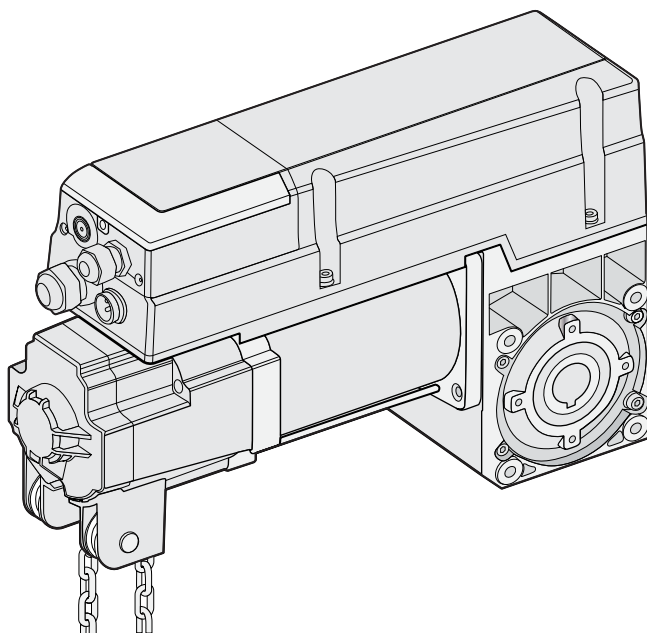


INDUSTRIAL DOOR DRIVE OPERATOR

INSTALLATION INSTRUCTIONS AND USER GUIDE

base 70



EN

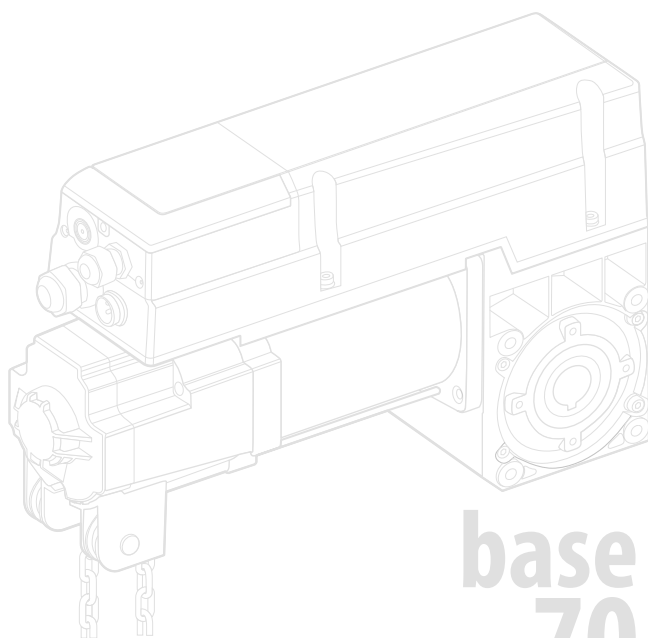
S/N

WARNING

Please read the manual carefully before installation and use.

The installation of your new door opener must be carried out by a technically qualified or licensed person.

Attempting to install or repair the door opener without suitable technical qualification may result in severe personal injury, death and / or property damage.



**base
70**

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IMPORTANT NOTICE FOR THE INSTALLER

Specified use

The industrial door drives is intended for a power-operated door with a drive unit.

The safe operation is only guaranteed with specified normal use. The drive unit is to be protected from rain, moisture and aggressive ambient conditions. No liability for damage caused by other applications or non-observance of the information in the manual.

Modifications are only permitted with the agreement of the manufacturer. Otherwise the Manufacturer's Declaration shall be rendered null and void.

Safety information

Installation and commissioning are to be performed by skilled personnel only.

Only trained electrical craftsmen are permitted to work on electrical equipment. They must assess the tasks assigned to them, recognize potential danger zones and be able to take appropriate safety measures.

Installation work is only to be carried out with the supply off.

Observe the applicable regulations and standards.

WARNING: Important safety instructions.

- It is vital for the safety of people to follow all instructions. Keep this manual.
- Do not let children play with the appliance or control devices including remote controls.
- Follow all instructions, as incorrect installation can lead to serious injuries.
- The actuating element of the dependent switch must be positioned so that it can be seen directly on the driven part, but out of reach of the moving parts. If it is not actuated by a key, it must be placed at a minimum height of 1.5 m and not accessible to the public; after installation, make sure that the mechanism is set correctly and that the protection system and any manual controls work properly.

Coverings and protective devices

Only operate with corresponding coverings and protective devices.

Ensure that gaskets are fitted correctly and that cable glands are correctly tightened.

Mesured sound pressure emission level A of the motor

LpA less than or equal to 70 dB (A).

WARNING Z101 - The effect of noise emitted by the structure, including the driven part to which the drive will be connected, is not considered.

Spare parts

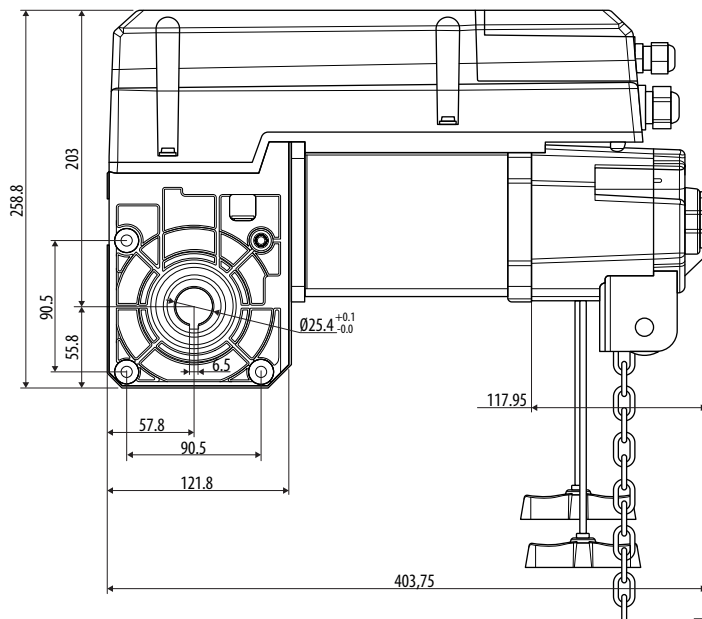
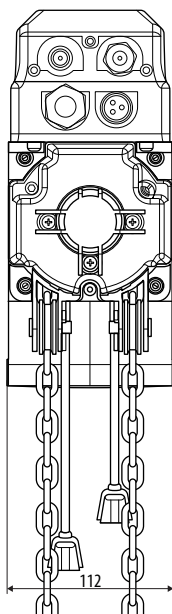
Only use original spare parts.

The manufacturer reserves the right to modify or improve products without prior notice. Any inaccuracies or errors found in this handbook will be corrected in the next edition. When opening the packing please check that the product is intact. Please recycle materials in compliance with current regulations. This product may only be installed by a qualified fitter. The manufacturer declines all liability for damage to property and/or personal injury deriving from the incorrect installation of the system or its non-compliance with current law (see Machinery Directive).

02) TECHNICAL DATA

MODEL	base 70
Max. output torque (Nm)	70 Nm
Rated output torque (Nm)	50 Nm
Output Speed (rpm)	24-32
Output shaft / hollow shaft (mm)	φ 25.4mm
Static holding torque (Nm)	400 Nm
Door Area (m ²)	≤28m ²
Input Voltage (V)	110-127V/220-240V & 380-420V
Motor Power (W)	550W
Control System	24V DC
Thermal Protection (°C)	105 °C
Max Cycles per hour (Cycle)	20 Cycles/hour
Class of protection	IP54
Limit Switch Range	15
Temperature Range (°C)	-20°C ~ +40°C (+60°C)

03) DIMENSIONS



04) PREPARATION

Danger!

To avoid injury, the following points must be observed:

- The operator must be installed free of any tension;
- The operator must not move on the shaft;
- The design and subsurface of all components must be suitable for the forces encountered.

Warning!

To avoid damage to the operator and the door, the operator must only be tested if:

- The operator is undamaged;
- The ambient temperature is -20°C to $+60^{\circ}\text{C}$;
- The altitude of the location does not exceed 1000 m;
- A suitable protection type has been selected.

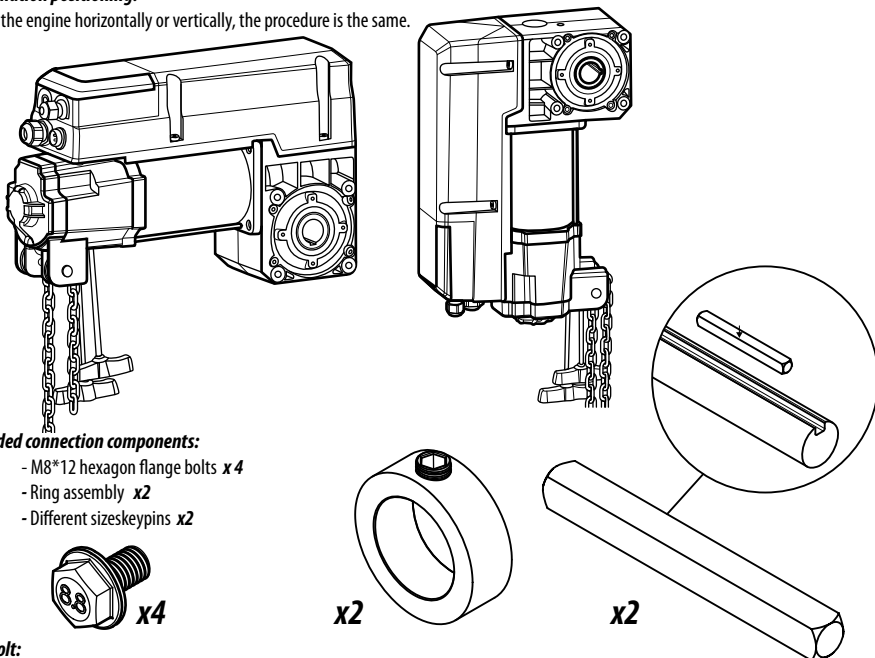
Before installation, ensure that:

- The operator is not blocked;
- The operator has been newly prepared after a long storage period;
- All connections have been carried out correctly;
- The direction of rotation of the drive motor is correct;
- All motor protective devices are active;
- No other sources of danger exist;
- The installation site has been cordoned off over a wide area.

05) MECHANICAL INSTALLATION

Allowed installation positioning:

You can install the engine horizontally or vertically, the procedure is the same.



Use the provided connection components:

- M8*12 hexagon flange bolts **x 4**
- Ring assembly **x2**
- Different sizes keypins **x2**



x4

x2

x2

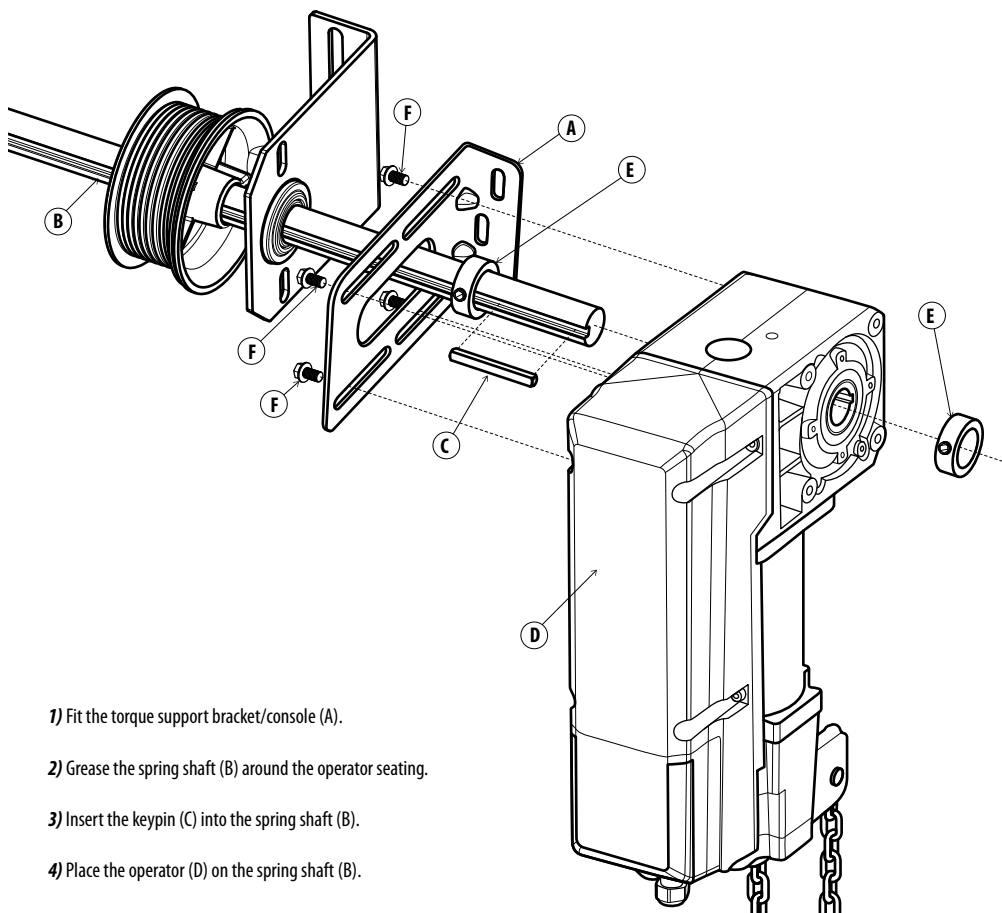
Connecting bolt:

Hexagon flange bolts with a minimum strength of 800 N/nm2 (8.8) must be used.

Mounting with the torque support bracket:

! **Warning!**

- To avoid damage to the operator and to the door, the operator must be mounted on a console or a torque support bracket so that it is vibration damped
- The automation must be installed in an area protected from shocks.
- The fixing surface must be solid.
- Appropriate accessories must be used to secure the motor to the mounting surface.
- Install suitable pipes for the passage of electrical cables, to ensure total protection against mechanical damage.
- The door structure must be sufficiently resistant, with efficient hinges.
- There must be no friction between fixed and moving parts.



- 1) Fit the torque support bracket/console (A).
- 2) Grease the spring shaft (B) around the operator seating.
- 3) Insert the keypin (C) into the spring shaft (B).
- 4) Place the operator (D) on the spring shaft (B).
- 5) Secure the keypin (C) against any movement.
- 6) The keypin can be secured with two locating rings (E).
- 7) Fix the operator to the torque support bracket with 4 screws.

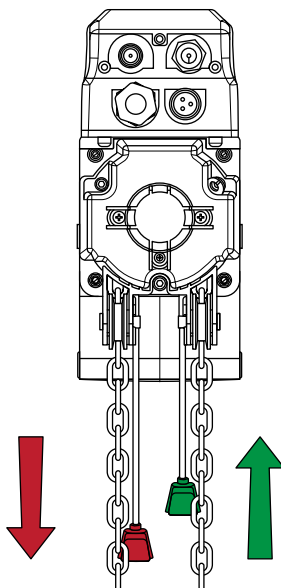
06) 7. EMERGENCY MANUAL OPERATION (Rapid hand chain operator)

Emergency manual operation is designed for opening or closing the door without power supply. Its activation interrupts the control voltage. Electrical operation is no longer possible.

Pulling the red handle on the left side, the door drive will be powered off, the door can be moved manually. At this time, while operating the door drive again, the digital display will show **ER**;

At this mode you can:

- close the door by pulling the chain on the left side manually;
- open the door by pulling the chain on the right side manually;



07) COMPLETING COMMISSIONING / INSPECTION

Check the following components and then install all covers.

Gearbox

Check the drive unit for loss of oil (a few drops can be neglected). Protect the output-shaft permanently against corrosion.

Mounting

Check that all connection elements (consoles, torque mounts, screws, locking rings, etc.) are secure and in proper condition.

Electrical wiring

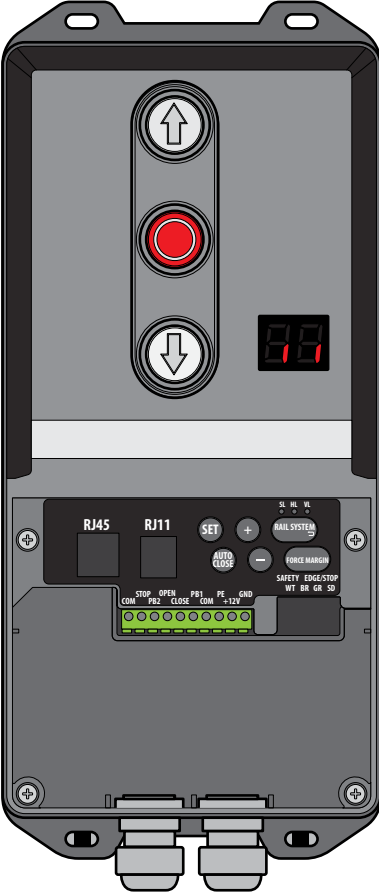
Check the connection cables and cabling for damage or crushing. Check that the screw connections and plug connections are fitted properly with a good electric contact.

Emergency manual operation

Check the function with the power disconnected. Perform the check only between the final limit positions.

Limit switch

Check the final limit positions by opening and closing fully. The safety area must not be approached.



Digital display:

The first boot up displays **FL**, then countdown from

99 to **00**.



Without travel limit set.



With travel limit set.



Button: **UP / STOP**



Button: **STOP**



Button: **DOWN / STOP**

9) INSTRUÇÕES BÁSICAS ACERCA DOS BOTÕES

		Short press: Confirm setting Long press: Enter the function menu setting			Short press: Quick activate "FORCE MARGIN" function
		Short press: Adjust the function menu Long press: Restore to factory settings			
		Short press: Adjust the function menu Long press: Running cycle counter inquiry			RJ45 Connection port Drive head & Control box
		Short press: Return Long press: Enter into rail system selection			RJ11 Connection port Drive head & Wired wall button
		Short press: Quick activate "AUTO CLOSE" function			

10) COMMON FUNCTION QUICK SETTING INSTRUCTION

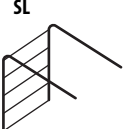
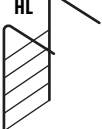
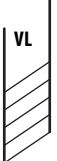
Function	Operation	Description
AUTO CLOSE	Short press  	Important: The "AUTO CLOSE" only can be activated when the Photo beam or light curtain has been correctly installed and the photo beam function has been enabled from function menu (Menu 5) -Short press the "AUTO CLOSE" button, when the indicator light is turned on. It means the "AUTO CLOSE" function has been activated. (Default: The door only can auto close while in the open limit position. And the Auto Close time is 15 seconds). Note: Refer to page Menu 4 to change any setting for AUTO CLOSE conditions or time if necessary. Note: If there is no any photo beam or light curtain installed, the door can not be closed, and the LED display will show the letter E6 as an indication. - Short press the "AUTO CLOSE" button, when the indicator light is turned off. It means the "AUTO CLOSE" function has been deactivated.
FORCE ADJUSTMENT	Short press  	-Short press the button, the digital display will indicate the current force level firstly -Continually short press the button: Incremental rolling display the force level between L1 to L9 . L1: Minimum force level. L9: Maximum force level. Note: L3 to L7 is recommended.
RUNNING CYCLE COUNTER INQUIRY	Long press 6 sec.  	-The digital will rolling display - 00 00 10 , it represents the drive has been 10 running cycles worked. Note: The running cycles is displayed in 6 digits
RESTAURAR CONFIGURAÇÕES DE FÁBRICA	Long press 10 sec.  	- The digital will rolling display F- F- F- , then release the button, it means the drive has been restored to factory setting. Note: The running cycle counter record will not been cleared.



11) QUICK SETTING TO GUIDE THE DRIVE WORKS BY "AAS" (Auto adaptive system)

Important:

"AAS" will automatic identify the door condition to define a best program for its "Open/ Close speed", "Soft start/ soft stop ranges" and "Force sensitivity".

Função	Ação	Descrição
1)Enter Menu RAIL SYSTEM	Long press 3 sec. 	- All of the indicator lights are light up constantly for "SL,HL,VL" and then off. - Then release the button until one of the indicator lights flashes.  
2) Select the corresponded RAIL SYSTEM of the door.	Short press  or  or 	The corresponded light flashes for "SL,HL,VL"   SL Standard lift SL sectional doors with cylindrical cable drum  HL High lift HL sectional doors with cylindrical-conical cable drum  VL Vertical lift VL sectional doors with cylindrical-conical cable drum
3) confirm the selected RAIL SYSTEM	Short press 	-The corresponded indicator light is constant on for "SL,HL,VL" - Then, the digital display shows  to start the OPEN travel limit setting. 
4) Set Opening/ Closing Limits	Long press   or  Short press   Long press   or  Short press  	- Long press the button + (Up) or - (Down) to set the door to the target OPEN limit position, then release the buttons. - Short Press the SET button once to store the open limit position, the digital displays  to start the CLOSE travel limit setting. - Long press the button + (Up) or - (Down) to set the door to the target CLOSE limit position then release the buttons. - Short press the SET button once to store the CLOSE limit position, then the door drive will automatically open and close the door to store the door weight and spring balance conditions.

Note:

- a) If a system selection error occurs during the setting process, please click  , Execute enter to exit the setting, and then execute the first operation again.
b) Active or change any stand alone function, refer to the below "FUNCTION TABLE MENU".

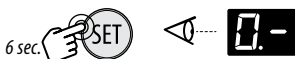
12) FUNCTION TABLE MENU ITEMS

0.- TRAVEL LIMIT Setting	5.- INFRARED BEAM & LIGHT CURTAIN Function
1.- COMMON FUNCTION Setting	6.- TERMINALS FOR EXTRA FUNCTION Setting
2.- OPERATING PARAMETER Setting	7.- COURTESY LIGHT Function Setting
3.- SOFT STOP (during-operation) Function Setting	8.- MAINTENANCE ALARM Function Setting
4.- AUTO CLOSE Time & Condition Setting	9.- GEAR MOTOR RUNNING DIRECTION ROTATING Setting

13) FUNCTION MENU DESCRIPTION

MENU **0.-** TRAVEL LIMIT

Press and hold **SET** button for about 6 seconds to enter travel limit setting until **0.-** appears on the display then release the button.



Press **SET** to enter travel limit setting menu, the digital displays **0.-** now you can set the **OPEN Position Limit**.

Click the button + or -, to adjust the open limit position of the door.

Click the **SET** button to confirm the open limit position.



Digital now displays automatically **0.-**, now you can set the **CLOSE position limit**.

Click the button +/-, to adjust the close position limit. Click the **SET** button to confirm.

Then the door drive would automatically open and close the door and save the setting.



Note: : If there is a faulty, please check if the encoder cable is connected properly. If the connection is normal, please reset the travel limit. When you reset the travel limit, short click the UP /DOWN button and then reset the travel limit.

MENU

1.-

COMMON FUNCTION SETTING

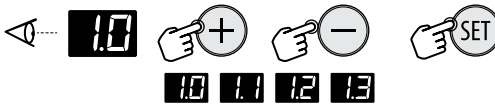
Press and hold **SET** button for about 6 seconds to enter main menu until **0.-** appears on the display then release the button.

Press "+" till **1.-** appears on the display, press **SET** to enter **common function setting** menu.



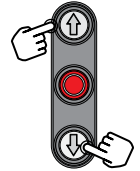
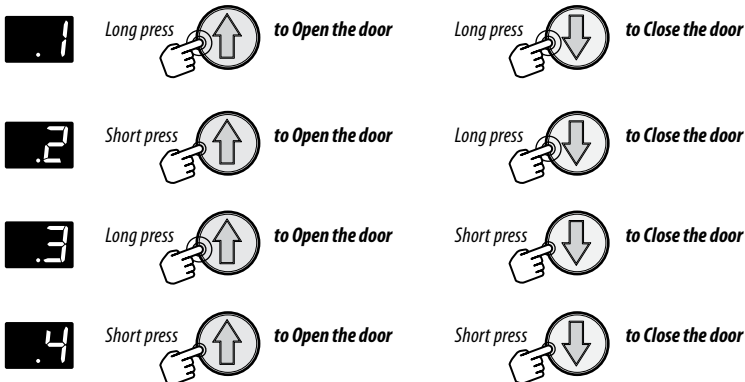
After press the **SET** button, **1.0** appears on the display. Press + / - to select between options **1.0**, **1.1**, **1.2** and **1.3**.

Press **SET** to enter the **function option settings**.



1.0 CONTROL PANEL BUTTON MODE SETTING

Select function mode from **1.1** to **1.4** press + / - and then press **SET** to confirm the control panel button mode setting.



1.1 REVERSAL DISTANCE IGNORANCE SETTING

The display flashes **8**, adjust the stalls from to **1**, **F** press + / - and then press **SET** to confirm.

According to the door rail system and the size of the cable drum, the adjustment range of each setting is between 2-5mm.

The customer can choose more appropriate parameters according to the actual state of the door.

Default **8** is about 3.5cm. The calculation format is like this: $[8] * 2 * 2.2\text{mm}$

1.2 FINE ADJUSTMENTS OF THE OPEN LIMIT POSITION

Adjust open limit position settings from **-F** ... **0** to **F**, press + / - and then press **SET** to select the target parameter and confirm the function option.

Select **0** to **F** *Limit Position moves in the OPEN DOOR direction.*

Select **-F** to **0** *Limit Position moves in the Door Center direction.*

Default **-5**

1.3 FINE ADJUSTMENTS OF THE CLOSE LIMIT POSITION

Adjust close limit position settings from **-F** ... **F** to **0**, press + / - and then press **SET** to select the target parameter and confirm the function option.

Select **0** to **F** *Limit Position moves in the Door Center direction.*

Select **-F** to **0** *Limit Position moves in the CLOSE DOOR direction.*

Default **-5**

MENU **2.-** OPERATING PARAMETER SETTINGS

Press and hold **SET** button for about 6 seconds to enter main menu until **0.-** appears on the display then release the button.

Press + until **2.-** appears on the display, press **SET** to enter *operating parameter settings*.



After press the **SET** button, **20** appears on the display. Press + / - to select function options **20** to **22**.

Press **SET** to enter the *function option settings*.



20 CLOSING SPEED ADJUSTMENT MENU

Select function mode from **1** to **4**, press + / - and then press **SET** to select options.

Select **1** *High speed, 100% of standard door Closing speed*

Select **2** *Medium speed, 90% of standard door Closing speed*

Select **3** *Low speed, 80% of standard door Closing speed*

Select **4** *Low speed, 70% of standard door Closing speed*

REMARK: After quick setting the door drive, AAS function automatically select the most optimized speed for the door already.

When you change the speed manually in this menu, you have to set the travel position limit again to ensure door drive works properly.

2.1 OPENING SPEED ADJUSTMENT MENU

Select funtion mode from **1** to **4**, clique + / - and then press **SET** to select options.

- Select **1** *High speed, 100% of standard door Opening speed*
- Select **2** *High speed, 90% of standard door Opening speed*
- Select **3** *Medium speed, 80% of standard door Opening speed*
- Select **4** *Low speed, 70% of standard door Opening speed*

REMARK: After quick setting the door drive, AAS function automatically select the most optimized speed for the door already.
When you change the speed manually in this menu, you have to set the travel position limit again to ensure door drive works properly.

2.2 SOFT CLOSING DISTANCE ADJUSTMENT

Select funtion mode from **1** to **4**, clique + / - and then press **SET** to select options.

- Select **1** *Soft closing distance » SL 10cm, HL 20cm, VL 25cm*
- Select **2** *Soft closing distance » SL 20cm, HL 30cm, VL 45cm*
- Select **3** *Soft closing distance » SL 25cm, HL 45cm, VL 50cm*
- Select **4** *Soft closing distance » SL 40cm, HL 55cm, VL 60cm*

REMARK: The soft closing distance is estimated with 18-inch cable drum. The actual distance will be different according to the customer's cable drum diameter. The rail system (AAS) will automatically match the optimized soft closing distance.
After the customer changes the default distance, the previous travel limit will be lost and needs to be relearned.

MENU **3.-** SOFT STOP (during operation) FUNCTION SETTINGS

Press and hold **SET** button for about 6 seconds to enter main menu until **0.-** appears on the display then release the button.

Press **UP** until **3.-** appears on the display, press **SET** to enter **Soft stop** (during operation) **function adjustments**.



After press the **SET** button, **3.1** appears on the display. Press + / - to select funtion options **3.0** to **3.4**.

Press **SET** to enter the **Soft Stop options settings**.



- Select **3.0** *Soft Stop function is OFF*
- Select **3.1** *Soft Stop will low-down the speed to 30% in 0.75 second, then stop the door.*
- Select **3.2** *Soft Stop will low-down the speed to 40% in 0.75 second, then stop the door.*
- Select **3.3** *Soft Stop will low-down the speed to 50% in 0.75 second, then stop the door.*
- Select **3.4** *Soft Stop will low-down the speed to 60% in 0.75 second, then stop the door.*

Default 3.1 Whether it is an external device or a remote control, the **Soft Stop** function is implemented during operation.

MENU **4.-** **AUTO CLOSE TIME & CONDITION SETTINGS**

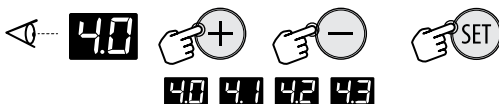
Press and hold **SET** button for about 6 seconds to enter main menu until **0.-**, appears on the display then release the button.

Press + until **4.-** appears on the display, press **SET** to enter **Auto Close time & condition settings**.



After press the **SET** button, **4.0** appears on the display. Press + / - to select from **4.0** to **4.3**.

Press **SET** to enter the **Auto Close time and condition settings**.



4.0 **AUTO CLOSE TIME SETTING**

Press + / - to adjust value from **01** to **99**, and then press **SET** to select options.

Each value represents 5 sec.

AUTO CLOSE time calculation method is 5 sec*N, N= 01~99.

*The maximum **AUTO CLOSE** time is 495sec.*

AUTO CLOSE CONDITION SETTINGS

The digital display **4.1**, press + / - to the selected function, from **4.1** to **4.3**, and then press **SET** to select options.

Select **4.1** *Only after the door is opened to the Open Limit position, the **AUTO CLOSE** function is effective and starts timing.*

Select **4.2** *After the door Stops at any position when Opening, the **AUTO CLOSE** function is effective and starts timing.*

Select **4.3** *No matter where the door is Open, as long as it is not at the Close Limit position, it will automatically close.*

Default **4.1**

REMARKS:

- If the **infrared function** is turned on, oth **AUTO CLOSE timing will stop** when the infrared is blocked by an obstacle. After the obstacle removed, it will continue the previous timing and automatically close the door.
- When the door is about to close, the courtesy light flashes for warning.
- When the door is about to close, the warning light flashes for warning. Note: The flashing time of the warning light follows the courtesy light.
- The **AUTO CLOSE** function can only be used when the safety protection devices are used correctly

MENU **5.-** INFRARED BEAM & LIGHT CURTAIN FUNCTION

Press and hold **SET** button for about 6 seconds to enter main menu until **0.-** appears on the display then release the button.
Press + until **5.-** appears on the display, press **SET** to enter **Infrared Beam and Light Curtain function**.



After press the **SET** button, **5.0** (default) appears on the display. Press + / - to select from **5.0** to **5.1**.
Press **SET** to save settings.



5.0 INFRARED INTERFACE FUNCTION IS CLOSED

5.1 INFRARED INTERFACE FUNCTION IS ENABLED

Press + / - to select **1** or **4**, and then press **SET** to confirm option and save settings.

Select **1** *The Infrared Function is not related to the AUTO CLOSE function*

Select **4** *The AUTO CLOSE function must be enabled after the Infrared Function is turned On.*

REMARKS:

Use the Normal-Close (NC) port of the infrared photoelectric device to connect to the PE port of the control box.
The infrared PE port defaults to a Normal-Close (NC) contact to ensure that the infrared photoelectric device has been installed correctly.
If the infrared photoelectric device is not installed, this function must be disabled, otherwise the drive unit cannot execute Close the door, and digital displays error **E6**.

MENU **6.-** TERMINALS FOR EXTRA FUNCTION SETTINGS

Press and hold **SET** button for about 6 seconds to enter main menu until **0.-** appears on the display then release the button.
Press + until **6.-** appears on the display, press **SET** to enter **Terminals for Extra function settings**.



After press the **SET** button, **6.0** (default) appears on the display. Press + / - to select from **6.0** to **6.8**.
Press **SET** to save settings.



6.0 PARTIAL OPEN POSITION SETTINGS

Digital quickly displays **1.4**, then flashes **.5**, press + / - and then press **SET** to select between **.1** to **.9** that represent 10% to 90% of the door Travel Limit. **.5** means that the Partial Open Door position is 50% of the full Travel Limit.

Default **.5**

6.1 PB1 PORT FUNCTION SETTINGS

Press + / - to select option from **.1** to **.5** and then press **SET** to confirm selection.

- Select **.1** **OPEN / STOP / CLOSE** the door...Single-cycle function
- Select **.2** **CLOSE** the door / **OPEN** the door / **ONLY OPEN** the door **in the middle of the travel limit**
- Select **.3** **ONLY OPEN** the door (Specified application scenarios, Fire alarm, infrared sensor to open the door)
- Select **.4** **PARTIAL OPEN** the door
- Select **.5** **REVERSE** during door closing

Default **.5**

6.2 PB2 PORT FUNCTION SETTINGS

press + / - to select option from **.1** to **.5** and then press **SET** to confirm selection.

- Select **.1** **OPEN / STOP / CLOSE** the door...Single-cycle function
- Select **.2** **CLOSE** the door / **OPEN** the door / **ONLY OPEN** the door **in the middle of the travel limit**
- Select **.3** **ONLY OPEN** the door (Specified application scenarios, Fire alarm, infrared sensor to open the door)
- Select **.4** **PARTIAL OPEN** the door
- Select **.5** **REVERSE** during door closing

Default **.5**

6.3 ELECTRONIC LOCK FUNCTION SETTINGS

Press + / - to select option between **0** and **1** and then press **SET** to confirm selection.

- Select **0** **Electronic lock function is OFF**
- Select **1** **Electronic lock function is ON**

1 second after the door drive runs to the close limit position, the electronic lock is powered on, the bolt is pushed out, and after 1.5 seconds electronic lock stops supplying power. After the door drive receives the door opening command at the close limit position, the electronic lock will be powered on firstly to retract the bolt, then the door starts to run after 1.5 seconds, and the electronic lock stops power supply after the door runs for 1 second.

Default **0**



6.4 FLASH/WARNING LIGHT OUTPUT PORT CONFIGURATION

Press + / - to select option from **.1** to **.6** and then press **SET** to confirm selection.

- Select **.1** the Warning light **FLASHES** when the door is running, and turns **OFF** when **the door stops**.
- Select **.2** the Warning light is **always ON** when **the door is running**, and turns **OFF** when **the door stops**.
- Select **.3** the Warning light **FLASHES** when **the door is running**, and **FLASHES** when **the door stops**.
- Select **.4** the Warning light is **always ON** when **the door is running**, and is **always ON** when **the door stops**.
- Select **.5** the Warning light **FLASHES** when **the door is running**, and is **always ON** when **the door stops**.
- Select **.6** the Warning light is **always ON** when **the door is running**, and **FLASHES** when **the door stops**.

Default **.1**

6.5 BUZZER FUNCTION SETTING

Press + / - to select option from **.1** to **.4** and then press **SET** to confirm selection.

- Select **.1** The buzzer sounds when the door opening, but does not sound when the door closing.
- Select **.2** The buzzer sounds when the door closing, but does not sound when the door opening.
- Select **.3** The buzzer sounds when the door drive is running, whether it's opening or closing.
- Select **.4** The buzzer turns off.

Default **.4**

6.6 XH06-1 RELAY OUTPUT MODULE FUNCTION SETTING AND 6.7 XH06-2 RELAY

Press + / - to select option from **.1** to **.8** and then press **SET** to confirm selection.

- Select **.1** Reach the Open Limit position, relay closed.
- Select **.2** Reach the Close Limit position, relay closed.
- Select **.3** Reach the Partial Open limit Position, relay closed.
- Select **.4** Before the door drive running, the relay is closed first (1-7 seconds time adjustable)
Press **SET** to confirm and directly enter the time setting. Adjust the time value from **.1** to **.7** by buttons + / -.
.3 default: Represents 3 seconds.
- Select **.5** Relay always closed during the door drive running. After the door drive stops, relay will be disconnected after 1-10 minutes delay.
(Adjustable time, similar to courtesy light OFF DELAY function).
Press **SET** to confirm and directly enter the time setting. Adjust time value from **.1** to **.A** by buttons + / -.
.A for 10 minutes and **.3** for 3 minutes (default selection).



Select **6** The relay is Closed during door drive operation.

Select **7** When the door drive is running, the relay flashes at a frequency of 1HZ (externally extended warning light function).

Select **8** Relay no action.

Default **8**

REMARK: The customer can set the function according to the specific application and choose the appropriate function with the Normal-Open (NO) and Normal-Close (NC) function of the relay.

6.8 SAFETY DEVICE PORT FUNCTION SELECTION

Press + / - to select option from **1** to **2** and then press **SET** to confirm selection.

Select **1** Use optical door edge sensor kit or 8.2K resistor.

Select **2** Use three-wire infrared photo eyes.

Default **1**

MENU 7. COURTESY LIGHT FUNCTION SETTING

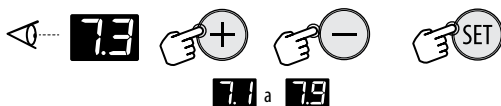
Press and hold **SET** button for about 6 seconds to enter main menu until **0.-** appears on the display then release the button.

Press + until **7.-** appears on the display, press **SET** to enter **courtesy light function setting**.



After press the **SET** button, **7.3** (default) appears on the display. Press + / - to select from **7.1** to **7.9**.

Press **SET** to select the **Delay Time of the courtesy light**. Each value represents 1 minute, it is adjustable for 1 to 9 min.

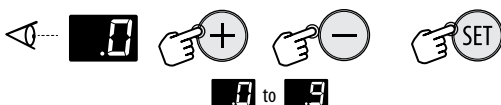


Default **7.3** 3 minutes.

Now digital displays **0**, to configure **Warning Flashing time before the door drive starts running**, press + / -

to select from **0** to **9**, each value represents 1 second., **0** means that the courtesy light warning function is OFF.

Press **SET** to confirm option.



REMARK:

- After the door drive stops running, the courtesy light delay time can be adjusted from 1~9 minutes, the default is **7.3**, means 3 minutes off delay.

- After the courtesy light warning function is turned on, the courtesy light will flash for a corresponding time before the door drive runs each time, and then the door drive will start to perform actions.

MENU MAINTENANCE ALARME FUNCTION SETTINGS

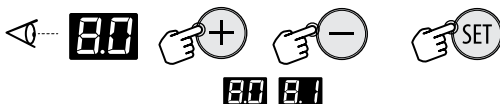
Press and hold **SET** button for about 6 seconds to enter main menu until  appears on the display then release the button.

Press + until  appears on the display, press **SET** to enter **Maintenance Alarm function settings**.



After press the **SET** button,  (default) appears on the display. Press + / - to select  or .

Press **SET** to save settings.



MAINTENANCE ALARM CYCLE COUNTING SETTINGS

After selection  (default) appear on display, indicating that the maintenance alarm function is closed, press + / - to select  to  and ,  ... Then press **SET** to confirm **cycle-counting settings**.

Select  **A função de Alarme de Manutenção está DESATIVADA**

Select  to  **Each value represents 500 cycles. Selected Value * 500 cycles = Total Cycles**

Select  **10*500=5000 cycles**

Select  **15*500=7500 cycles**

Default 

QUERY - REMAINING CYCLES OF MAINTENANCE ALARM

After selection digital will circulate display  indicating **running cycles counter**, then after the cumulative loop displays 3 times, the query display will exit.

REMARK:

- Running cycles counter will not be cleared even after the door drive is restored to factory settings.
- Maintenance alarm description (Running cycles will minus 1 cycle, after the door drive reaching the close limit position each time)
- When the maintenance alarm count shows 0, when the door drive runs to the open and close limit positions each time, the courtesy light will flash quickly, the buzzer will sound continuously to remind the customer that the door and the drive unit need maintenance, and the digital will display error .
- After the maintenance of the door or drive unit is completed, the maintenance personnel need to re-enter the menu to set the maintenance alarm cycles, and the cycles of maintenance alarms will restart to count.

MENU **9.-** GEAR MOTOR ROTATION DIRECTION SETTINGS

Press and hold **SET** button for about 6 seconds to enter main menu until **0.-** appears on the display then release the button.

Press **+** until **9.-** appears on the display, press **SET** to enter **Gear Motor Rotation Direction settings**.



After press the **SET** button, **9.1** appears on the display. Press **+/−** to select from **9.0** or **9.1**.

Press **SET** to select option.



Select **9.1** *Door Drive Rotating Direction is FORWARD.*

Select **9.0** *Door Drive Rotating Direction is REVERSE.*

Default **9.1**

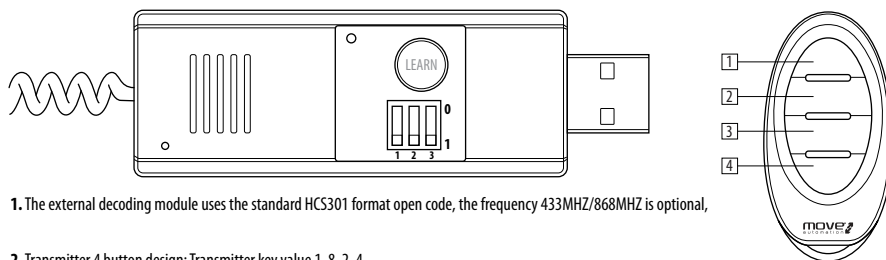
REMARK:

After adjusting the rotation direction of the door drive, it is necessary to relearn the Travel Limit.

13) TROUBLESHOOTING

DISPLAY	FAULT DESCRIPTION	CORREÇÃO DE FALHA
	Encoder failure, the encoder cannot write and read data.	1. Replace the encoder. 2. Replace the encoder cable.
	No motor motion signal is detected.	1. Check whether the wiring between the limiter and the control board is loose.
	The positive and negative poles of the motor wire are reversed.	1. Exchange the positive and negative poles of the motor.
	Motor current is too high.	1. Choose matching control system and motor. 2. Check the door body. 3. Replace the high-power door drive.
	Door drive overload alarm, current overrun.	1. The door is stuck or the door is too heavy. 2. The door size is too large. 3. Check the door body. 4. Replace the high-power door drive.
	Optical safety edge sensor kit fault.	1. 8.2K resistor is open circuit, missing installation. 2. The conductive tape edge is aging or broken.
	Infrared / infrared light curtain function port is triggered.	1. Check whether the infrared function is turned on. 2. Turn on the infrared function to detect whether the infrared device is blocked. 3. Check whether the NO/NC wiring of the infrared device output port is wrong. The NO port is connected by default, and the port is closed after the shot.
	SD (Pass door/wicket door) switch is triggered.	1. Check whether the SD function port of the secure port is not connected.
	The maintenance alarm cycle reaches.	1. Notify maintenance personnel to maintain the door and drive.
	Safety port three-wire infrared fault.	1. The three-wire infrared electric photo eye is blocked 2. Three-wire infrared electric photo eye failure 3. Is the three-wire infrared electric photo eye a product of our company?
	Communication failure between door drive and control panel.	1. Re-plug the 8P ribbon cable. 2. The door drive needs to be powered on and restarted. 3. Replace the 8P ribbon cable.
	Short learning travel limit.	1. Re-learn the travel limit. 2. Encoder position data failure.
	During the self-learning of the travel limit, if the rotor is blocked or the encoder is faulty, the buzzer will sound once and display "EE."	1. Re-learn the limit position. 2. Check the encoder connection. 3. Replace the encoder.
	The emergency stop switch function is triggered.	1. Check whether the emergency stop switch is pressed. 2. Whether the emergency stop switch uses a normally closed (NC) switch. 3. Whether the external port STOP short-circuit connection is loose.

14) TX/RX FUNCTION MODULE DESCRIPTION (OPTIONAL)



1. The external decoding module uses the standard HCS301 format open code, the frequency 433MHZ/868MHZ is optional,
2. Transmitter 4 button design; Transmitter key value 1, 8, 2, 4
3. The transmitter module and control box use USB standard interface to connect
4. Short press the LEARN button on the module, the LED will light up, press the remote control to learn the code. Long press the learn button on the module for 6 seconds, LED will flash 5 seconds quickly to clear the code.
5. O número máx. Standard de armazenamento do transmissor é de 50 códigos e, se 50 códigos já forem aprendidos, o 51º código cobrirá automaticamente o 1º código.
6. Transmitter module function:
 - a. Standard function: Single key cycle
 - b. Ignore the key value function, all keys are valid: OPEN-STOP-CLOSE command order each cycle. As long as learning a key, the others are valid
 - c. Multiple function key 1:
 - 1st button execute OPEN-STOP-CLOSE command order each cycle;
 - 2nd button execute PARTIAL OPEN command order;
 - 3rd button execute courtesy light ON/OFF command order;
 - 4th button execute remote LOCK command order;
 - d. Multiple function key 2:
 - 1st button execute OPEN the door command order;
 - 2nd button execute STOP command order;
 - 3rd button execute CLOSE the door command order;
 - 4th button execute remote LOCK command order;
 - e. Multiple function key 3:
 - 1st button execute OPEN the door command order;
 - 2nd button execute STOP command order;
 - 3rd button execute CLOSE the door command order;
 - 4th button execute "CF" command order; ("CF" command order means press the 4th button, the door will OPEN directly without STOP action, execute the REVERSE action during door closing)

7. Adjust the transmitter function through the three-circuit DIP switch

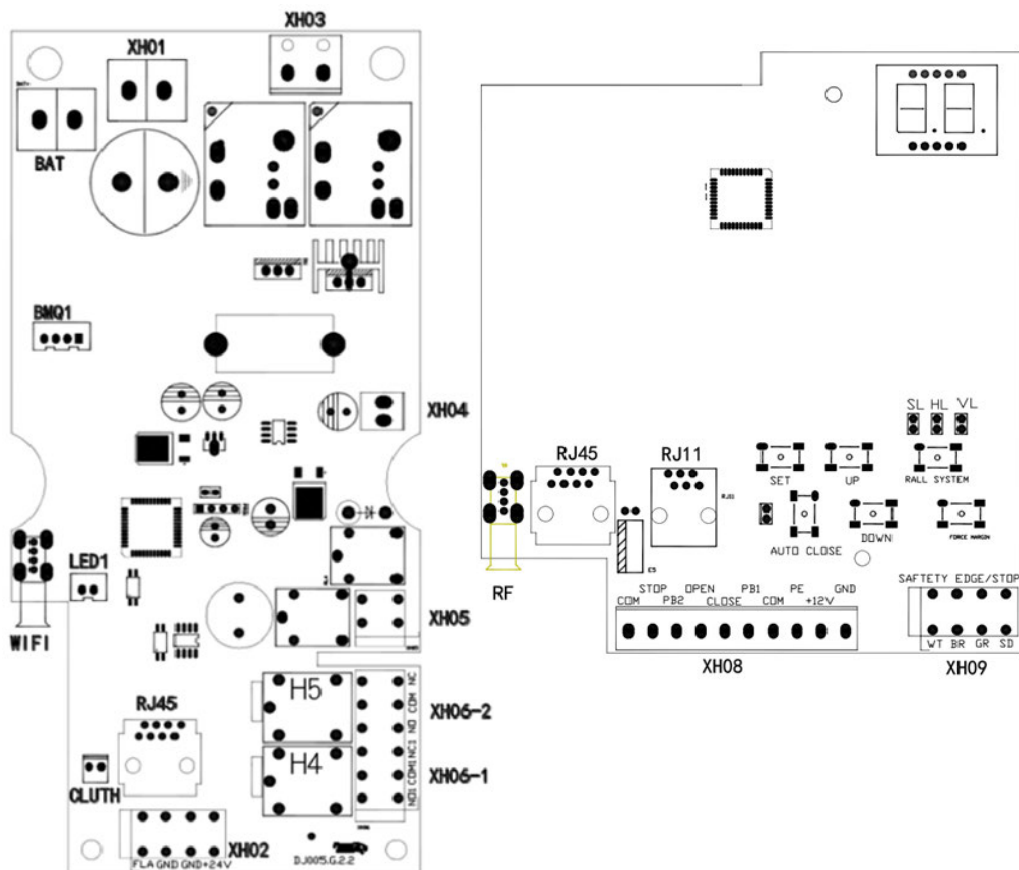
Important Note:

When using multiple function keys, you must use our company's standard transmitter.

The transmitter provided by the customer has inconsistent key values, which may cause function failure.

S1	S2	S3	FUNCTION DESCRIPTION
1	1	1	Standard function (Factory default).
0	1	1	Ignore the key value function.
1	0	1	Multiple function key 1
1	1	0	Multiple function key 2
0	0	1	Multiple function key 3

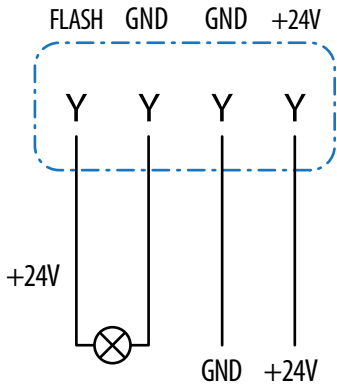
15) FUNCTION WIRING DIAGRAM



XH01	AC24V Power input terminal
XH02	Warning light output port, DC24V output terminal
XH03	Gear motor power supply terminal
XH04	DC24V Input terminal
XH05	Electronic lock terminal
XH06-1 / XH06-2	Relay module output terminal
BAT	Lead-acid battery input terminal
RJ45	Control box terminal
WIFI	WiFi control terminal
LED1	Courtesy light terminal
CLUTH	Rear clutch protection terminal

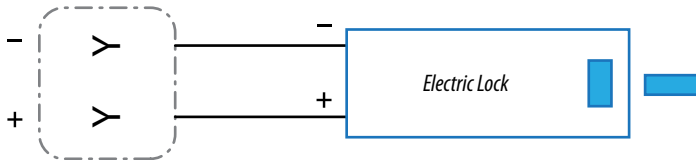
XH08	External function terminal
XH09	Safety terminal
RJ45	Control box and power head connection
RJ11	External three buttons wall control connection
RF	Transmitter receiver module terminal

XH02 DOOR DRIVE OUTPUT TERMINAL



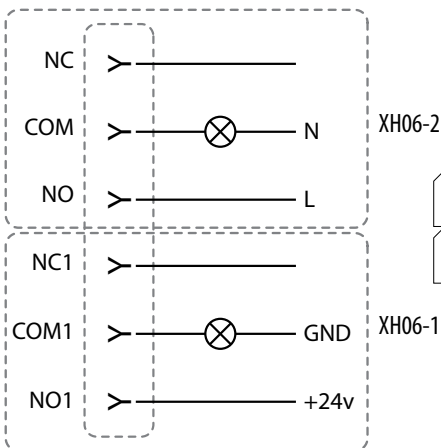
FLASH / GND	DC24V warning light output terminal, drive MAX current 0.2A, function menu 5.4 define function status.
+24V / GND	DC 24V/ MAX 0.2A

XH05 ELECTRONIC LOCK OUTPUT TERMINAL



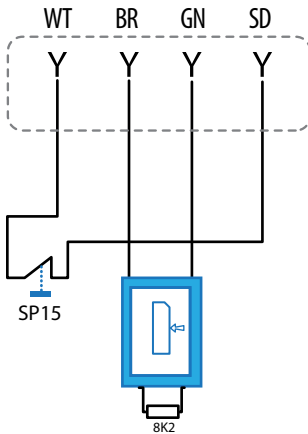
+ / -	± 24V Electronic lock output terminal, output current max. 2A, time 3sec., function menu 5.5 enabled.
-------	--

XH06 RELAY MODULE OUTPUT TERMINAL



NC / COM / NO	XH06-2 Relay output module, max 100w. See the function menu 5.7 for details.
NC1 / COM1 / NO1	XH06-1 Relay output module, max 100w. See the function menu 5.8 for details.

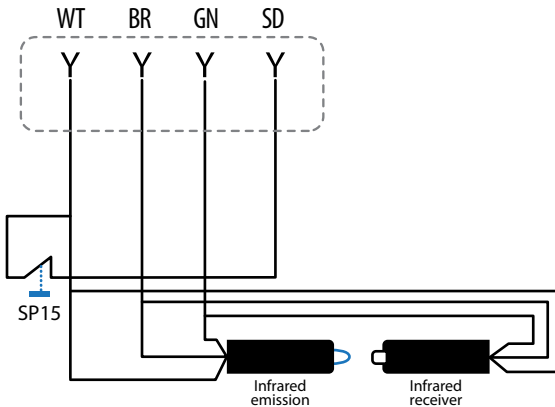
XH09 SAFETY TERMINAL (optical safety edge/wicket door protection)



WT	GND
BR	+12V
GN	Signal
SP15 / SD	Safety contact ,wicket door slackline protection

Note: SP15 is disconnected, the door drive stops, and all control functions are invalid. The optical safety edge is short-circuited during the closing process, and the door drive automatic reverse.

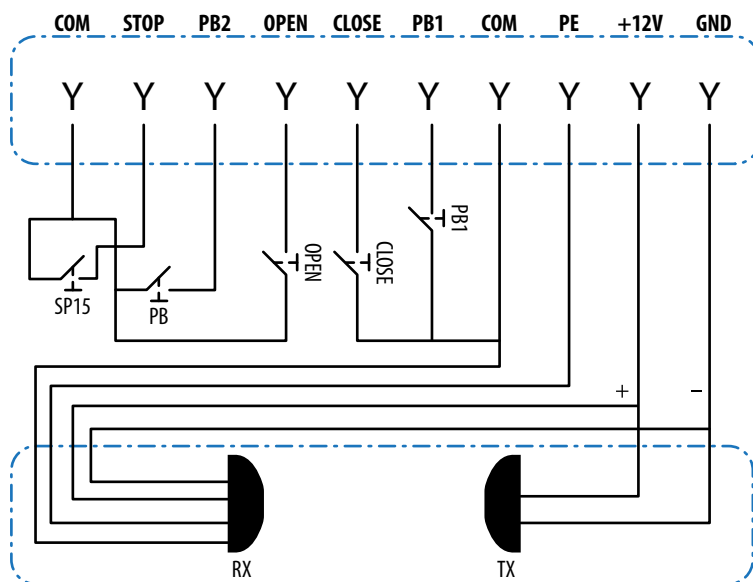
XH09 SAFETY TERMINAL (three-wire infrared sensors/wicket door protection)



WT	GND
BR	+12V
GN	Signal
Three-line infrared sensors	Enable function menu 6.8/2 Enable three-wire infrared sensor port (use our standard infrared sensors)
SP15 / SD	Safety contact ,wicket door slackline protection

Note: SP15 is disconnected, the motor stops, and all control functions are invalid. In the closing process, the three-wire infrared sensors are blocked during the closing process, and the door drive automatic reverse.

XH08 SAFETY TERMINAL (four-wire infrared sensors/infrared light curtain)



STOP	Emergency stop normally closed (NC) port, after disconnection, the door drive executes long press operation mode
PB2	Door drive operation control terminal, see details for specific functions 6.- / 6.2 Function menu normally open (NO) port
OPEN	External door opening terminal normally open (NO) port. The external switch can be defined the 1.9 function for button mode.
CLOSE	External door closing terminal normally open (NO) port The external switch can be defined the 1.9 function for button mode.
PB1	Door drive operation control terminal, see details for specific functions 6.- / 6.1 Function menu normally open (NO) port
PE	Infrared sensors, infrared light curtain, see details 5.- Function enable menu.
12V / GND	DC24V Output power, max 0.2A

DECLARAÇÃO DE CONFORMIDADE EMC Directive 2014/30/EU

ES. Declaración de Conformidad
EN. Declaration of Conformity
FR. Déclaration de Conformité



DECLARAÇÃO DE INCORPORAÇÃO Machinery Directive 2006/42/EC

ES. Declaración de Incorporación
EN. Declaration of Incorporation
FR. Déclaration de Constitution

for a partly completed machine Appendix II Part B

Eu, Márcio Cesar de Amorim Pereira, representante legal da empresa Portas Arcuense, Lda - Fábrica de Portas Seccionadas e Comércio de Automatismos, declaro que os seguintes produtos:

ES. Yo, Márcio Cesar de Amorim Pereira, representante legal de Portas Arcuense, Lda - Fábrica de Puertas Seccionales y Comercio de Automatismos, declaro que los siguientes productos:

EN. I, Márcio Cesar de Amorim Pereira, legal representative of Portas Arcuense, Lda - Sectional Doors Factory and Automation Trade, declare that the following products:

FR. Je, Márcio Cesar de Amorim Pereira, représentant légal de Portas Arcuense, Lda - Usine de Portes Sectionnelles et Commerce d'Automatismes, déclare que les produits suivant:

MOTOR DE TRACÇÃO AO VEIO

ES. MOTOR TRACCIÓN AL EJE PARA PUERTAS SECCIONALES INDUSTRIALES

EN. INDUSTRIAL DOOR DRIVE OPERATOR

FR. MOTEUR BOUT DE L'ARBRE POUR AUTOMATISER DES PORTES SECTIONNELLES INDUSTRIEL

modelos BASE 35 / BASE 50 / BASE 70

ES. modelos

EN. models

FR. modèles

Estão em conformidade com as diretrizes CE acima referidas e destinam-se apenas à instalação em equipamentos de portas.

ES. Cumplen con las directivas CE arriba mencionadas y solo están diseñadas para su instalación en equipos de puertas.

EN. They comply with the CE guidelines mentioned above and are only intended for installation in door equipment.

FR. Ils sont conformes aux directives CE ci-dessus et sont uniquement destinés à être installés dans des équipements de porte.

Standards applied

EN 12453 article 5.3.2

Industrial, commercial and garage doors and gates - Safety in use of power operated doors - Requirements

EN 60335-1

Household and similar electrical appliances - Safety - Part 1: General requirements

EN 60335-2-103

Household and similar electrical appliance - Safety - Part 2 - 103: particular requirements for drives for gates, doors and windows.

EN 61000-6-3

Electromagnetic compatibility (EMC) Part: 6-3 Generic standards – Emission standard for residential, commercial and light-industrial environments

EN 61000-6-2

Electromagnetic compatibility (EMC) Part 6-2 Generic standards – Immunity standard for industrial environments

Incomplete machines within the meaning of the EC Directive 2006/42/EC shall only be intended to be integrated into other machines (or into other incomplete machines/systems) or to be assembled with them to form a complete machine within the sense of the Directive. Therefore, this product cannot be commissioned before it is determined that the entire machine/system to which it was integrated shall comply with the provisions of the Machinery Directive indicated above.

Arcos de Valdevez, 19 de Julho de 2021


NIF: 506 409 660
Pq Empresarial de Radalheiro Lt 13
4970 - 500 Arcos de Valdevez
(Márcio Cesar de Amorim Pereira)

CERTIFICADO DE GARANTÍA



NOMBRE PT. NOME EN. NAME FR. NOM

DIRECCIÓN PT. MORADA EN. ADDRESS FR. ADRESSE

PAÍS PT. PAÍS EN. COUNTRY FR. PAYS

CONTACTO TELEFÓNICO PT. CONTACTO TELEFÓNICO EN. PHONE CONTACT FR. CONTACT TÉLÉPHONIQUE

FIRMA Y SELLO DEL INSTALADOR

PT. ASSINATURA E CARIMBO DO INSTALADOR

EN. INSTALLER'S SIGNATURE AND STAMP

FR. SIGNATURE ET TAMPON DE L'INSTALLATEUR

FECHA / /

GARANTÍA Y RESPONSABILIDAD: El correcto uso y mantenimiento de la automatización son fundamentales para la vigencia de la garantía. La garantía es por un periodo de dos (2) años para usuarios residenciales y un (1) año para usos industriales.

LA GARANTÍA NO COBRE: Reparaciones realizadas por personas que no están debidamente capacitadas y calificadas. Cambios realizados en la construcción y funcionamiento de la automatización. Daños causados por mal uso. Daños causados por falta de mantenimiento. Daños ocasionados por fenómenos naturales.

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PT. GARANTIA E RESPONSABILIDADE: O uso e manutenção correcto do automatismo são fundamentais para que a garantia seja válida. A garantia tem um periodo de dois (2) anos para utilizadores residenciais e de um (1) ano para utilizações industriais.

GARANTIA NÃO COBRE: Reparações efectuadas por pessoas que não estejam devidamente capacitadas e habilitadas. Alterações efectuadas à construção e funcionamento do automatismo. Danos causados por uso inadequado. Danos causados por falta de manutenção. Danos causados por fenómenos naturais.

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EN. WARRANTY AND LIABILITY: The correct use and maintenance of automation are essential for the warranty to be valid. The warranty is for a period of two (2) years for residential users and one (1) year for industrial uses. **WARRANTY DOES NOT COVER:** Repairs carried out by people who are not properly trained and qualified. Changes made to the construction and operation of the automation. Damage caused by misuse. Damage caused by lack of maintenance. Damage caused by natural phenomena.

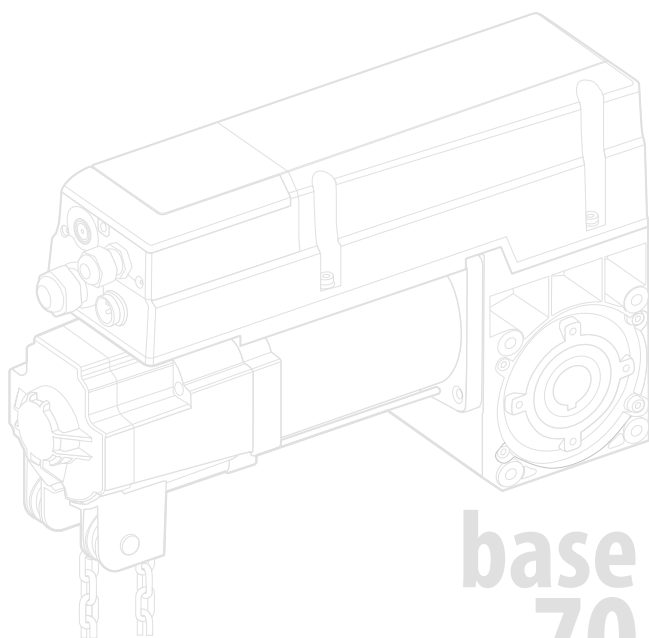
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FR. GARANTIE ET RESPONSABILITÉ : L'utilisation et l'entretien corrects de l'automatisme sont essentiels pour que la garantie soit valable. La garantie est d'une durée de deux (2) ans pour les utilisateurs résidentiels et d'un (1) an pour les utilisations industrielles.

LA GARANTIE NE COUVRE PAS : Les réparations effectuées par des personnes qui ne sont pas correctement formées et qualifiées. Modifications apportées à la construction et au fonctionnement de l'automatisation. Dommages causés par une mauvaise utilisation. Dommages causés par un manque d'entretien. Dommages causés par des phénomènes naturels.

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