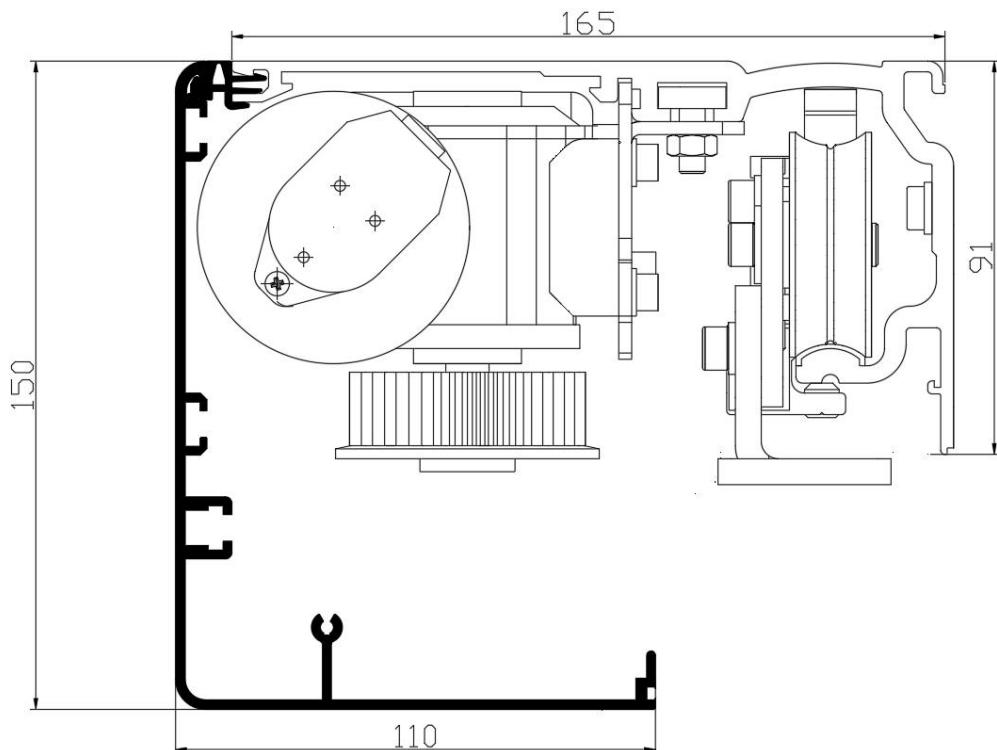


2023.11

# Automatic door installation instructions

## ES90 Easy/ES200 Easy

### <1> Engine box size

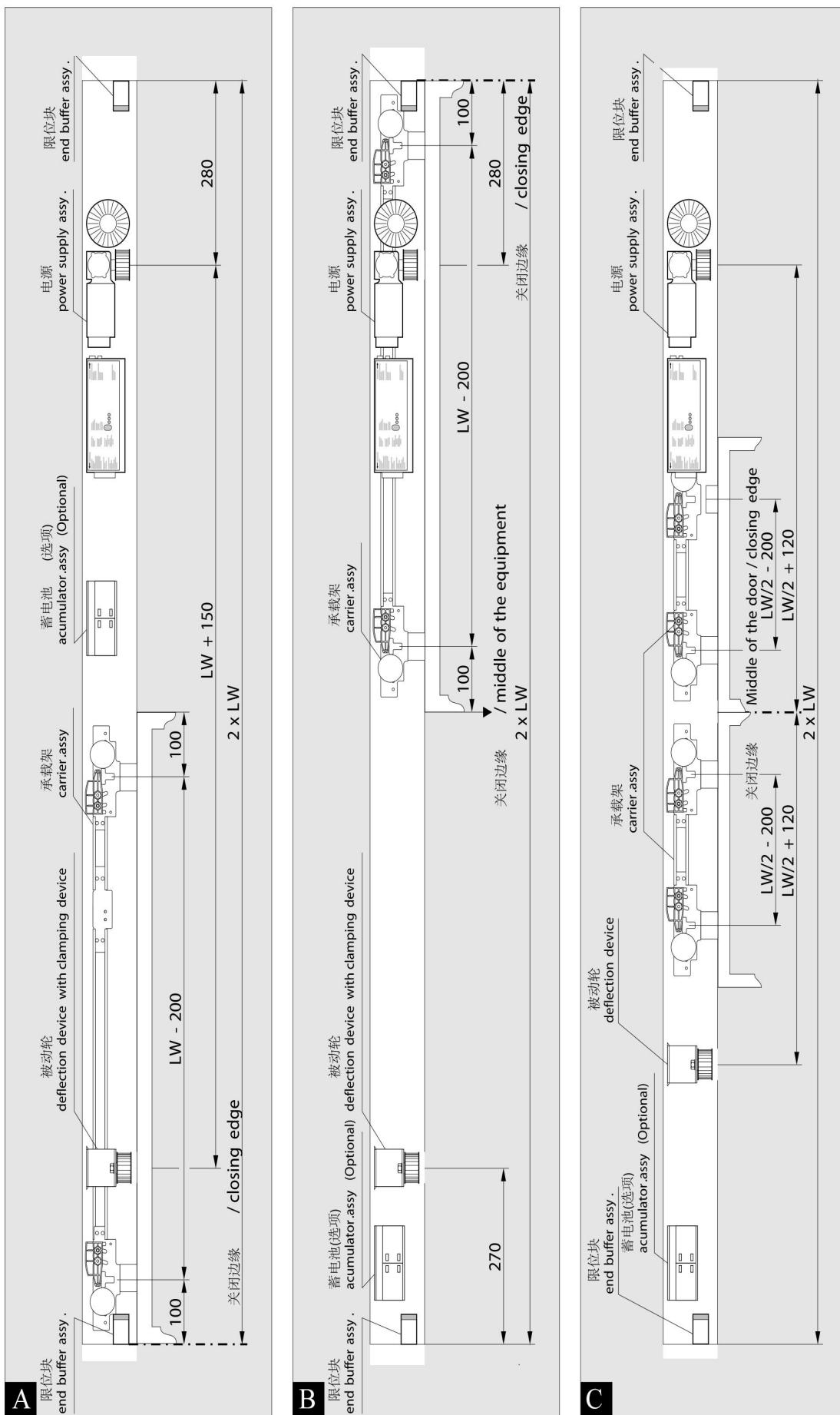


### <2> Engine box installation

1. First check the horizontality and verticality of the load-bearing steel beam to ensure an error of 1/1000;
2. When installing the engine box, please start from both sides of the engine box with an even spacing of 400mm–500mm or less.  
Install fixing screws;
3. Clean the engine box from impurities.

### <3> Installation location of motor and various components

1. First determine the door opening width and engine box length;
2. The position of the motor, the position of the driven wheel, the position of the hanging parts and other accessories are as shown in the figure below.



## <4> Installation of hanging parts

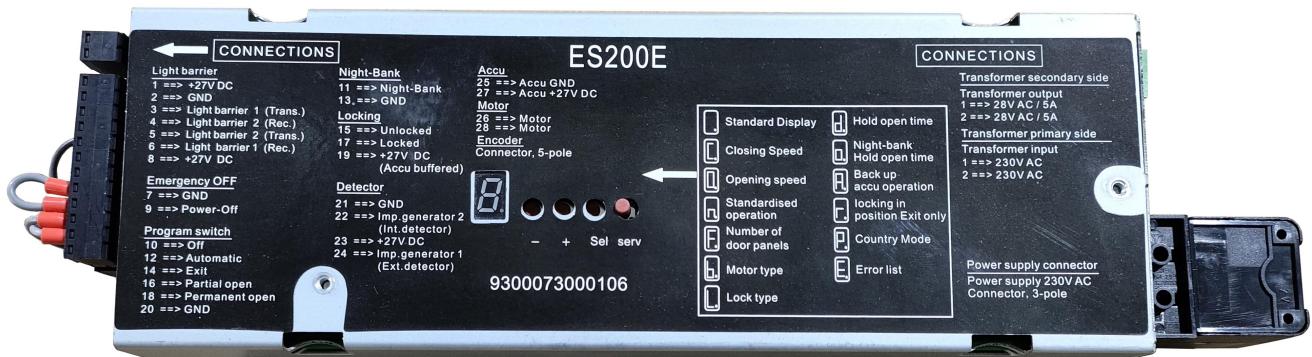
1. There is no slope horizontally or vertically, and the load on both wheels is even.
2. The gap between the top wheel (anti-shedding wheel) and the top of the chassis is 0.5-1mm.

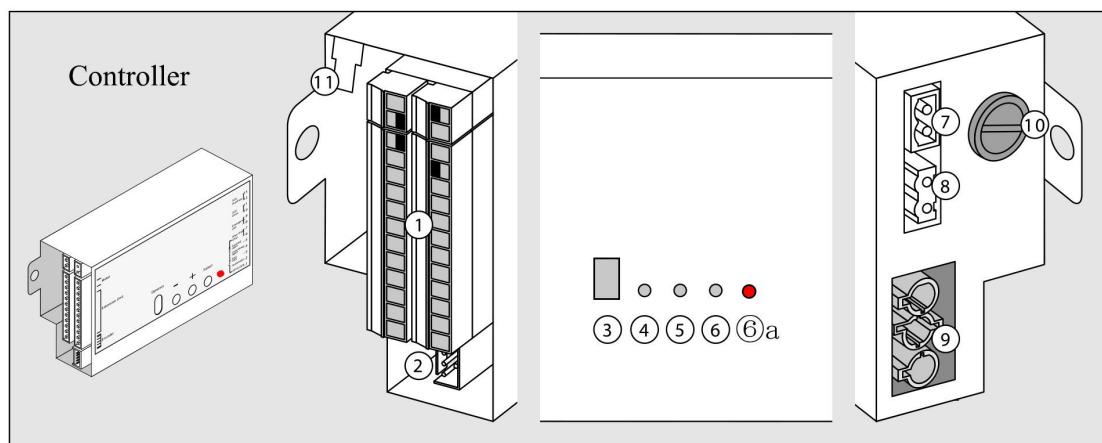
## <5> Basic requirements

1. The driving device has been completely installed;
2. Connect the protective ground;
3. The infrared safety light is connected properly (if there is no safety light, short-circuit the anti-pinch signal port);
4. Install and connect the program control switch, pulse generator, electric lock and other components;
5. The limit stop is adjusted as follows:
  - <1> When the two door leaves are opened to the maximum, they should hit the limit stop installed on the left or right side of the guide rail;
  - <2> When the door is closed, the central stopper should be adjusted so that the sliding door leaf contacts the sealing strip and the center of the frameless glass doorThe door gap is approximately 5mm-10mm.
6. The door leaf must move smoothly. Check whether the connecting bolts of the fixed belt are too long and hinder the operation of the pulley. If there are any obstacles, replace them promptly.

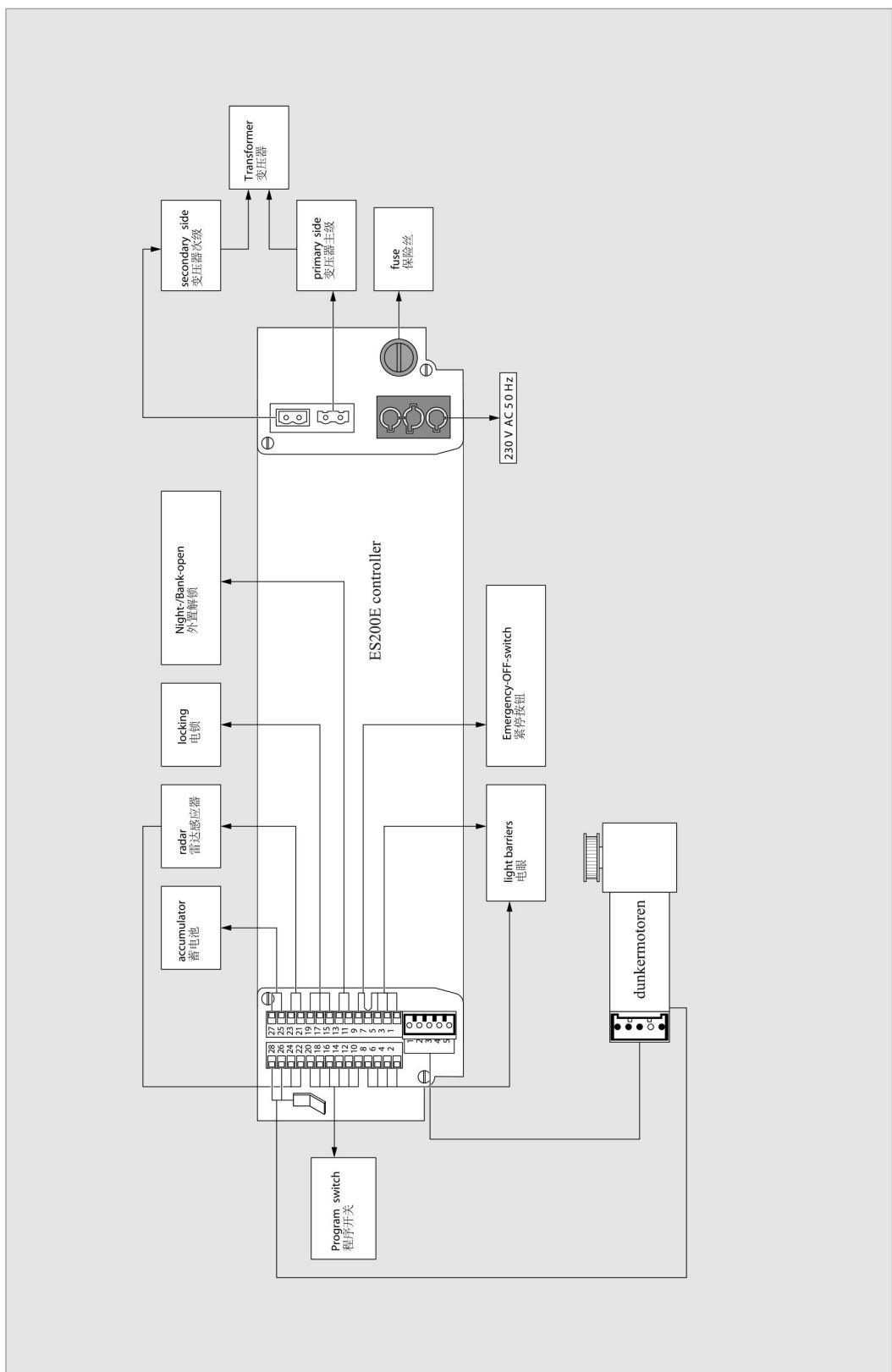
## <6> Electrical wiring instructions

### 1> Controller port definition:



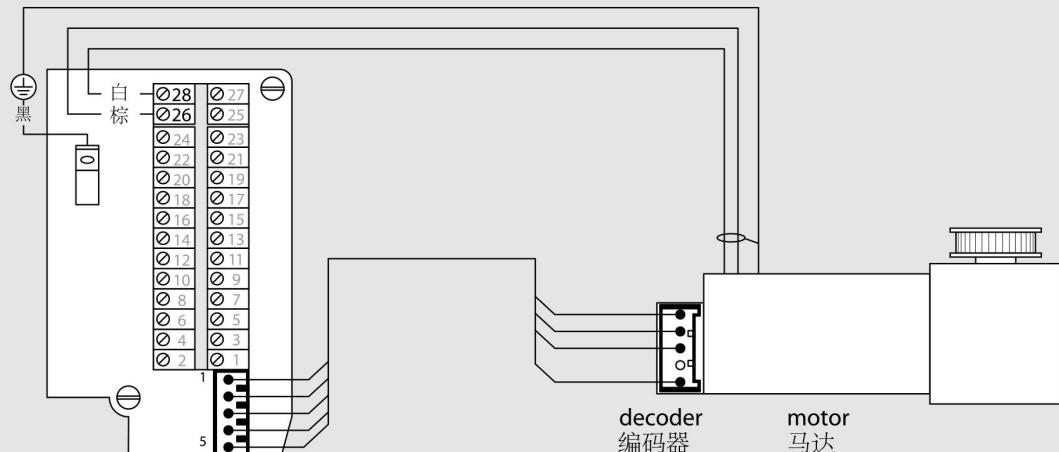


	D	Description and terminal connections	GB	接线柱描述	中文
①		Definición del puerto de cableado izquierdo Utilice un cortador de pernos con ranura de 2 mm para las conexiones de cableado.			
		motor motor sensor exterior sensor interior Tierra siempre encendido Parcialmente abierto Activador 1 (outside) Activador 2 (inside) Apertura unidireccional automático cierre	Cambio de programa	motor motor activator 1 (outside) activator 2 (inside) PARTIAL OPEN EXIT ONLY AUTOMATIC OFF	马达 马达 门外感应器 门内感应器 长期开启 部分开启 单向开启 自动 关闭
		Recibir ojo eléctrico 1 Recibir ojo eléctrico 2		light barrier 1 receiver light barrier 2 receiver	接受电眼1 接受电眼2
		+ 27 V DC - GND 27 26 24 22 20 18 16 14 12 10 8 6 4 2		accumulator accumulator	蓄电池 蓄电池
		+ 27 V DC - GND 27 25 23 21 19 17 15 13 11 9 7 5 3 1		accumulator buffered lock unlock	蓄电池输出+27V 上锁 解锁
		GND + 27 V DC 25 23 21 19 17 15 13 11 9 7 5 3 1		NIGHT/BANK emergency closed	外置解锁 紧急停按钮
				light barrier 2 transmitter light barrier 1 transmitter	发射电眼1 发射电眼2
②		codificador		decoder	编码器
③		Pantalla digital		control panel	数字显示器
④		-		key	-键
⑤		+		key	+键
⑥		Select serv		key	选择键
⑥a		aprende las claves		key	学习键
⑦		Transformador secundario		transformer secondary side	变压器次级
⑧		Polo principal del transformador		transformer primary side	变压器主级
⑨		fuente de alimentación		power supply	电源
⑩		fusible		fuse	保险丝
⑪		PE Cubierta interior protectora de puesta a tierra		protector earth interior cover	保护接地 内盖板



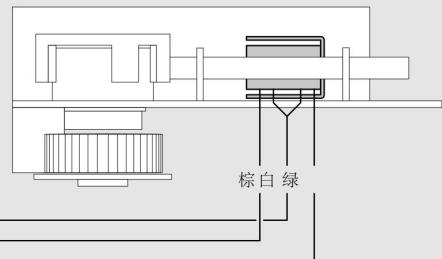
Wiring diagram of the motor and control system  
马达接线图

control system  
控制系统

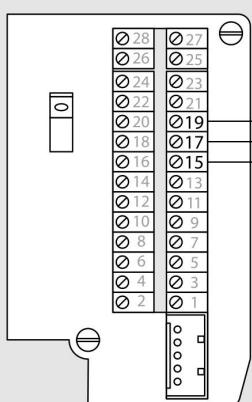


Wiring diagram locking contact  
电锁接线图

control system  
控制系统



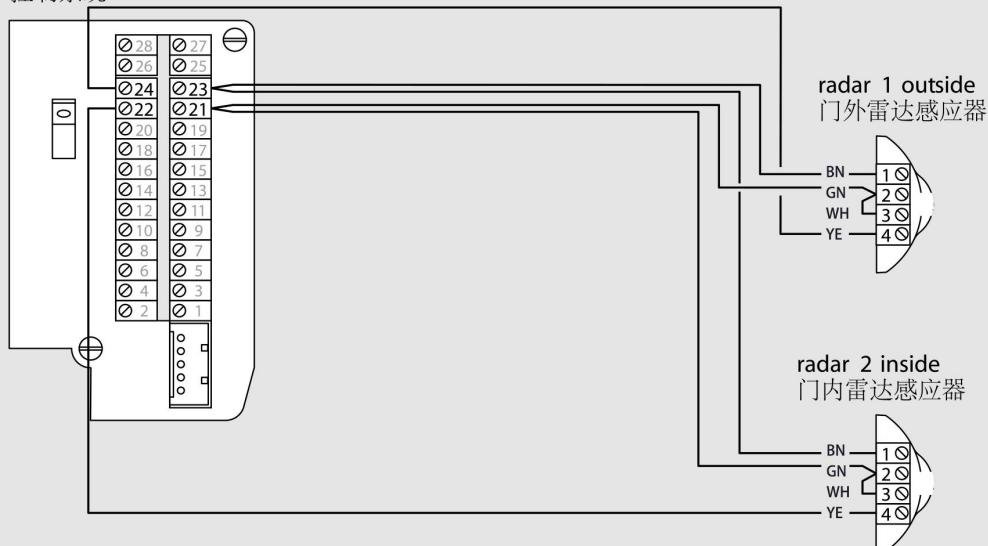
locking  
电锁



(D)	Description and terminal connections	(GB)	接线柱描述	(中文)
	Sistema de control	control system	控制系统	
19 (S) 17 (S) 15 (S)	→ + 27 V DC bloqueado desbloquear	locking unlocking	上锁 解锁	

Wiring diagram radar  
雷达感应器

control system  
控制系统



Descripción del terminal

(D)

Description and terminal connections

(GB)

接线柱描述

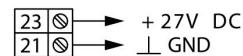
(中文)



sensor exterior  
sensor interior

control system

控制系统



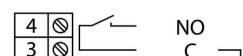
Sensor

radar 1 outside

门外雷达感应器

radar 2 Inside

门内雷达感应器



2 y 3 conectados en paralelo

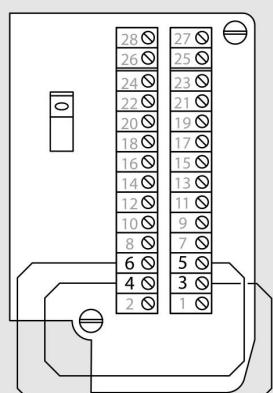
Sensor

感应器

2 and 3 connected in parallel

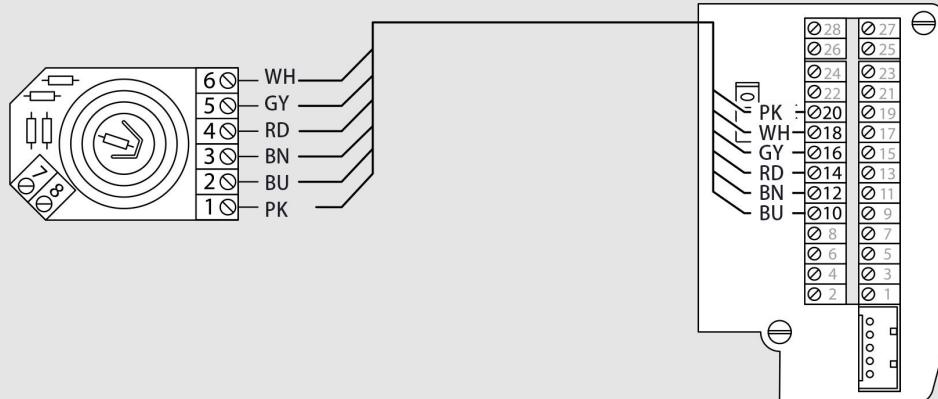
2和3并接

Wiring diagram without light barrier  
无电眼接线图



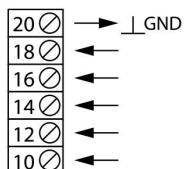
Wiring diagram program switch  
程序开关接线图

program switch  
程序开关

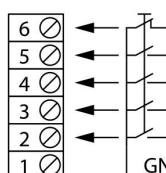


Descripción del terminal

Sistema de control



a largo plazo en  
Parcialmente abierto  
Apertura unidireccional  
automático  
cierra



a largo plazo en  
Parcialmente abierto  
Apertura unidireccional  
automático  
cierra

D

Description and  
terminal connections

controlsystem

permanent open  
partial opening  
exit only  
automatic  
OFF

program switch

permanent open  
partial opening  
exit only  
automatic  
OFF

controlsystem  
控制系统

控制系统

长期开启  
局部开启  
单向开启  
自动  
关闭

长期开启  
局部开启  
单向开启  
自动  
关闭

GB

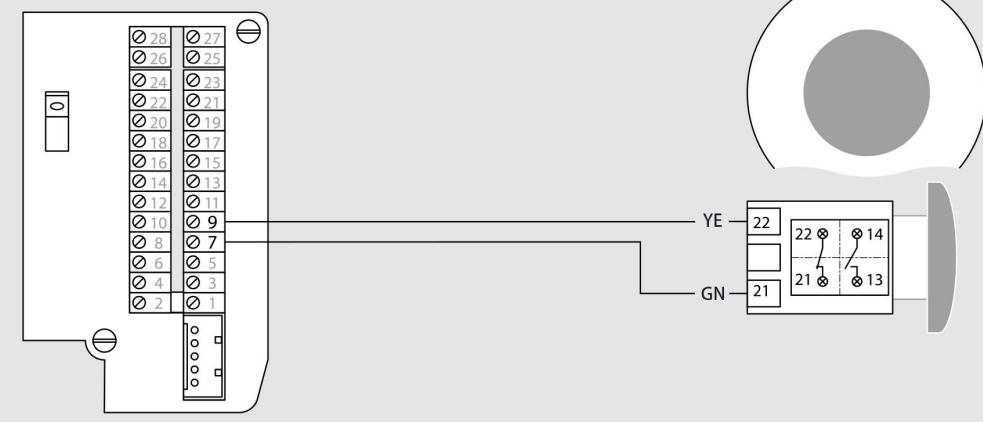
接线柱描述

中文

Wiring diagram Emergency-OFF -switch  
紧急停按钮接线图

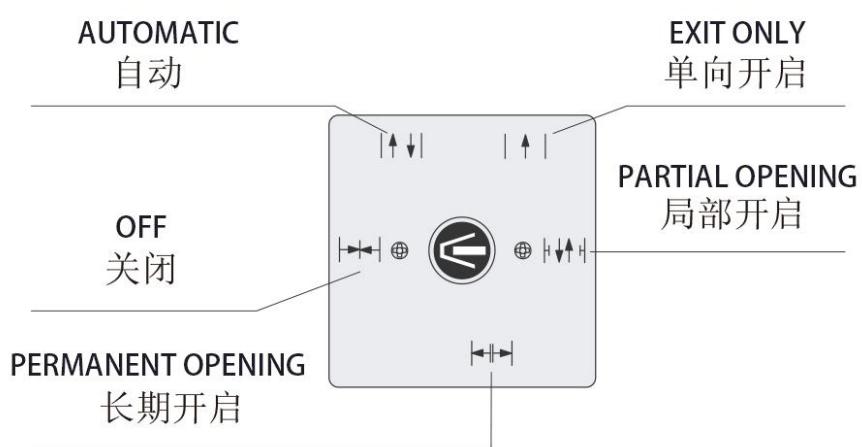
control system  
控制系统

Emergency-OFF-switch  
紧急停按钮



## <7> Start the self-learning operation for the first time

1. After turning off the power, move the door leaf to the half-open position;
2. Set the program switch to the "off" position (as shown in the figure below);



3. After the power is turned on, the door must be closed slowly;

4. Carry out self-learning after the door is closed:

To perform self-learning operation, press the SERVICE button (protruding red button). When the door slowly opens in the direction of opening, release the SERVICE button, and the door will conduct self-learning; at the same time, the seven-segment display of the control module flashes, and the door opens slowly in the direction of the door. When it runs to the open position and "8" flashes twice on the seven-segment display of the control module, even if the system parameters are stored, the system self-learning has been completed and the door leaf will automatically close.

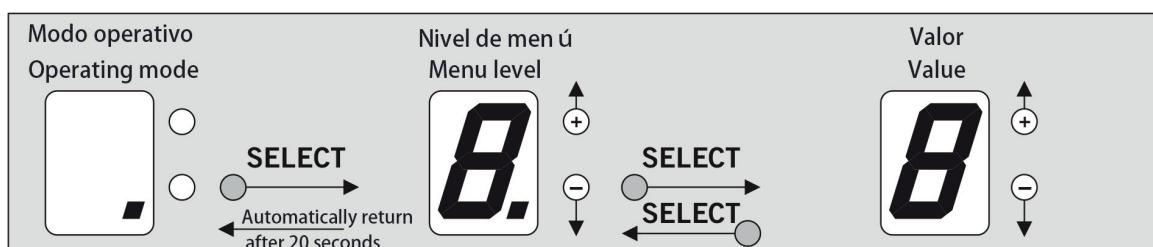
## <8> Parameter adjustment



Cuando la función del controlador sea normal, se mostrará: haga clic  
When the controller function is normal, it will display: click



(brillante) Cuando el controlador falla, muestra: "E" parpadea  
(flashing) When the controller fails, it displays: "E" flashes

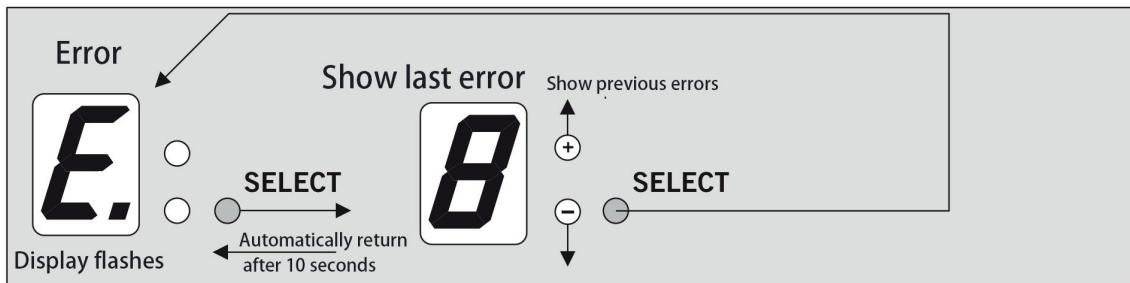


code display	Code meaning
	<p>0--No fault      1--Door blocked      2--Electric lock      3--Program switch      4--Electric eye      5--Encoder      6--Backup battery failure      7--Relay test failure      8--Emergency stop button failure      9--Self-learning parameter failure      A--Motor failure      b--battery test does not detect battery      c--force test failure      d--motor overcurrent      F--DCW      Other faults will be displayed on the PDA</p>
	<p>0--Standard program mode      1--Australian procedural model      2--French program model</p>
	<p>0--Lock when the program switch is set to the "off" position      1--Lock when the program switch is set to the "off" or "exit only" position      2--Lock when the program switch is set to the "off", "automatic" or "exit only" positions      3--The door is locked when in the closed position</p>
	<p>0--no electric lock      1--Bistable electric lock      2--Bistable electric lock (NO) with locking feedback signal      3--Monostable electric lock (safety lock)      4--Latch lock</p>

	0--No backup battery 1--Power off and shut down 2--Turn on after power off 3--Emergency backup battery mode
	0--0 seconds 1--1 second 2--2 seconds 3--5 seconds 4--8 seconds 5--10 seconds 6--15 seconds 7--20 seconds 8--25 seconds 9--30 seconds F--Adjust settings via PDA
	0--0 seconds 1--1 second 2--2 seconds 3--5 seconds 4--8 seconds 5--10 seconds 6--15 seconds 7--20 seconds 8--25 seconds 9--30 seconds F--Adjust settings via PDA
	0--Motor "63X25" small motor 1--Motor "63X55" large motor
	0--ZH 1/494 1--DIN V 18650 F--Adjust settings via PDA
	GR63X55:0--d adjustment (13 door opening speed gears) 0: 10cm/s--d: 75cm/s GR63X25:0--b adjustment (11 door opening speed gears) 0: 10cm/s--b: 65cm/s For each additional gear, the speed increases by 5cm/s.

 closing speed	<p>0: 10cm/s--8: 50cm/s (9 closing speed levels)          For each additional gear, the speed increases by 5cm/s.</p>
 Parameter setting lock selection	<p>0--Parameter setting locked          1--Parameter setting lock release</p>

Fault information confirmation: The current fault can be displayed and confirmed (the displayed ones must be eliminated), and a total of 10 fault messages can be stored.



#### Precautions:

1. Menu items must be detected:  =0. ;  =1. ;  
   Modify according to option combination.