Premis

PREMIS 200

AUTOMATIC SWING DOOR
INSTALLATION GUIDE

www.erreka.com

ERREKA

CAUTIONS

This actuator together with a swing door constitute a machine which can be used by children, the elderly and people with reduced physical, sensory or mental capacities, or lack of experience and knowledge, if they have been given adequate supervision or training.

Children should not play with the device.

Cleaning and maintenance of the appliance must be carried out by qualified personnel.

A disconnection must be incorporated into the fixed installation, with a contact separation at all poles that provides a total disconnection under category III overvoltage, in accordance with the installation regulations. Their specific characteristics (nominal intensity, voltage, etc.) must be appropriate to the installation and the elements used.

The device will be fixed as described in this manual.

The commercial name of the appliance is indicated on the cover of this manual. The manufacturer's complete address is indicated on the back cover of this manual.

The model or type of the actuator reference is indicated in the "Operator characteristics" section of this manual.

The proper use of the device is indicated in the section "Intended use". Any use other than that described in the manual is considered improper and is prohibited, as it could cause personal and material damage.

The designation of the device is indicated in the "Operator characteristics" section of this manual.

WARNING: Important safety instructions. It is important for the safety of people to follow these instructions. Keep these instructions.

WARNING: The operator must be disconnected from its power source during cleaning, maintenance and when replacing parts.

Do not allow children to play with the device or its controls, including remote controls.

The explanation of the mode indicators is indicated in the section "Door types and normal operation modes" of this manual.

The readjustment of the controls must be done by a qualified professional.

The A-weighted emission sound pressure level of the device is equal to or less than 70 dB (A): LpA <= 70dB (A).

INSTALLATION WARNINGS

WARNING: Important safety instructions. Follow all instructions because improper installation may entail the risk of serious injury.

The weight of this device is less than 20Kg and therefore, it is not necessary to use handling devices.

The necessary installation components are indicated in the section "Elements of the complete installation". The details and instructions of all the components are available on the web www.erreka.com.

Before installing the device, verify that the door is in good mechanical condition, that it is correctly balanced and that it opens and closes correctly.

The operator is intended to be installed at a height bellow 3 m above ground level or another level of access.

Ensure that entrapment between the driven part and the surrounding fixed parts is prevented due to the opening movement of the driven part except in the LOW ENERGY mode.

In FULL ENERGY operation, safety sensors must be installed in order to comply with Standard EN 16005.

In LOW ENERGY operation, it is not mandatory to use safety sensors as long as it is not used by children and the elderly. It is advisable to protect the area of the hinges to avoid entrapment.

The details for the installation of the device are indicated in the "Installation" chapter of this manual. If you install protective devices not supplied with this device, refer to the instructions for those components.

Details on how to regulate the controls are indicated in the section "Installation - Door Configuration" of this manual.

After installation, make sure that the mechanism is properly regulated and that the protection system and any manual release devices work correctly.

The list of all the components included in the device is indicated in the section "Unpacking and contents" of this manual.

The specification of the type of door, gate or window for which the appliance is intended, size and mass of the activated part and required torque are indicated in the "Operator characteristics" section.

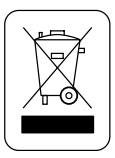
The position or positions the device can be installed in can be seen in the "Operator Installation" section of this guide.

WARNINGS FOR THE DISPOSAL

When this product reaches the end of its useful life, it must be dismantled by qualified personnel.

This product is made up of diverse materials, some can be recycled and others must be disposed of. It is necessary to find out about the recycling and disposal systems provided by the local regulations in force.

Some parts of this product may contain polluting or hazardous substances that, if released to the environment, could damage it and human health.



It is forbidden to dispose of this device together with household waste. Carry out selective collection according to local regulations.

1 SYMBOLS USED IN THIS GUIDE

This guide uses symbols to highlight specific texts. The functions of each symbol are explained below:

⚠ **Failure to respect the safety warnings could lead to accident or injury.**

☞ Important details which must be respected for correct assembly and operation.

ⓘ Additional information to help the installer.

♻ Information on care for the environment.

2 IMPORTANCE OF THIS GUIDE

⚠ **Read this guide in its entirety before carrying out the installation, and obey all instructions. Failure to do so may result in a defective installation, leading to accidents and failures.**

ⓘ Moreover, this guide provides valuable information which will help you to carry out installation more efficiently.

☞ This guide is an integral part of the product. Keep for future reference.

3 ENVISAGED USE

This operator has been designed exclusively to automate swing doors in dry environments.

⚠ **This operator is not suitable for installation in inflammable or explosive environments.**

⚠ **Failure to install or use as indicated in this guide is inappropriate and hazardous and could lead to accidents or failures.**

⚠ **The installer shall be responsible for ensuring the installation is set up for its envisaged use.**

4 INSTALLER'S QUALIFICATIONS

⚠ **Installation should be completed by a professional installer, complying with the following requirements:**

- **He/she must be capable of carrying out simple electrical installations in line with the low voltage regulations and applicable standards.**
- **He/she must be able to perform simple mechanical installations.**

⚠ **Installation should be carried out taking into account Standards EN16005.**

5 OPERATOR SAFETY ELEMENTS

This operator meets all current safety standards. However, the complete system comprises, apart from the operator referred to in these instructions, other elements which should be acquired separately.

☞ The safety of the complete installation depends on all the elements installed. Install only Erreka components in order to guarantee proper operation.

⚠ **Respect the instructions for all the elements used in the installation.**

⚠ **Installing safety elements is recommended.**

ⓘ For further information, see "Fig. 1 Elements of the complete installation" on page 7".

6 DANGERS IN THE CLOSING EDGES

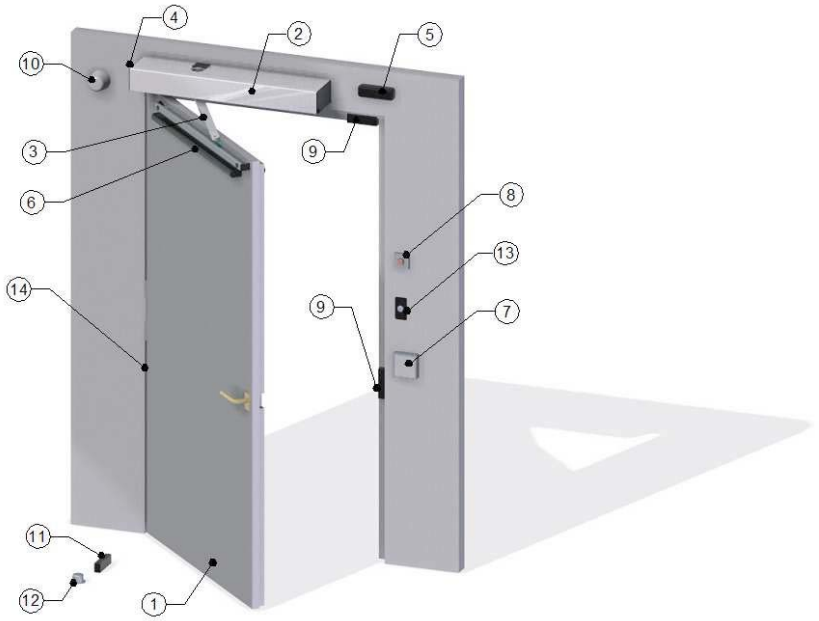
⚠ **There may be a risk of crushing, trapping, collision and dragging in the different closing edges of the automatic doors.**

7 MANUAL REVIEW

Manual review: 0.3.

- **Hardware Review: 2.1.**
- **Software version: 1.1.3.**

1 ELEMENTS OF THE COMPLETE INSTALLATION



1 Door
2 Operator
3 Arm: Pull / Push
4 Side switch
5 Activation sensor
6 Safety sensor
7 Selector
8 Emergency Stop
9 Electrical lock
10 Smoke sensor (Fire door)
11 "Hold-open" retention magnets (Fire resistant door)
12 Door stopper
13 External key
14 Fingers guards

ELECTRICAL CABLES:

Element	Nº wires x section	Remarks
Main power supply	3 x 1,5mm^2	
Selector	4 x 0,5mm^2	Screened cable
Safety sensor	6 x 0,5mm^2	Screened cable
Radar	4 x 0,5mm^2	
CAN (Double swing doors)	2 x 0,5mm^2	Screened cable
Stop	2 x 0,5mm^2	
Emergency	2 x 0,5mm^2	
Electrical lock (intercom)	2 x 0,5mm^2	With test; two more wires
Electrical lock (magnetic)	2 x 0,5mm^2	With test; two more wires
Hold-open retention magnets	2 x 0,5mm^2	

Fig. 1 Elements of the complete installation

2 OPERATOR CHARACTERISTICS

Erreka swing operators are built to automate swing pedestrian doors. Their multiple functions make them ideal for automating any type of door: normal, evacuation, smoke control, etc.

Speed, position and pushing force are controlled at all times, ensuring compliance with the requirements of Standard EN 16005.

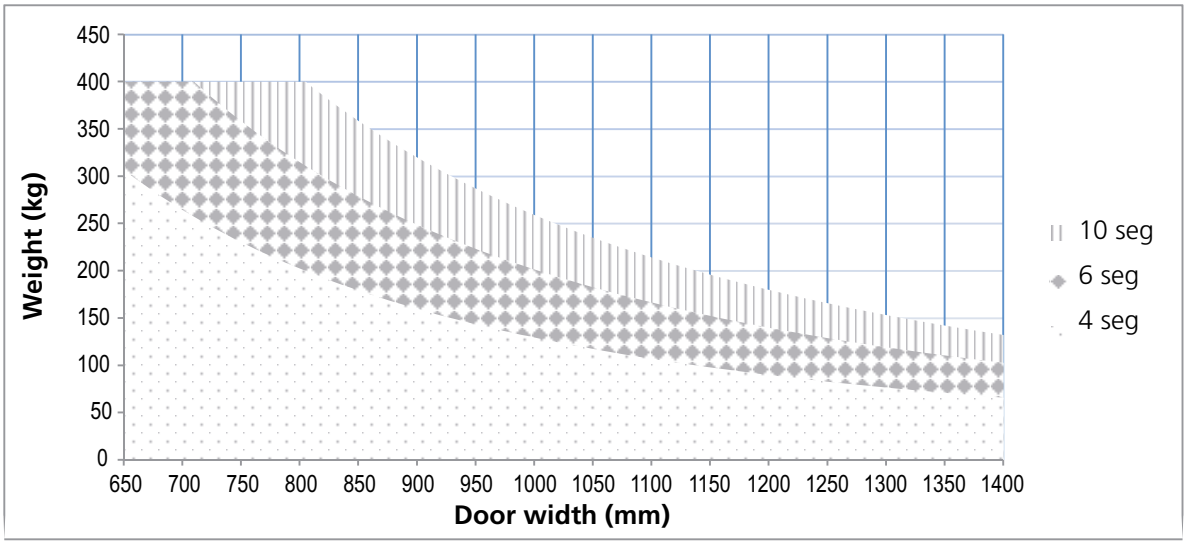
General characteristics

- Work mode:
  - Full Energy (Normal or Fire Door)
  - Low Energy
- Control of open/close by way of encoder.
- Control of movement in closed loop (PID).
- Adjustable speeds and forces.
- Anti-crush.
- Cable connectors: Opening and closing safety devices.
- Reset.
- Emergency input.
- Adjustable standby time.
- Master / Slave: Swing door synchronisation.
- Arms: Rigid and Articulated.
- Multifunction selector: Digital / Rotary.
- Side switch: manual / automatic / configurable.
- Multi-functions: Accessible toilets, etc.
- Peripherals power supply.
- Door closing spring.

Technical characteristics of the operator

CHARACTERISTIC	PREMIS200	PREMIS200M
Dimensions	Operator 644x75x138 mm	
Power supply (V/Hz)	230VAC - 50/60 Hz	125VAC 50/60Hz
Power consumed (VA)	85VA	
Motor voltage (Vdc)	40V	
Opening speed	Adjustable 3 - 10 seconds	
Closing speed	Adjustable 5 - 10 seconds	
Max. torque (Nm)	50	
Opening angle	Adjustable from 0 -100º (with mechanical stopper)	
Maximum: Weight / Width door	Operation diagram	
Use	Intensive	
Network input fuse	4 A (5X20)	
Peripherals power supply (voltage)	24 Volts	
Peripherals power supply (current)	1.5 Amps	
Service temperature (ºC)	-20ºC - 50ºC	
Protection rating (IP)	IP52	

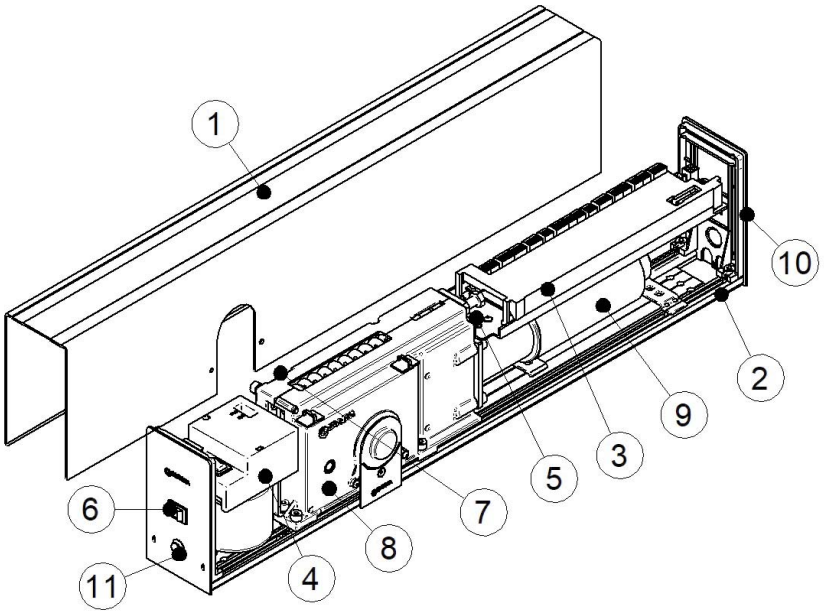
Operation diagram

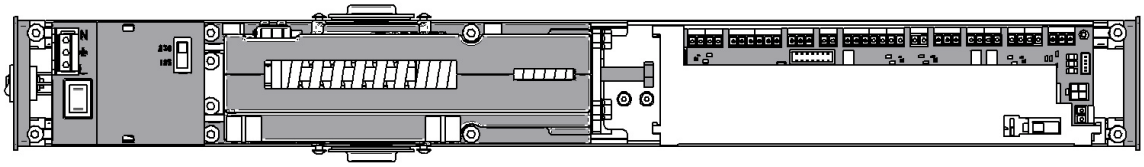


⚠ **If it is necessary, parameters must be adjusted in each installation.**

3 OPERATOR PARTS

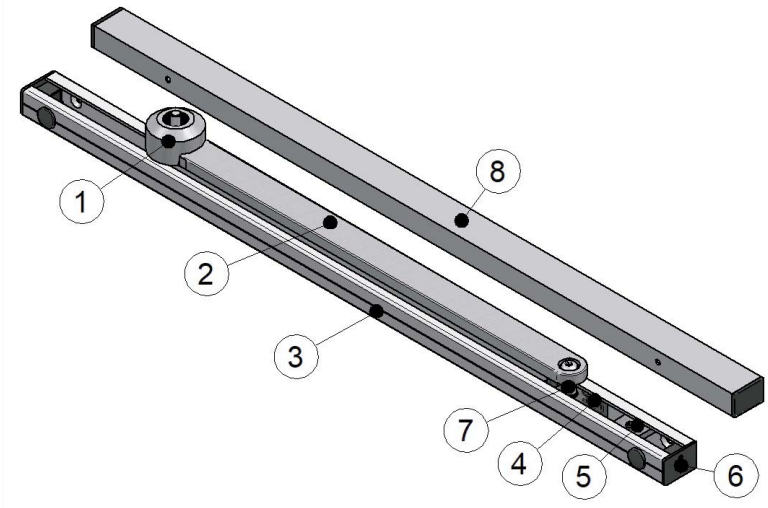
Operator





1 Cover
2 Bracket profile
3 Control plate
4 Power plate
5 Spring force regulator
6 Side switch
7 Limit micro switch
8 Reduction unit
9 Motor
10 Side plastic cover
11 Side reset button

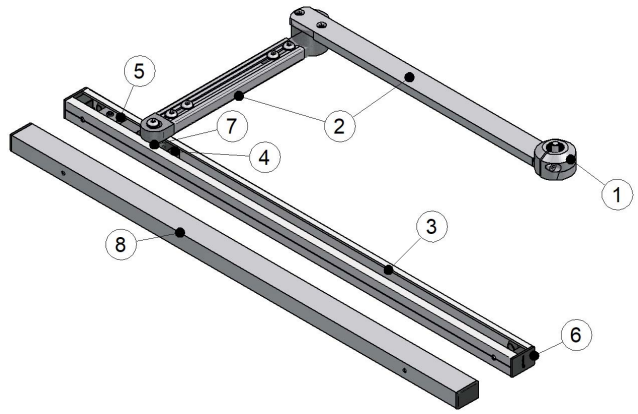
Pull slide arm (APR01)



1 Shaft coupling
2 Rigid arm
3 Guide profile
4 Guide block
5 Limit switch
6 Side trim
7 Guide block shaft
8 Spacer

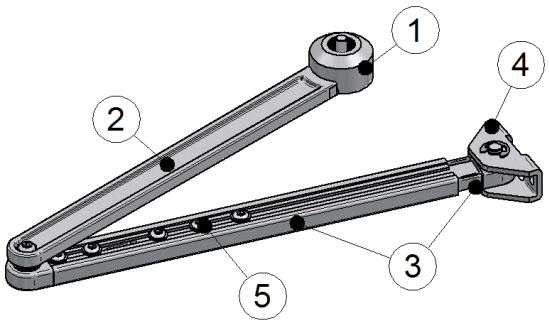
Special Pull slide arm (APR09)

With the rigid arm and the door set back more than 100 mm, the door can be automated using these special arms up to a maximum recess of 250 mm.



1 Shaft coupling
2 Special arms
3 Track profile
4 Track plug
5 Limit switch
6 Side trim
7 Track plug shaft
8 Spacer

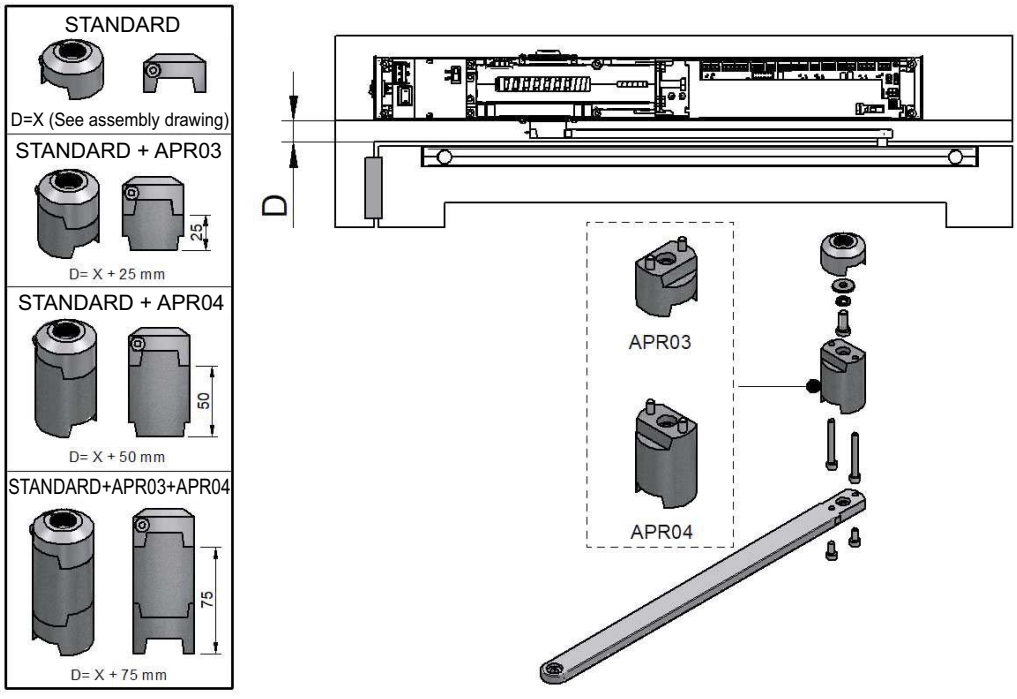
Articulated push arm (APR02)



1 Shaft coupling
2 Rigid arm
3 Telescopic arm
4 Coupling to door
5 Telescopic arm regulation screws

Extension pivot (APR03 / APR04)

Extensions must be used when the operator needs to be installed at different heights relative to the door:



1 TOOLS AND MATERIALS

Tool

- Drill
- Drill bits: ø 4.2 mm - ø 5 mm - ø 6 mm
- Set of Allen keys: 2,5 - 4 - 5
- Set of screwdrivers: Phillips - flathead
- Open-end wrench: 13
- Scissors
- Wire strippers
- Pencil
- Tape measure
- Spirit level

2 INITIAL CONDITIONS AND CHECKS

Initial conditions of the door

⚠ **Check that the size of the door is within the admissible range of the operator (see the operator's technical characteristics).**

⚠ **Do not install the operator in a door which does not work correctly in manual operation, as this may lead to accidents. Repair the door before installing.**

☞ The door must be provided with an opening stopper.

☞ The door must be easy to handle manually, namely:

- It must be balanced.
- There should be no stiffness throughout its open/close.

Ambient conditions

⚠ **This device is not suitable for installation in inflammable or explosive environments.**

⚠ **Check that the admissible ambient temperature range for the operator is suitable.**

Electrical power supply installation

⚠ **Ensure the power supply installation meets the following requirements:**

- **Rated voltage equal to that specified.**
- **Installation power greater than required power.**
- **The electrical installation must comply with low voltage regulations.**
- **The installation must be earthed.**

3 UNPACKING

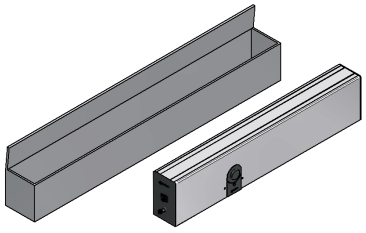
1 Open the package and remove the contents from within.

2 Check the contents of the package (see figure below).

☞ If it is noticed that a piece is missing or deteriorated, contact the nearest technical service.

♻ Discard the packaging in an environmentally friendly manner, using recycling containers.

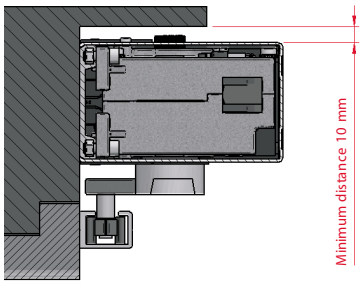
4 CONTENTS



1 Swing operator
2 Packing box
3 Protectors
4 Installation guide / user guide
5 Screw set
6 Erreka Sticker

5 OPERATOR INSTALLATION

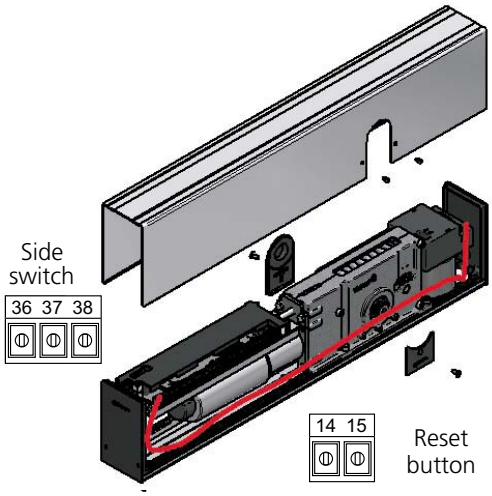
Check the installation space



⚠ **10 mm of space from the top of the operator.**

⚠ **The operator's fastening structure must be solid and must not have significant deformation.**

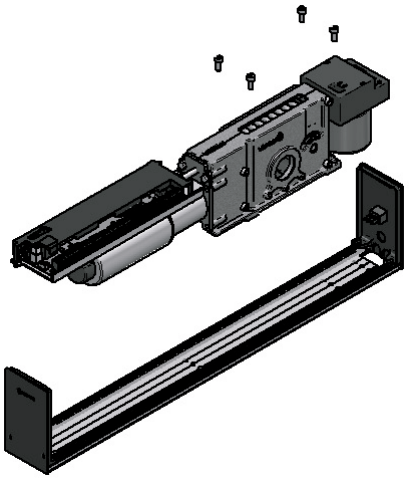
Disassemble the operator's bracket profile



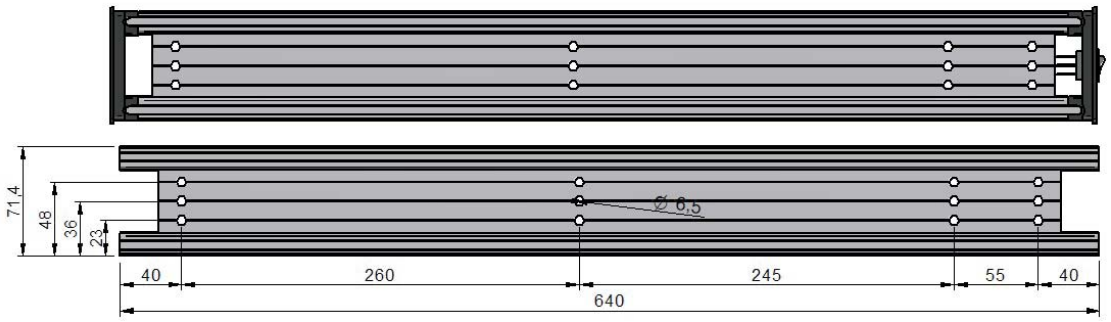
1 Remove the screws from the cover and extract it.

2 Release the electronic plate's side switch cable and side reset button cable.

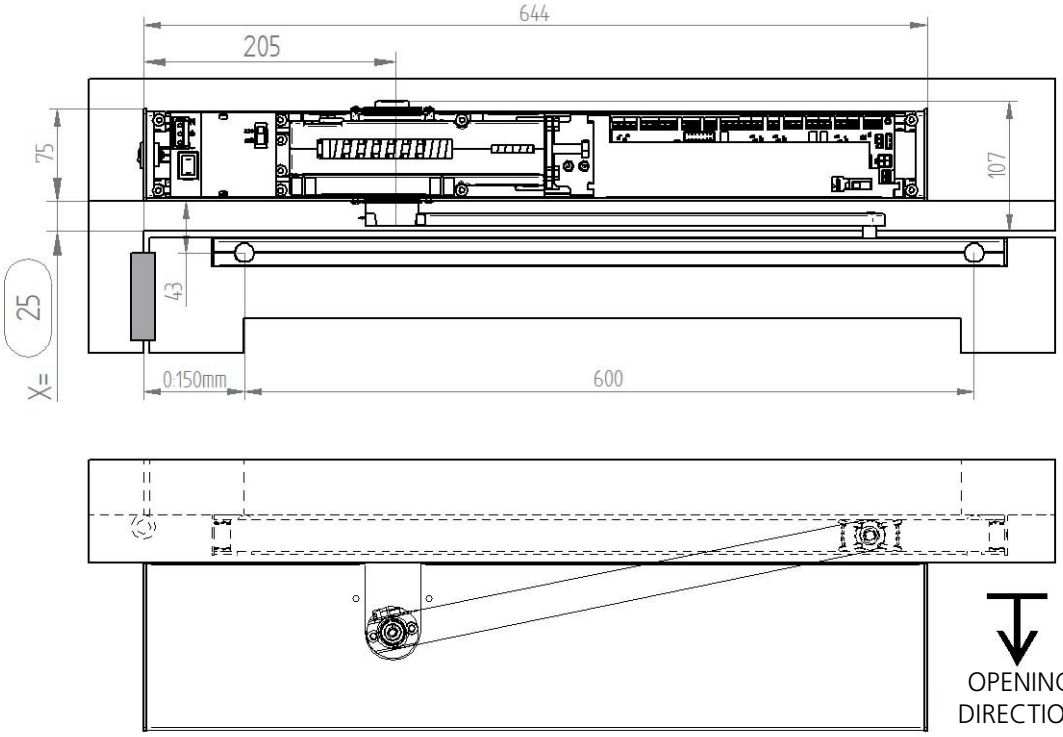
3 Release the geared motor screws (4) and remove the entire body.



⚠ **Fasten the bracket to the wall with the side covers, since level X is referenced on the outside face of the cover (installation drawings).**



Pull slide arm (APR01) - operator on the lintel - hinges side



HEIGHT SPACE DOOR - OPERATOR

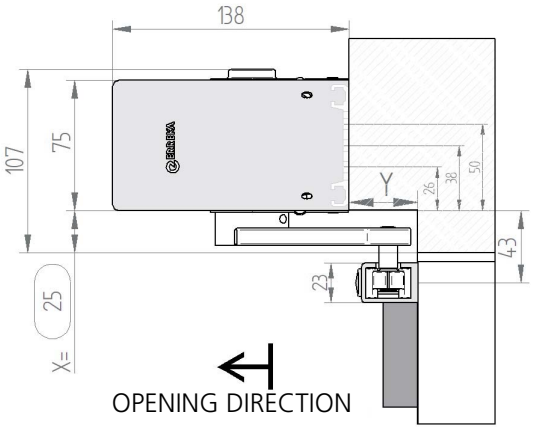
X=25mm
(Standard)

X=50mm
(Standard+APR03)

X=75mm
(Standard+APR04)

X=100mm
(Standard+APR03+APR04)

INSTALLATION MEASUREMENTS

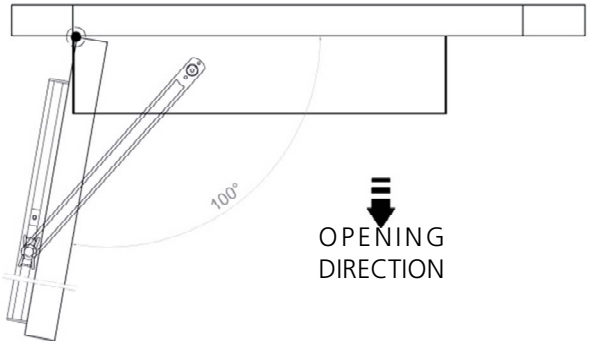


DOOR RETRACTION DOOR - OPERATOR

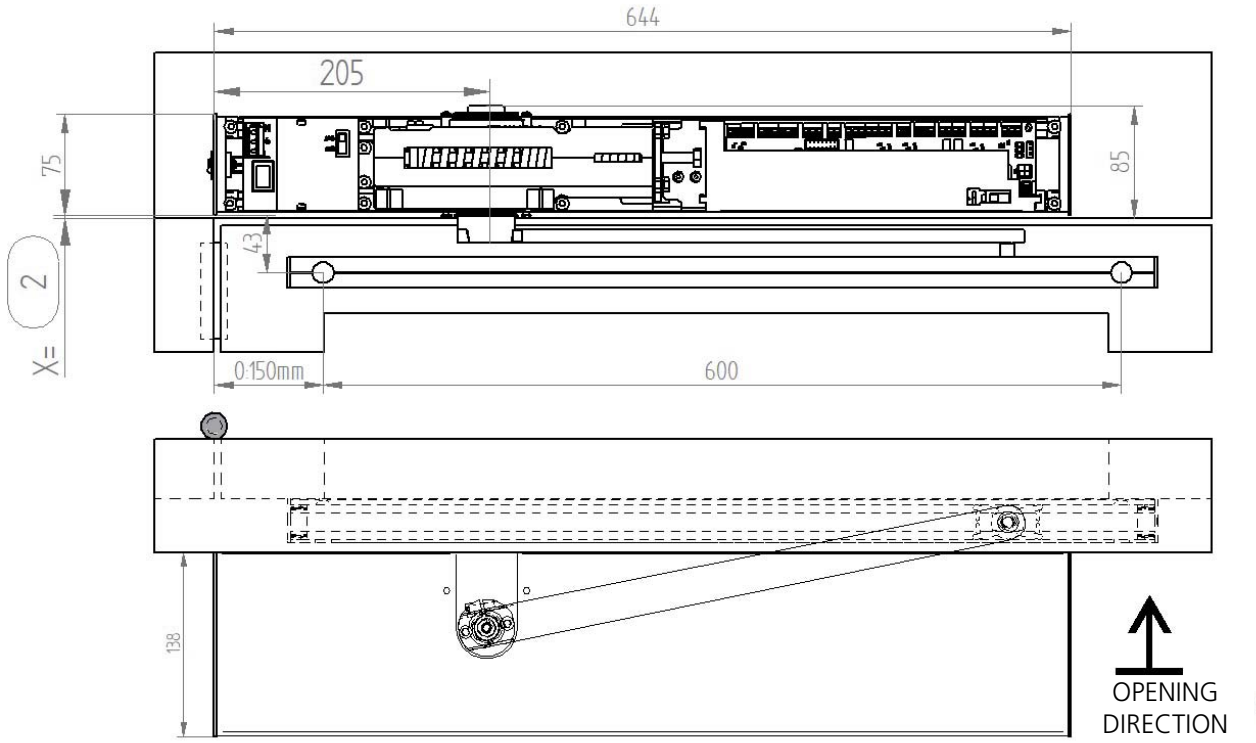
Y = 0 ÷ 100mm
(APR01)

Y = 100 ÷ 250mm
(APR09)
Max. angle 95°

CHARACTERISTICS	**SWING**
Distance between shafts (hinge / arm)	205 mm
EN Class	4 - 6
Opening angle	100°



Pull slide arm (APR01) - operator on the lintel - side opposite the hinges



HEIGHT SPACE DOOR - OPERATOR

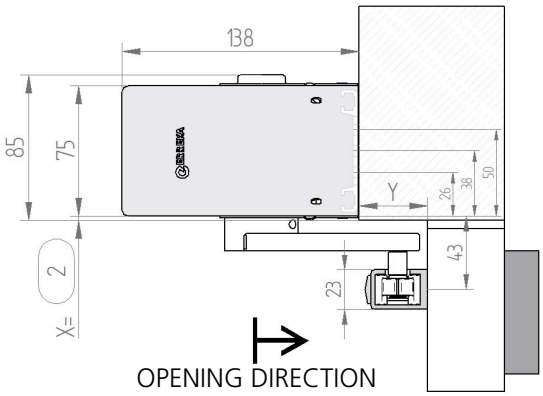
X=2mm
(Standard)

X=27mm
(Standard+APR03)

X=52mm
(Standard+APR04)

X=77mm
(Standard+APR03+APR04)

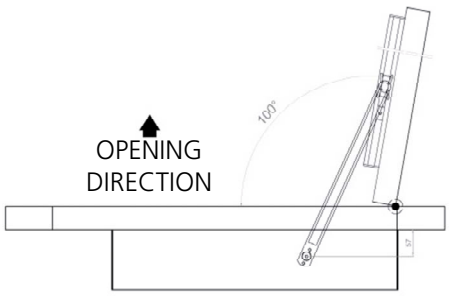
INSTALLATION MEASUREMENTS



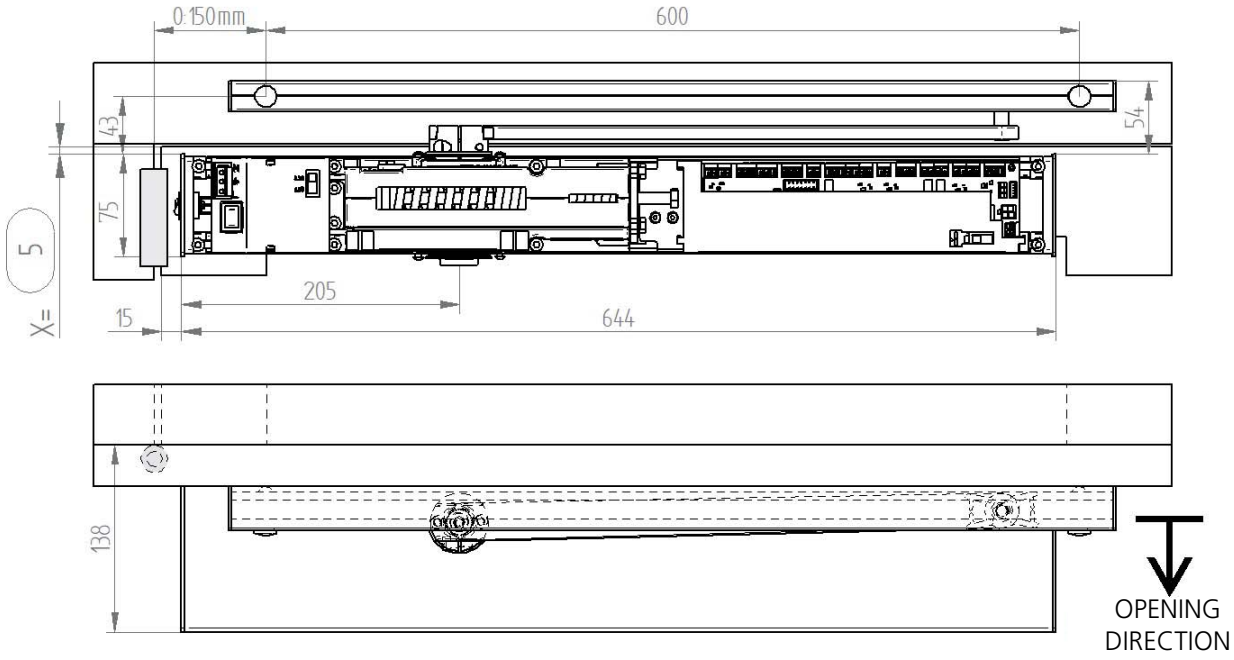
DOOR RETRACTION DOOR - OPERATOR

Y = 0 ÷ 90mm
(APR01)

CHARACTERISTICS	**SWING**
Distance between shafts (hinge / arm)	205 mm
EN Class	4 - 6
Opening angle	100°



Pull slide arm (APR01) - operator on the door - hinges side



HEIGHT SPACE DOOR - OPERATOR

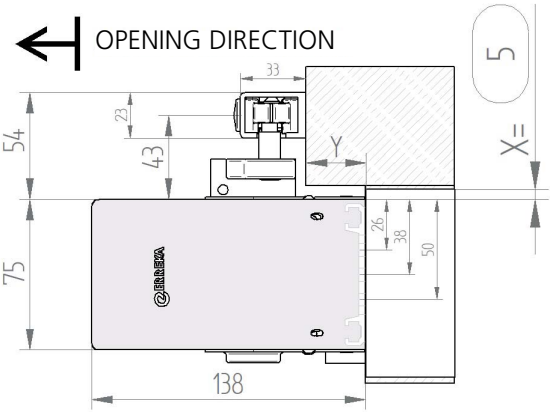
X=5mm
(Standard)

X=30mm
(Standard+APR03)

X=55mm
(Standard+APR04)

X=80mm
(Standard+APR03+APR04)

INSTALLATION MEASUREMENTS



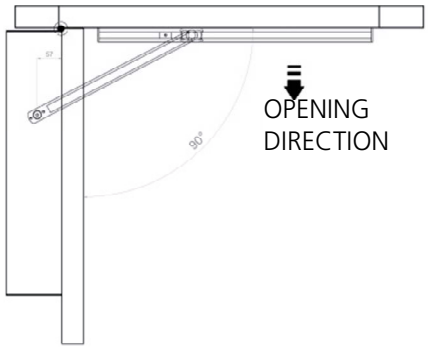
DOOR RETRACTION DOOR - OPERATOR

Y = 0 ÷ 35mm
(APR01)

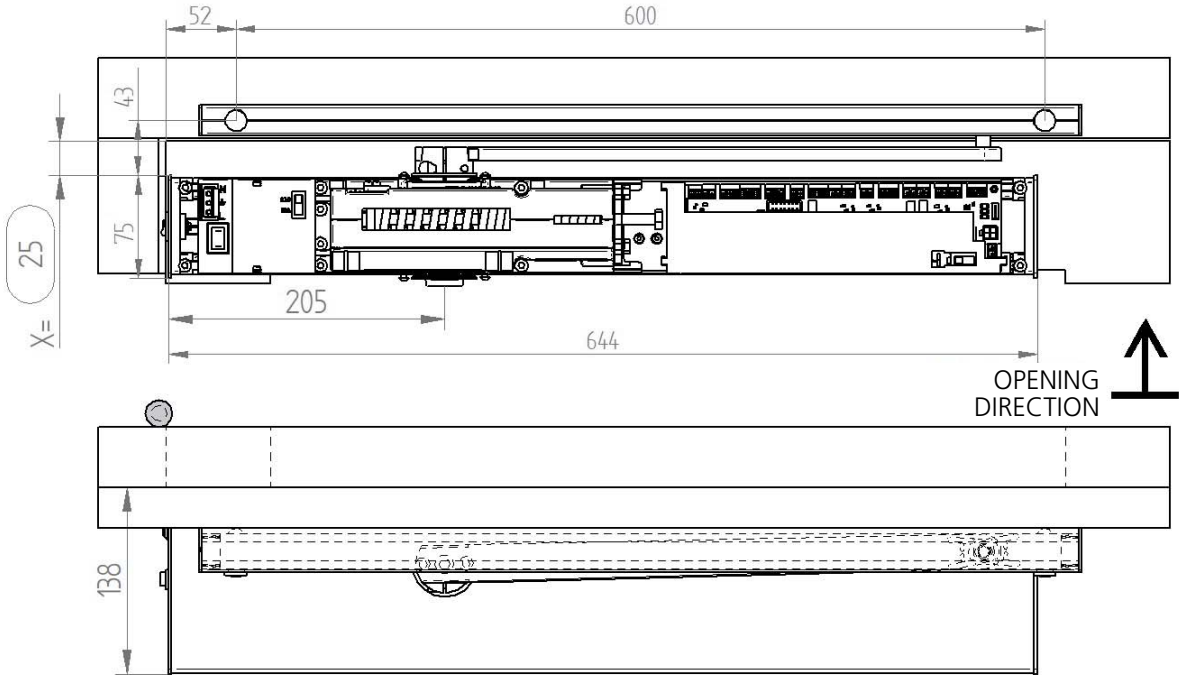
CHARACTERISTICS

Distance between shafts (hinge / arm)	205 mm
EN Class	4 - 6
Opening angle	90°

SWING



Pull slide arm (APR01) - operator on the door - side opposite the hinges



HEIGHT SPACE DOOR - OPERATOR

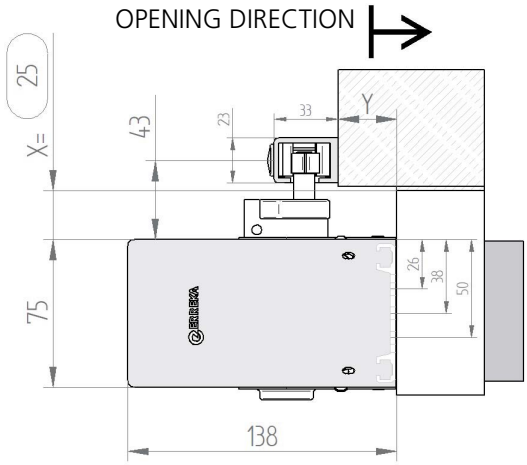
X=25mm
(Standard)

X=50mm
(Standard+APR03)

X=75mm
(Standard+APR04)

X=100mm
(Standard+APR03+APR04)

INSTALLATION MEASUREMENTS



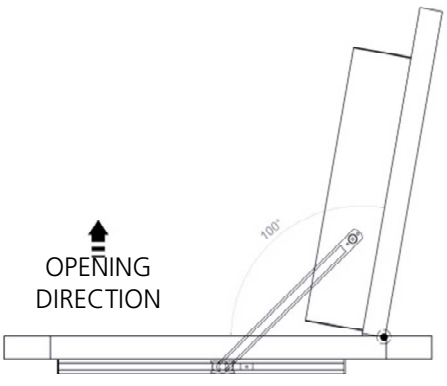
DOOR RETRACTION DOOR - OPERATOR

Y = 0 ÷ 35mm
(APR01)

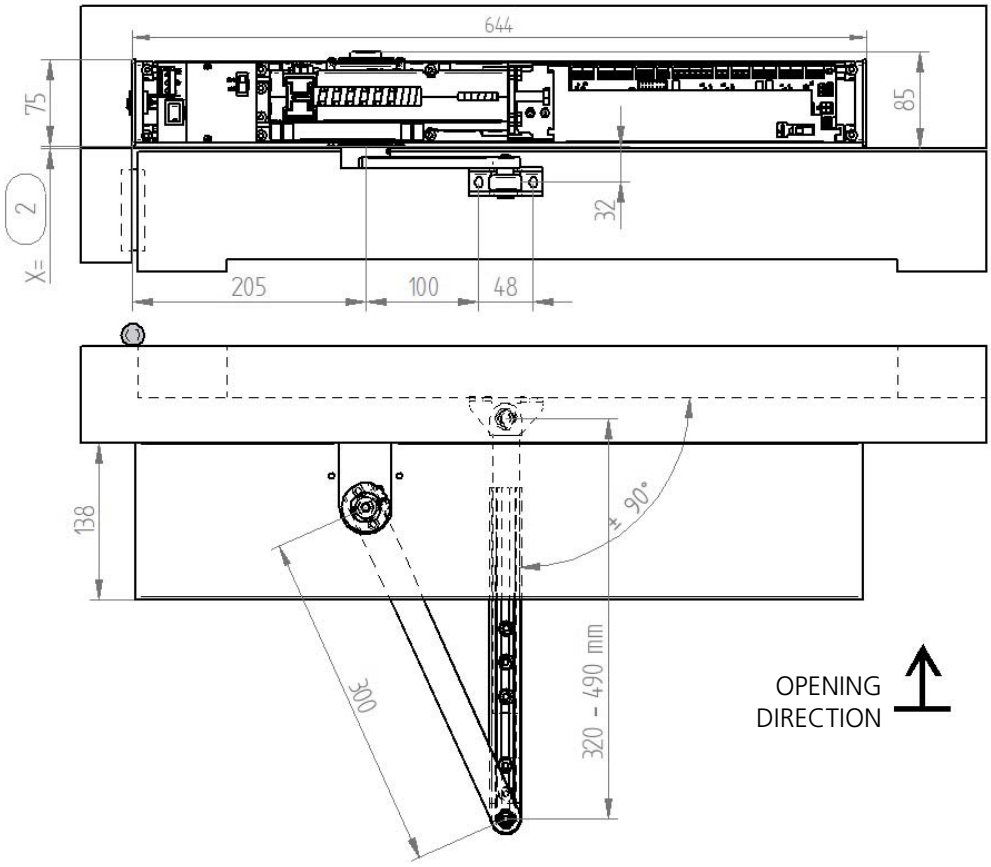
CHARACTERISTICS

Distance between shafts (hinge / arm)	205 mm
EN Class	3 - 6
Opening angle	100°

SWING



Push articulated arm (APR02) - operator on the lintel - side opposite the hinges



HEIGHT SPACE DOOR - OPERATOR

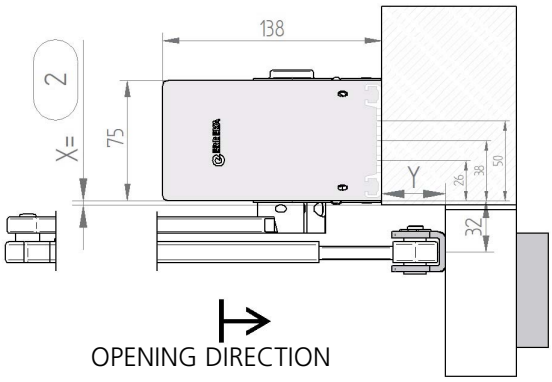
X=2mm
(Standard)

X=27mm
(Standard+APR03)

X=52mm
(Standard+APR04)

X=77mm
(Standard+APR03+APR04)

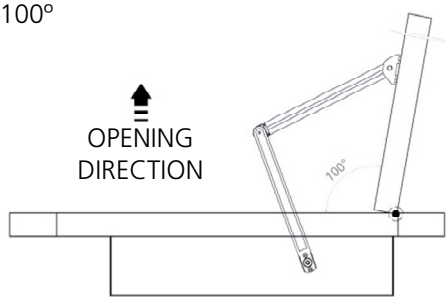
INSTALLATION MEASUREMENTS



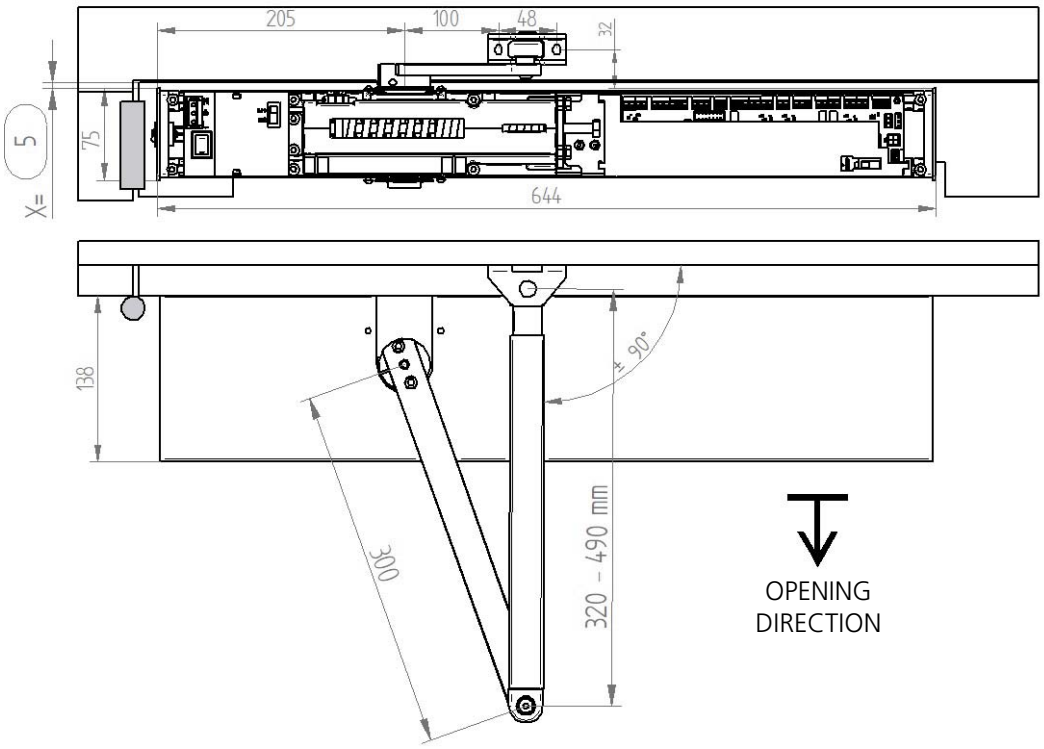
DOOR RETRACTION DOOR - OPERATOR

Y = 0 ÷ 210mm
(APR02)

CHARACTERISTICS	**SWING**
Distance between shafts (hinge / arm)	205 mm
EN Class	4 - 6
Opening angle	100°



Push articulated arm (APR02) - operator on the door - hinges side



HEIGHT SPACE DOOR - OPERATOR

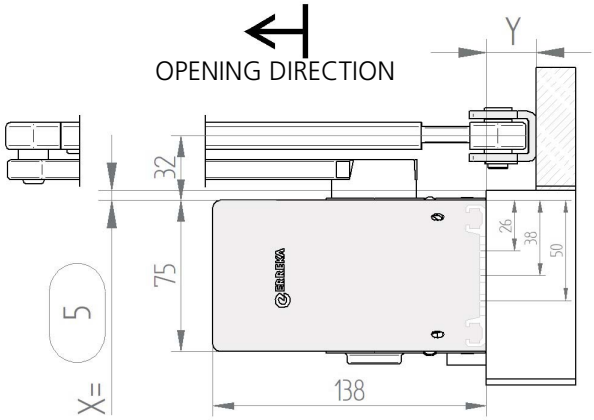
X=5mm
(Standard)

X=30mm
(Standard+APR03)

X=55mm
(Standard+APR04)

X=80mm
(Standard+APR03+APR04)

INSTALLATION MEASUREMENTS



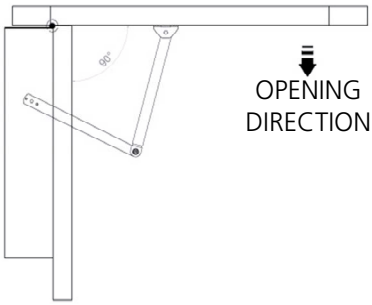
DOOR RETRACTION DOOR - OPERATOR

Y = 0 ÷ 165mm
(APR02)

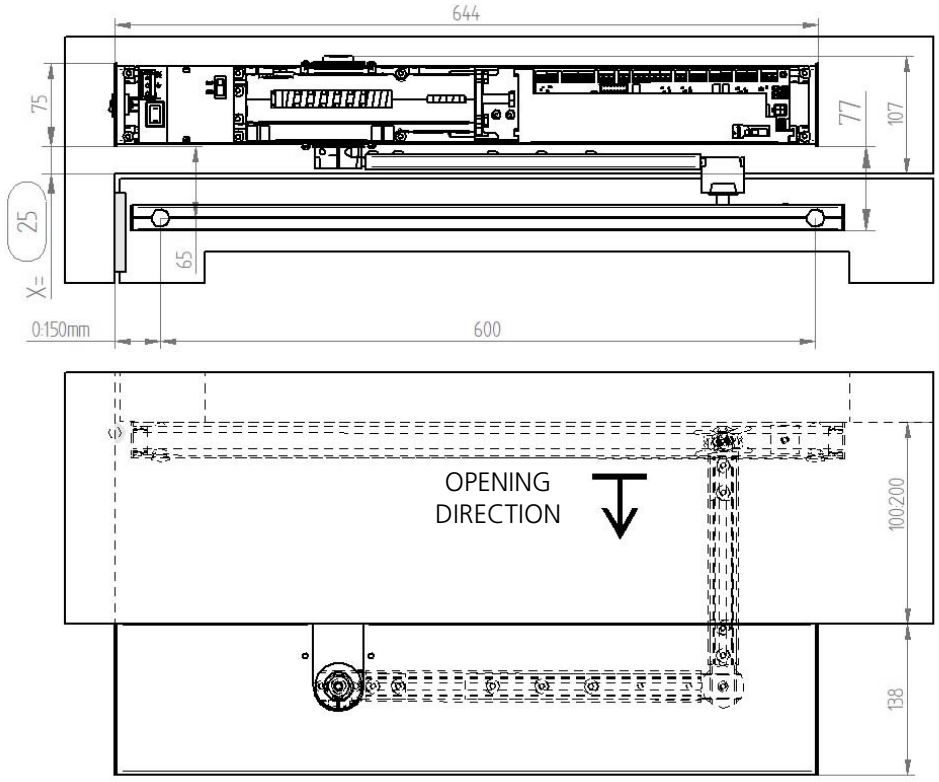
CHARACTERISTICS

Distance between shafts (hinge / arm)	205 mm
EN Class	4 - 6
Opening angle	100°

SWING



Push articulated arm (APR09) - operator on the lintel - hinges side



HEIGHT SPACE DOOR - OPERATOR

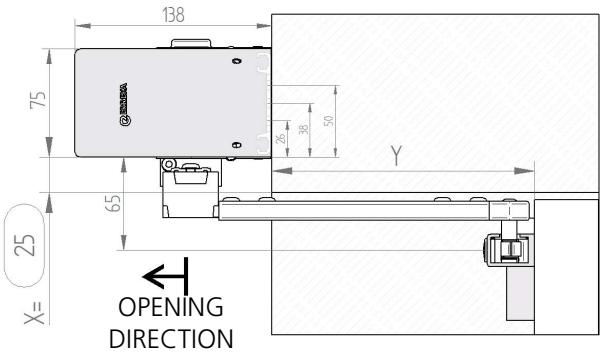
X=25mm
(Standard)

X=50mm
(Standard+APR03)

X=75mm
(Standard+APR04)

X=100mm
(Standard+APR03+APR04)

INSTALLATION MEASUREMENTS

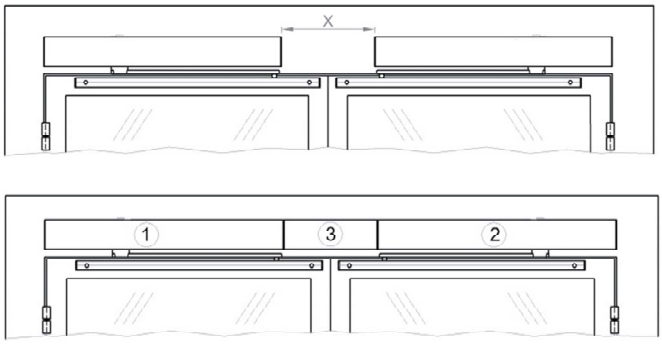


DOOR RETRACTION DOOR - OPERATOR

Y = 100 ÷ 250mm
Max. angle 95°

CHARACTERISTICS	**SWING**
Distance between shafts (hinge / arm)	205 mm
EN Class	4 - 6
Opening angle	95

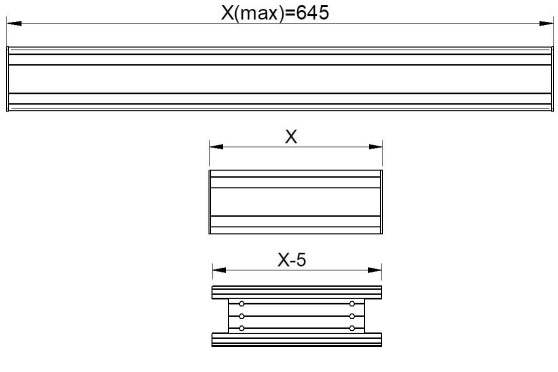
Intermediate cover (APR05) for double swing doors

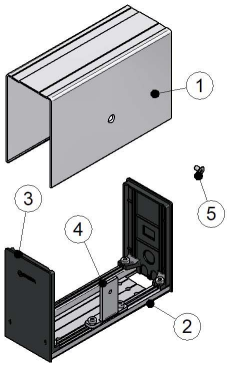


X: Distance between operators

1 Operator 1 cover
2 Operator 2 cover
3 Intermediate cover (APR05)

Intermediate cover subassembly

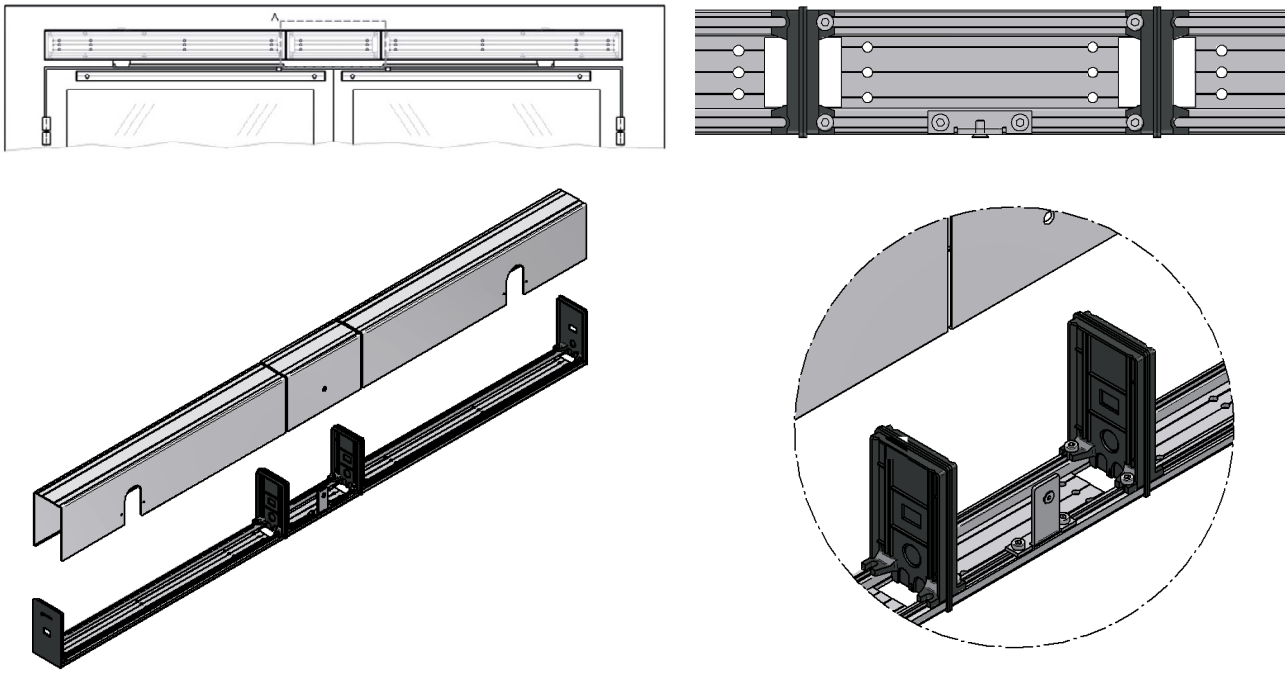




Parts:
1 Intermediate cover
2 Bracket profile
3 Side covers
4 Cover fastening point
5 Cover fastening screw

Cutting:
- Disassemble the unit.
- Cut the bracket profile and cover profile to X-5 mm.
- Reassemble the unit.

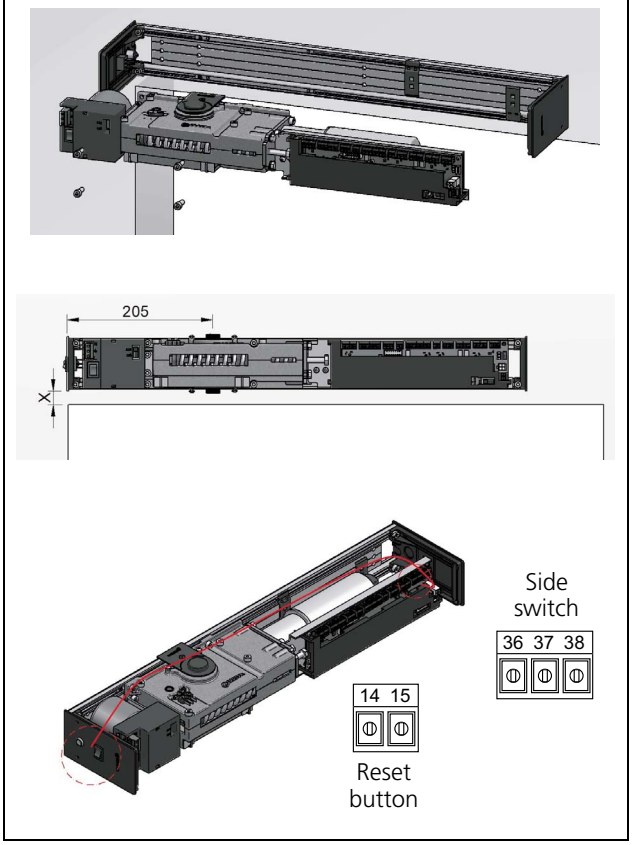
Assembling the intermediate cover



⚠ The side covers of the operators and the intermediate casing must remain attached.

ℹ Make holes in the side covers to pass cables from one operator to another.

6 OPERATOR ASSEMBLY ON BRACKET PROFILE



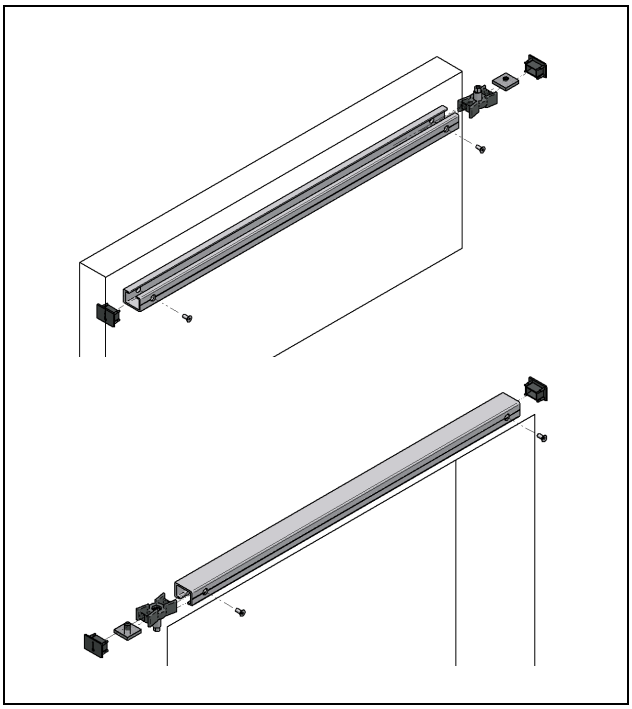
1 Fasten the geared motor to the bracket profile with the screws (4).

⚠ **Firmly secure the four screws of the geared motor.**

2 Insert the side switch and side reset button cables in the control board.

7 PULL SLIDE ARM (APR01) INSTALLATION

Installing the guide profile (On the door/On the lintel)



1 Insert the Guide block with its shaft inside the profile.

2 Insert the stopper inside the guide.

3 Fasten the guide profile with two screws.

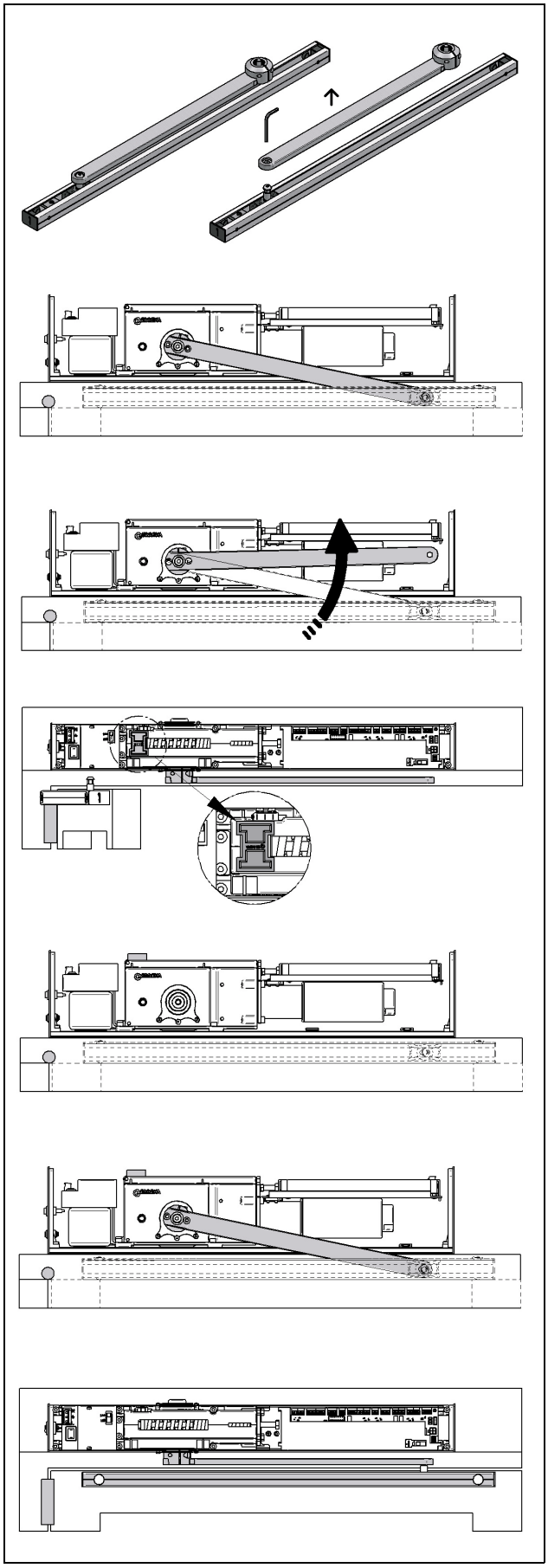
4 Fit the side covers.

5 Fit the decorative caps.

⚠ **The location of the guide profile is defined in the previous section.**

⚠ **The guide profile must be: well fastened, clean (no chips) and level.**

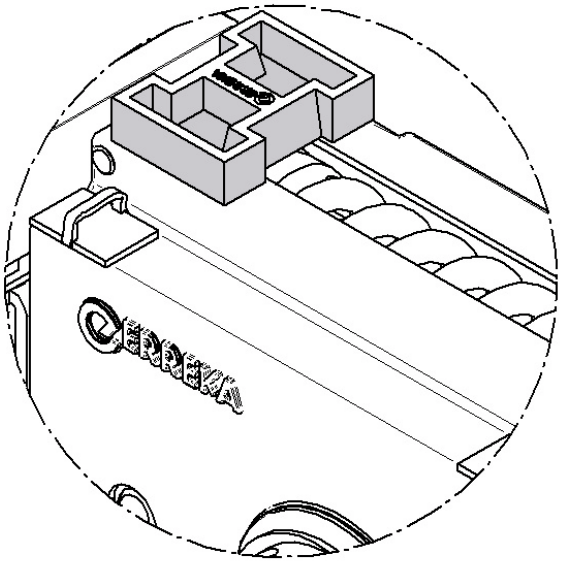
Installing the pull arm



1 Release the arm together with the coupling.

2 Open the door and fasten the arm in the position it will be in with the door closed.

3 Turn the arm in the door's OPENING DIRECTION and lock the geared motor with the locking piece.



4 Release the arm and fasten the arm in the position it will be in with the door closed.

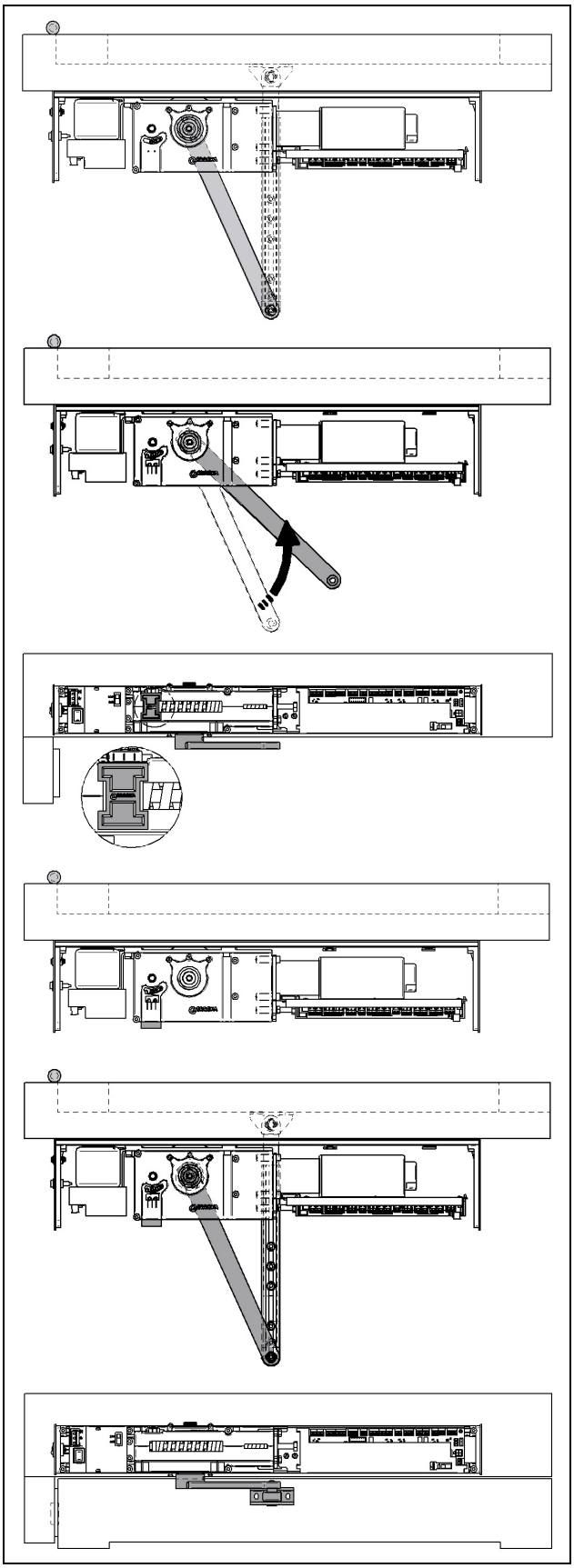
5 Fasten the arm to the guide block.

6 Open the door and remove the locking piece from the geared motor.

☞ When installing the arm, ensure it exerts enough tension to keep the door closed in closed position.

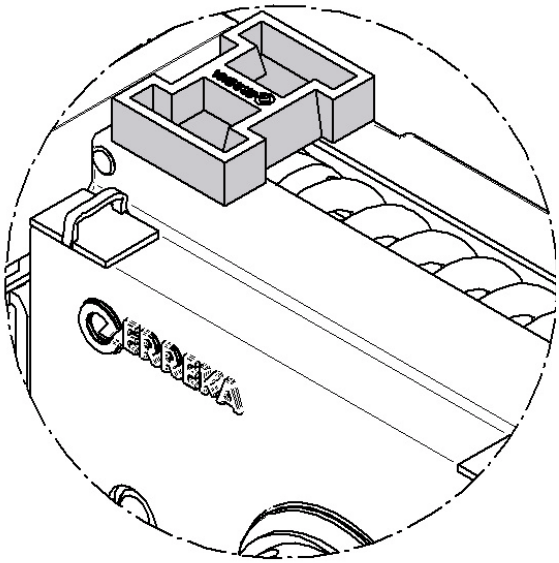
8 PUSH ARTICULATED ARM (APR02) INSTALLATION

Positioning the arm on the door



1 Fasten the arm in the position it will be in with the door closed.

2 Turn the arm in the door's OPENING DIRECTION and lock the geared motor with the locking piece.



3 Release the arm. Fasten the arm again in the position it will be in with the door closed.

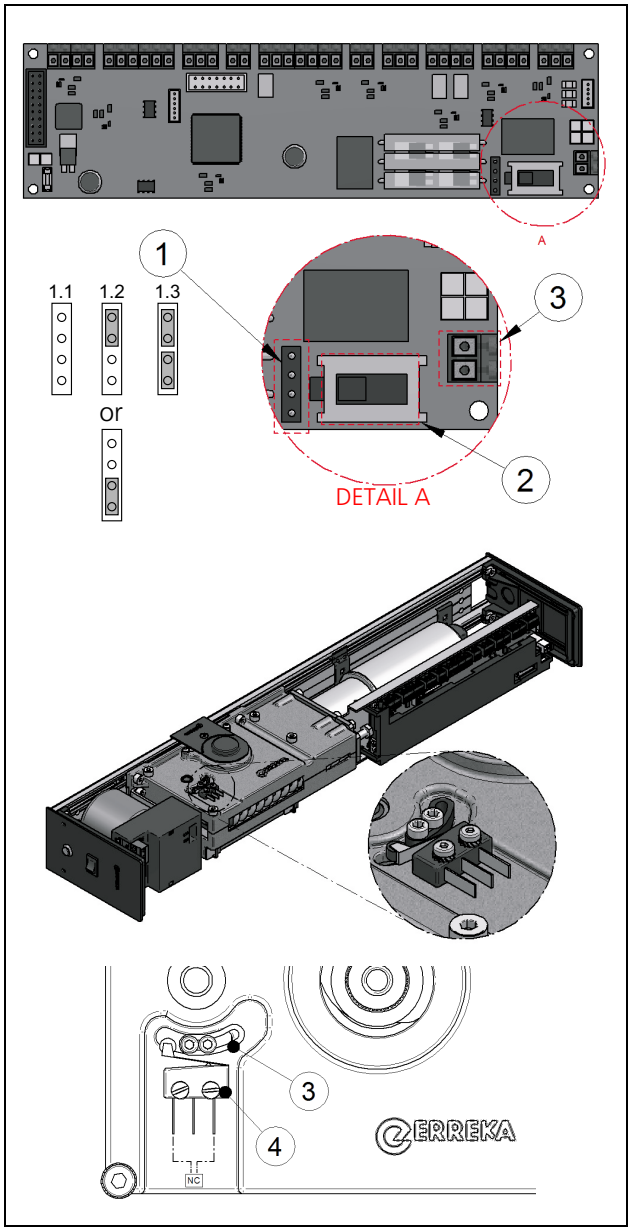
4 Fasten the arm to the telescopic arm.

5 Open the door and remove the locking piece from the geared motor.

☞ When installing the arm, ensure it exerts enough tension to keep the door closed in closed position.

9 OPERATOR ADJUSTMENTS - DOOR CLOSE MODE

Motor brake



When the operator works as a door closer (manually), the motor must brakes in closing direction in order to prevent the door from gathering speed due to the force of the spring. The following must be regulated:

1 Braking direction:

Position the electronic plate's switch (2) so braking is in closing.

2 Regulating braking force:

Force can be regulated by positioning the electronic plate's jumpers (1) in different positions:

- No jumper (1.1): Minimum braking.
- With one jumper (1.2): Medium braking.
- With two jumpers (1.3): Maximum braking.

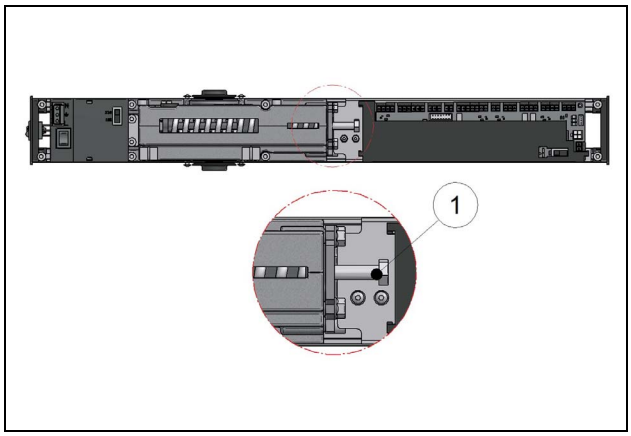
3 Remove motor brake:

The cable connector (3) must be Normally Closed (NC) for the motor brake to work.
A microswitch can be inserted in the operator so motor braking can be disabled at the end of closing and the door closes with more force. Adjust the part (3) to enable the microswitch (4) in the closing angle required to eliminate the motor brake and achieve adequate closing (Operator without power).

⚠ Test the passive brake:

- **Operator without power**
- **Operator running: Manual mode**

Closing force



The closing force should be adjusted to each door in accordance with its characteristics. To do this, turn the screw (1) clockwise to increase closing force, or anti-clockwise to reduce closing force.

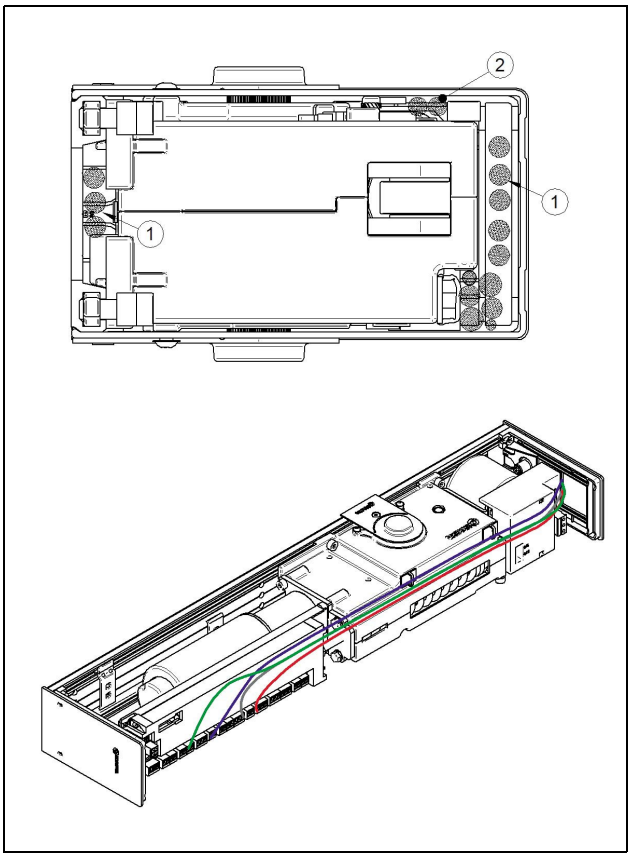
The door must close securely and be easy to open manually.

⚠ Closing force can only be regulated with the door without any power and in closed position.

⚠ The spring's torque has no effect on the arm's idle zone. The arm must be precharged, otherwise it will have no effect on closing, regardless of the spring's torque.

10 CABLES - COVER

Cables



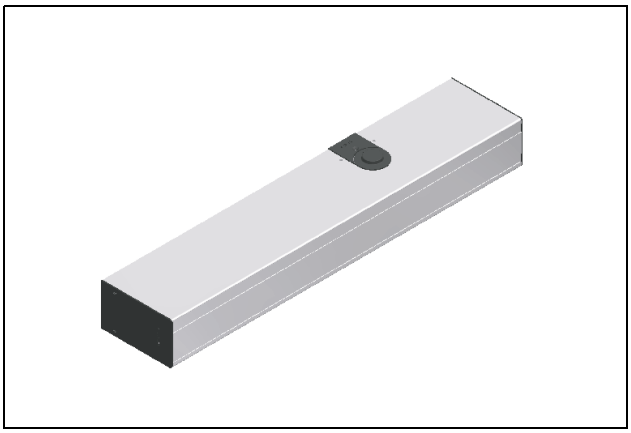
Due to the compact design of the operator, the internal wiring of the operator must be done in an orderly manner to avoid problems putting the cover on.

Try to pass the cables through zone 1. If necessary, they can also be passed through zone 2.

⚠ **Take care when installing cables in spaces with little room.**

☞ Once ordered, securing the cables to the reduction unit using the cable gland.

Exterior cover

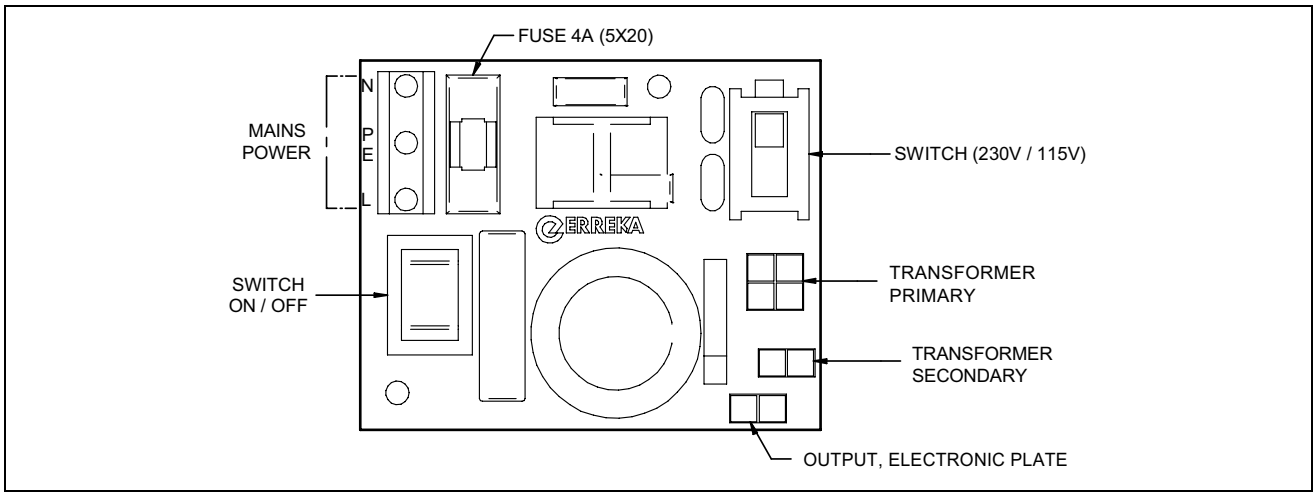


Once the cables are in place in accordance with the section above, position the cover. Fasten the cover to the gearbox with two screws.

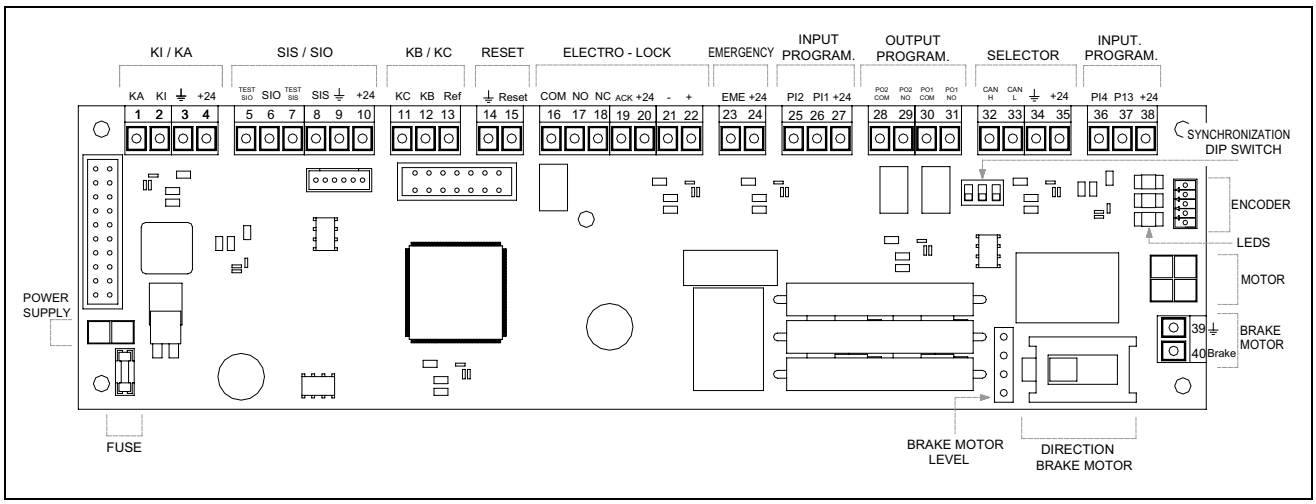
Finally, fit the plastic decorative pieces.

1 ELECTRONIC PLATE

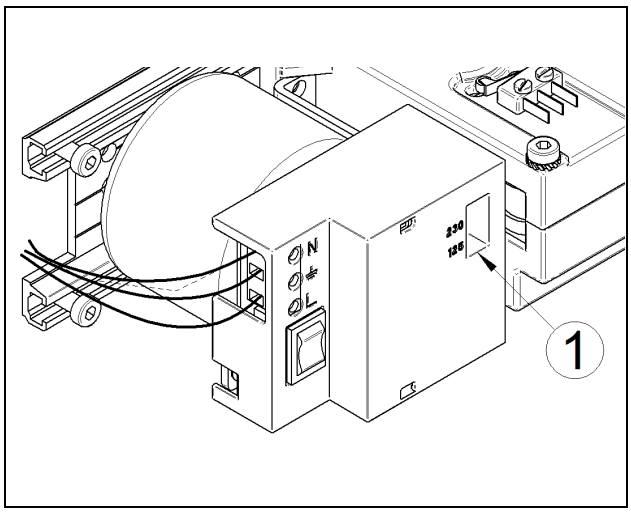
Power plate



Control plate



2 NETWORK CONNECTIONS



1 Connect the line cable (L) to the bottom cable connector and the neutral cable (N) to the top cable connector.

2 Connect the earth cable (PE) to the middle cable connector.

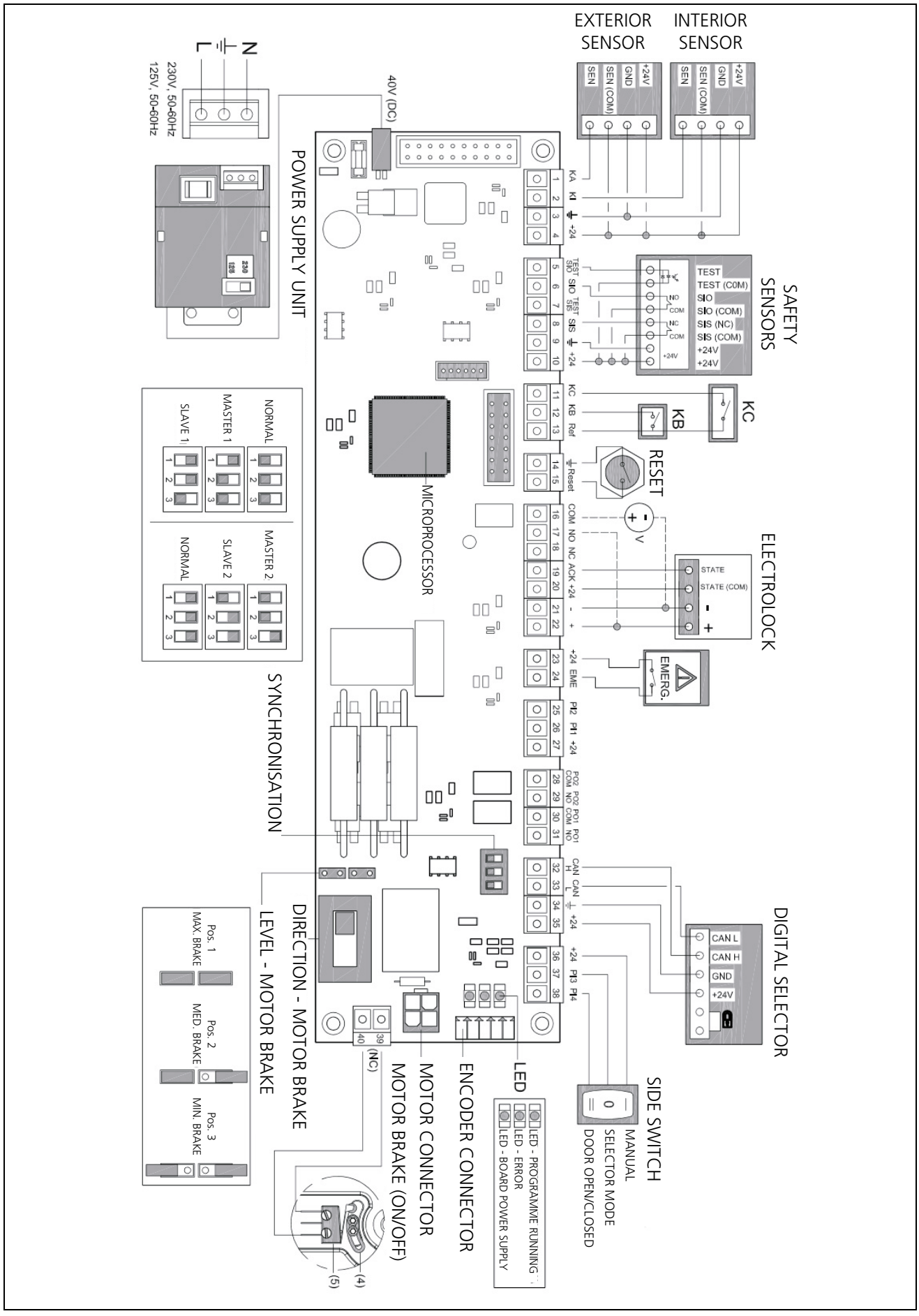
3 Ensure the main fuse (F) is correctly in place:

Fuse 5x20, 4A

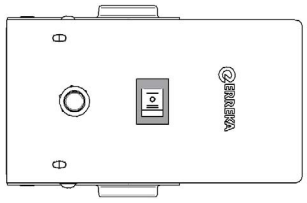
⚠ **Remember to connect the earth cable, in order to prevent the risk of electrical discharge.**

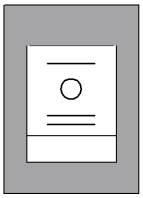
⚠ **VERY IMPORTANT: Make sure THE SWITCH (1) is in the correct position according to the mains supply!!!**

3 GENERAL VIEW OF THE CONTROL BOARD



4 OPERATOR SIDE SWITCH AND SIDE RESET BUTTON





Manual Mode

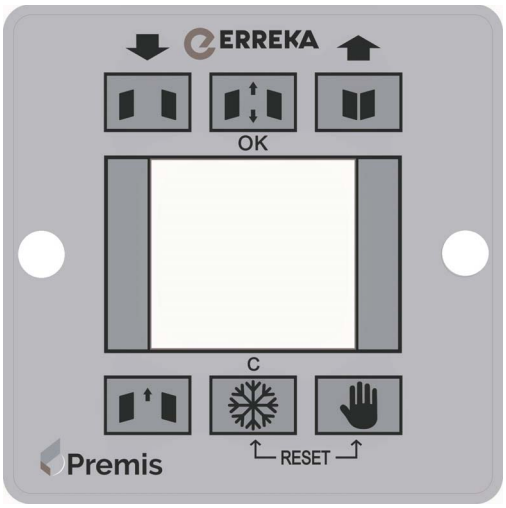
Automatic Mode or Selector

Programmable Mode

Door open

Door closed

5 DIGITAL SELECTOR



 Door open

 Door closed

 Automatic

 One direction

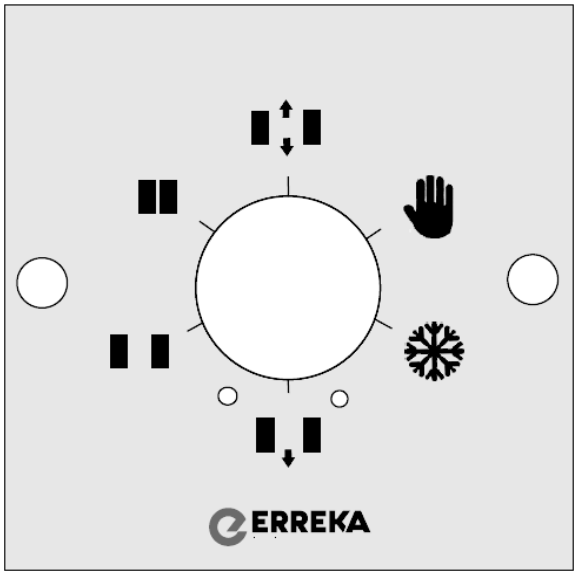
 Manual mode

 Winter (Double swing doors)

⚠ **Reset: Simultaneously pressing:**  **&**  **for 3 sec. The door carries out an automatic reset.**

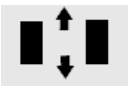
⚠ **To lock the selector, press the**  **&**  **keys for 3 sec. Repeat the sequence to unlock. When the selector is locked, the screen shows the icon:** .

6 ROTARY SELECTOR




Door open


Door closed

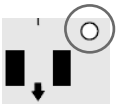

Automatic


One direction

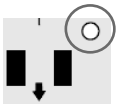

Manual mode


Winter (Double swing doors)

⚠ **To RESET, press the concealed pushbutton to the right of the exit only icon using a tipped instrument.**

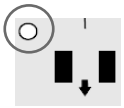


⚠ **SET-UP: Press RESET for 5 sec.**



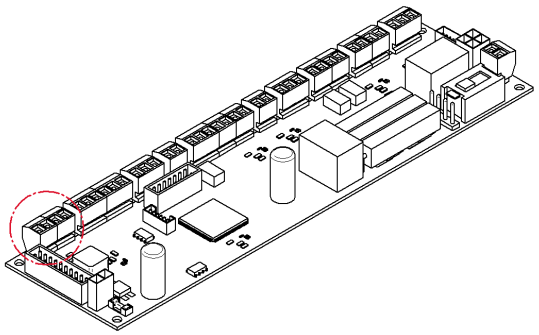
⚠ **It is not possible to configure any door parameters with the rotary selector.**

⚠ **LED:**
- **Normal operation: flashing 1 sec.**
- **Failure: fast flashing.**

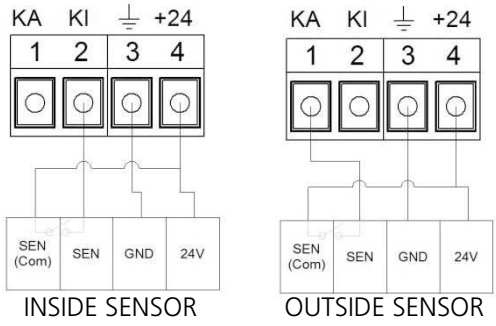


7 ACCESSORY CONNECTIONS

Activators



Connections diagram:



The following types of devices can be installed: radar motion sensors, passive infrared motion sensors, push buttons, switches, radio, IR receivers, access control systems, telephone and intercom systems, etc.

Minimum requirements:

- Service voltage supplied by the drive unit: 24V DC ±5%
- Impulse duration: Min. 200 ms.
- Voltage free output
- Energised output (telephone systems): Max. 24 V DC / AC ±5%.

The activators can be connected as:

- Activation → INTERNAL
  - Normal Activation → normal speeds and opening time
  - Courtesy Activation → speeds and courtesy opening time
- Activation → EXTERNAL
  - Normal Activation → normal speeds and opening time
  - Courtesy Activation → speeds and courtesy opening time

⚠ **Do not connect the power to the signal input!**

☞ On double doors the sensors must be installed on the Master board.

Safety sensors

Closing surveillance: Fit the sensor (SIS) on the door.

- When the sensor is enabled in the closing movement, the door stops and reverses at normal speed.

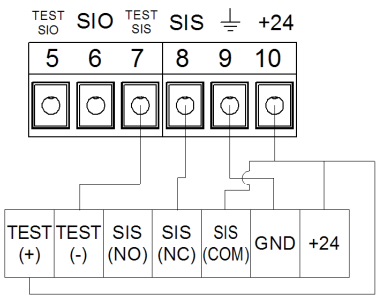
Opening surveillance: Fit the sensor (SIO) on the door.

- The door stops when the sensor is enabled in the opening movement. If the sensor (SIO) is disabled, the door continues the opening operation at slow speed until it finishes, or the sensor detects presence again. Once open, it closes in normal movement.

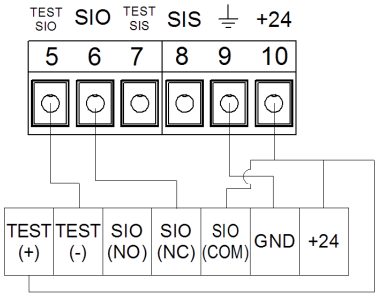
⚠ **DIN1865, EN16005**
The safety sensors (SIS) installed must have a test input to monitor correct operation. In consequence, input will be configured by defect to enable the test "with test" before each opening operation, and also in NC mode (normally closed). Enter configuration in the Tech. Support menu if this input needs to be modified.

☞ On double doors, the safety sensors must each be connected to their electronic board (Master Gate to the Master board / Slave Gate to the Slave board).

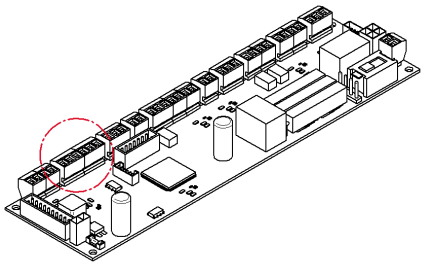
Connections diagram:



SAFETY SENSOR SIS

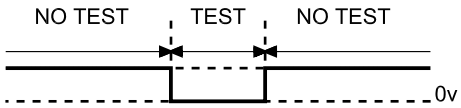


SAFETY SENSOR SIO



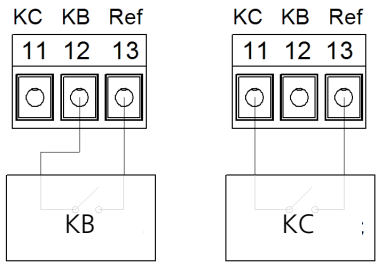
⚠ Do not connect power to the signal inputs.

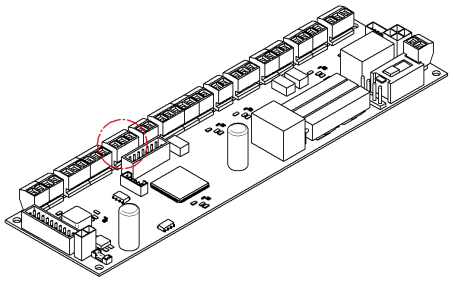
☞To comply with the EN16005 standard, adjust the sensor test according to the following diagram:



Opening impulse/Closing impulse (exterior key)

Connections diagram





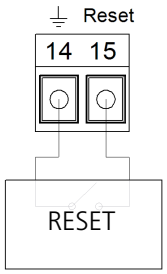
These are inputs which allow the doors to be opened and closed outside of the work modes commonly allowed by the mode selectors. The inputs are impulsive. The function or behaviour of each input is as follows:

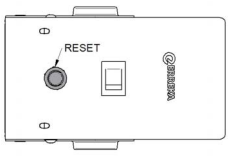
Opening impulse function (KB): Each KB impulse generates an opening of the door. When the opening has been carried out the operator will return to the previous operating mode.

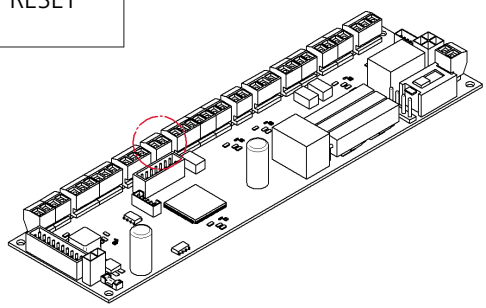
Closing impulse function (KC): This input leads the operator to close the door in night mode. Selectors and programmable inputs are disabled in this mode. Each KC input activation will take the door from its current position to closed. Act on KB or opening impulse to leave this mode.

Reset button

Connections diagram





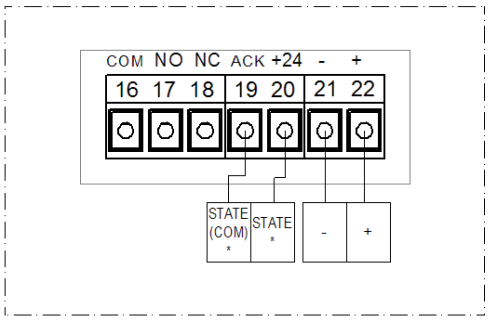


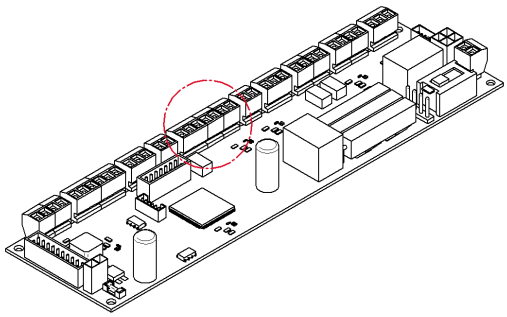
Enabling the signal directly resets the electronic plate's microprocessor.

Locking devices

Connections diagram

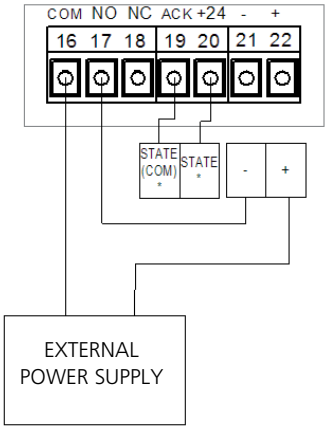
ELECTRO LOCK - POWER DOOP SWING





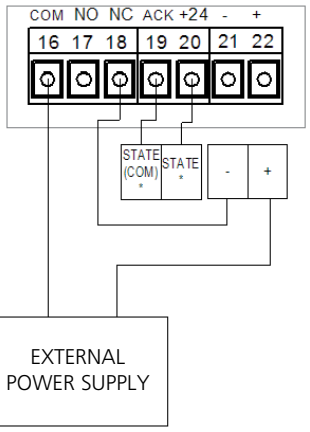
ELECTRO LOCK - BY EXTERNAL POWER

ELECTRO LOCK (NO) - EXTERNAL POWER



POWER OFF IN CLOSE/OPEN POSITION!

ELECTRO LOCK (NC) - EXTERNAL POWER



POWER ON IN CLOSE/OPEN POSITION!

Four parameters must be specified when configuring a locking device:

1 Type of device

- Specific power supply device configuration (intercom)
- Continuous power supply device configuration

2 Voltage

- 12 VDC
- 24 VDC

3 Opening delay

This is the time delay between lock activation and the start of the door's opening movement. It is configured in seconds (between 1 and 10 sec.). It is a common parameter for all devices and must be configured according to the characteristics of each device.

4 Test

This is the type of signal the electrical lock uses to indicate its status:

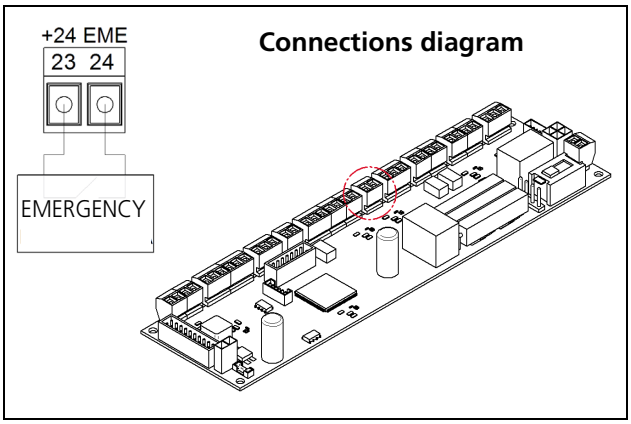
- NA
- NC
- OFF (test disabled)

In order to guarantee safe operation of the drive unit, the locking device must meet the following specifications:

- Service voltage supplied by the drive unit: 24V DC/AC ±5% / 12V DC/AC ±5%
- Service voltage with external power: max. 230 V DC/AC ±5%
- Contact relay locking load: max. 2A

The operator automatically makes a movement against the latch to help release the lock on each activation. The force of this movement is proportional to the delay time.

Emergency

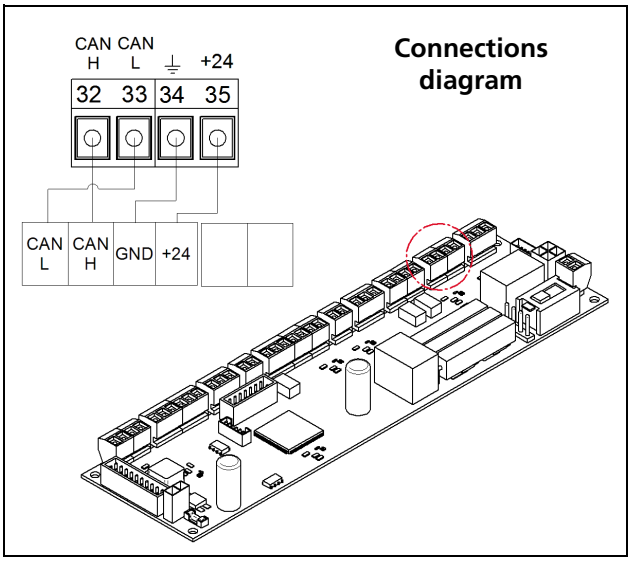


Two parameters must be specified when configuring the emergency input:

1 **Configuration:**
- NO Impulse: occasional signal normally Open
- NC Impulse: occasional signal normally Closed
- NO Continuous: continuous signal normally Open
- NC Continuous: continuous signal normally Closed
- Disabled

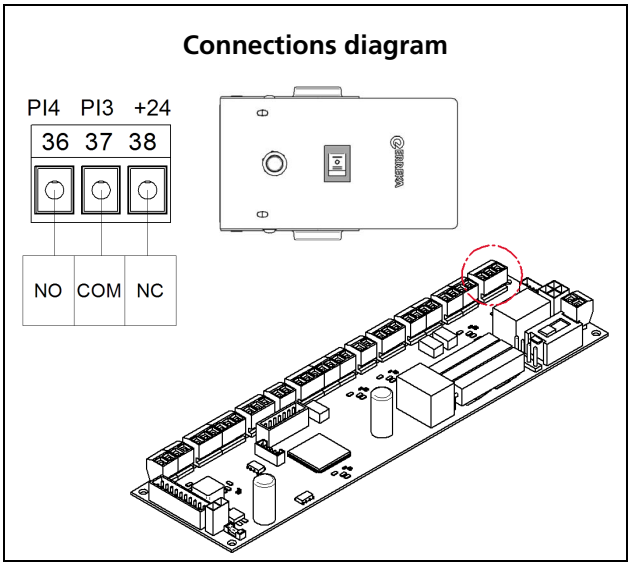
2 **Mode**:
- Door open
- Door Closed
- Manual

Digital selector (DIG SEL02) / Rotary selector (ROT SEL01)



Install the Digital selector or Rotary selector according to the following connections diagram.

Side switch

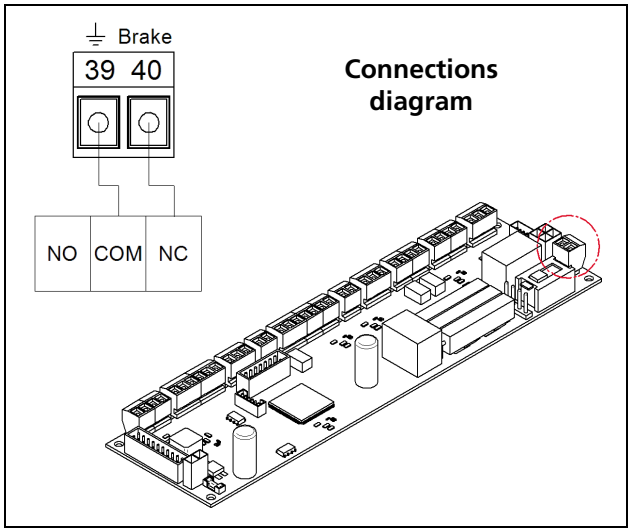


Connect the side switch cables according to the following wiring diagram.

When configuring the side switch, the function of the programmable mode must be specified (see illustration in section “Operator side switch and side reset button” on page 11):
- Door Open
- Door Closed

To use the switch as a mode selector, programmable inputs 3 and 4 must be configured with the Disabled option.

Passive brake

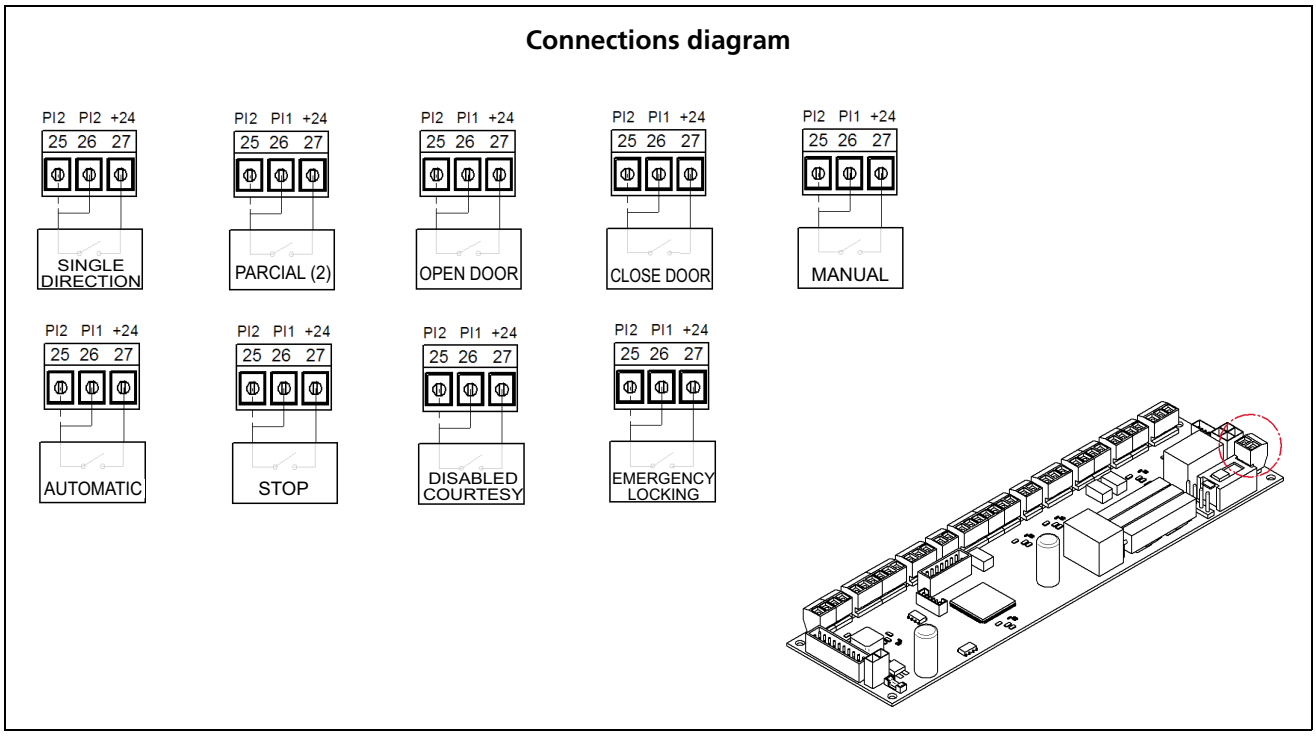


The contact must be closed to enable the passive brake. Connect as follows to install the microswitch to disable the passive brake at the end of closing.

⚠ **Close the contact with a cable if the microswitch is NOT used.**

☞ Regulate the microswitch correctly to eliminate the passive brake when necessary.

Programmable inputs - General



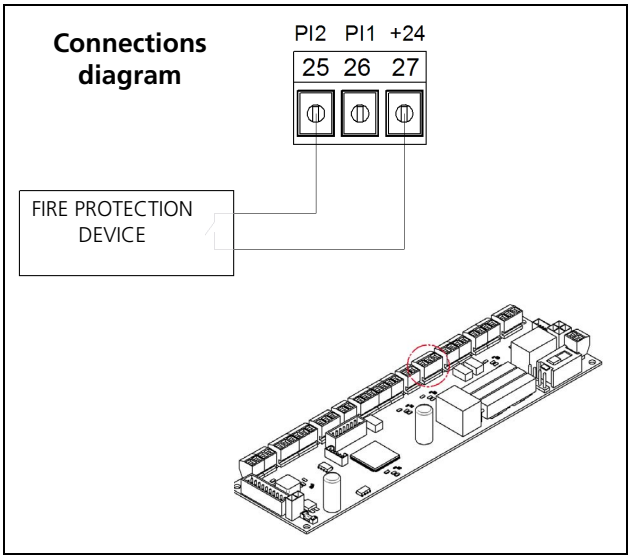
The following programmable inputs can be configured from the selector:

- Disabled (unconfigured input)
- Single direction
- Partial
- Door open
- Door closed
- Manual
- Automatic
- Stop
- Courtesy opening for the disabled
- Emergency locking
- Fire door (more information on page 35)
- Hold Open (more information on page 35)
- Toilet locking (more information on page 36)
- Toilet unlocking (more information on page 36)

ℹ When configuring the input, the signal type must be specified:

- NC Normally Closed input
- NO Normally Open Input

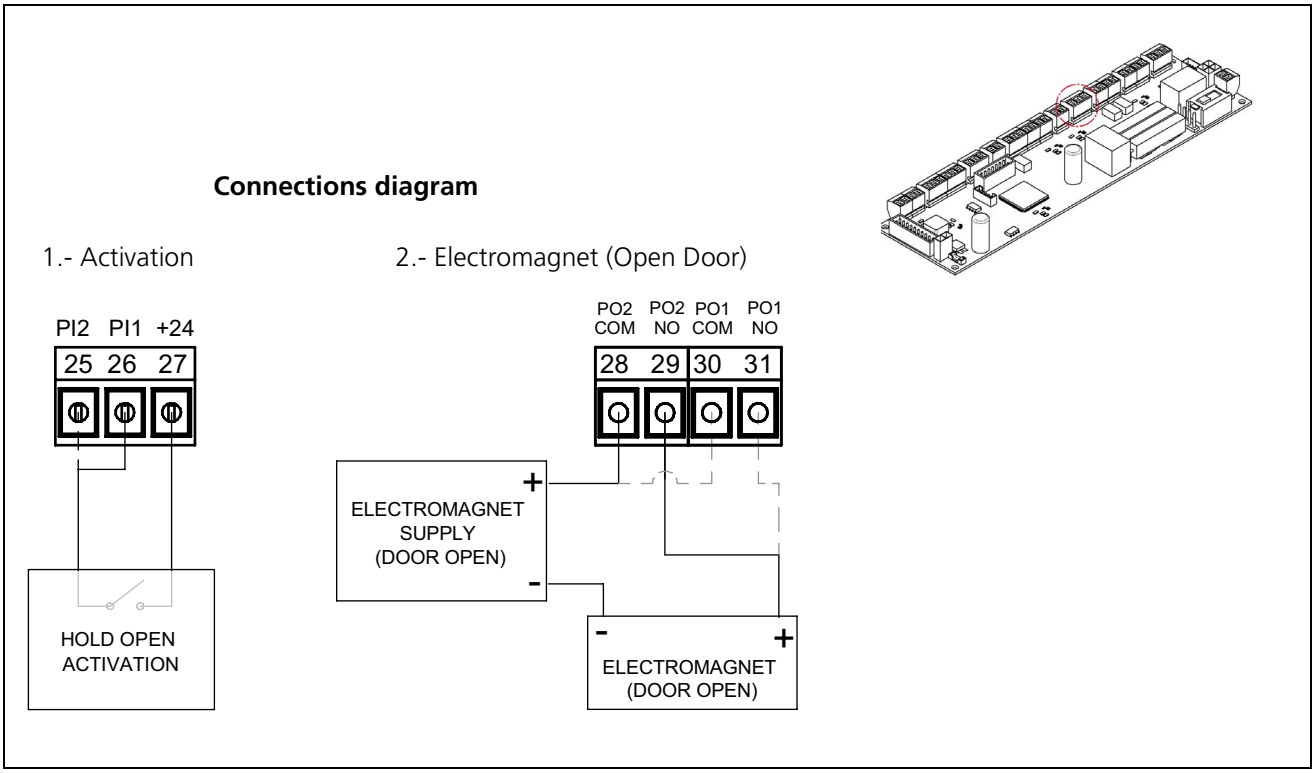
Programmable input - FIRE DOOR



The smoke detection device (or activation signal) must be installed in doors configured as Fire Doors. Reset to restart the door.

⚠ **When selecting the type of door as fire door, input 2 will be automatically configured as fire door function activation and the signal will be normally open.**

Programmable input - HOLD OPEN



A programmable input can be configured to keep the door open using the hold-open devices.

In this case, the door is only kept open by the action of the device; the motor is released.

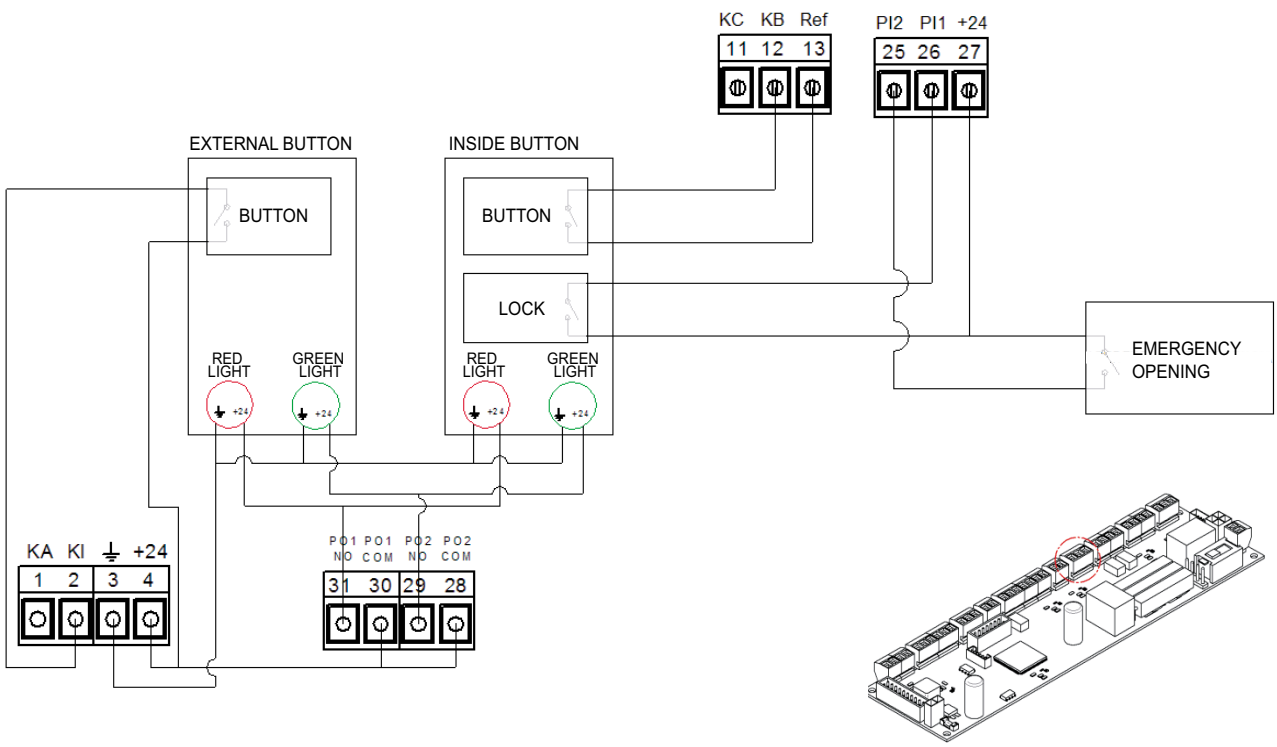
A programmable output (PO1 or PO2) must be configured to activate the electromagnet to hold the door open.

Programmable input - Accessible Toilets

The swing door for accessible toilet installations can be configured.

The following devices should be connected as indicated:

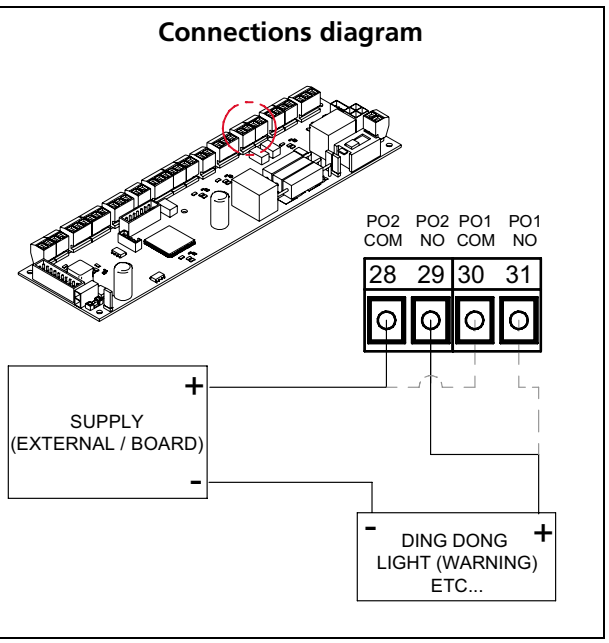
Connections diagram



⚠ All necessary inputs and outputs will be configured automatically when selecting the accessible toilets option in the selector.

Programmable outputs

Connections diagram



The following programmable outputs can be configured from the selector:

- Disabled (unconfigured output)
- Ding dong
- Door Open
- Anti-tampering
- Door Closed
- Warning
- Toilet engaged (more information on page 36)
- Toilet free (more information on page 36)
- Electric magnet, Hold Door Open (HOLD OPEN)

ℹ When configuring the output, the signal type must be specified:

- NC Normally Closed output
- NO Normally Open output

1 SINGLE SWING DOOR

Starting up

The first time, the operator after an internal configuration time, it will start a guided SET UP with the basic parameters of the door for a correct use.

Whenever other parameters need to be modified, check the sections USER MENU and TECH. SUPPORT MENU. After the wizard SET UP, the door makes a reset and a normal movement, an opening and a closing. Finishing the configuration the door will be in automatic mode.

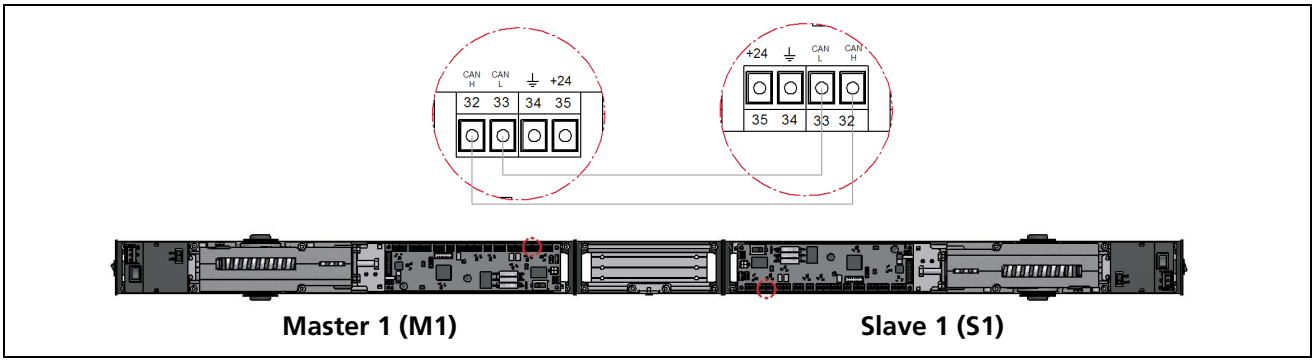
2 DOUBLE SWING DOOR

Starting up

To synchronise the doors, first connect them to each other using CAN communication.

To do this, connect CAN H (Master 1) to CAN H (Slave 1) and CAN L (Master 1) to CAN L (Slave 1).

☞ **Use shielded cable for connections.**



Selection of Synchronization Dip switches:

Before switching on the operators, select the **Master** operator and the **Slave** operator using synchronization dip-switches on the electronic plate.

Dip switch 1	Dip switch 2	Dip switch 3	Operator
0	0	0	Single swing door
1	0	0	Master 1 (M1)
1	1	0	Slave 1 (S1)

The first time the operators are switched on, after an internal configuration time, it will start a guided SET UP with the basic parameters of the doors for a correct use.

First the Master door, the operator which starts the movement, and then the Slave. When it is necessary to modify other parameters, it is necessary to enter the USER and Tech support menus of each operator (Master or Slave).

After the wizard SET UP, the master door makes a half reset, the slave one makes a complete reset and after that the master finishes its reset.

Then, both of them make a normal movement, an opening and a closing. Finishing the configuration the doors will be in automatic mode.

⚠ **To be synchronized the two doors, synchronization must be enabled in both: Master and Slave.**

⚠ **Activation devices must be connected to the Master. Safety sensors can be connected to the Master or Slave.**

⚠ **Parameters to be configured only in the Master:**

- **To operate in SEMI-AUTOMATIC mode**
- **Synchronization distance**

The rest at each door (Master / Slave) independent.

☞ In the Tech. support menu- Advance functions- Door sync you can modify also de sync distance (in degrees) between the two doors.

☞ In the guided set-up you have to specify if the doors are rebated doors or not.

☞ In the Winter mode  only the Master door is working.

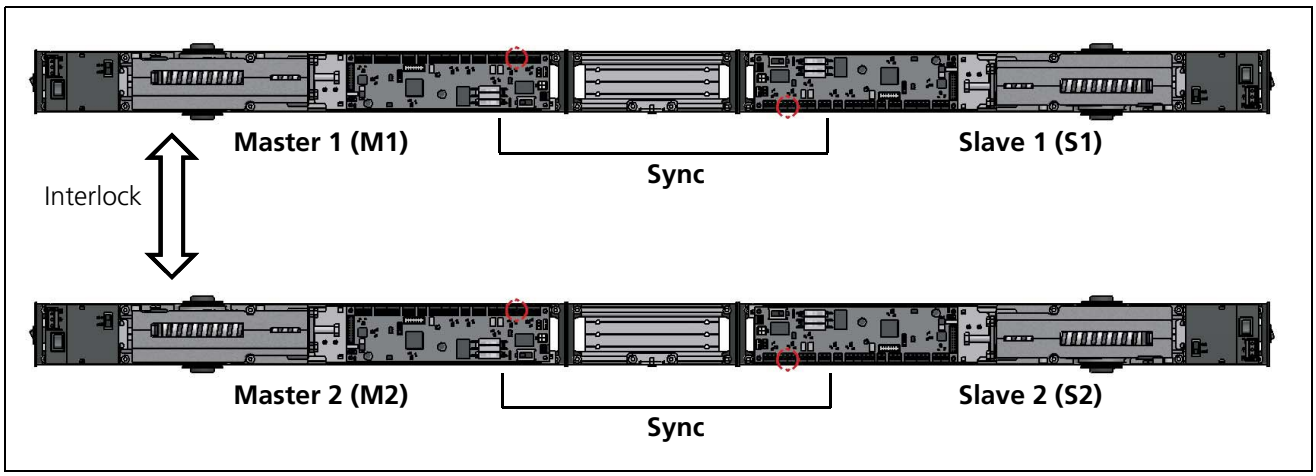
3 INTERLOCK

Starting up

The doors must be connected using CAN for interlocking.

To do this, connect CAN H (Master 1) to CAN H (Master 2) and CAN L (Slave 1) to CAN L (Slave 2):

☞ **Use shielded cable for connections.**



Selection Synchronization Dip switches:

Before switching on the operators, select the Masters operators and the Slaves operators using synchronization dip-switches on the electronic board.

Dip switch 1	Dip switch 2	Dip switch 3	Operator
0	0	0	Single swing door
1	0	0	Master 1 (M1)
1	1	0	Slave 1 (S1)
0	0	1	Master 2 (M2)
0	1	1	Slave 2 (S2)
1	1	1	Single swing door

The first time the operators are switched on, after an internal configuration time, it will start a guided SET UP with the basic parameters of the doors for a correct use.

First the Master door, the operator which starts the movement, and then the Slave. When it is necessary to modify other parameters, it is necessary to enter the USER and SAT menus of each Sliding operator Master 1, Slave 1, Master 2 or Slave 2.

After the wizard SET UP, the doors make a complete reset. Then, both of them make a normal movement, an opening and a closing.

Finishing the configuration the doors will be in automatic mode.

⚠ **To be synchronized the two Master doors, synchronization must be enabled in both.**

☞ In the Tech. support menu- Advance functions- Door sync – Interlock: the functionality of the interlock can be configured.

⚠ **Do not use KB activation for interlocks.**

4 USER MENU (+)

1.1.- Select Times

1.1.1- Normal Open time (0 - 60 sec, default value: **1**)

1.1.2- Pulse Open time (0 - 60 sec, default value: **1**)

1.1.3- Courtesy Open time (0 - 60 sec, default value: **1**)

1.1.4.- Switch to Closed (0 - 300 sec., default value: **0**)

1.2.- Select Languages

1.2.1- Spanish

1.2.2- **English** (default value)

1.2.3- French

1.2.4- Dutch

1.2.5- Portuguese

1.2.6- Basque

1.2.7- Polish

1.3.- Information

1.3.1.- General

- Commission Date — Define the operator's location
- Type of opener — Define how is works the operator
  - Low Energy
  - FE Normal
  - FE Firewall
- Serial nº
- Last Service Date
- Versions
  - HW Version
  - SW Version

1.3.2.- Operator Info

- Number of cycles
- Commission Time
  - Years
  - Months
  - Days
  - Hours
  - Minutes
- Cycles Last Service
- Last Notification code

1.4.- Door Sync Settings

1.4.1.- Select Door

- M1 — Define the operator Master
- S1 — Define the operator Slave

1.4.2.- Door Sync

- **Disabled** (default value)
- Enabled

1.4.3.- Interlock

- **Disabled** (default value)
- Enabled

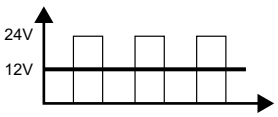
1.5.- Auto Screen Off

- **Disabled** (default value)
- Enabled

5 TECH. SUPPORT MENU (+ +)

SETUP	
SETUP	The door performs a RESET and a normal movement: one opening and one closing. The door will switch to AUTOMATIC mode once the configuration is complete.
Default Parameters	All configured parameters are deleted and a guided CONFIGURATION starts in order to establish the door's default parameters.
Guided SETUP	A guided CONFIGURATION starts in order to establish the door's basic parameters for correct use. The door performs a RESET and a normal movement: one opening and one closing. The door will switch to AUTOMATIC mode once the configuration is complete.

Basic functions			
Type of door	Low Energy		The operator can be configured according to the low power operation requirements of Standard EN 16005. The drive parameters are adjusted according to the specifications of the respective standard. The required safety of the system will be achieved by limiting the following characteristics: • Dynamic impact force. • Low speeds. • Reduction of static forces. • Limitation of force. Due to the system's tolerances, actual forces in the door panel must be measured after configuring the door in low energy mode, modifying any parameters necessary in order to comply with the standards. ⓘ No additional safety sensors are required; they are optional. ⚠ **Protection of the secondary closing edge should be considered separately.**
	Full Energy (default value)	**Normal** (default value)	The entire range of opening and closing speed parameters, along with opening and closing torque, can be adjusted in Full Energy mode. ⚠ **Safety sensors must be installed in order to comply with Standard 16005.**
		Fire Door	This is a specific operation mode for fire doors according to Standard EN 14637. The sensors detect the smoke and disable automatic opening of the door in the event of fire. In this case, the operator will close the door using the built-in spring and it will not open again automatically. Apart from activation by smoke detector, the system can be triggered manually using a pushbutton. The operator must be RESET in order to re-enable the system.
Type of Arm	Articulated - Push		Articulated arm, opening toward the opposite side of the operator (code APR02)
	Rigid - Pull (default value)		Rigid arm, opening toward the operator (code APR01)
	Rigid - Push		Rigid arm, opening toward the opposite side of the operator (code APR01)
Opening Direction	**Toward the operator** (default value)		Door opening direction toward the operator
	Toward the other side of the operator		Door opening direction toward the opposite side of the operator
Operator position	**Lintel** (default value)		Operator position on the lintel.
	Door		Operator position on the door.

Basic functions			
Opening direction (see opening direction diagram, page 51)	Right		Backing into the hinges will make the door open to the right.
	Left (default value)		Backing into the hinges will make the door open to the left.
Door Characteristics	Weight (50 to 250 kg, default value: **50**)		If the door is configured in LOW ENERGY mode, the drive parameters are adjusted according to the specifications of the standard, taking into account the weight and width values indicated.
	Width (700 to 1400 mm, default value: **700**)		
Electrolock	Type	Electrolock	Specific power supply device, intercom. During opening: the operator powers the lock in order to release the latch, and then stops powering the lock. During closing and with the door closed: the operator does not power the lock.
		Electromagnet	(Continuous power supply device) During opening: the operator stops powering the lock, starting to open after a while. During closing: the operator does not power the lock. During door closed: the operator constantly powers the lock in the following modes: KC, Door Closed and Egress Only.
		Disabled (default value)	(Door with no electrolock)
	Voltage	24V	Power with 24V internal power supply.
		12V (default value)	12V power by means of internal 24V power supply. "Real" voltage can only be measured under load. 
	Delay in opening (0 to 10.000 msg, default value: **0**)		Delay time, configurable from 0 to 10 seconds, between start of electrolock release and start of the opening movement.
	Opening force (0 to 5, default value: **0**)		Impulse level performed by the motor in closing direction in order to release the electrolock. Increasing the value increases impulse power in closing direction.
	Test	NO	Normally open signal with electrolock with no power.
		NC	Normally closed signal with electrolock with no power.
		Disabled (default value)	Electrolock with no test.

Advanced functions			
Door synchronisation	Select door	M1	To select the operator (M1 or S1) to be displayed in the digital selector.
		S1	
	Doors Synchronism	Enable: 1- enabled; **2- disabled** (default value)	To enable or disable synchronism between Master and Slave.
		Synchronism distance (0 to 45° default value: **0**)	For double swing doors. Increasing the value increases the delay in starting the Slave operator's movement relative to starting the Master operator's movement.
	Interlock ⚠ **Use KI/KA inputs ONLY for interlocking**	Enable / Disable	To enable or disable the interlock.
		Type of interlock: - **Normal Interlock** (default value) - Smart Interlock	NORMAL INTERLOCK: the master operator (2) does not open (even if the interior or exterior activation device is enabled) until the master operator (1) has completed the closing movement. SMART INTERLOCK: when the exterior activation device is enabled, the master operator (2) does not open until it (1) is in closed position. The Master operator (2) opens when the interior activation device is enabled, even if the Master (1) has not completed the closing movement.
		Interlock time (0 to 300 sec, default value: **0**)	Enable or disable interlock between Master operators (M1 and M2). Interlock release system: the interlock system is automatically released if the Master operator (1) does not close after a preset time.

Advanced functions			
Automat-ic Mode	Configuration	Normal Mode (default value)	This is the most common way of working. It allows transit in both directions. OPENING: starts by enabling the key device (activation sensor, transmitter, etc). STANDBY: the door remains open for a programmed time (configurable). CLOSING: the closing operation starts automatically once standby time is finished.
		Semi-Automatic	OPENING: starts by enabling the key device (activation sensor, transmitter, etc). STANDBY: the door remains open. CLOSING: the door closes automatically when the key device is enabled again. If Push&Close is enabled, the closing movement can be started by manually pushing the door in closing direction. ⚠ **Use ONLY KI/KA inputs for SEMI-AUTOMATIC.**
		Accessible toilets	TOILET INGRESS: if the toilet is vacant (green status indicator), the door opens automatically when the external opening button is pressed. Once open, the door will close automatically at the end of the established opening time. As soon as the door is completely closed, users can disable the external pushbutton using a pushbutton on the inside, meaning the door is no longer accessible from outside. At the same time, the internal and external status indicators change from green to red, indicating that the toilet is occupied. TOILET EGRESS: users can open the door automatically using the internal pushbutton. The door will carry out a complete operation and remain unlocked, changing the status of the indicators. **EMERGENCY OPENING FROM OUTSIDE: the system has an emergency pushbutton so the door can be unlocked from outside in the event of an emergency.**
(...)			

Advanced functions			
Automatic Mode (cont.)	Closing	Closing with Motor	The closing movement is carried out by the motor.
		Closing with spring (default value)	The closing movement is carried out by the spring. ℹ Parameters can be configured to optimise closing (see "Curve parameters").
	Push&Go mode	Enable - Enabled - **Disabled** (default value)	OPENING: starts by manually opening the door. The operator will finish the opening operation automatically when the door's opening angle exceeds a few degrees. STANDBY: the door remains open for a programmed time. CLOSING: the closing operation starts automatically once standby time is finished. DISABLED: function disabled.
		Degrees (0 to 45°, default value: **0**)	Configure the opening degrees to start the motorised opening movement.
	Push&Close mode	Enabled	When open in Semi-Automatic mode, the operator starts the closing movement if the door is pushed manually in closing direction.
		Disabled (default value)	Function disabled.
Manual Mode	**Normal** (default value)		In manual mode the door works as a normal "door closer". • OPENING: the door opens manually. • STANDBY: no standby time. • CLOSING: the compression spring closes the door.
	Servo-assisted (0 to 5, default value: **0**)		The operator will assist with opening whenever door movement is detected. The assistance level must be adjusted for each facility.
Anti-crushing	Sensitivity (1 to 10, default value: **5**)		Configure sensitivity level: • 1: more sensitive level, • 10: less sensitive level. If the door collides with an obstacle during opening, it reverses operation direction and closes slightly. The door slowly opens to the full after a few seconds. If the door collides with an obstacle during closing, it reverses operation direction and opens completely at slow speed. It then closes at slow speed.
	Sensitivity Mode	**Normal mode** (default value)	Full Energy standard configuration. In opening, it continues to open over and over again. In closing, it continues to close over and over again.
		Safe mode	Low Energy standard configuration. If the obstacle continues, the door switches to MANUAL MODE after five attempts.
	Spring Closing	Enabled	Anti-crushing enabled in spring closing movement.
		Disabled (default value)	Anti-crushing disabled in spring closing movement.

Advanced functions				
Inputs/ Outputs	Inputs (1,2,3,4)	Mode	Egress Only mode	The door only opens automatically in one direction (ingress only or egress only, configurable). If the door has an electrolock, it remains locked when closed. ℹ The door can only be opened from the opposite direction by an opening impulse (KB).
			Partial Mode	Function specially designed for double swing doors. Enabling this function generates an opening of the Master operator only. In single doors, this activation is equivalent to the KI or KA input.
			Door Open mode	The door remains in maximum opening position for the entire time.
			Door Closed Mode	After a period of delay, the door goes to door closed position and remains closed, locking if it has an electrolock. ℹ The door can only be opened by an external opening impulse (KB) or by changing mode from the selector.
			Manual Mode	The door switches to Manual mode.
			Automatic Mode	The door switches to Automatic mode.
			Fire Door Mode	When the Fire Door signal is enabled, the operator disconnects all peripherals and the motor, and the door closes using the built-in spring. A RESET will be necessary to re-enable the operator.
			Hold-Open Mode	When the hold-open signal is enabled, the door switches to open. When it reaches Door Open, the operator powers the fastening devices and the motor is released after a few seconds. The door remains open due to the action of the fastening devices. Once the signal has been disabled, the door returns to the previous mode.
			Courtesy Mode "Courtesy opening for persons with disability"	When courtesy opening for persons with disability is enabled, the door carries out an automatic opening and closing cycle at suitable speed. ℹ The speeds and standby time can be selected from the digital selector. ℹ Courtesy opening works in the following modes: Automatic, One-Way and Manual.
			Stop Mode	When this function is enabled, the motor is disabled and the door switches to Manual mode. The door remains in manual mode until the signal is disabled. At this moment the door returns to the work mode prior to the Stop signal being enabled. The assistance functions in Manual mode are disabled (servo-assisted opening and closing with the assistance of the motor).
			Emergency Lock Mode	If the emergency locking signal is enabled, the door switches to closed and the electrolock, if fitted, is enabled. Resetting is required to leave this function.
			Lock toilet	Specific input for "accessible toilets".
(...)	(...)	(...)	Unlock toilet	Specific input for "accessible toilets".

Advanced functions				
Inputs/ Outputs (cont.)	Inputs (1,2,3,4) (cont.)	Mode (cont.)	**Disabled Mode** (default value)	Input not configured (by default).
		Activation	**NO** (default value)	Normally Open Input Signal.
			NC	Normally Closed Input Signal.
	Outputs (1,2)	Mode	Ding-Dong Mode	The operator sends a specific signal in each start of opening movement.
			Door Open Mode	The operator sends a continuous signal when the door is in open position.
			Anti-Tamper Mode	The operator sends a continuous signal if tampering is detected in a closed door. ⚠ **The "Keep door closed" parameter must be enabled.**
			Door Closed Mode	The operator sends a signal when the door is in closed position.
			Warning Mode	The operator sends a signal whenever a warning is detected (e.g. Warning 20, etc.).
			Toilet engaged	Specific output for "accessible toilets".
			Toilet free	Specific output for "accessible toilets".
			Disabled Mode (default value)	Output not configured (default).
		Activation	**NO** (default value)	Normally Open Output Signal.
			NC	Normally Closed Output Signal.
	Side switch (with inputs (3, 4)) in Disabled mode		**Door Open** (default value)	The door goes to Door Open mode in position (II) of the side switch.
			Door Closed	The door goes to Door Closed mode in position (II) of the side switch.
I/O Configuration	One-way direction		**Egress** (default value)	The operator works in Egress Only when one-way is selected.
			Ingress	The operator works in Ingress Only when one-way is selected.
	Emergency		Type of Signal: - Impulse NO - Continuous NO - Impulse NC - Continuous NC - **Disabled** (default value)	CONTINUOUS SIGNAL: enters "Emergency" status for the duration of the signal. Once the signal has been disabled, the door returns to the previous mode. IMPULSE SIGNAL: enters "Emergency" status until Reset. DISABLED: emergency disabled (by default).
			Type of Action - **Door Open** (default value) - Door Closed - Manual	MANUAL DOOR: all the peripherals are disabled (electrolocks, hold-open systems, etc.), the motor is released, and the door works as a non-motorised door. DOOR OPEN / DOOR CLOSED: the door goes to open or closed position and remains in this status.

Advanced functions		
Temperatures	Motor temperature (-50 to 200ºC, default value:**100**)	Indicates the motor temperature and allows a limit to be set.
	Driver temperature (-50 to 200ºC, default value: **70**)	Indicates the driver temperature and allows a limit to be set.
	Min ambient temperature (-50 to 200ºC, default value: **-20**)	Indicates the minimum ambient temperature and allows a limit to be set.
	Max ambient temperature (-50 to 200ºC, default value: **70**)	Indicates the maximum ambient temperature and allows a limit to be set.

Sensors			
Activation sensors	Interior	Configuration - **NO** (default value) - NC - Disabled	Activation valid for modes: AUTOMATIC, EGRESS ONLY, SEMI-AUTOMATIC AND INTERLOCK. • *NO*: Input Normally Open (default setting), • *NC*: Input Normally Closed, • *Disabled.*
		Courtesy - **Disabled** (default value) - Enabled	The input can be configured as a Courtesy input: ⚠ **Do not use Courtesy mode as activation for Semi-automatic**
	Exterior	Configuration - **NO** (default value) - NC - Disabled	Activation valid for modes: AUTOMATIC, INGRESS ONLY, SEMI-AUTOMATIC AND INTERLOCK • *NO*: Input Normally Open (default setting), • *NC*: Input Normally Closed, • *Disabled.*
		Courtesy - **Disabled** (default value) - Enabled	The input can be configured as a Courtesy input. ⚠ **Do not use Courtesy mode as activation for Semi-automatic.**
Safety closing sensors (SIS) ⚠ **The safety sensors installed must have a test input to monitor correct operation. The door switches to MANUAL MODE in the event of test failure.**	Configuration	The door continues to open if the closing safety device is enabled during opening. The door reverses operation direction and opens completely if the closing safety device is enabled during closing. The door remains in this position until the signal is disabled.	
		NC with no test	Normally closed with no test signal.
		NC with test	Normally closed with test signal.
		NO with test	Normally open with test signal.
		Disabled (default value)	Safety sensor in closing disabled.
	Spring closing	Disabled	Safety sensor in closing disabled.
		Enabled (default value)	Safety sensor in spring closing enabled in modes: Automatic and Egress Only.

Sensors			
Opening safety sensors (SIO) ⚠ **The safety sensors installed must have a test input to monitor correct operation. The door switches to MANUAL MODE in the event of test failure.**	Configuration	The door stops if the safety device is enabled during opening. If disabled, the door opens completely at slow speed or until a new safety activation. The door continues to close if the opening safety device is enabled during closing.	
		NC with no test	Normally closed with no test signal.
		NC with test	Normally closed with test signal.
		NO with test	Normally open with test signal.
		Disabled (default value)	Safety sensor in opening disabled.
	Disable (30 to 90°, default value: **90**)		Opening safety sensor invalidation distance: prevents the leaf from stopping due to the wall being detected.

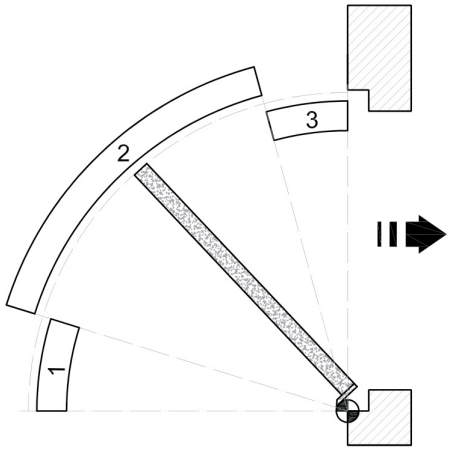
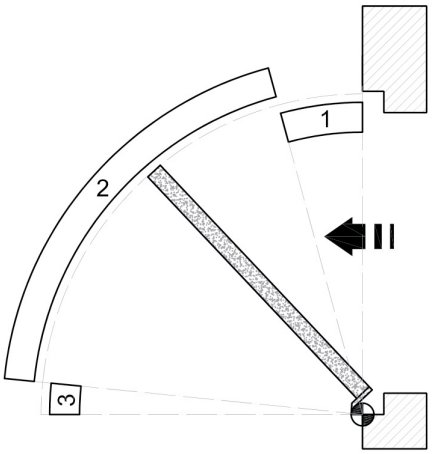
Parameters curve		
Closing (see closing movement diagram, page 50)	Speed (5 to 10 sec, default value:**7**)	Increasing the value decreases closing movement speed with motor. (KI, KA and KB activation).
	Courtesy Speed (6 to 10 sec, default value: **10**)	Increasing the value decreases closing movement speed with motor. (Courtesy activation).
	Slow Speed (1 to 5, default value: **3**)	Door speed in anti-crushing movement.
	Acceleration (0 to 5, default value: **1**)	Increasing the value increases initial opening movement with motor acceleration.
	Meeting position (5 to 30°, default value: **5**)	Meeting final speed start distance.
	Meeting Speed (1 to 5, default value: **2**)	Increasing the value increases final meeting speed.
Opening (see opening movement diagram, page 50)	Speed (3 to 10 sec, default value: **5**)	Increasing the value decreases opening movement speed. (KI, KA and KB activation).
	Courtesy Speed (6 to 10 sec, default value: **7**)	Increasing the value decreases opening movement speed. (Courtesy activation).
	Slow Speed (1 to 5, default value: **3**)	Door speed in anti-crushing movement.
	Acceleration (0 to 5, default value: **3**)	Increasing the value increases initial opening movement acceleration.
	Meeting Pos. (70 to 85°, default value: **80**)	Meeting final speed start distance.
	Meeting Speed (1 to 5, default value: **3**)	Increasing the value increases final meeting speed.
Reverse	Quick reverse position (10 to 45°, default value: **30**)	Position the door reverses quickly from.
	Slow reverse position (60 to 80°, default value: **70**)	Position the door reverses slowly from.

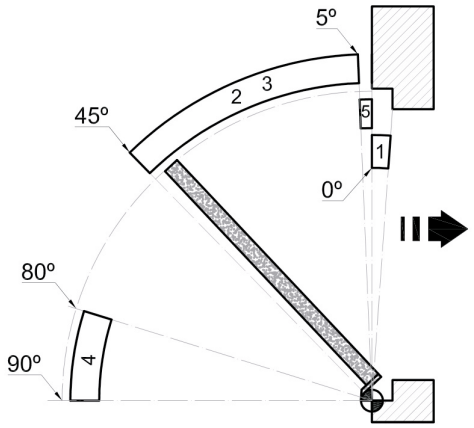
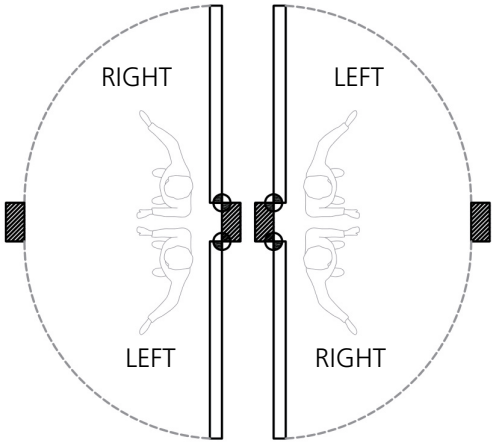
Parameters curve		
Power (see power diagram, page 51)	Door closed (0 to 10, default value: **0**)	Level of resistance exerted by the motor for manual opening in door closed position. Increasing the value increases the resistance. Value 0 disables resistance (default setting).
	Spring assistance (0 to 10, default value: **2**)	Assistance by the motor in closing whenever there is not enough spring force to guarantee optimum closing (e.g. due to wind, friction, etc). The motor assists in closing. Increasing the value (from 0 to 10) increases the level of assistance.
	Spring assistance position (0 to 45°, default value: **10**)	Determines the position (from 5° to 45°) the "Spring Assistance" function comes into action in.
	Final impulse (0 to 10, default value: **1**)	Increasing the value increases the motor's thrust power in the last 5°. This parameter acts both on spring closing and motor closing.
	Impulse to release the motor (0 to 5, default value: **0**)	The motor is released if an external impulse is received. • Zero value disables this function (default setting). • Increasing the value increases the impulse intensity required to release the motor. **Disabling this function and configuring motor close to guarantee controlled movements is recommended in windy locations.**
	Start spring closing (0 to 5, default value: **0**)	Assistance by the motor in the first 10° of closing whenever there is not enough spring force to guarantee optimal start of closing. Increasing the value increases the level of assistance.
Time selection	Normal Open time (0 to 60 sec, default value: **1**)	Time the door remains open before start of closing movement. (KI/KA activation).
	Pulse Open time (0 to 60 sec, default value: **1**)	Time the door remains open before start of closing movement. (KB activation).
	Courtesy Open time (0 to 60 sec, default value: **1**)	Time the door remains open before start of closing movement. (COURTESY activation).
	Switch to Closed mode (0 to 300 sec., default value: **0**)	Delay time to switch to Closed mode.

Installation Information	
SAT information	Technical support information.
Installation ID	Identification for the facility.
Installation date	Date of installation.
Latest warnings	List of latest warnings.
Latest maintenance	List of maintenance carried out.
Sensor status	Sensor status in real time.

Maintenance	
Next maintenance	Definition of the time interval to display the maintenance required warning.
Self-check	Records the date maintenance was carried out on. Disables the maintenance required warning.

Password	
Change password	Changes the password for the Technical Menu.
Reset password	Resets the password to 00000.
Enable password - **Disabled** (default value) - Enabled	Enables/disables password protection for access to the technical menu.

Closing movement diagram	**Opening movement diagram**
 1 Acceleration zone 2 Constant speed zone 3 Meeting zone	 1 Acceleration zone 2 Constant speed zone 3 Meeting zone

Power diagram	Opening direction diagram
 1 Door closed 2 Spring assistance 3 Spring assistance position 4 Start spring closing 5 Final impulse	

6 TROUBLESHOOTING

Malfunctions	Possible cause	Possible solution
Door with SPRING CLOSE does not close fully. The door stops in the last closing angle degrees	Arm assembled incorrectly	Check that the arm is mounted correctly. When installing the arm, ensure it exerts enough tension to keep the door closed in closed position.
	Friction, wind, electrolock	Configure "Spring closing assistance parameters" (Technical Menu / Parameters / Power). The motor will therefore assist the spring in closing. • Spring assistance: configure the assistance level necessary. • Spring assistance position: indicate the last degrees for the motor to assist in closing. • Final impulse: configure the final impulse level for the motor to finish closing the door.
Door with SPRING CLOSE is not able to start the closing movement	Arm assembled incorrectly	Check that the arm is mounted correctly and that the dimensions of the facility (recess, width, weight, etc.) are within specifications.
	Friction, door weight	Configure the "Spring closing assistance parameters". The motor will therefore assist in closing • Start spring closing assistance: configure the assistance level necessary for the motor to assist the spring in the first 10° of closing.
The door is not able to release the electrolock	Mechanical assembly incorrect	Check that the electrolock is working properly and is not too tight in the strike.
	Poor configuration	Check the configuration: type and voltage. Configure the following to improve electrolock release: "Opening Delay": configure a delay so the electrolock has time to release before starting the opening movement. "Force in Delay": configure the level of recoil required to release the lock before the opening movement starts.
The door loses control of movement due to the wind.	SPRING CLOSING configuration Release motor enabled	Closing must be configured with MOTOR if speed control is required throughout the open/close operation. The "Release motor" function must be disabled at the same time (Technical menu, Curve parameters/Power). Set the value to "0".
Semi-automatic does not work correctly	Incorrect input connection	Use KI/KA inputs only (in NORMAL mode) for door activation
Mode cannot be changed from the digital selector	Side switch	Check that the side switch is in middle position
	Door closing movement	Check that the arm is mounted correctly. Ensure that the arm exerts enough tension as to hold the door closed in door closed position. Configure "Spring closing assistance parameters" (Technical Menu / Parameters / Power). The motor will therefore assist the spring in closing. • Spring assistance: configure the assistance level necessary. • Spring assistance position: indicate the last degrees for the motor to assist in closing. • Final impulse: configure the final impulse level for the motor to finish closing the door.
Interlock does not work	Poor connection of wires and activation inputs	Check that the wiring is as specified. Use KI/KA inputs only (in NORMAL mode) for door activation.

7 WARNINGS / ERRORS

Warning Type	Description	Possible cause	Possible solution
Warning 2	Encoder failure	The motor may be locked or the encoder wire damaged	Analyse if the motor is locked. If the motor is free, change the encoder wire.
Warning 3	Electrolock failure	The electrolock could not be released	Check if the electrolock could be released manually. If it works properly mechanically, check the configuration of the test and the test itself.
Warning 4	Flash memory failure	The flash memory is damaged or it is out of date	Make a default parameters, if the warning continues, contact with the technical support, a replacement of the electronic board could be necessary.
Warning 5	Motor driver temperature	The motor control transistors are overheated	The door will open until the temperature of the driver drops. Then it will return to a normal operation. A reset could be done for a quick recovery.
Warning 6	Overcurrent in the motor	There is an overcurrent in the motor input	Check if the motor is locked. If the motor is free, make a reset. After a reset, if the warning continues, contact with the technical support, a replacement of the board or the motor could be necessary.
Warning 7	Motor temperature	The motor is overheated	The door will stop until the temperature of the motor drops. Then it will return to a normal operation. A reset could be done for a quick recovery.
Warning 8	Closing safety sensor enabled	Obstacle in the photocell detection area	Check the proper operating of the photocell, if it works properly, remove the obstacle. A reset could be done for a quick recovery.
Warning 9 (*)	Remote safety closing enabled	Obstacle in the remote photocell detection area	Check the proper operating of the photocell, if it works properly, remove the obstacle. A reset could be done for a quick recovery.
Warning 10	Interior radar enabled	Obstacle in the radar detection area	Check the proper operating of the radar, if it works properly, remove the obstacle. A reset could be done for a quick recovery.
Warning 11	Exterior radar enabled	Obstacle in the radar detection area	Check the proper operating of the radar, if it works properly, remove the obstacle. A reset could be done for a quick recovery.
Warning 12	Safety opening sensor enabled	Obstacle in the safety sensor detection area	Check the proper operating of the sensor, if it works properly, remove the obstacle. A reset could be done for a quick recovery.
Warning 13 (*)	Remote safety openingsensor enabled	Obstacle in the safety sensor detection area	Check the proper operating of the sensor, if it works properly, remove the obstacle. A reset could be done for a quick recovery.
Warning 14	Internal power source failure	One of the voltages inside the board is out of range	Make a reset to recover the proper functionality. If the warning persists contact with the technical support, a replacement of the electronic board could be necessary.
Warning 15	Motor voltage failure	The output voltage of the motor is out of range	Make a reset to recover the proper functionality. If the warning persists contact with the technical support, a replacement of the electronic board could be necessary.

Warning Type	Description	Possible cause	Possible solution
Warning 17	Main voltage failure	Input current wrong or power fuse failed	Check if the power input is suitable. If it is correct check the power fuse. If both works properly, contact with the technical support, a replacement of the electronic board or power supply could be necessary.
Warning 18	System voltage failure	The voltage of the system is out of range	Make a reset to recover the proper functionality. If the warning persists contact with the technical support, a replacement of the electronic board could be necessary.
Warning 19	Room temperature	The working temperature is too high	The door will automatically go to door open until the temperature drops below the temperature set the maximum temperature could be verify with the digital selector and the range is also able to modify with the digital selector.
Warning 20	Anti-crush	An entrapment occurs	Remove the obstacle or check if there is a friction in the movement of the door.
Warning 23	Emergency	The emergency signal is enabled	Depends on the configuration of the signal, the warning will be disappear automatically when the signal turns off or doing a reset would be necessary to remove the warning.
Warning 24	Continuous anti-crush	Three entrapment occur	Remove the obstacle or check if there is a friction in the movement of the door. A reset would be necessary to recover the proper functionality.
Warning 25	Photocell test failure	Photocell damaged	Check if the photocell configuration coincides with its configuration in the digital selector. If it is correct, contact with the technical support, a replacement of the photocell could be necessary. Temporally, a configuration normally closed without test could be used.
Warning 26 (*)	Remote photocell test failure	Photocell damaged	Check if the photocell configuration coincides with its configuration in the digital selector. If it is correct, contact with the technical support, a replacement of the photocell could be necessary. Temporally, a configuration normally closed without test could be used.
Warning 27	Safety sensor test failure	Safety sensor damaged	Check if the sensor configuration coincides with its configuration in the digital selector. If it is correct, contact with the technical support, a replacement of the sensor could be necessary. Temporally, a configuration normally closed without test could be used.
Warning 28 (*)	Remote safety sensor test failure	Safety sensor damaged	Check if the sensor configuration coincides with its configuration in the digital selector. If it is correct, contact with the technical support, a replacement of the sensor could be necessary. Temporally, a configuration normally closed without test could be used.
Warning 29 (*)	Warning on the other door operator (M1 or S1)	If the display shows M1 at the bottom, it means there is a warning in S1 (or vice versa)	Go to the "Select Door" menu and switch from M1 to S1 (or vice versa) to check the error in the other door operator
Warning 30	Motor or brake activation failure	Electronic board damaged or motor unplugged	Check if the motor is plugged, then make a reset to repeat the test. If the warning persists contact with the technical support, a replacement of the electronic board or motor could be necessary.
Warning 31	Relay K2 fail	The relay is damaged	Switch off and switch on the electronical board and check if the relay can commute.

Warning Type	Description	Possible cause	Possible solution
Warning 32	Relay K3 fail	The relay is damaged	Switch off and switch on the electronical board and check if the relay can commute.
Warning 34 (*)	Failure in communication	There is a communication error between two operators	Check if the communication wire is installed correctly. Make a reset to recover the proper functionality. If the warning persists check the configuration of the boards.
Warning 35	Incomplete reset	The opener cannot make a reset	Check if the door is blocked with an obstacule or if there is a friction in the movement of the door and try to make a reset again. The door must try to make a reset three times.
Warning 36	Electrolock release failure	The electrolock is blocked	Adjust the electrolock mechanically. Configure the help parameters for electrolocks: "Delay time" and "Reverse force".

(*) These errors are only available when two boards are communicated by CAN protocol.

1 MAINTENANCE

Automatic door installations require regular maintenance, with regularity determined by environmental conditions and traffic density.

- Check that all the fastening screws are tight.
- Clean and lubricate all sliding and moving components.
- Examine the cable connections.
- Check that the arm's fastening screw is tight.
- Check that the leaf is stable and that the movement is fluid and frictionless from "door open" position to "door closed" position.
- Check that the speed, times and safety functions are selected correctly.
- Check that the activation sensors and safety sensors work correctly.
- In the absence of power, check that the door closes again with the spring at controlled speed without any danger.

⚠ **Remove the main power line before starting operations on the operator.**

⚠ **Any component that is damaged or worn must be replaced! Use only original spare parts. First check ERREKA's catalogue.**

2 WARRANTY

ERREKA PUERTAS AUTOMATICAS declares, under its sole responsibility, that the products supplied have a warranty lasting 12 months from the date of purchase (Work Delivery Protocol Date). This warranty applies to any manufacturing defect and will include the cost of transporting the material to the closest certified technical service.

The installer is responsible for delivering the equipment to the technical service.

This warranty does not include:

- Damage caused by incorrect installation or use of the equipment.
- Damage caused by handling by unauthorised personnel.
- Damage caused by external or atmospheric agents (lightning, floods, etc.).

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MSY-002/03