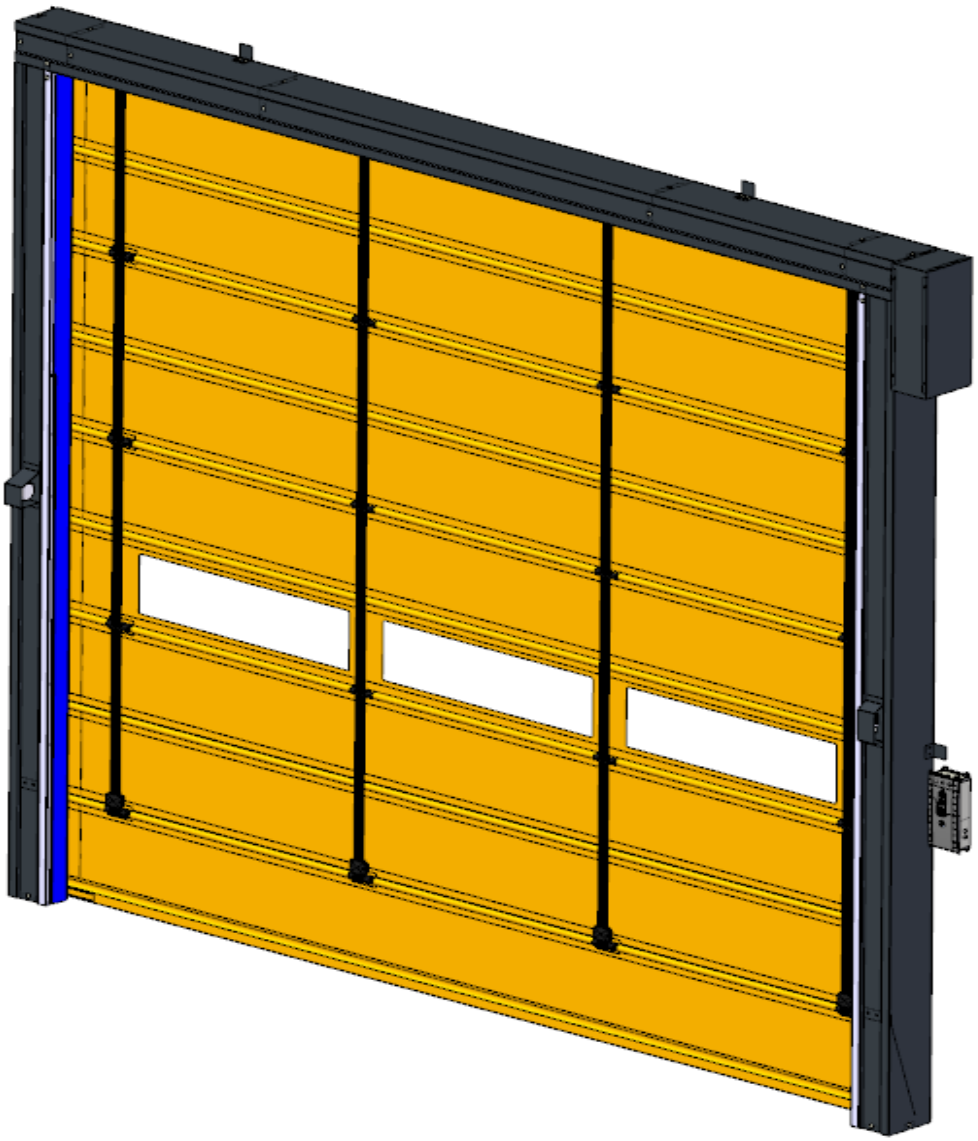

User manual:

PR64 Folding High speed door.

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01 – Introduction

This manual is the guide for the correct use and maintenance of the high-speed folding door model **PR64** and is the original document in English. Any discrepancies with a version translated into another language must be consulted with this original manual. The information contained in the manual is valid from the date of its publication until the publication of a new revision.

The photographs and drawings are illustrative and, therefore, this information may vary slightly from the actual component by ***INKEMA SISTEMAS, SL***

The colors displayed in this manual may differ from the actual colors due to different printing methods.

This manual is aimed at people involved in the daily operation, preventive maintenance and possible repairs of the high-speed door. Only personnel trained and duly informed of the possible risks are authorized to use and maintain the high-speed door.

Compliance with the instructions contained in its content ensures a long life of the door and compliance with safety regulations prevents the most common accidents that may occur during work or maintenance.

The instructions contained in this manual cannot, by themselves, make the job safe and do not exempt the user from observing the safety code or local or national law, rule or regulation.

01.01 – Warranty

The warranty for the high-speed door is ONE YEAR from the date of installation.

This guarantee includes the free replacement and installation of all those elements that have been proven useless due to a defect in material or manufacturing.

Failures or defects caused by the following reasons are excluded from this guarantee:

- Due to misuse of the equipment,
- Due to lack of maintenance,
- Due to accidents beyond the control of the equipment,
- Due to abrasion, shocks and/or impacts,
- Due to contact with acids and other corrosive elements,
- Due to wear and tear due to use.

Likewise, any change or manipulation of the product not authorized in writing by **INKEMA SISTEMAS, SL** will motivate the cancellation of the warranty period.

Any door repair or advanced maintenance work not carried out by **INKEMA SISTEMAS, SL** It will also cause a cancellation of the warranty period.

INKEMA SISTEMAS, SL Technical Service must be notified as soon as possible, and depending on the degree of failure or defect, the high-speed door must be made unusable until it has been repaired.

Likewise, it is highlighted that the following elements are exempt from the guarantee once handled:

- Electronic boards: once connected to power, burnt transformers due to network surges must be claimed from the energy supplier.

- Motors, reducers and electrical panels: although the panel or machine can be ordered in different materials and surface finishes, no material or surface finish guarantees the tightness of the motor and electrical installation when pressurized liquids are thrown onto them . If this type of cleaning is used, water may enter the interior, short circuits may occur and the device may burn, posing a danger to the safety of users. **INKEMA SISTEMAS, SL** declines all responsibility for any possible accidents that may occur for this reason and for damage to the electrical components of the high-speed door.

The owner is reminded that, in accordance with the General Law for the Defense of Consumers and Users and other complementary laws (Royal Legislative Decree 1/2007 BOE-A-2007-20555), the owner and user must inform **INKEMA SISTEMAS, SL** of the lack of conformity within a period of two months from when he became aware of it. Failure to comply with said deadline will not entail the loss of the right to the corresponding sanitation, with the owner and user being responsible, however, for any damages or losses actually caused by the delay in communication.

01.02 – Responsibilities

The **manufacturer** must make available to the owner, once the high-speed door has been installed and its proper functioning has been verified, the following documentation:

a) Operating instructions.

b) Routine maintenance instructions.

c) Maintenance book.

The **owner** is responsible for the correct use of the high-speed door, even by third parties, and must comply with the following concepts:

a) Confirm the final verification of the high-speed door together with the installer, as well as the receipt of the documents related to the manufacturer's responsibility.

b) Train and instruct users and maintenance operators in the safe use of the high-speed door, in accordance with the information provided in this manual and current legislation.

c) The periodic maintenance recommended by the manufacturer as well as the procedures, warnings and advice contained in this manual.

d) If this manual is lost during the life of the high-speed door, you must request another copy of it from the manufacturer, mentioning the serial number and related order number on the high-speed door label. It is completely necessary and mandatory that the manual is always accessible so that it can be consulted at any time or if there is a question regarding its use.

e) Inform **INKEMA SISTEMAS, SL** , as soon as possible, of the breakdown or non-conformity of the high-speed door for its prompt repair, as well as proceed to block it in the event that the non-conformity is a potential danger to safety.

Consult the Technical Department in case of doubt or discrepancy.

02 – Security.

The rapid rolling door model PR64 has been designed in accordance with the European Directives:

- **2023/1230/EU**. Machinery Directive.
- **2014/35/EU**. Electrical Material Directive to be used with Low Voltage.
- **2014/30/EU**. Electromagnetic Compatibility Directive.
- **EU 305/2011.** Regulation on Construction Products.

And it has been tested and certified in accordance with the following standards:

- **EN 12445:2001.** Commercial, industrial garage doors and gates. Safety of use of motorized doors. Test methods.
- **UNE-EN 12605:2000.** Industrial, commercial and garage doors and gates. Mechanical aspects. Test methods.
- **UNE-EN 12604:2000.** Commercial, industrial garage doors and gates. Mechanical aspects. Requirements.
- **UNE EN 12444:2001:** Industrial, commercial, garage doors and gates. Resistance to wind load. Test and calculation.
- **UNE EN 12424:2000.** Commercial, industrial garage doors and gates. Resistance to wind load. Classification.

02.01 – Security instructions.

This high-speed door has been designed and manufactured to meet the highest levels of safety; however, the manufacturer declines all responsibility for possible material damage, failures or accidents that may have occurred during the operation or installation of the product and that are a consequence of non-compliance. of the instructions and recommendations contained in this manual.

- Carefully read the instructions in this manual before using the door or carrying out maintenance actions.
- Electrically disconnect the door before any maintenance work.
- The door must be handled only by authorized personnel who have been previously trained and informed.
- It is prohibited to remove safety and warning pictograms, if any.
- Make sure that there are no people within the range of action of the high-speed door before use.
- The high-speed door safety equipment must never be disconnected or dismantled from the high-speed door during service.
- In case of door malfunction, disconnect it electrically and immobilize it in the upper or lower position depending on the owner's needs.
- Modifications or alterations to the door will be made only with written authorization from the manufacturer. These changes must satisfy all safety recommendations of the original equipment.
- The instructions contained in this manual cannot, by themselves, make work safe and do not exempt users from observing local, national and international safety code, law or regulation.
- Disconnect and lock the high-speed door once the validity date of the preventive maintenance actions marked as Important in the Maintenance Chart has expired.
- The use of the high-speed door as a means of lifting people or objects, as well as any other use other than opening and closing the passageway, is strictly prohibited.

Respect for safety regulations prevents the most common accidents that may occur during the use and maintenance of the product.

02.02 – Safety and warning instructions.

Figure Figure 1shows and describes the symbols used in this manual .

Figure 1. Symbols.

In addition to the symbols shown in Figure 1, the notes in Figure 2 will be used in this manual. Depending on the level of risk involved in non-compliance with the instructions contained in each note, one type of note or another is used.

DANGER	CAUTION	IMPORTANT
This is a high level statement. Failure to follow instructions will most likely result in serious injury or death.	This is a mid-level statement. Failure to follow the instructions contained therein will most likely result in the possibility of personal injury.	This is a low level statement. instructions contained therein are not followed, the most likely consequences will be material damage.

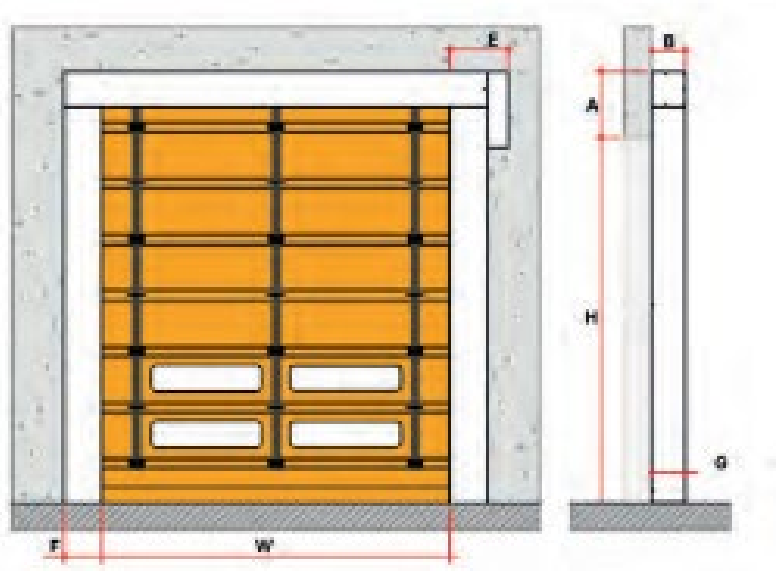
03 – Technical characteristics

03.01 – Features and limits of use

Characteristic	*Value or range*	*Unit*
DOOR		
Application	Outside-Inside	
Minimum gap	Width= 2000; High=2000	mm
Maximum gap	Width= 6000; High=6000	mm
Opening speed (average speed)	1	m/s
Closing speed (average speed)	1	m/s
Work temperature	Between -5 and 40	ºC
STRUCTURE		
Material	Steel o stainless steel 304	
Finish	Galvanized, lacquered o Stainless	
CANVAS		
Tissue	AT 1100 dtex polyester	
Covering	2 SIDED PVC	
Density	900	g/m^2
Finish	Color lacquered on two sides	
Thickness	0,75	mm
Tensile strength	400	daN /5cm
Tear resistance	50	daN
Adherence	10	daN /5cm
Work temperature	Between -30 and +70	ºC
Flame retardant level	M2	
CONTROL UNIT		

Feeding	230V I;230V III; 400V III AC +/- 10%	V
Accessory power outlet	24DC/500	V/mA
auxiliary contact	YES (tension free)	
Flash light output	Accepted	
Automatic closing time	From 1 sec to 1000 min	
Cabinet material	ABS	
Dimensions	L386 x W155 x H90	mm
Controls	Push button (UP/STOP/DOWN)	
LCD screen	YEAH	
Tightness	IP54 (IP65 with cable gland)	
Protection level	IP65	
Opposite engine side button panel	YES (ALT/STOP button)	
current disconnector	NO	
Working temperature	Between -20 and 50ºC	
SAFETY TRANSDUCERS		
Primary security	Photoelectric sensor curtain	
Open door security	Reflexive Photocell	
ENGINE		
Feeding	3~230/400	V
Output torque	120-200 (depending on door size)	Nm
Exit speed	120-90	rpm
Engine power	1,5-1,8	kW
Frequency	50 or 60	Hz
Rated current	8A (depending on door size)	TO
Protection index	IP54	
Work temperature	Between -5 and 60	ºC
Continuous sound pressure level	<70	dB
Weight	Approx. 18	kg
EXTRA OPTIONS		
Magnetic field	*(Optional)*	
Single channel remote control	*(Optional)*	
Two-channel remote control	*(Optional)*	
Quad-channel remote control	*(Optional)*	
Volumetric radar	*(Optional)*	
Additional button panel	Yeah	
Shooter	*(Optional)*	
Photocell opening	*(Optional)*	
Extra safety photocell	*(Optional)*	
Engine cover	Yeah	
Intermediate stoppage	*(Optional)*	
Uninterruptible Power Supply (UPS)	*(Optional)*	
Acoustic light warning	*(Optional)*	
Acoustic warning (buzzer)	*(Optional)*	
Ultrasonic detector	*(Optional)*	
Pre-frame	*(Optional)*	

03.02 – Dimensions



	H	W	A	B	C	D	E	F	G
Min.(mm)	2000	2000	1250(1100)	350(270)	-	-	520	250(200)	350(250)
Max.(mm)	6000	6000							

Figure 2. Limit dimensions for PR64 door.

04 – Instructions for use.

04.01 – Expected use

The high-speed door is intended to close an opening in a building and is intended to give access to people or vehicles.

The door must be completely open to be able to go through it.

04.02 – Incorrect use

Any other use different from that mentioned in section "04.01 – Intended use" will be considered incorrect use.

Incorrect use of the high-speed door is expressly considered to be:

- Hanging and/or lifting objects, animals and/or people using the door mechanism.
- Hold or press using the door mechanism.

The manufacturer is not responsible for any damage of any nature that may have been due to improper use.

It must be considered that corrosive and aggressive environments: conditions with acid and/or caustic, can negatively influence the operation and safety of the high-speed door.

04.02.01 – Safety risks due to improper use

- Do not manipulate the control panel or the motorization to increase or reduce the speed of movement of the high-speed door.
- Do not modify the high-speed door or any part of it.

- Do not operate the high-speed door after suffering a blow to the structure, the canvas or any of the safety elements until technically competent personnel have verified its correct operation.
- Do not attempt to operate the high-speed door if its operation is interrupted due to a fault. Immobilize the door and contact the **INKEMA SISTEMAS technical service SL** for repair and verification of correct operation.
- Do not carry out work on the door control panel or drive system without disconnecting the power supply.

04.03 – Mode of use.

The high-speed door operates by manually activating a system of buttons that activate, through the electrical panel, the gear motor, which rotates the shaft, rolling or unrolling the PVC canvas.

⚠ ***At the beginning of the day, before the first operation, visually inspect the door and make sure that there are no defects in the structure, canvas, motorization or safety elements.***

⚠ ***Before raising or lowering the door, make sure that there are no people or objects in its operating area.***

04.03.01 – Door opening

In the standard configuration, a dark green button is placed on each side of the door to facilitate bidirectional passage (Figure 7). One of them is fixed on the control panel (1) and the other button on the button panel, which is located on the other side of the door (2) in the most suitable passage place. Thus, by pressing either of the two, the door opens instantly.

04.03.02 – Door closing

manual closure

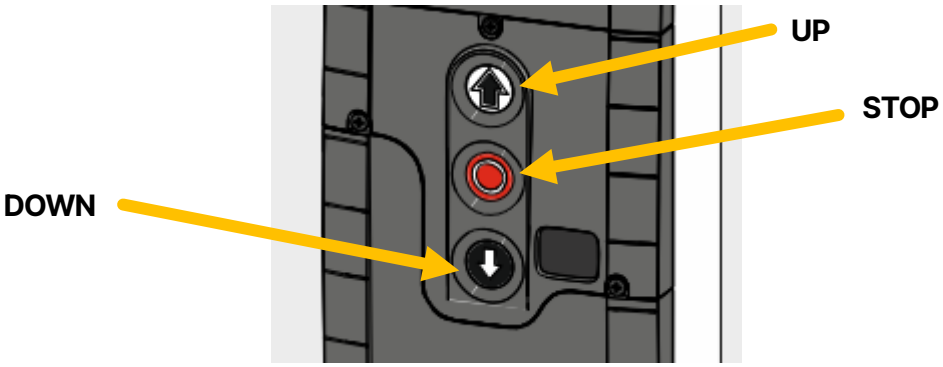
The high-speed door can be closed using a manually operated push-button system.

Before pressing the button, make sure that the area of influence of the door is free of obstacles.

Press and release the down button and check that the door performs the closing maneuver until it reaches its fully closed position.

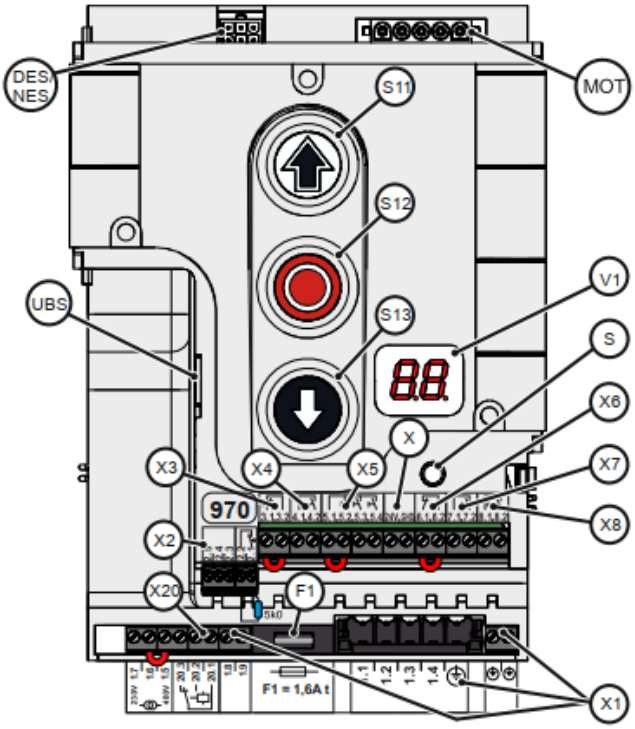
automatic closing

If the automatic closing function is activated, the open door closes after the programmed time has elapsed. If the Stop function is activated, the automatic closing stops. If the door is open and the transit photocell is intercepted or the OPEN key is pressed, the automatic closing time is set to zero (the counter is reset).



04.03.03 – Control panel: GFA Elektromaten TS970-TS971

Input	230VAC I
Maximum load	1hp / 0.75kW
AC main fuse	6A
Voltage output	15VDC 3.5W
Work temperature	-10ºC / 50ºC
Dimensions	L386 x W155 x H90mm
Weight	2000g
Tightness	IP65



DES/NES	DES or NES limit switch detector housing	**X**	24 V power supply, equipment External
F1	Weak Current Fuse 1.6 A Slow	**X1**	Mains power
MOT	Engine housing	**X2**	Gate safety switch and safety devices
S	Schedule Selector	**X3**	Emergency STOP control equipment
S11	Push button OPEN	**X4**	Timed automatic closing on/off
S12	STOP Push Button	**X5**	External triple push button command equipment
S13	Push button CLOSE	**X6**	Unidirectional/reflective light barrier
UBS	Housing for universal sensor command	**X7**	Roof handle, external radio receiver
V1	Indication	**X8**	Partial opening on/off
		X20	Potential-free relay contact

DESCRIPTION:

The GFA Elektromaten TS970-TS971 control panel is designed to be part of an up-and-over, ascending or sliding door automation system, with a 230/400VAC three-phase motor.

The box has the following characteristics:

- Control of 1 three-phase 230/400VAC motor up to 3kW
- Intuitive programming menu using 1 button key and backlit LCD screen.
- Support for absolute encoder.
- Independent regulation of power and speed in opening and closing.
- Configurable test of safety devices before each opening or closing.
- Two independent key entries for different activation modes.
- Output for 230V flash lamp and output for garage light contact reprogrammable to other functions.
- Independent inputs for a photocell and a band (resistive or contact) or a second photocell.
- LEDs indicating the status of the inputs and outputs of the panel.
- Voltage output for peripherals of 15VDC (3.5W) protected by resettable fuse .
- Optocoupled inputs with high electrical isolation.
- Storage of number of maneuvers (partial and total) and events to facilitate maintenance. Maintenance signal configurable on external LED.
- Maneuver learning system that facilitates start-up and configuration.
- Obstacle detection with configurable sensitivity by amperometric sensor and/or encoder.

IMPORTANT SAFETY INSTRUCTIONS FOR INSTALLATION

Before installing the box:

- Check that the door/shutter is in good mechanical condition and well counterbalanced.
- Remove everything that is not necessary from the environment and turn off the AC power
- Proceed to install the panel at a minimum height of 1.5 m. preferably next to the door.
- Use power and motor cables of adequate section.
- Power the panel through a circuit breaker/emergency switch that is easily accessible by the user.

IMPORTANT SAFETY INSTRUCTIONS FOR USE

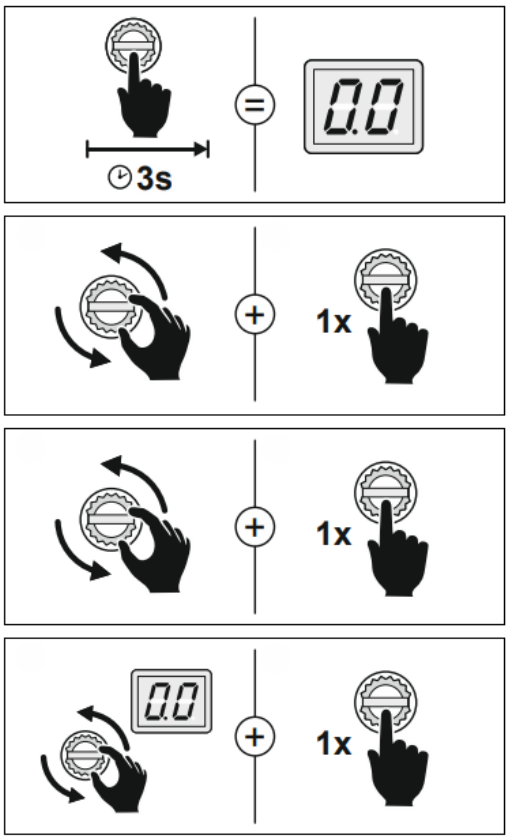
Once the mechanism is installed and as a prevention, the user must:

- Keep control of the mechanism out of the reach of children.
- Monitor the movement of the door, keeping the area free of people and objects.
- Act with caution when handling the door manually (unlocked) as it can move without control, due to its weight, the state of the fixings, springs and counterweights.

If a system malfunction is observed, the user must IMMEDIATELY contact technical support. You should not use the mechanism as it may cause damage.

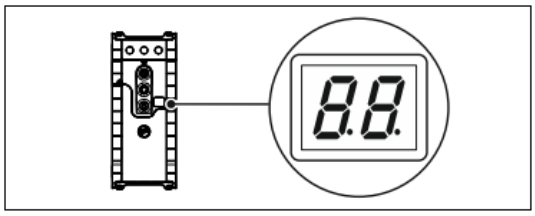
CONFIGURATION

1. Start programming
    a. Press the schedule selector for 3 seconds. The screen changes to 0.0.
2. Select the Schedule Point:
    a. Turn the schedule selector to the desired programming point.
    b. Press the schedule selector once to confirm the selection. This will give you access to the options.
3. Select the option:
    a. Turn the schedule selector to the desired option.
    b. Press the schedule selector once to save the selection. This way, you will be taken out of the options at the same time.
4. End the program:
    a. Turn the schedule selector to 0.0.
    b. Press the schedule selector once to exit the schedule

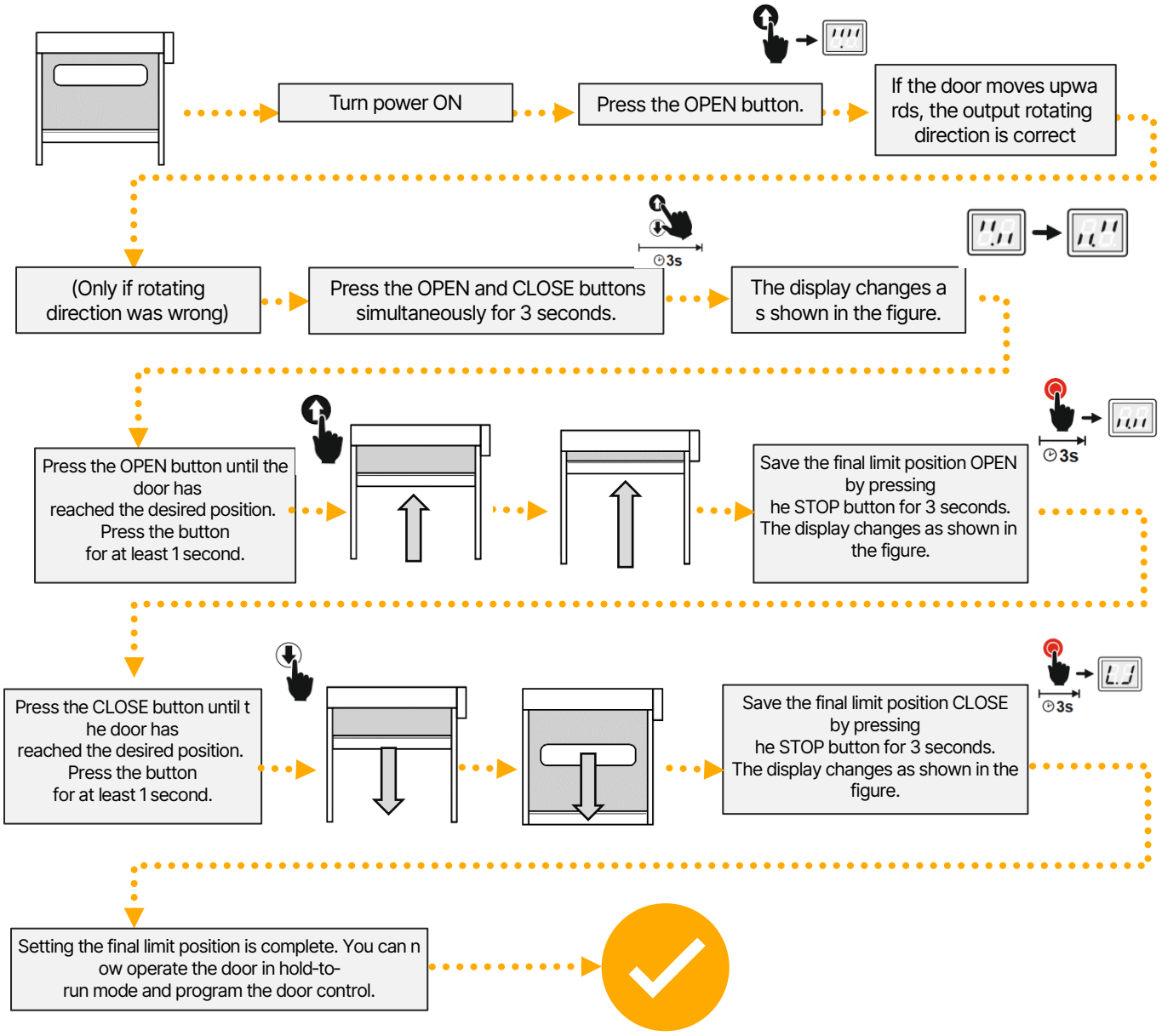


SCREEN

The display of the door control consists of a double-digit seven-segment-display. The display can show symbols, letters, or numbers. The figure shows the display when all segments are illuminated.

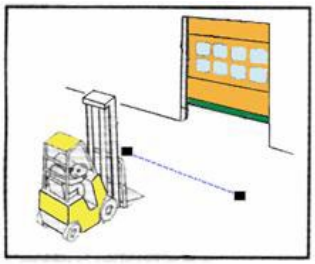


QUICK SETUP

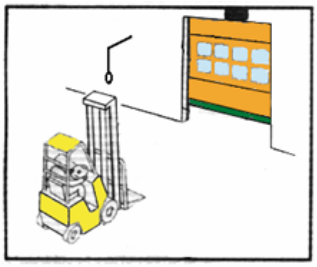

Turn power ON
Press the OPEN button.
If the door moves upwa rds, the output rotating direction is correct
(Only if rotating direction was wrong)
3s
Press the OPEN and CLOSE buttons simultaneously for 3 seconds.
The display changes a s shown in the figure.
Press the OPEN button until the door has reached the desired position. Press the button for at least 1 second.
3s
Save the final limit position OPEN by pressing he STOP button for 3 seconds. The display changes as shown in the figure.
Press the CLOSE button until t he door has reached the desired position. Press the button for at least 1 second.
3s
Save the final limit position CLOSE by pressing he STOP button for 3 seconds. The display changes as shown in the figure.
Setting the final limit position is complete. You can n ow operate the door in hold-to-run mode and program the door control.

04.03.04 – Opening options

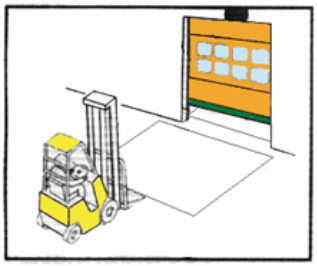
The different opening systems that can be attached to high-speed doors are described below:



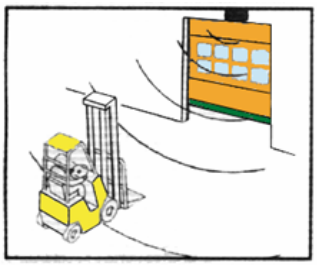
Photocell: When any object passes, it interrupts the light beam between the photocell and the mirror and, as a result, the door rises.



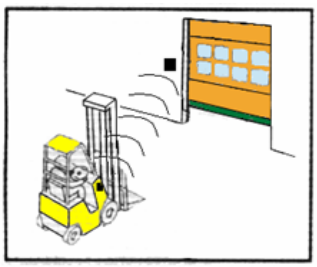
Ceiling handle: by activating an elastic rope attached to the ceiling, which in turn activates a switch, the rapid door opening is activated.



Magnetic loop detector: by installing a magnetic field, when the passage of a metal mass across its surface is detected, the door rises.

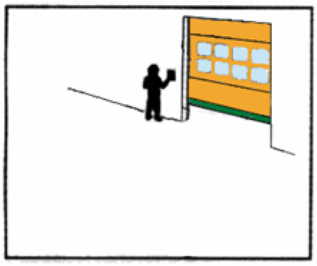


Volumetric radar: it is activated by the movement of people and/or vehicles. The drive distance can be adjusted.



Remote control: single channel / two channel / four channel.

Radio transmitter: it is operated by radio frequency transmitters.



Additional button panel: it is operated by pressing a button.

04.04 – Additional Programming Options

Not all the programmable functions explained below have practical application on the installed door as optional and additional accessories may or may not have been installed depending on the need for installation or customer request.

Some programs may have more options than those presented here since not all configuration options are valid for high-speed gate. DO NOT select options that are not represented or explained here. It could seriously damage the door or cause accident risks.

04.04.01 – Programming

0.1 Operating Mode

- .1 No safety device on the door: man present OPEN/CLOSE
- .2 No safety device at the door: impulse manoeuvre OPEN and man present CLOSE
- .3 A safety device on the door: impulse manoeuvring OPEN/CLOSE
- .4 A safety device on the door: impulse manoeuvre OPEN/CLOSE The CLOSE movement is possible in the case of an X5 control device.
- .6 A security band on the door: man present OPEN/CLOSE

0.2 - Direction of rotation
With this programming point, you can change the direction of rotation of the door drive.
Select the options with the OPEN or CLOSE button.

- .0 Maintain the direction of rotation
  Exit the schedule point by pressing the schedule selector
- .1 Changing the Direction of Rotation
  Save the programming point by pressing the STOP button for 3 seconds and exit.

1.1/1.2 Gross correction of final positions
With these programming points, you can change the already adjusted end positions.

1.1 Gross correction of the final position OPEN (DES)
1.2 Coarse correction of the final position CLOSE (DES).
Start the desired door position using the OPEN or CLOSE button.
Save the position of the door by pressing the STOP button once.

1.3/1.4/1.5 Fine correction of final positions
With these programming points, you can change the already adjusted end positions. During the fine correction, no door movement occurs. Proceed in steps.

1.3 Fine correction of the final position OPEN (DES)
1.4 Fine correction of the final position CLOSE (DES).
1.5 Fine correction of the pre-limit switch for the safety band (DES)

1.6 Adjusting the Door Position for Partial Opening
With this programming point you can adjust a door position for partial opening. A partial opening is a position of the door between the final OPEN position and the final CLOSE position. To do this, you need to install an external switch on the X8 terminals. With this switch you can turn the start of partial opening on and off. Using programming point 2.9, you can adjust which control devices the position is started with.

- Start the desired door position using the OPEN or CLOSE button.
  Save the position of the door by pressing the STOP button once.

1.7 Switching position of the X20 relays
With this programming point, you can adjust at which position on the gate the X20 relay is connected. With this programming point, you can adjust at which position on the gate the X20 and X21 relays are connected. To use this function, you must set the P 2.7/P 2.8 programming point and connect a computer to X20 or X21. This switching position should only be programmed if you want to use the .1 / .2 or 1 options from the P 2.7 or P 2.8 programming point. 1.

- Start the desired door position using the OPEN or CLOSE button.
  Save the position of the door by pressing the STOP button once.

2.2 - Correction of the inertial travel path
Automatic limit switch correction to reach a constant CLOSE position.

- .0 OFF
- .1 ON

2.3 - Timed Closure
With this programming point, you can select a time between 1 and 240 seconds after which the door closes automatically. Using the X4.1 and X4.2 terminals, you can connect a switch that activates and deactivates this function.
The timed closure can be interrupted manually:
Press the STOP button if the door is in the final OPEN position. The door remains open. Pressing the OPEN button reactivates the timed closure

- .0 OFF
- 1 –2.40 .1 = 1 second to 9.9 = 99 seconds.
  For 99 seconds the screen flashes three times to fully display the three-digit numbers: 1.- and 0.0 = 100 seconds up to 1.- and 9.9 = 199 seconds 2.- and 0.0 = 200 seconds up to 2.- and 40 = 240 seconds.

2.4 - Reaction of the timed closure in the photocell
With this programming point, you can stop the timed shutdown by activating the photocell. To do this, a photocell must be installed and the programming point P 2.3 must be activated. In the operating mode (P 0.1) Man present, this programming point has no effect.

- .0 OFF
- .1 Stopping the timed closing P 2.3 When the photocell is interrupted, the door closes after 3 seconds.
- .2 Detection of people and vehicles If the photocell interruption lasts less than 1.5 seconds (e.g. a person passes through the door), the door closes after the time set in P 2.3. If the photocell interruption lasts longer than 1.5 seconds (e.g., a vehicle passes through the door), the door closes after 3 seconds.

2.5 - Reaction of the timed closure in the photocell
Activate this programming point only if the timed shutdown P 2.3 is activated. If the timed closing is activated, the door moves after the set time to the final CLOSE position. If the door encounters an obstacle during the movement, it reverses. In other words, when a safety device is activated, the door changes the direction of travel and moves to the final position OPEN. By means of the timed closing, once the set time has elapsed, the door tries to close again. This continues to happen until the obstacle has been removed. After the time has elapsed, it stops again. With this programming point, you can adjust how often the door tries to close before stopping in the final OPEN position.

- .0 OFF
- .1 Adjustable from 1 to 10. .1 = 1 investment 1.0 = 10 investments
  Factory Settings: .2

2.6 - Ceiling handle or radio control
First connect a ceiling handle/radio control button to the X7 terminals. With this programming point, you can determine how the door reacts to an order from the radio control button or ceiling handle.

- .1 Actuation in the final position CLOSE or partial open: the door moves to the final position OPEN Actuation in the final position OPEN or partial open: the door moves to the final position CLOSE, another actuation while moving: the door moves to the final position OPEN
- .2 Actuation in the final position CLOSE or partial opening: the door moves to the final position OPEN Actuation in the final position OPEN or partial opening: the door moves to the final position CLOSE If new actuations occur during the movement, the following occurring in the following sequence: movement OPEN - STOP - movement CLOSE - STOP - movement OPEN
- .3 Actuation from all positions: the door is moved to the end position OPEN.

2.7 - X20 Relay Functions
With the P 2.7 programming point, you can control the X20 function. X20 is a potential-free relay contact.

- .0 OFF
- .1 Impulse with OPEN motion in the switching position for 1 second The switching position should be programmed with P 1.7
- .2 Permanent contact from the switching position The switching position should be programmed with P 1.7.
- .3 Red Traffic Light: During Door Movement: Permanent Contact In the End Position OPEN: Flashes 3 seconds In the End Position CLOSE: Flashes 3 seconds
- .4 Red Traffic Light: During Door Movement: Permanent Contact In the End Position OPEN: Flashes 3 Seconds In the End Position CLOSE: Off
- .5 Flashing light: during door movement: permanent contact In the final position OPEN: illuminates 3 seconds In the final position CLOSE: illuminates 3 seconds
- .6 Flashing light: during door movement: permanent contact In the final position OPEN: illuminates 3 seconds In the final position CLOSE: Off
- .7 Green traffic light: during door movement: Off In the end position OPEN: permanent contact In the end position CLOSE: Off Instead of a green traffic light, e.g. it can be used for the approval of a loading dock.
- .8 In the end position CLOSE: permanent contact
- 1.0 Boost for 1 second with the OPEN command
- 1.1 Impulse when exceeding the switching position. Permanent contact when stopping in the switching position. The switching position should be programmed with P 1.7.
- 1.2 Brake Activation Active with Gear Motion Inactive with Stop
- 1.4 Photocell curtain test or similar Test before each movement CLOSE

2.9 - Identification of control equipment for partial opening
With this programming point, you can determine which control devices are used to initiate the partial opening. Previously, with the programming point P 1.6 you must adjust a position for the partial aperture. To connect and disconnect the partial opening, you must have installed a switch on X8. You can install other control devices for partial opening on X7 or X5. With an OPEN command using the activated control devices, the door moves to partial opening.

- .1 Possibility of partial opening by means of all control equipment.
- .2 Partial opening by means of the control equipment in X7. End position OPEN using the OPEN button on the door control and the control system on X5.
- .3 Partial opening using the OPEN button on the door control and the control equipment on X5. Final position OPEN by means of the command equipment in X7.

4.1 to 4.9 - Variable frequency drive functions
The following programming points can only be used if the door drive has a frequency inverter. Increase/decrease output revolutions.
With these programming points, you can change the output speed of a door drive with a frequency inverter. With the P 4.3 programming point, you can additionally increase the output speed from a height of 2.5 m. To do this, you must first determine the switching position for high speeds CLOSE with the programming point P 4.4

- 4.1 Increase/decrease output revolutions OPEN
- 4.2 Increase/decrease output revolutions CLOSE
- 4.3 Increase/decrease output revolutions CLOSE >2.5m
- 4.4 Adjusting the switching position for high output speeds CLOSE
- 4.5 Increase/decrease acceleration OPEN
- 4.6 Increase/decrease acceleration CLOSE
- 4.7 Increase/decrease the braking delay OPEN
- 4.8 Increase/decrease the braking delay CLOSE
- 4.9 Increasing/decreasing the revs at very slow speed CLOSE

04.04.02 – List of failures and possible solutions.

F.	Cause of failure	Bug Fix
1.2	Loose wire/open pedestrian door contact switch.	Check if the connecting cables have been interrupted. Check whether the spiral cables or the WSD door module are properly connected. Loose cable switch: Check if the ropes are taut. Check the position of the DIP switch on the door leaf housing. Measure the slack wire/pedestrian door contact switch.
1.3	Open safety chain. Emergency manual actuation activated. Engine thermal protection activated. Reclosing Protection (WES) has been activated.	Check if the door drive is overloaded or blocked. WARNING! Danger from falling door! Do not release the lock on a door drive with integrated parachute! Blockage can be an indication of a fall. Replace the door drive. Allow the door drive to cool. Check the emergency manual actuation. Check that the connector and connection terminals are properly seated. Door with individual parachute system: check the parachute.
1.4	Emergency stop switch activated.	Check the emergency stop switch. Check for any interruptions in the connection cable.
1.7	Defective pedestrian door contact or loose cable contact.	Open and close the pedestrian gate. Check the pedestrian door assembly. Adjust the switching distance to < 4 mm. Check the position of the DIP switch on the door leaf housing. Compruebe la resistencia y el cableado del cable espiral.

		Check for overload of drive voltage.
1.8	Transverse conductor connection in the slack cable/pedestrian door circuit.	Check the position of the DIP switch on the door leaf housing. Check if the 5K0 resistor is mounted on the door leaf housing. Check if the 5K0 resistor is connected in series in the door leaf box. Check the wiring of the coiled cable.
2.0	The safety band was not recognized	Check the wiring and the condition of the security band. Check the position of the DIP switch on the door leaf housing. Check the status of the safety band optically and electrically.
2.1	Photocell activated.	Check the status and direction of the photocell. Remove existing obstacles in the door area. Clean the photocell and reflector. Check the connection cable for interruptions. If necessary, change the photocell.
2.2	Maximum number of gear reversals achieved by activating the safety band (only with automatic timed closure).	Remove existing obstacles in the door area. Check the mechanical system of the door for any damage. Check the advance of the door in the CLOSE direction. Check the function of the safety band. Readjust or disable the P 2.5 programming point.
2.4	8k2 security band activated.	Check for any water damage to the safety band and door leaf boxes. Check the safety band visually and electrically.
2.5	Defective 8k2 safety band.	Electrically calibrate the coiled wire and safety band. Check that all terminal points and connectors are properly seated.
2.6	1k2 security band activated.	Check the pressure switch. Check the pressure switch fit and sensitivity. Check for mechanical damage to the coiled wire and perform an electrical measurement. Check that all terminal points and connectors are properly seated.
2.7	Defective 1k2 safety band.	Electrically calibrate the spiral wire. Check for any water damage to the safety band and door leaf boxes
2.8	Safety band 1k2 - Negative test.	Check the adjustment of the limit switch pre-switch. Check the pressure switch. Check the integrity of the security band. Check if the safety band is crushed in the final position CLOSE.
2.9	The optical safety band is activated or defective.	Check the rubber profile for crushing. Check the sender and receiver by changing them. Control steering and mechanics. Check for any water damage to the safety band and door leaf boxes.
3.1	The contact of the emergency manual actuation is open or defective. The connection cable is defective. Thermal contact has been activated. Reclosing Protection (WES) has been activated. DES: Emergency limit switch detector OPEN started. NES: Emergency limit switch detector OPEN or CLOSE. The limit switch system was changed from DES to NES.	Check if the emergency manual drive is activated. Electrically calibrate the contact of the emergency manual actuation. Check the connection cable for damage. Check that the connector is seated properly. The geared motor is overloaded. Check the condition of the door (damage, spring breakage, etc.). Warning! Danger from falling door! The lock may indicate a fired parachute. If there is no step after cooling, it means that the thermal contact is defective. Check whether the geared motor with the emergency manual drive has been moved to the emergency limit switch sector. Check if the geared motor's coasting is too long. Check if the limit switch system was changed. Perform a door control reset.
3.2	The emergency limit switch sector was accessed CLOSE.	Check whether the geared motor with the emergency manual drive has been moved to the emergency limit switch sector. Check if the geared motor's coasting is too long.
3.4	Defective actuation of the S5 limit switch. The limit switch pre-switch is not connected, is poorly wired or is defective.	Check if the limit switch pre-switch is available. Control the wiring. Check optically and electrically for any damage to the connection cable.
3.5	No limit switch detected. (Note: active during first commissioning)	Check optically and electrically for any damage to the connection cable. Check that all connectors are seated properly.

		On TS 970 and TS 959: Check the position of the transformer bridge (terminal X 1.5 to X 1.7). Note the supply voltage on site and the chapter "Electrical Mounting". On the TS 970 and TS 971 with NES: Unlock the emergency stop control equipment. Place a wire bridge between the X 3.1 and X 3.2 terminals.
3.6	Erroneous recognition of the final degree system. The limit switch system has been changed from DES to NES without resetting the door control.	Check if the limit switch system was changed. Perform a door control reset.
3.7	Internal concordance ruling.	Turn the control panel off and on. Contact the service if the error is repeated.
3.8	Very high temperature in the door control.	Measure the ambient temperature and compare it to the permissible temperature range of the door control. Disconnect the door control for cooling.
4.1	Force control activated.	Check the mechanical system of the door for any damage. Check for wind pressure on the door. Check the spring tension.
4.5	Actuated, faulty, or unprogrammed impact switch.	Check for any boot damage to the door leaf. Check the impact switch. Control the setting of the 3.4 programming point. To reset the fault, press the STOP button for 3 seconds.
4.6	Photocell curtain activated.	Remove existing obstacles in the door area. Correct the direction of the photocell curtain. Clean the optics of the photocell curtain.
4.7	Incorrect photocell curtain test. Poorly wired, non-compatible or defective photocell curtain.	Control the wiring of the photocell curtain. Check the function of the photocell curtain.
5.0	Driver failure.	Turn the door control off and on. If necessary, replace the door control.
5.1	ROM failure.	Turn the door control off and on. If necessary, replace the door control.
5.2	CPU failure.	Turn the door control off and on. If necessary, replace the door control.
5.3	RAM failure.	Turn the door control off and on. If necessary, replace the door control.
5.4	Internal foul. Bug 3.7 was detected five consecutive times.	See Judgement 3.7. Turn the door control off and on. If necessary, replace the door control.
5.5	Digital Limit Switch (DES) failure.	Check the fixed seat of the limit switch connector. Check optically for any damage to the connection cable. Check the limit switch by replacing with an intact DES.
5.6	Failure to move the door. The mechanical system of the door is running with difficulty or is blocked. The final OPEN/CLOSE position is not reached. A supply phase is missing. The brake is not vented. The limit switch is not triggered. The runtime is poorly adjusted. FU motor only: the frequency inverter is not detected.	Check the door drive for any blockages. WARNING! Danger from falling door! Do not release the lock on a door drive with integrated parachute! Blockage can be an indication of a fall. Replace the door drive. Check the mechanical system of the door for any damage. Check the final OPEN/CLOSE position. If the door is sliding against a stop, correct the end position. Check the network connection of the door control. Set the correct supply voltage. Check the brake and rectifier function. Check the direction of the final stroke of rotation while the door is moving. Check and correct the supply voltage of the door control. Correct runtime (3.3 programming point) On single-phase FU motors: Control the neutral on the network connection. Control transformer jumper at gate control network input.
5.7	The turning field of the power supply network changed.	Set the right turn field on the network connection.
5.8	Incorrect door movement after the resting state.	Geared motors with brake ventilation: Check if the brake vent lever has been activated. Warning! Danger from falling door! Brake ventilation should only be used by specialized personnel. Observe the instructions on the geared motor. Geared motors with gear release: Check if the gear is unlocked and if the door was moved manually. Engage the gear and turn the door control off and on.

		Geared motors with magnetic brake: brake without function. Check if the brake is powered by tension.
5.9	The door drive does not move in the indicated direction of travel.	The brake does not stop the door: check for defects, wear or moisture damage on the brake and rectifier. Measure the voltage on the motor connector and check the correct connector seat. Check the screws on the motor connection.
6.1	Very high closing speed	Check the hardness of the mechanical system of the door. Only on weight-compensated doors: check for any spring breakage. If necessary, replace the door drive.
6.2	Internal communication failure in the frequency inverter	Turn the door control off and on. Check the connection cable at the end of the stroke. Check the fixed seat of the patch cord and connectors. If necessary, replace the door drive.
6.3	Low voltage in the intermediate circuit	Measure the tension during door movement. Measure the mains input voltage. Modify ramp/speed times. (P 4.1-P 4.9)
6.4	Overvoltage in the intermediate circuit	Measure the tension during door movement. Measure the mains input voltage. Modify ramp/speed times. (P 4.1-P 4.9)
6.5	Temperature limit exceeded	Overloaded door drive. Check if the ambient temperature is too high. Allow the door drive to cool and reduce the number of cycles.
6.6	Permanent current overload	Overloaded door drive. Check the hardness of the mechanical system of the door.
6.7	Brake/variable frequency drive failure	Check the brake. If necessary, replace the door drive.
6.9	Variable frequency drive message group	Turn the door control off and on. If necessary, replace the door drive.
8.1	When adjusting the final positions, the lower limit of the smallest possible travel path was exceeded.	When resetting the end positions, allow the door to operate for at least one second before saving the position. Reset door control to factory settings (P 9.5). Notice! All settings are lost!

04.05 – Security

04.05.01 – Close security.

Safety photoelectric curtain. It acts during the closing of the door, if it is automatic. When it detects an object that cuts the beam sequence between transmitter and receiver, it will reverse the motor manoeuvre, and the door will raise automatically. The barrier or curtain defined between the photocells is only activated in the range of free passage, so the sensors are deactivated as the canvas descends.

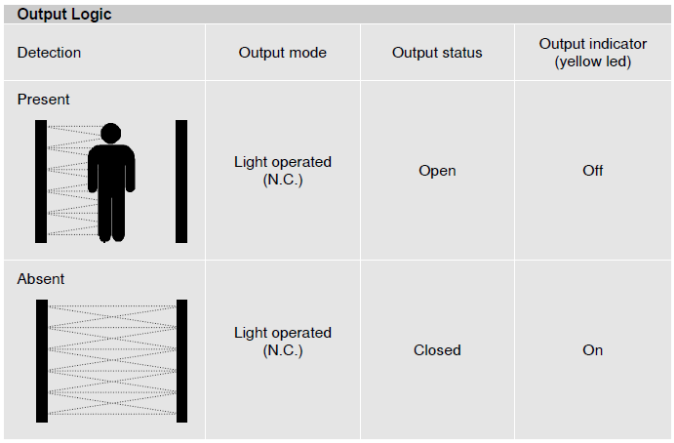


Figure 3. Operation of the barrier photocell.

- Run timer. It acts both when opening and closing the door. If either manoeuvre exceeds the set time during the installation process, the affected manoeuvre will be stopped.

04.05.02 – Open security

Safety reflective photocell. It acts during the opening of the door, if it is automatic. When it detects an object that cuts the photocell, it stops the motor and door manoeuvring.

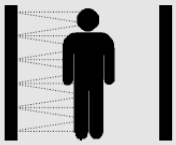
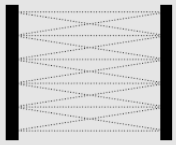
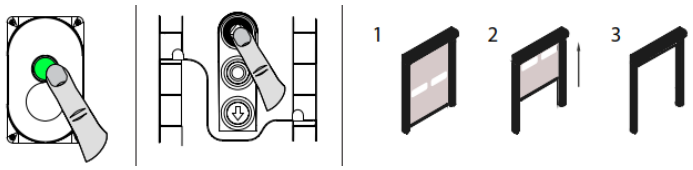
Output Logic			
Detection	Output mode	Output status	Output indicator (yellow led)
Present 	Light operated (N.C.)	Open	Off
Absent 	Light operated (N.C.)	Closed	On

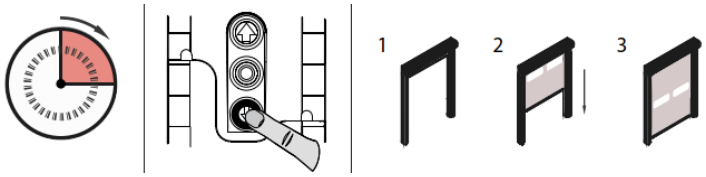
Figure 4. How the barrier photocell works.

04.06 – Use.

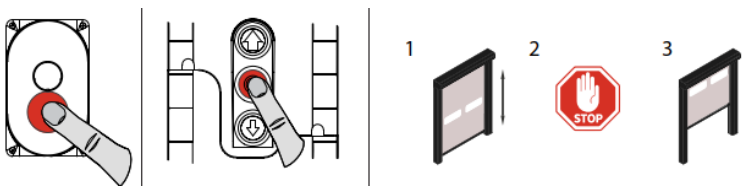
- Aperture.
  This manoeuvre can be carried out either from the control panel by pressing the upper button, or from the opening button panel by pressing the green button.



- Closing.
  The normal closing of the door is automatic, after a period. The closure can also be forced by pressing the lower button on the control panel.

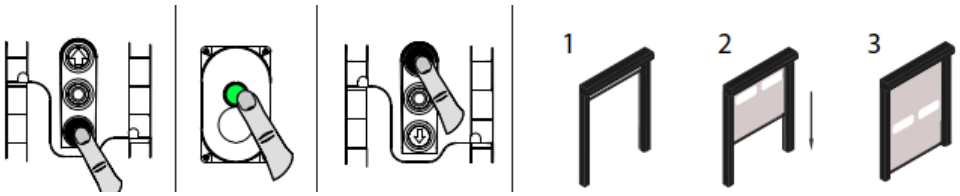


- Emergency stoppage.
  Pressing the red button on both the control panel and the opening button panel stops the movement of the door instantly. The red button on the opening button panel will be interlocked after being pressed.



- Rearmament.

The door is reset after an emergency stop by pressing the button to open or close according to the desired movement. If the stop has been made from the opening button, first unlock the red button by turning it before resuming the movement.



04.07 – Opening or closing the door in case of power failure

If the door is equipped with a UPS uninterruptible power supply system, it will open automatically when the power failure occurs and will remain open until the power supply is restored.

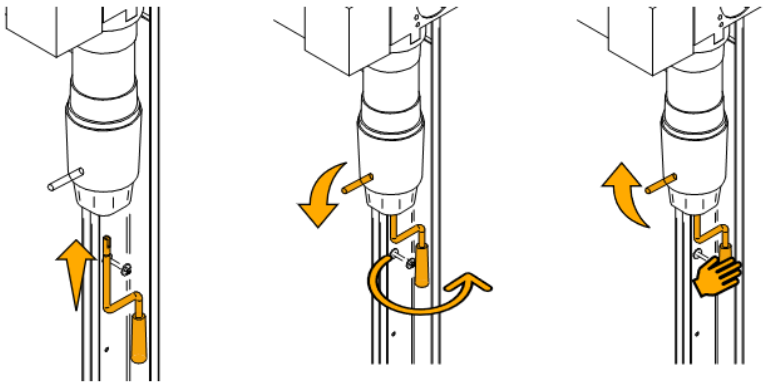
For installations in which there is no UPS, the door is provided with a motor with declutch and manual operation by crank.

Whether the door was open, closed or moving at the time of the failure, the brake built into the motor stops the door from moving immediately.

If the position in which the door was left after the failure is not convenient, it can be operated manually:

1. Disconnect the main power supply to the door, to avoid unexpected start-ups in the event of a power return.
2. Wait 15 minutes until the frequency converter capacitors have completely discharged.
3. Remove the crank from its housing.
4. Insert the crank into the bottom of the motor and turn it gently until you feel it click into place.
5. Firmly lower the brake lever while turning the crank to move the door to the desired position.
6. Release the brake lever, without releasing the crank.
7. Remove the crank and store it in its housing.

The door can be operated normally once the power supply is restored. Remember to reconnect the power to the door.



05 – Maintenance

The correct operation and long life of the door depend largely on the preventive maintenance carried out.

Advanced maintenance can only be carried out by the **INKEMA SISTEMAS Technical Service. SL** or personnel approved by it.
This maintenance is carried out so that the product retains the safety and use characteristics that it has at the time of installation.
Greasing, painting and continuous monitoring are the best guarantee of good performance for many years.

05.01 – Security measures.

At all times, the provisions of occupational health and safety regulations must be followed, whether national, local or specific to the user.

05.02 – Preventive maintenance table.

Preventive Maintenance Interventions	Advanced YES / NO	Diary	Each month	1 year	2 years
General cleaning and surveillance	NO	■			
Safety photoelectric curtain cleaning	NO		■		
Guidance system settings	⚠ YES			■	
Transmission lubrication/regulation	⚠ YES			■	
Retightening the support, frame and counterweight screws (optional).	NO			■	
Lubricate guides with Vaseline or plastic lubricant.	NO			■	
General review of mechanical transmissions, winding and unrolling, as well as canvas fixings	⚠ YES				■

If you find defects or deficiencies in the operations described below, block the door by cutting off the power and contact INKEMA SISTEMAS SL to proceed with the repair of the door.

Only original spare parts provided by the manufacturer should be used in the repair of the door. The use of other parts from other manufacturers would represent a change not authorized by the manufacturer.

Advanced maintenance: It can only be carried out by the Technical Service of INKEMA SISTEMAS SL or personnel approved by it, who is specifically prepared for the work to be carried out.

Non-advanced maintenance: It can be carried out by personnel without specific competence, but they must have been sufficiently informed and trained by the owner.

05.02.01 – Cleaning and surveillance.

It is very important to maintain general surveillance and cleaning of all the elements of the door, especially

when it is located in dusty, corrosive environments or with significant condensation due to changes in temperature.

05.02.02 – Cleaning the safety photoelectric curtain.

The pair of photocells (emitter and reflector), located on both sides of the door, will be cleaned monthly. However, if due to the environment or the conditions in which the door is located, this review and cleaning has to be intensified, it is left to the discretion of the user to reduce the intervals for carrying out the maintenance to what is considered necessary so that the door operate correctly.

A clean, dry cloth shall be wiped over the transmitting/receiving surfaces of the photocells.

If, between maintenance periods, the detection is reduced due to soiling, the yellow LED in the reflector starts to flash. Proceed with cleaning as described above.

05.02.03 – Checks of security systems.

On a monthly basis, it must be verified that the security systems are working correctly.

For the safety band, an object will be placed in the downward path of the door to check that the door stops and reverses movement.

For photocells, the light beam will be cut off during the movement of the door to check if the door reverses, closing safety photocell, or stops opening, opening safety photocell.

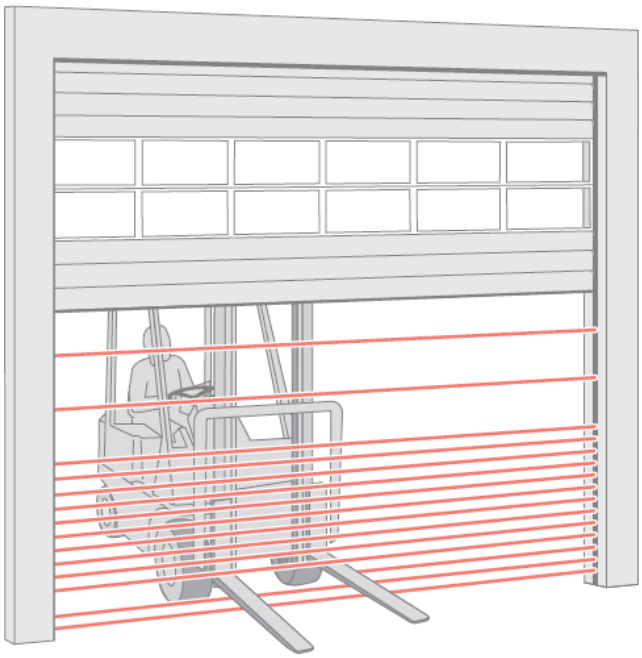


Figure 5. Operation of the safety photoelectric curtain.

06 – Maintenance Book

To be completed by the installer at the time of installation:

06.01 – Installation data

Maker	INKEMA SISTEMAS SL Cardedeu C-251 Highway, Km3, 08520 Les franqueses del Vallès – Barcelona – Spain Tel. 935 44 47 08 E-mail: inkema@inkema.com www.inkema.com		
Installer			
Company	INKEMA SISTEMAS SL Cardedeu C-251 Highway, Km3, 08520 Les franqueses del Vallès – Barcelona – Spain Tel. 935 44 47 08 E-mail: inkema@inkema.com www.inkema.com		
Installation location			
Business name			
Address			
Phone		Fax	
Responsible			
Post			
e-mail			

Installation date	
Installer Signature	Signature of acceptance Responsible

Space reserved for attaching the door identification sticker

06.02 – Final verification test

OPERATION	CONFORM	OBSERVATIONS AND RECOMMENDATIONS
Centred and level door		
Correctly graduated opening and closing limits		
Security systems work correctly		
Closing safety photoelectric curtain		
Run timer		
Second downward passage photocell (optional)		
Clearance lights (optional)		
Closing systems work correctly		
Automatic		
Manual – Man present		
Check opening system		
Button panel		
Remote control		
Shooter		
Photocell		
Magnetic switch		
Volumetric radar		
General review of the condition of the paint		
Delivery of the User Manual to the owner with the Installation Data (06.01) and Final Verification Test (06.02) duly completed and compliant		

06.03 – Record of interventions.

The user must record in writing, either on computer or paper, all maintenance interventions, both preventive and corrective.

The record must contain the result of the intervention, with the name, date and signature of the person who performed it and an observations section where, if applicable, the person's comments will be

specified in reference to suggestions for improvement or possible interventions. maintenance as a result of what was observed in their intervention.

REGISTER OF MAINTENANCE INTERVENTIONS

Date .... /..../....... Order N ° .... Signature INKEMA Signature Customer	Date .... /..../....... Order N ° .... Signature INKEMA Signature Customer
Date .... /..../....... Order N ° .... Signature INKEMA Signature Customer	Date .... /..../....... Order N ° .... Signature INKEMA Signature Customer
Date .... /..../....... Order N ° .... Signature INKEMA Signature Customer	Date .... /..../....... Order N ° .... Signature INKEMA Signature Customer
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Date .... /..../....... Order N ° .... Signature INKEMA Signature Customer	Date .... /..../....... Order N ° .... Signature INKEMA Signature Customer

06.04 – Tasks and frequency of maintenance interventions

Metallic structure	
Fixings - readjust screws	Every 4 months
Engine: Check the condition and wear of the brake, and check the release cam	Every 4 months
Engine: Checking the engine fixing screws	Every 4 months
Winding shaft: Readjust the bearing fixings.	Every 4 months
Canvas: Check that it does not have cuts or areas with great wear	Every 4 months
Canvas: Check the fixings of the canvas with the winding axis.	Every 4 months
Canvas: Check the condition of the canvas, as well as the wear areas of the guide.	Every 4 months
Lateral guides: Check the fixation and condition of the guides.	Every 4 months
Side guides: Observe the wiring fixation.	Every 4 months
Lateral guides: Check the condition and operation of the photocell.	Every 4 months
Lateral guides: Clean the optics of the photocell barrier.	Every 4 months
Electrical panel and complementary automations	
Check the status of all connections.	Every 4 months
Check the main switch and the closure of the electrical panel.	Every 4 months
Check the fixings.	Every 4 months
Check the opening and closing positions of the door.	Every 4 months
Check the fixation and operation of the limit switches.	Every 4 months
Carry out a visual check and look for any mechanical damage defects.	Every 4 months
Check the operation and condition of the engine while running.	Every 4 months
Examine the behaviour of the curtain.	Every 4 months
UPS Power System: Perform proper battery maintenance	Every 3 months

07 – Disassembly

During the disassembly of the door, the provisions of occupational health and safety regulations must be followed, whether national, local or specific to the user.

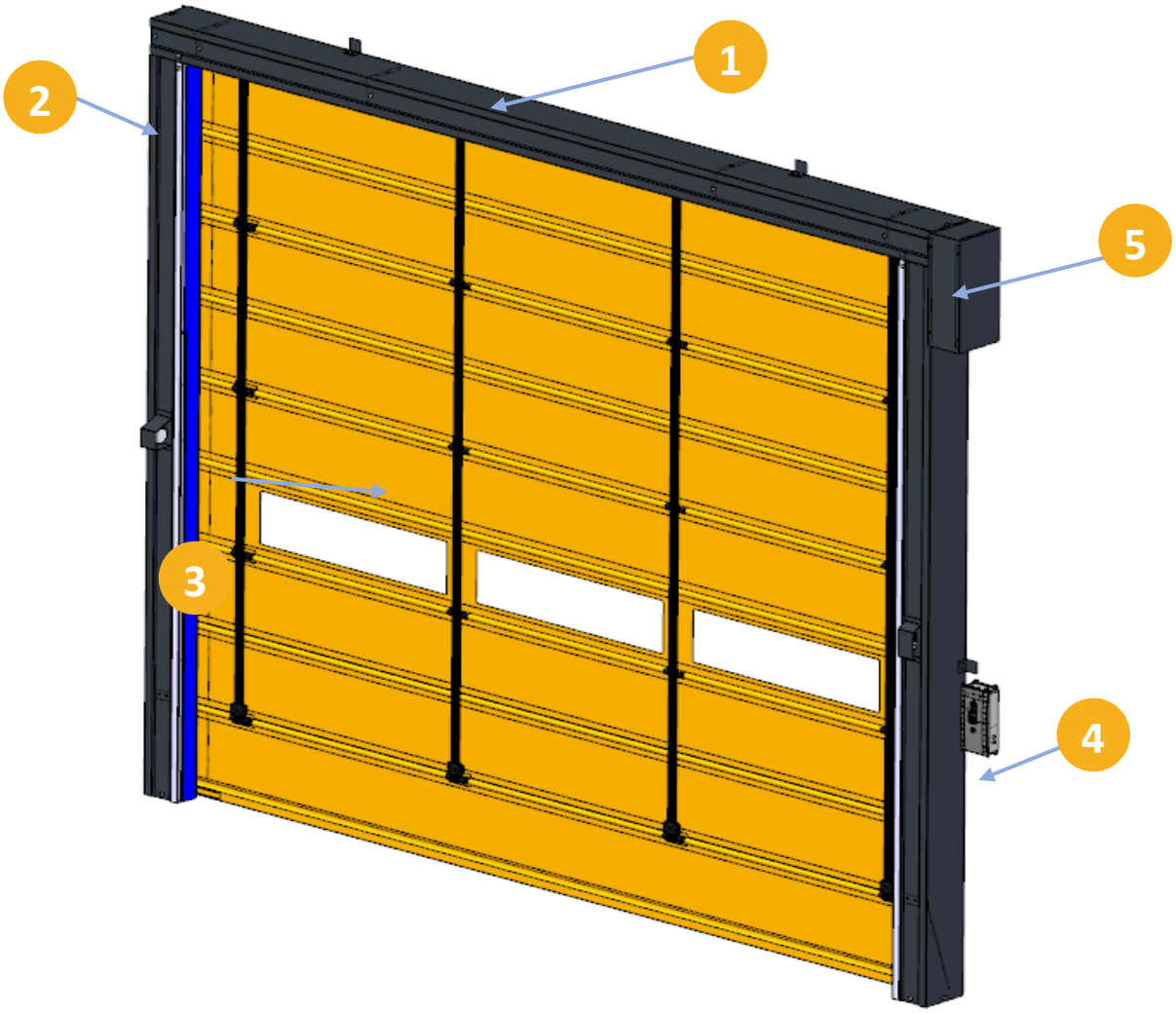
The process to follow is the opposite of what is provided in the PR64 Rapid Door Installation Manual.

08 – Modifications or improvements

Any subsequent modification or improvement of the door after receipt must be carried out only if the door thus modified allows compliance with all the relevant standards listed in UNE-EN 13241.

Such modification or improvement must be carried out exclusively by ***INKEMA SISTEMAS, SL personnel*** or authorized by it. During the modification or improvement process, a modification/transformation sheet must be prepared according to Annex C (informative) of the EN 12635 standard.

09 – Spare parts list (For more specific spare parts, please contact us)



GENERAL LIST OF SPARE PARTS (Images may differ from the installed product)			
1 – Head Assembly			
Ref. PR64 head assembly		Ref. Oval bearing	
2 - Side sets			
Ref. Right, left or both side assembly PR64			

Ref. Photocell barrier 2590mm		Ref. Photocell barrier 2220mm	
Ref. 2030mm photocell barrier		Ref. **5Mts** Barrier-Frame connection cable	
Ref. Barrier-Barrier Extension Cable	 **3 mtrs**	Ref. Barrier-Barrier Extension Cable	 **1 mtrs**

3 - Canvas Set

Ref. Canvas and components set PR64	

4 – Control panel

Ref. Control panel			

5 – Engine and accessories

Ref. PR64 engine		Ref. Engine box connection hose **5** meters	
		Ref. Engine box connection hose **7** meters	
		Ref. Engine box connection hose **11** meters	

Declaration of conformity.

Doc núm. 001690-02

Inkema Sistemas, S.L. . declares under its responsability that:
Brand: Inkema
Model: PR64 type door
Year of manufacture: 2024
Serial number:

It complies with the essential requirements of the following directives:

2023/1230/UE European Machinery Regulation
2014/35/UE Low voltage directive
2014/30/UE Electromagnetic Compatibility
2011/65/UE RoHS Directive

The following European standards have been applied:

EN13241:2003+A2:2016 **EN 12453:2017** **EN60335-1:2014-04**
EN 61000-6-3:2011-09 **EN 61000-6-2:2019-11**

09.01 – Notified body:

0370 - LGAI Technological Center, S.A.

The manufacturing process ensures the conformity of the equipment with the technical file.

Collection of technical file

Prisco Crespo
R&D Manager
Inkema Sistemas, S.L.
Carretera de Cardedeu, C-251. Km.3
08520 Les Franqueses del Vallès
(Barcelona) España

Signed for and on behalf of Inkema Sistemas S.L. by: Daniel Burgos

Inkema
Inkema Sistemas S.L.
Carretera de Cardedeu, C-251 Km3
08520 Les Franqueses del Vallès (Barcelona, Spain)
Tel: +34 93 544 47 08 - CIF: ESB64231822

This declaration of conformity becomes invalid if any modifications are made to the machine without Inkema's written consent.

The equipment must not be used until the installed machine has undergone a site assessment in accordance with European Regulation (EU) 2023/1230 and has been correctly and safely installed by the installing organisation.

Declaration of performance.

Construction Products Regulation 305/2011

Documento nº. TC-000476/05

Manufacturer: *Inkema Sistemas, S.L.*
Carretera de Cardedeu C-251, Km.308520
Les Franqueses del Vallès
(Barcelona) España

Declare under our sole responsibility that on our **PR64 type door** with serial number: [ ]

Declaration No.: ***23/32303398, 103336***

The Inkema ***PR64 type door*** is intended to be used for safe access in industrial or commercial buildings.

CE type -examination or certificate issued by a notified or competent body in respect of the apparatus:
Notified Body No.: **0370,1292**
System of assessment and verification of constancy of performance: System 3.

The manufacturing process ensures the conformity of the equipment with the technical file.

Declared performance, according to harmonised European standard

Essential characteristics:	**Perfomance:**
Watertightness	NPD
Wind load resistance	Class 4
Thermal resistance	NPD
Air permeability	NPD
Hazardous substances	OK
Safe opening (vertically moving doors)	OK
Definition of the geometry of glass components	NPD
Mechanical strength and stability	OK
Actuating forces (electric gates)	OK
Performance durability	750.000

The equipment must not be used until the installed machine has undergone a site assessment in accordance with European Regulation (EU) 2023/1230 and has been correctly and safely installed by the installing organisation.

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Signed for and on behalf of Inkema Sistemas S.L. by: Daniel Burgos

Inkema

10 – Contact

Contact with us.

INKEMA España

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Technical service.

To guarantee a quick response and an efficient service, we have a fleet of **more than 25 vehicles spread** throughout Spain.

Contact us for any queries you may have on:
93 544 47 08