A1000



EN16005:2012











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EC DECLARATION OF CONFORMITY OF A MACHINE

(2006/42/EC ANNEX II P.1, A)

Manufacturer and person authorised to compile the technical file

Company name: FAAC S.p.A. Soc. Unipersonale

Address: Via Calari, 10 - 40069 Zola Predosa BOLOGNA - ITALY

hereby declares that the following machine:

Description: Automatic door with 1 or 2 leaves

Model: A1000 CS

complies with the following applicable EU legislations:

Machinery Directive 2006/42/EC (including all applicable amendments)

and that the technical file has been compiled in compliance with part A of Annex VII.

Furthermore, the following harmonised standards have been applied:

EN 16005:2012 EN ISO 12100:2010 EN 60335-2-103:2015 EN 13849-1:2015 PL "c" CAT. 3

EN 13849-2:2012

Bologna, Italy 10-06-2017 CEO

A.Marcellan

A Moul

EC DECLARATION OF CONFORMITY

The Manufacturer

Company name: FAAC S.p.A. Soc. Unipersonale

Address: Via Calari, 10 - 40069 Zola Predosa BOLOGNA - ITALY

hereby declares that the following products:

Description: Automation for automatic door with 1 or 2 leaves

Model: A1000 KIT; A1000 PA;A1000 CS

comply with the following applicable EU legislations:

EMC Directive 2014/30/EU Directive ROHS 2 2011/65/EU

Furthermore, the following harmonised standards have been applied:

EN 61000-6-2:2005

EN 61000-6-3:2007+A1:2011

Bologna, Italy 10-06-2017

A.Marcellan

& Moult

A1000 3 53226404 - Rev.A



DECLARATION OF INCORPORATION OF PARTLY COMPLETED MACHINERY

(2006/42/EC ANNEX II P.1, B)

Manufacturer and person authorised to prepare the relevant technical documentation

Company name: FAAC S.p.A. Soc. Unipersonale

Address: Via Calari, 10 - 40069 Zola Predosa BOLOGNA - ITALY

hereby declares that for the partly completed machinery:

Description: Automatic door with 1 or 2 leaves

Model: A1000 KIT

The essential requirements of the machinery directive 2006/42/EC (as amended) which have been applied and satisfied are as follows:

RESS 1.1.2, 1.1.3, 1.1.4, 1.1.5, 1.1.6, 1.2.1, 1.2.3, 1.3.4, 1.5.1, 1.5.11, 1.5.13, 1.6.3, 1.7.1, 1.7.1.2, 1.7.4

and that the relevant technical documentation has been compiled in compliance with part B of Annex VII.

Furthermore, the following harmonised standards have been applied:

EN 16005:2012 EN ISO 12100:2010 EN 60335-2-103:2015 EN 13849-1:2015 EN 13849-2:2012

Finally, the manufacturer declares that the above-mentioned partly completed machinery must not be commissioned until the final machine in which it is to be incorporated has been declared compliant with the requirements of the same Machinery Directive 2006/42/EC.

Bologna, Italy 10-06-2017

A.Marcellan

DECLARATION OF INCORPORATION FOR PARTLY COMPLETED MACHINERY

CF0

(2006/42/EC ANNEX II P.1, B)

Manufacturer and person authorised to prepare the relevant technical documentation

Company name: FAAC S.p.A. Soc. Unipersonale

Address: Via Calari, 10 - 40069 Zola Predosa BOLOGNA - ITALY

hereby declares that for the partly completed machinery:

Description: Automatic door with 1 or 2 leaves

Model: A1000 PA

The essential requirements of the machinery directive 2006/42/EC (as amended) which have been applied and satisfied are as follows:

 $\mathsf{RESS}\,1.1.2, 1.1.3, 1.1.5, 1.1.6, 1.2.1, 1.2.3, 1.2.6, 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.4.1, 1.4.2.1, 1.5.1, 1.5.2, 1.5.4, 1.5.11, 1.5.13, 1.6.1, 1.5.13, 1.5.13, 1.5.14, 1.5.14, 1.5.15, 1.5$

1.6.3, 1.6.4, 1.6.5, 1.7.1, 1.7.1.2, 1.7.4

and that the relevant technical documentation has been compiled in compliance with part B of Annex VII.

Furthermore, the following harmonised standards have been applied:

EN 16005:2012 EN ISO 12100:2010 EN 60335-2-103:2015 EN 13849-1:2015 EN 13849-2:2012

Finally, the manufacturer declares that the above-mentioned partly completed machinery must not be commissioned until the final machine in which it is to be incorporated has been declared compliant with the requirements of the same Machinery Directive 2006/42/EC.

Bologna, Italy 10-06-2017

A.Marcellan

CEO

A Moul

FAA⊂

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1. INTRODUCTION TO THE MANUAL

The instructions manual provides the correct procedures and requirements to be complied with for installation and operation of the system in safe conditions.



Carefully read and comply with all the instructions before starting any activity on the product.

Keep these instructions for future reference.



Unless otherwise specified, the measurements provided in the instructions are in mm.

In writing the instructions manual, due account was taken of the results of the risk assessment conducted by the manufacturer on the entire life cycle of the automation in order to implement effective risk reduction.

The following stages of the life cycle of the automation were considered:

- Consignment reception/handling
- Assembly and installation
- Setting up and commissioning
- Operation
- Maintenance / addressing any failures
- Disposal at the end of the product's life.

The sources of risk arising from installation and use of the automation were taken into account:

- Risks for the installer/maintenance technician (technical personnel)
- Risks for the user of the automation
- Risks for the product's integrity (damage)

1.1 SAFETY RECOMMENDATIONS

The installer/maintenance technician is responsible for the installation/testing of the system and for filling in the system's Register.

SAFETY OF THE INSTALLER/MAINTENANCE TECHNICIAN



Installation must be performed in compliance with Standards currently in force. The installer's safety is connected to environmental and operative conditions that reduce the risks of accidents and severe damage to a minimum

It should be remarked that most accidents occurring in the workplace are caused by failure to comply with and monitor the most basic and fundamental safety and prevention rules.

The installer/maintenance technician must prove or declare to possess the technical-professional proficiency to perform installation, testing and maintenance activities according to the requirements of these instructions. He or she is bound to read and comply with the instructions manual.

Incorrect installation and/or incorrect use of the product might cause serious harm to people.

Perform installation and other activities adhering to the sequences provided in the instructions manual.

Always comply with all the requirements contained in the instructions and warning tables at the beginning of the paragraphs.

Do not modify the components of the automation in any way.

Only the installer and/or maintenance technician is authorised to open the automation casing.



FAAC disclaims any liability regarding the safety and proper operation of the automation if non-original FAAC components are used.

FAAC supplies a system register form with the A1000 CS.

WORKPLACE SAFETY



The installer/maintenance technician must be in good psycho-physical conditions, aware of and responsible about the hazards that may be engendered when using a machine.

The installation activity requires special work conditions. Furthermore, the suitable precautions must be taken to prevent risks of injury to persons or damage.

It is recommended to always comply with the safety recommendations.

Cordon off the work site and prevent access to the area.

The work area must be kept tidy and must not be left unattended.

Do not wear clothes or accessories - such as ties or bracelets - that might get caught in moving parts.

Always wear the personal protective equipment recommended for the type of activity to be carried out.

Use work instruments in good conditions.

The required level of workplace lighting must be equal to at least 200 lux.

Use the transport and lifting equipment recommended in the instructions manual.

Use safety-compliant portable ladders of adequate size, fitted with anti-slip devices at the top and bottom, equipped with retainer hooks.

USER SAFETY



The person in charge of the automation is responsible for the operation of the system.

He or she is bound to read and comply with the instructions manual.

He/she must be in good psycho-physical conditions, aware of and responsible about the hazards that may be engendered when using a machine.

The required level of ambient lighting must be equal to at least 200 lux.

The person in charge of using the automation must prevent the control devices being used by anyone who has not been specifically authorised and trained to use them. He/she must not allow access to the control devices to persons under age or with reduced psycho-physical abilities, unless under supervision by an adult responsible for their safety.

Do not use the system in case of malfunctioning.

Under no circumstances is the user authorised to perform any work inside the housing of the automation or on any of its components.

The user is not permitted to perform any type of work on the motorisation or on components of the system.

If the system malfunctions, the user must not attempt any kind of repair or take any direct action. He/she must request assistance from the INSTALLER / MAINTENANCE TECHNICIAN.

The user must make sure that maintenance to the system is carried out according to the instructions provided in this manual.



The installer/maintenance technician must provide the user with all the information required to operate the system and for emergency situations.

The installer/maintenance technician must supply the system's Register to the owner.



1.2 MEANING OF THE SYMBOLS USED



Perform the operations and steps described in compliance with safety regulations and the instructions provided so as to prevent the risks indicated by the symbols in the following tables.

1 Symbols: notes and warnings on the instructions



It indicates the risk of personal injury or damage to parts. The described operation/step must be carried out in compliance with the instructions provided and with safety regulations.





Indicates risk of electrocution. The described operation/step must be carried out in compliance with the instructions provided and with safety regulations.



WARNING

Details and specifications to be followed with the utmost attention, in order to ensure correct operation of the system.



PAGE REFERENCE

It refers to the page indicated by the number for details or clarifications.



PICTURE REFERENCE

It refers to the picture indicated by the number.



TABLE REFERENCE

It refers to the table indicated by the number.



WARNING

The batteries and electronic components must not be disposed of with household waste but delivered to authorised disposal and recycling centres.

2 Symbols: tools (type and size)



HEX WRENCH of the specified size (6, 8...)



ALLEN KEY with ROUND HEAD of the specified size (6, 8...)



CIRCLIP PLIERS



FLAT-HEAD SCREWDRIVER of the specified size (6, 8...)



CROSS-HEAD SCREWDRIVER of the specified size (6, 8...)





METAL DRILL BITS of the specified size (6, 8...)



MASONRY DRILL BITS of the specified size (6, 8...)



D LEVEL



COUNTERSINK with specified angle (45°...)



THREADING TAP with specified thread (M6, M8...)



ROUND SAW



GLASS SUCTION CUPS



PALLET FORKS



TOOL with TORQUE ADJUSTMENT

It indicates that a tool with torque adjustment is required where necessary for safety reasons.

TIGHTENING TORQUE VALUE

The torque wrench and the tightening torque in Nm is specified in the E.g.: HEX WRENCH 6 set at 2.5 Nm figures.



■ 3 Symbols: safety signs and symbols (EN ISO 7010)



GENERIC HAZARD

It indicates the risk of personal injury or damage to parts.



ELECTROCUTION HAZARD

It indicates the risk of electrocution due to the presence of live parts.



RISK OF CRUSHING AND MUSCULO-SKELETAL DISORDERS

It indicates the risk of crushing and musculo-skeletal disorders due to lifting heavy parts.

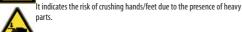


BURNING OR SCALDING HAZARD

It indicates the risk of burning or scalding due to the presence of parts at high temperature.



CRUSHING HAZARD





RISK OF CRUSHING HANDS

It indicates the risk of crushing hands due to the presence of moving parts.



CUTTING/AMPUTATION/PIERCING HAZARD

It indicates the risk of cutting due to the presence of sharp parts or using pointed tools (drill).



SHEARING HAZARD

lt indicates the risk of shearing due to moving parts.



RISK OF IMPACT/CRUSHING

It indicates the risk of impact or crushing due to moving parts.



FALLING OBJECTS HAZARD

It indicates the risk of impact due to falling objects.



SPENT BATTERIES HAZARD

It indicates a risk for the environment and health arising from spent batteries due to possible leakage of the liquid content.



COLLISION WITH FORKLIFT TRUCKS HAZARD

It indicates a risk of collision/impact with forklift trucks.

4 Symbols: markings on product



Obligation to read the instructions

5 Symbols: Personal Protective Equipment

Personal protective equipment to be worn for protection from any risks (e.g. crushing, cutting, shearing, etc.):



Obligation to wear head protection helmet.



Obligation to wear safety footwear.



Obligation to wear mask/goggles to protect the eyes from the risk of fragments due to the use of drill or welder.



Obligation to wear work gloves.



Obligation to wear ear protectors.



Obligation to wear overalls. Do not wear clothes or accessories - such as ties or bracelets - that might get caught in moving parts.

Ⅲ 6 Symbols: markings on packaging

 $Important\ warnings\ for\ the\ safety\ of\ people\ and\ integrity\ of\ the\ load:$



Handle with care. Presence of fragile parts.



Store away from water and humidity.



PROHIBITION to stack items.



 $Maximum\ number\ of\ stackable\ items,\ e.g.:\ 2.$



Wear work gloves.



Wear safety footwear.



Use pallet trucks.



Use forklift trucks.



20 kg is the MAX weight that 1 person can lift.

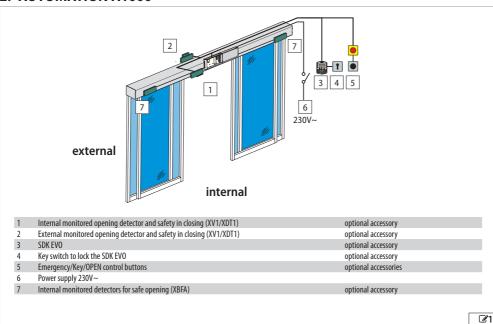


WEIGHT of the load.

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2. AUTOMATION A1000



2.1 INTENDED USE

The FAAC series A1000 systems are designed to automatically operate, manage and control linear horizontal motion one- or two-leaf sliding doors.

The A1000 series automations are designed to automate entry doors that are used exclusively for pedestrian traffic.

They are compliant with standard EN 16005:2012.

They are suitable for indoor installation, for applications that meet the specifications indicated in $\boxplus 7$.



No other use outside the ones set out above is allowed by the manufacturer.

FAAC declines all liability deriving from misuse or uses other than that for which the automation s intended.

LIMITATIONS FOR USE

Do not use the automation in the presence of the following conditions:

- direct exposure to weathering
- exposure to direct water jets of any type or extent
- outside the technical limitations set out. Specifically, it is forbidden to connect to sources of energy other than those set out.

2.2 UNAUTHORISED USE

It is forbidden to:

- use the automation for uses other than THE INTENDED USE:
- use the automation for installing smoke and/or fire protection doors (fire doors);
- use the automation with mobile and fixed guards tampered with or removed;
- use the automation in environments in which there is a risk of explosion and/or fire: the presence of flammable gases or fumes is a serious safety hazard (the product is not 94/9/EC ATEX certified);
- integrate other systems and/or commercial equipment not intended:
- use other systems and/or commercial equipment for uses not authorised by the respective manufacturers;
- use commercial devices for purposes other than those set out by the respective manufacturers.

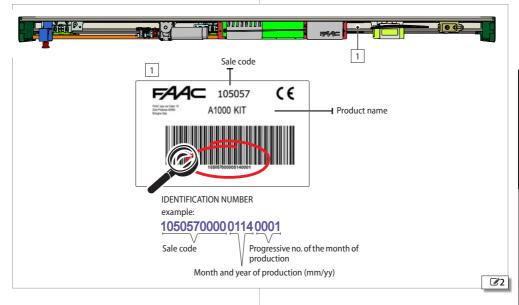


2.3 IDENTIFICATION PLATE

The identification plate **2**-① is located on the support profile.



If the A1000 KIT is supplied, it is the responsibility of the installer to attach the identification plate in a visible position $\Im 2$ - \Im .





2.4 TECHNICAL SPECIFICATIONS A1000

III 7 Technical specifications

MODEL	A1000 single leaf	A1000 double leaf
Length * [mm]	from 1500 to 6100	from 1700 to 6100
Depth * [mm]	150	150
Height * [mm]	100	100
Weight** [kg]	MIN. 21 - MAX 47	MIN. 24- MAX. 49
No. of leaves	1	2
MAX. leaf weight [kg]	110	70 +70
Passage opening (Vp) [mm]	from 700 to 3000	from 800 to 3000
Beam length [mm]	Vp x 2 +100	Vp x 2 +100
Maximum framed leaf thickness [mm]	60	60
Power supply voltage	230 V~ (+6% -10%) 50 Hz	230 V~(+6% -10%) 50Hz
MAX absorbed power [W]	140	140
Stand-by power without accessories [W]	3	3
Use frequency	100 %	100 %
Main motor (with encoder)	powered at 36V	powered at 36V
Max. accessories load (excluding SDK EVO)	1A, 24V	1A, 24V
Time/date backup battery	Lithium CR2032 3V	Lithium CR2032 3V
Motion backup battery	NiMh 24V 1800mAh	NiMh 24V 1800mAh
Traction	by toothed belt	by toothed belt
Opening/closing speed adjustment (empty) [cm/s]	10 75	20 150
Partial opening adjustment	5% 95% of total opening	5% 95% of total opening
Pause time adjustment [s]	0 30	0 30
Night pause time adjustment [s]	0 240	0 240
Anti-crushing safety device	in opening/closing	in opening/closing
Protection sensors monitoring (EN 16005:2012)	can be bypassed	can be bypassed
Energy Saving function	can be enabled	can be enabled
Low Energy movement	can be enabled	can be enabled
Operating ambient temperature [°C]	-20 +55	-20 +55
Automation protection rating	IP 23 (internal use)	IP 23 (internal use)

^{*} The dimensions and weight of the automation are specified excluding carriage and leaf overall dimensions, which are customisable

^{**} For the specifications of weights in relation to the length of the automation, see 11.

2.5 TYPES OF SYSTEM SUPPLIED

The FAAC A1000 series automations may be supplied as follows:

- Automation kit: A1000 KIT
- Assembled automation: A1000 PA
- Complete entry door: A1000 CS

INSTALLATION ACCORDING TO THE TYPE OF SYSTEM SUPPLIED



During installation, it is recommended to comply with the order of the sections set out based on the type of purchased supply.

A1000 KIT



- A. Pack containing automation components to be assembled on the FAAC support profile.
- B. Pack with FAAC profiles purchased in 4.30 m or 6.10 m long bars. Sequence of installation phases (dedicated sections in the instructions manual)
 - Inspection and preparation (§ 3)
 - Cutting the profiles (§ 5)
 - Installation of the head section: assembly of the components on the support profile (use exclusively FAAC profiles) (§ 6)
 - Installation of the head section (§ 8)
 - Installation of the leaves (§ 9) for glass leaves see (§ 10)
 - Electronics installation (§ 12)
 - Startup (§ 13)

A1000 PA



- C. Automation assembled on FAAC* head section.
- Sequence of installation phases (dedicated sections in the instructions manual)
 - Inspection and preparation (§ 3)
 - Installation of the head section (§ 8)
 - Installation of the leaves (§ 9) for glass leaves see (§ 10)
 - Electronics installation (§ 12)
 - Startup (§ 13)

A1000 CS



- C. Automation assembled on FAAC* head section.
- D. FAAC leaves (with TK20 or TK50 profiles)
- E. Package with TK20 or TK50 profiles for installing the FAAC door wall frame.

Sequence of installation phases (dedicated sections in the instructions manual)

- Inspection and preparation (§ 3)
- Installation of the door wall frame (§ 8) with FAAC TK50 or TK20 profiles.
- Installation of the head section (§ 8)
- Installation of the leaves (§ 9) for glass leaves see (§ 10)
- Electronics installation (§ 12)
- Startup (§ 13)
- * supplied with the required measurement and with pre-assembled automation components.



A1000 AUTOMATION COMPONENTS Support profile



It lets you adequately fasten the automation along a load-bearing metal or masonry wall.

FRONT CASING CLOSING PROFILE



Aluminium profile for front head section closure. H100 version available.

Plates with screws



Accessories for installation of components.

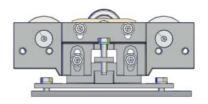
Motor with encoder



Return pulley



Leaf Support/Sliding Carriages - (2 for each leaf)



Transmission belt





It is compulsory to use the FAAC belt for the A1000

Control electronics module



E1SL electronic board and power supply unit.

ACCESSORIES

XB LOCK motor block and internal release - OPTIONAL





It acts directly on the Motor, mechanically locking it in order to maintain the leaves in position.

Supplied with internal release device which allows emergency opening to be performed in case of need.

Ready for installing external release.

Monitoring - OPTIONAL

The magnetic monitoring sensor detects the door status: closed/not closed It is fitted with connector for connecting a relay (e.g. to connect an alarm system).

The monitoring micro switch on the motor block detects any malfunction. It is ready to remotely activate a light or sound warning.





Emergency battery - OPTIONAL



It allows the automation to operate in case of mains power failure.

SDK EVO - OPTIONAL

Programming and function selector device with display.

LK EVO - OPTIONAL

Programming and function selector device without display.

KS EVO - OPTIONAL

Device with function selector key without display.







TK50 - Sliding shoes with bracket - OPTIONAL

For fastening to wall or fixed leaf (supplied in a PAIR).



TK50 - Swivel sliding shoes - OPTIONAL

For fastening to the floor (supplied in a PAIR).



TK20 - Sliding shoes with bracket - OPTIONAL

For fastening to fixed leaf (supplied in a PAIR).



Lower guide profile - OPTIONAL

Allows the lower leaf profile to be adapted to the sliding shoe. Supplied in 3.0 m long bars.



Upper profile for connecting the leaf - (1 for each leaf) - OPTIONAL

Accessory to adapt the upper leaf profile to the carriage connections. Supplied in 3.0 m long bars.



Sweeper for lower guide profile (H19 or H25) - OPTIONAL

Completes the floor guide system.



Glass leaf lower shoes - OPTIONAL

For glass leaf sliding.

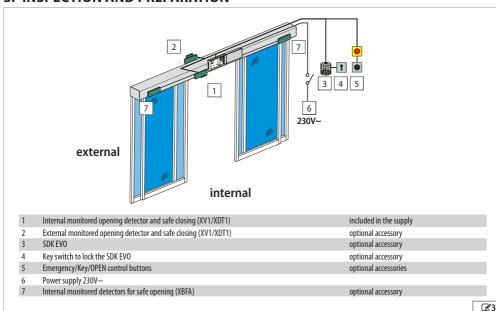


Glass leaf gripper - OPTIONAL





3. INSPECTION AND PREPARATION



3.1 PRELIMINARY INSPECTION



Prior to installation, check soundness of the load bearing masonry structure and door. Perform any required work to assure:

- solidity, stability and absence of any risk of detachment or collapse of the masonry structure, fixed door frame and automation

- level flooring, without any friction/hindrance to smooth leaf sliding
- absence of sharp edges (cutting hazard)
- absence of protruding parts (hooking/entrainment hazard)

3.2 ARRANGEMENT OF ELECTRICAL CABLES



Always shut off the power supply before performing any work. If the disconnect switch is not in view, apply a warning sign stating "WARNING - Maintenance in Progress".



The electrical system must comply with applicable legislation in the country of installation.

Use components and materials with CE marking which are compliant with the Low Voltage Directive 2014/35/EU and EMC Directive 2014/30/EU.

The power supply line for the automation must be fitted with a multi-pole circuit breaker, with a suitable tripping threshold, a contact opening distance of at least 3 mm and a breaking capacity that complies with current regulations.

The power supply for the automation must be fitted with a 30 mA differential switch.

The metal parts of the structure must be earthed.

Check that the protective earthing system complies with applicable regulations in the country of installation.

The electrical cables of the automation system must be of a size and insulation class that is compliant with current legislation and laid in appropriate rigid or flexible conduits, either above or below ground.

Use separate conduits for the power supply and the 12-24V control devices / accessories cables.

Check buried cable plans to ensure that there are no other electrical cables in proximity to the planned digging/drilling locations to prevent the risk of electrocution.

Check that there are no pipes in the vicinity as well.

The conduit fittings and the cable glands must prevent the entry of moisture, insects and small animals.

Protect extension connections using junction boxes with an IP 67 protection rating or higher.

The control accessories must be positioned in areas that are always accessible and not dangerous for the user. It is recommended to position the control accessories within the field of view of the automation.

If an emergency stop button has been installed, it must be EN13850 compliant.

Comply with the following heights from the ground:

- control accessories = minimum 150 cm
- emergency buttons = maximum 120 cm

If the manual controls are intended to be used by disabled or infirm persons, highlight them with suitable pictograms and make sure that these users are able to access them.

4. TRANSPORT AND RECEIPT OF THE GOODS

HANDLE PACKAGES



Always comply with instructions on the package.



The NET WEIGHT is indicated on the package.

PALLETISED SUPPLY



RISKS







PERSONAL PROTECTIVE EQUIPMENT





REQUIRED TOOLS





SINGLE PACKAGE



RISKS







PERSONAL PROTECTIVE EQUIPMENT





REQUIRED TOOLS



For manual lifting, there should be 1 person for every 20 kg to be lifted.

UNPACK AND HANDLE

RISKS





PERSONAL PROTECTIVE EQUIPMENT





REQUIRED TOOLS



For manual lifting, arrange for an adequate number of people for the weight of the leaf: 1 person for every 20 kg to be lifted.

- 1. Open and remove all packaging elements.
- Make sure that all components requested are present and undamaged (14).



If the goods supplied are non-compliant, proceed as indicated in the General Conditions of Sale listed in the sales catalogue and which can be consulted on the website www.faacgroup.com.

The unpackaged goods must be handled manually.



Should transport be required, the products must be suitably packaged. Discard the packaging after use in the appropriate containers in compliance with waste disposal regulations.

The packaging materials (plastic, polystyrene, etc.) must not be left within reach of children as they are potential sources of danger.



5. CUTTING THE PROFILES



If the A1000 KIT has been supplied, the profiles must be cut to the size indicated. This operation is performed in the shop. After cutting, assemble the components to the support profile.

Handling instructions: 🐼 17.

RISKS



PERSONAL PROTECTIVE EQUIPMENT









REQUIRED TOOLS



Use a circular or linear saw cutting machine with blade suitable for cutting metals.

It is forbidden to use a hand saw.

Only use equipment in good conditions and fitted with all the required safety devices.

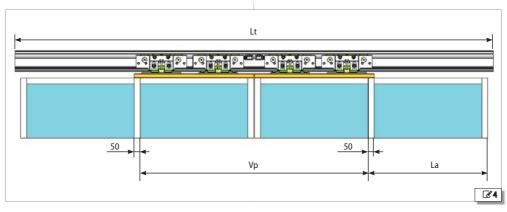
Always comply with the instructions provided by the equipment's manufacturer.

Cutting operations may only be performed by personnel authorised to use the equipment.

Cut to size according to the measurements indicated in **3** 8.

■ 8 Profile cutting measurements

Profile to be cut	Cutting measurement [mm]
- Support profile	Lt = Vp x 2 + 100
- Head section cover	The head section length (Lt) must be calculated based on the measurement of the transit space (Vp).
- Self-supporting profile (OPTIONAL)	100 mm is the overlap between leaves (50 \pm 50). If the overlap is different, the Lt measurement varies accordingly.
	The passage opening measurement (Vp) taken on the installation must already be known when placing the order since the profiles can be supplied in 4300 mm or 6100 mm long bars.
	If installed with side profiles, the support profile must be cut to:
	Lt - 2mm
- Leaf connection profile (OPTIONAL)	La
- Lower guide profile (OPTIONAL)	The leaf width measurement (La) depends on the transit space measurement (Vp), on the number of leaves and the planned overlap.





6. ASSEMBLING THE HEAD SECTION



If the A1000 KIT has been supplied, the components must be installed on the support profile. This operation is performed in the shop. The assembled head section is then moved to the installation site.

For handling instructions see 🕢 17.











ERSONAL PROTECTIVE EQUIPMENT











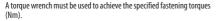






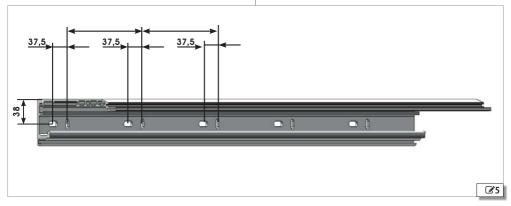








For manual lifting, arrange for an adequate number of people for the weight of the leaf: 1 person for every 20 kg to be lifted.





6.1 ASSEMBLING THE COMPONENTS



Keep to the positions indicated in the relevant diagram:

3 52 53 5 54.

MECHANICAL STOPS



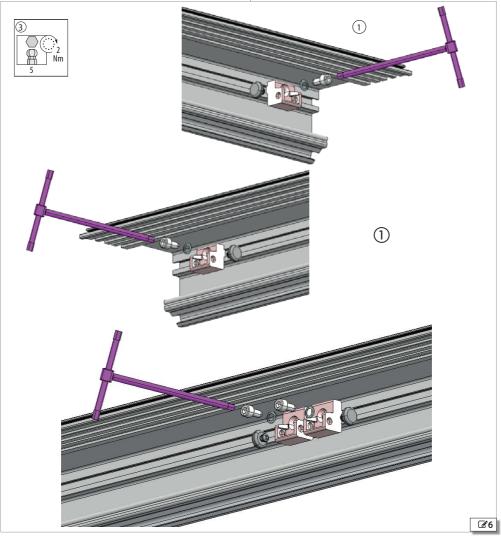
SINGLE LEAF: 2 mechanical stops are required. Place them at the two ends of the profile to begin with.

DOUBLE LEAF: 4 mechanical stops are required. Place 2 of them at the two ends of the profile and 2 in the middle to begin with.

- 1. Insert the mechanical stops from the side or front **6**-①.
- 2. Make sure that they are resting in the correct position on the profile **36**-**2** and temporarily fasten each mechanical stop **36**-**3**.



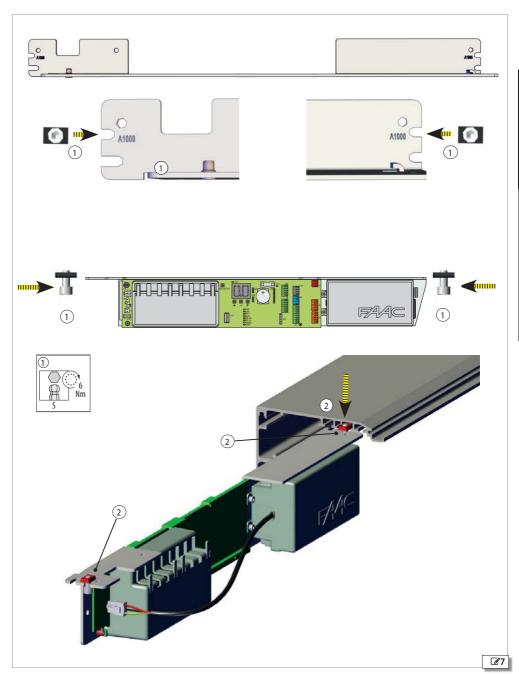
After assembling the leaves, the stops' positions must be adjusted.





ELECTRONICS MODULE

- 1. Insert the screws and plate into the 2 slots indicated by A1000 **27**-①.
- 2. Insert the electronics module into the profile from the side using the 2 plates **27**-2.





SAFETY CABLES AND SPACERS

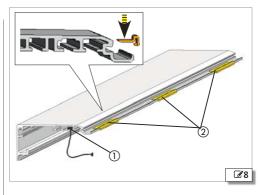
- 1. Insert the end of each cable into the support profile **38**-1.
- 2. Insert 2 vibration damper spacers **8**.2 onto the edge of the profile. In the case of profiles longer than 3 m, add a spacer in the middle **8**.3.

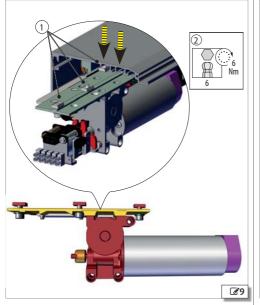
MOTOR

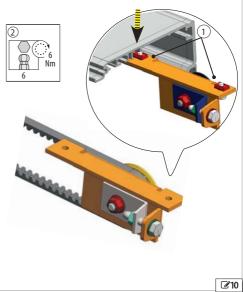
- 1. Insert the motor in the side of the support profile.
- 2. Fasten using the 3 plates with screws **39**-1

RETURN PULLEY

- 1. Insert the return pulley from the side **210**-①.
- 2. Fasten using the 2 plates with screws **10**-1.







FAAC

MOTOR RELEASE MONITOR

(OPTIONAL ACCESSORY)

Install the micro switch on the motor block 211.

INTERNAL RELEASE



Double leaf applications.

For passage openings (Vp) of between 800 and 1000 mm, it is recommended to install the release at the end <u>opposite</u> Motor_1.

For passage openings (Vp) of between 1000 and 3000 mm, it is recommended to install the release close to Motor 1.

Release knobs are available for H100 or H140 covers. The method of assembly and adjustment is the same for both versions.

The knob must be unscrewed and removed to open the automation casing after mounting the internal release.

- 1. Turn the adjustment nut, with the relative locknut **12-10**.
- Extract about 20 cm steel cable from the sheath. Insert the cable into the adjustment nut and pass it into the release device 12-2.
- 3. Tighten the screw 312-3 to lock the steel cable.
- Move the black cable sheath against the adjustment screw and screw the adjustment screw fully into the bracket.
- 5. Insert two plates into the profile **313**-① and install the release knob on the side bracket.
- 6. Lock the knob: pull and turn it by 90° **12**. The knob must maintain this position.
- 7. Run the cable with sheath into the suitable cable ducts up to the motor block. Avoid bending the sheath too tightly.
- 8. Bring the cable with sheath close to part ② **14** and remove any excess sheath.
- 9. Feed the cable into the guide **314**-2 so that the sheath is in contact with it. Insert the cable into the clamp 3.
- 10. Pull the block (a) as far as it will go, compressing the springs. Tighten the clamp screw (a) to lock the steel cable.
- 11. Cut the excess steel cable.

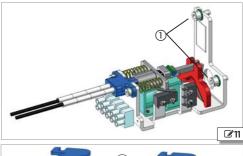
XB LOCK MOTOR BLOCK OPERATION TEST

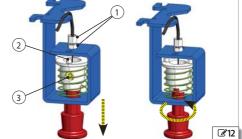
The motor must be free to move: motor block not engaged in the motor shaft coupling.

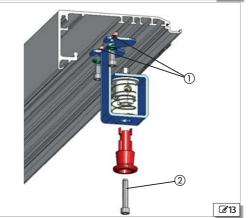
- Use the adjustment nut to regulate the tension of the cable **312**-1.
- Unlock the knob by turning it 90° and ensure the release is working.
- Pull the knob to make sure that the door opening micro switch is activated (**)14-(4)).

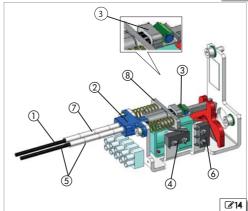


If installation of the external release is required, use suitable key buttons.
Insert the release cable in the suitable housing in the motor block.









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COVER DRILLING

Make a 18 mm diameter hole on the lengthways marking of the cover **315**-(1).

The hole must be centred with respect to the release knob.

CLOSED DOOR MONITOR SENSOR

(OPTIONAL ACCESSORY)



Assemble the magnet on the carriage closest to the closing stop.

- 1. Screw the magnet **3.16**-(1) onto the carriage (use the threaded hole normally used to attach the belt).
- 2. Install the sensor onto the bracket using the plastic nuts **16**-2.
- Insert a threaded plate with screw into seat on the support profile and fasten the bracket 6.6.3.



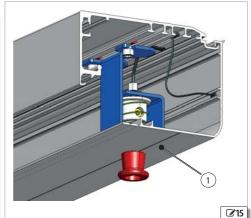
After installing the door the position must be checked to ensure sensor and magnet are aligned when the door is closed.

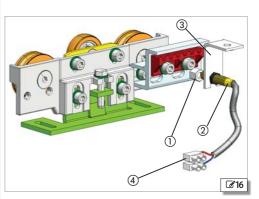
EMERGENCY BATTERY KIT

- 1. Insert two plates into the support profile as shown in **317**.
- 2. Fasten the battery support onto the support profile using the 2 screws and washers (provided).

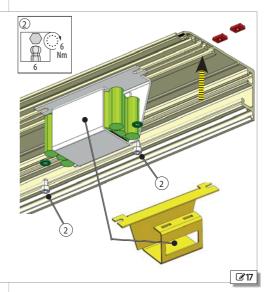


Check the date on the label on the emergency battery through the window on the battery support plate. **2** 17-3 **44**









F44C

7. ASSEMBLING THE A1000 CS FRAME

RISKS







PERSONAL PROTECTIVE EQUIPMENT





REQUIRED TOOLS











mm 5



A torque wrench must be used to achieve the specified fastening torques (Nm).

When ordering the door frame, remember to take into account that the opening safety clearances must be as indicated in standard EN 16005:2012 since no opening protection detectors can be installed on the A1000 door.



For manual lifting, arrange for an adequate number of people for the weight of the leaf: 1 person for every 20 kg to be lifted.

7.1 ENTRY WITH TK50 PROFILES

PRELIMINARY OPERATIONS

- Check soundness of the installation opening (Masonry, Structural Metal Work etc.).
- 2. Take the measurements of the opening.



The door frame must be fastened to the structure with suitable fasteners (dowels, self-tapping screws etc.).

- Measure the door frame and compare them with the opening measurements.
- 4. Check floor levelness with a spirit level.

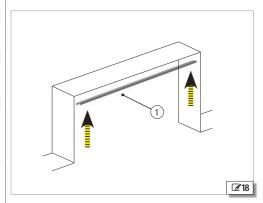


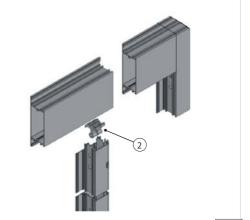
Ensure there are no hydraulic coils or electrical conduits under the floor at the planned drill points.

ASSEMBLING THE FRAME

The supply includes:

- upper head section with reinforcement counter-plate for A1000
- 2 mobile leaves assembled with or without glazing
- 2 fixed side leaves without glazing to be assembled with upper head section
- seal for fixed glass leaves
- frame assembly screws kit
- 1. Mount the upper balancing profile on the opening (STD solution) (\$\mathbb{3}19-(1)\$.
- 2. Fasten with appropriate screws with minimum 500 mm pitch.
- 4. Lift the assembled entry door.
- 5. Place the entry door in the opening and insert it into the top balancing profile.
- 6. Check levelness with a spirit level.
- Fasten the side balancing profiles using suitable screws next to the grub screws 20-3.





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- 8. Check verticality with a spirit level.
- Adjust the distance between the leaf profile and balancing profile using the grub screws on the profile 20-3. This adjustment corrects any flaws on the wall surface.
- 10. Check proper vertical and horizontal alignment.
- 11. Fasten the fixed leaf sides as shown in 20-4).



If the balancing profile needs to be cut, pay attention to the alignment of the holes, which have a variable spacing. It is recommended to make the reference marks for the cut starting from the top.

FASTENING THE FIXED LEAVES

Fixed leaves may be:

- with low skirting
- with high skirting

Fasten the fixed leaf to the floor by drilling the leaf $\Im 21$ and fasten it using suitable screws and dowels.

- Use adequate wall bits and dowels with screws.



Ensure there are no hydraulic coils or electrical conduits under the floor at the planned drill points.

MOUNTING MOBILE LEAVES

Mount the leaves as described in § 9 3 29.

GLAZING INSTALLATION

- 1. Place the 3 shims in the lower part of the profile **21-2**.
- 2. Place the glazing on the shims. 22-34



Handle the glazing adhering to the safety warnings in the Safety chapter.

- 3. Secure the glass using the beading supplied **22**-5.
- 4. Insert the beading along the entire length of the perimeter.



The seal must be inserted with the spline side towards the inside of the profile 32-0.

ASSEMBLY OF THE HEAD SECTION TO THE UPPER PROFILE

Mount the assembled head section onto the upper profile by means of suitable attachments.

After mounting the head section, perform all procedures to secure the leaf to the carriages as set out in the chapters concerning kit assembly. Refer to chapter \S 8 also for all the adjustment procedures.

7.2 ENTRY DOOR WITH TK20 PROFILES

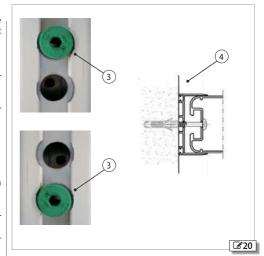
PRELIMINARY OPERATIONS

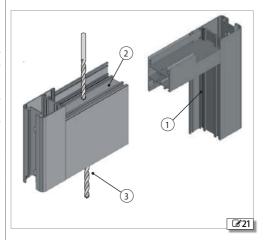
- Check soundness of the installation opening (Masonry, Structural Metal Work, etc.).
- 2. Take the measurements of the opening.

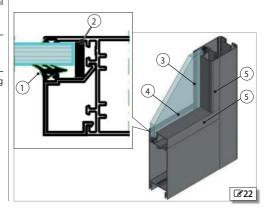


The frame must be fastened to the structure with suitable attachments. Ensure there are no hydraulic coils or electrical conduits under the floor at the planned drill points.

- Measure the door frame and compare them with the opening measurements.
- 4. Check floor levelness with a spirit level.







ASSEMBLING THE FRAME

The supply includes:

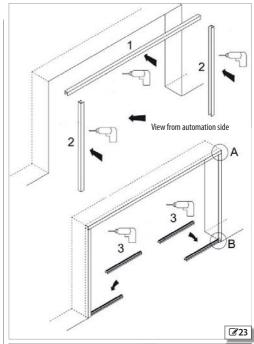
- 4 leaves (2 fixed leaves and 2 mobile leaves with installed glazing).
- side and upper balancing profiles
- alignment profile
- fixed leaf beading
- floor shoe
- 1. Install the upper balancing profile **23**-1.
- 2. Install the side balancing profiles **23-**2.
- 3. Mount the floor profile **23**-3.
- 4. Insert the fixed leaf by tilting it and inserting it into the top profile **224** ① ② ③.
- 5. Place horizontally then fasten the leaf.
- 6. Mount the upper labyrinth profile **24**-5.

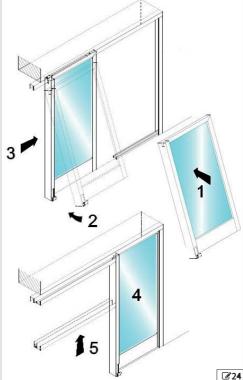
MOUNTING MOBILE LEAVES

Mount the leaves as described in § 9 6 29.

ASSEMBLY OF THE HEAD SECTION TO THE UPPER PROFILE

Mount the assembled head section onto the upper profile by means of suitable attachments.







A1000 27 53226404 - Rev.A

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8. INSTALLING THE HEAD SECTION

RISKS









PERSONAL PROTECTIVE EQUIPMENT









REQUIRED TOOLS









For manual lifting, there should be 1 person for every 20 kg to be lifted.

8.1 PRELIMINARY OPERATIONS

1. To be able to perform fastenings, the casing and electronics module must be temporarily disassembled and the components must be moved as they are a hindrance.



To make subsequent replacing easier, mark components' positions.

- With the automation on the ground, extract the safety cables and remove the casing
- Loosen the screws of the electronics module and remove it.
- Loosen the screws of the components that are a hindrance (e.g. motors) and slide them along the profile.
- 2. Establish the fastening height of the support profile: see installation diagrams @ 49 @ 50 @ 51



The minimum distance between the top of the support profile and the ceiling must be 80 mm 25.

Check the horizontal with a spirit level.

3. Proceed according to the intended type of installation.

8.2 FASTENING TO THE WALL



The supporting wall must be adequate for the weight of the entry door (automation with leaves). It is recommended to use dowels with adequate screws and tightening torque.

- 1. Lift the support profile to the established fastening height.
- 2. Mark the drilling points on the wall.

Check the horizontal with a spirit level.

- 3. Drill the holes on the wall.
 - Use suitable drill bits for the wall material.
- 4. Lift the support profile. Start fastening at a vertical slot at one end and a horizontal slot at the other end.

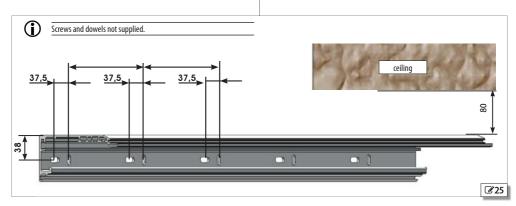


Check the horizontal with a spirit level

5. First fasten it in the centre and then fasten it at the other points, alternating vertical and horizontal slots at a distance of 200 mm **25**



Upon completing head section installation, reposition the components you have moved and reassemble the electronics module in the correct position. Finally, fit again the safety cables and the casing.



9. INSTALLING THE LEAVES

RISKS





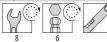














For manual lifting, there should be 1 person for every 20 kg to be lifted.

9.1 MOUNTING THE LOWER SHOES

SHOE WITH TK50 BRACKET

For fastening to the wall or the fixed leaf 26.

- use suitable screws (not provided).

TK50 SWIVEL SHOE

For fastening to the floor **27**.

- use suitable screws (not provided).

SHOE WITH TK20 BRACKET

For fastening to the fixed leaf 28.

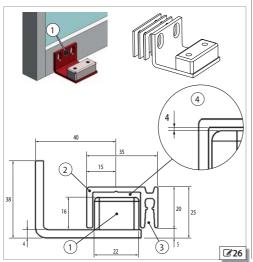
- use suitable screws (not provided).

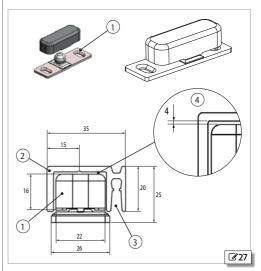


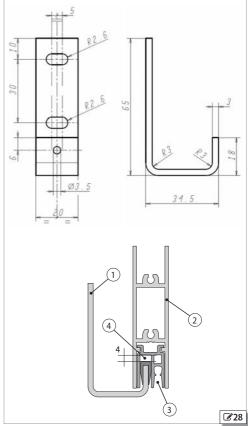
Check leaf verticality.

When the leaf is open or closed, the shoe must be fully inside the lower leaf profile.

The distance between the shoe and the lower profile must be 4mm (ref. 4 £ 26-£ 27-£ 28).









9.2 MOUNT PROFILES ON THE LEAVES



Before installing the leaves, ensure there is no cutting or dragging hazard. Check leaf verticality.

Remove any protrusions and/or sharp edges on the frame and leaves.

1. Position and fasten the attachment profile onto the top of the leaf @ 29.



Use suitable screws for the weight of the leaf with adequate tightening torque.

2. Position and fasten the lower guide profile onto the bottom of the leaf 30.

9.3 MOUNT THE LOWER SWEEPER

(OPTIONAL ACCESSORY)

- 1. Cut the sweeper to the same length as the leaf.
- 2. Insert the brush into the appropriate housing in the lower guide profile **30**-1.

GLASS LEAVES



For installation of glass leaves see the dedicated section: § 10 32

9.4 INSTALLING THE LEAVES

Install each leaf as described below.

- 1. Disassemble the 2 carriages:
- Remove the 2 fastening screws 31-1).
 - Separate the top plate of the carriage from the bottom plate
- 2. Slowly insert the lower plates of the carriage into the profile
- 3. Adjust the position of the two plates on the leaf.
 - Keep to the measurements indicated in diagrams 660 61

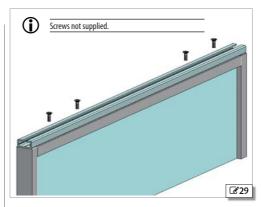
and the positions shown in figures:

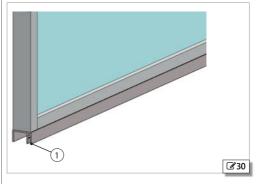
- **363** for RIGHT single leaf automations
- 64 for LEFT single leaf automations
- 65 for DOUBLE leaf automations
- 4. Fasten the plates of the carriages using the 2 screws **31**-1.

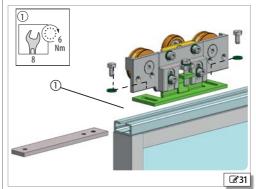


For manual lifting, there should be 1 person for every 20 kg to be lifted.

Adjust the counter wheel 34







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9.5 ADJUSTING THE LEAVES AND CARRIAGES

Act on the carriages to adjust height and depth of the leaves.

Adjust the counter wheel to prevent the carriage coming off the sliding guide.

HEIGHT OF THE LEAVES



The carriages allow leaf height to be adjusted by \pm 7.5 mm.

- 1. Slightly loosen the two screws **32**-1.
- 2. To lift the leaf, turn the screw ② clockwise. To lower the leaf, turn screw ② anti-clockwise.
- 3. Tighten the two screws **32**-1.

DEPTH OF THE LEAVES

- 1. Loosen the 2 screws **33**-(1).
- Move the leaf on the two slots at the base of the carriages as desired.
- 3. Tighten the 2 screws **33**-1.



After the adjustments check the vertical and horizontal positions of the leaf with a spirit level.

COUNTER WHEEL

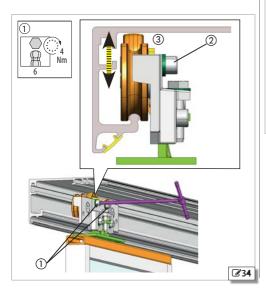
- 1. Loosen the screws **34**-①.
- 2. Adjust the height by raising or lowering the wheel support. 34-2.
 - The wheel must be brought close to the top profile 34.3. It
 is recommended to place a 0.5 mm shim between wheel and
 profile. Remove the shim upon completing adjustment.
- 3. Tighten the screw **34**-1.

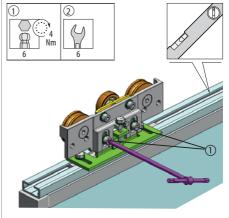


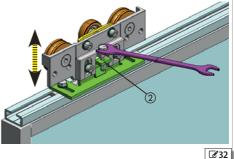
Manually move the leaves to ensure the counter wheel runs freely along the entire stroke. Ensure there are no friction points with the surface of the support profile.

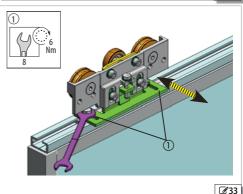


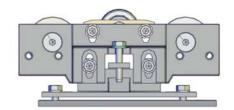
When installation has been completed, apply the FAAC stickers that were supplied with automatic door to the glass leaves.











FAAC

10. INSTALLING THE GLASS LEAVES

RISKS













REQUIRED TOOLS













For manual lifting, there should be 1 person for every 20 kg to be lifted.



Comply with the glass thickness = 10-11 mm.

- 1. The glass must be drilled as shown 35-1.
- Insert a bush in each hole in the glass 35-2.
- 3. Make 2 holes on the profiles of the gripper 35-3-4.
- 4. Cut 2 pieces of glass beading with the length equal to L.
- 5. Drill holes in the seals in correspondence to the holes in the glass
- **35**-(5)
- 6. Insert the 2 seals into the profiles 35-6.
- 7. Clean the glass, insert the gripper.



Ensure the beading is in its housing.

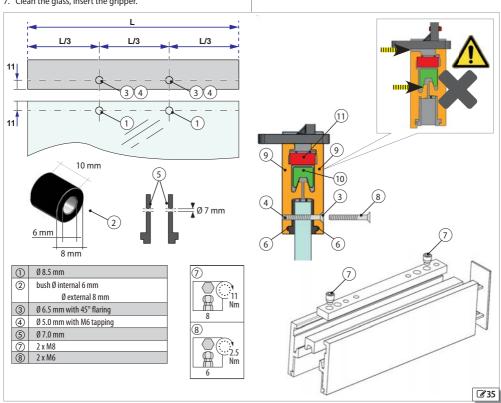
- 8. Assemble the gripper as follows: Insert elements (1) and (1) into the 2 plates 9.
- 9. Tighten the 2 grub screws 35-7
- 10. Part (1) must be aligned with the fixing holes on the carriage
- 11.Insert 2 galvanised countersunk head screws into the holes **35**-(8).



The glass must be fully inserted until it touches the clamps on its upper profile. If the grip of the clamp on the glass is not correct, the glass might fall. The two clamp profiles must be aligned.

Install each leaf as described below.

- 12. Adjust the counter wheel to prevent the carriage from falling.
- 13. Place the lower plate onto the glass leaf.
 - Keep to the measurements indicated in diagrams :
 - 🗷 63 🖟 52 for RIGHT single leaf automations
 - **ਡੇ64** ਯੋ **53** for LEFT single leaf automations
 - 🕝 65 🖓 54 for DOUBLE leaf automations.
- 14. Fasten the lower plate onto the leaf gripper using the 2 screws **36**-3







For manual lifting, arrange for an adequate number of people for the weight of the leaf: 1 person for every 20 kg to be lifted.



Use suitable glazing suction cups.

15. Adjust the counter wheel, see ⓓ 31). 16. Insert the end cover ☑ 36-⑧.



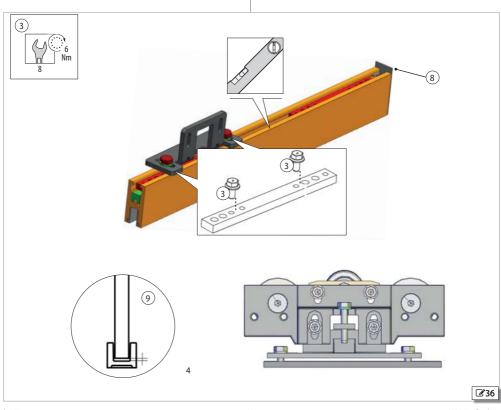
Check leaf verticality.

When the leaf is open or closed, the shoe must be fully inside the lower leaf profile.

The distance between glass and lower shoe must be 4mm **36**-9.



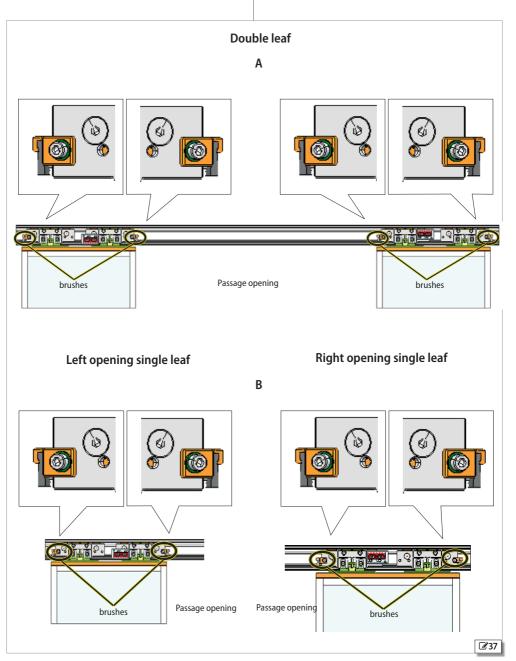
When installation has been completed, apply the FAAC stickers supplied with the automatic door to the glass leaves.



FAAC

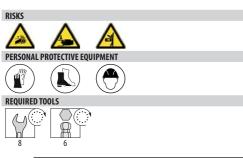
10.1 MOUNTING THE BRUSHES

For double leaf automations: **337**. For single leaf automations: **337**.





11. ASSEMBLE THE BELT, CASING AND ACCESSORIES





Do not place hands between: the pulley and belt or between the sliding quide and carriage wheels.

11.1 MOUNTING THE BELT

Close the leaves at the centre line (closing point in case of single leaf). Move the leaves by hand and ensure the movement is smooth and friction-less along the stroke.



It is mandatory to use a FAAC belt for the A1000

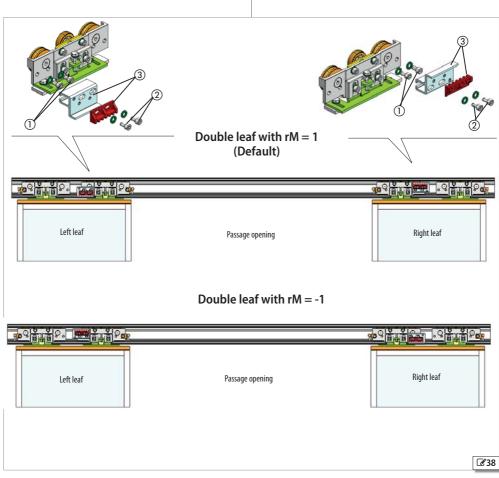
- 1. Place one end of the belt over the pulley of the motor. Fasten the two ends using the fittings **38**(1) and screws **38**(2).
- Position the assembled fitting with the belt on the carriage. Keep to the positions indicated in 38 and fasten using the screws 38-(3).

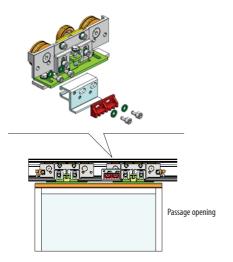


In case of double leaf, the belt joint must be fastened on the lower fitting (on the left leaf).

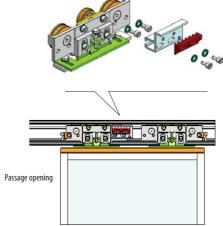
The position of the belt fitting determines the opening direction.

3. Position the belt also on the pulley of the second motor.





Single leaf - LH opening with rM = 1 (Default) Single leaf - RH opening with rM = -1



Single leaf - RH opening with rM = 1 (Default) Single leaf - LH opening with rM = -1

ADJUSTING THE BELT

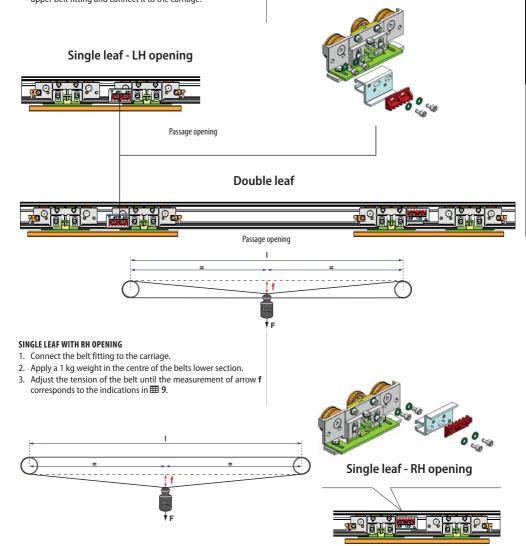


Open and close manually a few times: the belt must remain in its seat flush with the pulley.

When the belt is installed, operate the leaves with care to prevent crushing your fingers between the carriage wheels and the sliding guide and between the pulley and belt.

SINGLE LEAF WITH LH OPENING / DOUBLE LEAF

- 1. Connect the belt fitting to the carriage.
- 2. Attach a 1kg weight in the centre of the upper section of the belt.
- 3. Adjust the tension of the belt until the measurement of arrow f corresponds to the indications in **III 9**.
- 4. In the case of a double leaf: after adjustment, mount the second upper belt fitting and connect it to the carriage.





11.2 BELT TENSIONING

- 1. To tension the belt correctly, proceed as follows.
- 2. Loosen the nut **39**-(1).
- 3. Adjust the screw and nut **39**-(2) to tension or slacken the belt.
- 4. Attach a 1 kg weight in the centre of the lower section of the belt.
- 5. Measure the arrow **f** and adjust the screw **39** ② using a hex spanner until obtaining the measurement specified in the table.
- 6. After adjustment, tighten the screw 39-1.
- 7. Carry out a few cycles and make sure the belt remains in its seat flush with the pulley on the main motor and on the return pulley.



Caution - make sure that the belt remains flush with the pulleys of the main motor and the return pulley.

- 8. If the belt is not flush with the pulleys, loosen the fastening screws of the return pulley bracket **39**-3
- 9. Rotate the return pulley bracket clockwise.
- 10. Tighten the return pulley bracket fastening screws.
- 11. Perform a few cycles again and check that the belt remains flush with the pulley.



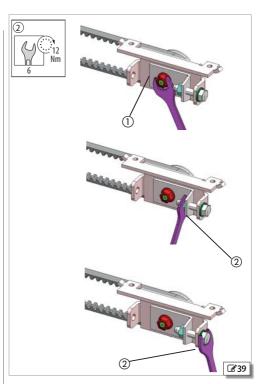
Close the door and ensure:

- the closing point between the two leaves matches with the centre line of the support profile.
- complete opening and closing is possible.

In case of deviation, check the position and correct connection of the belt fittings.



When the belt is new tensioning adjustment must be repeated after the first 100 cycles.



9 A1000 belt tensioning (measurements in mm)

RH single leaf Pulley centre dis- tance (I)	Belt length	f	LH single leaf Pulleys centre distance (I)	Belt length	f	Double leaf Pulleys centre distance (I)	Belt	f
turree (i)			distance (i)	leligui		distalice (I)	length	
1000	2140	17	1000	2140	17	1250	2640	22
1080	2300	19	1080	2300	19	1320	2780	23
1160	2460	20	1160	2460	20	1390	2920	24
1240	2620	22	1240	2620	22	1460	3060	25
1320	2780	23	1320	2780	23	1530	3200	27
1400	2940	24	1400	2940	24	1600	3340	28
1480	3100	26	1480	3100	26	1670	3480	29
1560	3260	27	1560	3260	27	1740	3620	30
1640	3420	29	1640	3420	29	1810	3760	31
1720	3580	30	1720	3580	30	1880	3900	33
1800	3740	31	1800	3740	31	1950	4040	34
1880	3900	33	1880	3900	33	2020	4180	35
1960	4060	34	1960	4060	34	2090	4320	36
2040	4220	35	2040	4220	35	2160	4460	38
2120	4380	37	2120	4380	37	2230	4600	39
2200	4540	38	2200	4540	38	2300	4740	40
2280	4700	40	2280	4700	40	2370	4880	41
2360	4860	41	2360	4860	41	2440	5020	42
2440	5020	42	2440	5020	42	2510	5160	44
2520	5180	44	2520	5180	44	2580	5300	45
2600	5340	45	2600	5340	45	2650	5440	46
2680	5500	47	2680	5500	47	2720	5580	47
2760	5660	48	2760	5660	48	2790	5720	49
2840	5820	49	2840	5820	49			

FAAC

11.3 ADJUSTING THE MECHANICAL STOPS



The adjustment of the mechanical stops is indispensable for correct operation of the automation.

The carriages must come into contact with the mechanical stops positioned at stroke end in opening and closing.

STOPS ON OPENING

- 1. Loosen the screw **40** 1 to release the mechanical stop.
- 2. Open the leaf completely **341**.1.
- 3. Bring the pad of the mechanical stop and the carriage into contact 41-(2).
- 4. Tighten the screw to lock the mechanical stop **40**-①.

SINGLE LEAF CLOSING STOPS

With closed door the carriage must be in full contact with the mechanical stop.

- 1. Loosen the screw to release the mechanical stop **40**-①.
- 2. Close the leaf.
- 3. Bring the pad of the mechanical stop and the carriage into contact 41-(2).
- 4. Tighten the screw to lock the mechanical stop **41**-1.

DOUBLE LEAF CLOSING STOPS

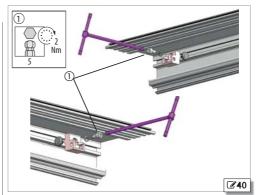


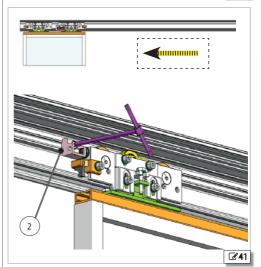
In double leaf automations, the leaves must close at the head section centre line.

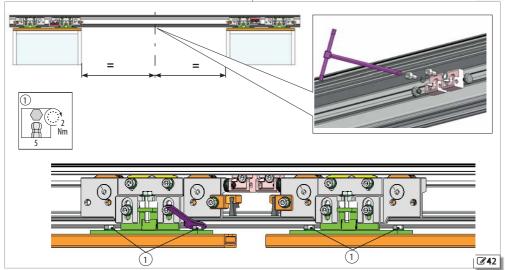
- 1. Move the leaves in the closed door position.
- 2. For each leaf, ensure the carriage is in full contact with the closing stop pad.

Should adjustment be required:

- 3. Bring the pad of the mechanical stop and the carriage into contact **3.42**-(2).
- 4. Tighten the screw to lock the mechanical stop **40**-①.









11.4 MOUNTING THE SIDE PROFILES

The side profiles enable the casing to remain closed.



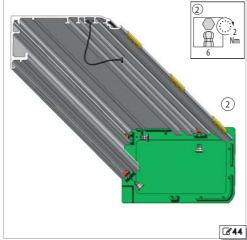
If there are no side profiles, cover mounting brackets should be used.

- 1. Place 6 plates on the support profile (for profiles longer than 3m) **343**·①.
- 2. Mount the side profiles for H100 casings on the ends of the support profile.
- 3. Fasten each side profile using the 3 screws provided **44**-2.



Use at least one central bracket **46**-② for profiles longer than 3 m.









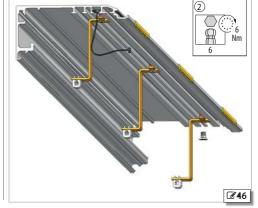
The brackets enable the casing to be closed if side profiles are not used.



Brackets are available for H100 covers. It is recommended to use a central bracket for profiles longer than 3 m.

- 1. Place 2 plates **45**-① on the support profile (for profiles longer than 3 m, a third plate should be added).
- Mount the brackets and fasten them using the screws provided 346-2.





11.6 FITTING THE COVER



On the profile there must be:

- the safety cables
- the spacers
- the side profiles or the cover fastening brackets
- 1. Place the cover on the profile **347** or **348**.
- 2. Hold the cover in the open position **349**-23 (lift it, then push it into the profile).
- 3. Fasten the safety cables to the cover **47**-**5** and close the cover.



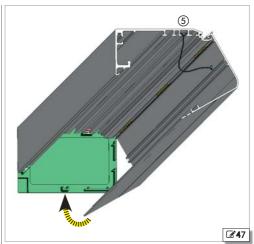
The safety cables must be correctly installed to protect from the risk of accidental casing fall.

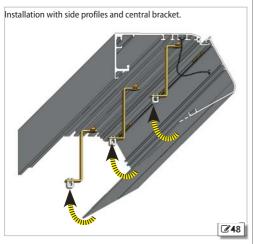
Push the cover slightly in order to insert the blocks into the brackets or side profiles 347 or 348.

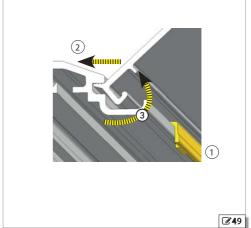


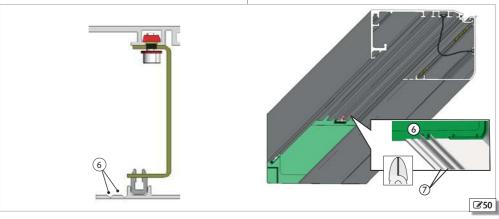
The markings on the casing allow it to be adapted to varying leaf thickness. The breaking points **350** make it possible to remove the profile section in excess.











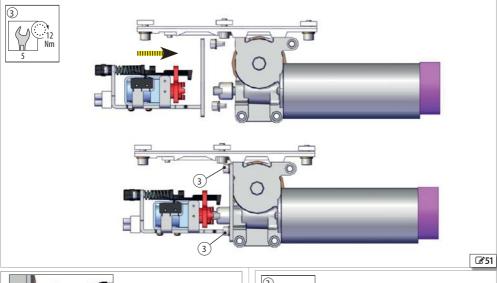


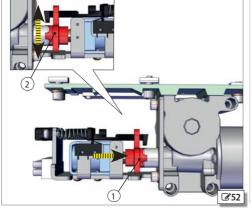
11.7 INSTALLING THE XB LOCK MOTOR BLOCK

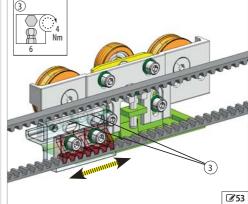
- 1. Install the motor block by resting it on the motor body and securing it using the two M5 screws **351**-3.
- 2. Close the leaves.
- Manually push the lever 52-1 towards the motor shaft. Check correct coupling.
- Move the motor block lever to check the clearance between the motor shaft and the motor block coupling \$\mathbb{G}\$ 52-\mathbb{Q}. If it is incorrect, adjust it as described below. \$\mathbb{G}\$ 53-\mathbb{G}\$.
- 5. Fasten the motor block using the two M5 screws **51**-3.

11.8 ADJUSTING THE XB LOCK MOTOR BLOCK

- 1. Loosen the two screws **353**-(3) that connect the belt fitting to the carriage (on both carriages in the case of a double leaf).
- Slightly move the belt fitting horizontally until there is a clearance between the coupling of the motor shaft and the motor block by moving the motor block lever @ 51-②.
- 3. re-tighten the screws that were previously loosened.







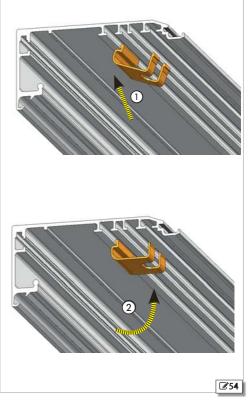


11.9 MOUNTING THE CABLE GLAND GUIDES



The guides prevent interference between cables and moving parts.

Install the electric cable guides inside the support profile 354-0 and 2.





12. MAINTENANCE



In order to keep the system operating safety and efficiently and to reduce the number of malfunctions and breakdowns, routine maintenance and the periodic replacement of parts must be carried out as indicated in

10.

ROUTINE MAINTENANCE must be performed every 6 months.



Frequency of replacements is indicated based on number of operation cycles for components subject to wear; in years for components subject to deterioration.



All maintenance operations must exclusively be performed by technical-professional personnel.

Only the installer/maintenance technician is authorised to open the casing to access the automation housing.

12.1 CALCULATION ESTIMATE OF CYCLES PERFORMED

If there is a E1SL board fault and the cycle counter data is lost with error code 53, the number of cycles performed since the last service should be estimated.

 $\mathbf{R1} = \text{number of days elapsed since the last motor replacement (see SYSTEM REGISTER)}$

R2 = number of hours of operation per day

R3 = door cycle time (opening time + pause + closing time)



The installer must take on responsibility for indicating parameters R1, R2 and R3 $\,$

Calculate:

R4 = R1 * R2 *3600

Calculate the ESTIMATED NUMBER OF CYCLES:

R4/R3

Afterwards, from the SDK EVO; in the Cycle counter menu (5) in the Maintenance section (a) 44, enter the calculated number of cycles.

III 10 Maintenance programme and periodic replacements

ROUTINE MAINTENANCE

OPERATION			
Check automation fastening to the wall	check the support profile is so	lidly secured to the wall	-
	in case of installation with se	f-supporting Head Section:	
	Check the fixing screws of the	support profile	ு 28
Check the fastening of the Motor and return Pulley	check screws securing the mo	tors on the support profile	ு 22
Check on carriages	check screws securing to the	eaf	₼ 30
	check and adjust the counter	wheels of carriages and leaf depth and height screws	₼ 31
Check mechanical stops	check position of mechanical	stops and fixing screws	₼ 20
Belt tensioning check	check belt tensioning		ு 37
Cleaning	clean: Sliding Guide; Lower G	Guide Shoe; Carriages	₫ 47
Functional system check	perform required checks and and leaf frames	procedures to ensure integrity of the load bearing structure	₫ 16
	perform functional checks		₫ 47

PERIODIC REPLACEMENTS

175	20
141	- 20

PART/COMPONENT FREQUENCY		Replacements
Operation cycles	Time (years)	Recommended / Mandatory
Motor 1 000 000		Recommended
Return pulley 1 000 000		Recommended
Lower guide shoe 2 000 000		Mandatory
Carriages 2 000 000		Mandatory
Belt 1 000 000	5	Mandatory
Pad mechanical stop 2 000 000	5	Mandatory
Safety fall arrest cables	5	Mandatory
Emergency battery	1	Recommended

12.2 MAINTENANCE TECHNICIAN SAFETY

RISKS











PERSONAL PROTECTIVE EQUIPMENT







REQUIRED TOOLS









Before any maintenance operation, disconnect the mains power supply and disconnect the emergency battery.



The installer/maintenance technician is bound to comply with the safety instructions and recommendations provided in this manual.

Signal maintenance work in progress and prevent access to the area.

Do not leave the work site unattended.

The work area must be kept tidy and clear upon completing maintenance. Do not proceed with modifications or repairs of any motorisation component.

 $The \ repairs \ must \ exclusively \ be \ performed \ by \ an \ Authorised \ Repair \ Centre.$



The warranty shall be forfeited in the event of tampering with components.

Only use original FAAC spare parts.



The batteries and electronic components must not be disposed of with household waste but delivered to authorised disposal and recycling centres.

12.3 REPLACEMENTS

Per 2 million cycles

- 1. Remove the belt after loosening it from the leaf fittings.
- Remove the motor from its support after removing the screws \$\mathbb{Z}\$55-1.
- 3. Loosen the screws **3.56**-(1) of each carriage and lower the leaves to the floor using screw (2).
- 4. Disconnect the leaves from the carriages by removing the screws **356**-(1).
- Temporarily store the leaves away, using all precautions to prevent risks of fall.
- Loosen the screw 556-3 and lower the counter wheel in order to remove each carriage.
- 7. Remove the mechanical stops.
- 8. Remove the lower guide shoe.
- 9. Install the new shoe டு 29.
- 10. Install the new motor on its support.
- 11. Tighten the screws **25-**1-2-3.
- 12. Install the new mechanical stops @ 20.
- 13. Install the new carriages onto the leaves @ 30.
- 14. Install and adjust the leaves 🚳 30 🚳 31.
- 15. Install and adjust the new belt 35 35 37.
- 16. Adjust the new mechanical stops @ 20.

For 1 million cycles

Perform steps 1, 2, 11, 12, 13 and 18 of the sequence for 2 million cycles.

Belt replacement

Only perform steps 1 and 9 of the sequence for 2 million cycles.

Replacement of mechanical stops

Only perform steps 7 and 19 of the sequence for 2 million cycles.

Replacement of safety cables

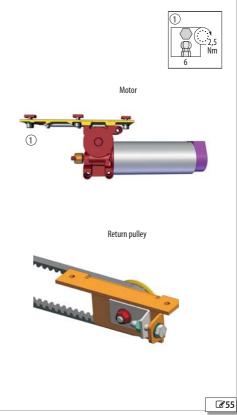
- 1. Remove the safety cables from the casing.
- 2. Install the new cables രീ 22 e രീ 41.

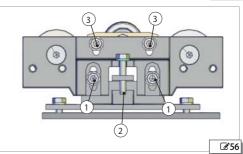
Emergency battery replacement



Before proceeding, disconnect mains power supply.

- 1. Disconnect the battery from the E1SL board.
- 2. Unscrew the 2 screws with washer **357**-① and remove the battery.





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- 3. Install the new battery **257**-①.
- 4. Connect the battery to the E1SL board.

Electronic board replacement



Before proceeding, disconnect the mains power supply and disconnect the emergency battery.



It is recommended to download the data to a USB storage device in order to upload it (update) to the new board 🗗 46.

- 1. Remove all connections.
- 2. Remove the screw **358**-① and the screw with washer **358**-②.
- 3. Remove the board from the support.
- 4. Insert the new board in the seats **258**-(3).
- 5. Fasten using the screw (1) and screw (2) with washer (4).



The washer **58**-(4) ensures that the board is earthed.

- 6. Restore all connections.
- 7. Program the new board.



If programming files that were previously saved to a USB storage device are available, upload (update) these to the board 46.

8. Carry out the SETUP procedure @ 46.

Replacing the fuses

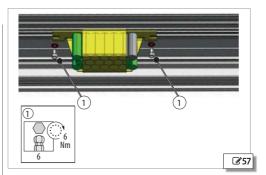


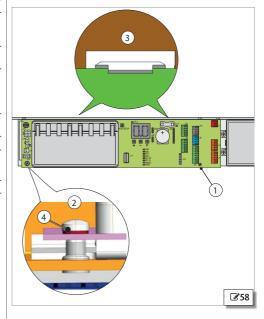
Before proceeding, disconnect the mains power supply and disconnect the emergency battery.

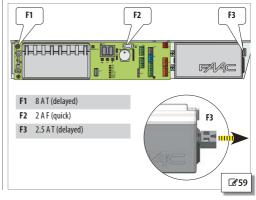
- 1. Remove the fuse F1 by pressing and turning anti-clockwise. Remove fuses F2 and F3 by gently using a screwdriver as a lever.
- 2. Assemble the new fuse.



Only use the fuses indicated 259.







12.4 CLEANING



Before any maintenance operation, disconnect the mains power supply and disconnect the emergency battery.



Before starting to clean, wait for the components subject to overheating to cool down.

DO NOT use detergents on optical devices and electronic displays (e.g. photocell lenses).

Do not moisten parts. In particular, do not moisten electrical connections and components in any way.

NEVER use direct water and compressed air jets neither for cleaning nor drying.

Ensure all components are dry after cleaning.

Use clean soft cloths to remove dust. Moisten the cloth to remove dirt. Dry parts with clean, dry and soft cloths.

For parts that are hard to reach, use brushes with soft bristles.

Cleaning products for plastic material parts

With the exception of optical devices and electronic displays, water and neutral detergent solutions are allowed (in the concentration indicated by the manufacturer). Use detergents at ambient temperature (max. 30°C).

DO NOT use alkaline, acid or base solutions, benzene, acetic acid or solvents of any kind: these products may damage the surfaces of the materials.

Cleaning products of steel or aluminium parts

Water and neutral detergent solutions are allowed (in the concentration indicated on the detergent packaging). 95% methylated spirit diluted at 50%. In case of oily dirt, use 70% solutions of isopropyl alcohol.

DO NOT use solutions of acetic acid, acid or basic solutions or ethyl alcohol

12.5 FUNCTIONAL CHECKS



Connect power supply and emergency battery only after tidying up the area.

In case of failures or malfunctions, please refer to 69 47 and 69 47.

Command some movements to check correct operation:

- movements correctly executed, according to logics and settings
- regular and smooth leaf movement
- end of run slowing down correctly executed
- approaching the opening and closing stops without impact
- regular operation of motor block on Motor_1 (if present)
- working efficiency of emergency battery: disconnect the mains power supply and ensure that the door opens and remains open (safety condition)
- efficiency of safety detectors (the radar field must be free and adequately sized with respect to passage flow)
- operation of EMERGENCY button (if present) and any other accessories installed.

FAAC

13. WASTE DISPOSAL

After taking down the automation, dispose of it in compliance with the material disposal regulations in force.



WARNING

The batteries and electronic components must not be disposed of with household waste but delivered to authorised disposal and recycling centres.

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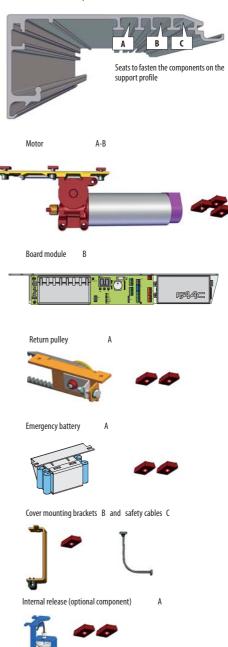
14. ANNEXES TO A1000

Ⅲ 11 A1000 automation weights

Single leaf			
Vp	Lt	Support profile weight	TOTAL weight
[mm]	[mm]	[kg - approximate values]	[kg]
700	1500	9	21
800	1700	10	22
900	1900	12	23
1000	2100	13	24
1100	2300	14	25
1200	2500	15	26
1300	2700	16	27
1400	2900	17	29
1500	3100	19	30
1600	3300	20	31
1700	3500	21	32
1800	3700	22	33
1900	3900	23	34
2000	4100	24	35
2100	4300	26	37
2200	4500	27	38
2300	4700	28	39
2400	4900	29	40
2500	5100	30	41
2600	5300	31	42
2700	5500	32	43
2800	5700	34	45
2900	5900	35	46
3000	6100	36	47

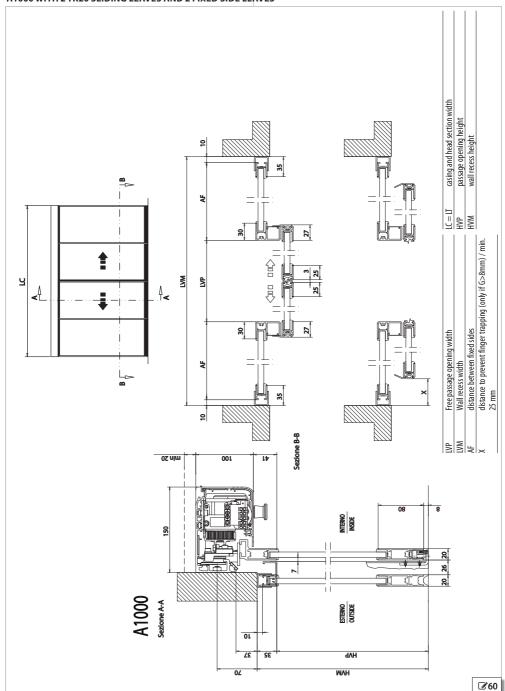
Double leaf					
Vp	Lt	Support profile weight	TOTAL weight		
[mm]	[mm]	[kg - approximate values]	[kg]		
800	1700	11	24		
900	1900	12	25		
1000	2100	13	27		
1100	2300	14	28		
1200	2500	15	29		
1300	2700	16	30		
1400	2900	18	31		
1500	3100	19	32		
1600	3300	20	33		
1700	3500	21	34		
1800	3700	22	36		
1900	3900	23	37		
2000	4100	24	38		
2100	4300	26	39		
2200	4500	27	40		
2300	4700	28	41		
2400	4900	29	42		
2500	5100	30	44		
2600	5300	31	45		
2700	5500	32	46		
2800	5700	34	47		
2900	5900	35	48		
3000	6100	36	49		

III 12 Positions of components on the head section

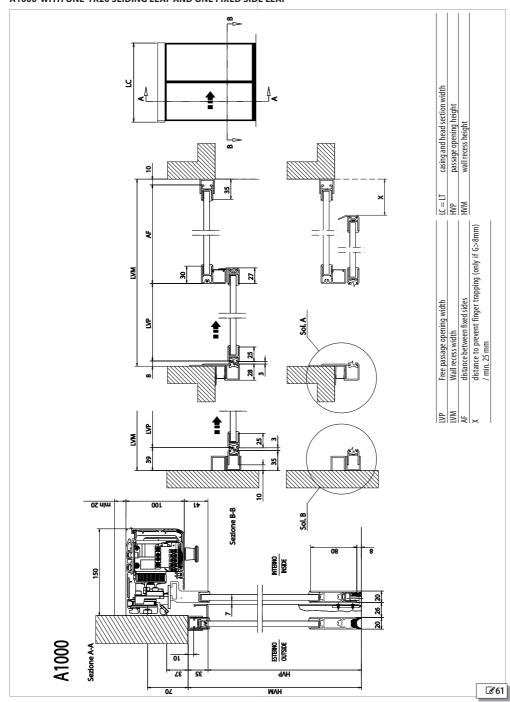


14.1 INSTALLATION DIAGRAMS

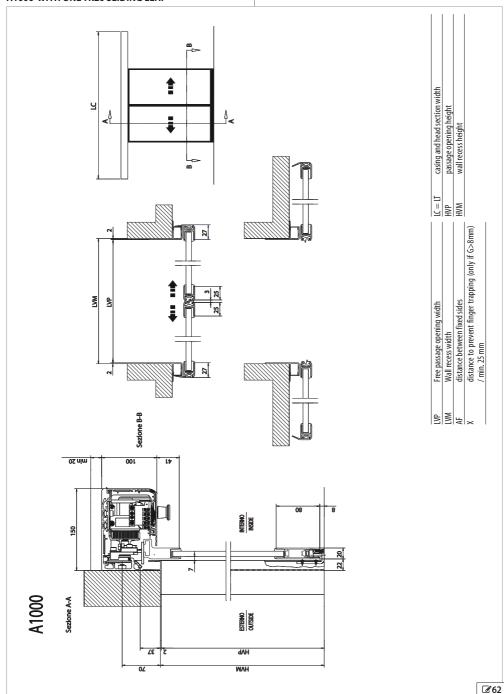
A1000 WITH 2 TK20 SLIDING LEAVES AND 2 FIXED SIDE LEAVES



A1000 WITH ONE TK20 SLIDING LEAF AND ONE FIXED SIDE LEAF

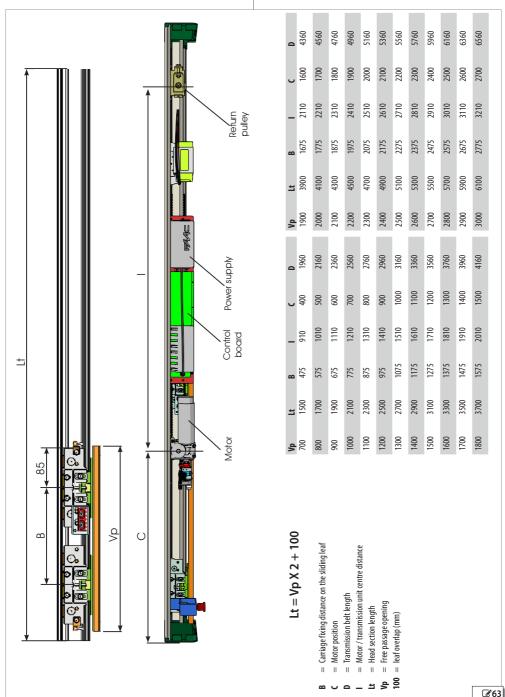


A1000 WITH ONE TK20 SLIDING LEAF

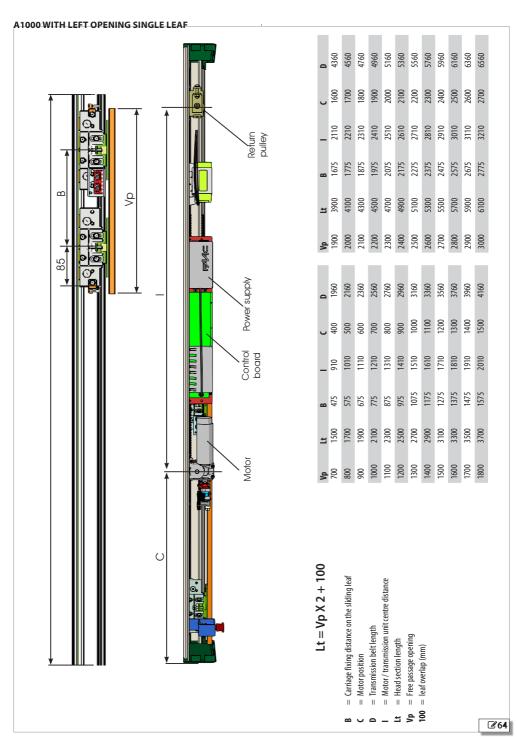


14.2 POSITION OF COMPONENTS ON THE A1000 SUPPORT PROFILE

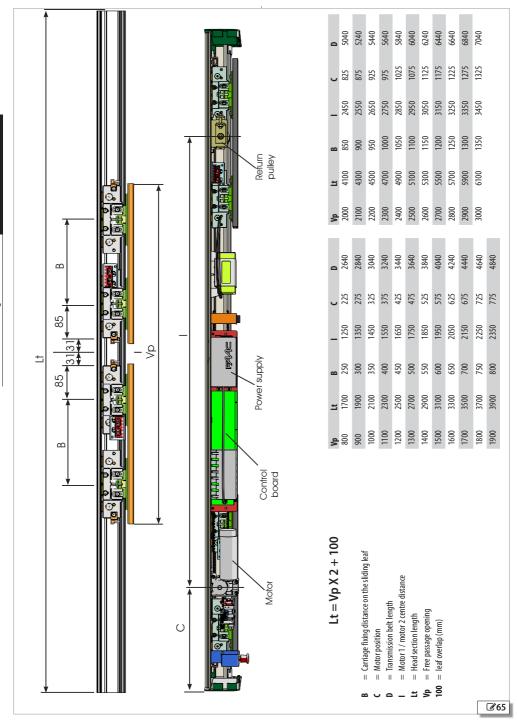
A1000 WITH RIGHT OPENING SINGLE LEAF















A1000 USFR'S GUIDE

SAFETY RECOMMENDATIONS

The A1000 automation, if correctly installed, maintained and used, quarantees a high level of safety.

GENERAL SAFETY RECOMMENDATIONS

The operator in charge of using the automation is responsible for running the system and must:



carefully read the instructions before using the product and store them

comply with all Operating instructions and Safety recommendations store the instructions of the products installed

prevent the control devices from being used by persons not expressly authorised and instructed

prevent access to the control devices to persons under age or with reduced psycho-physical abilities, unless under supervision by an adult responsible for their safety

not use the system in case of malfunctioning. If the system malfunctions, the operator must not attempt any kind of repair or take any direct action. He/she must request intervention by the installer/maintenance technician.

make sure the system's maintenance is carried out according to the instructions provided in this manual.

must be in good psycho-physical conditions, aware of and responsible about the hazards that may be engendered when using a machine.

the required level of ambient lighting must be equal to at least 200 lux store the system Register filled in at the end of every maintenance operation by the installer/maintenance technician

IISE

The FAAC series A1000 systems are designed to automatically operate, manage and control linear horizontal motion one- or two-leaf sliding doors.

The A1000 series automations are designed to automate entry doors that are used exclusively for pedestrian traffic.

They are compliant with standard EN 16005:2012.

They are suitable for indoor installation, for applications meeting the features detailed in the instruction manual.



No other use outside the ones set out above is allowed by the manufacturer

FAAC declines all liability deriving from misuse or use other than that for which the automation is intended.

Unauthorised use

- use the automation for uses other than THE INTENDED USE:
- use the automation with mobile and fixed guards tampered with or removed.

WARNINGS DURING NORMAL OPERATION

The following conditions can occur during normal operation of the door:



When the A1000 door changes from NIGHT-TIME or MANUAL mode to TWO-DIRECTION AUTOMATIC mode a system test is carried out immediately.

Routine and planned maintenance



In order to keep the system operating safety and efficiently and to reduce the number of malfunctions and breakdowns, ROUTINE MAINTENANCE and the PERIODIC REPLACEMENT of parts must be carried out as indicated in the A 1000 manual.

All maintenance operations must exclusively be performed by technical-professional personnel.

Only the installer/maintenance technician is authorised to open the casing to access the automation housing.

ROUTINE MAINTENANCE must be performed every 6 months.

Frequency of REPLACEMENTS is indicated based on number of operation cycles for components subject to wear; in years for components subject to deterioration.

MANUAL OPERATION Release manoeuvre

If it is necessary to manually actuate the internal release to manually open the door, proceed as follows:

To open the door, pull the red knob downwards and turn it anticlockwise until it locks on the bracket Fig. 1.

To close the door, pull the red knob downwards to release it and turn it clockwise until it comes into contact with the bracket Fig. 1.









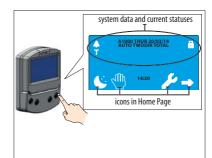


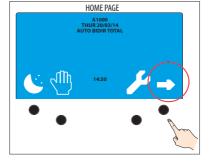
SDK EVO USER'S GUIDE

14.3 SELECTION MENU

- To access the operating mode selection menu, press the corresponding button on the HOME PAGE.
- 2. With the selection buttons you can set:
 - the Automatic or Door open operation
 - Two-directional or Exit only mode
- Total or Partial Opening option
- To go back to the HOME PAGE use the OK button (the selections displayed are confirmed).

Automatic or Door open operation	Automatic	Door open
Automatic = opening via detector Open door = closure is inhibited	•	
Direction of travel Two-directional = the detectors are enabled for entry and exit Exit only = the detector is only enabled for exit Entry only = the detector is only enabled for exit	Two-directional	Exit only Entry only
Opening percentage	Total opening	Partial opening
100% = Total opening % = Partial opening (percentage that can be modified by the program)		%





example - automatic operation, only for exit, with partial Opening:



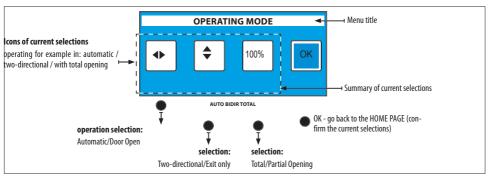




example - door open with total opening:







14.4 PASSWORD

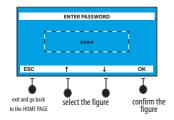
The 4 digit **PASSWORD** has to be entered in order to use some of the functions.

- select the first digit using the ↑↓ buttons
- confirm via the OK button and it moves on to the next digit
- once the 4 digits have been entered, the password is recognised by the device as **OPERATOR** or **INSTALLER**.

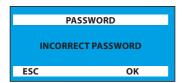


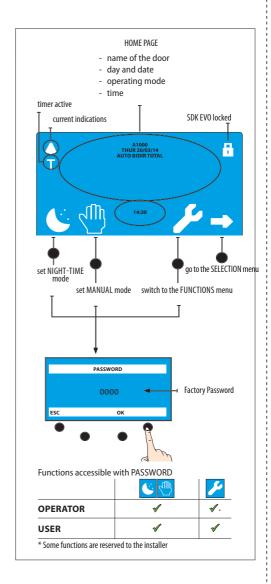
The factory-set password is: 0000





- In case of unrecognised password:
- the command is not executed
- the display shows "incorrect password"
- press OK to go back to the home page.









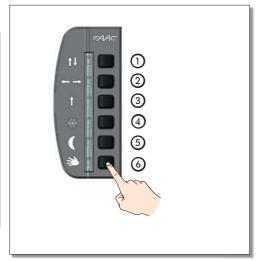
LK EVO USER'S GUIDE

14.5 SELECTION MENU

- 1. To access the operating mode selection menu, press the correspond- 7. The key combinations will allow special functions: ing function button.
- 2. The following functions may be set with the selection buttons:
 - TOTAL TWO-DIRECTION AUTOMATIC
 - DOOR OPEN
 - AUTOMATIC TOTAL ONE-DIRECTION
- NIGHT
- MANUAL
- AUTOMATIC PARTIAL TWO-DIRECTION AUTOMATIC
- 3. The LED switches on to identify the active function.

1	ţ↓	TOTAL TWO-DIRECTION AUTOMATIC
2	←→	DOOR OPEN
3	t	AUTOMATIC TOTAL ONE-DIRECTIONAL
4	*	AUTOMATIC PARTIAL TWO-DIRECTIONAL
5	(NIGHT
6	*	MANUAL

- - LOCK / UNLOCK
 - RESET
 - WARNINGS
 - FIRMWARE VERSION
- 8. The LEDs corresponding to WARNINGS will blink for as long as the keys are held.



- 4. To switch to another function press the key corresponding to the new function.
- 5. If there is an alert, to display it 2 keys must be pressed simultaneously as indicated in the table:

LOCK / UNLOCK	0.0	② + ⑤ 5 sec.
RESET		3+4
WARNINGS		① + ② continuous
FIRMWARE VERSION		(5) + (6) continuous

6. The ALARMS are displayed with a code of flashing LEDs alternating with the current operating mode. For the type of ALARM see ## 23 in the A1400 AIR manual.







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