# **AIRSLIDE**



EN16005:2012









Translation of the original instructions

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#### **EU DECLARATION OF CONFORMITY**

The Manufacturer

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

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

hereby declares on his own responsibility that the following products:

 Description:
 Air barrier for automatic entry

 Model:
 AIRSLIDE KIT; AIRSLIDE PA

comply with the following applicable EU legislations:

EMC Directive 2014/30/EU
Directive ROHS 2 2011/65/EU
LVD Directive 2014/35/EU

Furthermore, the following harmonised standards have been applied:

EN 61000-6-2:2005

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

EN60335-2-80: 2003 + A1: 2004 + A2: 2009

A Moul

Bologna, Italy 08-09-2017 A. Marcellan CEO

#### **EU DECLARATION OF CONFORMITY**

The Manufacturer

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

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

hereby declares on his own responsibility that the following products:

**Description:** Automatic entry with integrated air barrier

Model: AIRSLIDE 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

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Bologna, Italy 08-09-2017 A. Marcellan CEO

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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 on his own responsibility that the following products:

**Description:** Automatic entry with integrated air barrier

Model: AIRSLIDE CS

complies with the following applicable EU legislations:

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

A Mouly

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 08-09-2017 CEO

A. Marcellan

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#### 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 for the AIRSLIDE 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

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

#### CAUTION



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.



#### CAUTION

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...)



TORX WRENCH 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°...)



ROUND SAW



PALLET FORKS



#### TOOL with TORQUE ADJUSTMENT

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

FASTENING TORQUE VALUE

The torque wrench and the fastening torque in Nm is specified in the figures. E.g.: SPANNER 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 ind

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



#### FALLING OBJECTS HAZARD



#### 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.





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.



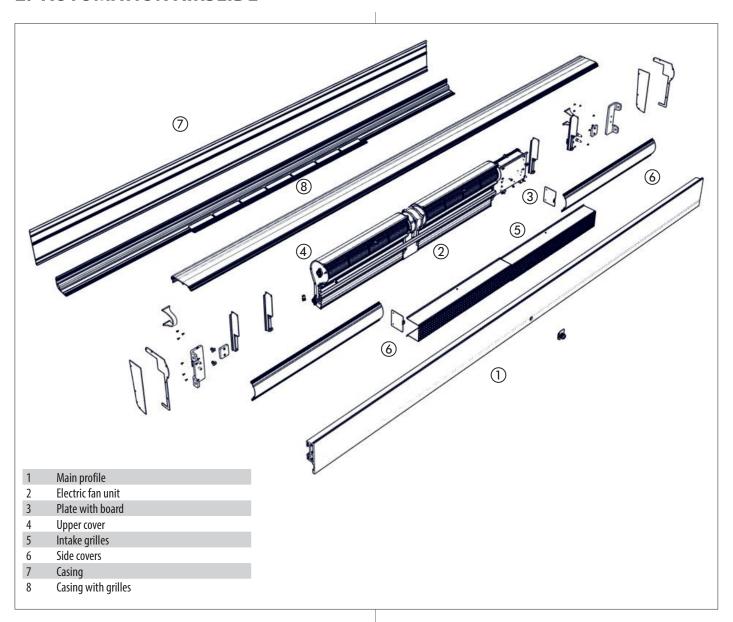
20 kg is the MAX weight that 1 person can lift.



**Kg** \_\_\_\_\_ WEIGHT of the load.

## FAAC

#### 2. AUTOMATION AIRSLIDE



#### 2.1 INTENDED USE

The AIRSLIDE systems with integrated air blade at the entry ensure a greater level of insulation between the indoor and outdoor environment, protecting the entrance area from winter cold and summer heat without dispersion, also protecting the rooms from dust, pollution and insects from the outside area.

The AIRSLIDE 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 installation indoors, for applications which meet the specifications given in **III** 7.



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

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

#### **LIMITATIONS FOR USE**

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

- 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:

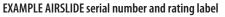
- use the automation for uses other than the INTENDED USE;
- use the automation for installing smoke and/or fire protection doors (fire doors);
- use the automation with mobile and fixed guards tampered with or removed;
- use the automation in environments in which there is a risk of explosion and/or 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.

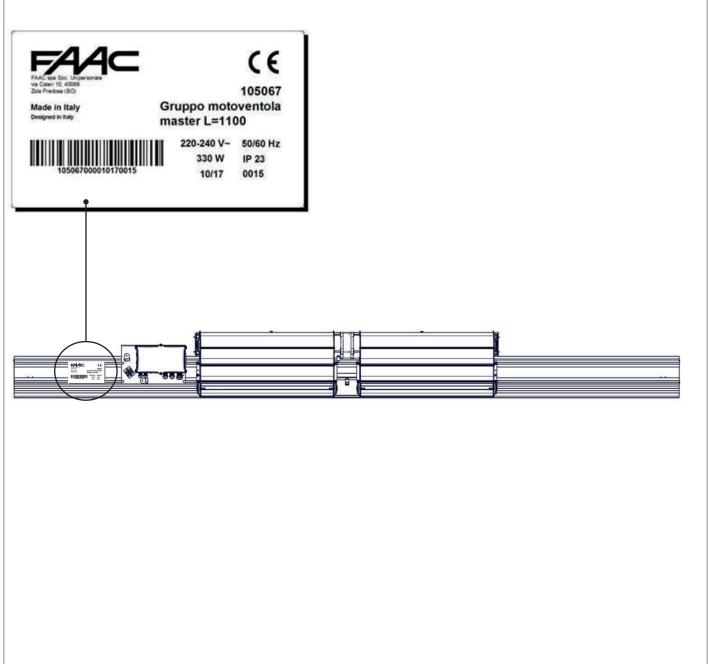


#### 2.3 TECHNICAL SPECIFICATIONS AIRSLIDE

## **III 7** Technical specifications

MODEL	AIRSLIDE
MAX installation height (m)	2.5
MAX recommended opening width (m)	2.2
Power supply voltage	220-240V~ 50-60Hz
MAX absorbed power [W]	160 (single motor) - 330 (double motor)
Electric motor	Asynchronous single phase motor
Motor rotation speed (rpm)	2850
Beam dimension (D x H) (mm)	182.1 x 252.5 (Including Grille)
Fan diameter (mm)	80
Fan length (mm)	360 - 500
Speed of air output from the grilles from 0 to 2.5m in height (m/s)	15.3 - 4.2
Air flow rate (m3/h)	1250
Noise level (dB) at 5m	49.5 - 57.5
Operating ambient temperature [°C]	-20°/+55°
Automation protection rating	IP23
Use frequency	100%





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## FAAC

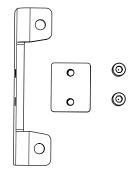
#### **AIRSLIDE COMPONENTS**

#### Support profile



Main AIRSLIDE profile for assembly of components and plate.

#### Side fixing plates (Optional)



Support profile side fixing plates

#### FRONT CASING CLOSING PROFILE



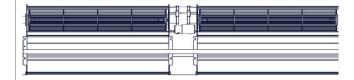
Aluminium profile for front head section closure.

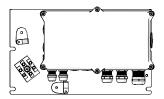
#### Plates with screws



Plates with screws for installation of components.

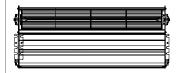
#### Master electric fan unit and E1AS board plate





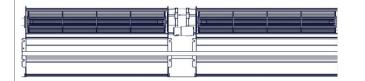
Master electric fan unit and E1AS board plate.

#### Additional fan module



Additional electric fan module to be connected to the Master electric fan module

#### Slave electric fan unit



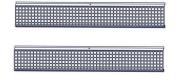
Slave electric fan module to be connected to E1AS

#### Side profiles



Side profiles AIRSLIDE.

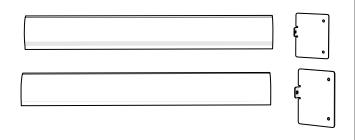
#### Intake grilles



AIRSLIDE grilles

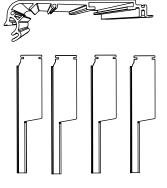


#### Side covers and side panels



Side cover AIRSLIDE and side panels

#### Upper cover and brackets



Upper cover and fastening brackets

#### 2.4 TYPES OF SYSTEM SUPPLIED

The AIRSLIDE series systems may be supplied as follows:

- Air barrier in kit form for automatic entry: AIRSLIDE KIT
- Assembled air barrier for automatic entry: AIRSLIDE PA
- Automatic entry with integrated air barrier: AIRSLIDE CS

## INSTALLATION ACCORDING TO THE TYPE OF SYSTEM SUPPLIED

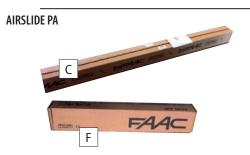


During installation, it is recommended to comply with the order of the sections set out based on the type of purchased supply.

#### **AIRSLIDE KIT**



- A. Pack containing AIRSLIDE components to be assembled on the FAAC support profile.
- B. Pack with FAAC profiles purchased in 6.10 m long bars.



- C. Assembled automatic door \*.
- F. Assembled AIRSLIDE \*

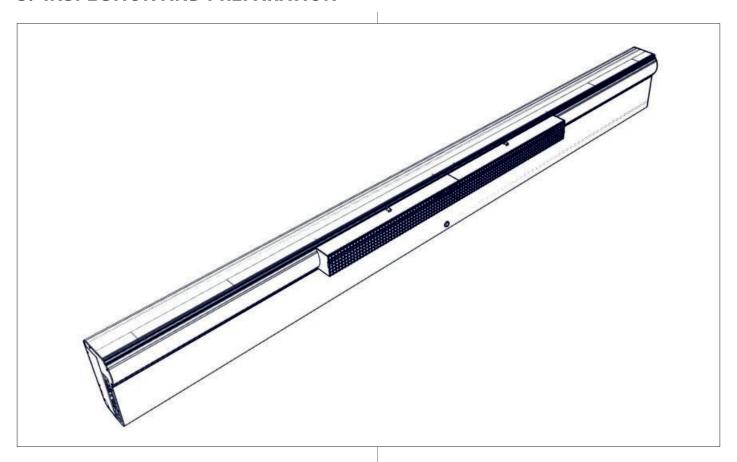




- C. Assembled automatic door \*.
- D. FAAC leaves (with TK20 or TK50 profiles)
- E. Package with TK20 or TK50 profiles for installing the FAAC door wall frame.
- F. Assembled AIRSLIDE \*
- \* Supplied with the required measurement and with pre-assembled automation components.

## F44C

#### 3. INSPECTION AND PREPARATION



#### 3.1 PRELIMINARY INSPECTION



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

- solidity, stability and absence of any risk of detachment or collapse of the masonry structure, fixed door frame and automation
- level flooring, without any friction/hindrance to smooth leaf sliding
- absence of sharp edges (cutting hazard)
- absence of protruding parts (hooking/entrainment hazard)

#### 3.2 ARRANGEMENT OF ELECTRICAL CABLES



Before performing any operation on the system, disconnect the power supply. The electrical system must comply with applicable legislation in the country of installation (EN60335-2-80: 2003 + A1 : 2004 + A2 : 2009)

The power mains of the automation must be fitted with a multi-pole power switch with a switch-contact gap of at least 3 mm. It is advisable to use a 6A circuit breaker with a multi-pole power switch.

Ensure there is a residual current device with a  $0.03~\mathrm{A}$  threshold upstream of the system.

Ensure the earthing system is constructed in a workmanlike manner and connect the structure's metal parts to it.

If the E1AS board has to be controlled remotely, provide additional power and earth cables to maintain a continuous earth.

In order to control it remotely, use:

Motor cable FROR – 450/750 V 3G1
Power cable FROR – 450/750 3G1.5
Earth cable PE H07V-K section 1.0

for a maximum distance of 10m.

Lay the electrical cables for connecting the accessories and the electrical power supply **4**.

Protect cables by means of suitable ducting.



Place control accessories within the automation's visual range. These devices must always be accessible, even with the door open.

Comply with the following heights from the ground:

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

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## 4. TRANSPORT AND RECEIPT OF THE GOODS

#### 4.1 HANDLE PACKAGES

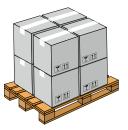


Always comply with instructions on the package.



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.

#### 4.2 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. Make sure that all components requested are present and undamaged.



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 AIRSLIDE 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: 14.

#### 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 man-

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



Make the cuts to the specified measurements.

The technical drawings are available on the FAAC website.



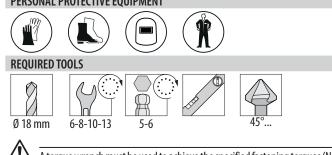
#### 6. ASSEMBLING THE HEAD SECTION



If the AIRSLIDE 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.

Handling instructions **14**.





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



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

## 6.1 ELECTRIC FAN MODULE AND PLATE WITH CASE FOR E1AS BOARD

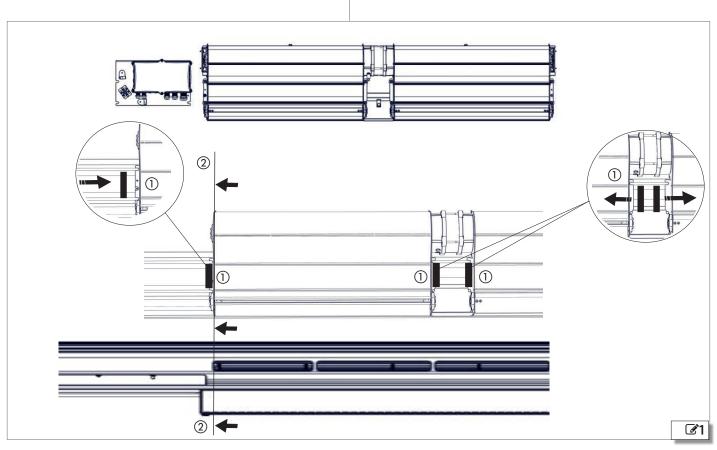
The electric fan module is supplied pre-assembled.

Also supplied is a plate with case attached containing the

E1AS electronic board and wiring connectors 2.1.

A protective sheathing for the cables is provided, and must be applied to the edges of the modules **21-1**.

The modules must be positioned so that they correspond with the air outlet slots in the casing 3.2.

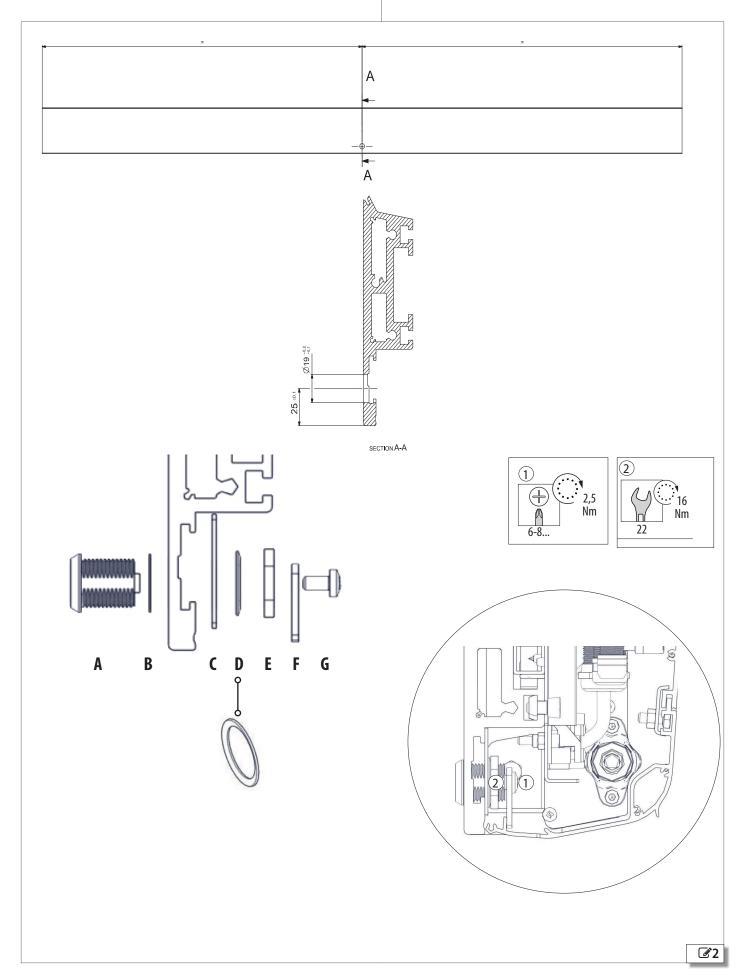




## ■ Lock hole on the head section for profiles of less than 3500 mm

Make a hole in the main profile for fitting the lock as shown in figure  $\begin{tabular}{l} \hline \ref{table} \end{tabular}$ 

The lock component D must be positioned as shown in the figure.

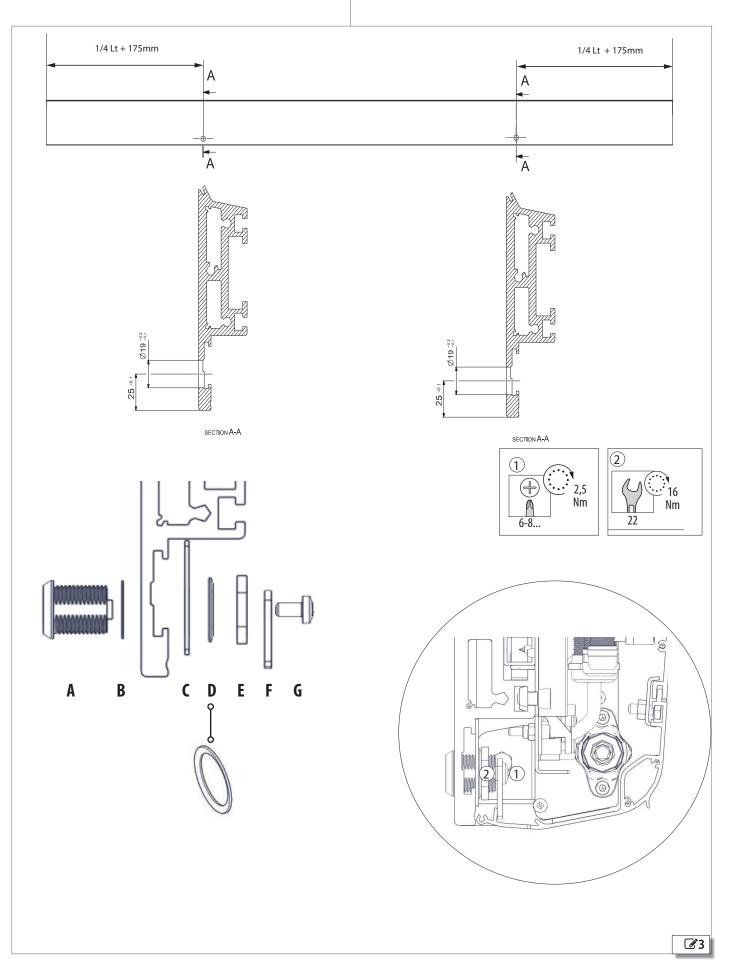




#### ■ Lock hole on the head section for profiles greater than 3500 mm

Drill 2 holes in the main profile in order to install the locks as shown in figure 3 at 1/4 Lt (head section length) + 175 mm from the two ends of the head section.

The lock component D must be positioned as shown in the figure.





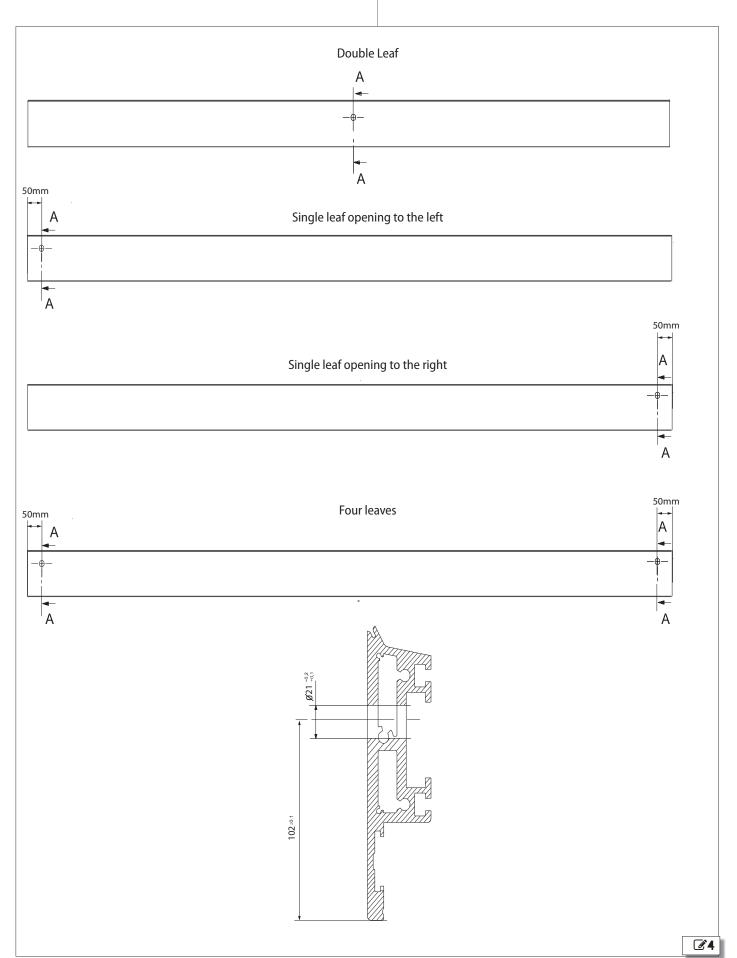
#### ■ Cable routing holes

Make cable routing holes in the main profile according to the type of automatic door.

Figure **4** shows four types of automatic door and indicates where the 21 mm diameter holes should be drilled **4**.



When routing the cables, fit cable guards to protect them from any sharp borders or burs.



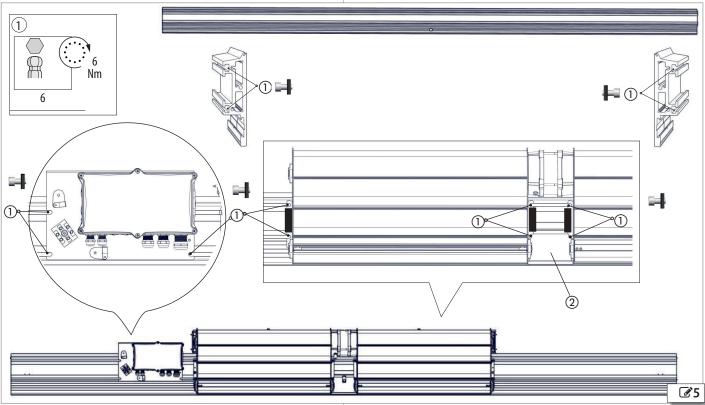


#### ■ Installing the master electric fan and plate with the E1AS board.

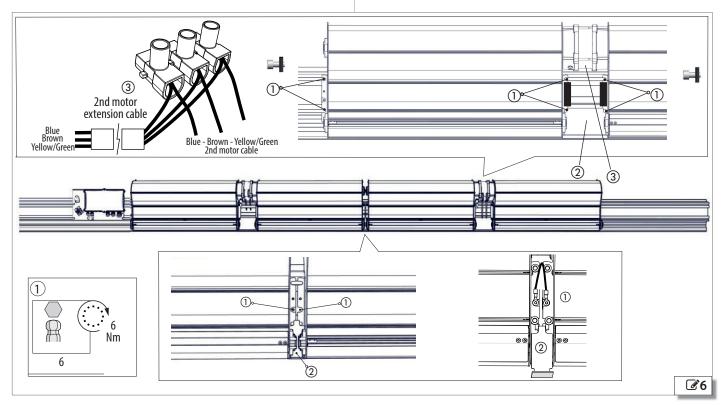
The unit is fixed to the AIRSLIDE profile using fastener plates with M6 screws inserted in the profile. Fasten the electronic module plate using three fastener plates and M6 screws and fasten each fan module using two fastener plates and M6 screws on each side **5-1**. Insert the protective cable sheath at the sides of the modules **1-1**.



Do not install devices which could cause condensation or other liquid above the electronics module plate in order to prevent liquid dripping onto the E1AS electronic board case.



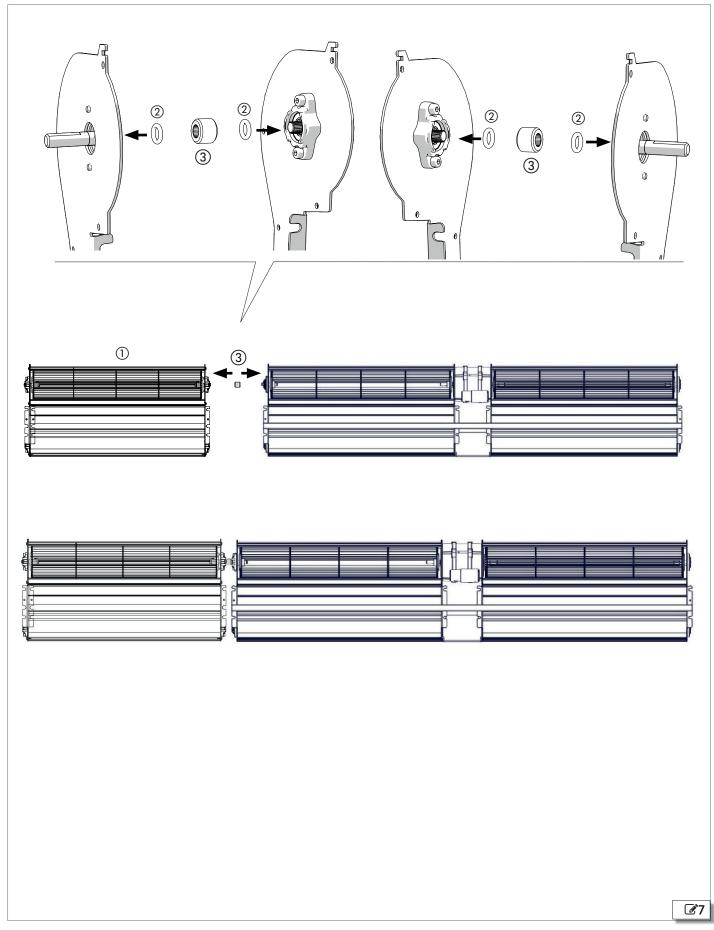
In the version with Slave electric fan unit alongside the main electric fan unit, connect the second motor with a joint to a cable that is to be connected to the E1AS board. Connect the 2 units to a ground cable **6**. Use the lower fastening screws for the main electric fan unit and a screw from the Slave electric fan unit to fasten the plug **6**-2. Insert the protective cable sheath at the sides of the modules **6**-1





## Assembly of the additional module

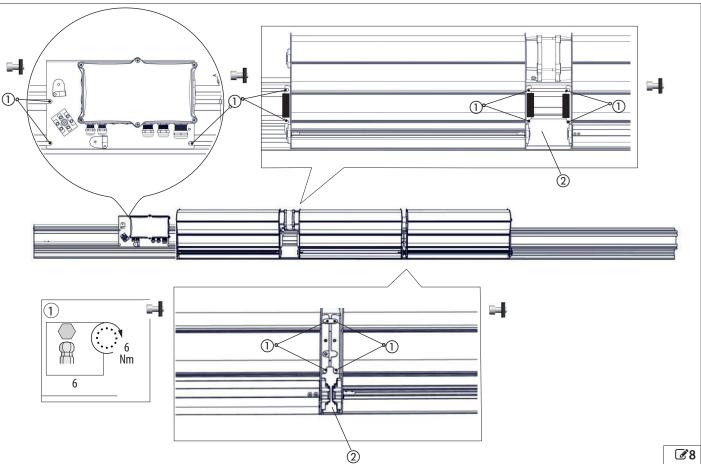
After having positioned the additional module **7-1**. Place an O-ring on each flange **7-2**. Join and lock the two pins together using the bush **7-3**.



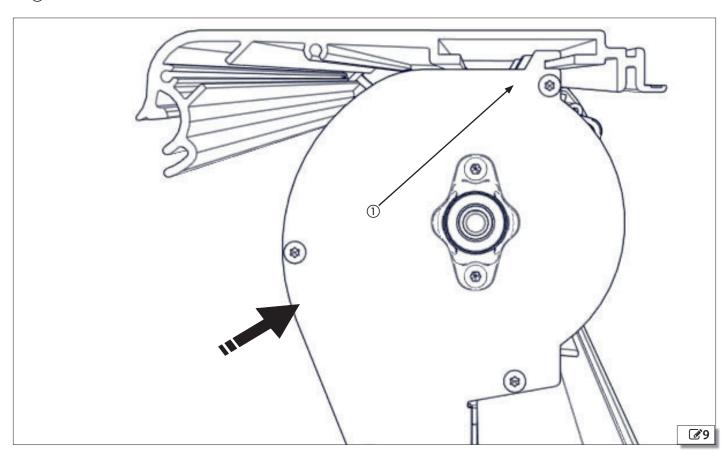


Fasten the electronic module plate using three fastener plates and M6 hex socket screws, and fasten each fan module using two fastener plates with M6 hex socket screws per side **8**-1.

Use the plugs provided to close the spaces between the fans **3-2** 



Insert the electric fan unit in the upper cover profile as shown in **29**-1.





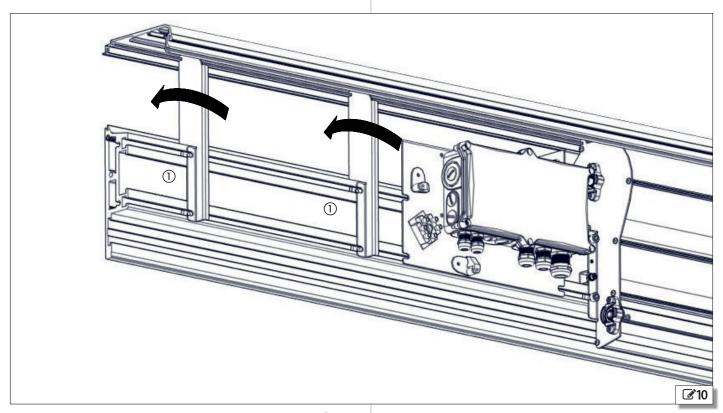
Use four brackets to fix the upper cover; there should be distributed 2 at each end of the AIRSLIDE head section.

Rotate the brackets to insert them in the upper cover.

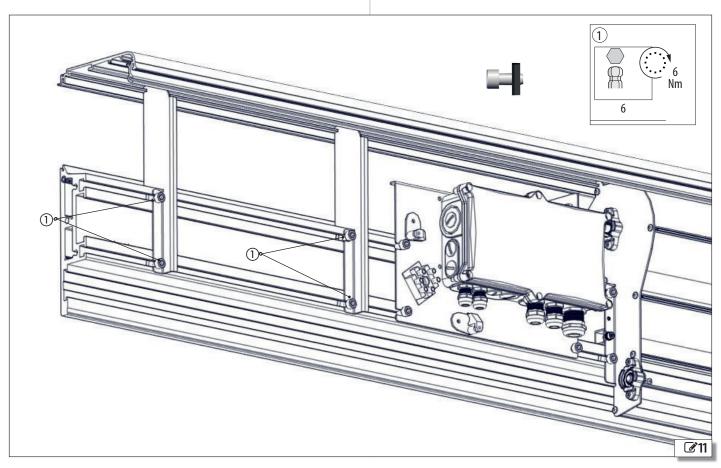


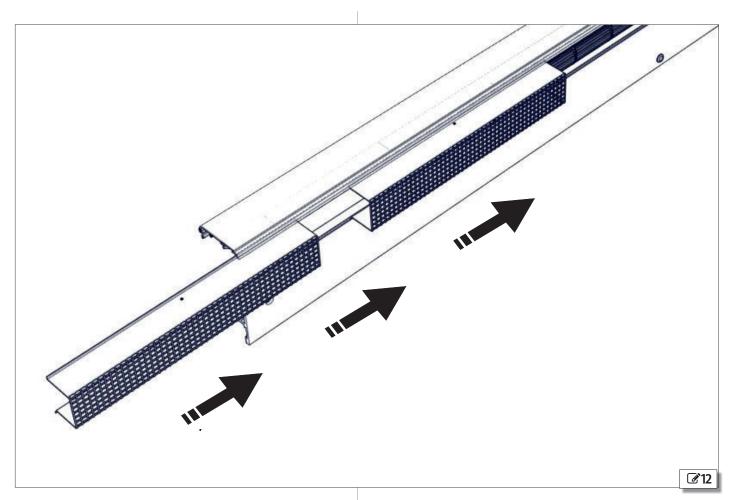
Check that the brackets are vertical with respect to the profile.

Fasten the brackets to the profile using the plates with M6 hex socket screws provided 310-1.

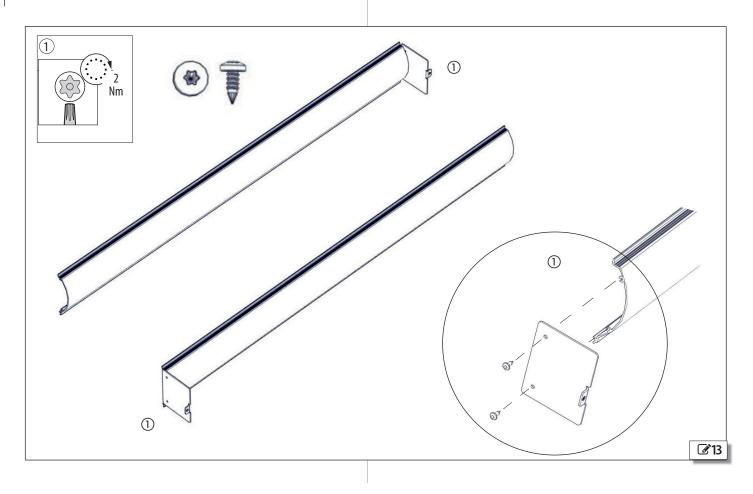


Tighten the hex head screws to the torques specified in **11**-1.

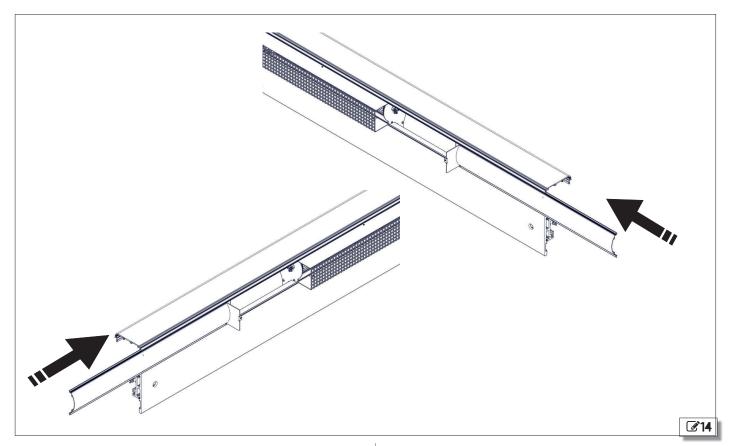




Assemble the side covers with the panels using the screws supplied  $\textcircled{\textbf{2}}$ 13-①.

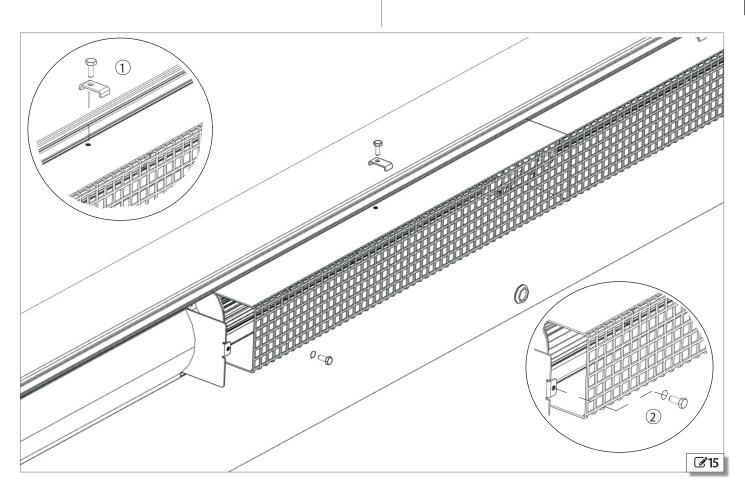






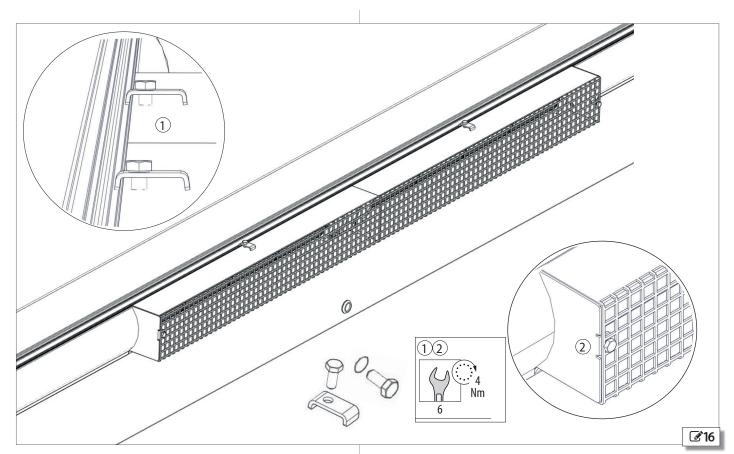
Fasten the grilles to the top profile with the screws and clips supplied. Use a clip for the grille.  $\red 15$ -(1)

Fasten the side cover panels to the grille using the screws and washers supplied 315-2.



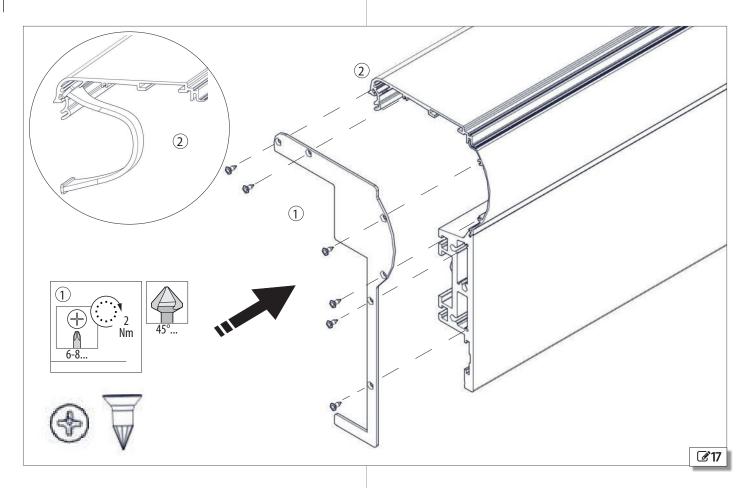


Tighten the screws to the torques specified in 36-0 2.



Insert the parachute cables 317-2.

Countersink the holes. A 90 degree countersink must be used for the left and right panels. Insert the side panels and fasten them with the screws provided using the fastening torques indicated in **17**-1.





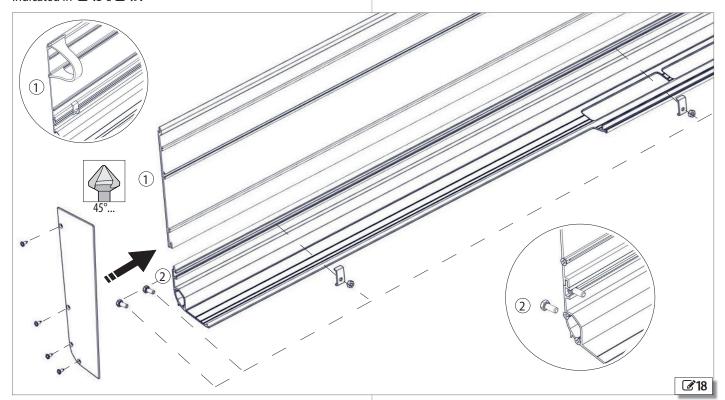
#### AIRSLIDE casing assembly.

Assemble the casing and fasten it with brackets and screws.

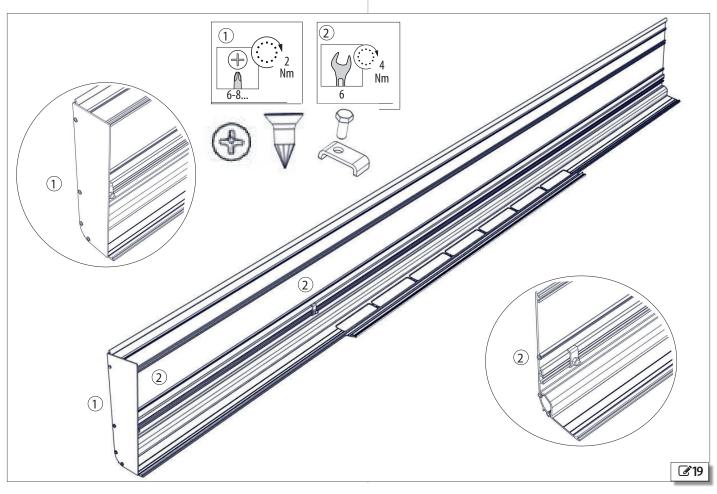
Insert the parachute cables **218**-1.

Countersink the holes. A 90 degree countersink must be used for the left and right panels. Insert the side panels.

Fasten them with the screws provided using the fastening torques indicated in 218 e 19.



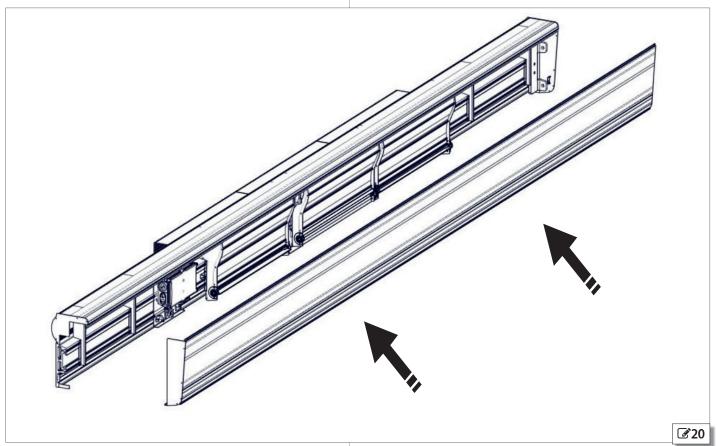
Tighten the screws to the fastening torques specified in 2 19-1 2.



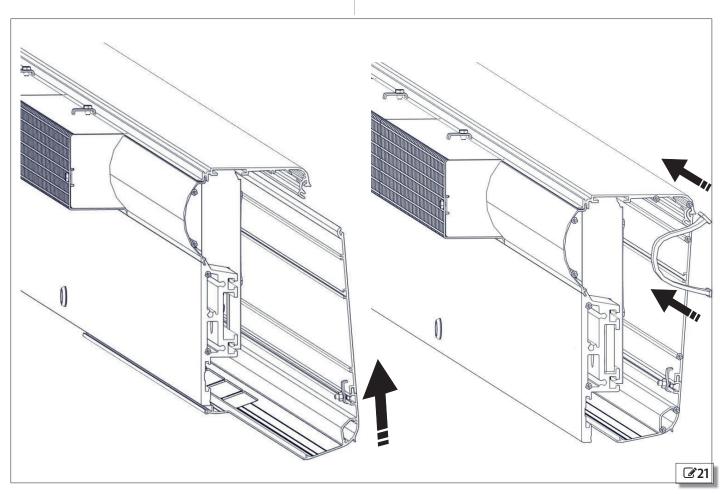


#### ■ AIRSLIDE casing installation.

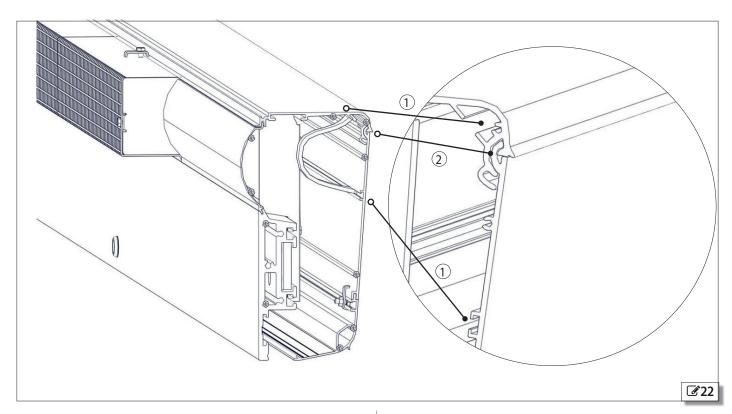
Once the casing has been assembled, insert it into the main profile, tilt it and insert it into the upper profile. **20 21.** 



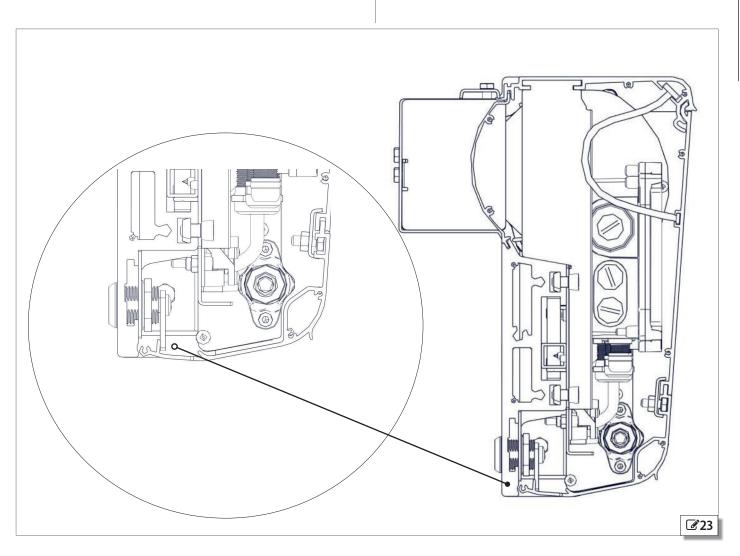
Then insert the parachute cables between the casing and upper profile in the grooves of the profiles  $\red{21}\red{22}$  ① ②





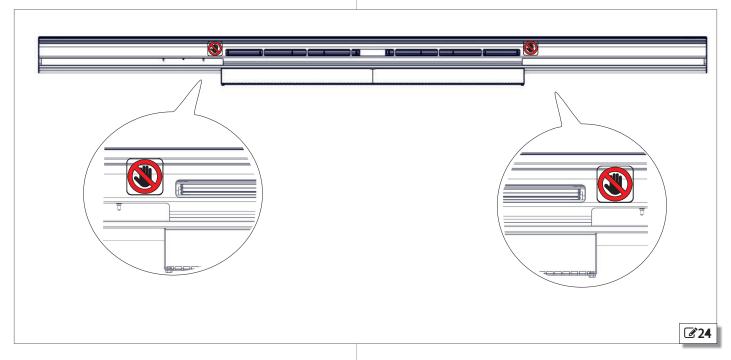


Fasten the closing casing using the lock fitted on the main profile.  $\ensuremath{\ensuremath{\cancel{2}}}$  23





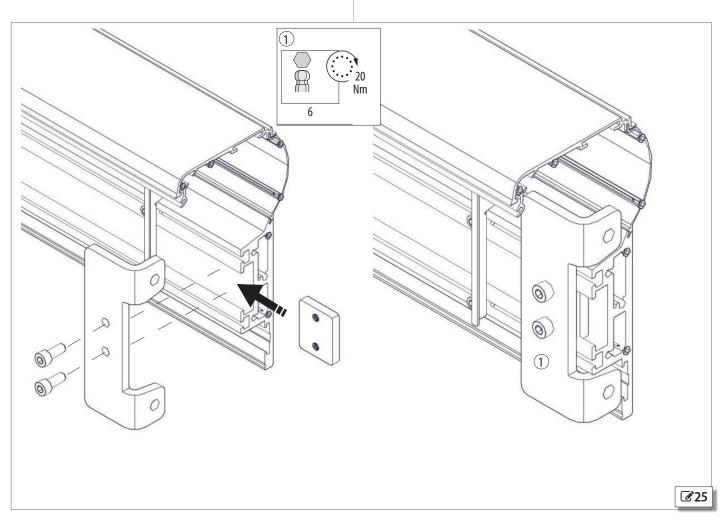
Apply the two warning stickers (hazard to hands and fingers), supplied with the electric fan component, to the sides of the intake slots **24** 



## ■ Fastening the side bracket (Optional accessory not supplied with the AIRSLIDE)

For side fastening of AIRSLIDE, use the side bracket to fasten to the main profile. Insert the plate in the AIRSLIDE profile and fasten it to the wall bracket using the screws provided.

Use the fastening torques given in **25.** 



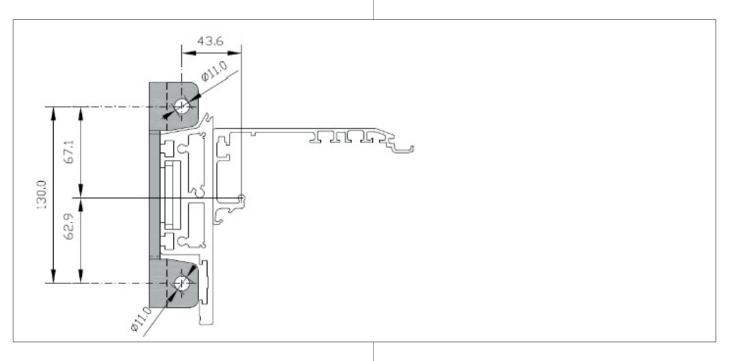


#### **6.2 PERMISSIBLE SUBSTRATES FOR AIRSLIDE**

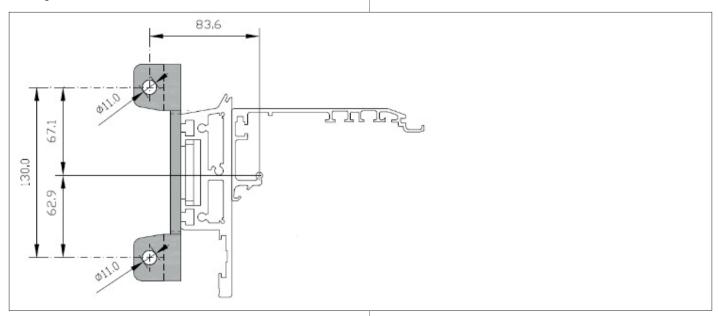
The following masonry substrates are permissible for fastening the upright to:

- CONCRETE
- SOLID BRICK (VOIDS < 15%)
- HOLLOW BRICK (15% < VOIDS < 45%)</li>

#### **■** Configuration 1



#### ■ Configuration 2



For other existing substrate types (natural stone, hollow brick with a greater proportion of voids, gypsum board etc.), it will be necessary to prepare a counterframe made from::

- STEEL FRAMEWORK
- ALUMINIUM FRAMEWORK
- WOODEN FRAMEWORK



#### **6.3 SUBSTRATE CONDITION**

Before installation, you must carefully check the condition of the existing substrate which the beam is to be attached to; this substrate must be in good condition without any evident cracking or patching up; more specifically, by substrate type, the following requirements apply:

#### CONCRETE

The attachment surface must be homogeneous and compact, without voids or flaking due to corrosion caused by carbonation.

#### SOLID BRICK (VOIDS < 15%)

The attachment surface must be homogeneous, without any cracking brickwork or evidence of cementitious or gypsum-based plaster or rendering having been applied; the mortar joints must not come away simply by running a hand tool over them, and the wall must have been faced to a good standard.

#### **HOLLOW CONCRETE BLOCKS**

No cracking or other damage should be evident, and they should not have been subject to previous installations; the blocks must have been laid to a good standard using thin-joint techniques or standard mortar joints, following the manufacturer's specifications.

#### STEEL FRAMEWORK

Steel counterframes must show no signs of corrosion and must be treated with red oxide primer.

Such counterframes must be specified by the installer in accordance with the loads given, and must in turn be anchored using appropriate hardware to a supporting structure which is able to keep them stable. A minimum thickness of 6mm is recommended for such structures.

#### ALUMINIUM FRAMEWORK

The rods of the counterframe must show no sign of deformation, and they must not have been subject to cold bending which could cause micro-cracking or localised weaknesses.

Such counterframes must be specified by the installer in accordance with the loads given, and must in turn be anchored using appropriate hardware to a supporting structure which is able to keep them stable. A minimum thickness of 6mm is recommended for such structures.

When using aluminium counterframes, a layer of teflon must be placed between the framework and the metal beam to prevent galvanic corrosion.

#### WOODEN FRAMEWORK

The lumber used must show no sign of rot or damp, and must not have been previously used, cut or damaged.

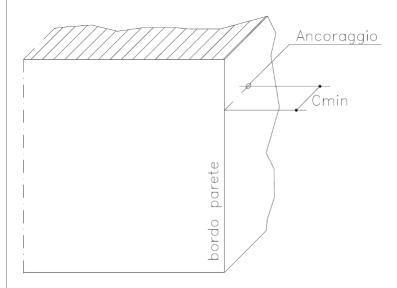
Such counterframes must be specified by the installer in accordance with the loads given, and must in turn be anchored using appropriate hardware to a supporting structure which is able to keep them stable. A minimum thickness of 50mm is recommended for such structures.

It is always preferable to have the counterframes specifically made to measure, providing for through fasteners (bolts for metal frames, self-tapping screws or similar or else bolts for timber frames).

#### 6.4 MINIMUMANCHORDISTANCESFROMEDGES

The following minimum distances from both side edges have been determined after examining the instructions/specifications for some of the most popular dowels on the market:

SUBSTRATE	Cmin (mm)
CONCRETE	40/50
SOLID BRICK (VOIDS < 15%)	100
HOLLOW BRICK (15% < VOIDS < 45%)	100
STEEL	30
W00D (1)	5d (2)



In the event that it is not possible to comply with the minimum distances specified, a counterframe suitably fastened to the wall must be provided for.

- (1) For solid wood with a C14 strength class and a density of ρ=350kg/m3 as per EN338 – a pilot hole should be drilled in anchoring wood thicknesses of less than 60mm.
- (2) Where "d" is the diameter of the screw (for 8 mm screws Cmin = 40mm; for 10mm screws Cmin = 50mm) - data taken from technical instructions CNR-DT-206/2007



## 6.5 INFORMATION ABOUT THE TYPES OF ANCHORS

Many types of anchors can be used. The type chosen mainly depends on the following factors:

- type of substrate;
- maximum load to be supported;
- distance of the anchors from the edges;

For the permissible substrates indicated above, we suggest several types of fastenings made by well-known manufacturers (FISCHER and HILTI). This does not mean that you cannot select other products; however, you should check their maximum load carrying capacity in the technical data sheets.

Mechanical expansion anchors should be used, made of steel for structural concrete and polyamide for bricks; the recommended diameter of the screw is M8 and M10.

The following table summarises the main characteristics and types of anchor and their relative load carrying capacity according to the substrate (information taken from the fastener manuals of the relative manufacturers):

TYPE OF SUBSTRATE	MANUFACTURER	MODEL	DIAMETER	LOAD CARRYING CAPACITY	Cmin (mm)
	FISCHER	FAZ II	M8	2.4	40
CONCRETE (2)		FH II	M10	2.1	50
CONCRETE (3)	HILTI	HST	M8	1.5 (4)	40
	ПІСІІ	HSA	M8	2.4	45
COLID DDICK (E)	FISCHER	SXR 10/SXRL 10	10	0.57	100
SOLID BRICK (5)	HILTI	HDU- 8X40	8	0.62	100
HOLLOW BRICK (6)	FISCHER	SXR 10/SXRL 10	10	0.43	100
HOLLOW CONCRETE BLOCKS (7)	FISCHER	SXR 10/SXRL 10	10	0.43	100
STEEL	Würth	Self-tapping for steel	4.2 – 6.3	> 2.00	30
W00D (8)	ROTHOBLASS	HBS	6 x 50	2.05	5d

For carrying capacities of less than 1.28 kN (masonry walls), if you do not wish to use a counterframe you should "limit the total weight of the automation".

- (3) For structural concrete having a minimum strength of C20/25
- (4) Configuration 1 has to be used in order not to exceed the maximum stress (see section 6.2), or the weight of the entire system has to be limited (see the following table).
- (5) For solid bricks having a minimum density of 18 kN/m3, a minimum compressive strength of 10 N/mm2 and a max. long and short-term temperature range of 50°/80°.
- (6) For semi-solid bricks having a minimum density of 14 kN/m3, a minimum compressive strength of 10 N/mm2 and a max. long and short-term temperature range of 50°/80°.
- (7) For semi-solid bricks having a minimum density of 12 kN/m3, a minimum compressive strength of 6 N/mm2 and a max. long and short-term temperature range of 50°/80°.
- (8) A pilot hole should drilled in anchoring wood thicknesses of less than 60mm.



The table below indicates the maximum weight of the automation (total weight consisting of leaves, beam and automation) for both anchoring configurations shown in section 6.2. This table refers to the types of fastener that were mentioned above:

TYPE OF SUBSTRATE	MANUFACTURER	MODEL	DIAMETER		CONFIG. 2
	FISCHER	FAZ II	M8	326	326
CONCRETE)		FHII	M10	326	326
CONCRETE)	HILTI	HST	M8	326	242
	ПІСІІ	HSA	M8	326	326
SOLID BRICK	FISCHER	SXR 10/SXRL 10	10	146	108
SOLID DRICK	HILTI	HDU- 8X40	8	158	118
HOLLOW BRICK	FISCHER	SXR 10/SXRL 10	10	110	82
HOLLOW CONCRETE BLOCKS	FISCHER	SXR 10/SXRL 10	10	110	82
STEEL	Würth	Self-tapping for steel	4.2 - 6.3	326	326
WOOD	ROTHOBLASS	HBS	6 x 50	326	326

A framework, suitably anchored to the walls, should be used for all installations that do not fall within the minimum requisites indicated above.

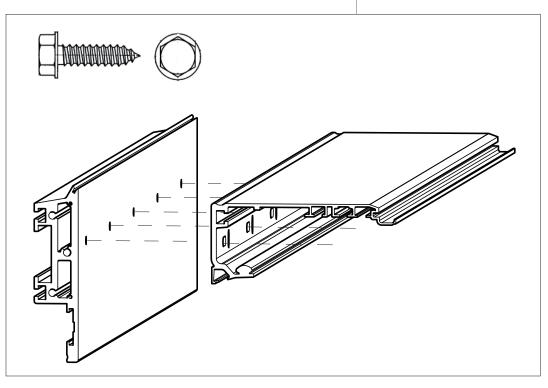
For anchors other than those indicated above, always refer to the technical data sheet for the anchor taking into account the following parameters:

- Type of substrate
- Total weight of the automation and the stresses on the anchors
- Minimum distances from the edges and choice of mounting configuration (cap.6.2)

## 6.6 AUTOMATIC DOOR HEAD SECTION - FRONT MOUNTING

To fasten the profile AIRSLIDE to the head section of the automatic door use type 25 mm long UNI6950 hex flange head self-tapping screws.

The distance between the screws must correspond to the slots in the head section of the door.





# 6.7 PERMISSIBLE SUBSTRATES FOR AIRSLIDE WITH APN (ANTI-PANIC BREAKOUT SYSTEM)

The following masonry substrates are permissible for fastening the upright to:

- CONCRETE
- SOLID BRICK (VOIDS < 15%)</li>
- HOLLOW BRICK (15% < VOIDS < 45%)</li>

For other existing substrate types (natural stone, hollow brick with a greater proportion of voids, gypsum board etc.), it will be necessary to prepare a counterframe made from::

- STEEL FRAMEWORK
- ALUMINIUM FRAMEWORK
- WOODEN FRAMEWORK

#### **6.8 SUBSTRATE CONDITION**

Before installation, you should carefully check the condition of the existing substrate that the system will be anchored to; this substrate must be in good condition without any evident cracking or patching up; more specifically, by substrate type, the following requirements apply:

#### CONCRETE

The attachment surface must be homogeneous and compact, without voids or flaking due to corrosion caused by carbonation.

#### SOLID BRICK (VOIDS < 15%)

The attachment surface must be homogeneous, without any cracked brickwork. In the case of previous installations, the position of the new holes must not coincide existing holes and you must keep to the minimum distance from the edges. The mortar joints must not come away simply by running a hand tool over them and the wall must have been faced to a good standard.

#### **HOLLOW CONCRETE BLOCKS**

No cracking or other damage should be evident, and they should not have been subject to previous installations; the blocks must have been laid to a good standard using thin-joint techniques or standard mortar joints, following the manufacturer's specifications.

#### STEEL FRAMEWORK

Steel counterframes must show no signs of corrosion and must be treated with red oxide primer.

Such counterframes must be specified by the installer in accordance with the loads given, and must in turn be anchored using appropriate hardware to a supporting structure which is able to keep them stable. A minimum thickness of 6mm is recommended for such structures.

#### ALUMINIUM FRAMEWORK

The rods of the counterframe must show no sign of deformation, and they must not have been subject to cold bending which could cause micro-cracking or localised weaknesses.

Such counterframes must be specified by the installer in accordance with the loads given, and must in turn be anchored using appropriate hardware to a supporting structure which is able to keep them stable. A minimum thickness of 6 mm is recommended for such structures.



When using aluminium counterframes, a layer of Teflon must be placed between the framework and the steel parts in order to prevent galvanic corrosion.

#### WOODEN FRAMEWORK

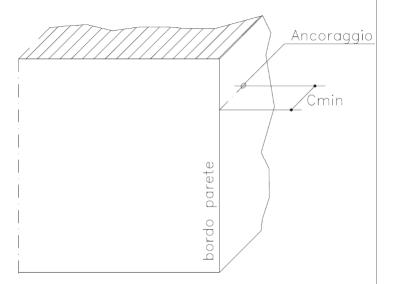
The lumber used must show no sign of rot or damp, and must not have been previously used, cut or damaged.

Such counterframes must be specified by the installer in accordance with the loads given, and must in turn be anchored using appropriate hardware to a supporting structure which is able to keep them stable. A minimum thickness of 50 mm is recommended for such structures. It is always preferable to have the counterframes specifically made to measure, providing for through fasteners (bolts for metal frames, self-tapping screws or similar or else bolts for timber frames).

## 6.9 MINIMUM ANCHOR DISTANCES FROM EDGES

The following minimum distances from both side edges have been determined after examining the instructions/specifications for some of the most popular dowels on the market:

SUBSTRATE	Cmin (mm)
CONCRETE	40/50
SOLID BRICK (VOIDS < 15%)	100
HOLLOW BRICK (15% < VOIDS < 45%)	100
STEEL	30
W00D (1)	5d (2)



In the event that it is not possible to comply with the minimum distances specified, a counterframe suitably fastened to the wall must be provided for.

- (1) For solid wood with a C14 strength class and a density of ρ=350kg/m3 as per EN338 – a pilot hole should be drilled in anchoring wood thicknesses of less than 60mm.
- (2) Where "d" is the diameter of the screw (for 8 mm screws Cmin = 40mm; for 10mm screws Cmin = 50mm) data taken from technical instructions CNR-DT-206/2007



# 6.10 INFORMATION ABOUT THE TYPES OF ANCHORS

Many types of anchors can be used. The type chosen mainly depends on the following factors:

- type of substrate;
- maximum load to be supported;
- distance of the anchors from the edges;

For the permissible substrates indicated above, we suggest several types of fastenings made by well-known manufacturers (FISCHER and HILTI). This does not mean that you cannot select other products; however, you should check their maximum load carrying capacity in the technical data sheets.

Mechanical expansion anchors should be used, made of steel for structural concrete and polyamide for bricks; the recommended diameter of the screw is M8 and M10.

The following table summarises the main characteristics and types of anchor and their relative load carrying capacity according to the substrate (information taken from the fastener manuals of the relative manufacturers):

TYPE OF SUBSTRATE	MANUFACTURER	MODEL	DIAMETER	LOAD CARRYING CAPACITY	Cmin (mm)
	FISCHER	FAZ II	M8	2.4	40
CONCRETE (3)	LIDCHEN	FH II	M10	2.1	50
CONCRETE (3)	шт	HST	M8	2.8	40
	HILTI	HSA	M8	2.7	35
SOLID BRICK (4)	FISCHER	SXR 10/SXRL 10	10	0.57	100
	HILTI	HDU- 8X40	8	0.62	100
HOLLOW BRICK (5)	FISCHER	SXR 10/SXRL 10	10	0.43	100
HOLLOW CONCRETE BLOCKS (6)	FISCHER	SXR 10/SXRL 10	10	0.43	100
STEEL	Würth	Self-tapping for steel	4.2 – 6.3	> 2.00	30
W00D (7)	ROTHOBLASS	HBS	6 x 50	2.05	5d
11000 (1)		КОР	8 x50	2.64	5d

For semi-solid and hollow structural concrete bricks, since the horizontal component is greater than the maximum permissible limit, double dowels should be used as shown in the diagram below:

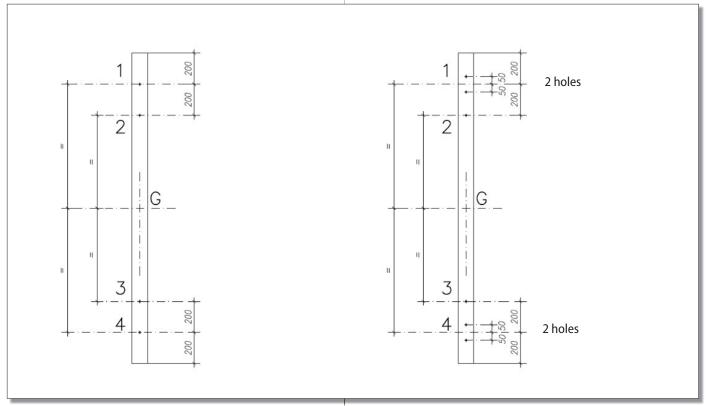
- (3) For structural concrete having a minimum strength of C20/25
- (4) For solid bricks having a minimum density of 18 kN/m3, a minimum compressive strength of 10 N/mm2 and a max. long and short-term temperature range of 50°/80°.
- (5) For semi-solid bricks having a minimum density of 14 kN/m3, a minimum compressive strength of 10 N/mm2 and a max. long and short-term temperature range of 50°/80°.
- (6) For semi-solid bricks having a minimum density of 12 kN/m3, a minimum compressive strength of 6 N/mm2 and a max. long and short-term temperature range of 50°/80°.
- (7) A pilot hole should drilled in anchoring wood thicknesses of less than 60mm.



#### **■ CONCRETE AND SOLID BRICKS**

#### **UPRIGHT HOLES**

#### SEMI-SOLID AND HOLLOW STRUCTURAL CONCRETE BRICKS UPRIGHT HOLES



A framework, suitably anchored to the walls, should be used for all installations that do not fall within the minimum requisites indicated above.

For anchors other than those indicated above, always refer to the technical data sheet for the anchor taking into account the following parameters:

- Type of substrate
- Total weight of the automation and the stresses on the anchors
- Minimum distances from the edges.

### FAAC

#### 7. ELECTRONIC INSTALLATION

#### RISKS



#### PERSONAL PROTECTIVE EQUIPMENT



#### **REQUIRED TOOLS**



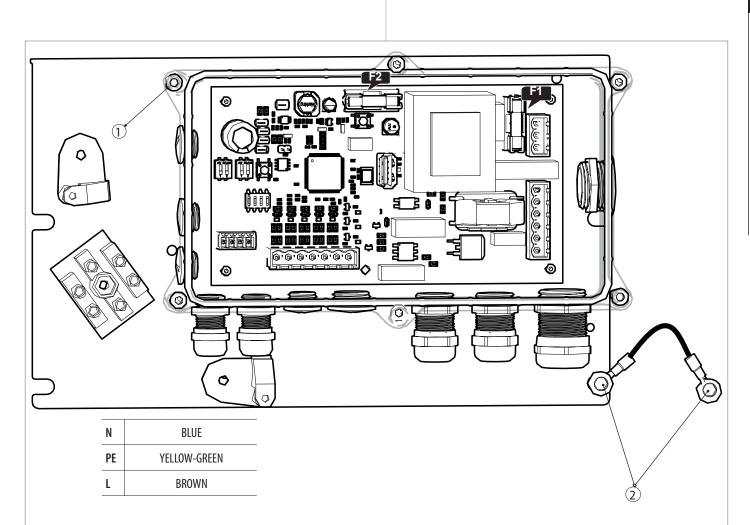


#### 7.1 PLATE AND E1AS BOARD

Connect the 230 VAC mains power supply to the terminal on the board plate.



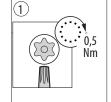
ALWAYS DISCONNECT THE POWER SUPPLY before working on the board. Turn power on only after having made all the electrical connections and carried out the preliminary start-up checks.

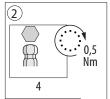


#### Fuses

Г1	230Vac power supply fuse	3.15 A
FI	23UVac DOWER SIIDDIV IIISE	3 I 2 A

F2 Secondary power supply fuse 250 mA



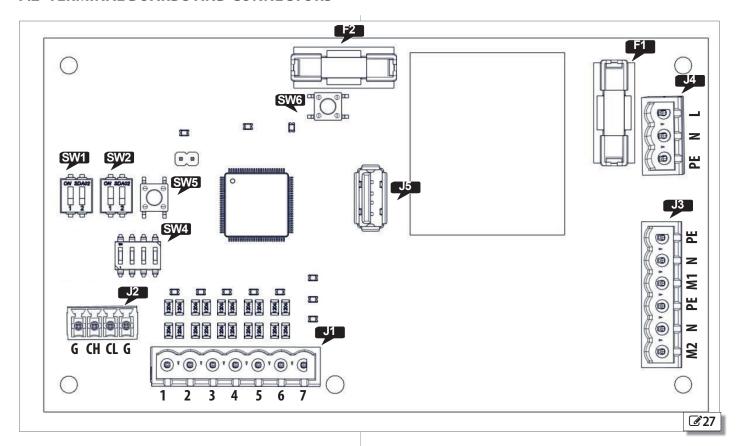




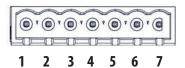
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## FAAC

#### 7.2 TERMINAL BOARDS AND CONNECTORS



#### ■ J1 - INPUTS



1	Emergency
2	Speed command V1
3	Speed command V2
4	Input1
5	Input2
6	GND
7	GND

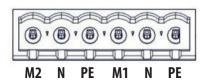
#### ■ J2 - INTERCOM



#### G CH CL G

G	GND Accessories power supply negative and Common contacts
СН	CH High INTERCOM Channel
CL	CL Low INTERCOM Channel
G	GND Accessories power supply negative and Common contacts

#### ■ J3 - motor INPUTS



M2	BROWN Motor 2
N	BLUE Motor 2
PE	YELLOW-GREEN
M1	BROWN Motor 1
N	BLUE Motor 1
PE	YELLOW-GREEN

#### ■ J4 - 230VAC power supply

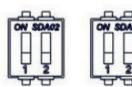


PE	YELLOW-GREEN
N	BLUE
L	BROWN

## F44C

#### **DIP SWITCHES SW1 - SW2**

■ Motor 1 \_ Motor 2 speed adjustment



#### **DIP SWITCH SW4**

■ INTERCOM



#### J5 - USB PORT

■ E1AS board update



#### **BUTTON SW5**

■ Motor test



#### **BUTTON SW6**

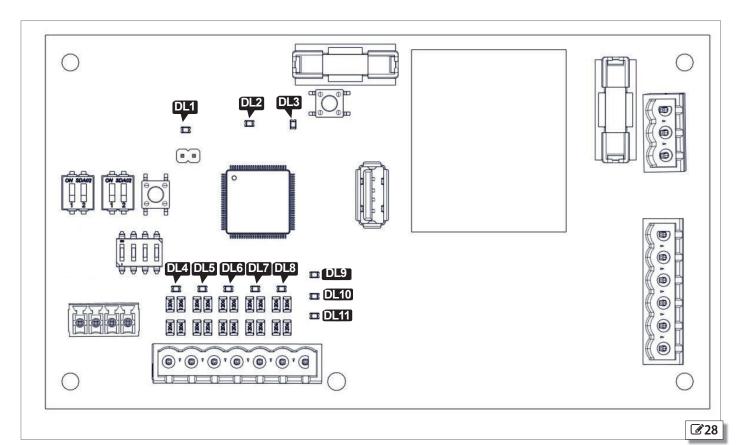
■ Board Reset



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#### 7.3 ELECTRONIC BOARD LEDS E1AS



#### **8** LEDs on the board

Name	Description	States	input active	input not active
DL1 (BLUE)	+24Vdc		•	0
DL2 (BLUE)	+5Vdc		•	0
DL3 (BLUE)	+3.3Vdc		•	0
DL4 (RED)	Emergency Pin1 (J1)		•	0
DL5 (RED)	Speed1 Pin2 (J1)		•	0
DL6 (RED)	Speed2 Pin3 (J1)		•	0
DL7 (RED)	I1 Pin4 (J1)		•	0
DL8 (RED)	I2 Pin5 (J1)		•	0
DL9 (GREEN)	OK board status		*	0
DL10 (RED)	Error		•	0
DL11 (RED)	USB		•	0

#### LED statuses:

EED Statuses.			
• on	O off	* flashing	in sleep mode: off with flashing every 5 s
Indicated in grey = condition of the LEDs with the board in standby			y

#### **7.4 J1-INPUTS**

Manual and automatic controls can be connected to input J1 to manage the 2 AIRSLIDE speeds.

A three-position switch connected between pin2 (V1) and pin3 (V2) and pin6 (GND) allows speeds V1 (low) and speed V2 (high) to be managed.

Using pin 4 (I1) and pin5 (I2), it is possible to manage speeds V1 and V2 automatically.

#### 7.5 J2 AIRSLIDE IN INTERCOM

(via SDK EVO - with E1SL firmware version 3.2 or later)

#### ■ Description

An AIRSLIDE, can be installed that is controlled by the automation via the INTERCOM network. AIRSLIDE is activated when the door is opening or closing, or open (status other than "closed") and is deactivated when the door is closed. The fan speed can be automatically decreased when people are detected (via safety detectors) in the access.

#### Addressing

On the E1AS board:

1. assign the ID using DIP switch SW4 (see section § DIP switch SW4)

- 1. With the mains power supply switched off and the emergency battery disconnected, make the INTERCOM network connection between the boards:
  - 3 cascade connected wires between connectors J18 of boards E1SL/E1RD and J2 of boards E1AS (the sequence in which the units are wired is unimportant, but it is essential that a CASCADE connection is used).
- 2. Bridge inputs 1 and 3 with the negative (6) on terminal board J1.

#### ■ Registration

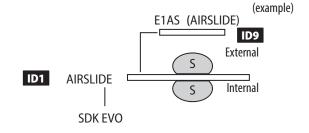
Only on the master E1SL/E1RD with ID=1.

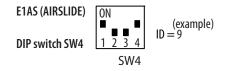
- 1. Turn power on to the boards.
- 2. With SDK EVO connected to the E1RD/(E1SL), assign ID 1 to E1RD/ (E1SL), then enable the AIRSLIDE:
- PROGRAMMING/INTERCOM/ID:
- ... INTERCOM ID ID = 1
- ... AIRSLIDE ENABLED (ID = 9) (example)
- 3. Register the boards on the network (each board is called a NODE).
- ... NODE REGISTRATION
- ... ARE YOU SURE? OK ... WAIT ... NODE LIST
- 4. Enable the function and program the fan speeds:
- ... NODE LIST select the AIRSLIDEID and OK
- ... FUNCTION select ENABLED and OK
- ... SPEED1 1...4 adjusts the normal speed (e.g. = 3) and OK
- ... SPEED2 1...4 adjusts the reduced speed (e.g. =1) and OK

If you do not require a variable speed, assign the same value to both.

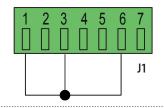
5. Lastly, press ESC repeatedly until you reach the main SDK EVO menu.

#### Automation with AIRSLIDE INTERCOM

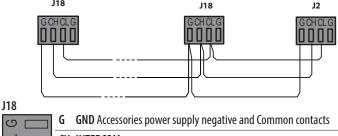


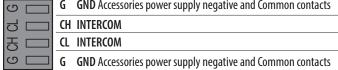


Terminal board J1: bridge inputs 1 and 3 with the negative.



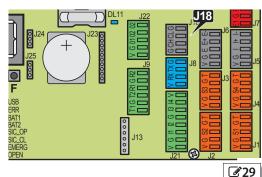
Network connection between boards E1RD/(E1SL) (J18) / E1AS (J2)





example E1RD

J18





#### 7.6 J7 - MOTOR INPUTS

It is possible to connect 2 motors, M1 and M2, to connector J7. The second motor M2 is connected for electric fan modules with more than 3 fans.

#### 7.7 J5 - MAINS POWER SUPPLY

The E1AS is powered on connector J5 with

230Vac 50/60Hz mains power. The board automatically recognises the mains voltage frequency.

When the board is switched on, LED DL 3 flashes to indicate that it is operating correctly.

During movement of motor 1 or motor 2, LED DL3 will remain steadily lit

When movement of motor 1 or motor 2 finishes, LED DL3 will begin to flash again.

#### 7.8 BUTTONS SW5 AND SW6

There are 2 buttons on board E1AS:

- 1. SW5 Motor test button Operates the motor at maximum speed when pressed. It has priority over all other inputs.
- 2. SW6 Board reset button Pressing this resets the board.

#### 7.9 DIP SWITCHES SW1 AND SW2

There are 2 DIP switches on board E1AS:

- 1. SW1 2-way DIP switch for adjustment of speed 1.
- DIP switch OFF OFF (High speed)
- DIP switch ON OFF (Medium-High speed)
- DIP switch OFF ON (Medium-Low speed)
- DIP switch ON ON (Low speed)
- 2. SW2 2-way DIP switch for adjustment of speed 2.
  - DIP switch OFF OFF (High speed)
  - DIP switch ON OFF (Medium-High speed)
  - DIP switch OFF ON (Medium-Low speed)
  - DIP switch ON ON (Low speed)

#### 7.10 DIP SWITCH SW4

DIP switch SW4 can be used to assign an ID address for INTERCOM communication on the E1AS board.

The possible addresses are:

E1AS	SW4	E1SL/E1RD
	1234	(SDK EVO)
9	1001	1
10	1010	2
11	1011	3
12	1100	4
13	1101	5
14	1110	6
15	1111	7
NO INTERCOM	0000	



Do not assign the same ID to more than one unit in the network.

If the INTERCOM is not used, the 4 DIP switches must be in the OFF position (0000).

The addresses from 0 to 8 on the E1AS are not active.

#### **7.11 J8 USB INPUT**

USB port for E1AS update.

Insert the USB device on J8.

Press button SW6 (Reset) for USB recognition.

LED DL10 will light up and DL3 will switch off.

Press and hold button SW5 (motor test) for 3 seconds and LED DL10 will flash during the update phase.

When the update is complete, LED DL10 will light up steadily and DL3 will turn on.

Remove the USB device

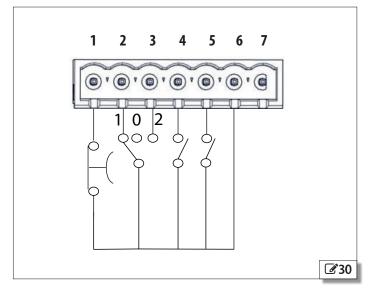
The name of the file to be loaded on the USB device is:

- E1AS.hex E1AS board firmware



The update files may be downloaded from the website: www.faacgroup.com
The USB device must be formatted with FAT or FAT 32 file system. The NTFS
format is not recognised by the control board.

The necessary files must be directly available on the USB storage medium with the precise names defined; they must not be zipped or inside folders. Use a USB with maximum 500mA absorption.





#### 7.12 E1AS BOARD OPERATION

Board E1AS manages the activation of the electric fan unit via commands received from other boards or from the operator.

The commands can be received via Inputs (J1) or via INTERCOM (J2). It is also possible to use a single system for the commands.

If both are used, the commands on J1 have priority.

The fan turns on in the conditions specified in table **31**. The fan will be switched off under all other conditions.

The following table indicates the various input configurations for buttons P1, P0, P2 and the inputs for the management of external commands I1, I2.

The commands from the INTERCOM are also taken into consideration. The speed column allows speed V1 or V2 to be determined.

The table with the various J1 configurations is given below: Input configuration table.

#### **■** Key

- 0 input not active
- 1 input active
- V1 low speed
- V2 high speed
- P1 Position 1 of selector connected to pin2 of the terminal board
- P2 Position 2 of selector connected to pin3 of the terminal board
- 11 Signal from board 11 connected to pin4 of the terminal board
- 12 Signal from board 12 connected to pin5 of the terminal board
- CanV1 Command from INTERCOM
- CanV2 Command from INTERCOM

P1	P2	l1	12	CanV1	CanV2	Velocità Ventola - Fan speed - Vitesse ventilateur - Gebläsegeschwindigke - Velocidad ventilador - snelheid van de ventilator
Pin2 (J1)	Pin3 (J1)	Pin4 (J1)	Pin5 (J1)			
0	1	1	0	0	0	V2
0	1	1	1	0	0	V1
0	1	1	0	0	1	V2
0	1	1	1	0	1	V1
0	1	1	0	1	0	V2
0	1	1	1	1	0	V1
0	1	1	0	1	1	V2
0	1	1	1	1	1	V1
1	0	1	0	0	0	V1
1	0	1	1	0	0	V1
1	0	1	0	0	1	V1
1	0	1	1	0	1	V1
1	0	1	0	1	0	V1
1	0	1	1	1	0	V1
1	0	1	0	1	1	V1
1	0	1	1	1	1	V1
0	1	0	0	1	0	V2
0	1	0	1	1	0	V2
0	1	1	0	1	0	V2
0	1	1	1	1	0	V2
0	1	0	0	1	1	V1
0	1	0	1	1	1	V1
0	1	1	0	1	1	V1
0	1	1	1	1	1	V1
1	0	0	0	1	0	V1
1	0	0	1	1	0	V1
1	0	1	0	1	0	V1
1	0	1	1	1	0	V1
1	0	0	0	1	1	V1
1	0	0	1	1	1	V1
1	0	1	0	1	1	V1
1	0	1	1	1	1	V1



#### 7.13 INPUT J1 WIRING CONFIGURATIONS

Pin 1 (Emergency) is connected to pin 6 (GND).

No other connection is present.

A three-position switch is supplied with the AIRSLIDE air barrier to control the fan connected to connector J1.

A three-position switch connected between pin 2 and pin 3 can be used to manage speeds V1 and V2 and to pin 6 GND.

Pin 2 corresponds to speed V1 selected via the DIP switch SW2. Pin 3 corresponds to speed V2 selected via the DIP switch SW1.

Speed V2 can also be managed automatically via pin4 and pin5. To use this in the event that the three-way selector is also used, it must be connected to pin3 (V2).

Connect pin4 to pin6 GND.

#### ■ Configuration 1

Wiring of the three-way switch, with indications of where it is possible to manage the two speeds V1 and V2 as programmed by the DIP switches SW1 and SW2 (232):

If the 3-way switch is not used but automatic speed management is used via inputs I1 and I2.

These inputs are NO (normally open) and manage speed V2.

When these inputs I1 and I2 close, the speed of the fan passes from speed V2 to speed V1.

In this configuration, connect pin3 to pin6 33).

Management of the inputs can be via the automatic door board using outputs O1 and O2.

Example of connection between board E1SL and board E1AS.

O1 must be programmed on the E1SL board with the parameter 11 = At least one safety in closing device active and O2 with the parameter 6=Door not closed.

When input O1 switches from NO (normally open) to NC (normally closed) the selected speed V1 will be activated.

When input O2 switches from NO (normally open) to NC (normally closed) the selected speed V2 will be activated.

Speed V1 will remain active as long as the safety device is engaged. When this condition is no longer present, the the fan will return to speed V2.

Connect pin3 to pin6 GND of J1.

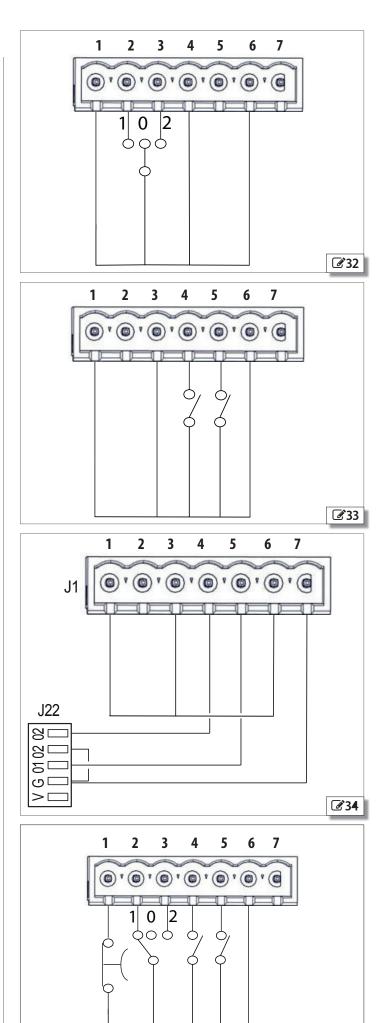
Connect G of J22 to pin7 GND of J1 (234).

#### ■ Configuration 3

This configuration provides for the three-way switch to be connected to pin 2 and pin 3.

An NC button on pin 1 is used to manage an emergency command to lock operation of the AIRSLIDE air barrier in NO (normally open) configuration.

Two NO contacts on pin 4 and pin 5 to manage the speed of the fan via external commands (**35**).



**35** 

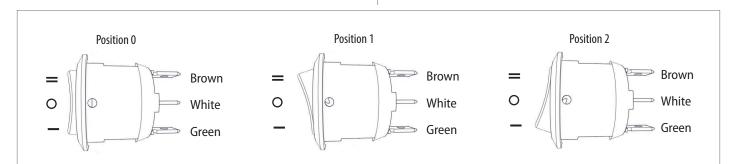


#### 7.14 3 POSITION SWITCH

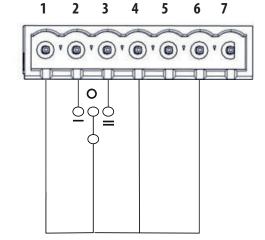
The 3 position switch is supplied with a 800 mm long 3-wire cable with faston connector and free wires at the other end.

- In position 0 there is no contact between white, brown and green.
- In position 1 there is a NC contact between white and brown.
- In position 2 there is a NC contact between white and green.

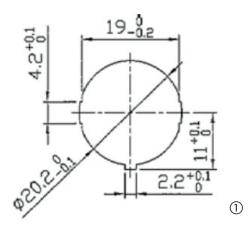
The switch will be connected to connector J1 as shown in **36** To install the switch, make a hole of the diameter indicated in **36**-(1).



J1	3-way SWITCH
pin2	Brown
pin3	Green
pin6	White



1	Emergency
2	Speed command V1
3	Speed command V2
4	Input1
5	Input2
6	GND
7	GND



**36** 



# **7.15 MAINTENANCE**ROUTINE MAINTENANCE

OPERATION			
Check automation fastening to the wall	check the screws securing the support profile to the main AIRSLIDE profile and the screws of side wall fixings		
Check the fastening of the electric fan unit	check the screws securing the electric fan unit to the main AIRSLIDE profile		
Check the flaps	make sure that the flaps open correctly during operation		
Cleaning	clean fans and grilles		
Functional system check	perform required checks and procedures to ensure integrity of the load bearing structure and leaf frames perform functional checks		

#### PERIODIC REPLACEMENTS

PART/COMPONENT	FREQUENCY		Replacements
	Operation cycles	Time (years)	Recommended / Mandatory
Motor	2 000 000		Recommended
Bearings	2 000 000	5	Recommended
Safety cables		5	Mandatory

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