

# INSTALLATION AND MAINTENANCE MANUAL FOR SWING DOOR



SW2 LIGHT

SW4 SPRING

SW5 HEAVY

#### 1. INTRODUCTION

Before you begin to install or start an automatic pedestrian doors, an inspection must be carried out on site by qualified personnel, for making measurements of the compartment wall, door and drive.

This inspection is to assess the risk and to select and implement the most appropriate solutions according to the type of pedestrian traffic (intense, narrow, one-way, bi-directional, etc..), The type of users (elderly, disabled, children, etc..), in the presence of potential hazards or local circumstances.

To assist installers in applying the requirements of European Standard EN 16005 concerning the safe use of automatic pedestrian doors, we recommend consulting the guides E.D.S.F. (European Door and Shutter Federation) available on <a href="https://www.edsf.com">www.edsf.com</a>.

#### 1.1 GENERAL SAFETY INSTRUCTION

This installation manual is intended for professionally competent personnel only. Before installing the product, carefully read the instructions.

Bad installation could be hazardous. The packaging materials (plastic, polystyrene, etc.) should not be discarded in the environment or left within reach of children, as these are a potential source of hazard.

Before installing the product, make sure it is in perfect condition. Do not install the product in an explosive environment and atmosphere: gas or inflammable fumes are a serious hazard risk.

Before installing the automations, make all structural changes relating to safety clearances and protection or segregation of all areas where there is risk of being crushed, cut or dragged, and danger areas in general.

Make sure the existing structure is up to standard in terms of strength and stability. FACE is not responsible for failure to use Good Working Methods in building the frames to be motorised or for any deformation occurring during use.

The safety devices (safety sensor, photocells, etc.) must be installed taking into account: applicable laws and directives, Good Working Methods, installation premises, system operating logic and the forces developed by the motorised door. Apply hazard area notices required by applicable regulations.

Each installation must clearly show the identification details of the automatic pedestrian door.

#### 1.2 EC MARKING AND EUROPEAN DIRECTIVES



Automations for swing pedestrian door, are designed and manufactured in compliance with the safety requirements of the European standard EN 16005 and are CE-marked in accordance with the Electromagnetic Compatibility Directive (2014/30/UE).

The automation also include a Declaration of Incorporation according to the Machinery Directive (2006/42/EC).

Pursuant to Machinery Directive (2006/42/CE) the installer who motorises a door or gate has the same obligations as the manufacturer of machinery and as such must:

- prepare the technical file which must contain the documents indicated in Annex V of the Machinery Directive; (The technical file must be kept and placed at the disposal of competent national authorities for at least ten years from the date of manufacture of the pedestrian door);
- draft the EC declaration of conformity in accordance with Annex II-A of the Machinery Directive and deliver it to the customer;
- affix the CE marking on the power operated door in accordance with point 1.7.3 of Annex I of the Machinery

All data and information contained in this manual have been drawn up and checked with the greatest care. However FACE cannot take any responsibility for eventual errors, omissions or inaccuracies due to technical or illustrative purposes.

FACE reserves the right to make changes and improvements to their products. For this reason, the illustrations and the information appearing in this document are not definitive.

This edition of the manual cancels and replaces all previous versions. In case of modification will be issued a new edition.



## **DECLARATION OF INCORPORATION**

Machines Directive 2006/42/EC, Annex II-B

FACE S.r.l.

Viale delle Industrie, 74 - 31030 Dosson di Casier (TV) - ITALY

## **Declares that:**

The Product automations for power operated pedestrian sliding door type: SW2, SW4, SW5.

Has been built for installation on pedestrian door and constitutes a machine in accordance with Directive 2006/42/EC. The manufacturer of the power operated pedestrian door must declare its conformity in accordance with Directive 2006/42/EC (Annex II-A) prior to starting-up the machine.

It complies with the applicable essential safety requirements specified in Annex I, chapter 1 of Directive 2006/42/EC. It complies with the Electromagnetic Compatibility Directive 2014/30/UE.

It complies with following harmonized standards:

EN 16005 Power operated pedestrian doorsets - Safety in use - Requirements and test methods (chapters: 4.2, 4.3.1, 4.3.2, 4.3.3, 4.4.1, 4.4.4, 4.4.5, 4.6.1, 4.6.3, 4.6.4, 4.6.7, 4.6.8, 4.7.2.4, 5.1, 5.2, 5.3, 5.4, 5.5.3, 5.6, 5.8.1, 5.8.2, 5.8.3, 5.10)

EN 60335-2-103 Household and similar electrical appliances - Safety - Part 2: Particular requirements for drives for gates, doors and windows

The technical documentation complies with Annex VII-B to Directive 2006/42/EC.

The technical documentation is managed by: Ferdinando Menuzzo with registered offices in Viale delle Industrie, 74 - 31030 Dosson di Casier (TV) - ITALY

A copy of the technical documentation shall be supplied to the competent national authorities following duly motivated request.

Place and date:

Dosson di Casier, 2018-12-01

Paelo Bacchin

Managing Director

## 2. TECHNICAL DATA

SW2	SW4	SW5	
Automation type: LIGHT			
(for internal use, not exposed to wind	Automation type: SPRING	Automation type: HEAVY	
pressure)	(with closing spring)		
Dimensions: 82 x 117 x 443 mm	Dimensions: 135 x 118 x 503 mm	Dimensions: 104 x 118 x 463 mm	
(Height x Depth x Length)	(Height x Depth x Length)	(Height x Depth x Length)	
200 kg x 0,8 m	220 kg x 0,8 m	300 kg x 0,8 m	
300	300	300	
250	250	250	
200	200	200	
150	150	150	
100	100	100	
50	50	50	
0	0	0	
0,6 0,7 0,8 0,9 1,0 1,1 1,2 1,3 1,41,5 m  Opening and closing time: 2 – 6 s	0,6 0,7 0,8 0,9 1,0 1,1 1,2 1,3 1,41,5 m  Opening and closing time: 2 – 6 s	0,6 0,7 0,8 0,9 1,0 1,1 1,2 1,3 1,41,5 m  Opening and closing time: 2 – 6 s	
Duty class:	Duty class:	Duty class:	
Continuous operation	Continuous operation	Continuous operation	
Intermittent operation: S3 = 100%	Intermittent operation: S3 = 100%	Intermittent operation: S3 = 100%	
Power supply: 100–240 Vca 50/60 Hz	Power supply: 100–240 Vca 50/60 Hz	Power supply: 100–240 Vca 50/60 Hz	
Rated power: 40 W	Rated power: 70 W	Rated power: 70 W	
Stand-by: 8 W	Stand-by: 8 W	Stand-by: 8 W	
Rated load: 20 Nm	Rated load: 23 Nm	Rated load: 40 Nm	
Protection rating: IP 20	Protection rating: IP 20	Protection rating: IP 20	
Operating temperature:	Operating temperature:	Operating temperature:	
A 15 °C A 150 °C	1 15 °C 1 150 °C	15°C 1 150°C	
Parameter Settings:	Parameter Settings:	Parameter Settings:	
Buttons and Display	Buttons and Display	Buttons and Display	
Connections to control and safety	Connections to control and safety	Connections to control and safety	
devices:	devices:	devices:	
Dedicated connecting terminals	Dedicated connecting terminals	Dedicated connecting terminals	
Power output for accessories:	Power output for accessories:	Power output for accessories:	
12 Vdc (1 A max)	12 Vdc (1 A max)	12 Vdc (1 A max)	
Memory for settings and saving:	Memory for settings and saving:	Memory for settings and saving:	
Micro SD standard	Micro SD standard	Micro SD standard	
Electronic function selector: FSD1,	Electronic function selector: FSD1,	Electronic function selector: FSD1,	
FSD4	FSD4	FSD4	
Battery power device: SWBD	Battery power device: SWBD	Battery power device: SWBD	

N.B. The technical data above refer to average conditions of use and cannot be certain in each case. Each automatic entrance variables such as: friction, balancing and environmental conditions that may substantially change both the duration and the quality of the operation of the automatic or some of its components, including the automation. The installer must to adopt adequate safety coefficients for each particular installation.

## 3. STANDARD INSTALLATION



Rif.	Code	Description
	SW2	SW2 automation (Light) for swing doors
1	SW4	SW4 automation (Spring) for swing doors
	SW5	SW5 automation (Heavy) for swing doors
2	SWSA	Sliding arm
3	SD3	Safety sensor
4	OS1	Opening sensor
5	FSD1, FSD4	Electronic function selector
-	SWBD	Battery power device

Note: Components and codes are those most commonly used in systems for automatic swing doors. The full range of equipment and accessories is also available in the sales list.

The given operating and performance features can only be guaranteed with use of FACE accessories and safety devices.

#### 4. ASSEMBLY PROCEDURE OF THE AUTOMATION

Check the stability, the weight of the leaf and that the movement is smooth and without friction (if necessary to reinforce the frame). Any closing door device must be removed or completely deactivated.

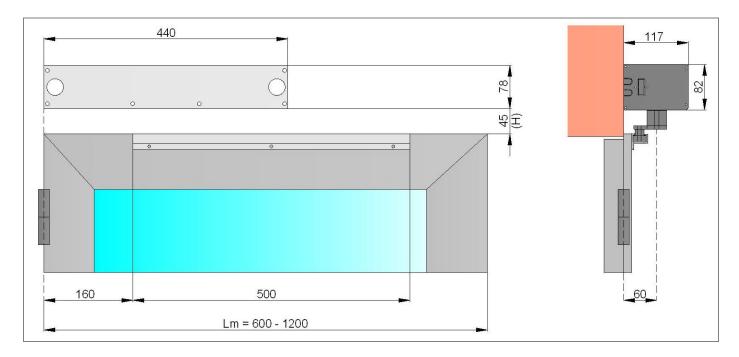
Check the correct operation in case of installation on doors that divide environments at different pressures.

#### 4.1 INSTALLATION OF SW2 AUTOMATION WITH SWSA SLIDING ARM

Use the sliding arm to pull with doors which open inside (view from the automation).

Remove the cover and fix the automation in a stable and leveled way to the wall using the measurements shown in the figure; refer to the axis of the door hinges.

Fix the sliding arm on the door as shown in the figure. Insert the sliding arm in the guide and fix to the automation.



Note: if necessary, you can change the measure H, between the automation and the door, by replacing the spacer, using the codes listed in the table.

(H)	SW2 automation
28	SWSA + SWH17
45	SWSA
62	SWSA + SWH51

Move the door manually, and verify the correct opening and closing smoothly.

Adjust the opening mechanical stop inside the sliding arm.

## CLOSING OF THE AUTOMATION COVER

Fix the cover to the heads using the supplied screws.

#### 4.2 INSTALLATION OF SW2 AUTOMATION WITH SWSA1 SLIDING ARM

Use the sliding arm to push with doors which open outside (view from the automation).

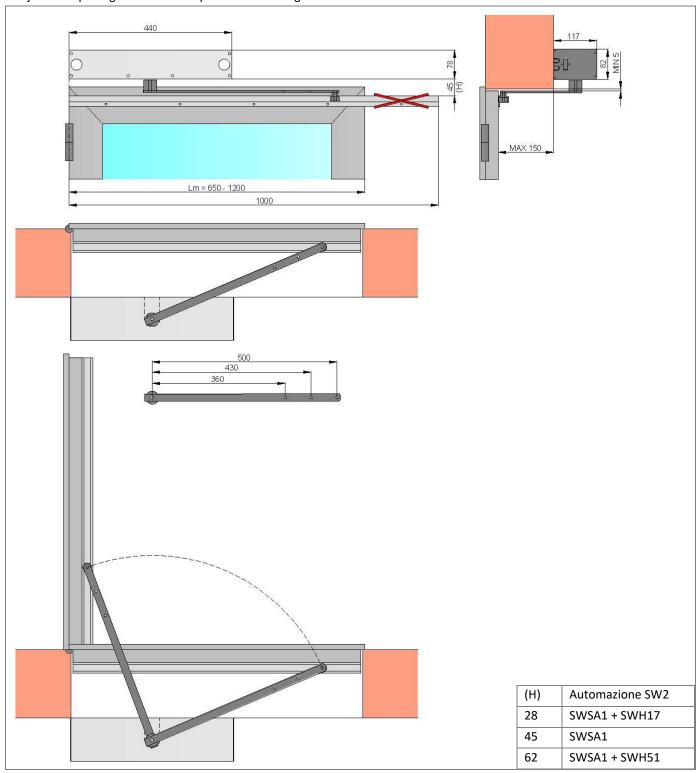
Remove the cover and fix the automation in a stable and leveled way to the wall using the measurements shown in the figure; refer to the axis of the door hinges.

Fix the sliding arm on the door as shown in the figure. Insert the sliding arm in the guide and fix to the automation. If the leaf width is reduced, shorten the sliding guide and the sliding arm.

Note: if necessary, you can change the measure H, between the automation and the door, by replacing the spacer, using the codes listed in the table.

Move the door manually, and verify the correct opening and closing smoothly.

Adjust the opening mechanical stop inside the sliding arm.



## CLOSING OF THE AUTOMATION COVER

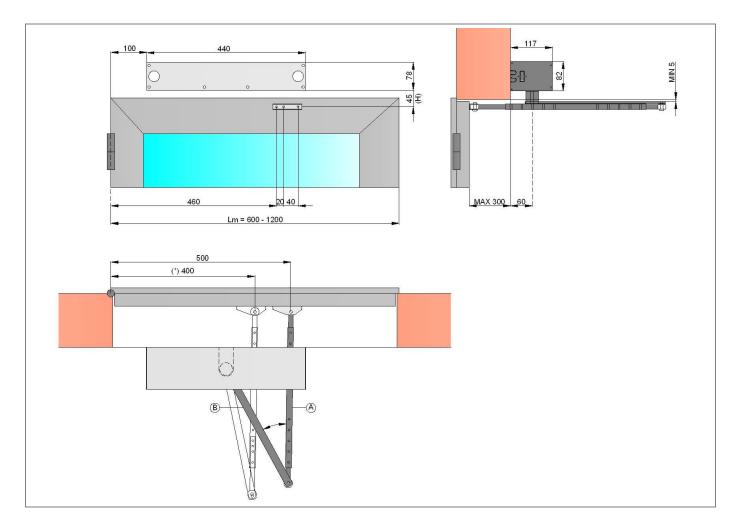
Fix the cover to the heads using the supplied screws.

#### 4.3 INSTALLATION OF SW2 AUTOMATION WITH SWAA ARTICULATED ARM

Use the articulated arm to push with doors which open outside (view from the automation).

Remove the cover and fix the automation in a stable and leveled way to the wall using the measurements shown in the figure; refer to the axis of the door hinges.

Fix the bracket of the articulated arm on the door, using the measurements shown in the figure.



Note: if necessary, you can change the measure H, between the automation and the door, by replacing the spacer, using the codes listed in the table.

SW2 automation
SWAA + SWH17
SWAA
SWAA + SWH51

Fix the articulated arm to the automation, and fix the other end of the articulated arm to the door.

Move the door in the closed position, and adjust the length of the half-arm [A] so that the angle between the two half-arms [A] and [B] is the greater possible.

(\*) To increase the opening force it is possible to reduce the angle and reduce the measurement of fixing of the articulated arm, as shown in figure.

Move the door manually, and verify the correct opening and closing smoothly.

Install the opening mechanical stop (not supplied by us).

Note: the mechanical stop on the floor must be fixed in a visible position and must not create tripping hazard.

#### CLOSING OF THE AUTOMATION COVER

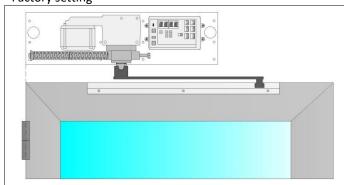
Fix the cover to the heads using the supplied screws.

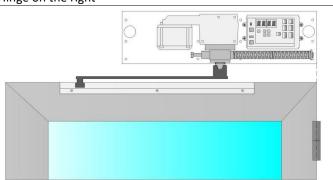
## 4.4 INSTALLATION OF SW4 AUTOMATION WITH SWSA SLIDING ARM

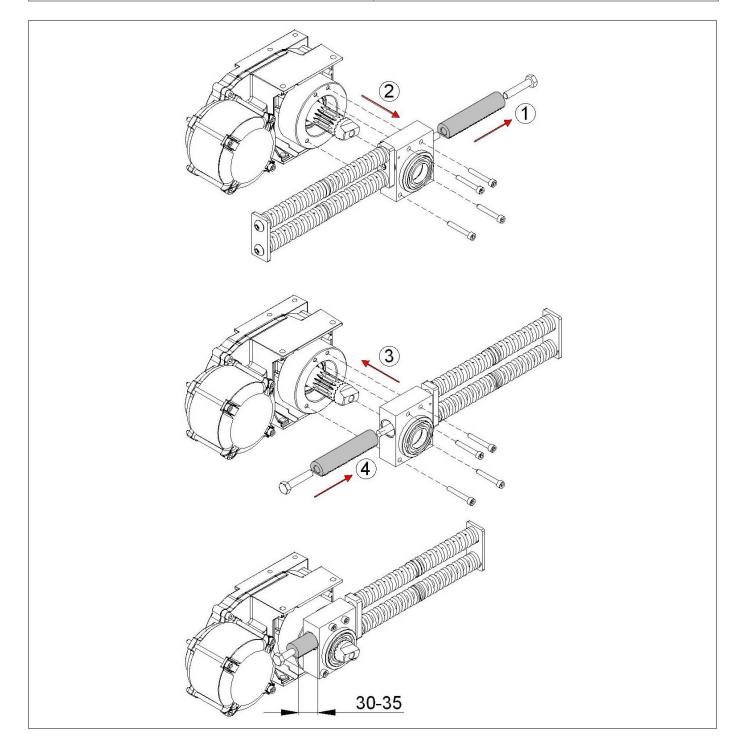
Use the sliding arm to pull with doors which open inside (view from the automation).

If the door has the hinge on the right, disassemble the gear motor group from the automation and move the spring group from the left side to the right side of the automation, as shown in the figure.

Factory setting Hinge on the right

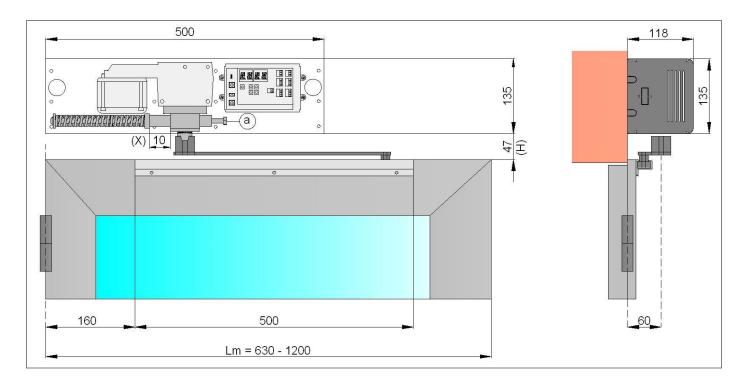






Remove the cover and fix the automation in a stable and leveled way to the wall using the measurements shown in the figure; refer to the axis of the door hinges.

Fix the sliding arm on the door as shown in the figure. Insert the sliding arm in the guide and fix to the automation (use the screw  $M8 \times 50$ )



Note: if necessary, you can change the measure H, between the automation and the door, by replacing the spacer, using the codes listed in the table.

(H)	SW4 automation
30	SWSA + SWH17
47	SWSA
64	SWSA + SWH51

#### PRE-CHARGING OF THE CLOSING SPRINGS

Tighten the screw [a] and compress the springs of about X = 10 mm, as shown in the figure.

Move the door manually, and verify the correct opening and closing force.

Adjust the opening mechanical stop inside the sliding arm.

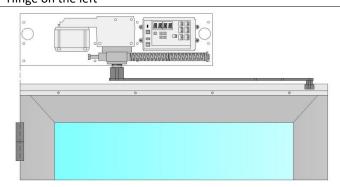
## CLOSING OF THE AUTOMATION COVER

#### 4.5 INSTALLATION OF SW4 AUTOMATION WITH SWSA1 SLIDING ARM

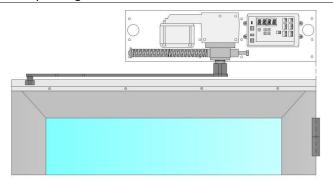
Use the sliding arm to push with doors which open outside (view from the automation).

If the door has the hinge on the left, disassemble the gear motor group from the automation and move the spring group from the left side to the right side of the automation, as shown in chapter 4.4.

Hinge on the left



Factory setting



Remove the cover and fix the automation in a stable and leveled way to the wall using the measurements shown in the figure; refer to the axis of the door hinges.

Fix the sliding arm on the door as shown in the figure. Insert the sliding arm in the guide and fix to the automation (use the screw M8 x 50). If the leaf width is reduced, shorten the sliding guide and the sliding arm.

Note: if necessary, you can change the measure H, between the automation and the door, by replacing the spacer, using the codes listed in the table.

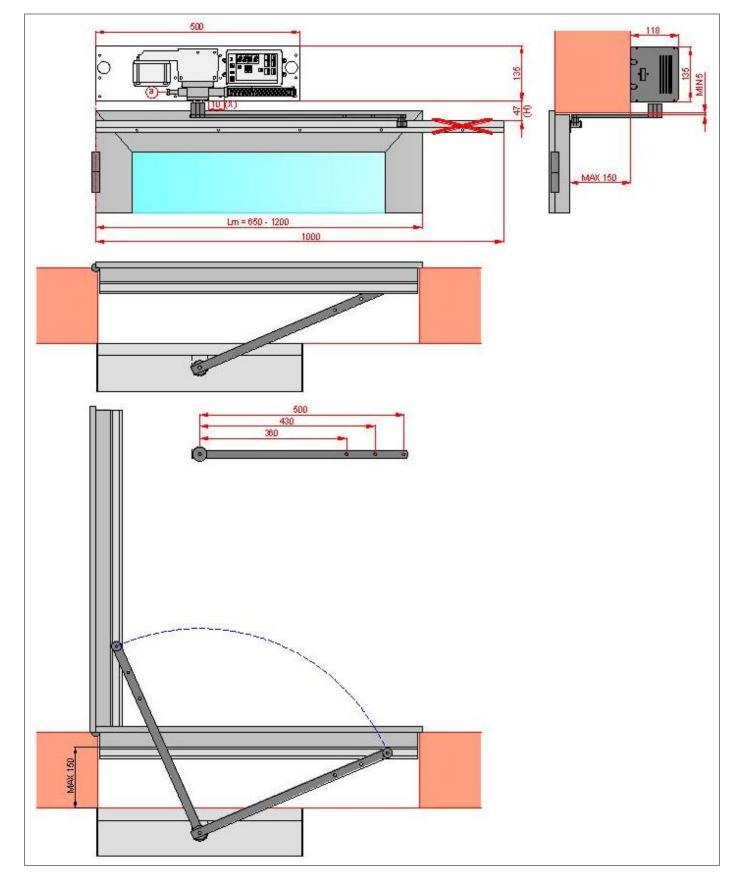
(H)	SW4 automation
30	SWSA1 + SWH17
47	SWSA1
64	SWSA1 + SWH51

#### PRE-CHARGING OF THE CLOSING SPRINGS

Tighten the screw [a] and compress the springs of about X = 10 mm, as shown in the figure.

Move the door manually, and verify the correct opening and closing force.

Adjust the opening mechanical stop inside the sliding arm.

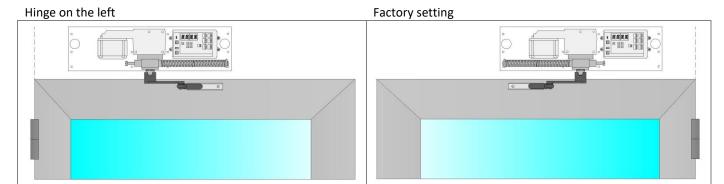


## CLOSING OF THE AUTOMATION COVER

## 4.6 INSTALLATION OF SW4 AUTOMATION WITH SWAA ARTICULATED ARM

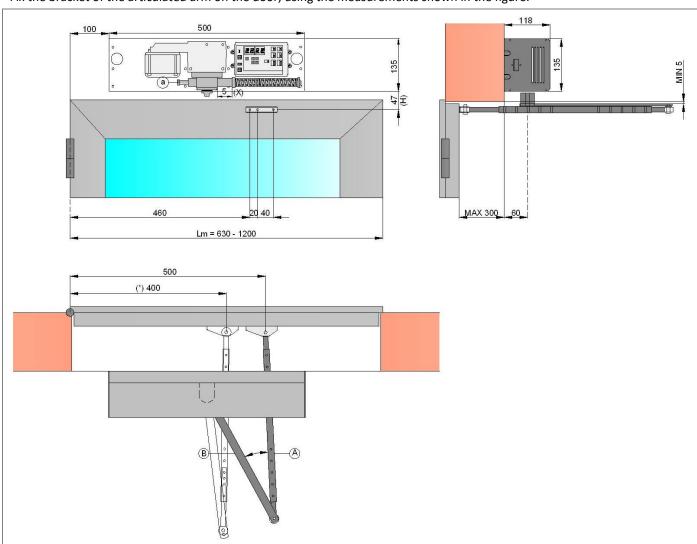
Use the articulated arm to push with doors which open outside (view from the automation).

If the door has the hinge on the left, disassemble the gear motor group from the automation and move the spring group from the left side to the right side of the automation, as described in chapter 4.4.



Remove the cover and fix the automation in a stable and leveled way to the wall using the measurements shown in the figure; refer to the axis of the door hinges.

Fix the bracket of the articulated arm on the door, using the measurements shown in the figure.



Note: if necessary, you can change the measure H, between the automation and the door, by replacing the spacer, using the codes listed in the table.

(H)	SW4 automation
30	SWAA + SWH17
47	SWAA
64	SWAA + SWH51

Fix the articulated arm to the automation (use the screw M8 x 50), and fix the other end of the articulated arm to the door.

Move the door in the closed position, and adjust the length of the half-arm [A] so that the angle between the two half-arms [A] and [B] is the greater possible.

(\*) To increase the opening force it is possible to reduce the angle and reduce the measurement of fixing of the articulated arm, as shown in figure.

#### PRE-CHARGING OF THE CLOSING SPRINGS

Tighten the screw [a] and compress the springs of about X = 5 mm, as shown in the figure.

Move the door manually, and verify the correct opening and closing force.

Install the opening mechanical stop (not supplied by us).

Note: the mechanical stop on the floor must be fixed in a visible position and must not create tripping hazard.

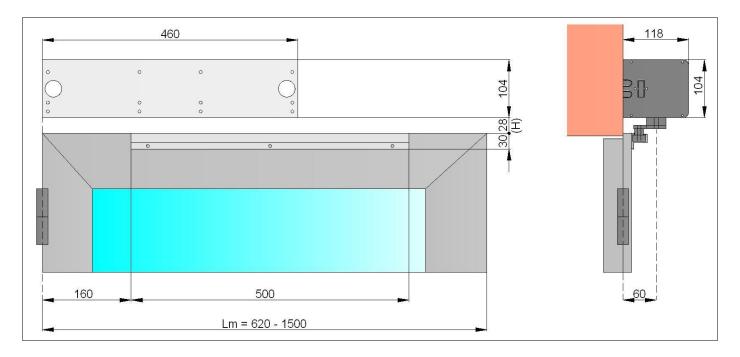
#### **CLOSING OF THE AUTOMATION COVER**

#### 4.7 INSTALLATION OF SW5 AUTOMATION WITH SWSA SLIDING ARM

Use the sliding arm to pull with doors which open inside (view from the automation).

Remove the cover and fix the automation in a stable and leveled way to the wall using the measurements shown in the figure; refer to the axis of the door hinges.

Fix the sliding arm on the door as shown in the figure. Insert the sliding arm in the guide and fix to the automation.



Note: if necessary, you can change the measure H, between the automation and the door, by replacing the spacer, using the codes listed in the table.

(H)	SW5 automation
28	SWSA
45	SWSA + SWH51
62	SWSA + SWH68

Move the door manually, and verify the correct opening and closing smoothly.

Adjust the opening mechanical stop inside the sliding arm.

## CLOSING OF THE AUTOMATION COVER

#### 4.8 INSTALLATION OF SW5 AUTOMATION WITH SWSA1 SLIDING ARM

Use the sliding arm to push with doors which open outside (view from the automation).

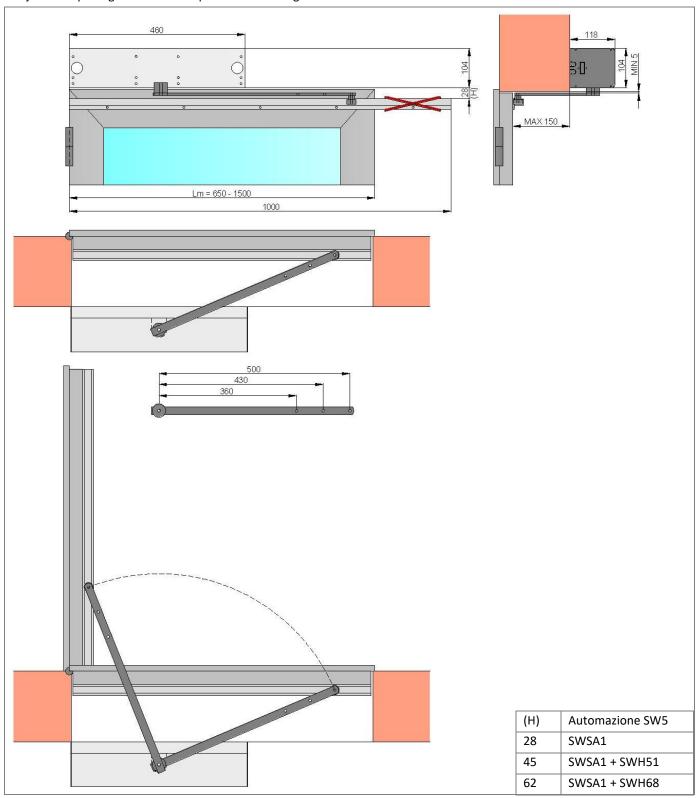
Remove the cover and fix the automation in a stable and leveled way to the wall using the measurements shown in the figure; refer to the axis of the door hinges.

Fix the sliding arm on the door as shown in the figure. Insert the sliding arm in the guide and fix to the automation. If the leaf width is reduced, shorten the sliding guide and the sliding arm.

Note: if necessary, you can change the measure H, between the automation and the door, by replacing the spacer, using the codes listed in the table.

Move the door manually, and verify the correct opening and closing smoothly.

Adjust the opening mechanical stop inside the sliding arm.



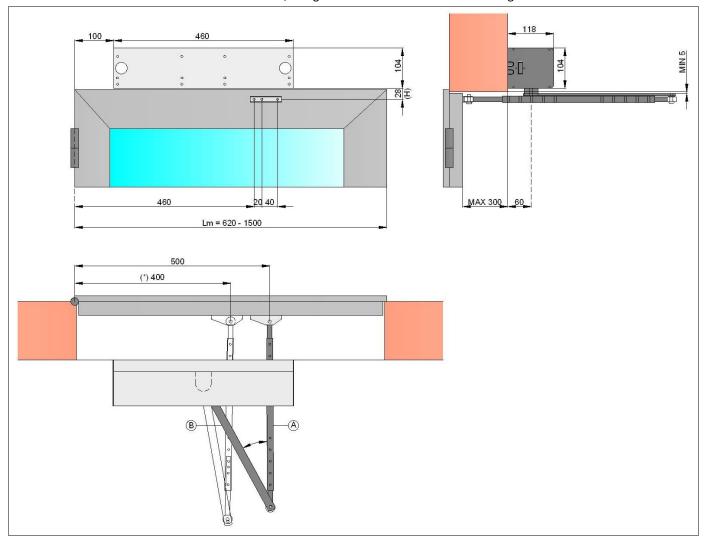
#### CLOSING OF THE AUTOMATION COVER

#### 4.9 INSTALLATION OF SW5 AUTOMATION WITH SWAA ARTICULATED ARM

Use the articulated arm to push with doors which open outside (view from the automation).

Remove the cover and fix the automation in a stable and leveled way to the wall using the measurements shown in the figure; refer to the axis of the door hinges.

Fix the bracket of the articulated arm on the door, using the measurements shown in the figure.



Note: if necessary, you can change the measure H, between the automation and the door, by replacing the spacer, using the codes listed in the table.

(H)	SW5 automation
28	SWAA
45	SWAA + SWH51
62	SWAA + SWH68

Fix the articulated arm to the automation, and fix the other end of the articulated arm to the door.

Move the door in the closed position, and adjust the length of the half-arm [A] so that the angle between the two half-arms [A] and [B] is the greater possible.

(\*) To increase the opening force it is possible to reduce the angle and reduce the measurement of fixing of the articulated arm, as shown in figure.

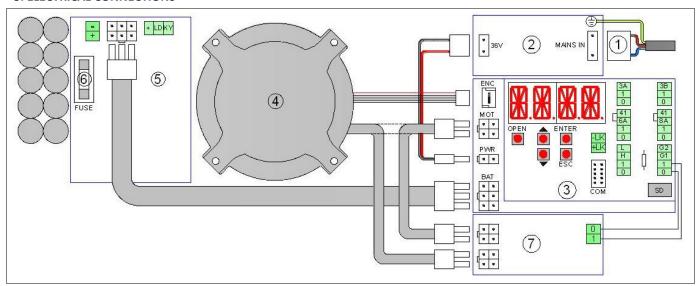
Move the door manually, and verify the correct opening and closing smoothly.

Install the opening mechanical stop (not supplied by us).

Note: the mechanical stop on the floor must be fixed in a visible position and must not create tripping hazard.

#### CLOSING OF THE AUTOMATION COVER

#### 5. ELECTRICAL CONNECTIONS



Rif.	Code	Terminals	Description
1	2329	MAINS IN	Cable for connection to the power supply.
2	3TFEPS6536C	PWR	Switching power supply 36V 65W (for SW2 automation)
2	3TFEPS7536C	PWR	Switching power supply 36V 75W (for SW4 and SW5 automation)
3	5CB03		Electronic control
_	2B9015	MOT	Brushless motor (for SW2 automation)
4	2B9030	MOT	Brushless motor (for SW4 and SW5 automation)
		ENC	Angular sensor
5	SWBD	BAT	Battery power device
6		FUSE	Battery fuse 5x20 - F10A
7	5EA04	MOT	Braking card (for SW4 automation)

## **5.1 GENERAL SAFETY ELECTRICAL PRECAUTIONS**

Installation, electrical connections and adjustments must be completed in conformity with Good Working Methods and with regulations in force.

Before making power connections, check that the rating corresponds to that of the mains supply. A multipolar disconnection switch with a contact opening gap of at least 3 mm must be included in the mains supply. This switch must be protected from unauthorized activations.

Check that, upstream of the electrical installation, an adequate residual current circuit breaker and an overcurrent cut out are fitted.

Connect the automation to an effective earthing system carried out as indicated by current safety regulations.

During installation, maintenance and repair operations, cut off the power supply before opening the cover to access the electrical parts. To handle electronic parts, wear earthed antistatic conductive bracelets.

FACE declines all responsibility in the event of components which are not compatible with the safe and correct operation of the product.

For repairs or replacements of products only original spare parts must be used.

## **5.2 POWER SUPPLY ELECTRICAL CONNECTION**

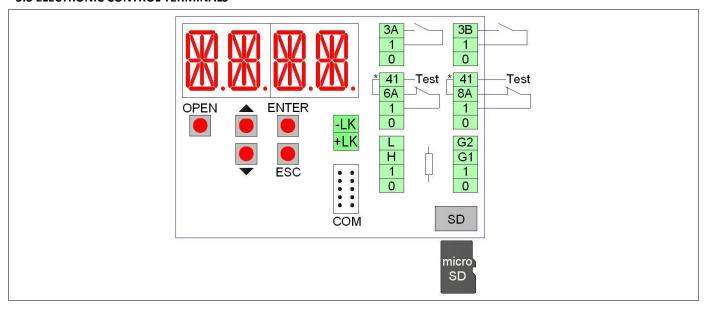
Use the supplied cable for connection to electricity.

If the path of the power cord is outer portion automation, drill the cap on the suitable area, and route the power cable through a channel (not supplied by us) to the junction box.

Make sure there are no sharp edges that might damage the power cable.

The connection to the mains supply in the outer portion automation, should be an independent channel, separated from the connections to control and safety devices.

## **5.3 ELECTRONIC CONTROL TERMINALS**



Note: The terminals with the same number are equivalent.

The electronic control comes with the jumpers on the terminals with an asterisk [\*]. When connecting safety devices remove the jumpers of the corresponding terminals.

Terminals	Description
0-1	Output 12 Vdc for external powering accessories. The maximum absorption of 1 A corresponds to the sum of all the terminals 1 (+12V).
1 – 3A	Contact N.O. opening A side (interior side).
1 – 3B	Contact N.O. opening B side (outer side).
1 – 8A	Closing safety contact N.C. The opening of the contact causes the reversal of the movement.  Note: connect safety devices with test (see terminal 41), and remove the jumper 41 - 8A.
1 – 6A	Opening safety contact N.C. The opening of the contact stops the movement during the opening phase; the door closes after 3s. If the automation is closed, the opening of the contact prevents the opening. Note: connect safety devices with test (see terminal 41), and remove the jumper 41 - 6A.
41	Test output (+12 V). Connect the safety devices with test (in accordance with EN 16005), as indicated in the following chapters.  Note: in case of devices without test, connect the N.C. contact to terminals 41 - 8A or 41 - 6A.
1 – G1	Input terminal provided for general use.
0 – G1	Output terminal (12 Vdc, 20 mA max) provided for general use.
	Using the ADV > STG1 menu you can choose a specific function to the G1 terminal.
1 – G2	Input terminal provided for general use.
	Using the ADV > STG2 menu you can choose a specific function to the G2 terminal.
0 – 1 – H – L	Bus connection to the function selector.
+LK / -LK	Output 12V-24V (1A max) for electric lock.
SD	Standard connection for memory cards Micro SD. Allows saving the door settings and loading the firmware updates.
СОМ	Connection for remote communication

Buttons	Description
OPEN	Open the door.
$\uparrow$	Scroll the menu and increase of selected values.
<b>\</b>	Scroll the menu and reduction of selected values.
ENTER	Button to select the menu and save the selected data.
ESC	Exit the menu.

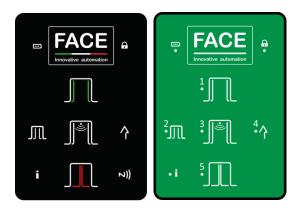
#### **5.4 ELECTRICAL CONNECTION OF FUNCTION SELECTOR**

Connect the 0-1-H-L terminals of the function selector, by cable (not supplied by us), to the 0-1-H-L terminals of the electronic control.

Note: for lengths over 10 m, use a cable with 2 twisted-pairs.

After connecting, the function selector is working. If you want to limit the use only by authorized personnel, use proximity badges (13,56MHz ISO15693 and ISO14443 Mifare) or numeric code (max 50 badges and codes).

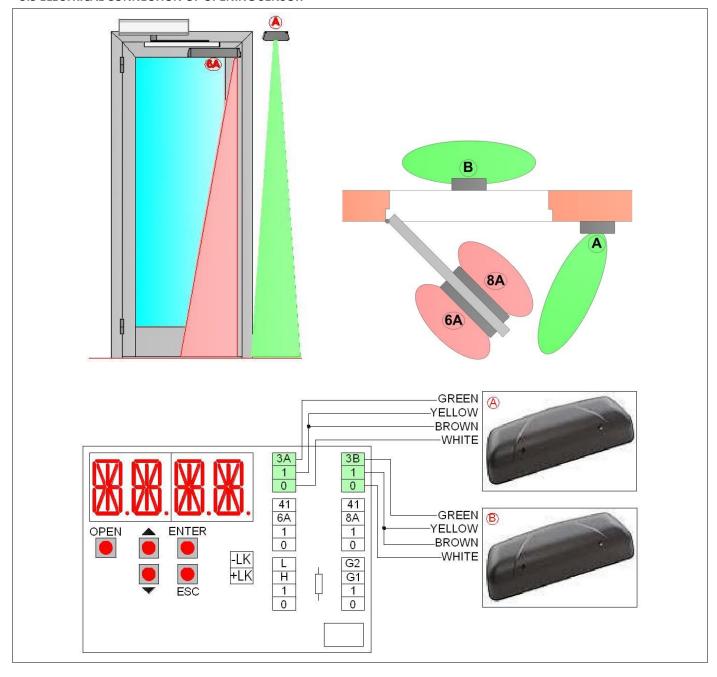
The function selector allows the following settings.



Symbol	Description
- Symbol	OPEN DOOR
	When selected, the symbol lights up, the door is permanently open.
J) (L	Note: the leaves can still be handled manually.
	AUTOMATIC BI-DIRECTIONAL OPERATION
ெ	When selected, the symbol lights up, the door works automatic in bidirectional mode.
	RESET
ے) رر	Select the symbol for 5 seconds, the automation performs the self-test and the automatic learning.
	CLOSED DOOR
	When selected, the door is permanently closed.
	Note: using the menu SEL > DLAY you can adjust the delay time to close the door.
اللا	MANUAL OPERATION
	Select the symbol for 3 seconds, the symbol flashes and the door can be moved manually.
(77)	AUTOMATIC PARTIAL OPERATION
$\int \int $	In the case of a door with 2 automations, when selected, the symbol lights and allows the automatic
77 CF	operation of only one leaf.
<b>^</b>	AUTOMATIC ONE-WAY OPERATION
	When selected, the symbol lights up and automatic operation of the door is in one-way mode.
	FUNCTION SELECTOR IS NOT ACTIVE
	The symbol lights up when the function selector is not active. To activate the temporary operation of the
<b>⊕</b>	function selector is necessary to approach the badge to the NFC symbol (FSD1), or enter the code (FSD4),
	or select for 3 seconds the logo.
FAOE	ACTIVATION OF THE FUNCTION SELECTOR
FACE	Select the logo for 3 seconds (the lock symbol light off), the function selector is activated for 10 seconds.
Innovative automation	Expired the time the function selector switches off (the lock symbol lights up).
	FSD1 - Authorized activation of function selector by badge.
<i>((1</i> )	Approach the badge to the NFC symbol (the lock symbol light off), the function selector is activated for 10
//	seconds. Expired the time the function selector switches off (the lock symbol lights up).
1	<b>FSD4</b> - Authorized activation of function selector by numeric code.
1	Press the logo, enter the code (maximum 5 numbers), press the logo for confirmation, (the lock symbol
2 3 4	light off), the function selector is activated for 10 seconds. Expired the time the function selector switches
5	off (the lock symbol lights up).
	BATTERY SIGNAL
<b></b>	Battery symbol off = the door is operating with the mains supply
ш.	Battery symbol on = the door is operating with battery power
	Battery symbol flashing = the battery is low or disconnected
	INFORMATION SIGNAL
	Information symbol on = it is necessary to perform the ordinary maintenance of the door.
•	Information symbol flashing = shows the presence of alarms:
1	- 1 flash = failure of electronic control or locking device;
	- 2 flashes = mechanical failure;
	- 3 flashes = failure of sensor safety test;

- 4 flashes = motor overtemperature.

## 5.5 ELECTRICAL CONNECTION OF OPENING SENSOR



Connect the sensor, using the supplied cable to the terminals of the electronic control as follows:

	5CB03	OS1 (PrimeMotionB), OS2 (PrimeMotionC)	Notes
G	0	White	
	1	Brown	
PE	1	Yellow	
0	3A (3B)	Green	

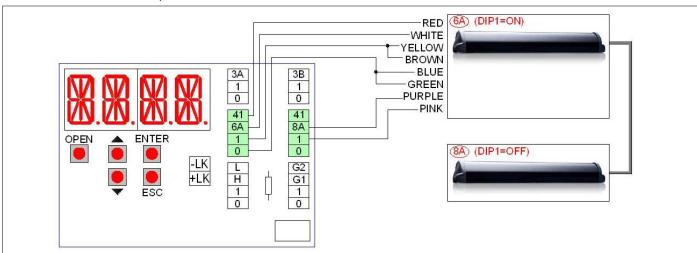
For more information, check the installation manual of the sensor.

## **5.6 ELECTRICAL CONNECTION OF SAFETY SENSOR**

The safety sensors should be installed directly on the leaf of the door, and protect both the opening and the closing of the swing door.

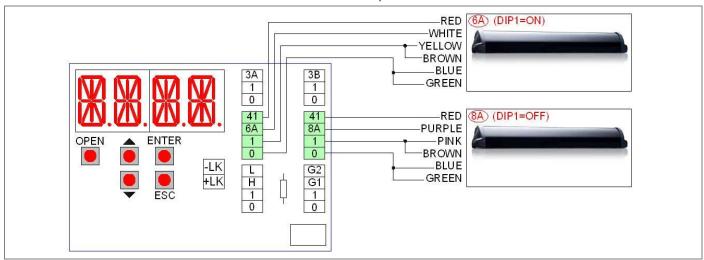
To simplify the installation of the safety sensors, you can choose one of the following two options.

- OPTION 1: Connect the 2 sensors to each other, using the supplied cable. Connect only one of the 2 sensors to the electronic control terminals, as shown below.



	5CB03	SD3 (4SAFE ON SW)	Notes
	0	Green	
	0	Blue	
	1	Brown	
	1	Yellow	
SAF	6A	White (DIP1=ON)	Remove the jumper
0,	41	Red	
	1	Pink	
	8A	Purple (DIP1=OFF)	Remove the jumper

- OPTION 2: Connect each sensor to the electronic control terminals, as shown below.



	5CB03	SD3 (4SAFE ON SW)	Notes		5CB03	SD3 (4SAFE ON SW)	Notes
	0	Green			0	Green	
	0	Blue			0	Blue	
	1	Brown			1	Brown	
SAF	1	Yellow		SAF	1	Pink	
0,	6A	White (DIP1=ON)	Remove the jumper	0,	8A	Purple (DIP1=OFF)	Remove the jumper
	41	Red			41	Red	

For more information, check the installation manual of the sensor.

## 5.7 ELECTRICAL CONNECTION OF A DOOR WITH 2 LEAVES

To coordinate the operation of two automatic swing doors with the closing overlap of the leaves (see figure), procedures as follows.

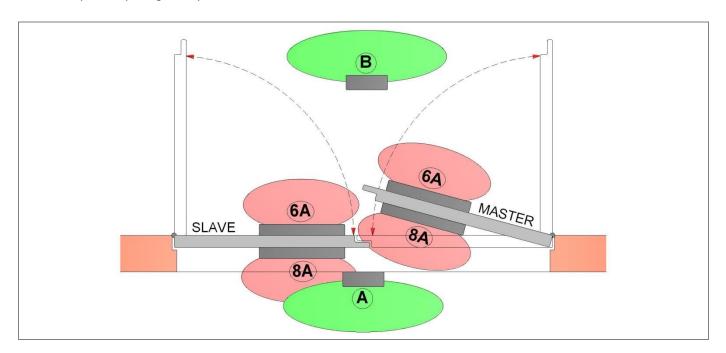
Using a 3-wire cable (1-H-L), connect the 2 automations MASTER-SLAVE, as shown in the figure.

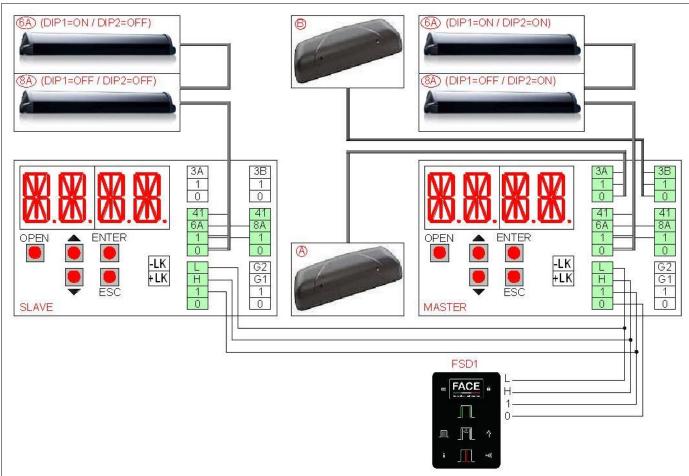
Using the menu of the electronic control, set: ADV> SYNC> MST1 on MASTER automation and ADV> SYNC> SLV1 on SLAVE automation.

Connect the opening sensors as described in chapter 5.5 and connect the safety sensors as described in chapter 5.6.

If desired, connect the function selector, as shown in the figure.

Note: the partial opening of only one leaf is referred to the MASTER automation.





#### 5.8. ELECTRICAL CONNECTIONS OF ELECTRIC LOCK

Automations for swing doors are compatible with most of the electric locks available in the market. Verify that power supply of the electric lock is 12Vdc or 24Vdc, and that the maximum current is 1 A.

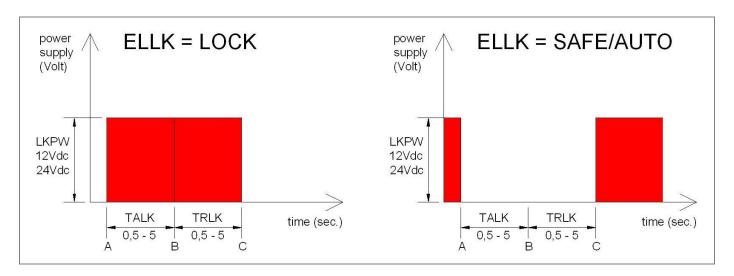
- Connect the electric lock to terminals LK + and –LK of the electronic control.
- Set the electric lock power supply, using menu: ADV > LKPW > 12Vdc or 24Vdc.
- Set the type of electric lock operation, using menu: ADV > ELLK > LOCK or SAFE/AUTO.
- Set the operating time of the electric lock, using menu: ADV > TRLK > from 0,5 to 5,0 seconds.
- Set the start of the door opening delay time, using menu: ADV > TALK > from 0,5 to 5,0 seconds.

In the figure are shown the timing of the electric lock operation:

A = start of opening pulse and electric lock power supply on/off,

B = start of door opening,

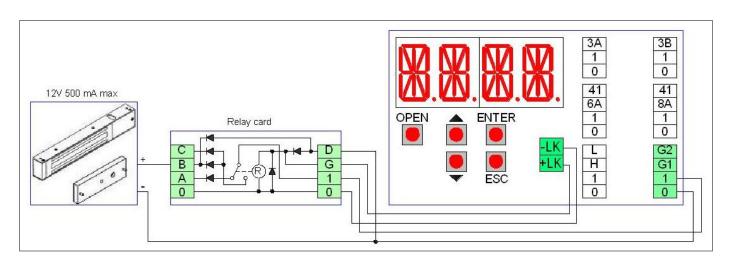
C = end of electric lock power supply on/off.



## 5.9 ELECTRICAL CONNECTIONS OF ELECTROMAGNET 12 Vdc

In case the electromagnet used requires a stabilized power supply of 12 Vdc (with absorption of 500 mA max), use the relay card and make the connections shown in the figure.

- Set from menu: ADV > ELLK > SAVE or AUTO.
- Set from menu: ADV > LKPW > 12.



## **6. ELECTRONIC CONTROL ADJUSTEMENT**

The electronic control has 4 buttons and 4 alphanumeric displays to set all the necessary adjustments.

After turning on the electronic control, the display shows the word "MENU". The operation of the four keys are indicated in the table.

Keys	Description	
ENTER	Select button, each time you press the button you enter on the selected parameter.  Save button, pressing for 1 seconds you "SAVE" the selected value.  MENU = Main parameters menu  ADV = Advanced parameters menu  SEL = Function selector menu  MEM = Memory management menu  INFO = Information and diagnostics menu	ENTER
ESC	Exit button, exit from all the parameter or exit from the menu.	
$\uparrow$	Scroll button, each press selects a menu item or increases the value of the selected item.	● ● ▼ ESC
<b>→</b>	Scroll button, each press selects a menu item or reduces the value of the selected item.	

# **6.1 MENU (BASIC SETTINGS MENU)**

Using the buttons  $\uparrow$  and  $\downarrow$  choose MENU, press ENTER to select and adjust the following parameters.

Display	Description Fa	actory settings
DOOR	Setting the automation type. Choose between the following values:	SW2
DOOR TYPE	SW2 = SW2 automation (LIGHT)	
	SW4 = SW4 automation (SPRING)	
	SW5 = SW5 automation (HEAVY)	
OPEN	Setting the opening direction. Choose between the following values:	<del>-</del>
OPENING	← = door hinged on left	
DIRECTION	→ = door hinged on right	
ARM	Setting the type of arm. Choose between the following values:	SA
ARM TYPE	SA = sliding arm to pull	
	SA1 = sliding arm to push	
	AA = articulated arm to push	
VOP	Opening speed setting. Choose between the minimum and maximum:	50
OPENING	minimum value = 15 deg/s	
SPEED	maximum value = 70 deg/s	
VCL	Closing speed setting. Choose between the minimum and maximum:	50
CLOSING	minimum value = 15 deg/s	
SPEED	maximum value = 70 deg/s	
TAC	Open door time setting. Choose between the minimum and maximum:	1
CLOSING TIME	NO = the door is always open	
	minimum value = 1 s	
	maximum value = 30 s	
PUSH	Force setting. Choose between the minimum and maximum:	10
MOTOR	minimum value = 1	
POWER	maximum value = 10	
LEAF	Setting the weight of the door. Choose between the following values:	MED
DOOR WEIGHT	MIN = light door	
	MED = medium door	
	MAX = heavy door	
RAMP	Set the acceleration time. Choose between the minimum and maximum values:	400
ACCELERATION	minimum value = 100 ms (maximum acceleration)	
TIME	maximum value = 2000 ms (minimum acceleration)	
BTMD	Setting operation of battery power device, in absence of electricity. Choose between the followi	ng NO
BATTERY	values:	
MODE	NO = battery not connected	
	EMER = emergency open	
	CONT = continuation of normal operation of the door, with last cycle of opening	
	Note: the number of operations with battery, depends on the efficiency of the battery, the weig	ht of
	the doors and the present friction.	

# **6.2 ADV (ADVANCED PARAMETERS MENU)**

Using the buttons  $\uparrow$  and  $\downarrow$  select ADV, press ENTER to select and adjust the following parameters.

Display	<b>Description</b> Factor	y settings
8AEX	Exclusion of the operation of the sensor closing safety. Choose between the minimum and maximum	0
8A-	values:	
EXCLUSION	minimum value = 0%	
	maximum value = 50%	
6AEX	Exclusion of the operation of the sensor opening safety. Choose between the minimum and	0
6A-	maximum values:	
EXCLUSION	minimum value = 0%	
	maximum value = 50%	
ST6A	Operation of 6A safety command, after the door stop. Choose between the following values:	CLOS
6A-SETTING	CLOS = automatic closing of the door	
	OPEN = continues the opening of the door	
ELLK	Selecting the electric lock. Choose between the following values:	NO
LOCK	NO = electric lock not connected	
OPERATION TYPE	LOCK = standard electric lock (security operation)	
IIFL	SAFE = anti-panic electric lock (safety operation)	
	AUTO = anti-panic electric lock (operation matched to the function selector)	
LKPW	Power supply electric lock. Choose between the following values:	12
LOCK POWER	12 = 12V electric lock	
SUPPLY	24 = 24V electric lock	
TALK	Time advance operating electric lock. Choose between the minimum and maximum values:	0.5
LOCK	minimum value = 0,5 s	
ADVANCE TIME	maximum value = 5,0 s	
TRLK	Operating time of the electric lock. Choose between the minimum and maximum values:	0.5
LOCK	minimum value = 0,5 s	0.0
OPERATION	maximum value = 5,0 s	
TIME		MAED
LKSH LOCK	Setting of closing push for hooking the electric lock. Choose between the following values:	MED
HOOKING	NO = no push	
	MIN = light push MED = medium push	
	MAX = heavy push	
PUCL	Setting the push on the closed mechanical stop. Choose between the following values:	MIN
PUSH DOOR	NO = no push	IVIIIN
CLOSED	MIN = light push	
	MED = medium push	
	MAX = heavy push	
	XMAX = very heavy push	
PIPP	Setting of the opening push. Choose between the following values:	NO
PUSH DOOR	NO = no push	110
OPEN	YES = push enabled (disabled with ANG)	
HOLD	Setting the push of keeping the door open. Choose between the following values:	MED
HOLD DOOR	NO = no push	IVILD
OPEN	MIN = light push	
	MED = medium push	
	MAX = heavy push	
HAND	Manual operation of the door in power-assisted mode or with push opening. Choose between the	PUGO
MANUAL	following values:	. 555
OPERATION	NO = disabled manual operation power-assisted	
	MIN = minimum manual operation power-assisted (Note: the safety devices are disabled)	
	MAX = maximum manual operation power-assisted (Note: the safety devices are disabled)	
	PUGO = push opening enabled	
	i to the Ottober	

Display	<b>Description</b> Fa	ctory settings
ANG	Selecting of the door opening angle. Choose between the following values:	NO
OPENING ANGLE	NO = the door opens up to the mechanical opening stop	
	50 240 = the door opens up to the selected angle (minimum angle = 50)	
	Note: the value indicated refers to the arm angle and not to the door angle	
TAKO	Open door time setting, after the 1-KO command. Choose between the minimum and maxim	um: NO
KO-CLOSING TIME	minimum value = 1 s	
ITIVIE	maximum value = 30 s	
	NO = the door is always open	
	NO = see MENU > TAC	
MOT	Setting the manual friction of the door, by means of the electrical connection of the motor	SC
MOTOR CIRCUIT	windings. Choose between the following values:	
	OC = manual door opening without friction (motor with open circuit windings)	
	SC = manual door opening with friction (motor with short-circuit windings)	
T41	Enable test for safety devices (in accordance with EN 16005). Choose between the following	YES
SAFETY TEST	values:	
	NO = test disabled	
	YES = test enable	
SYNC	Door with 2 leaves, setting of master-slave synchronization. Choose between the following va	alues: NO
DOOR SYNCHRO- NIZATION	NO = no synchronization (door with 1 leaf)	
NIZATION	MST1 = automation MASTER which opens first	
	SLV1 = automation SLAVE which closes first	
	MST2 = external automation MASTER which opens first (see menu: ADV > INK > EXT)	
	SLV2 = external automation SLAVE which closes first (see menu: ADV > INK > EXT)	
SDLY	Door with 2 leaves, setting of delay of movement between Master-Slave. Choose between th	e MED
DOOR DELAY	following values:	
	NO = leaves without overlap	
	MIN = minimum delay	
	MED = medium delay	
	MAX = maximum delay	
INK	Interlocked operation of two automatic doors, the opening of a door is permitted only whe	n the NO
INTER-LOCKED DOOR	other door is closed. Choose between the following values.	
BOOK	NO = no interlock	
	INT = internal door	
	EXT = external door	
ID	If several automations are connected to the network via the 1-H-L terminals, they must have	NO
IDENTIFICATION NUMBER	different identification numbers. Choose between the following values:	
OWIDEN	NO = no network	
	0/1/2/3/4/5/6/7/8/9/10/11/12/13/14	

Display	<b>Description</b> F	actory settings
STG1 G1-SETTING	INPUT COMMANDS BETWEEN 1-G1 TERMINALS. Choose between the following values.  NO = no function  KO = opening command	NO
	KO2 = semi-priority opening command (not active with function selector in closed door) KC = closing command	
	VOPN = N.O. opening limit-switch STEP = Step-by-step contact N.O. The closing of the contact performs in sequence the opening (disabled automatic closure) and the closing of the door.	
	SAM = Automatic setting command of function selector. The closing of the contact changes the function selector mode (see menu: SEL > SAM1 and SEL > SAM2).  EMER = Emergency opening contact N.C. The opening of the 1-G1 contact opens the door.	
	RSET = reset command  CAB = Step-by-step contact N.O. The closing of the contact performs in sequence the closing of door (disabling 3A/3B terminals, enabling the signaling for occupied cabin) and the opening of the door (enabling 3A/3B terminals, disabling the signaling for occupied cabin).	
	INKE = Interlocked operation exclusion command between two doors (see menu: ADV > INK). PART = Opening command for the MASTER door only (see menu: ADV > SYNC).	
	OUTPUT SIGNALS BETWEEN 0-G1 TERMINALS (12Vdc 20mA). Choose between the following value BELL = The output is activated for 3 seconds when people enter the store (through the sequentiactivation of the contacts: 1-3B and 1-3A).  SERV = The output is activated when the door reaches the number of maintenance cycles, set us	al
	the menu: INFO > SERV.  WARN = The output is activated when at least one warning remains active for 5 minutes. For retthe alarm signal make a reset or turn off the power supply.	nove
	CLOS = The output is activated when the door is closed  OPEN = The output is activated when the door is open	
	AIR = The output is activated when the door is not closed LAMP = The output is activated when the door is moving	
	CABS = Signaling of the occupied cabin (see menu: ADV > STG2 > CAB)  INK = Red traffic light signaling for interlocked doors (see menu: ADV > INK)  PWOF = The output is activated in the absence of power supply (W128)  HAND = The output is activated when the door is opened by hand	
STG2	INPUT COMMANDS BETWEEN 1-G2 TERMINALS. Choose between the following values.	NO
G2-SETTING	NO = no function KO = opening command KO2 = semi-priority opening command (not active with function selector in closed door) KC = closing command	
	VOPN = N.O. opening limit-switch STEP = Step-by-step contact N.O. The closing of the contact performs in sequence the opening (disabled automatic closure) and the closing of the door.	
	SAM = Automatic setting command of function selector. The closing of the contact changes the function selector mode (see menu: SEL > SAM1 and SEL > SAM2).	
	EMER = Emergency opening contact N.C. The opening of the 1-G2 contact opens the door.  RSET = reset command  CAR Standard to the product N.C. The placing of the contact performs in convenient to the placing of the contact performs in convenient to the placing of the contact performs in convenient to the placing of the contact performs in convenient to the contact performs in contact performs i	<b>*</b>
	CAB = Step-by-step contact N.O. The closing of the contact performs in sequence the closing of door (disabling 3A/3B terminals, enabling the signaling for occupied cabin) and the opening of the door (enabling 3A/3B terminals, disabling the signaling for occupied cabin).	
	INKE = Interlocked operation exclusion command between two doors (see menu: ADV > INK). PART = Opening command for the MASTER door only (see menu: ADV > SYNC).	

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# **6.3 SEL (FUNCTION SELECTOR MENU)**

Using the buttons  $\uparrow$  and  $\downarrow$  select SEL, press ENTER to select and adjust the following parameters.

MODE SELECTOR MODE OPEN = 0 AUTO = a CLOS = clo	on Factory s	ettings
SELECTOR NO = no r MODE OPEN = 0 AUTO = a CLOS = clo	g of operating mode of function selector device. Choose between the following values:	NO
OPEN = 0 AUTO = a CLOS = clo		
AUTO = a CLOS = clo		
CLOS = clo	utomatic bi-directional operation	
	•	
	omatic one-way operation	
	matic partial operation	
	utomatic one-way operation and partial	
	nanual operation	
	ctivate the function selector. Choose between the following values:	NO
	ction selector always accessible	NO
1004	unction selector accessible by selecting the logo for 3 seconds	
	nction selector accessible with badge and numeric code	
_	elay time function closed door. Choose between the minimum and maximum values:	1
CLOSED	value = 1 s	
DOOR	n value = 5 min	
TMEM Saving pr	ocedure of badge and numeric code for function selector. Choose between the following	NO
TAG values.		
MEMORISE NO = no s	aving	
SMOD = S	Saving badge and numeric code for activation of the function selector:	
	e ENTER button for 1 second, the display shows REDY,	
•	oproach the badge to the function selector (in front of the NFC symbol), the display shows	
the badge		
•	ress the logo, enter the code (from 1 to 5 numbers), press the logo for confirmation, the	
	nows the numeric code (Note: the numeric code can be stored only if SECL=TAG),	
	20 seconds or press the ESC button.	
	aving badge and numeric code for activation of priority opening: proceed as SMOD	
	ne badge and the numeric code is not recognized the display shows the message UNKN, or if	
	e and the numeric code is already stored will show the message NOK.	
_	tore a total maximum of 50 badges and numeric codes.	
	ring phone for activation of the FACE SRC App	
	e ENTER button for 1 second, the display shows REDY,	
<del></del>	proach the phone to the function selector, in front of the NFC symbol.	
· · · · · · · · · · · · · · · · · · ·	ok for the most suitable position.	
		NO
	ble to create master badge and master numeric code that allows the saving of the badges umeric codes, without the use of the menu. Choose from the following values.	NO
and the n	•	
NO see		
NO = no s	creation of the master badge and master numeric code to saving badges and numeric codes	
MMOD =		
MMOD = for function	on selector activation: proceed as SMOD.	
MMOD = for functi MOPE = 0	creation of the master badge and master numeric code to saving the badges and numeric	
MMOD = for functi MOPE = c codes of c	creation of the master badge and master numeric code to saving the badges and numeric opening priority: proceed as SMOD.	
MMOD = for function MOPE = 0 codes of 0 Note: if the	creation of the master badge and master numeric code to saving the badges and numeric opening priority: proceed as SMOD.  ne badge and the numeric code is not recognized the display shows the message UNKN, or if	
MMOD = for function MOPE = 0 codes of 0 Note: if the badge	creation of the master badge and master numeric code to saving the badges and numeric opening priority: proceed as SMOD.  The badge and the numeric code is not recognized the display shows the message UNKN, or if the and the numeric code is already stored will show the message NOK.	
MMOD = for function MOPE = 0 codes of 0 Note: if the badge FSD1 - The	creation of the master badge and master numeric code to saving the badges and numeric opening priority: proceed as SMOD.  The badge and the numeric code is not recognized the display shows the message UNKN, or if the and the numeric code is already stored will show the message NOK.  The early the master badge is the following:	
MMOD = for function MOPE = 0 codes of 0 Note: if the badge FSD1 - The comprosed	creation of the master badge and master numeric code to saving the badges and numeric opening priority: proceed as SMOD.  The badge and the numeric code is not recognized the display shows the message UNKN, or if the and the numeric code is already stored will show the message NOK.  The use of the master badge is the following:  The the master badge to the function selector (in front of the NFC symbol), the buzzer emits 2	
MMOD = for function MOPE = 0 codes of 0 Note: if the badge FSD1 - The - approace beeps at 1	creation of the master badge and master numeric code to saving the badges and numeric opening priority: proceed as SMOD. The badge and the numeric code is not recognized the display shows the message UNKN, or if the and the numeric code is already stored will show the message NOK. The use of the master badge is the following:  The the master badge to the function selector (in front of the NFC symbol), the buzzer emits 2 the beginning of the storage procedure,	
MMOD = for functi MOPE = c codes of c Note: if th the badge FSD1 - Th - approac beeps at t - approac	creation of the master badge and master numeric code to saving the badges and numeric opening priority: proceed as SMOD.  The badge and the numeric code is not recognized the display shows the message UNKN, or if the and the numeric code is already stored will show the message NOK.  The use of the master badge is the following:  The the master badge to the function selector (in front of the NFC symbol), the buzzer emits 2 the beginning of the storage procedure,  The the badges, that you want to store, one at a time, to the function selector (in front of the	
MMOD = for functi MOPE = c codes of c Note: if th the badge FSD1 - Th - approac beeps at t - approac	creation of the master badge and master numeric code to saving the badges and numeric opening priority: proceed as SMOD. The badge and the numeric code is not recognized the display shows the message UNKN, or if the and the numeric code is already stored will show the message NOK. The use of the master badge is the following:  The the master badge to the function selector (in front of the NFC symbol), the buzzer emits 2 the beginning of the storage procedure,	
MMOD = for function MOPE = 0 codes of 0 Note: if the badge FSD1 - The approace beeps at 1 approace NFC symbol	creation of the master badge and master numeric code to saving the badges and numeric opening priority: proceed as SMOD.  The badge and the numeric code is not recognized the display shows the message UNKN, or if the and the numeric code is already stored will show the message NOK.  The use of the master badge is the following:  The the master badge to the function selector (in front of the NFC symbol), the buzzer emits 2 the beginning of the storage procedure,  The the badges, that you want to store, one at a time, to the function selector (in front of the	
MMOD = for function MOPE = 0 codes of 0 Note: if the badge FSD1 - The - approace beeps at 1 - approace NFC symbolium - wait for	creation of the master badge and master numeric code to saving the badges and numeric opening priority: proceed as SMOD.  The badge and the numeric code is not recognized the display shows the message UNKN, or if the and the numeric code is already stored will show the message NOK.  The use of the master badge is the following:  The the master badge to the function selector (in front of the NFC symbol), the buzzer emits 2 the beginning of the storage procedure, with the badges, that you want to store, one at a time, to the function selector (in front of the bool), the buzzer emits 1 beep of confirmation storage,	
MMOD = for function MOPE = 0 codes of 0 Note: if the badge FSD1 - The - approace beeps at 1 - approace NFC symbol - wait for FSD4 - The	creation of the master badge and master numeric code to saving the badges and numeric opening priority: proceed as SMOD.  The badge and the numeric code is not recognized the display shows the message UNKN, or if the and the numeric code is already stored will show the message NOK.  The use of the master badge is the following:  The the master badge to the function selector (in front of the NFC symbol), the buzzer emits 2 the beginning of the storage procedure,  The the badges, that you want to store, one at a time, to the function selector (in front of the bool), the buzzer emits 1 beep of confirmation storage,  20 seconds, the buzzer emits 2 beeps at the end of the storage procedure.	
MMOD = for function MOPE = 0 codes of 0 Note: if the badge FSD1 - The - approace beeps at 1 - approace NFC symb - wait for FSD4 - The - press the	creation of the master badge and master numeric code to saving the badges and numeric opening priority: proceed as SMOD.  The badge and the numeric code is not recognized the display shows the message UNKN, or if the and the numeric code is already stored will show the message NOK.  The use of the master badge is the following:  The the master badge to the function selector (in front of the NFC symbol), the buzzer emits 2 the beginning of the storage procedure,  The the badges, that you want to store, one at a time, to the function selector (in front of the bool), the buzzer emits 1 beep of confirmation storage,  20 seconds, the buzzer emits 2 beeps at the end of the storage procedure.  The use of the master numeric code is the following:	
MMOD = for function MOPE = codes of cod	creation of the master badge and master numeric code to saving the badges and numeric opening priority: proceed as SMOD.  The badge and the numeric code is not recognized the display shows the message UNKN, or if a and the numeric code is already stored will show the message NOK.  The use of the master badge is the following:  The the master badge to the function selector (in front of the NFC symbol), the buzzer emits 2 the beginning of the storage procedure,  The the badges, that you want to store, one at a time, to the function selector (in front of the bool), the buzzer emits 1 beep of confirmation storage,  20 seconds, the buzzer emits 2 beeps at the end of the storage procedure.  The use of the master numeric code is the following:  The logo, enter the master numeric code, press the logo for confirmation, the buzzer emits 2 the beginning of the storage procedure,	
MMOD = for functi MOPE = c codes of c Note: if th the badge FSD1 - Th - approac beeps at t - approac NFC symb - wait for FSD4 - Th - press th beeps at t - press th	creation of the master badge and master numeric code to saving the badges and numeric opening priority: proceed as SMOD.  The badge and the numeric code is not recognized the display shows the message UNKN, or if the and the numeric code is already stored will show the message NOK.  The use of the master badge is the following:  The the master badge to the function selector (in front of the NFC symbol), the buzzer emits 2 the beginning of the storage procedure, with the badges, that you want to store, one at a time, to the function selector (in front of the bool), the buzzer emits 1 beep of confirmation storage,  20 seconds, the buzzer emits 2 beeps at the end of the storage procedure.  The logo, enter the master numeric code, press the logo for confirmation, the buzzer emits 2 the beginning of the storage procedure,  The logo, enter the new code (from 1 to 5 numbers), press the logo for confirmation,, the	
MMOD = for functi MOPE = c codes of c Note: if th the badge FSD1 - Th - approac beeps at c - approac NFC symb - wait for FSD4 - Th - press th beeps at c - press th buzzer en	creation of the master badge and master numeric code to saving the badges and numeric opening priority: proceed as SMOD.  The badge and the numeric code is not recognized the display shows the message UNKN, or if a and the numeric code is already stored will show the message NOK.  The use of the master badge is the following:  The the master badge to the function selector (in front of the NFC symbol), the buzzer emits 2 the beginning of the storage procedure,  The the badges, that you want to store, one at a time, to the function selector (in front of the bool), the buzzer emits 1 beep of confirmation storage,  20 seconds, the buzzer emits 2 beeps at the end of the storage procedure.  The use of the master numeric code is the following:  The logo, enter the master numeric code, press the logo for confirmation, the buzzer emits 2 the beginning of the storage procedure,	

Display	<b>Description</b> Factory	settings
TDEL	Cancellation procedure of badge and numeric code. Choose between the following values.	NO
TAG DELETE	NO = no cancellation	
	YES = badge and numeric code cancellation - press the ENTER button for 1 second, the display shows REDY,	
	<b>FSD1</b> - approach the badge to the function selector (in front of the NFC symbol), the display shows	
	the badge code,	
	FSD4 - press the logo, enter the code (from 1 to 5 numbers), press the logo for confirmation, the	
	display shows the numeric code.	
	<ul> <li>wait for 20 seconds or press the ESC button.</li> <li>Note: if the badge and the numeric code is not recognized the display shows the message UNKN.</li> </ul>	
TERA	How to erase all stored badges and numeric codes. Choose between the following values:	NO
TAG TOTAL	NO = no erase	
ERASE	YES = cancellation of all badges and numeric codes	
SAM1 SELECTOR	First setting of function selector, when the 1-G1 (1-G2) contact becomes closed. Set the menu ADV > STG1 (STG2) > SAM.	CLOS
AUTOMATIC	Connect the contact of a clock to 1-G1 (1-G2) terminals, and choose between the following values:	
MODE	OPEN = open door	
	AUTO = automatic bi-directional operation	
	CLOS = closed door	
	1D = automatic one-way operation	
	HAND = manual operation	
SAM2	Second setting of function selector, when the 1-G1 (1-G2) contact becomes open. Set the menu ADV	CLOS
SELECTOR AUTOMATIC	> STG1 (STG2) > SAM.	CLOS
MODE	Connect the contact of a clock to 1-G1 (1-G2) terminals, and choose between the following values:	
	OPEN = open door	
	AUTO = automatic bi-directional operation	
	CLOS = closed door	
	1D = automatic one-way operation	
	HAND = manual operation	
FW	Programming procedure of function selector.	
FIRMWARE UPGRADE	Insert the micro SD memory in the electronic control.	
	From this menu, choose the firmware version you want.	
	Press ENTER until it starts the programming procedure that lasts about 30 seconds (the display shows "WAIT • • • •"), at the end the display shows "SAVE".	
	After the procedure, remove the micro SD memory from the electronic control and store it for future use.	
	Note: in the case of programming error or missing firmware (W103), proceed as follows: disconnect the power supply, insert the micro SD memory, give power supply, and repeat the programming procedure from this menu.	
VER VERSION	Displaying the firmware version of function selector (eg = 0435).	
TIN TAG INPUT	You can upload the badges and numeric codes used in another automation, already stored in the micro SD memory. Choose between the following values:	NO
	NO = no upload	
	YES = upload the badges and numeric codes from the micro SD memory	
TOUT TAG OUTPUT	You can save the stored badges and numeric codes in the micro SD memory. Choose between the following values:	NO
	NO = no save	

# **6.4 MEM (MEMORY MANAGEMENT MENU)**

Using the buttons  $\uparrow$  and  $\downarrow$  select MEM, press ENTER to select and adjust the following parameters.

FSETT Restore all settings to factory defaults. Choose between the following values:  NO = no restore.  YES = restore to factory settings.  Programming procedure of electronic control. Insert the micro SD memory in the electronic control.  From this menu, choose the firmware version you want.  Press ENTER until it starts the programming procedure that lasts about 30 seconds (the display shows "WAIT • • • •"), at the end the display shows "SAVE".  After the procedure, remove the micro SD memory from the electronic control and store it for future use.  Note: in the case of programming error or missing firmware (W100), proceed as follows: disconnect the power supply, insert the micro SD memory, give power supply, the programming procedure starts automatically.  SIN  You can upload the menu settings used in another automation, already stored in the micro SD memory.  Choose between the following values:  NO = no upload  YES = upload the menu settings from the micro SD memory.  You can save the menu settings of automation in use, in the micro SD memory. Choose between the following values:  NO = no save  YES = save the menu settings of automation in the micro SD memory	_		
FACTORY SETTINGS  NO = no restore. YES = restore to factory settings.  FW Programming procedure of electronic control. Insert the micro SD memory in the electronic control. From this menu, choose the firmware version you want. Press ENTER until it starts the programming procedure that lasts about 30 seconds (the display shows "WAIT • • • • •"), at the end the display shows "SAVE".  After the procedure, remove the micro SD memory from the electronic control and store it for future use.  Note: in the case of programming error or missing firmware (W100), proceed as follows: disconnect the power supply, insert the micro SD memory, give power supply, the programming procedure starts automatically.  SIN SIN SETTING INPUT Choose between the following values: NO = no upload YES = upload the menu settings from the micro SD memory  You can save the menu settings of automation in use, in the micro SD memory. Choose between the following values: NO = no save	Display	Description Factory s	ettings
Insert the micro SD memory in the electronic control. From this menu, choose the firmware version you want. Press ENTER until it starts the programming procedure that lasts about 30 seconds (the display shows "WAIT • • • • •"), at the end the display shows "SAVE". After the procedure, remove the micro SD memory from the electronic control and store it for future use. Note: in the case of programming error or missing firmware (W100), proceed as follows: disconnect the power supply, insert the micro SD memory, give power supply, the programming procedure starts automatically.  SIN SETTING INPUT OUTPUT  You can upload the menu settings used in another automation, already stored in the micro SD memory. NO SOUT YOU can save the menu settings from the micro SD memory You can save the menu settings of automation in use, in the micro SD memory. Choose between the following values: NO = no save	FACTORY	NO = no restore.	NO
Insert the micro SD memory in the electronic control.  From this menu, choose the firmware version you want.  Press ENTER until it starts the programming procedure that lasts about 30 seconds (the display shows "WAIT • • • • "), at the end the display shows "SAVE".  After the procedure, remove the micro SD memory from the electronic control and store it for future use.  Note: in the case of programming error or missing firmware (W100), proceed as follows: disconnect the power supply, insert the micro SD memory, give power supply, the programming procedure starts automatically.  SIN  SETTING INPUT  You can upload the menu settings used in another automation, already stored in the micro SD memory.  NO  Toose between the following values:  NO = no upload YES = upload the menu settings from the micro SD memory  You can save the menu settings of automation in use, in the micro SD memory. Choose between the following values:  NO = no save	FW	Programming procedure of electronic control.	
From this menu, choose the firmware version you want.  Press ENTER until it starts the programming procedure that lasts about 30 seconds (the display shows "WAIT • • • • •"), at the end the display shows "SAVE".  After the procedure, remove the micro SD memory from the electronic control and store it for future use.  Note: in the case of programming error or missing firmware (W100), proceed as follows: disconnect the power supply, insert the micro SD memory, give power supply, the programming procedure starts automatically.  SIN  SETTING INPUT  Output  You can upload the menu settings used in another automation, already stored in the micro SD memory.  NO  Toose between the following values:  NO = no upload  YES = upload the menu settings from the micro SD memory.  You can save the menu settings of automation in use, in the micro SD memory. Choose between the following values:  NO = no save		Insert the micro SD memory in the electronic control.	
"WAIT • • • • •"), at the end the display shows "SAVE".  After the procedure, remove the micro SD memory from the electronic control and store it for future use.  Note: in the case of programming error or missing firmware (W100), proceed as follows: disconnect the power supply, insert the micro SD memory, give power supply, the programming procedure starts automatically.  SIN  SETTING INPUT  You can upload the menu settings used in another automation, already stored in the micro SD memory.  Choose between the following values:  NO = no upload  YES = upload the menu settings from the micro SD memory  You can save the menu settings of automation in use, in the micro SD memory. Choose between the following values:  NO = no save	0.0.0.02	From this menu, choose the firmware version you want.	
use.  Note: in the case of programming error or missing firmware (W100), proceed as follows: disconnect the power supply, insert the micro SD memory, give power supply, the programming procedure starts automatically.  SIN  SETTING INPUT  Output  You can upload the menu settings used in another automation, already stored in the micro SD memory.  NO  Choose between the following values:  NO = no upload  YES = upload the menu settings from the micro SD memory  You can save the menu settings of automation in use, in the micro SD memory. Choose between the following values:  NO = no save			
power supply, insert the micro SD memory, give power supply, the programming procedure starts automatically.  SIN SETTING INPUT Choose between the following values: NO = no upload YES = upload the menu settings from the micro SD memory  SOUT SETTING OUTPUT You can save the menu settings of automation in use, in the micro SD memory. Choose between the following values: NO = no save			
Choose between the following values:  NO = no upload  YES = upload the menu settings from the micro SD memory  SOUT SETTING OUTPUT  Vou can save the menu settings of automation in use, in the micro SD memory. Choose between the NO following values:  NO = no save		power supply, insert the micro SD memory, give power supply, the programming procedure starts	
NO = no upload YES = upload the menu settings from the micro SD memory  SOUT SETTING OUTPUT Vou can save the menu settings of automation in use, in the micro SD memory. Choose between the NO following values: NO = no save	_	You can upload the menu settings used in another automation, already stored in the micro SD memory.	NO
NO = no upload YES = upload the menu settings from the micro SD memory  SOUT SETTING OUTPUT Vou can save the menu settings of automation in use, in the micro SD memory. Choose between the NO following values: NO = no save		Choose between the following values:	
SOUT SETTING OUTPUT OUTPUT You can save the menu settings of automation in use, in the micro SD memory. Choose between the NO following values: NO = no save		NO = no upload	
SETTING following values: OUTPUT NO = no save		YES = upload the menu settings from the micro SD memory	
NO = no save	SETTING	- · · · · · · · · · · · · · · · · · · ·	NO
YES = save the menu settings of automation in the micro SD memory	OUTPUT	NO = no save	
		YES = save the menu settings of automation in the micro SD memory	

# 6.5 INFO (INFORMATION AND DIAGNOSTICS MENU)

Using the buttons  $\uparrow$  and  $\downarrow$  select INFO, press ENTER to select and adjust the following parameters.

_		
Display	<b>Description</b> Factor	ry settings
SHOW	Displaying information of warning and faults. Choose between the following values:	CONT
DISPLAY	CONT = the display shows the active contacts of the terminal blocks and the alarms.	
INFO	WARN = the display shows the alarms only.	
VER VERSION	Displaying the firmware version of electronic control (eg = 0260).	
CYCL CYCLES	Shows the number of cycles of the door (1 = 1.000 cycles, 9000 = 9.000.000 cycles).	0000
SERV	Enabling the signaling of routine maintenance of the door.	0000
SERVICE	NO = no signaling	
SIGNAL	1 = 1.000 cycles / 9000 = 9.000.000 cycles	
LOG INFO OUTPUT	You can save the following information in the micro SD memory (swing_log.txt): the last 20 warnings the menu settings, and the electronic devices connected to automation. Choose between the followin values:  NO = no save	
	YES = save the information in the micro SD memory	
WARN	Displaying of the last 10 warnings (the warning number 0 is the last):	0
WARNING LIST	0.xxx / 1.xxx / 2.xxx / 3.xxx / 4.xxx / 5.xxx / 6.xxx / 7.xxx / 8.xxx / 9.xxx	

DISPLAY	SEL	FLASH	WARNING	CHECK
W001	i	1	Encoder error	Check encoder connection
W002	i	1	Motor short circuit	Check the connection of the motor
W003	i	1	Motor control error	Electronic control failure
W010	$\mathbf{i}$	2	Direction reversed	Check the presence of obstacles
W011	i	2	Running too long	Check the connection between the motor and leaf
W012	i	2	Running too short	Check the presence of obstacles
W013	i	2	Overrun	Check the mechanical stops
W100	-	-	Programming error	Repeat the programming procedure in MEM > FW menu
W103	-	-	Programming error Selector	Repeat the programming procedure in SEL > FW menu
W127	-	-	Automation reset	The automation performs a self-test
W128	Ш	on	No power supply	Check the power supply
W129	Ш	1	No battery	Check the battery connection
W130	Ш	1	Low Battery	Replace or recharge the battery
W140	$\mathbf{i}$	3	6A safety test failure	Check the safety sensor connection
W142	i	3	8A safety test failure	Check the safety sensor connection
W145	i	4	Motor overtemperature (first step)	The door reduces the speed
W146	i	4	Motor overtemperature (second step)	The door stops
W150	i	2	Obstacle in opening	Check the presence of obstacles
W151	i	2	Obstacle in closing	Check the presence of obstacles
W152	i	2	Door locked open	Check the presence of locks
W153	i	2	Door locked closed	Check the presence of locks
W156	i	2	Door moved manually	Wait about 5 seconds
W160	i	1	Synchronization error	Check the ADV > SYNC and the ADV > INK menu
W256	i	-	Power on	-
W257	i	-	Firmware update	-
W320	i	on	Signaling of maintenance	Check the INFO > SERV menu
W330	i	1	Tuning between motor and electronics	Wait about 3-30 seconds

#### 7. START-UP PROCEDURE OF THE AUTOMATIC SWING DOOR

#### 7.1 Preliminary checks.

At the end of the installation, move the doors manually and make sure that operation is smooth and without friction. Check the solidity of the structure and the proper attachment of all the screws. Check the correctness of all electrical connections. Make sure you have installed the mechanical stop of the open door.

Before connecting any security devices, leave the jumper on terminals safety (41-6A, 41-8A).

7.2 Giving power supply and connect the battery, if present.

Note: every time you switch on the automation performs a self-test (from 3 to 30 seconds). The first opening and closing cycle is at low speed to allow the automatic learning.

To ensure that the electronic control has the factory settings, restore via the menu:

MEM> FSET> YES (confirm by pressing ENTER for 1 second).

Select the type of automation via the menu: MENU > DOOR > SW2 / SW4 / SW5.

Note: if the door is hinged on right, set as follow: MENU > OPEN > →

Note: if the door is with articulated arm to push, set as follow: MENU > ARM > AA.

Note: if the door is with sliding arm to push, set as follow: MENU > ARM > SA1.

Perform the menu settings as described in Chapter 6. Use OPEN button to perform the opening door, and verify the correct operation of the door.

Note: the automation automatically detects any obstacles during the closing movement (reversal movement) and opening (stopping movement).

If present, connect the electric lock of the door to the terminals (-LK \ +LK) of electronic control, and make the settings available in the ADV menu, as described in Chapter 5.8.

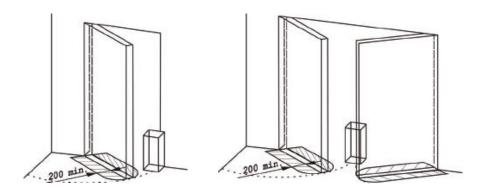
7.3 Connect one at a time, control and safety devices to protect the opening and closing cycle of the door, as described in Chapter 5.6, and verify proper operations.

Note: verify that the opening access is properly protected by safety sensors, in accordance with the requirements of the European standard EN16005 (annex C).

7.4 At the end of the automation starting, deliver to the owner the user instructions, including all warnings and information necessary to maintain the security and functionality of the automatic door.

Automations are feature of label containing the required information by European standards EN16005 and EN60335-2-103.

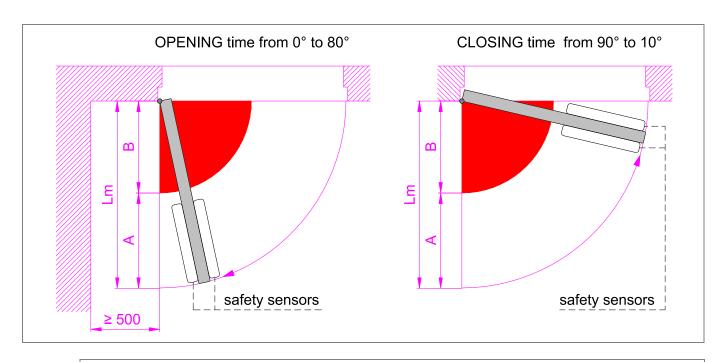
Note: the manufacturer of the automatic swing door has to add his own label identifying the installation.





## 8. ADJUSTMENT OF THE KINETIC ENERGY OF THE DOOR

To reduce the kinetic energy of the door in area B not protected by safety sensors, make the following adjustments. Adjust the opening speed (VOP) so as to open the door (from 0° to 80°) at the times indicated in the table. Adjust the closing speed (VCL) so as to close the door (from 90° to 10°) at the times indicated in the table.



						Time [s]					
	1,0	1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0
						B [m]					
	0,16	0,24	0,32	0,40	0,48	0,56	0,64	0,72	0,80	0,88	0,95
Lm [m]						A [m]					
0,7	0,54	0,46	0,38	0,30	0,22	0,14	0,06	-	-	-	-
0,8	0,64	0,56	0,48	0,40	0,32	0,24	0,16	0,08	-	-	-
0,9	0,74	0,66	0,58	0,50	0,42	0,34	0,26	0,18	0,10	0,02	-
1,0	0,84	0,76	0,68	0,60	0,52	0,44	0,36	0,28	0,20	0,12	0,05
1,1	0,94	0,86	0,78	0,70	0,62	0,54	0,46	0,38	0,30	0,22	0,15
1,2	1,04	0,96	0,88	0,80	0,72	0,64	0,56	0,48	0,40	0,32	0,25
1,3	1,14	1,06	0,98	0,90	0,82	0,74	0,66	0,58	0,50	0,42	0,35
1,4	1,24	1,16	1,08	1,00	0,92	0,84	0,76	0,68	0,60	0,52	0,45
1,5	1,34	1,26	1,18	1,10	1,02	0,94	0,86	0,78	0,70	0,62	0,55

# 9. TROUBLESHOOTING

In addition to the following list of possible problems, there are warnings provided by the display, as described in chapter 6.5.

Problem	Possible causes	Remedy
The automation does not	No power supply (display off).	Check the power supply.
open or close.	Short circuited external accessories.	Disconnect all accessories from terminals 0-1 and reconnect them one at a time (check for voltage 12V).
	The door is locked by bolts and locks.	Check the freely move of the doors
The automation does not perform the functions set.	Function selector incorrectly set.	Check and correct the settings of the function selector.
	Control devices or safety always activated.	Disconnect devices from the terminal and verify the operation of the door.
The movement of the doors isn't linear, or reverse the movement for no reason.	The automation does not successfully perform the automatic learning.	Perform a reset or power off and power on the automation.
The automation opens but does not close	Anomalies during the safety devices test.	Jumper contacts one at a time 41 -6A , 41 - 8A.
	The opening devices are activated.	Verify that the opening sensors are not subject to vibration, do not perform false detections or the presence of moving objects in the field of action.
	The automatic closing doesn't work.	Check the settings of the function selector .
Safety devices not activating.	Incorrect connections between the safety devices and electronic control.	Check that the safety contacts of the devices are properly connected to the terminal blocks and the relative jumpers have been removed.
The automation opens by itself.	The opening and safety devices are unstable or detect moving bodies	Verify that the opening sensors are not subject to vibration, do not perform false detections or the presence of moving bodies in the field of action.

#### 10. AUTOMATIC SWING DOOR ROUTINE MAINTENANCE PLAN

To ensure proper operation and safe use of the automatic swing door, as required by European standard EN16005, the owner has to perform routine maintenance by qualified personnel.

Except for routine cleaning of the door, the responsibility of the owner, all maintenance and repair work must be carried out by qualified personnel.

The following table lists tasks related to routine maintenance, and the frequency of intervention related to an automatic swing door operation with standard conditions. In the case of more severe operating conditions, or in the case of sporadic use of the automatic swing door, the frequency of maintenance can be consistently adequate.

Task	Frequency
Remove the power supply, open the automation and perform the following checks and adjustments.	Every 6 months or every 200.000 cycles.
- Check all screws fastening of components within the automation.	
- Check the state of wear of the hinges (if necessary replace them).	
- Verify correct mounting of the arm on the door.	
- In the case of SW4 automation, check the correct force of the closing spring.	
- If present, verify proper engagement of the electric lock.	
Connect the power supply and perform the following checks and adjustments.	Every 6 months or every 200.000
- Check the correct operation of the control devices and safety.	cycles.
- Check the detection area of the security sensors complies with the requirements of the European standard EN16005.	Note: the verification of the automation security functions and
- If present, verify the correct operation of the electric lock.	safety devices must be made at least 1 time per year.
- If present, verify the correct operation of the battery power device (if necessary replace the battery).	Time per year.

All maintenance, replacement, repair, update, etc.. must be written into the proof book, as required by European standard EN16005, and delivered to the owner of the automatic swing door.

For repairs or replacements of products, original spare parts must be used.

## **10.1 DISPOSAL OF PRODUCTS**



The packaging materials (cardboard, plastic, and so on) should be disposed of as solid household waste, and simply separated from other waste for recycling.

Our products are made of various materials. Most of these (aluminum, plastic, iron, electrical cables) are classified as solid household waste. They can be recycled by separating them before dumping at authorized city plants.

Whereas other components (control boards, batteries, and so on) may contain hazardous pollutants.

These must therefore be disposed of by authorized, certified professional services.

Before disposing, it is always advisable to check with the specific laws that apply in your area.

DO NOT DISPOSE IN THE ENVIRONMENT.

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