

USER INSTRUCTIONS FOR SWING DOOR



SW2	LIGHT
SW5	HEAVY
SW4	SPRING
SW80S	SPRING
SW80S1	LIGHT SPRING

1. CORRECT USE OF THE AUTOMATIC SWING DOOR

The FACE automations for automatic swing doors have been designed and constructed in accordance with European standard EN 16005, also the innovative and advanced electronic control system makes the door safer, as the maximum forces developed are limited to non-hazardous values.

It's still need to be observed the following precautions to ensure safety in relation to intended use, pedestrian traffic of people.

1.1 GENERAL SAFETY INSTRUCTION

These warnings are an integral and essential part of the product and must be supplied to the user. Read them carefully as they contain important information regarding the safe use and maintenance. You must keep these instructions and pass them on to subsequent users of the system.

This product must be used only for the purpose for which it designed. Any other use is considered improper and therefore dangerous. The manufacturer can't be held responsible for any damage caused by improper, incorrect or unreasonable.

Avoid the rest of the people in the vicinity of the area occupied by the stroke of the swing doors. Do not obstruct the motion of the automatic swing door as it may cause dangerous situations.

It's forbidden run toward a closed door, as the reaction time of the opening devices may be insufficient to avoid a collision.

This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the product by a person responsible for their safety. Children should be supervised to ensure that they do not play with the product.

In the event of failure or malfunction of the product, disconnect the power supply, avoid any attempt to repair or intervene directly and contact only qualified personnel. Failure to comply with the above may create a hazardous situation.

To ensure the efficiency of the system and its proper functioning is essential to follow the manufacturer's instructions must be performed by qualified personnel the periodic maintenance of automatic swing door. In particular, it is recommended that the periodic verification of the correct operation of all safety devices. All installation, maintenance and repair work must be documented and made available to the user.

1.2 RESTRICTIONS USE AND RESIDUAL RISKS

The European standard EN 16005 defines clearly what are the main hazards and the necessary protection to secure the use of an automatic swing door in standard conditions. Nevertheless, there may be particulary situations where it is necessary to assess the possible risks and adopt the related solutions for the protection or risk reduction.

For example, the particular installation can be generated by: the architectural requirements, the type of use, from the environment of use, from the spaces in the building, the type of users, etc.

It's the installer duty to identify and assess these risks and notify the owner of the solutions adopted, including the existence of residual risks or the need for restrictions on use, filling in the following table.

Rif.	Residual risk	Adopted solution

2. STANDARD INSTALLATION



Rif.	Code	Description
	SW2	SW2 automation (Light) for swing doors
1	SW5	SW5 automation (Heavy) for swing doors
1	SW4	SW4 automation (Spring) for swing doors
	SW80S	SW80S automation (Spring) for swing doors
	SWSA	Sliding arm to pull
2	SWSA1	Sliding arm to push
	SWAA	Articulated arm to push
3	SD3	Infrared safety sensor
4	OS1	Unidirectional microwave 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.

This is a translation of the original Italian user instruction. 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.

3. TECHNICAL DATA

Technical data	SW2	SW5	
Model	LIGHT	HEAVY	
Use	Opening and closing by motor. For internal use, not exposed to wind pressure.	Opening and closing by motor.	
Reference standard	EN 16005	EN 16005	
Product dimensions (Height x Depth x Length)	82 x 117 x 443 mm	104 x 118 x 463 mm	
Maximum load:	200 kg x 0,8 m 300 250 200 150 100 50 0 0,6 0,7 0,8 0,9 1,0 1,1 1,2 1,3 1,41,5 m	300 kg x 0,8 m 300 250 200 150 100 50 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	2 – 6 s	
Duty classContinuous operationIntermittent operationS3 = 100%		Continuous operation S3 = 100%	
Power supply Rated power / Stand-by	100–240 Vca 50/60 Hz 40 W / 8 W	100–240 Vca 50/60 Hz 70 W / 8 W	
Rated load	20 Nm	40 Nm	
Protection Rating	IP 20	IP 20	
Operating temperature	-15 °C +50 °C	-15 °C +50 °C	
Parameter adjustment	Buttons and Display	Buttons and Display	
Connections to control and safety devices	Dedicated connecting terminals	Dedicated connecting terminals	
Number of programmable terminals	2 (G1, G2)	2 (G1, G2)	
Power output for accessories	12 Vdc (1 A max)	12 Vdc (1 A max)	
Power output for electric locks and electronic locks	12 V (1A max) / 24 V (0,5 A max) (for electric locks only)	12 V (1A max) / 24 V (0,5 A max) (for electric locks only)	
Firmware update	Micro SD standard	Micro SD standard	
Function selector device	FSD1, FSD4	FSD1, FSD4	
Battery power device SWBD		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.

Technical data	SW4	SW80S	SW80S1
Model	SPRING	SPRING	LIGHT SPRING
Use	Opening by motor, closing by spring and motor	Opening by motor, closing by spring and motor	Opening by motor, closing by spring and motor, with facilitated manual handling
Reference standard	EN 16005 EN 1154 (closing force: EN4)	EN 16005 EN 1154 (closing force: EN4, EN5, EN6)	EN 16005 EN 1154 (closing force: EN4)
TÜV Thüringen certification	-	Type tested EN 16005 • open and close safe ID P-4113/19	
Product dimensions	135 x 118 x 500 mm	88 x 130 x 540 mm	88 x 130 x 540 mm
Maximum load:	220 kg x 0,8 m	300 kg	z x 0,8 m
	300 250 200 150 100 50 0 0,6 0,7 0,8 0,9 1,0 1,1 1,2	300 250 200 150 100 50 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	2 – 6 s	2 – 6 s
Duty class	Continuous operation	Continuous operation	Continuous operation
Intermittent operation	S3 = 100%	S3 = 100%	S3 = 100%
Power supply	100 – 240 Vac 50/60 Hz	100 – 240 Vac 50/60 Hz	100 – 240 Vac 50/60 Hz
Rated power	70 W	70 W	70 W
Stand-by	8 W	3 W	3 W
Rated load	23 Nm	40 Nm	40 Nm
Protection Rating	IP 20	IP 20	IP 20
Operating temperature	-15 °C +50 °C	↓ -15 °C ↓ +50 °C	-15 °C +50 °C
Parameter adjustment	Buttons and Display	Buttons and Display	Buttons and Display
Connections to control and safety devices	Dedicated connecting terminals	Dedicated connecting terminals	Dedicated connecting terminals
Number of programmable terminals	2 (G1, G2)	4 (G1, G2, G3, G4)	4 (G1, G2, G3, G4)
Power output for accessories	12 Vdc (1A max)	12 Vdc (1A max)	12 Vdc (1A max)
Power output for electric locks and electronic locks	12 V (1A max) / 24 V (0,5 A max) (for electric locks only)	12 Vdc (1A max) / 24 Vdc (0,5 A max)	12 Vdc (1A max) / 24 Vdc (0,5 A max)
Firmware update	Micro SD standard	USB standard	USB standard
Function selector device	FSD1, FSD4	FSD1, FSD4	FSD1, FSD4
		SW80BD	SW80BD
Battery power device	SWBD	(for automations cut to size only)	(for automations cut to size only)

4. FUNCTION SELECTOR FSD1, FSD4 USE

You can use the function selector to select the operating mode of the automatic swing door.

The function selector can work in the following ways:

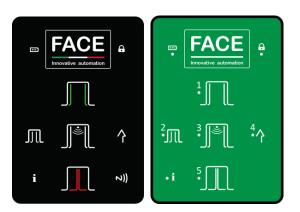
- Always active and usable by all (factory setting);

- Selecting for 3 seconds, the logo, the function selector is activated for 10 seconds, after that time the function selector turned off to prevent inadvertent operation;

- Approaching the badge, the function selector is activated for 10 seconds, after that time is turned off to prevent its use by unauthorized personnel.

Note: the type of use and the desired storage of the badge must be performed in the installation phase.

The function selector allows the following settings.



Description
OPEN DOOR
When selected, the symbol lights up, the door is permanently open.
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
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.
If the locking device is present, the door is closed and locked.
Note: using the menu SEL > DLAY you can adjust the delay time to close the door. CLOSING PRIORITY
Select the symbol for 3 seconds, the automation closes slowly.
AUTOMATIC PARTIAL OPERATION
When selected, the symbol lights up and automatic operation of the door is with a partial opening of the
leaves.
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 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.
ACTIVATION OF THE FUNCTION SELECTOR
Select the logo for 3 seconds (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).
FSD1 - Authorized activation of function selector by badge.
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).
FSD4 - Authorized activation of function selector by numeric code.
Press the logo, enter the code (maximum 5 numbers), press the logo for confirmation, (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).
BATTERY SIGNAL
Battery symbol off = the door is operating with the mains supply
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 flash = failure of electronic control or locking device; - 2 flashes = mechanical failure;
- 3 flashes = failure of sensor safety test;
- 4 flashes = motor overtemperature.
- 5 flashes = failure of Emergency electronic control

5. MANUAL SWING DOOR USE

The FACE automations for automatic swing doors are extremely reversible, and allow manual handling of the doors without additional effort.

The situations in which it is necessary to move the door manually are mainly two:

- For cleaning the doors, the glasses and external slides of the automation;
- In case of power failure or in damaged of the automation.

Note: in both cases, should be opened any latches and locks fitted on the doors.

5.1 MANUAL DOOR USE FOR DOOR CLEANING OPERATION



The manual handling of the door is always possible, select the door open mode from function selector. Note: in the absence of the function selector, you can keep the door open mode via a switch connected to terminals 1-3A of electronic control.

5.2 MANUAL DOOR USE IN ABSENCE OF POWER SUPPLY OR IN DAMAGED CASE

The manual handling of the door is always possible even in case of power failure, or in damaged case of the automation. To remove the power supply, for example in case of automation failure, turn off the isolating switch arranged in the electrical system.

6. TROUBLESHOOTING

The following list of possible problems must be used by qualified personnel.

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 using the command 1-29 , 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.

7. WARNINGS ON THE ELECTRONIC CONTROL DISPLAY AND ON THE FUNCTION SELECTOR

Warnings on the electronic control display must be used by qualified personnel.

DISPLAY	SEL	FLASH	WARNING	СНЕСК
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	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 (CB03)	Repeat the programming procedure in MEM > FW menu
W103	-	-	Programming error (FSD1)	Repeat the programming procedure in SEL > FW menu
W127	-	-	Automation reset	The automation performs a self-test
W128		on	No power supply	Check the power supply
W129		1	No battery	Check the battery connection
W130		1	Low Battery	Replace or recharge the battery
W140	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

8. AUTOMATIC SWING DOOR ORDINARY MAINTENANCE PLAN

To ensure proper operation and safe use of the automatic 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 500.000 cycles.
- Check all screws fastening of components within the automation.	
- Check the state of wear of the hinges of the door (if necessary replace them).	
- Check the correct mounting of the arm on the door.	
- In the case of automation with spring, 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 500.000
- 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
- Check the operating forces of the doors comply with the requirements of the European standard EN16005.	safety devices must be made at least 1 time per year.
- If present, verify the correct operation of the electric lock.	
- If present, verify the correct operation of the battery power device (if necessary replace the battery).	

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.

8.1 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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PROOF BOOK

FOR PEDESTRIAN AUTOMATIC DOORS

ACCORDING TO MACHINES DIRECTIVE 2006/42/CE AND EUROPEAN STANDARD EN 16005

This proof book contains technical references and records of installation, maintenance, repairs and alterations carried out and must be made available for any inspections by authorised bodies.

	SPECIFICATIONS OF THE AUTOMATIC DOOR AND INSTALLATION
Manufacturer / Installer:	
	Name, address and reference person
Customer / Owner:	
	Name, address and reference person
Order number:	
	Number and date of customer order
Model and description:	
	Type of door
Dimensions and weight:	
	Doorway width, dimensions and weight of the leaves
Serial number:	
	Number for clear identification of the door
Location:	
	Address of installation

LIST OF COMPONENTS INSTALLED				
	The technical features and performances of the components listed below are documented in the relevant installation manuals and/or on the label on the component itself.			
Drive unit:				
	Model, type, serial number			
Motor:				
	Model, type, serial number			
Electronic control:				
	Model, type, serial number			
Safety devices:				
	Model, type, serial number			
Control devices:				
	Model, type, serial number			
Other devices:				
	Model, type, serial number			
Other components:				
·	Model, type, serial number			

	START-UP REPORT Tick the box corresponding to the work made: C = Comply, NC = Not comply, NA = Not applicable.					
Step		Description		С	NC	NA
1	Check the ex	kisting structure and the fixing of the automation				
2	Check of me	chanical stops, and the fixing of all screws				
3	Check the m	echanical stop on the floor				
4	Manually ch	ecked that the leaf moves without friction				
5	Check of elec	ctrical connection of devices				
6	Check the de	etection area of the opening sensor				
7	Check the de	etection area of the safety sensor				
8	Check the ac	dditional opening controls (buttons, key contacts, e	.c.)			
9	Check the fu	inction selector				
10	Check the ba	attery operation				
11	Check the el	ectric locking device operation				
12	Check the op	pening and closing speed				
13	Delivered th	e declaration of conformity to the owner				
14	Delivered the user instructions to the owner					
15	Delivered th	e proof book to the owner				
	Date	Technician's signature	Custor	ner's signa	ature	

DESCRIPTION OF THE WORK				
Tick the box corresponding to the work carried out. Describe possible residual risks and/or foreseeable improper use.				
[] Installation				
[] Start-up				
[] Adjustments				
[] Maintenance				
[] Repairs				
[] Alterations				
Date	Technician's signature	Customer's signature		

DESCRIPTION OF THE WORK				
Tick the box corresponding to the work carried out. Describe possible residual risks and/or foreseeable improper use.				
[] Installation				
[] Start-up				
[] Adjustments				
[] Maintenance				
[] Repairs				
[] Alterations				
Date	Technician's signature	Customer's signature		

DESCRIPTION OF THE WORK				
Tick the box corresponding to the work carried out. Describe possible residual risks and/or foreseeable improper use.				
[] Installation				
[] Start-up				
[] Adjustments				
[] Maintenance				
[] Repairs				
[] Alterations				
Date	Technician's signature	Customer's signature		

DECLARATION OF CONFORMITY

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

	(F		
Manufacturer:			
Address:			
	DECLARES THAT:		
The Product:			
Location:			
-			
It complies with the	e Machines Directive 2006/42/EC.		
	e Electromagnetic Compatibility Directive 2014/30/UE.		
p			
It complies with fol	lowing harmonized standards:		
EN 16005			
EN 10005	Power operated pedestrian doorsets - Safety in use - Requirements and test methods		
The technical decu			
	mentation is managed by:		
Name:			
Address:			
Place and date:			
Name:			
Position:			

Signature: