

A1400 AIR A1400 AIR DM



FAAC

EN16005:2012



energy  saving



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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:** A1400 AIR 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 08-10-2016

CEO

A.Marcellan


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:** A1400 AIR KIT; A1400 AIR PA; A1400 AIR 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 08-10-2016

CEO

A.Marcellan



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: A1400 AIR 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 08-10-2016

CEO

A.Marcellan



DECLARATION OF INCORPORATION FOR 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: A1400 AIR PA

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, 1.1.5, 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, 1.6.3, 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.

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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 A1400 AIR 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

WARNING



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.

WARNING ELECTRIC SHOCK HAZARD



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...)



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 figures. E.g.: HEX WRENCH 6 set at 2.5 Nm



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 It indicates the risk of crushing hands/feet due to the presence of heavy parts.
	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 It 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.

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.



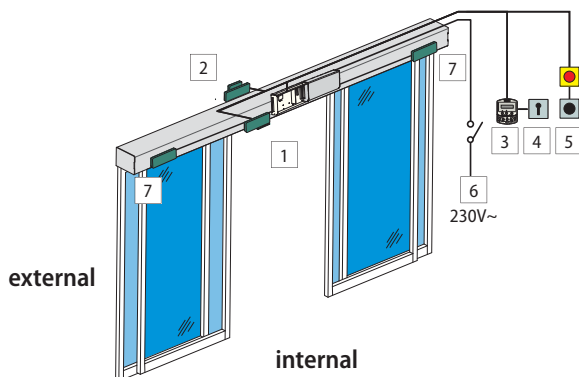
Use forklift trucks.



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

Kg _____ WEIGHT of the load.

2. AUTOMATION A1400 AIR H100-H140



1	Internal monitored opening detector and safety in closing (XV1/XDT1)	optional accessory
2	External monitored opening detector and safety in closing (XV1/XDT1)	optional accessory
3	SDK EVO	optional accessory
4	Key switch to lock the SDK EVO	optional accessory
5	Emergency/Key/OPEN control buttons	optional accessories
6	Power supply 230V~	
7	Internal monitored detectors for safe opening (XBFA)	optional accessory

1

2.1 INTENDED USE

The FAAC series A1400 AIR systems are designed to automatically operate, manage and control linear horizontal motion one- or two-leaf sliding doors.

The A1400 AIR 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 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 is 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:

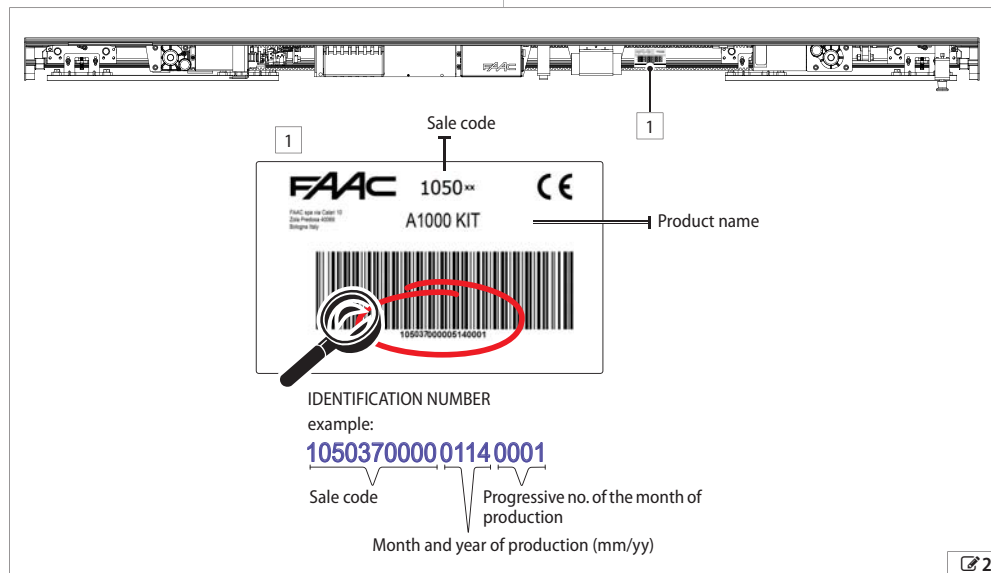
- use the automation for uses other than THE INTENDED USE;
- use the automation for installing smoke and/or fire protection doors (fire doors);
- use the automation with mobile and fixed guards tampered with or removed;
- use the automation in environments in which there is a risk of explosion and/or 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 A1400 AIR KIT is supplied, it is the responsibility of the installer to attach the identification plate in a visible position 2-1.



2.4 A1400 AIR KIT DM IDENTIFICATION PLATE

In the configuration with the A1400 AIR KIT, a second label is added in order to identify the second motor.



If the A1400 AIR KIT DM, is supplied, it is the responsibility of the installer to attach the identification plate in a visible position 3-2.



2.5 TECHNICAL SPECIFICATIONS A1400 AIR

7 Technical specifications

MODEL	A1400 AIR single leaf	A1400 AIR double leaf
Length * [mm]	from 1500 to 6100	from 1700 to 6100
Depth * [mm]	128.7	128.7
Total depth with self-supporting beam * [mm]	183.7	183.7
Height * [mm]	100-140	100-140
Weight** [kg]	MIN. 21 - MAX 47	MIN. 24- MAX. 49
No. of leaves	1	2
MAX. leaf weight [kg]	200	120 +120
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]	65	65
Power supply voltage	230V~ (+6% -10%) 50 Hz	230 V~(+6% -10%) 50Hz
MAX absorbed power [W]	140	140
Stand-by power without accessories	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 13.

2.6 TECHNICAL SPECIFICATIONS A1400 AIR DM

8 Technical specifications

MODEL	A1400 AIR DM single leaf	A1400 AIR DM double leaf
Length * [mm]	from 1700 to 6100	from 1900 to 6100
Depth * [mm]	128.7	128.7
Total depth with self-supporting beam * [mm]	183.7	183.7
Height * [mm]	100-140	100-140
Weight** [kg]	MIN. 24 - MAX 49	MIN. 27 - MAX. 51
No. of leaves	1	2
MAX. leaf weight [kg]	250	180 +180
Passage opening (Vp) [mm]	from 800 to 3000	from 900 to 3000
Beam length [mm]	Vp x 2 +100	Vp x 2 +100
Maximum framed leaf thickness [mm]	65	65
Power supply voltage	230V~ (+6% -10%) 50 Hz	230 V~(+6% -10%) 50Hz
MAX absorbed power [W]	140	140
Stand-by power without accessories	3	3
Use frequency	100 %	100 %
Main motor (with encoder)	powered at 36V	powered at 36V
DM motor (without 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 15

2.7 TYPES OF SYSTEM SUPPLIED

The FAAC A1400 AIR series automations may be supplied as follows:

- Automation kit: A1400 AIR KIT
- Assembled automation: A1400 AIR PA
- Complete entry door: A1400 AIR 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.

A1400 AIR 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)

A1400 AIR PA

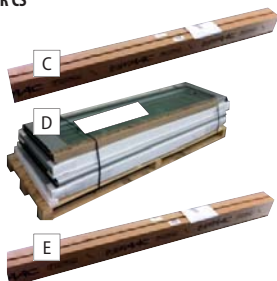


C. Automation assembled on FAAC* head section.

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)

A1400 AIR 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.

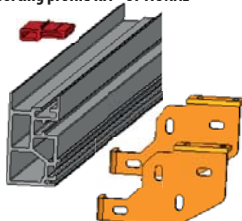
AUTOMATION COMPONENTS A1400 AIR

Support profile



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

Self-supporting profile KIT - OPTIONAL



To fasten the head section to the side walls. In cases where there is no load bearing wall to fasten the support profile, or if the wall is not smooth.

The kit includes:

- Self-supporting profile to be assembled to the support profile to obtain a self-supporting head section.
- 2 Sides to fasten the head section to the side walls.
- Transom profiles to lock any transom panel installed above the self-supporting profile.

CLOSING front CASING PROFILE (H100 or H140)



Aluminium profile for front head section closure.

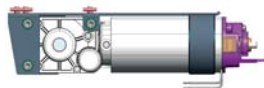
Available in versions H100 (height 100 mm) or H140 (height 140 mm).

Plates with screws



Accessories for installation of components.

Motor with encoder



Return pulley



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



In the configuration with the second motor kit, the wheels of the carriages should be replaced with the wheels specific for heavy leaves.

Transmission belt



It is compulsory to use the FAAC belt for the A1400 AIR

Control electronics module

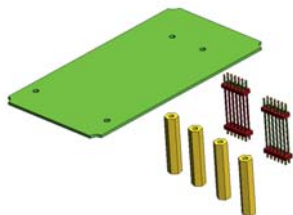


E1SL electronic board and power supply unit.

A1400 AIR DM KIT COMPONENTS

2nd Motor with adjustment bracket

Belt-tightening half-moon profiles

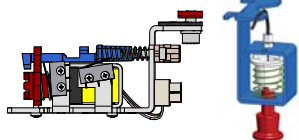
2nd Motor board and connection and fixing accessories2nd Motor extension cable

Carriage sliding wheels A1400 AIR DM (8 pieces)



ACCESSORIES

Motor block XB LOCK and Internal release - OPTIONAL



It acts directly on Motor_1 mechanically locking it to maintain leaf position.
Supplied with internal release device which allows emergency opening to be performed in case of need.

Ready for installing external release.

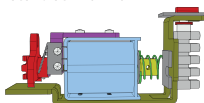
Monitoring - OPTIONAL

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.

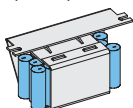


XM LOCK Motor block - OPTIONAL



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

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).



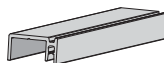
Spacer for leaf carriage unit H140 - (2 for each leaf) - OPTIONAL

To use with casing H140 per obtain the correct leaf installation position.



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 arriover - OPTIONAL



4. TRANSPORT AND RECEIPT OF THE GOODS

HANDLE PACKAGES

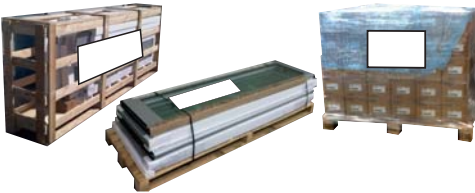


Always comply with instructions on the package.



The NET WEIGHT is indicated on the package.

PALLETISED SUPPLY



RISKS



PERSONAL PROTECTIVE EQUIPMENT



REQUIRED TOOLS



SINGLE PACKAGE



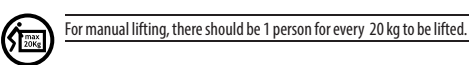
RISKS



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.
2. Ensure all components requested are present and undamaged (§ - 15).



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 A1400 AIR 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: 19.

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.

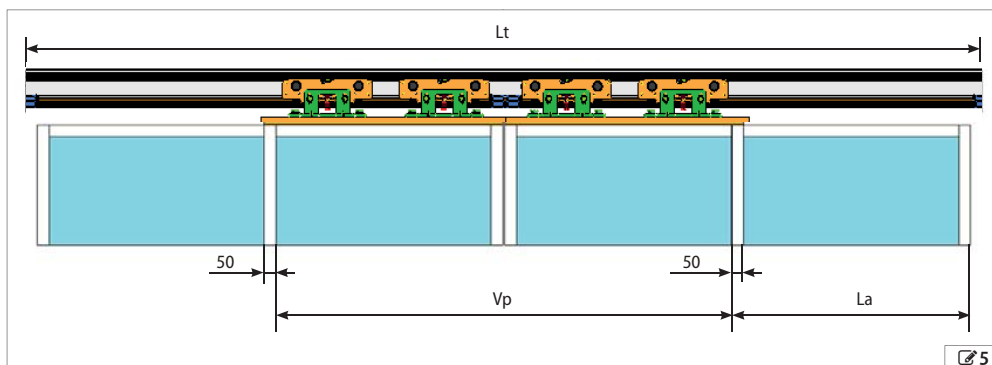
Always comply with the instructions provided by the equipment's manufacturer.

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

Cut to size according to the measurements indicated in 9.

9 Profile cutting measurements

Profile to be cut	Cutting measurement [mm]
- Support profile	$Lt = Vp \times 2 + 100$
- Head section cover	The head section length (Lt) must be calculated based on the measurement of the transit space (Vp). 100 mm is the overlap between leaves (50 + 50). If the overlap is different, the Lt measurement varies accordingly.
- Self-supporting profile (OPTIONAL)	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 A1400 AIR 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 [19](#).

RISKS



PERSONAL PROTECTIVE EQUIPMENT



REQUIRED TOOLS



Ø 18 mm

6-8-10-13

5



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



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 PREPARING THE SELF-SUPPORTING HEAD SECTION (if used)



ONLY in cases where the head section is to be fastened to the side walls, the self-supporting head section must be prepared:

the support profile, self-supporting profile and the side brackets are assembled before assembling the automation components.

1. Fasten the support profile to the self-supporting profile [6-1](#):
 - start fastening at a vertical slot at one end and a horizontal slot at the other end.

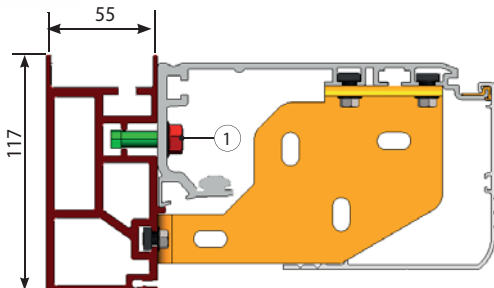
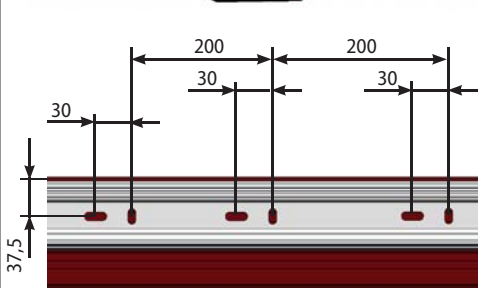
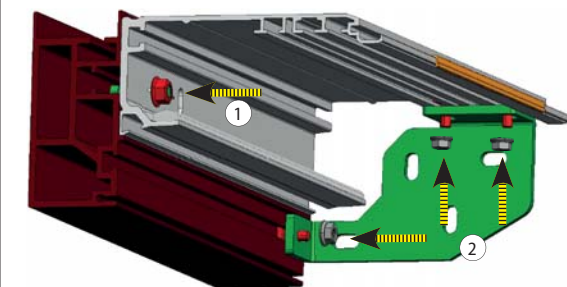
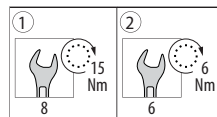


Check the horizontal with a spirit level.

- proceed with the other fastenings at a 200 mm distance; alternate vertical and horizontal slots.
2. Fasten the side brackets at the ends:
 - insert the plates into their housings and fasten the 2 side brackets to the ends of the support profile and self-supporting profile [6-2](#).



use the screws and the plates supplied



6.2 ASSEMBLING THE COMPONENTS



Keep to the positions indicated in the relevant diagram:
 61/ 62/ 63.

MECHANICAL STOPS



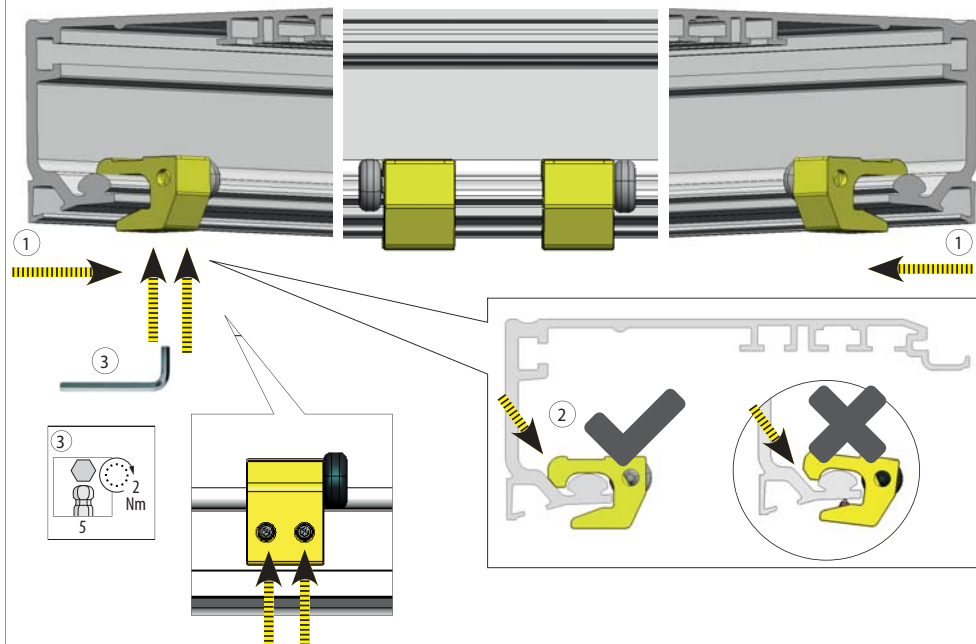
SINGLE LEAF: 2 mechanical stops are required. Place them at the two ends of the profile to begin with.

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 7-①.
2. Make sure that they are resting in the correct position on the profile - 7-② and temporarily fasten each mechanical stop 7-③.

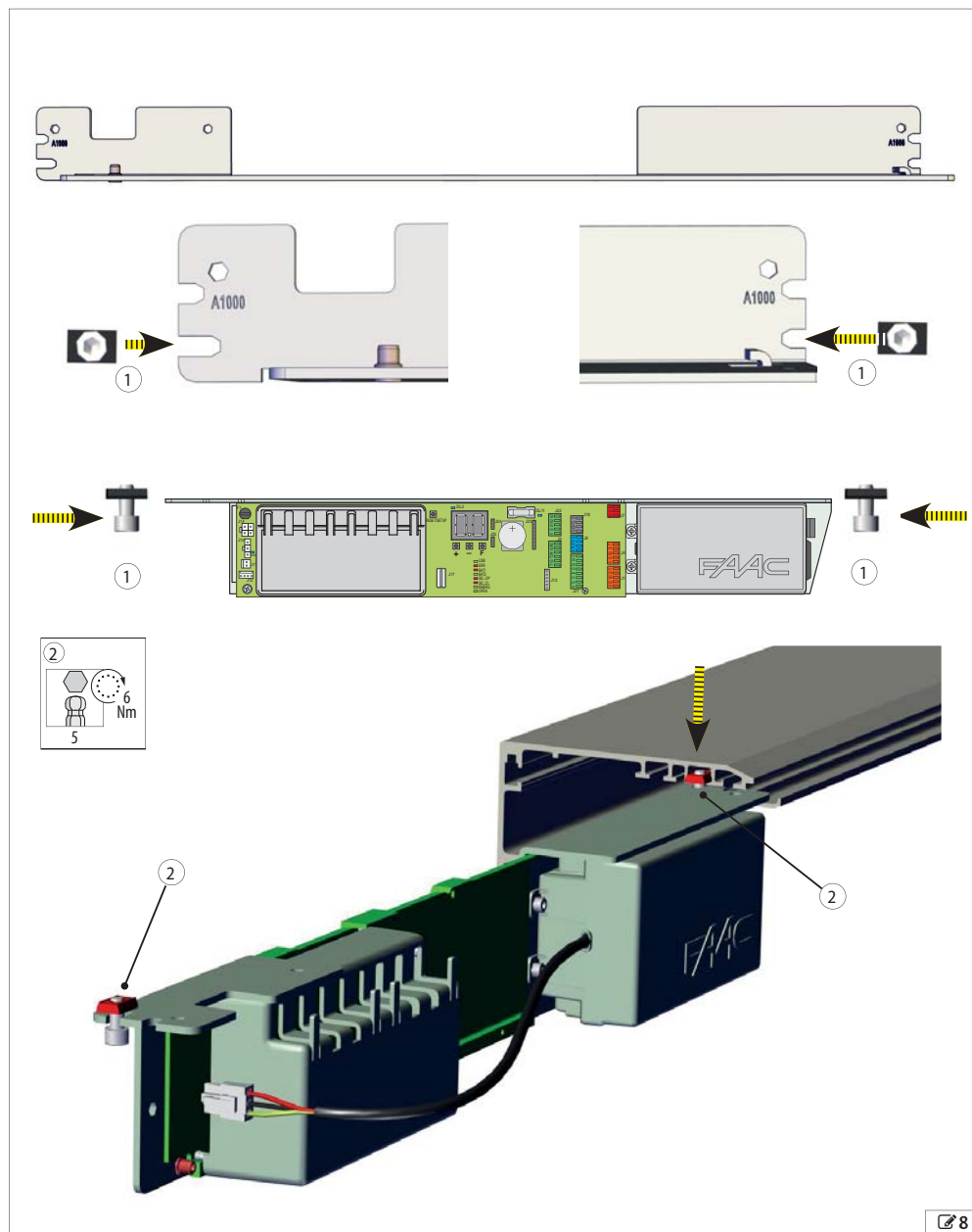


After assembling the leaves, the stops' positions must be adjusted.






ELECTRONICS MODULE


1. Insert the screws with plates into the 2 slots as indicated in  8-①.
2. Insert the electronics module into the profile from the side using the 2 plates  8-②.





SAFETY CABLES AND SPACERS

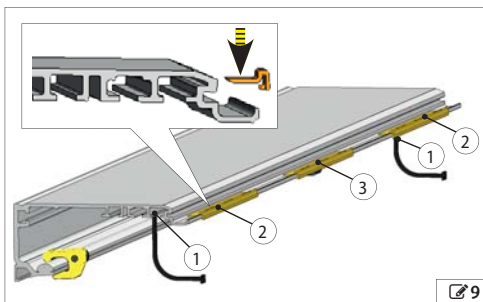
1. Insert the largest end of each cable into the support profile .
2. Insert 2 vibration damper spacers  onto the edge of the profile. In the case of profiles longer than 3 m, add a spacer in the middle .

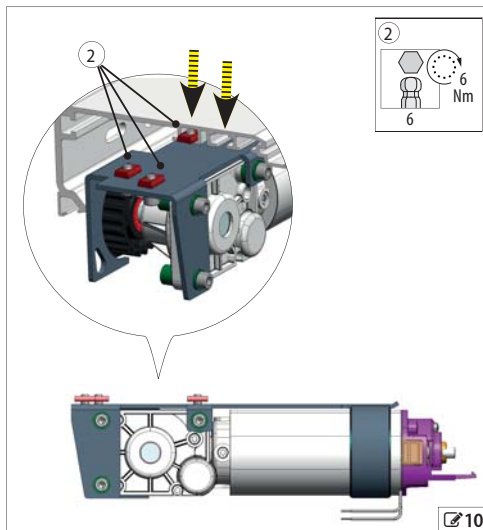
MOTOR

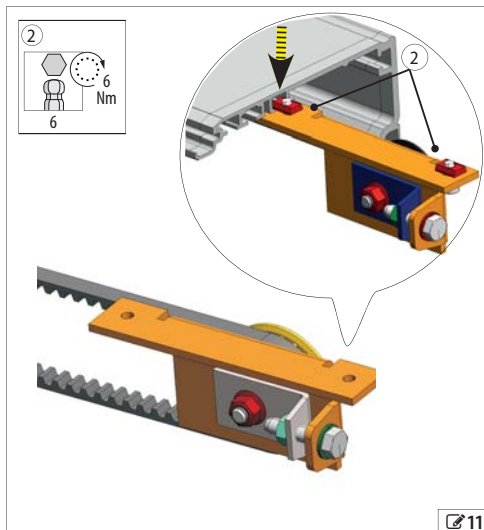
1. Insert the motor in the side of the support profile.
2. Fasten using the 3 plates with screws .

RETURN PULLEY

1. Insert the return pulley from the side .
2. Fasten using the 2 plates with screws .










6.3 INSTALLING THE 2ND MOTOR OF THE A1400 AIR DM KIT




MOTOR

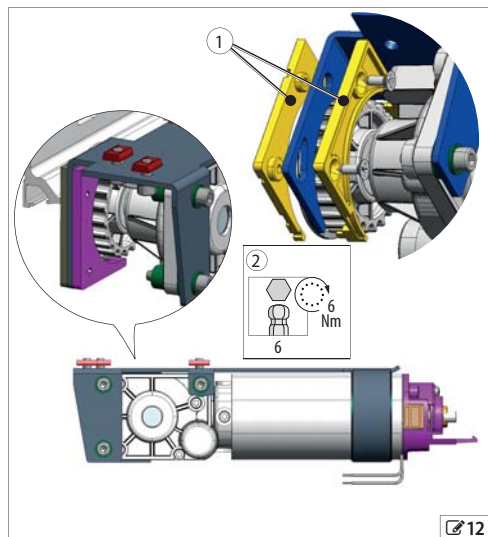
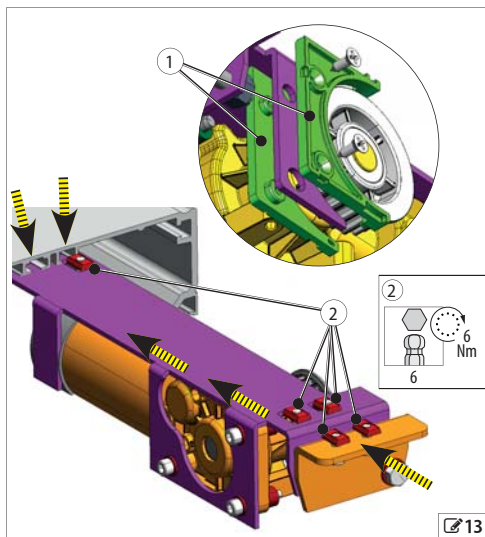
1. Mount the half-moon profiles onto the motor  12-①.

2ND MOTOR

1. Mount the half-moon profiles onto the 2nd motor  13-①.
2. Insert the motor from the side.
3. Fasten using the 5 plates with screws  13-②.




There may be a decrease in the passage opening VP when passing from the A1400 AIR to the configuration using the A1400 AIR DM kit. Refer to tables  83  84  85


 12

 13

MOTOR RELEASE MONITOR

(OPTIONAL ACCESSORY)

Install the micro switch on the motor block .

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 opposite 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 .
2. Extract about 20 cm steel cable from the sheath. Insert the cable into the adjustment nut and pass it into the release device .
3. Tighten the screw .
4. 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  and install the release knob on the side bracket.
6. Lock the knob: pull and turn it by 90° .
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  and remove any excess sheath.
9. Feed the cable into the guide  so that the sheath is in contact with it. Insert the cable into the clamp .
10. Pull the block  as far as it will go, compressing the springs. Tighten the clamp screw  to lock the steel cable.
11. Cut the excess steel cable.

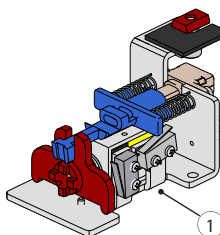
MOTOR BLOCK OPERATION TEST XB LOCK

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

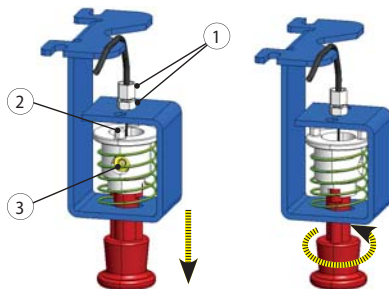
- Use the adjustment nut to regulate the tension of the cable .
- Unlock the knob by turning it 90° and ensure the release is working.
- Pull the knob to make sure that the door opening micro switch is activated .



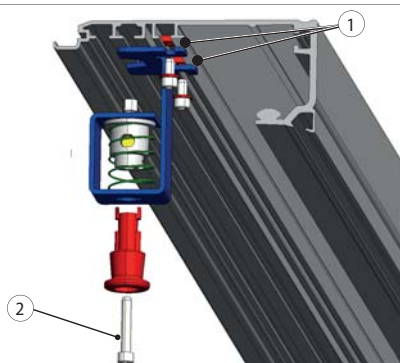
If installation of the external release is required, use suitable key buttons. Insert the release cable in the suitable housing in the motor block.



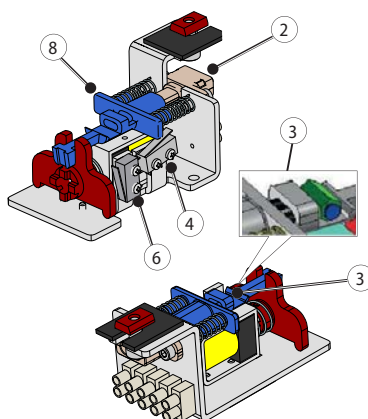
 17



 14




 15



 16

COVER DRILLING




Make a 18 mm diameter hole on the lengthways marking of the cover .


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.

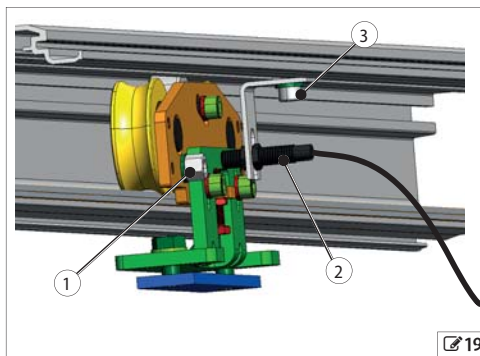
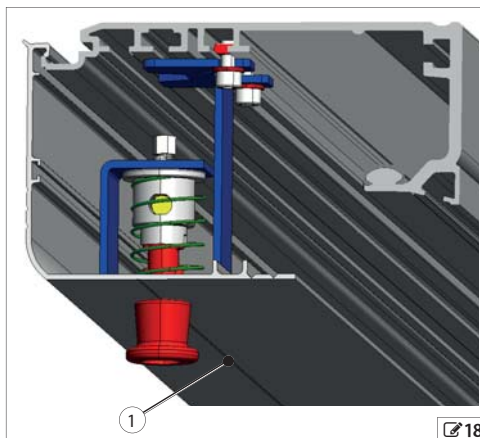
1. Screw the magnet  onto the carriage (use the threaded hole normally used to attach the belt).
2. Install the sensor onto the bracket using the plastic nuts .
3. Insert a threaded plate with screw into seat on the support profile and fasten the bracket .

 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 .
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.  



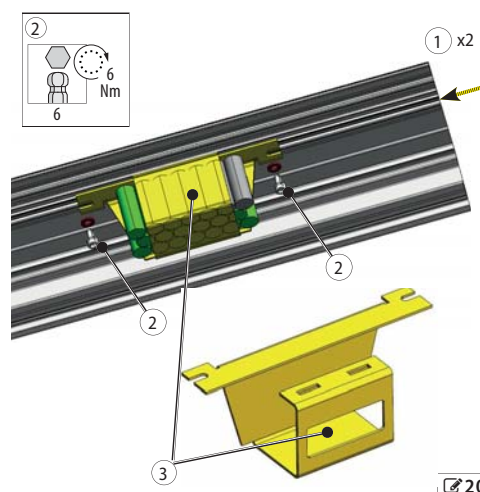
IDENTIFICATION NUMBER

example:

75501500 **2015**

Sale code

year of manufacture (yyyy)



7. ASSEMBLING THE A1400 AIR CS FRAME

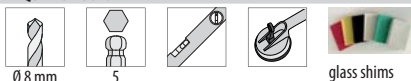
RISKS



PERSONAL PROTECTIVE EQUIPMENT



REQUIRED TOOLS



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 A1400 AIR 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

1. 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.).

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



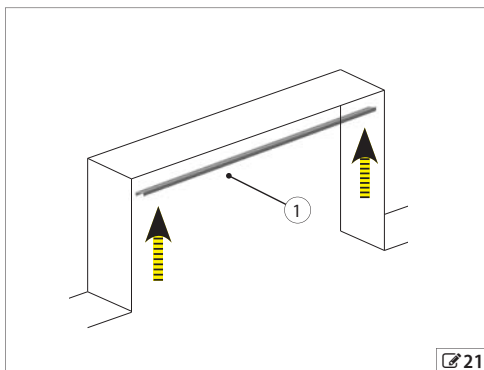
Ensure there are no hydraulic coils or electrical conduits under the floor at the planned drill points.

ASSEMBLING THE FRAME

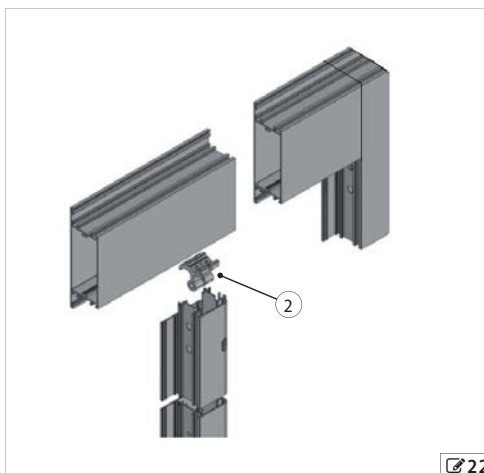
The supply includes:

- upper head section with reinforcement counter-plate for A1400 AIR
- 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) .
2. Fasten with appropriate screws with minimum 500 mm pitch.
3. Assemble the entry door parts, consisting of 2 leaves open at the top and connect it to the head section connection profile, by means of the connecting bracket shown . Join the head section to the profile using the supplied screw kit.
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.
7. Fasten the side balancing profiles using suitable screws next to the grub screws .
8. Check verticality with a spirit level.



21



22

9. Adjust the distance between the leaf profile and balancing profile using the grub screws on the profile  23-3. 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  23-4.




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  24-3 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  34.

GLAZING INSTALLATION

1. Place the 3 shims in the lower part of the profile  24-2.
2. Place the glazing on the shims.  25-3(4)



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

3. Secure the glass using the beading supplied  25-5.
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  25-1.

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 § 8 also for all the adjustment procedures.

7.2 ENTRY DOOR WITH TK20 PROFILES

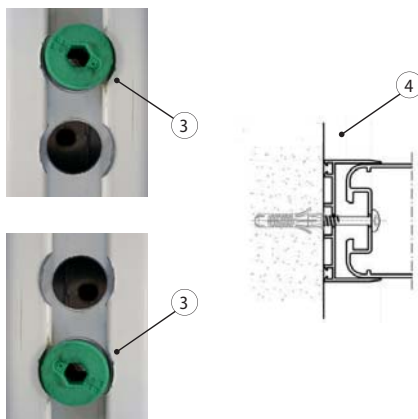
PRELIMINARY OPERATIONS

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

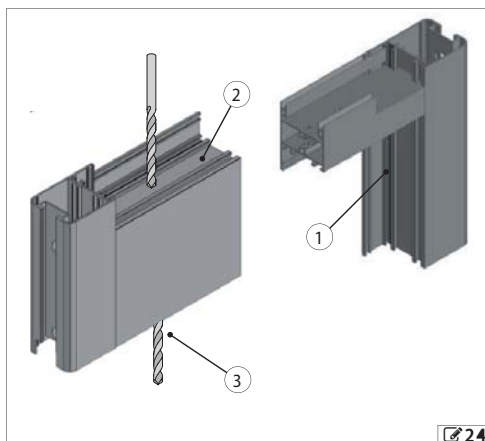


The frame must be fastened to the structure with suitable attachments. Ensure there are no hydraulic coils or electrical conduits under the floor at the planned drill points.

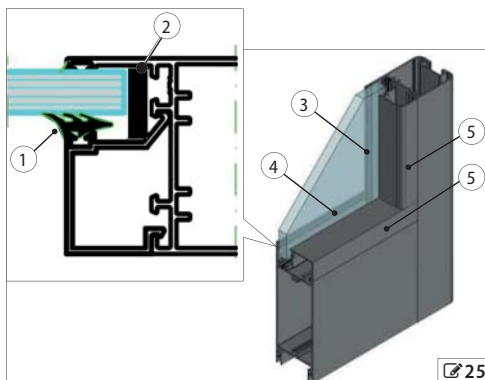
3. Measure the door frame and compare them with the opening measurements.
4. Check floor levelness with a spirit level.



 23



 24



 25

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 26-①.
2. Install the side balancing profiles 26-②.
3. Mount the floor profile 26-③.
4. Insert the fixed leaf by tilting it and inserting it into the top profile 27 ① ② ③.
5. Place horizontally then fasten the leaf.
6. Mount the upper labyrinth profile 27-⑤.

MOUNTING MOBILE LEAVES

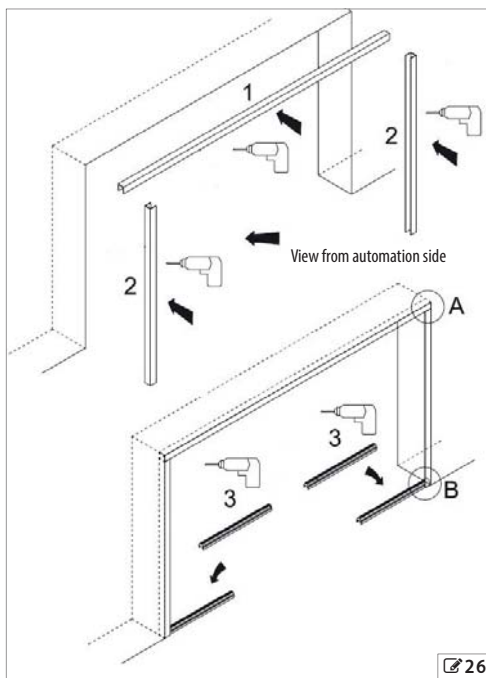
Mount the leaves as described in § 9 34.

ASSEMBLY OF THE HEAD SECTION TO THE UPPER PROFILE

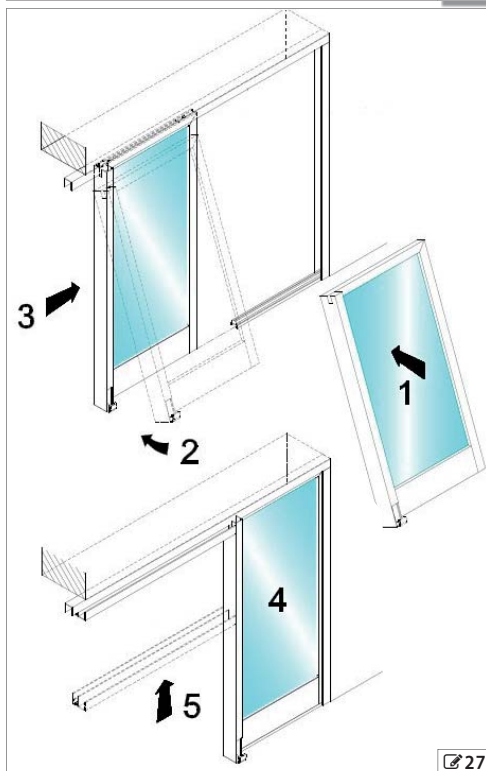
Mount the assembled head section onto the upper profile by means of suitable attachments.

After mounting the head section, perform all procedures to secure the leaf to the carriages as set out in the chapters concerning kit assembly.

For all the adjustment procedures, also refer to chapter § 8 31.



26



27



8. INSTALLING THE HEAD SECTION

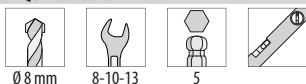
RISKS



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:

- for leaves with a 2.5 m standard height frame, consider overall dimensions of -

$$HA = LH - 27$$

- for leaves with a frame height of less than 2.5 m consider overall dimensions of -

$$HA = LH - 19.5$$

- for doors with glass leaves without a frame, consider overall dimensions of -

$$HV = LH - 31$$



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

Check the horizontal with a spirit level.

3. Continue according to the intended type of installation:

- FASTENING TO THE WALL
- SELF-SUPPORTING FASTENING with OPTIONAL accessory profile - if provided for specific requirements.

8.2 WALL FASTENING



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.

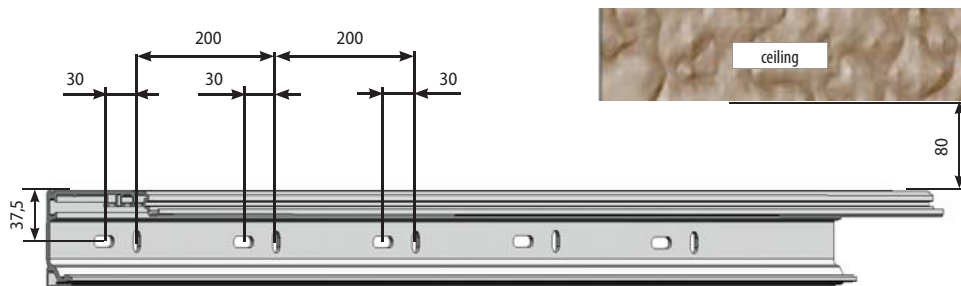
5. First fasten it in the centre and then fasten it at the other points, alternating vertical and horizontal slots at a distance of 200 mm .



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.



Screws and dowels not supplied.



28

8.3 MOUNTING THE SELF-SUPPORTING AUTOMATION

(IF PROVIDED)



The side supporting walls 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.



In the self-supporting version of the automation system (if supplied), the support profile is mounted on the self-supporting profile and the side brackets 21.

1. Lift the automation to the established fastening height and mark on the wall the drilling points at the 4 slots of each side bracket.



Check the horizontal with a spirit level.

2. Drill the holes on the side walls.
 - Use drill bits that are suitable for the material 29.
3. Lift the automation and fasten it to the side walls:
 - Use 4 suitable wall plugs in correspondence with the 4 slots on each of the two side brackets 30.



Check the horizontal with a spirit level.

4. If the length of the profile exceeds 3000 mm, tie rods must be fitted to the wall or ceiling, depending on the situation, in intermediate position to prevent bending of the head section's middle.

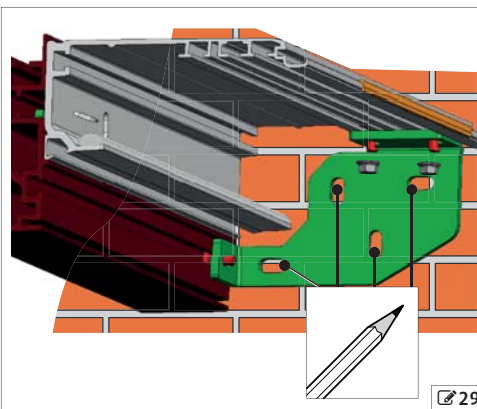


Use steel tie rods suitable for supporting a 600 kg load (the contact surface of the cable with the self-supporting profile must be at least 70 mm²) * 31.

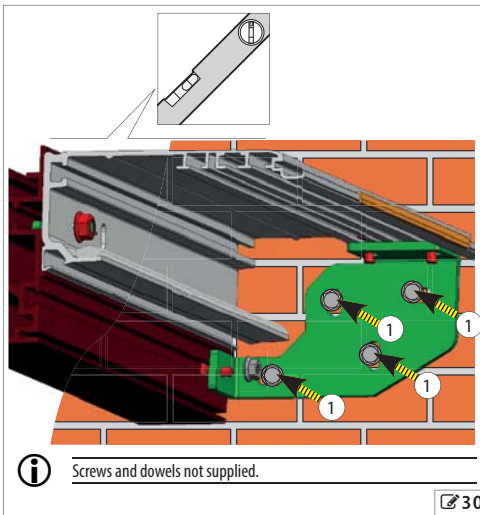
5. The number of tie rods required depends on the length of the profile:
 - from 3000 to 4000 mm, a central fastening is required.
 - from 4000 to 6100 mm, two intermediate fastening points are required.



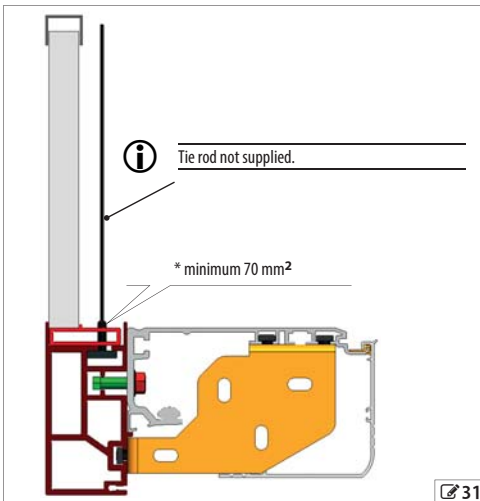
It is nevertheless recommended to fit a tie rod in a central position also for lengths less than 3000 mm.



29



30



31

8.4 MOUNT THE TRANSOM

(OPTIONAL)



The optional transom is provided in the event of self-supporting head section.

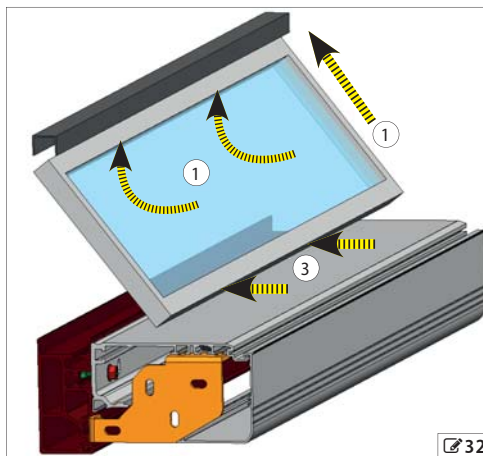
1. Insert the transom panel into the slot on the self-supporting profile 32.
2. Keep the panel raised in order to insert the profiles at a regular distance 33.
3. Lower the panel onto the profiles 34.
4. Install a tie rod (not provided) in the centre 35.



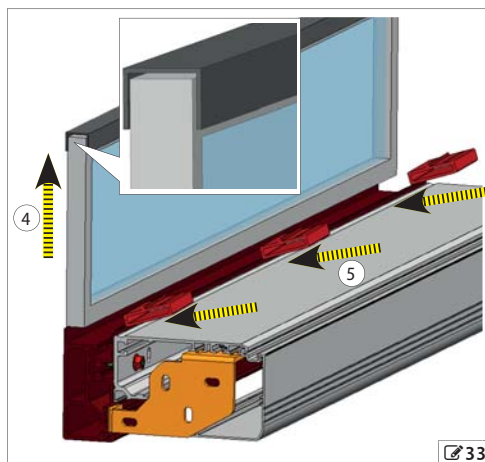
Use steel tie rods suitable for supporting a 600 kg load (the contact surface of the cable with the self-supporting profile must be at least 70 mm²) * 31.



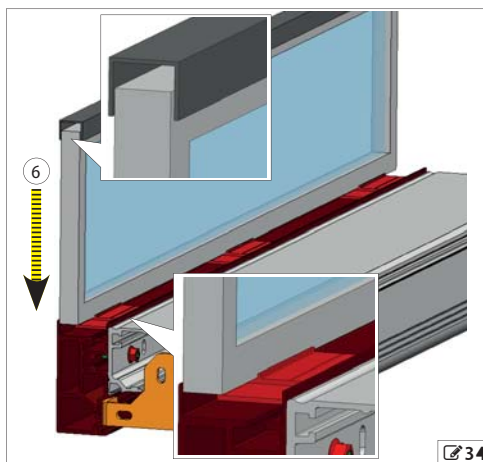
The number of tie rods required depends on the length of the profile: install one tie rod every 2500 mm.



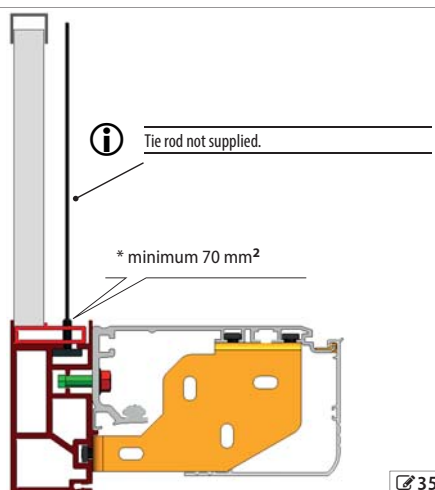
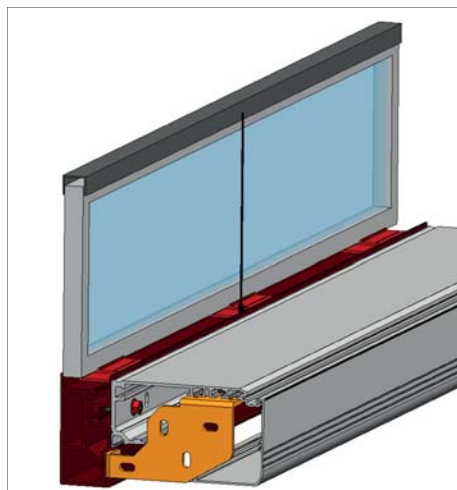
32



33



34



35

9. INSTALLING THE LEAVES

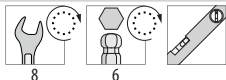
RISKS



PERSONAL PROTECTIVE EQUIPMENT




REQUIRED TOOLS



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  36.


- use suitable screws (not provided).

TK50 SWIVEL SHOE

For fastening to the floor  37.

- use suitable screws (not provided).

SHOE WITH TK20 BRACKET




For fastening to the fixed leaf  38.

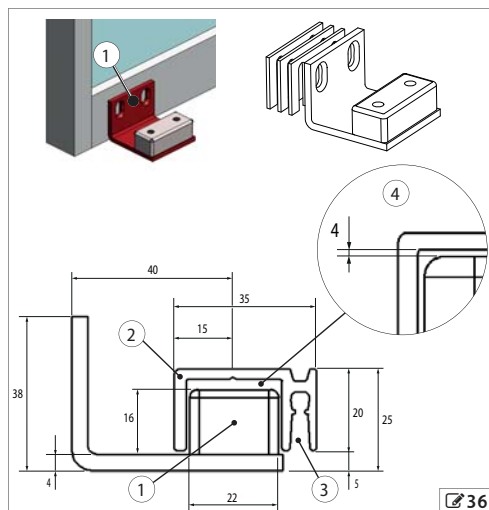
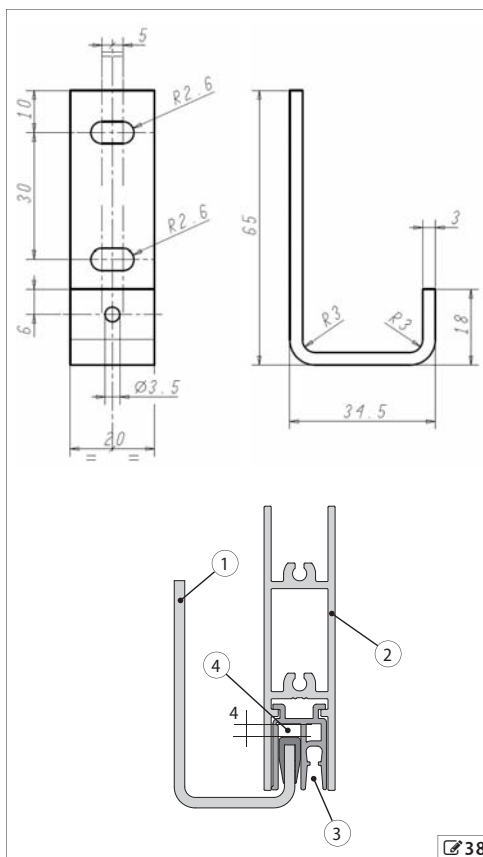
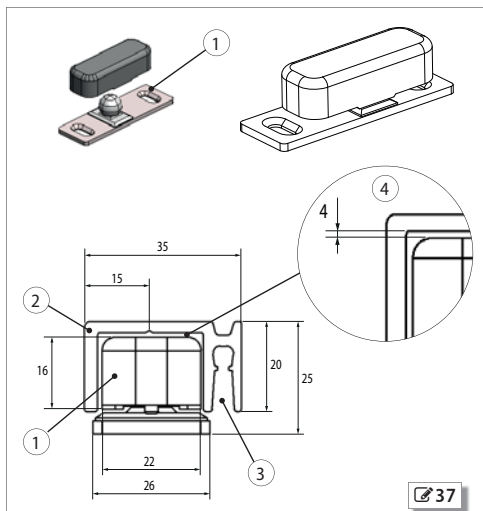
- use suitable screws (not provided).



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.  36  37  38).



9.2 MOUNT PROFILES ON THE LEAVES



Before installing the leaves, ensure there is no cutting or dragging hazard.
Check leaf vertically.
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 39.



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 40.

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 40-1.

GLASS LEAVES



For installation of glass leaves see the dedicated section: § 10 38.

9.4 INSTALLING THE LEAVES

Install each leaf as described below.

1. Disassemble the 2 carriages:
 - Remove the 2 fastening screws 41-1.
 - Separate the top plate of the carriage from the bottom plate 41-2.
2. Place the wheels of the upper plate unit on the sliding guide (two plates for each leaf) 42-1.
3. Adjust the counter wheel to prevent the carriage from falling 42-2.
4. Slowly insert the lower plates of the carriage into the profile 42-3.
5. Adjust the position of the two plates on the leaf.
 - Keep to the measurements indicated in diagrams 77 or 78 and:
 - 80 - 61 for RIGHT single leaf automations
 - 81 - 62 for LEFT single leaf automations
 - 82 - 63 for DOUBLE leaf automations
6. Fasten the plates of the carriages using the 2 screws 42-4.
7. Lift the leaf until the upper and lower plates of the carriage come into contact 43-1. Align the slots.



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

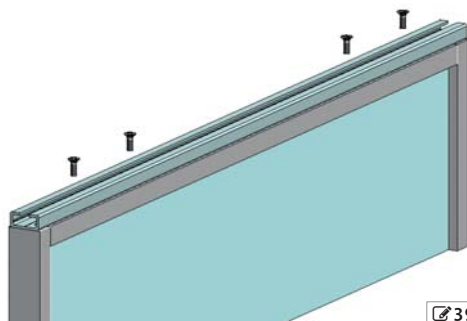
8. Fasten the 2 plates of the carriage together 43-2.



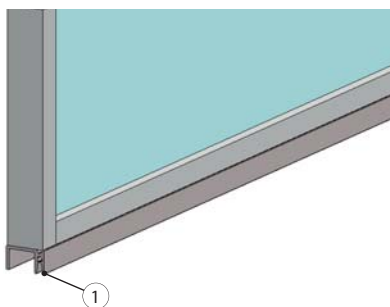
Adjust the counter wheel 47 37.



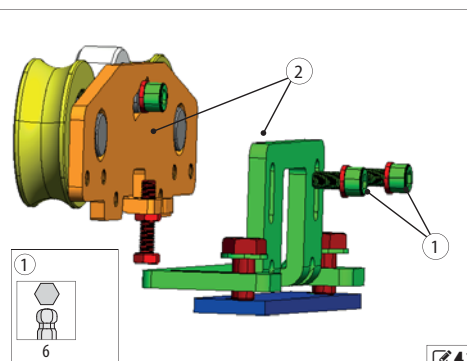
Screws not supplied.



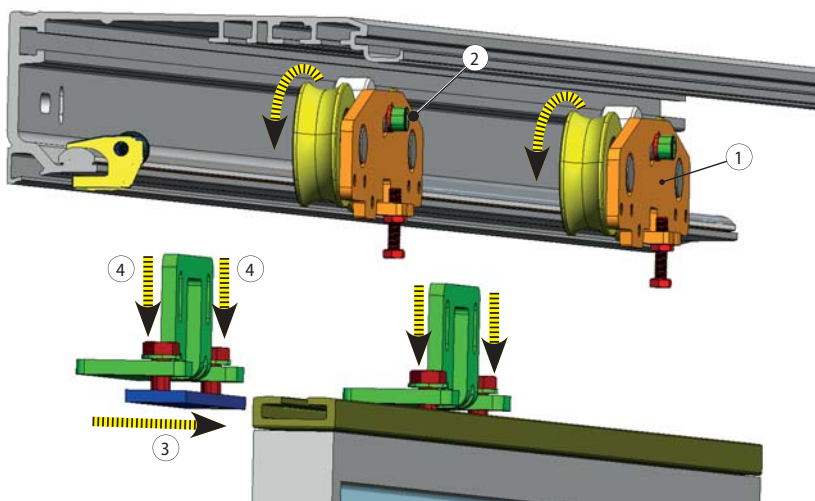
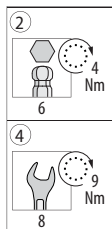
39



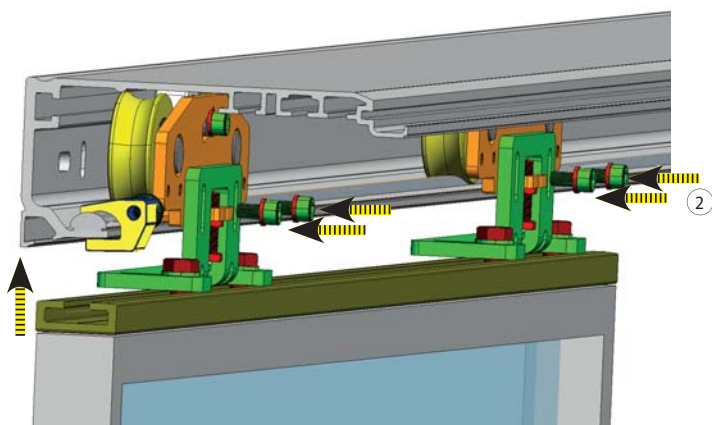
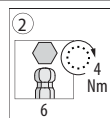
40



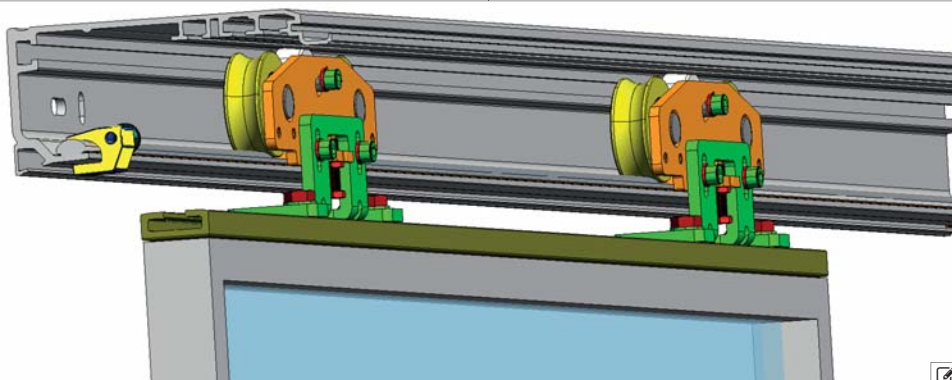
41



42



43



44

9.5 ADJUSTING THE LEAVES AND CARRIAGES



In the configuration with the second motor kit, the wheels of the carriages should be replaced with the wheels specific for heavy leaves.

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 ± 7.5 mm.

1. Slightly loosen the two screws 45-1.
2. To lift the leaf, turn the screw 2 clockwise. To lower the leaf, turn screw 2 anti-clockwise.
3. Tighten the two screws 45-1.

DEPTH OF THE LEAVES

1. Loosen the 2 screws 46-1.
2. Move the leaf on the two slots at the base of the carriages as desired.
3. Tighten the 2 screws 46-1.



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

COUNTER WHEEL

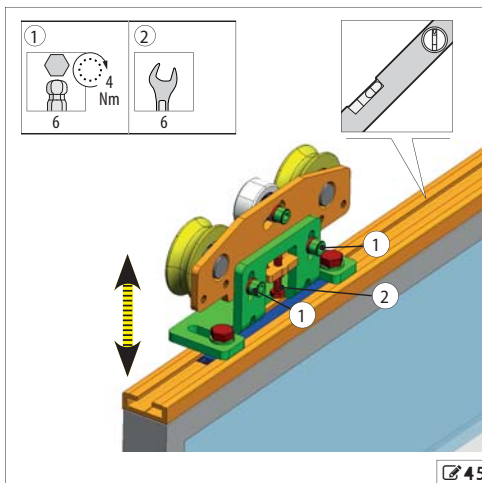
1. Loosen the screw 47-1.
2. Adjust the height by sliding the wheel support in the diagonal slot 47-2.
 - The wheel must be brought close to the top profile 47-3. It is recommended to place a 0.5 mm shim between wheel and profile. Remove the shim upon completing adjustment.
3. Tighten the screw 47-1.



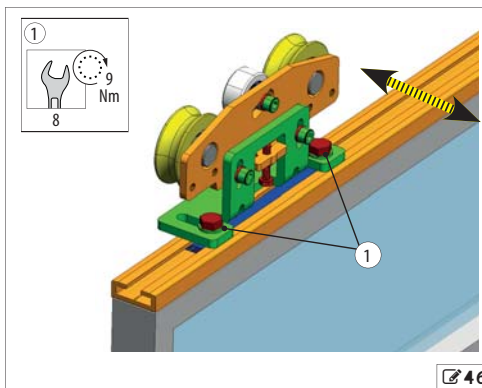
Manually move the leaves to ensure the counter wheel runs freely along the entire stroke. Ensure there are no friction points with the surface of the support profile.



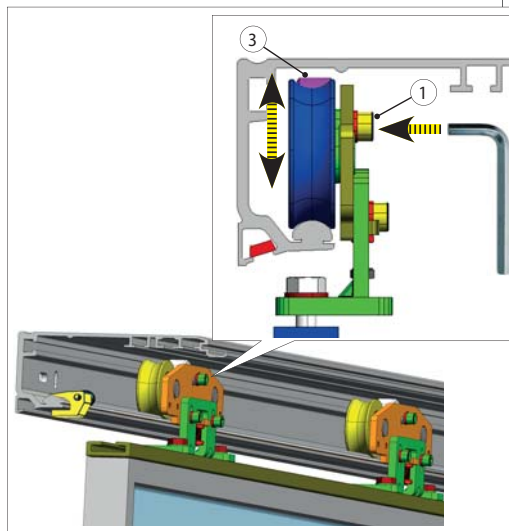
When installation has been completed, apply the FAAC stickers that were supplied with automatic door to the glass leaves.



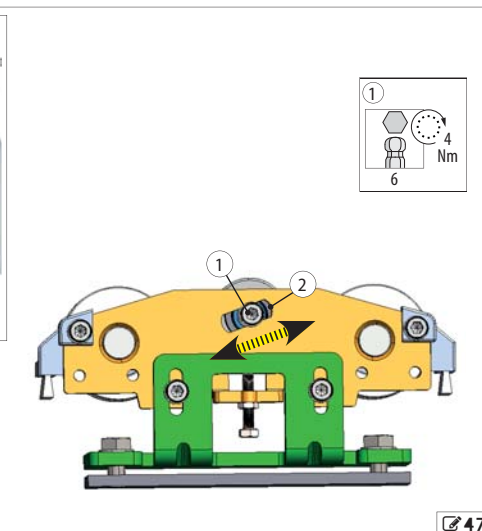
45



46



47



10. INSTALLING THE GLASS LEAVES

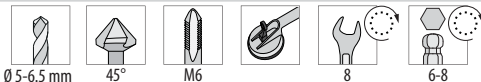
RISKS



PERSONAL PROTECTIVE EQUIPMENT



REQUIRED TOOLS

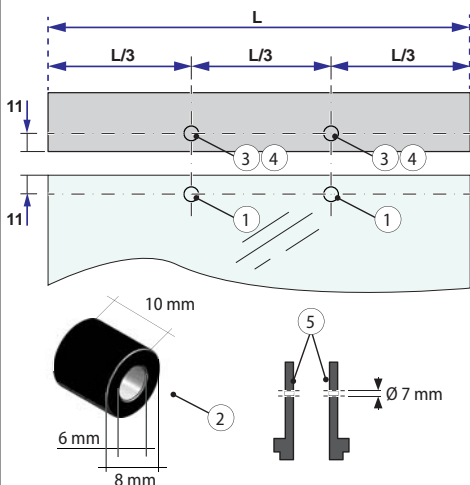


For manual lifting, there should be 1 person for every 20 kg to be lifted.

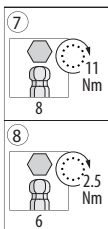


Comply with the glass thickness = 10-11 mm.

1. The glass must be drilled as shown .
2. Insert a bush in each hole in the glass .
3. Make 2 holes on the profiles of the gripper .
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 .
6. Insert the 2 seals into the profiles .
7. Clean the glass, insert the gripper.



①	Ø 8.5 mm
②	bush Ø internal 6 mm Ø external 8 mm
③	Ø 6.5 mm with 45° flaring
④	Ø 5.0 mm with M6 tapping
⑤	Ø 7.0 mm
⑦	2 x M8
⑧	2 x M6



Ensure the beading is in its housing.

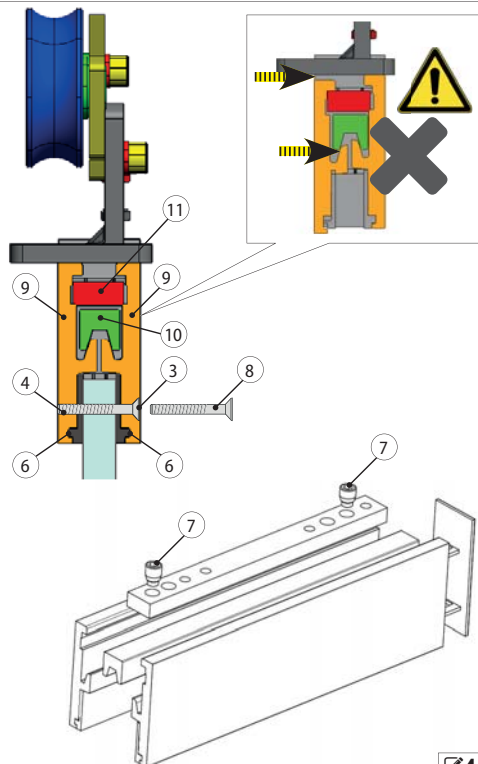
8. Assemble the gripper as follows: Insert elements and into the 2 plates .
9. Tighten the 2 grub screws .
10. Part must be aligned with the fixing holes on the carriage .
11. Insert 2 galvanised countersunk head screws into the holes .



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.

1. Disassemble the 2 carriages:
 - Tighten the 2 screws .
 - Separate the top plate of the carriage from the bottom plate and remove the plate .
2. Position the wheels of the upper plate unit on the sliding guide
3. (2 plates for each leaf).
4. Adjust the counter wheel to prevent the carriage from falling .
5. Place the lower plate onto the glass leaf.
 - Keep to the measurements indicated in diagrams - and:
 - - for RIGHT single leaf automations
 - - for LEFT single leaf automations



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- 82 - 63 for DOUBLE leaf automations
- 6. Fasten the lower plate onto the leaf gripper using the 2 screws 50-3
- 7. Lift the leaf until the upper and lower plates of the carriage come into contact 50-6. The slots must be aligned.



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.

- 8. Fasten the 2 plates of the carriage together 50-7.
- 9. Adjust the counter wheel 50-2 (see 37).
- 10. Insert the end cover 50-8.



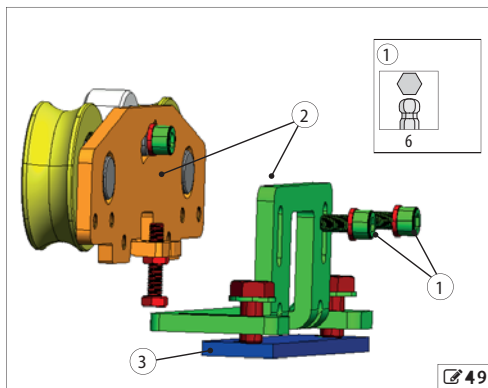
Check leaf verticality.

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

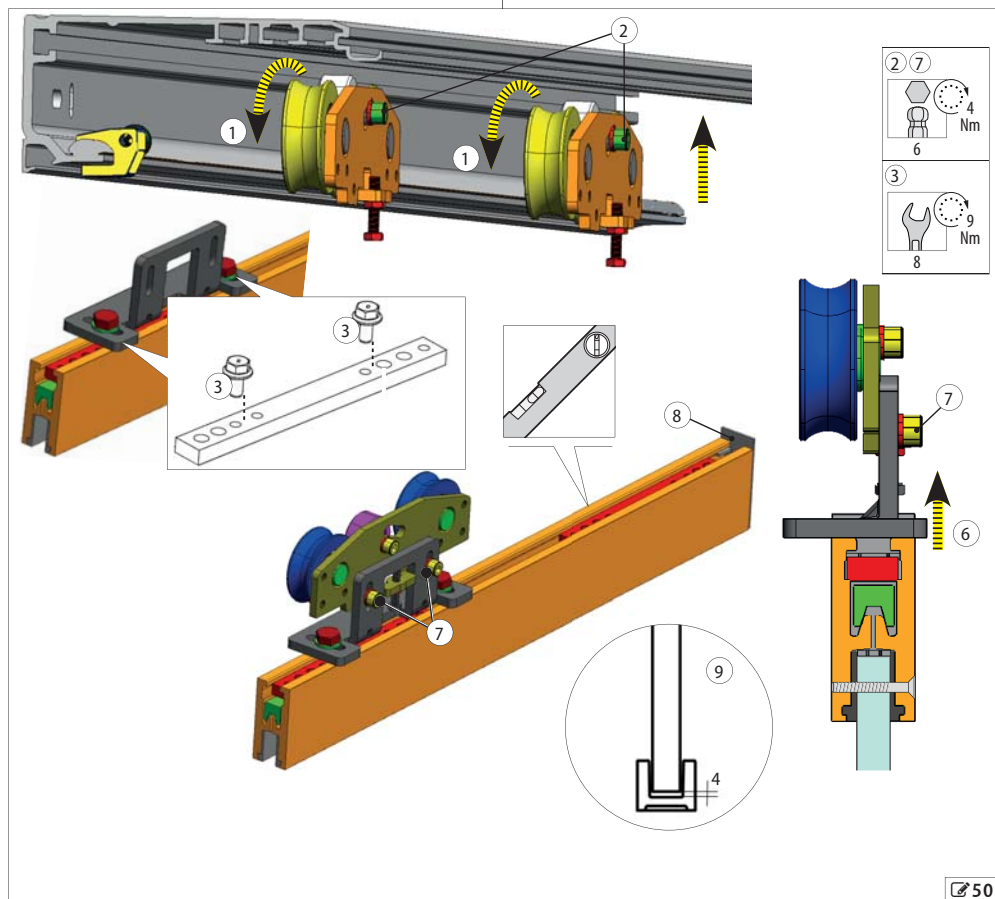
The distance between glass and lower shoe must be 4mm 50-9.



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



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50

10.1 INSTALLING WHEELS ON THE A1400 AIR DM

RISKS




PERSONAL PROTECTIVE EQUIPMENT

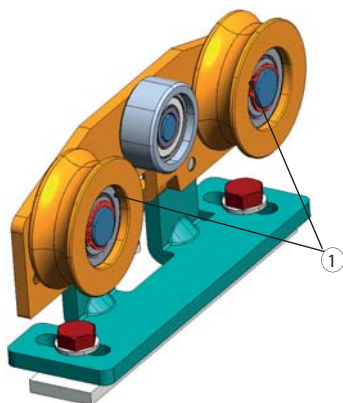


REQUIRED TOOLS






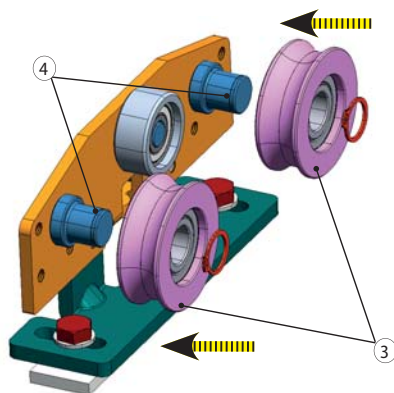
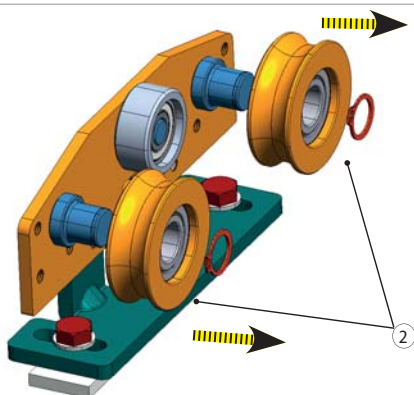
8 Wheels are provided in the A1400 AIR DM kit for use with heavy leaves, to be installed on the carriages in place of the standard wheels. To remove the wheels proceed as follows:

1. Release and remove the circlips from the wheels, using circlip pliers .



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2. Remove the wheels from the carriages .
3. Install the wheels for the A1400 AIR DM provided in the kit .
4. Using the circlip pliers, replace the circlips in the grooves of the wheel pins in order to secure the wheels .



 52

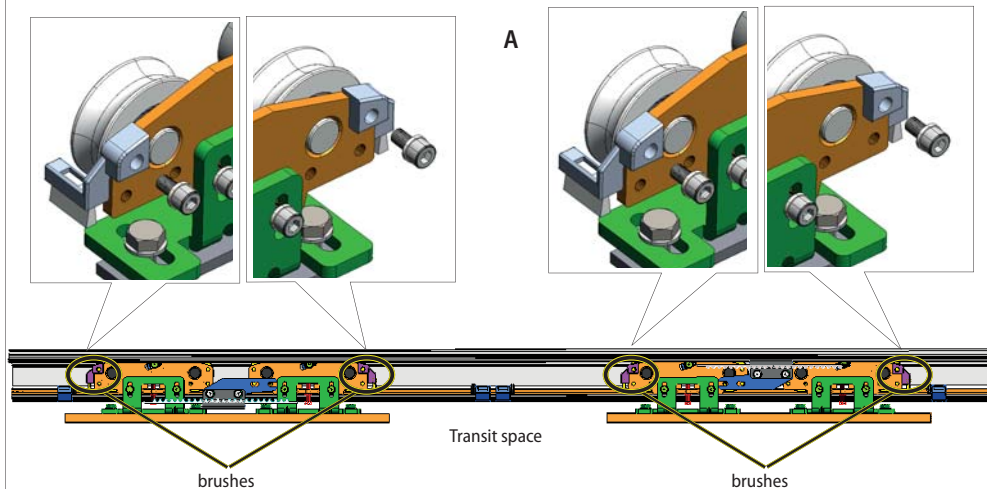
10.2 MOUNTING THE BRUSHES

For double leaf automations:  53.

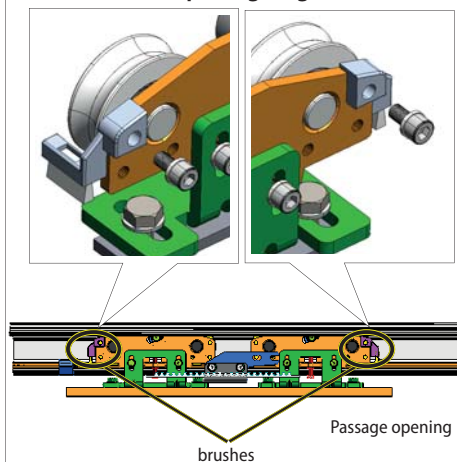
For single leaf automations:  53.

Double leaf

A

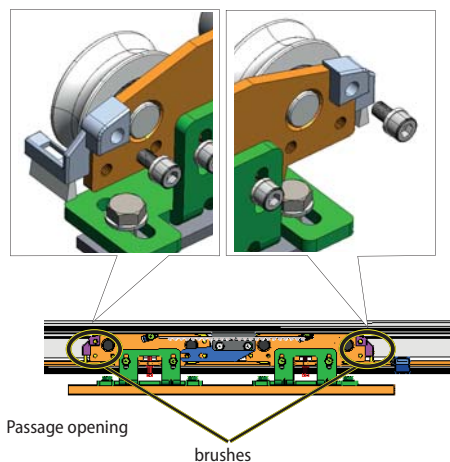


Left opening single leaf



Right opening single leaf

B



11. ASSEMBLE THE BELT, CASING AND ACCESSORIES

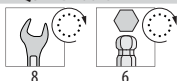
RISKS



PERSONAL PROTECTIVE EQUIPMENT



REQUIRED TOOLS



Do not place hands between: the pulley and belt or between the sliding guide 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 A1400 AIR

1. Place one end of the belt over the pulley of Motor_1. Fasten the two ends using the fittings and screws .



The middle slot of the belt fitting must be left empty .

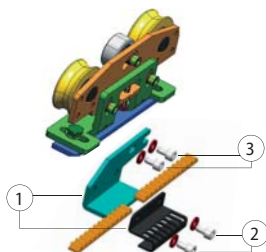
2. Position the assembled fitting with the belt on the carriage. Keep to the positions indicated in and fasten using the screws .



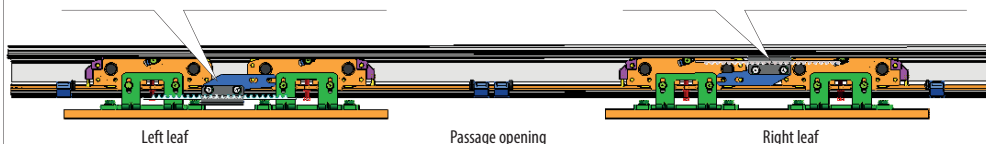
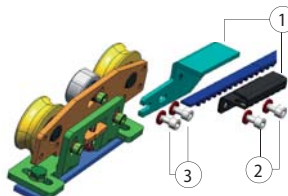
In case of double leaf, the belt joint must be fastened on the lower fitting (on the left leaf).

The position of the belt fitting determines the opening direction.

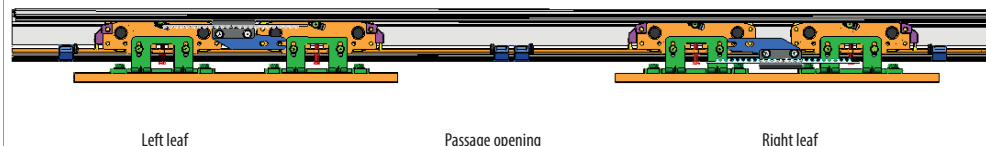
3. Position the belt also on the pulley of the second motor.

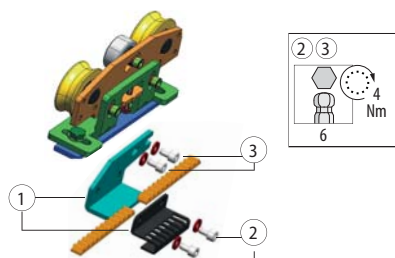


Double leaf with $rM = 1$
(Default)



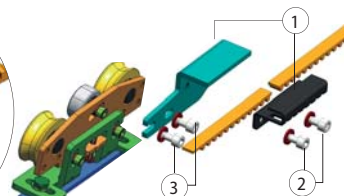
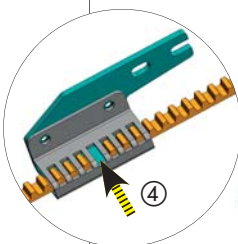
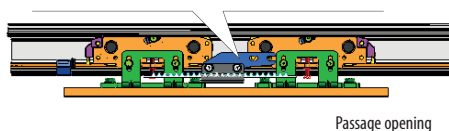
Double leaf with $rM = -1$





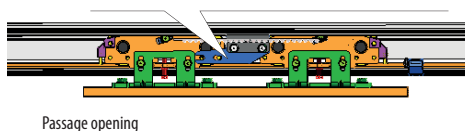
Single leaf - LH opening with $rM = 1$
(Default)

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



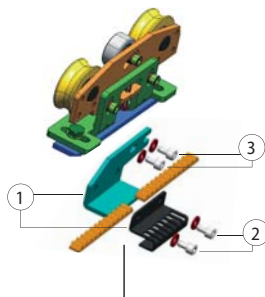
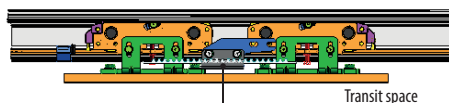
Open and close manually a few times: the belt must remain in its seat flush with the pulley.

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.

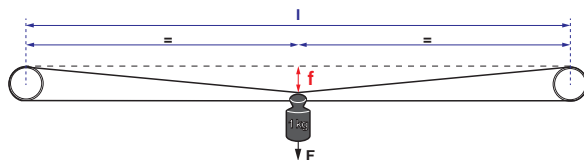
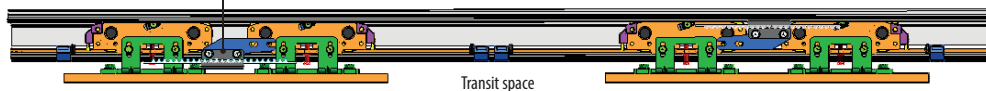
SINGLE LEAF WITH LH OPENING / DOUBLE LEAF

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 **10**.
4. In the case of a double leaf: after adjustment, mount the second upper belt fitting and connect it to the carriage.

Single leaf - LH opening

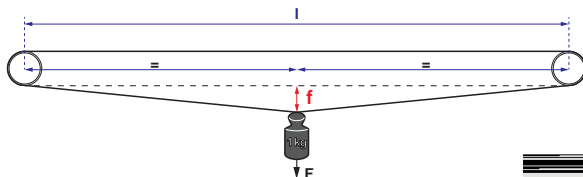


Double leaf

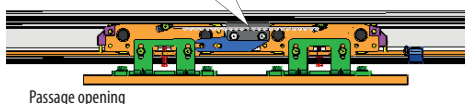


SINGLE LEAF WITH RH OPENING





1. Connect the belt fitting to the carriage.
2. Apply a 1 kg weight in the centre of the belts lower section.
3. Adjust the tension of the belt until the measurement of arrow f corresponds to the indications in **10**.



Single leaf - RH opening




11.2 BELT TENSIONING

1. To tension the belt correctly, proceed as follows.
2. Loosen the nut  55-①.
3. Adjust the screw and nut  55-② 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  55-② using a hex spanner until obtaining the measurement specified in the table.
6. After adjustment, tighten the nut  55-①.
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  55-③.
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.



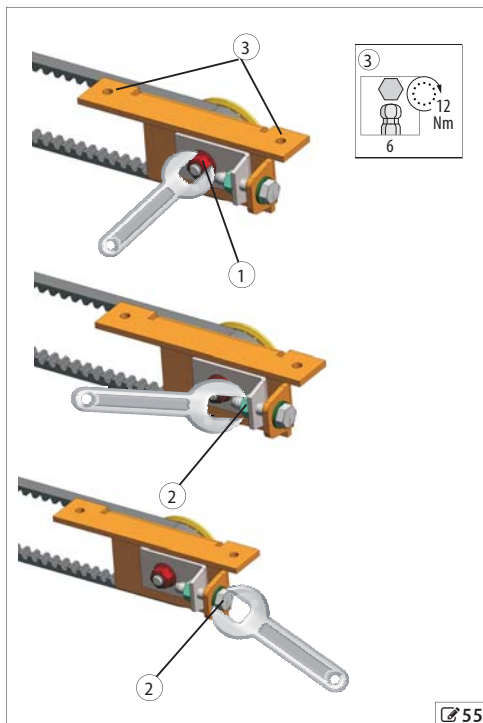
Close the door and ensure:

- 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.









 55

10 Belt tensioning (measurements in mm)

RH single leaf			LH single leaf			Double leaf		
Pulley centre distance (l)	Belt length	f	Centre distance pulleys (l)	Length belt	f	Centre distance pulleys (l)	Length belt	f
1150	2470	18	1170	2510	18	1200	2570	19
1200	2570	19	1265	2700	20	1310	2790	20
1250	2670	20	1360	2890	21	1420	3010	22
1300	2770	20	1455	3080	23	1530	3230	24
1350	2870	21	1550	3270	24	1640	3450	26
1400	2970	22	1645	3460	26	1750	3670	27
1450	3070	23	1740	3650	27	1860	3890	29
1500	3170	23	1835	3840	29	1970	4110	31
1550	3270	24	1930	4030	30	2080	4330	32
1600	3370	25	2025	4220	32	2190	4550	34
1650	3470	26	2120	4410	33	2300	4750	36
1700	3570	27	2215	4600	35	2410	4970	38
1750	3670	27	2310	4790	36	2520	5190	39
1800	3770	28	2405	4980	38	2630	5410	41
1850	3870	29	2500	5170	39	2740	5630	43
1900	3970	30	2595	5360	40	2850	5850	44
1950	4070	30	2690	5550	42	2960	6070	46
2000	4170	31	2785	5740	43	3070	6290	48
2050	4270	32	2880	5930	45	3180	6510	50
2100	4370	33	2975	6120	46	3290	6730	51
2150	4470	34	3070	6310	48	3400	6950	53
2200	4570	34	3165	6500	49	3510	7170	55
2250	4670	35	3260	6690	51	3620	7390	56
2300	4770	36	3355	6880	52			




11.3 BELT TENSIONING WITH THE

A1400 AIR KIT DM

12. Move the second motor manually in order to tension the belt.
13. Fasten the bracket using the 2 screws  56 - ①
14. Loosen the 3 screws  56 - ②.
15. Loosen the nut  56 - ③.
16. Attach a **1 kg** weight in the centre of the lower section of the belt.
17. Measure the arrow **f** and adjust the screw  56 - ④ using a hex spanner until obtaining the measurement specified in the table.
18. After adjustment, tighten the 3 screws  56 - ②.
19. Tighten the nut  56 - ③.
20. Carry out several cycles and make sure that the belt remains in its housing flush with the pulley on the main motor and on the second motor.



Caution - make sure the belt remains flush with the pulleys of the main motor and the second motor.

21. If the belt is not flush with the pulleys, loosen the 3 screws  56 - ② and rotate the plate clockwise using the slot  56 - ⑤
22. After adjustment, tighten the 3 screws  56 - ②.
23. Carry out several cycles again and make sure that the belt remains flush with the pulley of both motors.



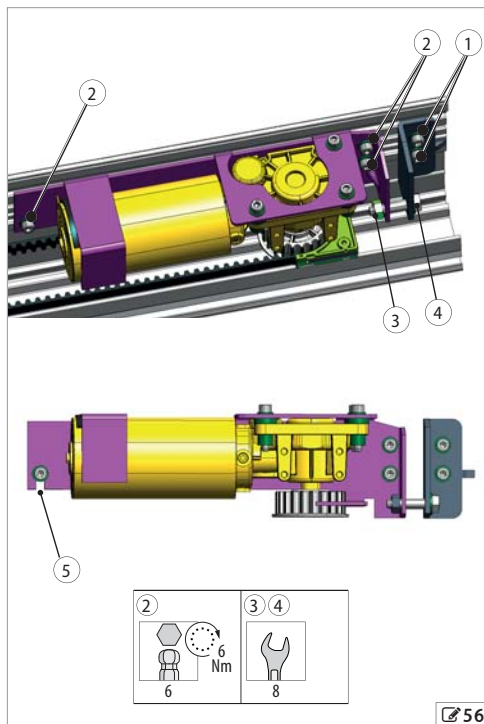
Close the door and ensure:

- 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.



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 11 Belt tensioning (measurements in mm)

RH single leaf Pulley centre distance (l)	Belt length	f
1292	2744	20
1344	2848	21
1400	2960	22
1456	3072	23
1512	3184	24
1568	3296	25
1624	3408	26
1680	3520	27
1736	3632	28
1792	3744	29
1848	3856	30
1904	3968	31
1960	4080	32
2016	4192	33
2072	4304	34
2128	4416	35
2184	4528	36
2240	4640	37
2296	4752	38
2352	4864	39
2408	4976	40
2464	5088	41
2520	5200	42
2576	5312	43
2632	5424	44
2688	5536	45
2744	5648	46
2800	5760	47
2856	5872	48
2912	5984	49
2968	6096	50
3024	6208	51
3080	6320	52
3136	6432	53
3192	6544	54
3248	6656	55
3304	6768	56
3360	6880	57
3416	6992	58
3472	7104	59
3528	7216	60
3584	7328	61
3640	7440	62
3696	7552	63
3752	7664	64
3808	7776	65
3864	7888	66
3920	8000	67
3976	8112	68
4032	8224	69
4088	8336	70
4144	8448	71
4200	8560	72
4256	8672	73
4312	8784	74
4368	8896	75
4424	9008	76
4480	9120	77
4536	9232	78
4592	9344	79
4648	9456	80
4704	9568	81
4760	9680	82
4816	9792	83
4872	9904	84
4928	10016	85
4984	10128	86
5040	10240	87
5096	10352	88
5152	10464	89
5208	10576	90
5264	10688	91
5320	10800	92
5376	10912	93
5432	11024	94
5488	11136	95
5544	11248	96
5600	11360	97
5656	11472	98
5712	11584	99
5768	11696	100

LH single leaf Centre distance pulleys (l)	Length belt	f
1320	2800	21
1340	2840	21
1360	2880	21
1380	2920	22
1340	2840	21
1440	3040	22
1540	3240	24
1640	3440	26
1740	3640	27
1840	3840	29
1940	4040	30
2040	4240	32
2140	4440	33
2240	4640	35
2340	4840	37
2440	5040	38
2540	5240	40
2640	5440	41
2740	5640	43
2840	5840	44
2940	6040	46
3040	6240	47
3140	6440	49





11.4 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 2 grub screws  57-① to release the mechanical stop.
2. Open the leaf completely  58-①.
3. Bring the pad of the mechanical stop and the carriage into contact  58-②.
4. Tighten the 2 grub screws to lock the mechanical stop  57-①.



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.

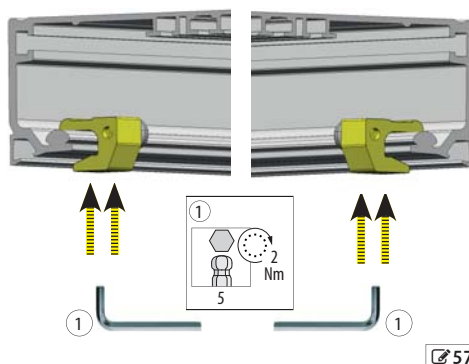
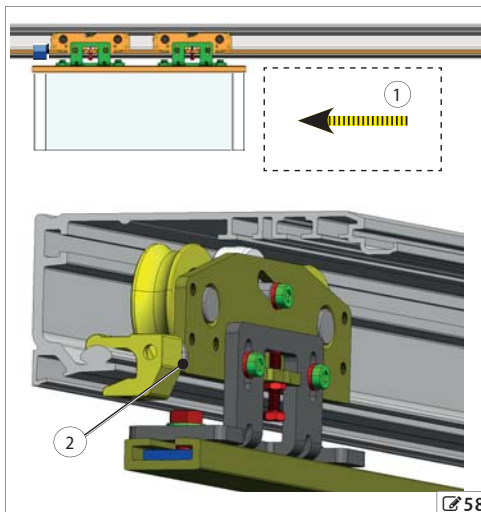
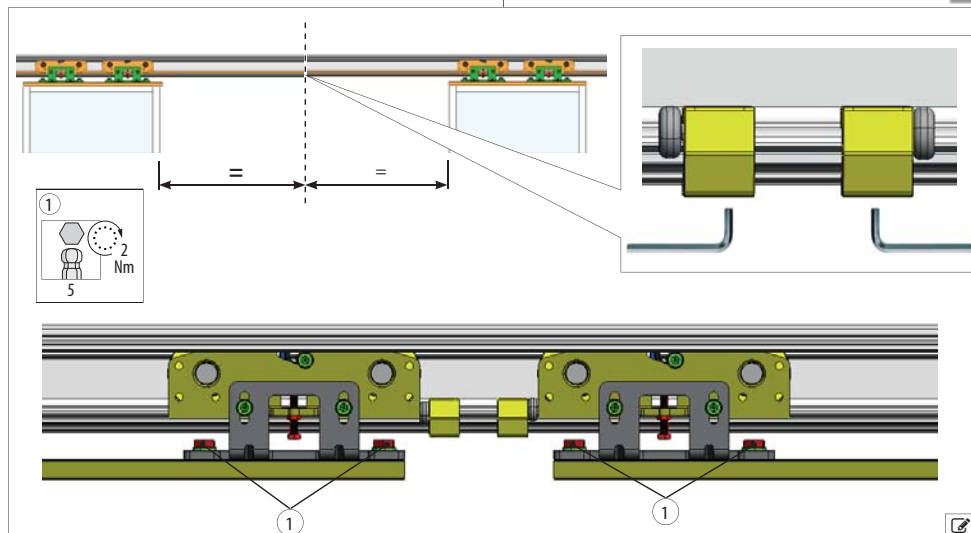
Should adjustment be required:

3. Bring the pad of the mechanical stop and the carriage into contact  58-②.
4. Tighten the 2 grub screws to lock the mechanical stop  57-①.

SINGLE LEAF CLOSING STOPS

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

1. Loosen the 2 grub screws to release the mechanical stop  57-①.
2. Close the leaf.
3. Bring the pad of the mechanical stop and the carriage into contact  58-②.
4. Tighten the 2 grub screws to lock the mechanical stop  58-①.




 57

 58

 59

11.5 MOUNTING THE SIDE PROFILES


The side profiles enable the casing to remain closed.

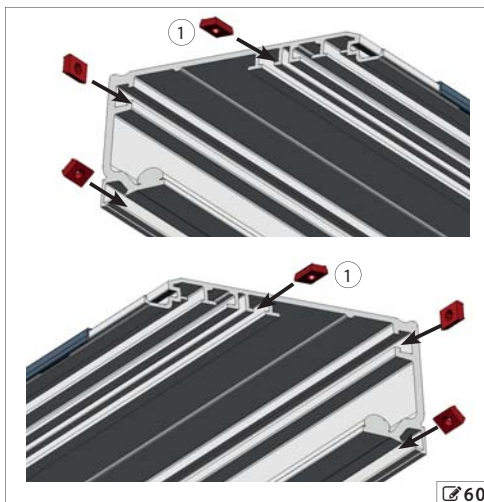


If there are no side profiles, cover mounting brackets should be used.

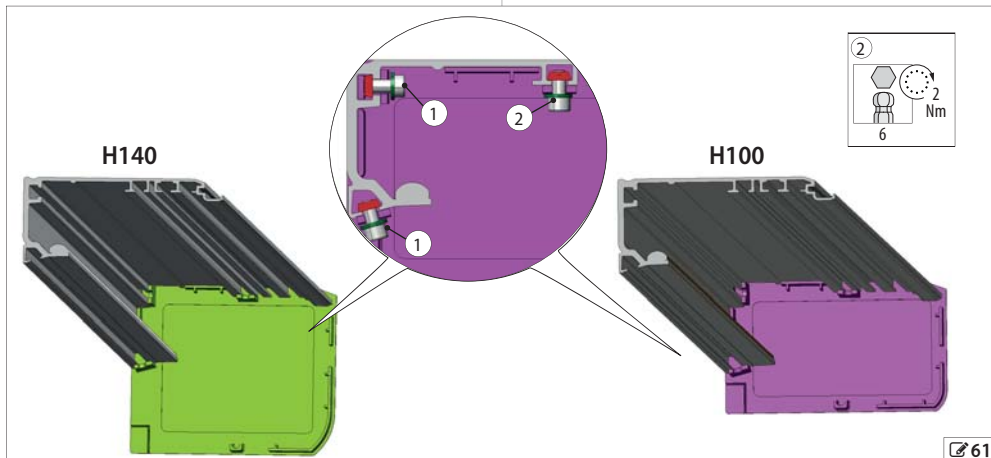
1. Place 6 plates on the support profile (for profiles longer than 3m)  60-①.
2. Mount the side profiles for H100 or H140 casings on the ends of the support profile.
3. Fasten each side profile using the 3 screws provided  61-②.



Use at least one central bracket  62-② for profiles longer than 3 m.



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11.6 INSTALLING THE CASING BRACKETS





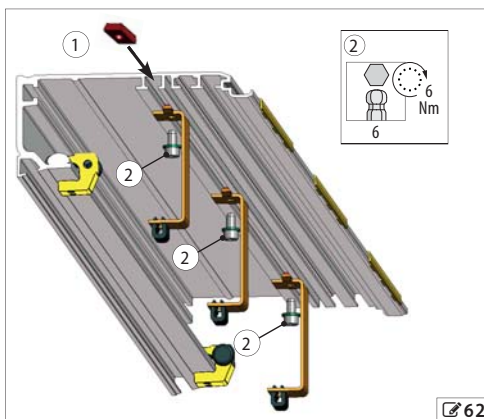
The brackets enable the casing to be closed if side profiles are not used.



Brackets are available for H100 or H140 covers.

It is recommended to use a central bracket for profiles longer than 3 m.

1. Place 2 plates  62-① on the support profile (for profiles longer than 3 m, a third plate should be added).
2. Mount the brackets and fasten them using the screws provided  62-②.



 62

11.7 FITTING THE COVER



On the profile there must be:

- the safety cables **63-5**
- the spacers **65-1**
- the side profiles **64-7** or the cover fastening brackets **63-8**

1. Place the cover on the profile **63** or **64**.
2. Hold the cover in the open position **65-2** (lift it, then push it into the profile).
3. Fasten the safety cables to the cover **66-5** and close the cover.



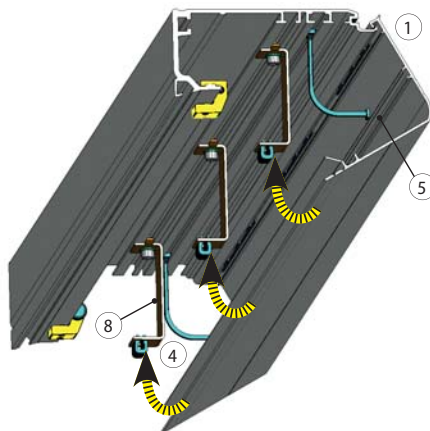
The safety cables must be correctly installed to protect from the risk of accidental casing fall.

Push the cover slightly in order to insert the blocks into the brackets or side profiles **63-4** or **64-4**.

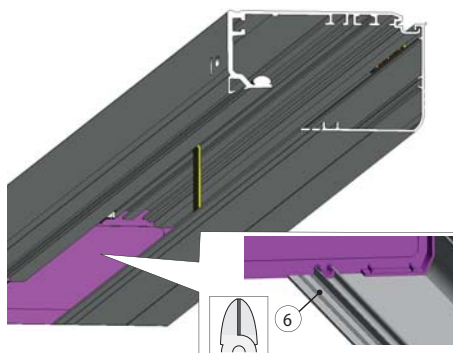
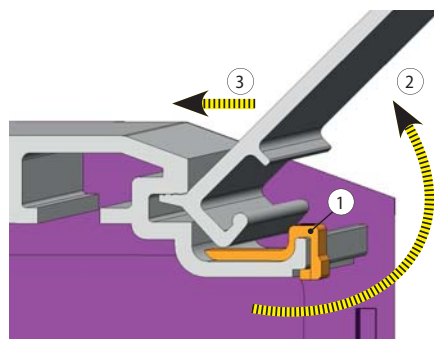
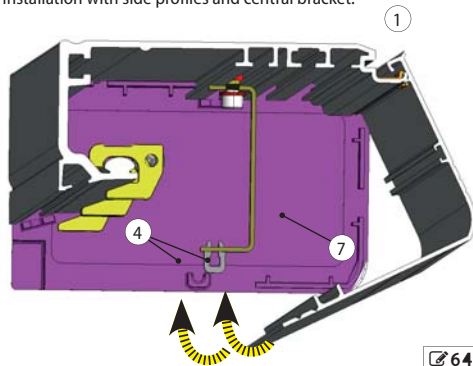


The markings on the casing allow it to be adapted to varying leaf thickness. The breaking points **66-6** make it possible to remove the profile section in excess.






Cover fastening bracket installation.



Installation with side profiles and central bracket.




11.8 INSTALLING THE MOTOR BLOCK XB LOCK



1. Install the motor block by engaging the retaining hook ① in the slot ② of the motor block  67 A-B.
2. Close the leaves.
3. Manually push the lever  68-① towards the motor shaft. Check correct coupling.
4. Move the motor block lever to check the clearance between the motor shaft and the motor block coupling  68-②. If it is incorrect, adjust it as described below.  69-③.
5. After making sure that it is, tighten screw  67-④.

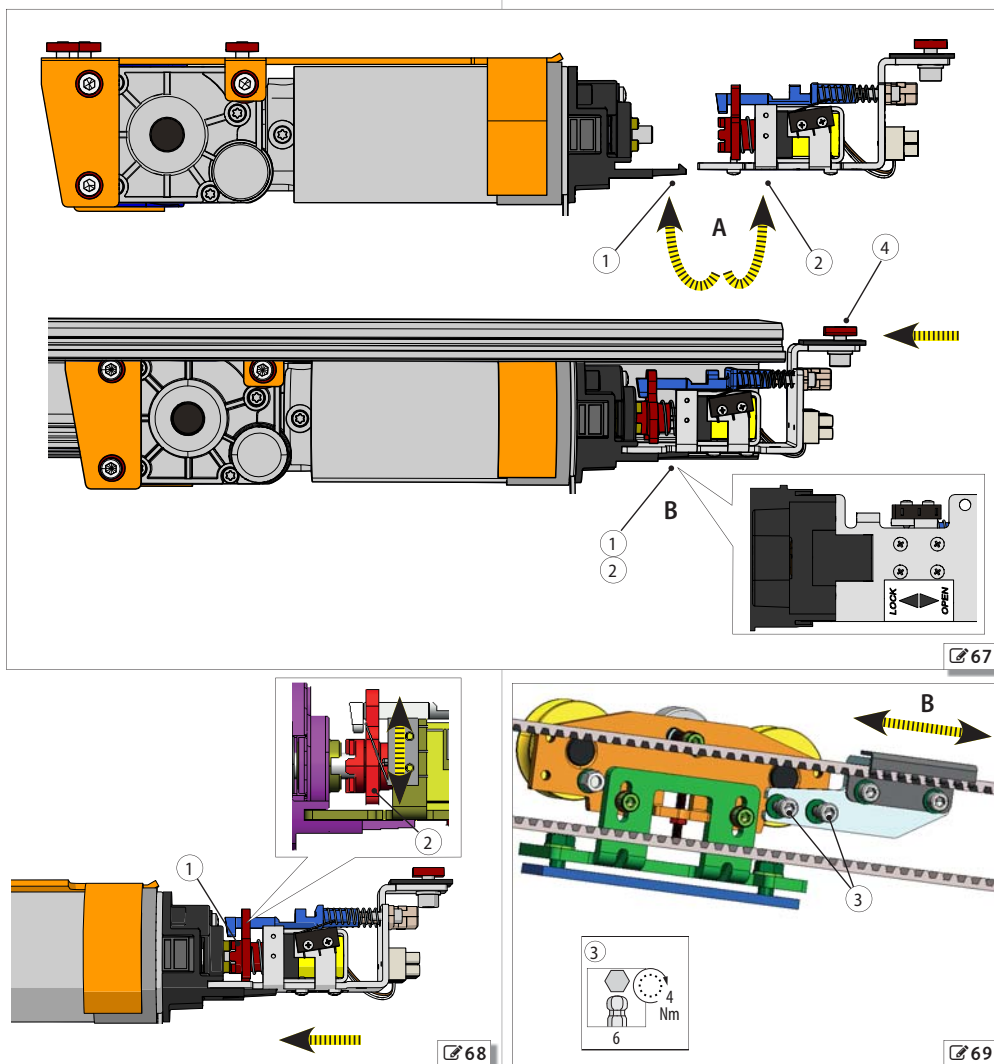


To remove the XB LOCK motor block:





Release the motor retainer hook carefully so as not to break it; use a flat-head screwdriver to prise the retainer hook away from the motor block  67-①.

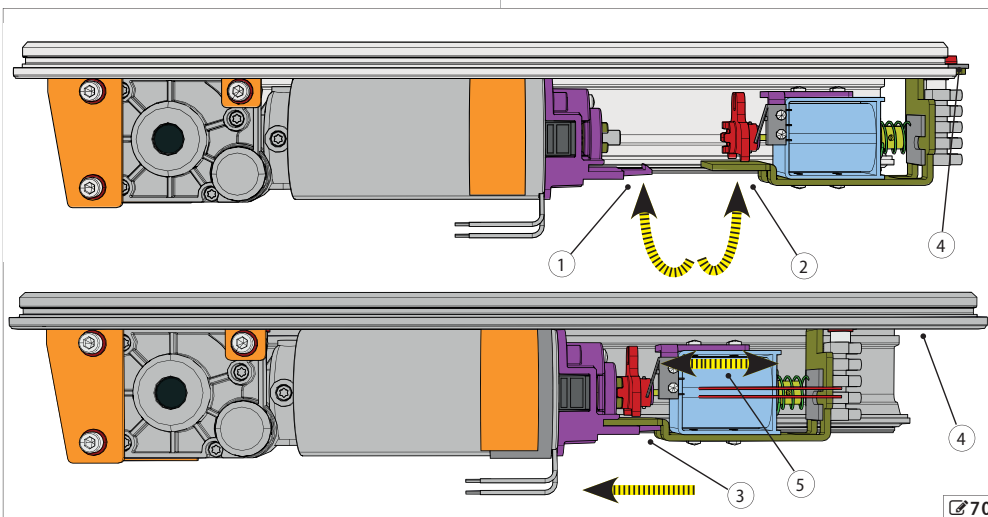
11.9 ADJUSTING THE XB LOCK MOTOR BLOCK

1. Loosen the two screws  69-③ that connect the belt fitting to the carriage (on both carriages in the case of a double leaf).
2. Slightly move the belt fitting horizontally until there is clearance between the coupling of the motor shaft and the motor block by moving the motor block lever  68-②; re-tighten the previously loosened screws.



11.10 INSTALLING THE XM LOCK MOTOR BLOCK


1. Install the motor block by engaging the retaining hook ① in the slot ② of the motor block 70.
2. Check that the motor block is properly engaged 70-③.
3. Adjust the monitoring micro switch support and check the switching of the micro switch contact 70-⑤.
4. After making sure that it is, tighten screw 70-④.

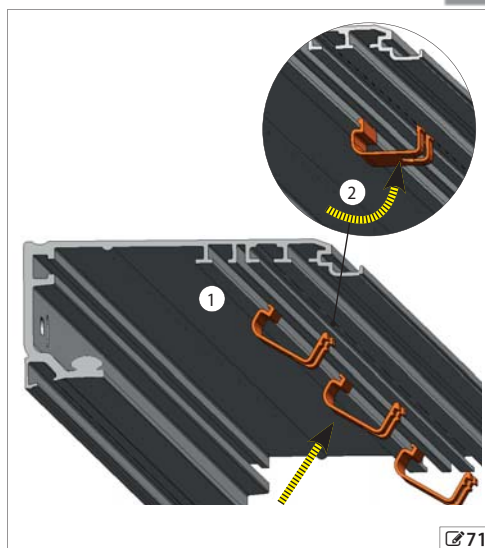

70

11.11 MOUNTING THE CABLE GLAND GUIDES



The guides prevent interference between cables and moving parts.

Install the electric cable guides inside the support profile 71-① and ②).


71

12. MAINTENANCE



In order to keep the system operating safely 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 **12**.

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.

R1 = 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 **52**, enter the calculated number of cycles.

12 Maintenance programme and periodic replacements

ROUTINE MAINTENANCE

OPERATION			
Check automation fastening to the wall	check the support profile is solidly secured to the wall in case of installation with self-supporting Head Section: check screws securing the support profile to the self-supporting profile and the screws of side wall fixings	-	21 32
Check the fastening of the Motor and return Pulley	check screws securing the motors on the support profile	24	
Check on carriages	check screws securing to the leaf check and adjust the counter wheels of carriages and leaf depth and height screws	35 37	
Check mechanical stops	check position of mechanical stops and fixing screws	46	
Belt tensioning check	check belt tensioning	44	
Cleaning	clean: Sliding Guide; Lower Guide Shoe; Carriages	55	
Functional system check	perform required checks and procedures to ensure integrity of the load bearing structure and leaf frames perform functional checks	18 55	

PERIODIC REPLACEMENTS

22

PART/COMPONENT	FREQUENCY		Replacements Recommended / Mandatory
	Operation cycles	Time (years)	
Motor	1 000 000	--	Recommended
DM Motor	1 000 000	--	Recommended
Plastic motor spacers	2 000 000	--	Recommended
Return pulley	1 000 000	--	Recommended
Lower guide shoe	2 000 000	--	Mandatory
Carriages	2 000 000	--	Mandatory
DM Carriage Wheels	2 000 000	--	Mandatory
Belt	1 000 000	5	Mandatory
Limit switch rubber pads	2 000 000	5	Mandatory
Safety fall arrest cables	--	5	Mandatory
Emergency battery	--	1	Recommended

12.2 MAINTENANCE TECHNICIAN SAFETY

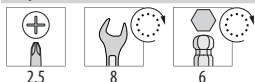
RISKS



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.
2. Remove the motor from its support after removing the screws 72-1-2-3.
3. Loosen the screws 73-1 of each carriage and lower the leaves to the floor using the screw 2.
4. Disconnect the leaves from the carriages by removing the screws 73-1.
5. Temporarily store the leaves away, using all precautions to prevent risks of fall.
6. Loosen the screw 73-3 and lower the counter wheel in order to remove each carriage.
7. Install the new wheels for the DM carriages 40.
8. Remove the mechanical stops.
9. Remove the lower guide shoe.
10. Install the new shoe 34.
11. Install the vibration damper rubbers onto the support.
12. Install the new motor on its support.
13. Tighten the screws 72-1-2-3.
14. Install the new mechanical stops 22.
15. Install the new carriages onto the leaves 35.
16. Install and adjust the leaves 35 37.
17. Install and adjust the new belt 42 44.
18. Adjust the new mechanical stops 46.

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

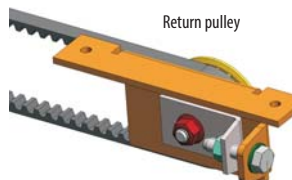
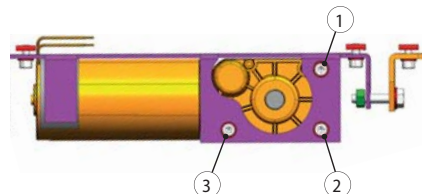
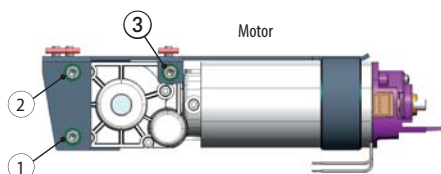
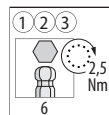
Only perform steps 7 and 19 of the sequence for 2 million cycles.

Replacement of safety cables

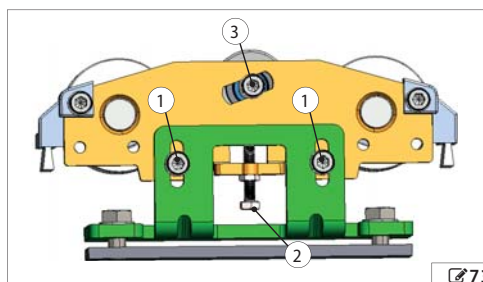
1. Remove the safety cables from the casing.
2. Install the new cables 24 and 49.



Follow the tightening sequence
1-2-3.



72



73

Emergency battery replacement



Before proceeding, disconnect mains power supply.

1. Disconnect the battery from the E1SL board.
2. Unscrew the 2 screws with washer 74-① and remove the battery.
3. Install the new battery 74-①.
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 54.

1. Remove all connections.
2. Remove the screw 75-① and the screw with washer 75-②.
3. Remove the board from the support.
4. Insert the new board in the seats 75-③.
5. Fasten using the screw ① and screw ② with washer ④.



The washer 75-④ 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 54.

8. Carry out the SETUP procedure 54.

Replacing the fuses

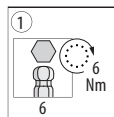
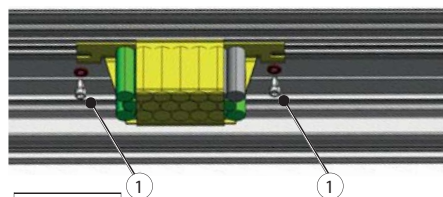


Before proceeding, disconnect the mains power supply and disconnect the emergency battery.

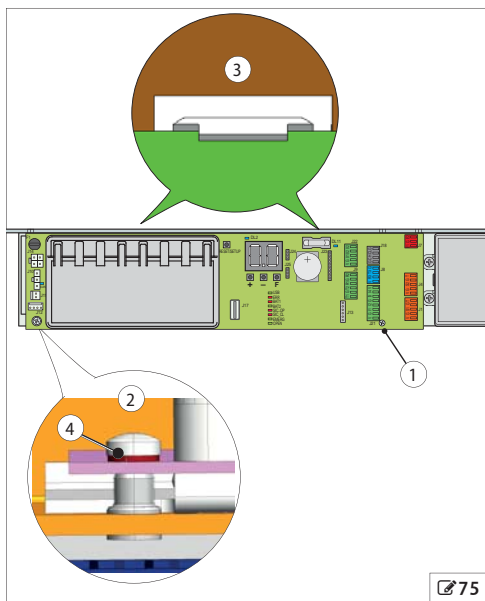
1. Remove the fuse F1 by pressing and turning anti-clockwise. Remove fuses F2 and F3 by gently using a screwdriver as a lever.
2. Assemble the new fuse.



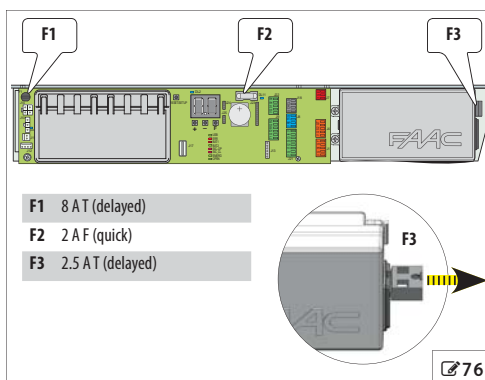
Only use the fuses indicated 76.



74



75



76

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 [fig 55](#) and [fig 55](#).

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.

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.



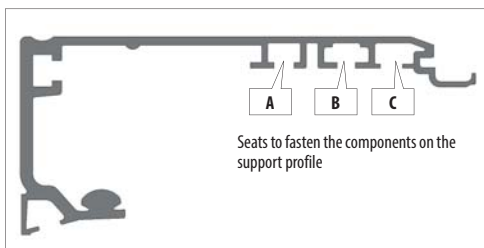
14. ATTACHMENTS - A1400 AIR

13 A1400 AIR Automation weights

Single leaf			
Vp [mm]	Lt [mm]	Support profile weight [kg - approximate values]	TOTAL weight [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 [mm]	Lt [mm]	Support profile weight [kg - approximate values]	TOTAL weight [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

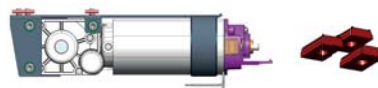
14 Positions of components on the head section



Electronics module B



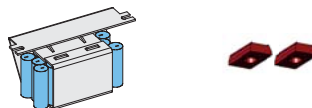
Motor A-B



Return pulley A



Emergency battery A



Cover fastening brackets B Safety cables C



Internal release (optional component) A



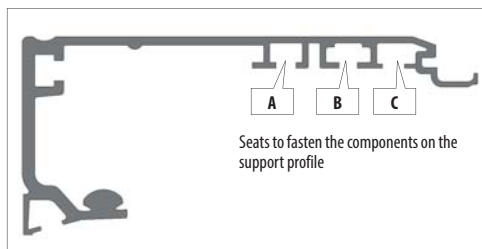
15. ATTACHMENTS - A1400 AIR DM

15 A1400 AIR DM automation weights

Single leaf			
Vp [mm]	Lt [mm]	Support profile weight [kg - approximate values]	TOTAL weight [kg]
800	1700	9	24
900	1900	10	25
1000	2100	12	26
1100	2300	13	27
1200	2500	14	28
1300	2700	15	29
1400	2900	16	30
1500	3100	17	32
1600	3300	19	33
1700	3500	20	34
1800	3700	21	35
1900	3900	22	36
2000	4100	23	37
2100	4300	24	38
2200	4500	26	40
2300	4700	27	41
2400	4900	28	42
2500	5100	29	43
2600	5300	30	44
2700	5500	31	45
2800	5700	32	46
2900	5900	34	48
3000	6100	35	49

Double leaf			
Vp [mm]	Lt [mm]	Support profile weight [kg - approximate values]	TOTAL weight [kg]
900	1900	11	27
1000	2100	12	28
1100	2300	13	30
1200	2500	14	31
1300	2700	15	32
1400	2900	16	33
1500	3100	18	34
1600	3300	19	35
1700	3500	20	36
1800	3700	21	37
1900	3900	22	39
2000	4100	23	40
2100	4300	24	41
2200	4500	26	42
2300	4700	27	43
2400	4900	28	44
2500	5100	29	45
2600	5300	30	47
2700	5500	31	48
2800	5700	32	49
2900	5900	34	50
3000	6100	35	51

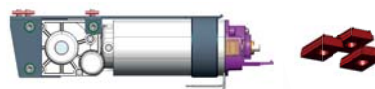
16 Positions of components on the head section



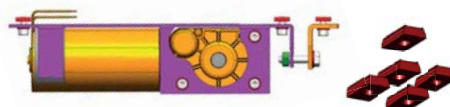
Electronics module B



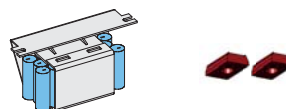
Motor A-B



2nd motor A-B



Emergency battery A



Cover fastening brackets B and Safety cables C



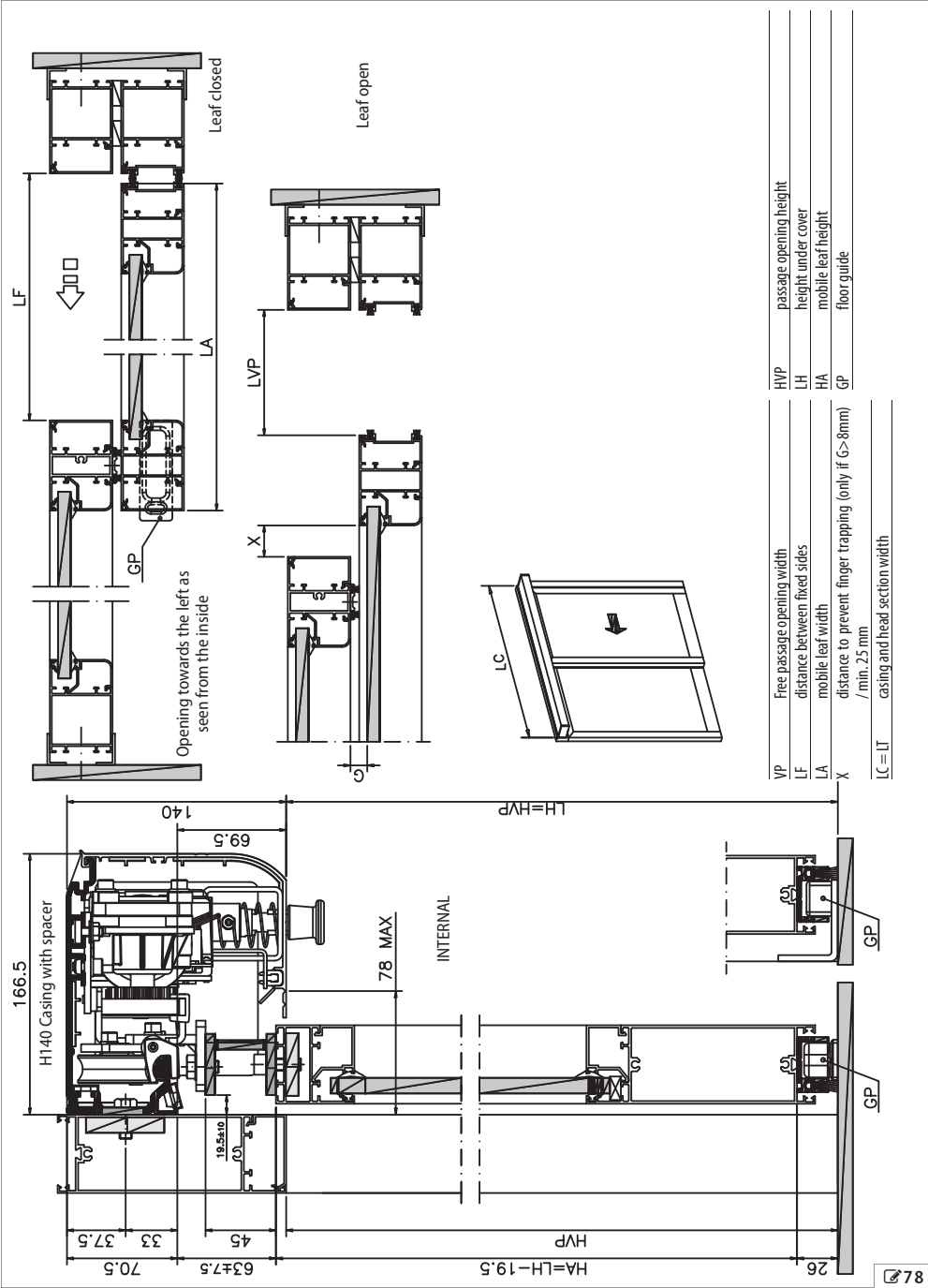
Internal release (optional component) A



A1400 AIR H100 - H140



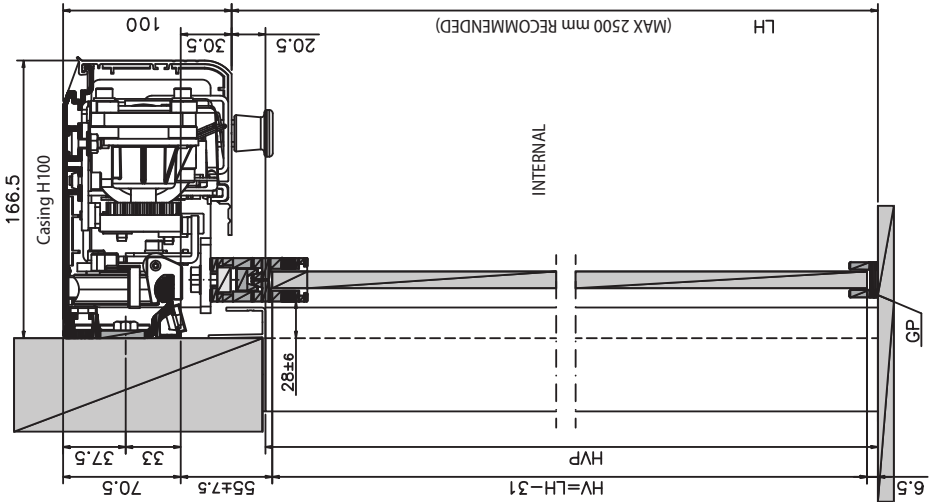
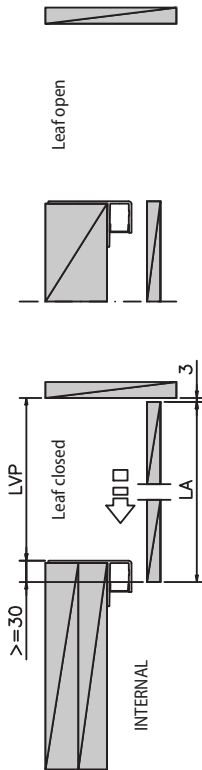
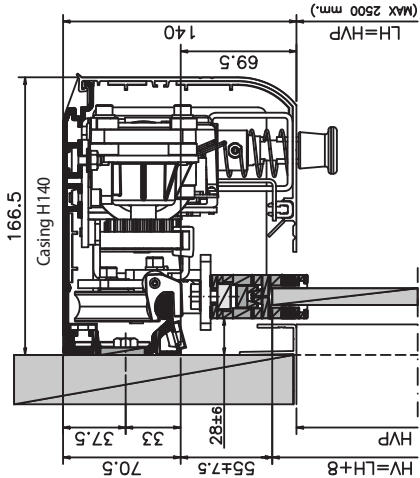
A1400 AIR WITH CARRIAGE LEAF SPACER



A1400 AIR H140 GLASS LEAF

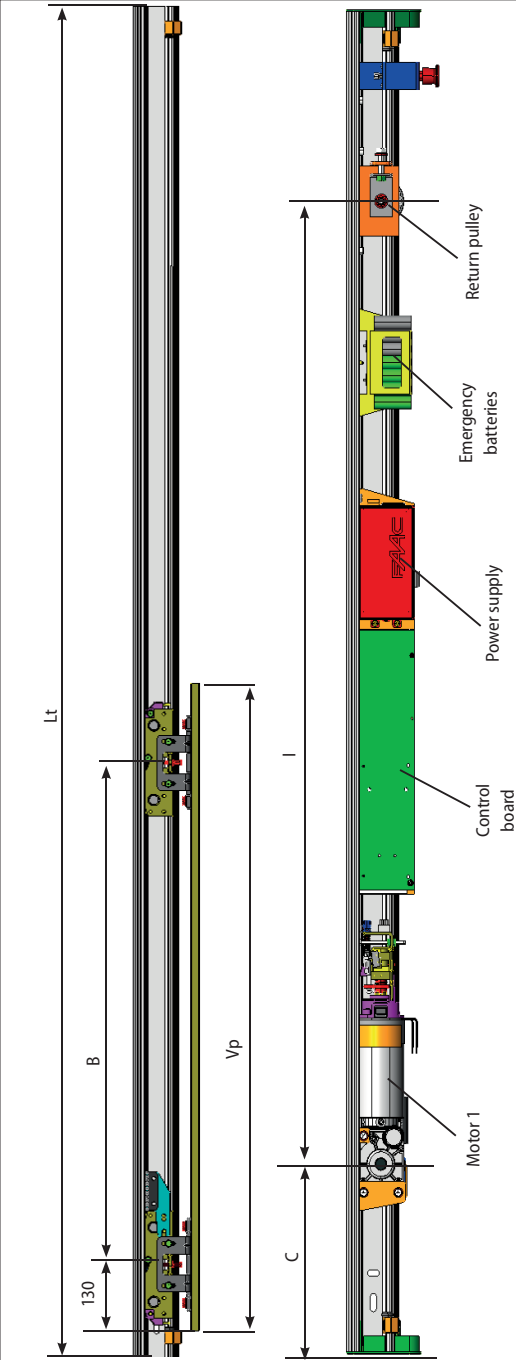
ENGLISH

Translation of the original instructions



VP	Free passage opening width	HVP	passage opening height
LF	distance between fixed sides	LH	height under cover
LA	mobile leaf width	HV	glass height
X	distance to prevent finger trapping (only if >8mm) / min. 25 mm	GP	floor guide
LC = LT	casing and head section width		

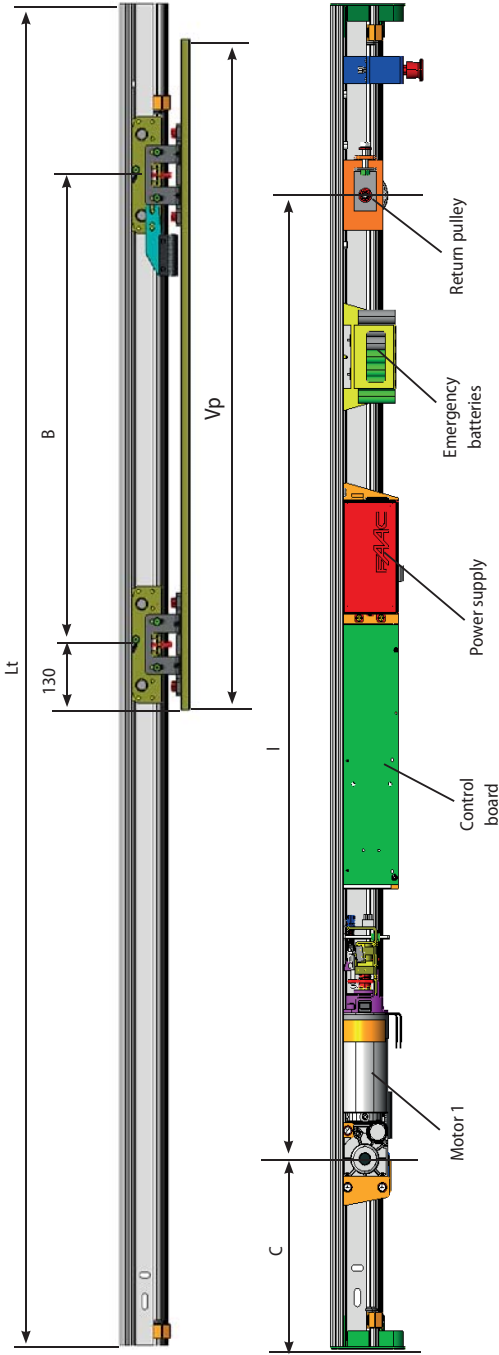
15.2 POSITION OF COMPONENTS ON A1400 AIR SUPPORT PROFILE
A1400 AIR RIGHT OPENING SINGLE LEAF



$$Lt = Vp \times 2 + 100$$

- B** = Carriage fixing distance on the sliding leaf
- C** = Motor position
- D** = Transmission belt length
- I** = Motor / transmission unit centre distance
- Lt** = Head section length
- Vp** = Free passage opening
- 100** = leaf overlap (mm)

Vp	Lt	B	I	C	D	Vp	Lt	B	I	C	D
700	1500	520	1150	140	2470	1900	3900	1720	2230	140	4630
800	1700	620	1240	140	2650	2000	4100	1820	2320	140	4810
900	1900	720	1330	140	2830	2100	4300	1920	2410	140	4990
1000	2100	820	1420	140	3010	2200	4500	2020	2500	140	5170
1100	2300	920	1510	140	3190	2300	4700	2120	2590	140	5350
1200	2500	1020	1600	140	3370	2400	4900	2220	2680	140	5530
1300	2700	1120	1690	140	3550	2500	5100	2320	2770	140	5710
1400	2900	1220	1780	140	3730	2600	5300	2420	2860	140	5890
1500	3100	1320	1870	140	3910	2700	5500	2520	2950	140	6070
1600	3300	1420	1960	140	4090	2800	5700	2620	3040	140	6250
1700	3500	1520	2050	140	4270	2900	5900	2720	3130	140	6430
1800	3700	1620	2140	140	4450	3000	6100	2820	3220	140	6610



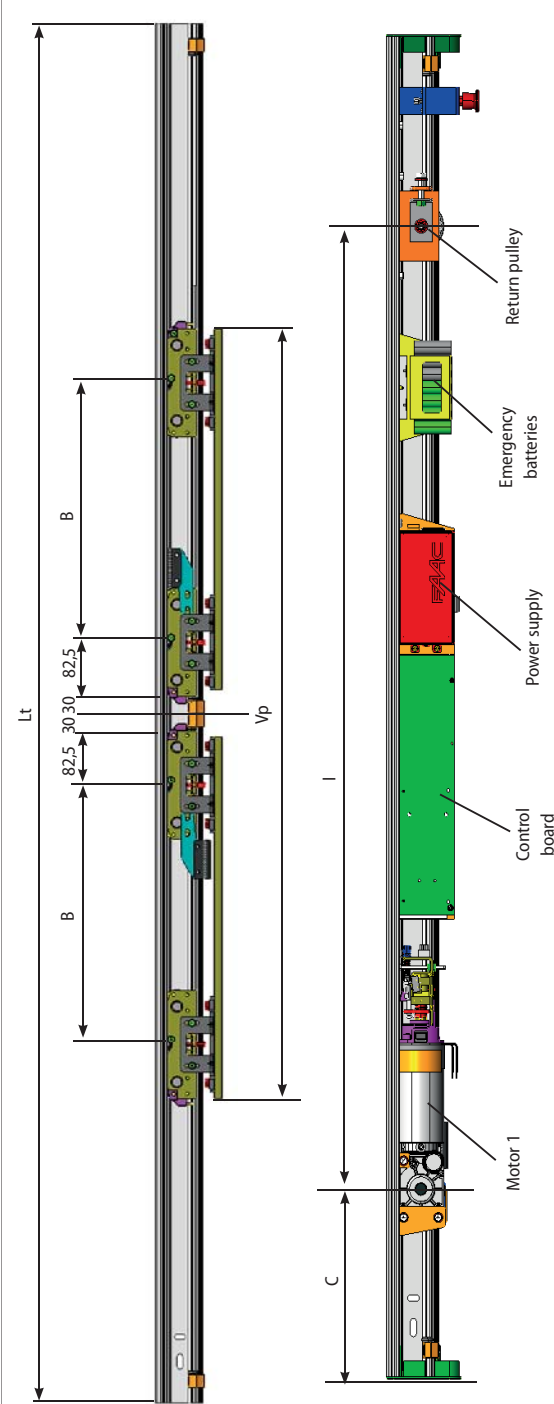
$$Lt = Vp \times 2 + 100$$

- B** = Carriage fixing distance on the sliding leaf
C = Motor position
D = Transmission belt length
I = Motor / transmission unit centre distance
Lt = Head section length
Vp = Free passage opening
100 = leaf overlap (mm)

Vp	Lt	B	I	C	D
700	1500	520	1150	140	2470
800	1700	620	1240	140	2650
900	1900	720	1330	140	2830
1000	2100	820	1420	140	3010
1100	2300	920	1510	140	3190
1200	2500	1020	1600	140	3370
1300	2700	1120	1690	140	3550
1400	2900	1220	1780	140	3730
1500	3100	1320	1870	140	3910
1600	3300	1420	1960	140	4090
1700	3500	1520	2050	140	4270
1800	3700	1620	2140	140	4450

Vp	Lt	B	I	C	D
1900	3900	1720	2230	140	4630
2000	4100	1820	2320	140	4810
2100	4300	1920	2410	140	4990
2200	4500	2020	2500	140	5170
2300	4700	2120	2590	140	5350
2400	4900	2220	2680	140	5530
2500	5100	2320	2770	140	5710
2600	5300	2420	2860	140	5890
2700	5500	2520	2950	140	6070
2800	5700	2620	3040	140	6250
2900	5900	2720	3130	140	6430
3000	6100	2820	3220	140	6610

A1400 AIR DOUBLE LEAF



$$Lt = Vp \times 2 + 100$$

- B** = Carriage fixing distance on the sliding leaf
C = Motor position
D = Transmission belt length
I = Motor 1 / motor 2 centre distance
Lt = Head section length
Vp = Free passage opening
100 = leaf overlap (mm)

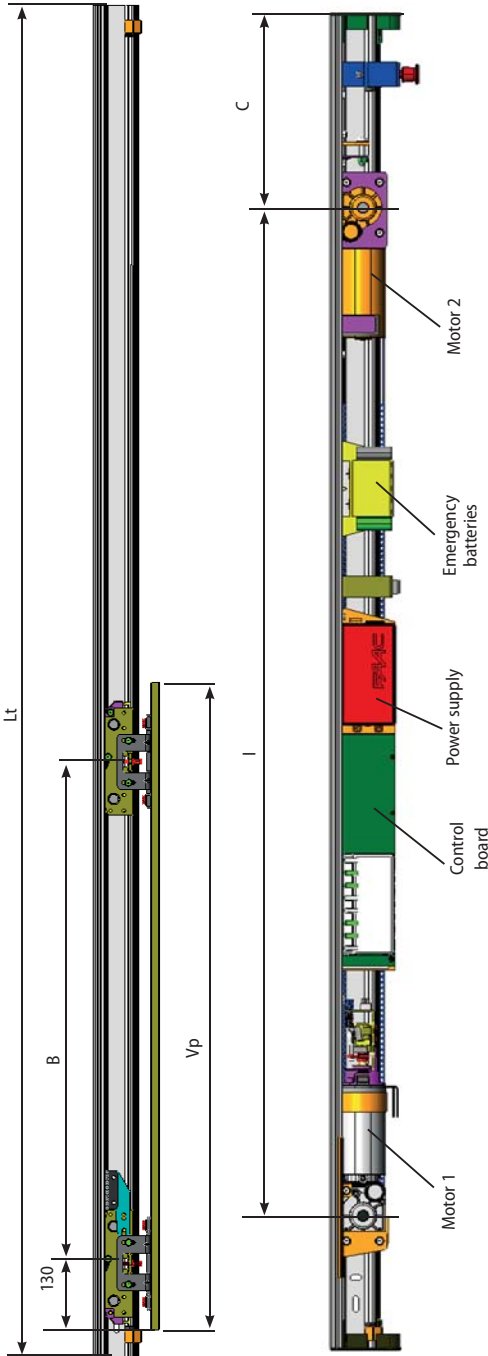
Vp	Lt	B	I	C	D	Vp	Lt	B	I	C	D
800	1700	240	1350	175	2870	2000	4100	840	2670	715	5510
900	1900	290	1460	220	3090	2100	4300	890	2780	760	5730
1000	2100	340	1570	265	3310	2200	4500	940	2890	805	5950
1100	2300	390	1680	310	3530	2300	4700	990	3000	850	6170
1200	2500	440	1790	355	3750	2400	4900	1040	3110	895	6390
1300	2700	490	1900	400	3970	2500	5100	1090	3220	940	6610
1400	2900	540	2010	445	4190	2600	5300	1140	3330	985	6830
1500	3100	590	2120	490	4410	2700	5500	1190	3440	1030	7050
1600	3300	640	2230	535	4630	2800	5700	1240	3550	1075	7270
1700	3500	690	2340	580	4850	2900	5900	1290	3660	1120	7490
1800	3700	740	2450	625	5070	3000	6100	1340	3770	1165	7710
1900	3900	790	2560	670	5290						

15.3 POSITION OF COMPONENTS ON A1400 AIR DM SUPPORT PROFILE

A1400 AIR DM RIGHT OPENING SINGLE LEAF

ENGLISH

Translation of the original instructions



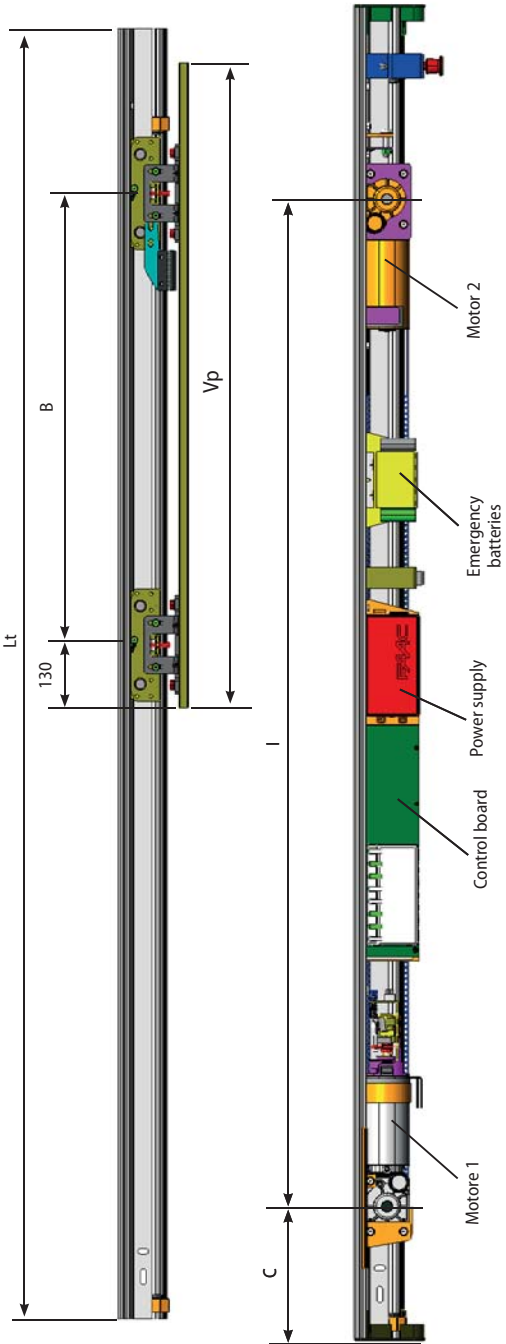
$Lt = Vp \times 2 + 100$

- B** = Carriage fixing distance on the sliding leaf
C = Motor position
D = Transmission belt length
I = Motor / transmission unit centre distance
Lt = Head section length
Vp = Free passage opening
100 = leaf overlap (mm)

Vp	Lt	B	I	C	D
800	1700	620	1300	140	2770
900	1900	720	1385	140	2940
1000	2100	820	1470	140	3110
1100	2300	920	1555	140	3280
1200	2500	1020	1640	140	3450
1300	2700	1120	1725	140	3620
1400	2900	1220	1810	140	3790
1500	3100	1320	1895	140	3960
1600	3300	1420	1980	140	4130
1700	3500	1520	2065	140	4300
1800	3700	1620	2150	140	4470
1900	3900	1720	2235	140	4640

Vp	Lt	B	I	C	D
2000	4100	1820	2320	140	4810
2100	4300	1920	2405	140	4980
2200	4500	2020	2490	140	5150
2300	4700	2120	2575	140	5320
2400	4900	2220	2660	140	5490
2500	5100	2320	2745	140	5660
2600	5300	2420	2830	140	5830
2700	5500	2520	2915	140	6000
2800	5700	2620	3000	140	6170
2900	5900	2720	3085	140	6340
3000	6100	2820	3170	140	6510

A1400 AIR DM LEFT OPENING SINGLE LEAF

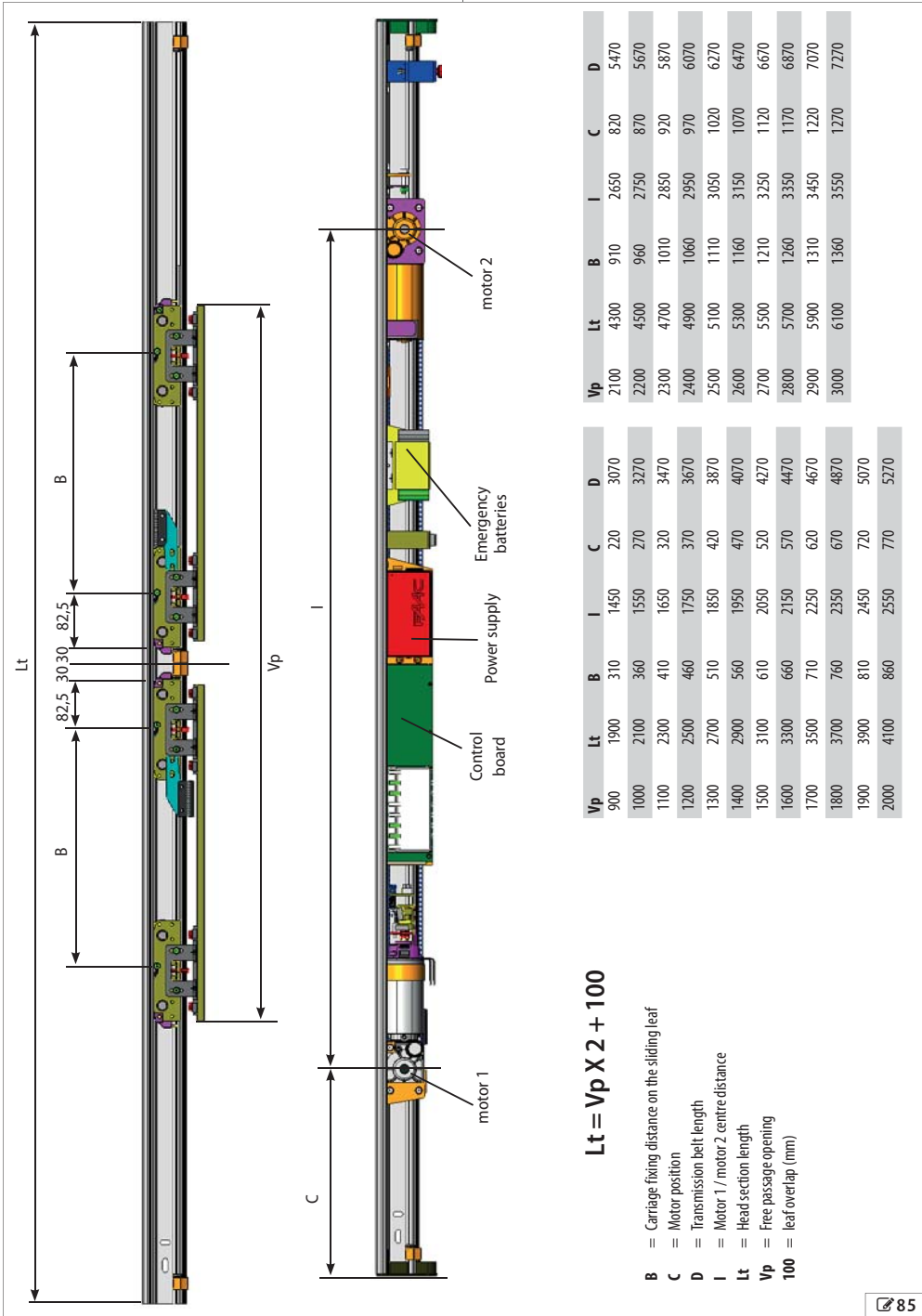


Lt = Vp X 2 + 100

- B** = Carriage fixing distance on the sliding leaf
- C** = Motor position
- D** = Transmission belt length
- I** = Motor / transmission unit centre distance
- Lt** = Head section length
- Vp** = Free passage opening
- 100** = leaf overlap (mm)

Vp	Lt	B	I	C	D
800	1700	545	1300	250	2770
900	1900	645	1385	250	2940
1000	2100	745	1470	250	3110
1100	2300	845	1555	250	3280
1200	2500	945	1640	250	3450
1300	2700	1045	1725	250	3620
1400	2900	1145	1810	250	3790
1500	3100	1245	1895	250	3960
1600	3300	1345	1980	250	4130
1700	3500	1445	2065	250	4300
1800	3700	1545	2150	250	4470
1900	3900	1645	2235	250	4640

Vp	Lt	B	I	C	D
2000	4100	1745	2320	250	4810
2100	4300	1845	2405	250	4980
2200	4500	1945	2490	250	5150
2300	4700	2045	2575	250	5320
2400	4900	2145	2660	250	5490
2500	5100	2245	2745	250	5660
2600	5300	2345	2830	250	5830
2700	5500	2445	2915	250	6000
2800	5700	2545	3000	250	6170
2900	5900	2645	3085	250	6340
3000	6100	2745	3170	250	6510



USER'S GUIDE A1400 AIR

SAFETY RECOMMENDATIONS

The A1400 AIR automation, if correctly installed, maintained and used, guarantees 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 for future use

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

Routine and planned maintenance



In order to keep the system operating safely 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 A1400 AIR 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.

USE

The FAAC series A1400 AIR systems are designed to automatically operate, manage and control linear horizontal motion one- or two-leaf sliding doors.

The A1400 AIR 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 uses 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 A1400 AIR door changes from NIGHT-TIME or MANUAL mode to TWO-DIRECTION AUTOMATIC mode a system test is carried out immediately.

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 anti-clockwise 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.





USER'S GUIDE SDK EVO

15.4 SELECTION MENU

1. 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
3. To go back to the HOME PAGE use the OK button (the selections displayed are confirmed).

Automatic or Door open operation

Automatic = opening via detector

Open door = closure is inhibited

Automatic



Door open

**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**

100% = Total opening

% = Partial opening (percentage that can be modified by the program)

Total opening



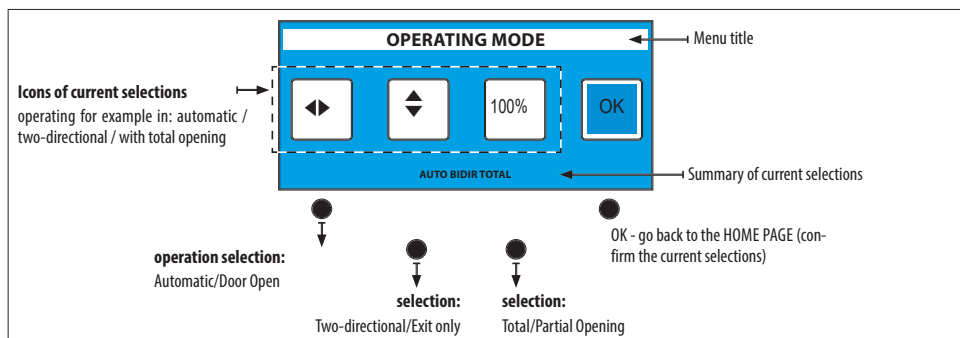
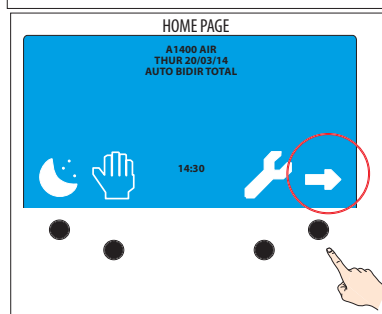
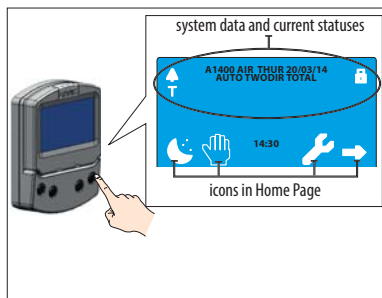
Partial opening



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



example - door open with total opening:



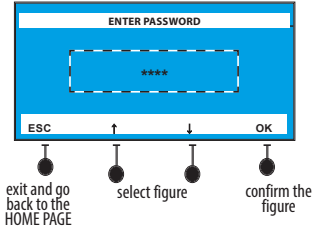
The 4 digit **PASSWORD** has to be entered in order to use some of the functions.

- select the first digit using the $\uparrow \downarrow$ 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**.

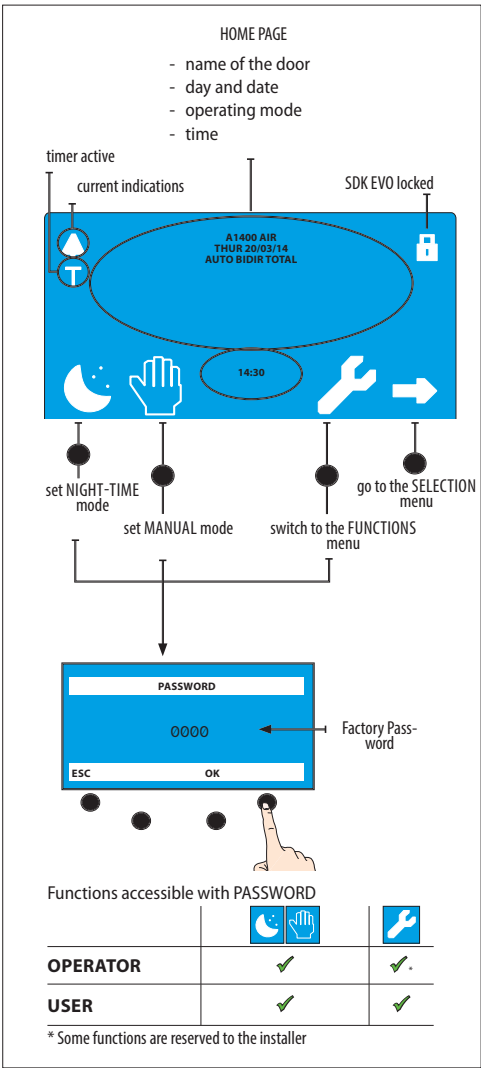


The factory-set password is: 0000





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

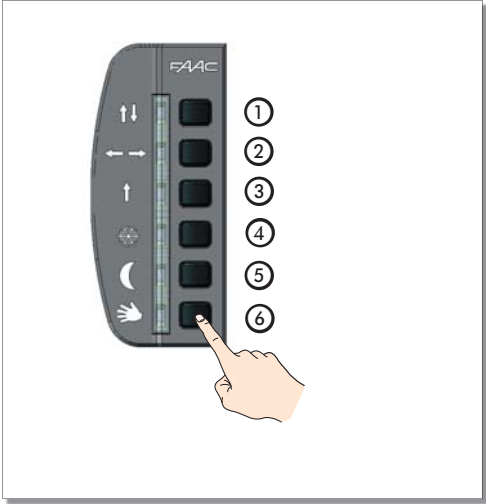


USER'S GUIDE LK EVO

15.6 SELECTION MENU

- To access the operating mode selection menu, press the corresponding function button.
- The following functions may be set with the selection buttons:
 - TOTAL TWO-DIRECTION AUTOMATIC
 - DOOR OPEN
 - AUTOMATIC TOTAL ONE-DIRECTION
 - AUTOMATIC PARTIAL TWO-DIRECTION AUTOMATIC
 - NIGHT
 - MANUAL
- The LED switches on to identify the active function.

①	↑↓	TOTAL TWO-DIRECTION AUTOMATIC
②	←→	DOOR OPEN
③	↑	AUTOMATIC TOTAL ONE-DIRECTIONAL
④	❄️	AUTOMATIC PARTIAL TWO-DIRECTIONAL
⑤	🌙	NIGHT
⑥	👤	MANUAL



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

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

- The ALARMS are displayed with a code of flashing LEDs alternating with the current operating mode. For the type of ALARM see 25 in the A1400 AIR manual.







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