

## Mechanical Ventilation with Heat Recovery

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## BEFORE STARTING

The following symbols in the manual serve for better guidance. The following table describes the symbols and their meaning.

Symbol	Meaning
	Warning or Caution
 <b>ATTENTION!</b>	
 <b>PLEASE NOTE!</b>	Important instructions
 <b>YOU WILL NEED</b>	Practical tips and information
 <b>TECHNICAL INFORMATION</b>	Detailed technical information
	Reference to a different part of the manual



Before installing the unit, **read carefully the section on the safe operation of the heat recovery unit.** You will find instructions on the safe and proper use of the product.

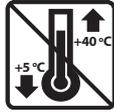
This manual provides instructions on how to properly install the unit. Before installing the unit, read carefully the entire manual. The manufacturer reserves the right to make changes, including in the technical documentation, without prior notice. Keep the manual in a safe place for future reference. The manual is an integral part of the product.

## 2. UNPACKING

### PLEASE CHECK THE DELIVERED PRODUCT

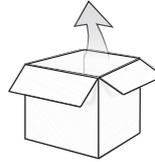
 **PLEASE NOTE!**

- Unpack the product upon delivery and control for damages. In case of damage, inform and file a report with the carrier.
- Any claims that have not been filed in due time, will be disregarded later.
- Check that you have received the model ordered. Should the delivered model differ from the one ordered, do not unpack the unit and notify the supplier immediately.
- After unpacking, check that the unit and the accessories are in good order. Contact the supplier in case of any doubt.
- Do not attempt to commission a damaged ventilation unit.
- If the unit is not unpacked upon delivery, it must be stored in a dry room with a temperature range of **+5 °C to +40 °C**.
- This product must not be used by persons (incl. minors) with mental or physical disabilities, or insufficient experience or knowledge in the safe use thereof, unless they are supervised or instructed on how to use the product by a person responsible for their safety.
- Do not let children play with the unit.



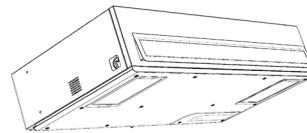
	<p>All the packing material is environmentally friendly and can be reused or recycled. Please, contribute actively to the protection of the environment and procure the regular disposal or recycling of packing materials.</p>	
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### UNPACKING THE UNIT

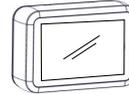


Susurro

1x



1x



1x

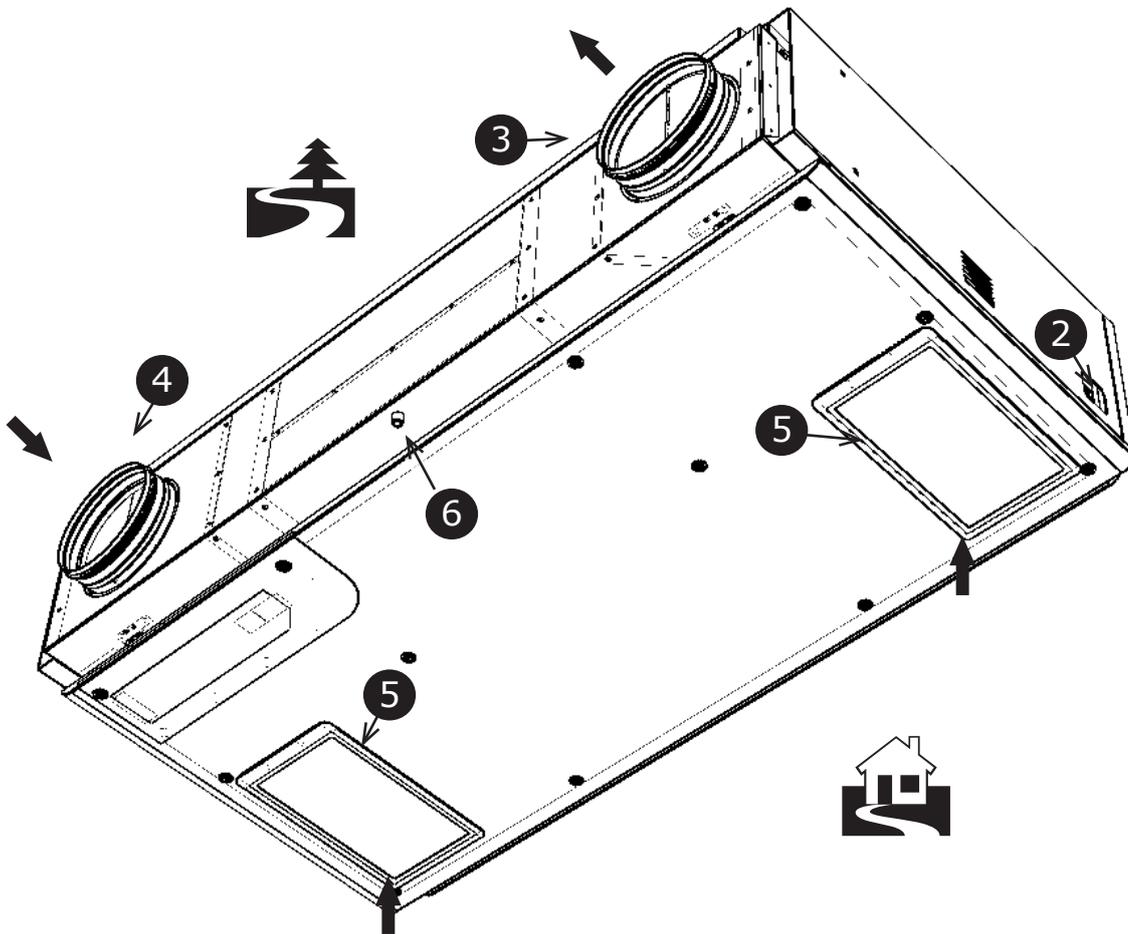
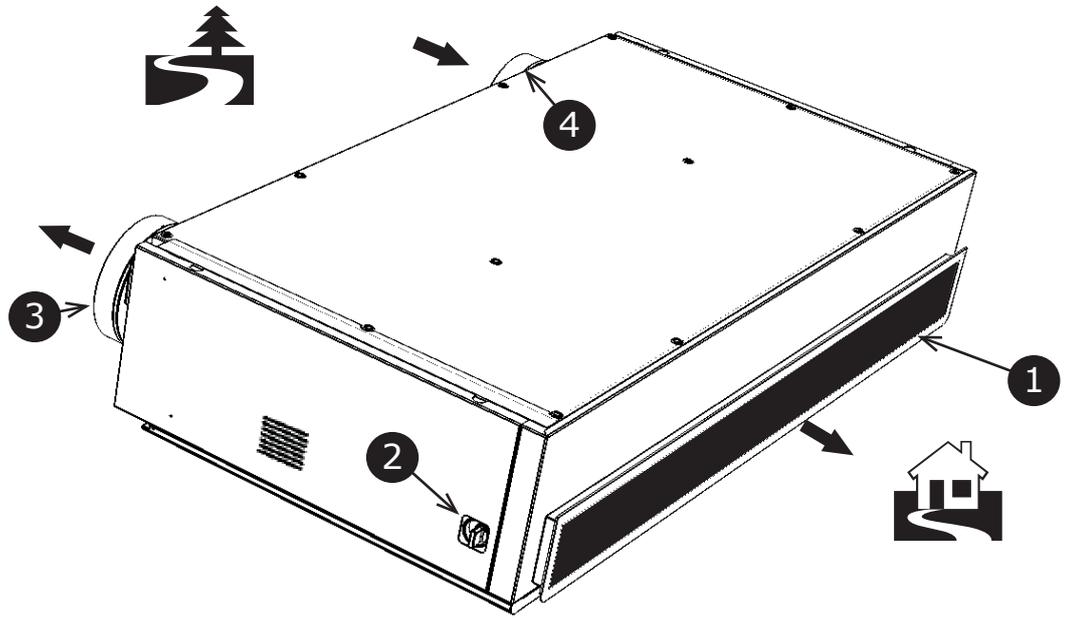


**PLEASE NOTE!**

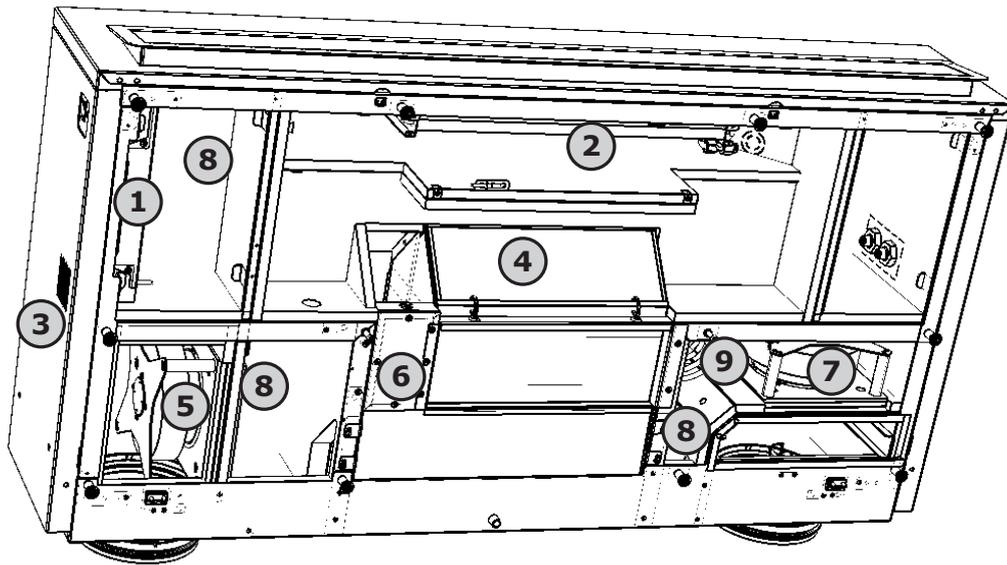
- If the unit was shipped at below 0°C temperatures, let it rest for at least 2 hours, without turning it on, so that its inner temperature can match the surroundings.

## 3. MAIN PART

1	Outlet grill with Straw system
2	Main power switch
3	Outside fresh air duct with spring loaded damper
4	Outside exhaust air duct with spring loaded damper
5	Inlet grill with Straw system
6	Condensate drain



## 4. SPARE PARTS



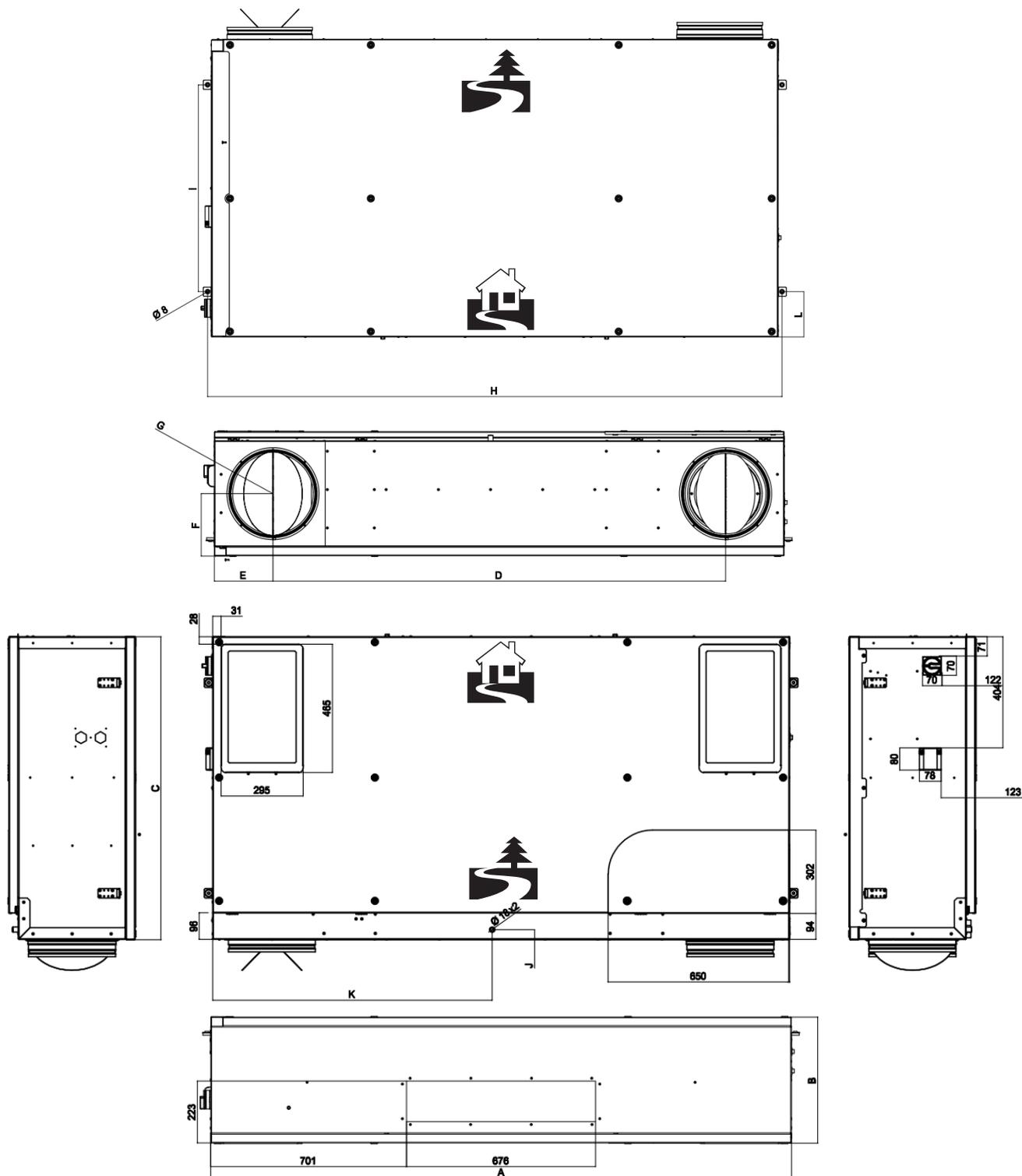
Number	Description	Susurro 400		Susurro 700		Susurro 1000	
		Part number/pc.	Pcs. in unit	Part number/pc.	Pcs. in unit	Part number/pc.	Pcs. in unit
①	Main PCB	60000397	1	60000397	1	60000397	1
	PCB module for water coil	60000398	1	60000398	1	60000398	1
②	Water heater	60000399	1	60000399	1	60000400	1
	Electric post-heater	60000401	1	60000402	1	60000403	1
③	CO <sub>2</sub> sensor	60000404	1	60000404	1	60000404	1
④	HR cell	60000405	1	60000406	1	60000407	1
⑤	Motor (exhaust air)	60000408	1	60000408	1	60000409	1
⑥	Bypass actuator	60000410	1	60000410	1	60000410	1
⑦	Motor (outdoor air)	60000408	1	60000408	1	60000409	1
⑧	Pressure sensor	60000411	3	60000411	3	60000411	3
⑨	Pre-heater	60000412	1	60000413	1	60000414	1



The codes of the spare filters and these filters can be found in "Maintenance", **replacing filters**

## 4. DIMENSIONS

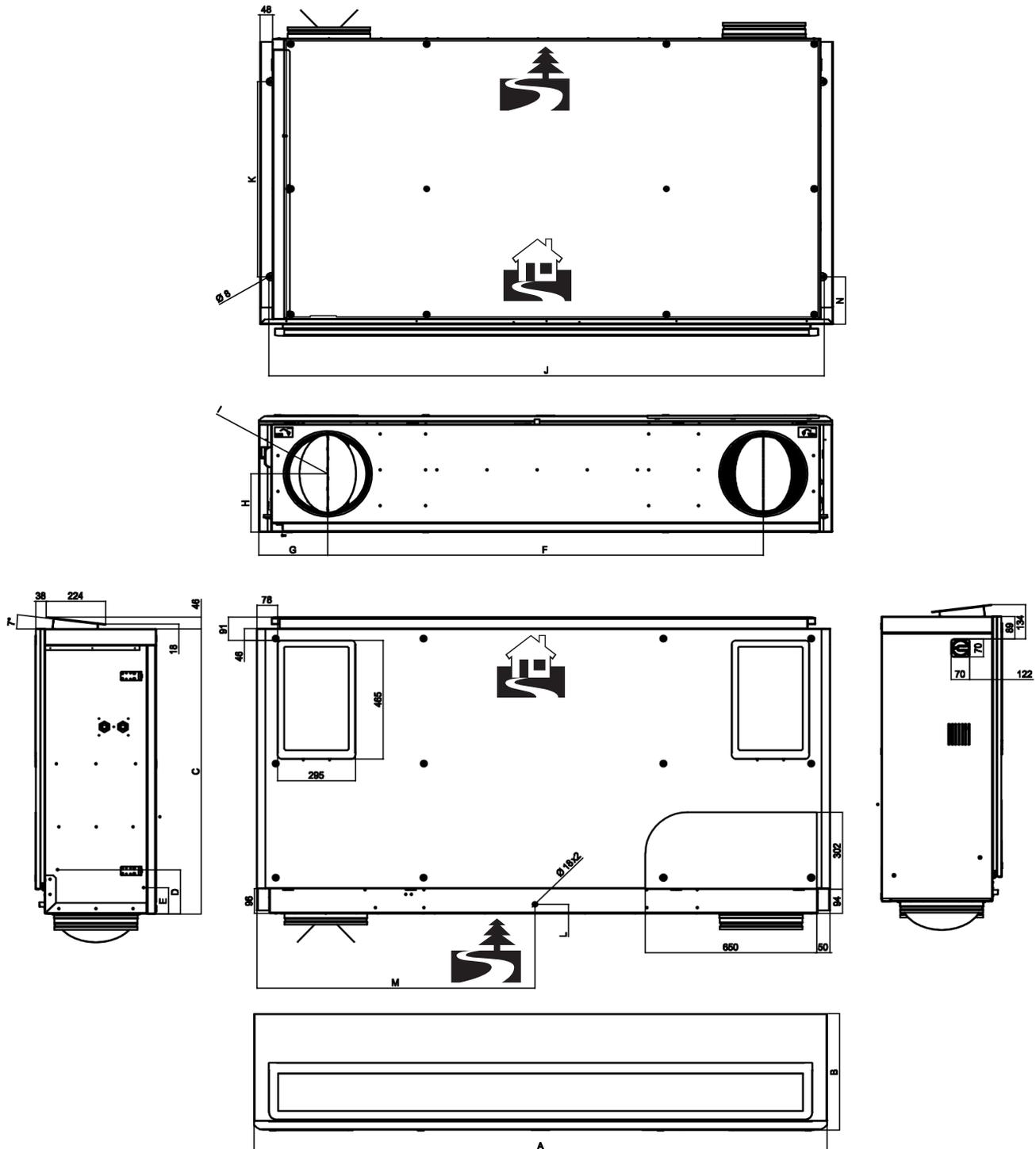
# Susurro



Type	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	J [mm]	K [mm]	L [mm]
Susurro 400	1806	398	940	1408	182	198	250	1835	689	32	875	143
Susurro 700	2078	455	1098	1649	213	228	315	2105	763	37	1006	167
Susurro 1000	2406	573	1262	1920	243	288	315	2435	962	31	1203	150

4. DIMENSIONS

# Susurro Dezajno



Type	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	J [mm]	K [mm]	L [mm]	M [mm]
Susurro 400	1901	398	963	195	165	1408	228	198	250	1835	689	32	922
Susurro 700	2171	455	1116	172	102	1649	261	228	315	2105	763	37	1054
Susurro 1000	2501	575	1280	167	97	1920	291	288	315	2435	962	31	1251

## 5. TECHNICAL PARAMETERS

Voltage, current and power consumption for different heat recovery units  
[number of phases / V / A / W]

Type	Maximum air flow [m <sup>3</sup> /h]	Intake filter class	Exhaust filter class	Frequency [Hz]	S0	EPOH	WPOH	Weight* [kg]
Susurro 400 EPRH	400	ePM1 60%(F7)	Coarse 60%(G4)	50	1 / 230 / 9,2 / 1840	1 / 230 / 15,8 / 3340	1 / 230 / 9,2 / 1840	94
Susurro 400-X	400	ePM1 60%(F7)	Coarse 60%(G4)	50	1 / 230 / 2,7 / 340	1 / 230 / 9,2 / 1840	1 / 230 / 2,7 / 340	93
Susurro 700-EPRH	700	ePM1 60%(F7)	Coarse 60%(G4)	50	1 / 230 / 11,4 / 2340	3 / 400 / 9,8 / 4590	1 / 230 / 11,4 / 2340	128
Susurro 700-X	700	ePM1 60%(F7)	Coarse 60%(G4)	50	1 / 230 / 2,7 / 340	1 / 230 / 12,5 / 2590	1 / 230 / 2,7 / 340	127
Susurro 1000-EPRH	1000	ePM1 60%(F7)	Coarse 60%(G4)	50	3 / 400 / 7,5 / 3770	3 / 400 / 11,8 / 6770	3 / 400 / 7,5 / 3770	151
Susurro 1000-X	1000	ePM1 60%(F7)	Coarse 60%(G4)	50	1 / 230 / 5 / 770	3 / 400 / 9,3 / 3770	1 / 230 / 5 / 770	150

\* Given weight refers to the heaviest unit for each model

EPRH - electric pre-heater

EPOH - electric post-heater

WPOH - water post-heater

X - none pre-heater

S0 - none post-heater



The listed weight is valid for the heaviest unit in a given class  
The rest of technical data can be found in the technical catalogue

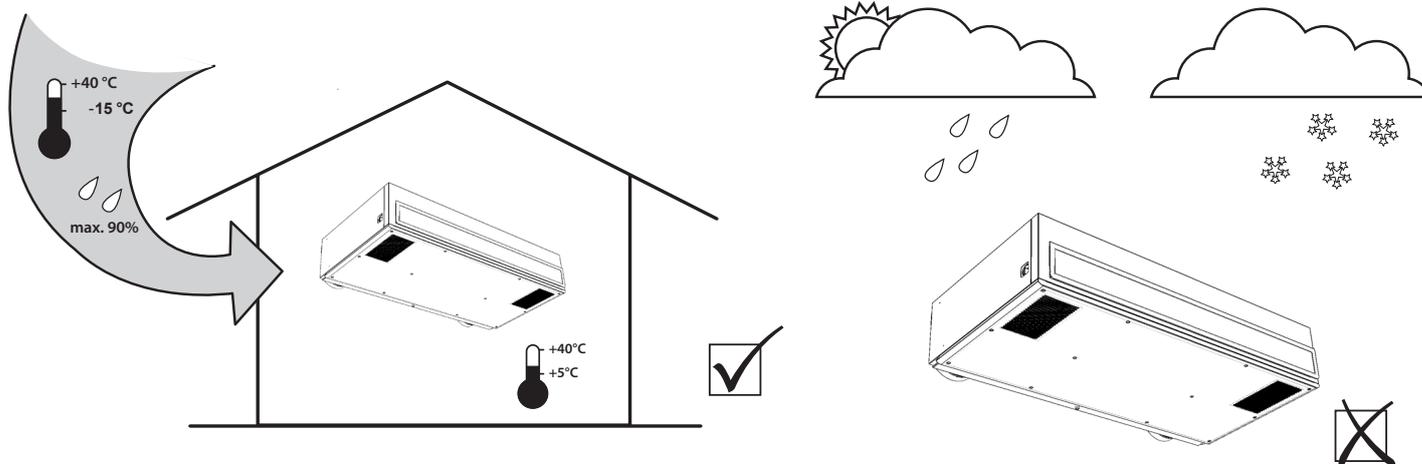
## 6. INSTALLATION

## CHOOSING THE PLACE

The project of the ventilation system must be prepared by a HVAC designer.

## TECHNICAL INFORMATION

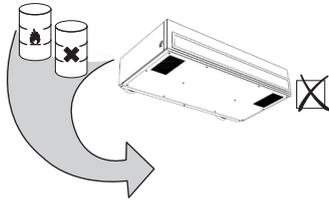
The unit must be operated in a closed, dry place with a range of temperatures of **+5°C to +40°C**.



The filtered air must have a temperature ranging from -15°C to +40°C and a relative humidity of up to 90%.  
If air at a temperature lower than -15°C is to be sucked, the unit can work in the anti-freeze mode or may switch itself off to prevent damages to important components.

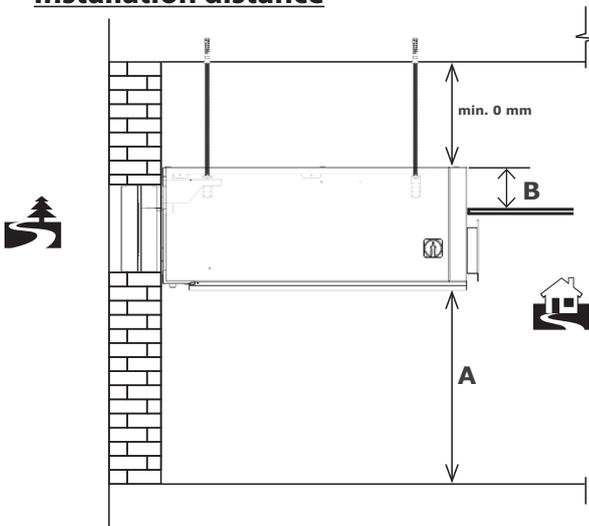
## 6. INSTALLATION

The unit is not designed to filter air containing combustible or flammable particles, chemical fumes, coarse dust, carbon, grease, poisons, bacteria, etc.



The IP protection level of the unit in the ducts is IP 20 (protection against objects bigger than 12.5 mm, does not protect against water).

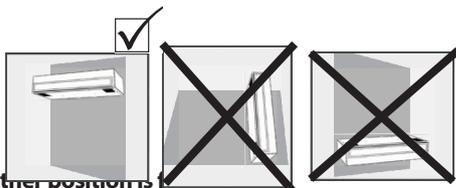
### Installation distance



<b>A</b>	Susurro 400	min. 1500mm
	Susurro 700	
	Susurro 1000	
<b>B</b>	Susurro 400	170 mm
	Susurro 700	190 mm
	Susurro 1000	280 mm

### TECHNICAL INFORMATION

• All the models of the heat recovery unit can be installed in the following positions:



- Any other positions
- The unit must be installed so that the direction of the air circulation will correspond with the air circulation in the distribution system.
- The installation must allow access for maintenance, service or disassembling. Access relates mainly to opening the revision lid.

### Required distance

**CAUTION!**

The intake and exhaust vents must not be blocked by non-combustible material.

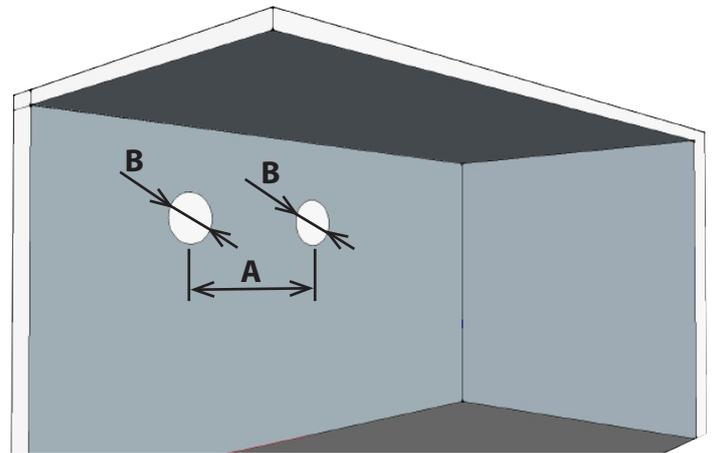
- The safe distance between combustible materials and the intake is 250 mm.

### Installing the unit

- The unit is installed on the ceiling with the built-in brackets, and threaded rods, with the neck facing the wall.

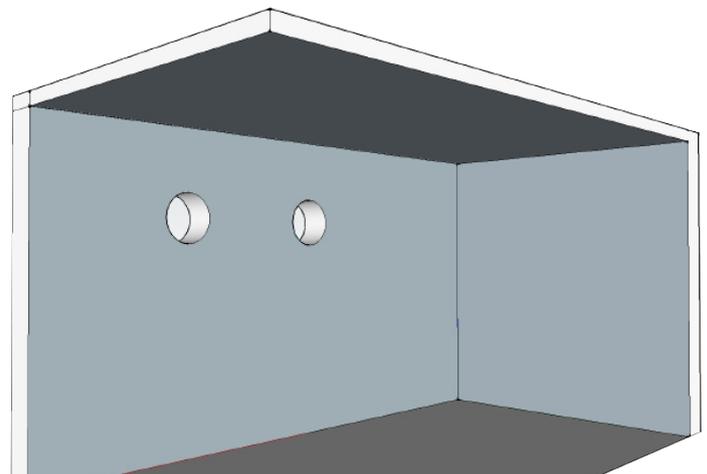
#### A) Preparing the hole for the piping

- 1) Measure carefully the position of the hole in the wall where the piping is to be connected.



<b>A</b>	Susurro 400	1408 mm
	Susurro 700	1648 mm
	Susurro 1000	1920 mm
<b>B</b>	Susurro 400	250 mm
	Susurro 700	315 mm
	Susurro 1000	315 mm

- 2) Drill the holes

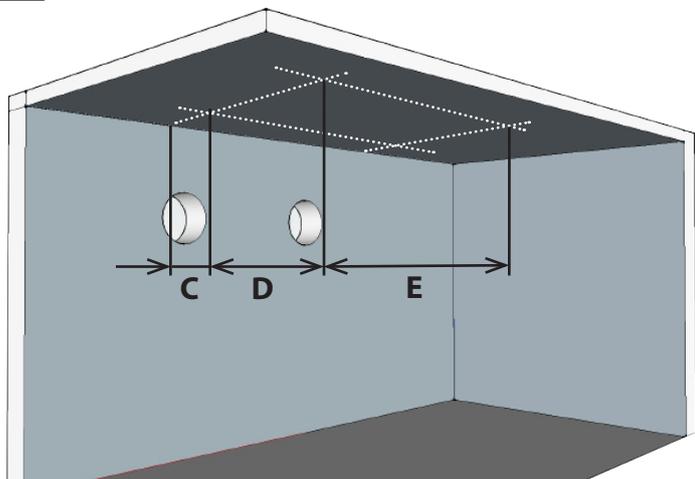


## 6. INSTALLATION

### B) Preparing the attachment to the ceiling

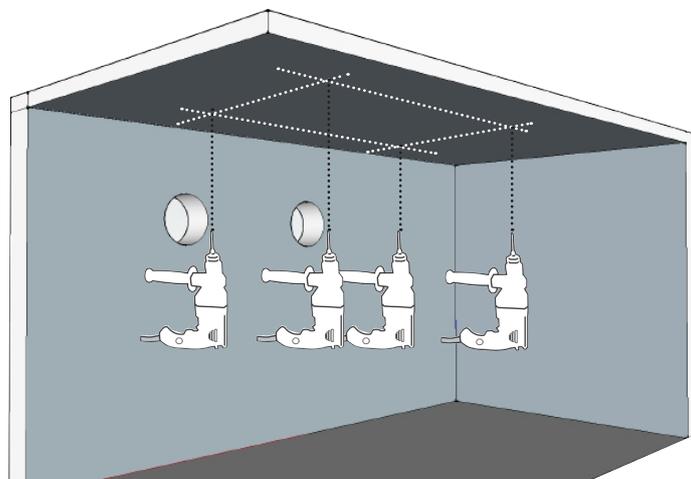
1) Measure carefully the position of the holes for the threaded rods

 (not included)

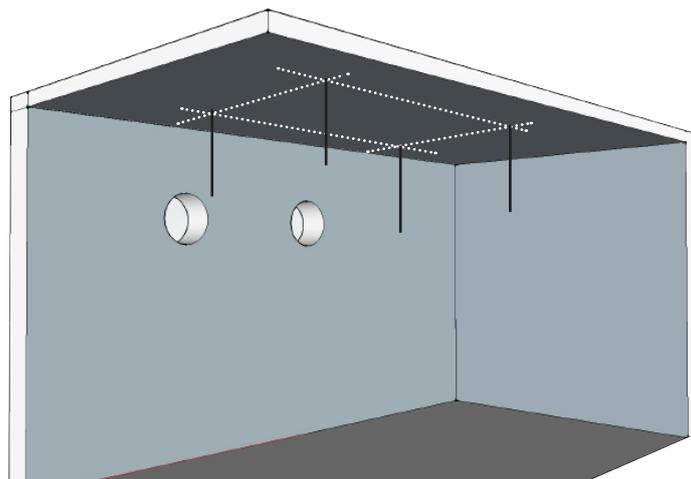


<b>C</b>	Susurro 400	110 mm
	Susurro 700	168 mm
	Susurro 1000	150 mm
<b>D</b>	Susurro 400	689 mm
	Susurro 700	763 mm
	Susurro 1000	962 mm
<b>E</b>	Susurro 400	1835 mm
	Susurro 700	2105 mm
	Susurro 1000	2435 mm

2) Drill the holes



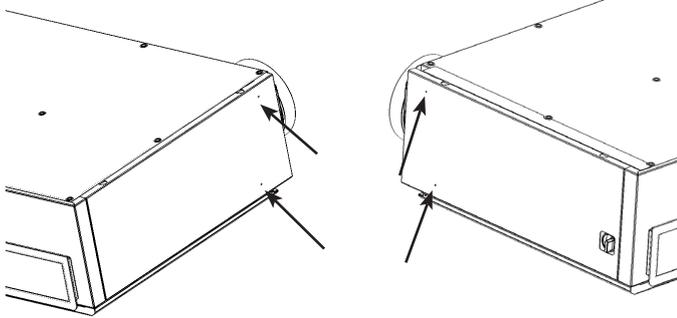
3) Install threaded rods of the appropriate length



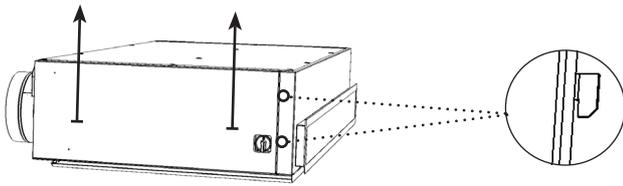
## 6. INSTALLATION

### C) Preparing the unit

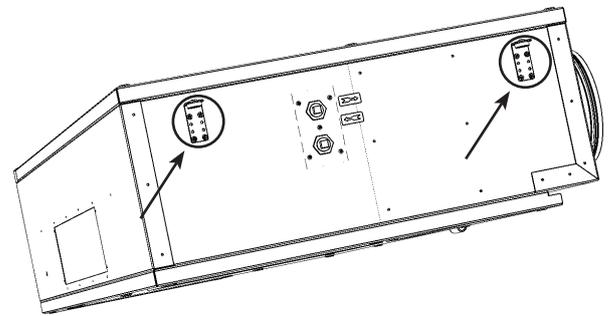
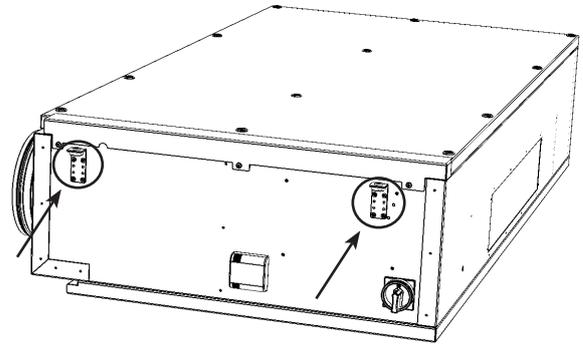
The design version may require to remove the side covers. You will need a no. 3 Allen wrench.



Move the cover upwards to remove it. It is secured by auxiliary brackets (see following picture).

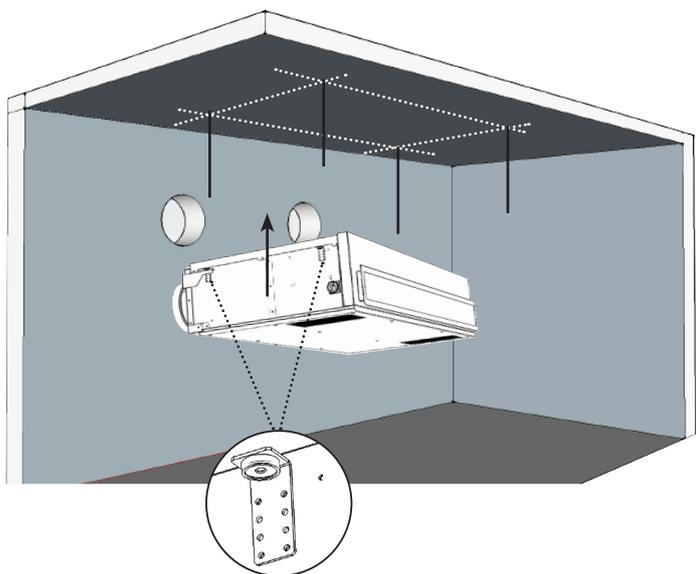


Removed cover with brackets

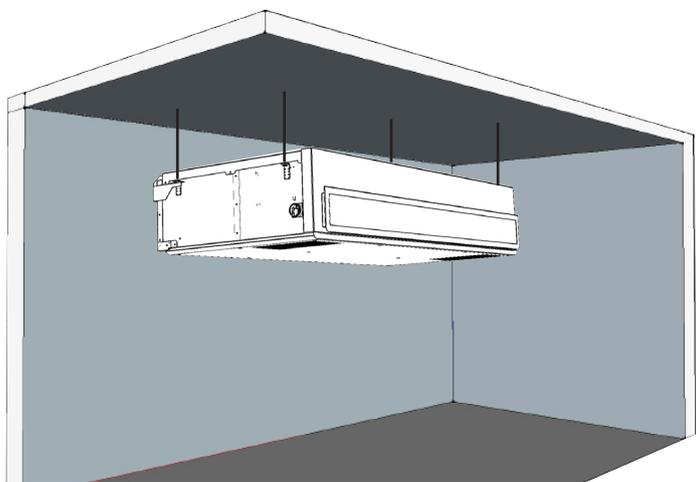


## 6. INSTALLATION

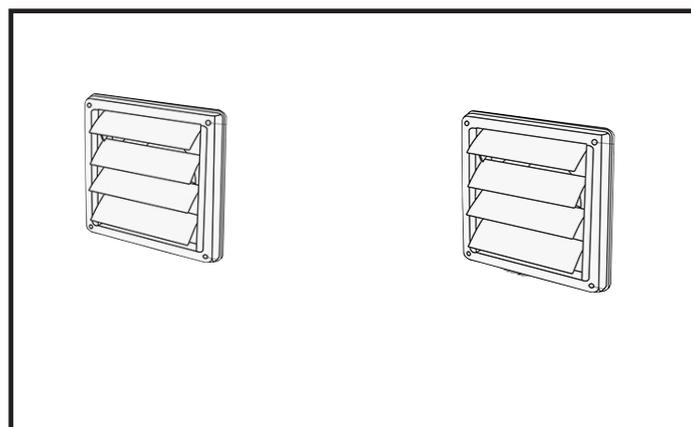
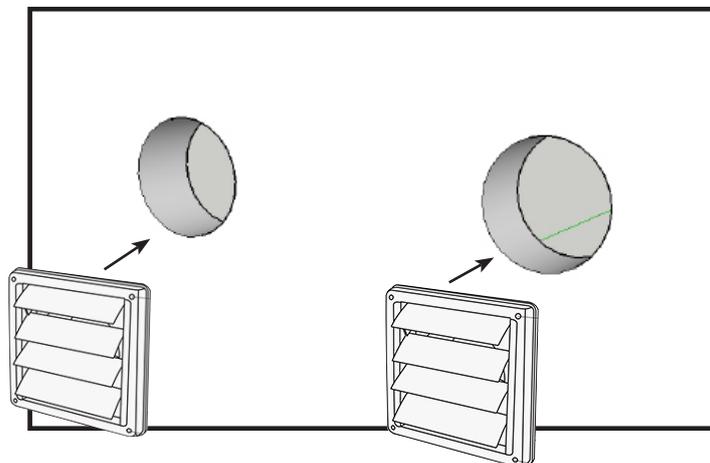
- Hang the unit from the rods and secure the holes in the wall appropriately.



- Control the fixing



- Install protection grilles on the outside of the wall to prevent the ingress of water and bigger objects. *(not included)*



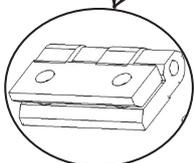
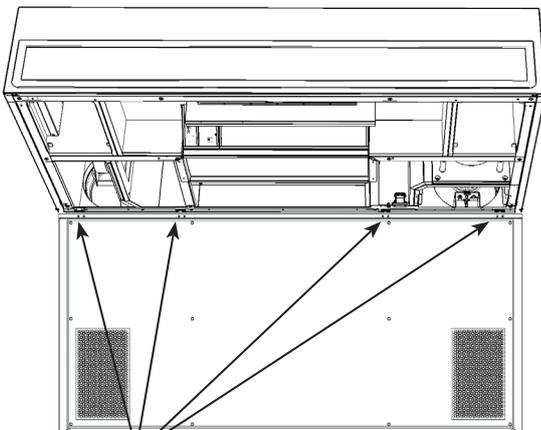
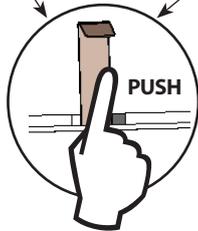
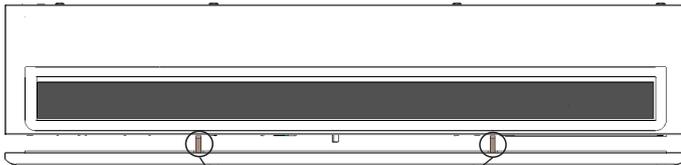
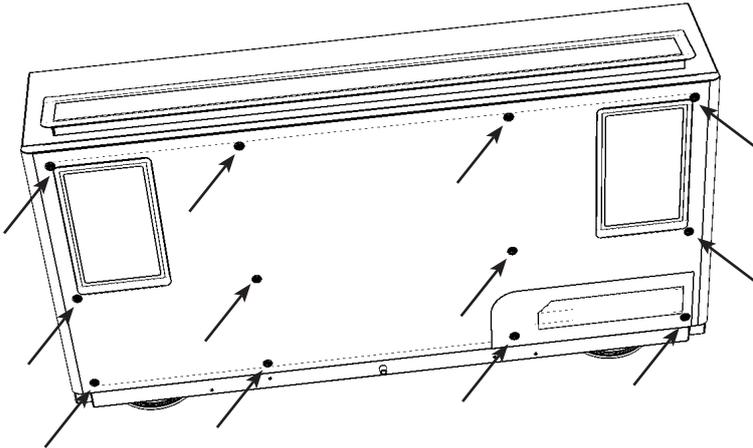
## 6. INSTALLATION

### How to open the lid

 Disconnect the unit with the main switch before opening the lid. Be especially careful when manipulating it.

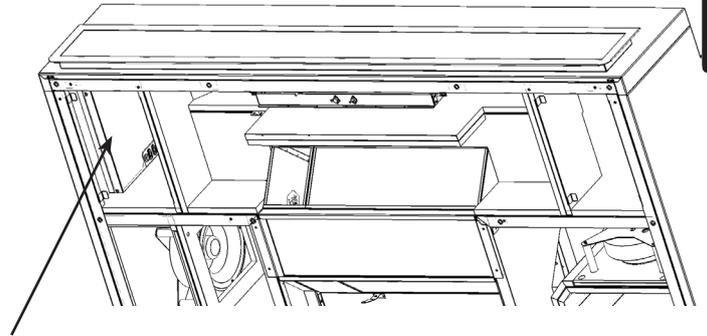
#### 1) Remove 12 screws on the lower side

CAUTION: The door is only held by the hinges. After removing the screws keep on holding the door to prevent its opening

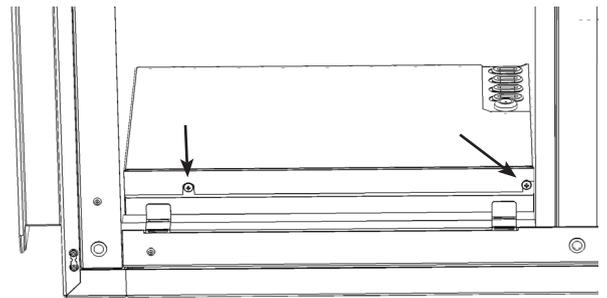


### Access to the electric connection and electronics

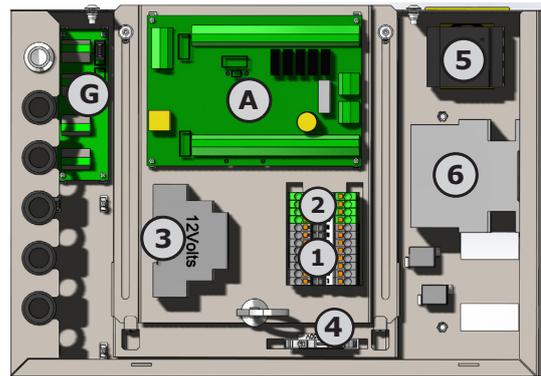
This part is located inside the unit, on the left side, below the intake filter.



To access the electronics, remove the following screws



Electronic parts:



<b>A</b>	Electronic board - Module A
<b>G</b>	Electronic board - Module G
<b>1</b>	Terminals for the power supply (L) and the output of the auxiliary power supply (12V, 24V)
<b>2</b>	Terminals to connect N and PE cables
<b>3</b>	Auxiliary power supply (12V, 24V)
<b>4</b>	Engine fuse
<b>5</b>	Main power switch
<b>6</b>	Safety Contactor (units with electric heater)

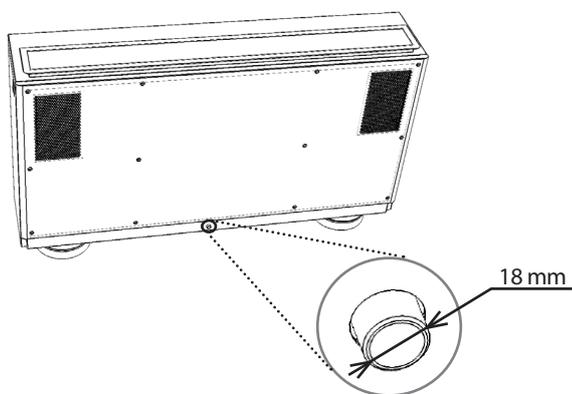
## 6. INSTALLATION

### CONNECTING THE CONDENSATE DRAIN

**PLEASE NOTE!**

- The sink must be well connected to the unit and sealed.
- We recommend to submerge the sink in water check its integrity.

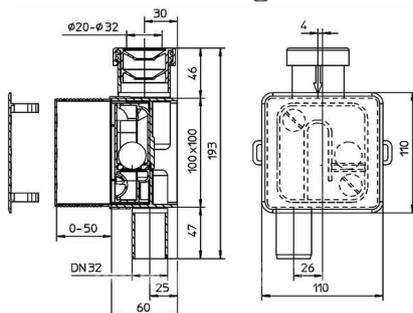
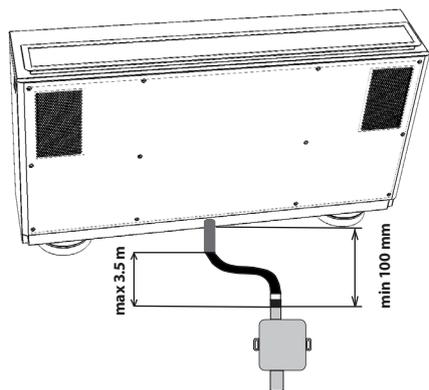
**ATTENTION!**  
 If the sink is not well connected, the unit may be flooded and damaged.



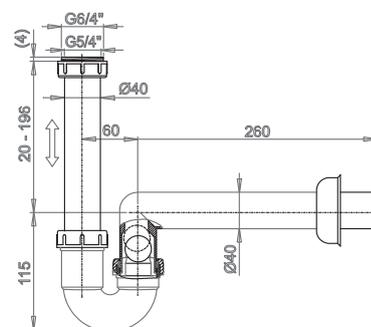
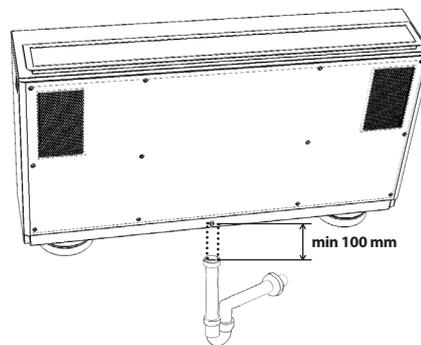
### INSTALLATION OF THE RECOMMENDED TYPES:

#### Sink (SK-HL138)

it can be mounted on the wall or embedded.  
 (non included)



#### Sink (SK-AKS3) (non included)



## 6. INSTALLATION

### ELECTRIC INSTALLATION AND WIRING

**⚠ CAUTION!**

- The main power supply must be turned off before working on the internal parts of the unit.
- The electrical installation must be done pursuant to the technical documentation and by a certified electrician. The installation might be done by a professional with qualifications in electricity. The manual must be observed, together with the laws and regulations applicable in the country.
- The wiring diagrams in the product have a higher priority than those in manual. Before the installation, check that the indication of the terminals corresponds to the wiring connection diagram. In case of doubt, contact the supplier and do not connect the unit under any circumstances.
- The unit must be connected to the main power source with an isolated cable with a heat resistance in compliance with the diameter and the applicable laws and regulations of the country.
- Any altering or changes to the internal connections of the unit are forbidden and may result in the loss of warranty.
- Only the use of original accessories guarantees the correct function of the unit.

### Electric power cable

- The power cable is not included. It has to be procured before the installation. Choose the type and thickness of the cable according to the unit's maximum consumption and the specific requirements of the place of installation.

 **TECHNICAL INFORMATION**

- The electrical parameters can be found on the manufacturer's labels inside and on the side of the unit (Fig. 1).

All the unit's electrical circuits must be connected through an earth leakage breaker according to the current model. The unit must be connected in a way that it can be disconnected from the power supply with one piece.

Table of minimum sizes of breakers according to the model of heat recovery unit.

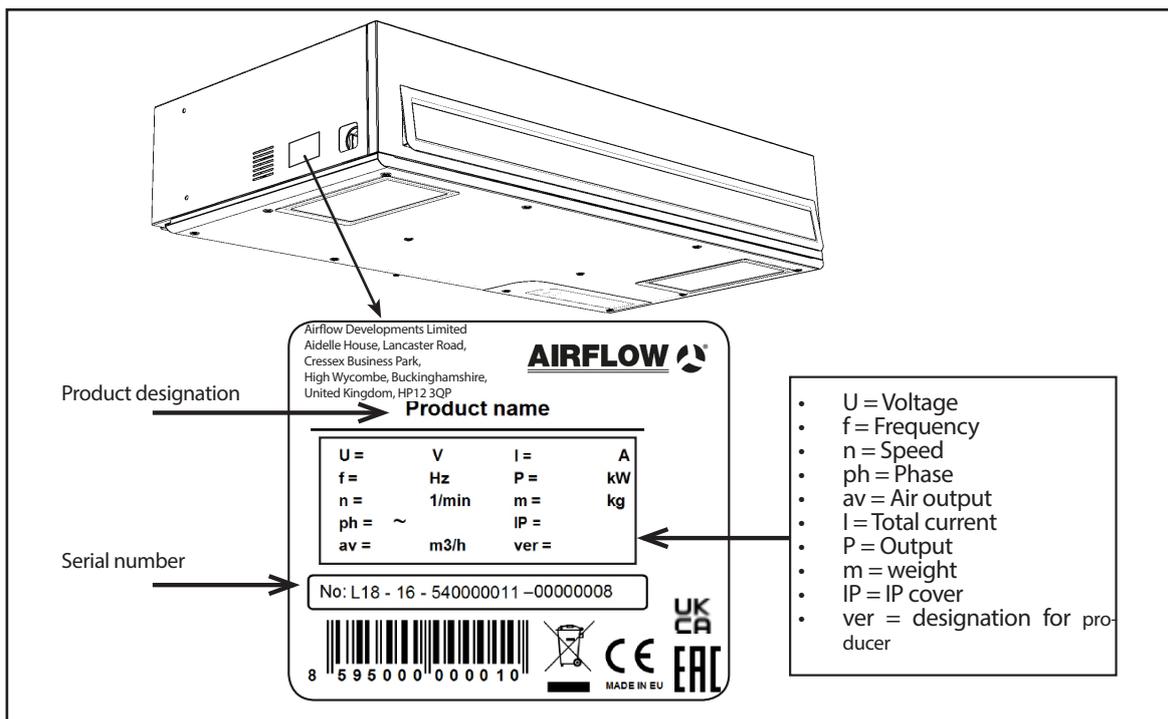
**Recommended minimum values of the circuit breakers:**

	-XS0...	EPRH - S0	EPRH-EPOH	EPRH-WPOH	X - EPOH	X - WPOH
Susurro 400	4A (1F)	10A (1F)	16A (1F)	10A (1F)	10A (1F)	4A (1F)
Susurro 700	4A (1F)	13A (1F)	10A (3F)	13A (1F)	13A (1F)	4A (1F)
Susurro 1000	6A (1F)	10A (1F)	13A (3F)	10A (3F)	10A (3F)	6A (1F)

### Accessories

Connect the electric accessories of the unit to the connecting terminal, as shown in the diagram and the indications of the terminals.

(Fig. 1) Location of the label and explanation of each part.

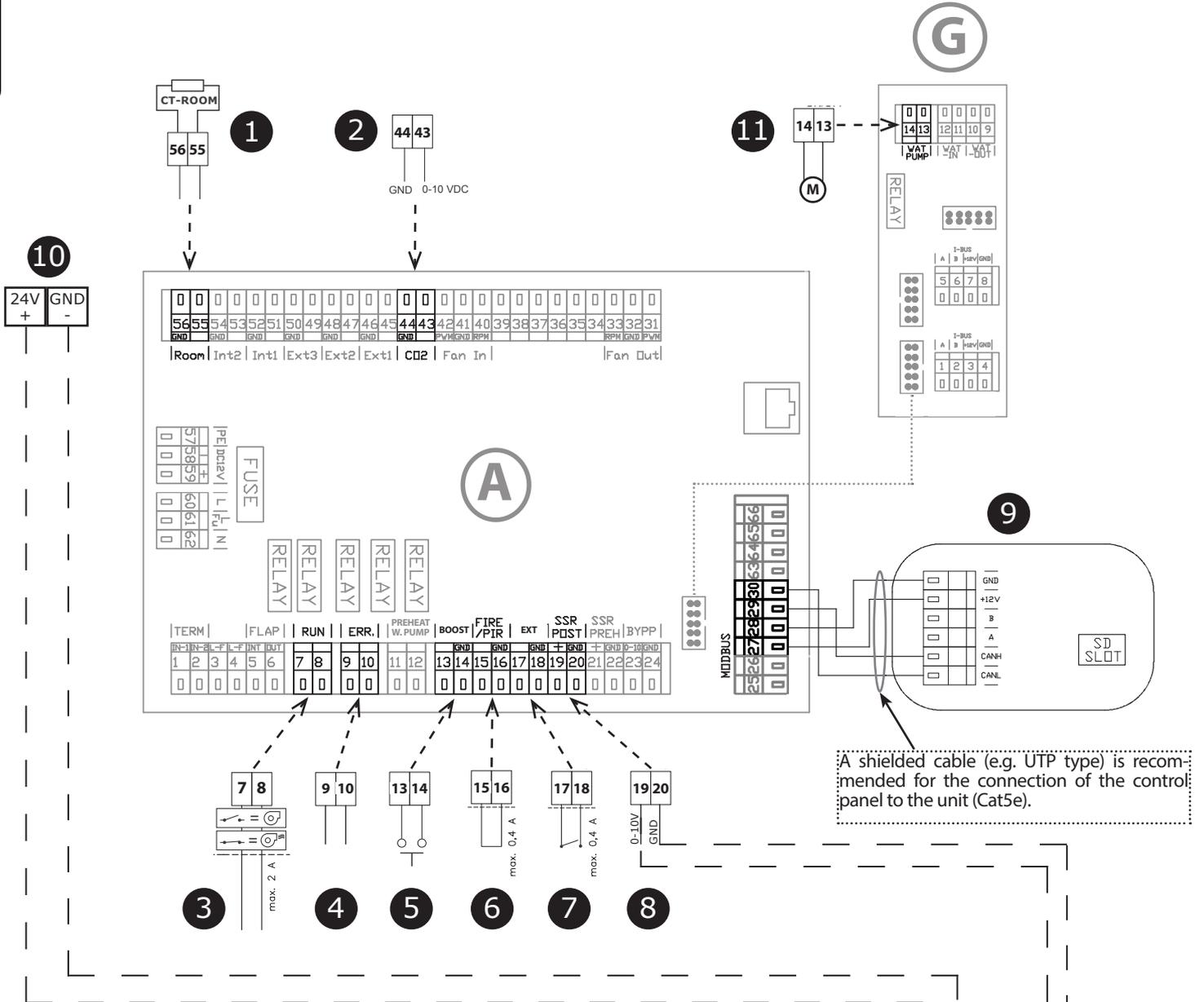


## 6. INSTALLATION

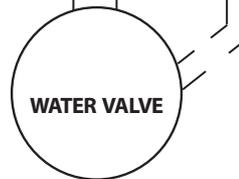
### UNIT WITH COMFORT REGULATION:

The control is located inside the unit.

### ELECTRIC POWER DIAGRAM AND CONNECTION OF ACCESSORIES:



<b>A</b>	Electronic board - Module A
<b>G</b>	Electronic board - Module G
<b>1</b>	Room temperature sensor (CT-ROOM, input)
<b>2</b>	CO <sub>2</sub> sensor, data input (0-10V, input)
<b>3</b>	RUN contact (relay, adjustable, max. 2A)
<b>4</b>	ERROR contact (relay, error = ON, OK = switched off, max. 2A)
<b>5</b>	BOOST button (input button)
<b>6</b>	PIR input sensor or FIRE alarm (input, adjustable)
<b>7</b>	External control input (input, connected = ON, disconnected = OFF)
<b>8</b>	Output for SMU actuator (output, 0-10V), only in version SUSURRO-...-V1...
<b>9</b>	Control panel (must be connected – cable not included)
<b>10</b>	24V power supply for the mixing junction or specific components (output)
<b>11</b>	Circulation pump (relay max. 2A)



**!** Check the following before switching on the unit for the first time:

- That the unit is properly closed and all the outlets are connected to the ductwork.
- That the electric connection matches the diagram, including earthing and protection of external circuits.
- That all the electric components are properly connected.
- That the condensate drain is connected to the sewage
- That the installation corresponds to the instructions in the manual.
- That no tools or objects that may damage the unit have been left inside.
- That the filters are clean

**CAUTION!**

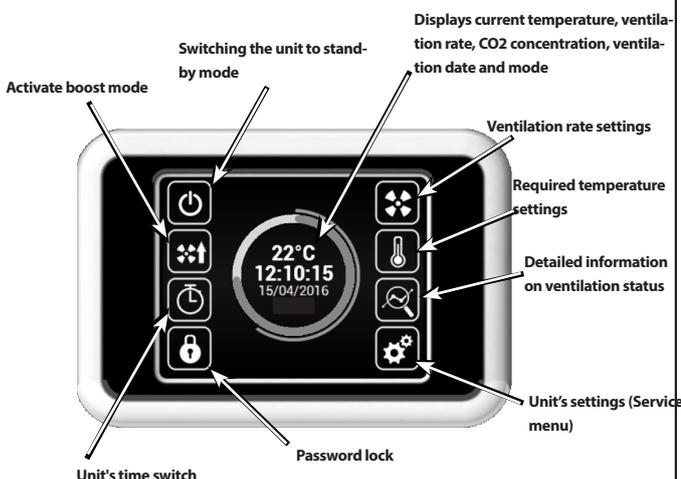
- Alterations and changes to the internal connections of the unit are forbidden and may result in the loss of warranty.
- We recommend the use of accessories provided by our company. Contact your supplier in case of doubts with the use of non-original accessories.

## 7. CONTROL

### INITIAL COMMISSIONING

- After connecting the unit, the display lights up and the data is loaded. The service data begins to load. Once it has fully loaded, the unit is ready for start-up.
- The remote control has a touch-screen – the unit is controlled touching the symbols on the screen.

**Start-up:**



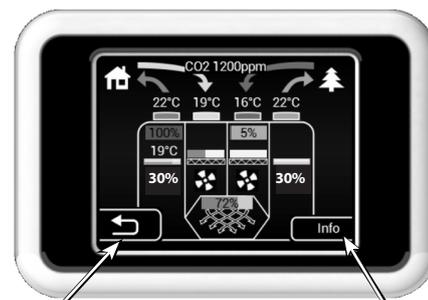
- Occupancy mode active
- The timer is active
- The cooling is active (with a graphic indication of the remaining time)



### INFORMATION ON THE VENTILATION STATUS

This screen shows the status of the unit and the values of the sensors:

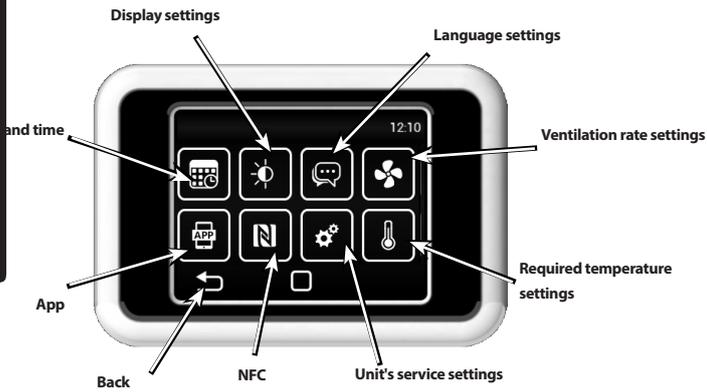
- Current air flow of both fans
- Inlet and exhaust air temperature
- Status of the heat exchanger bypass
- Performance of the electric preheating and reheating
- Values of the connected air quality sensor



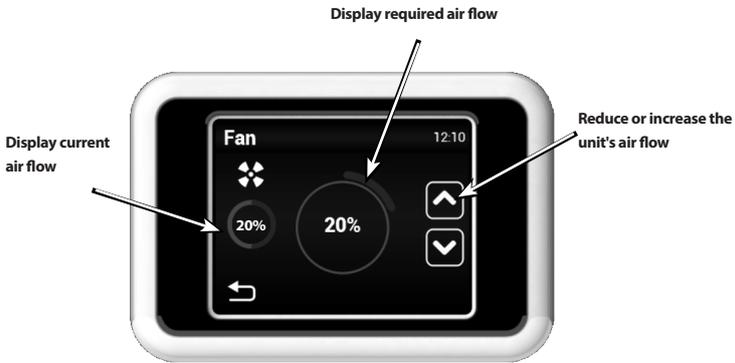
- Back
- Information on the type of unit



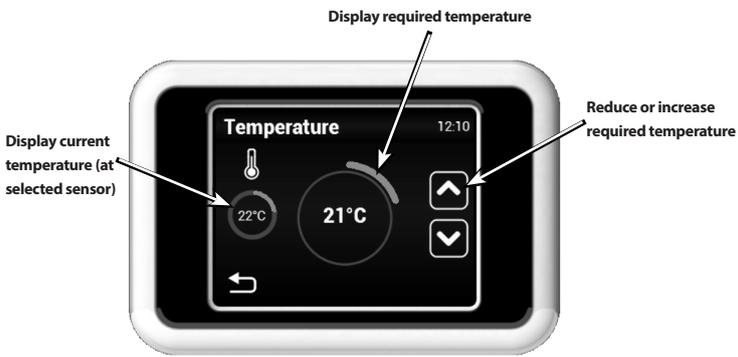
## UNIT SETTINGS



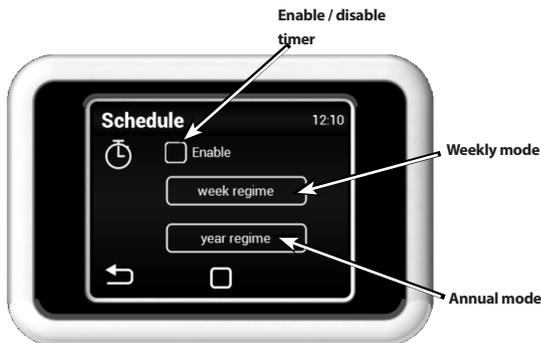
### Ventilation rate settings



### Required temperature settings



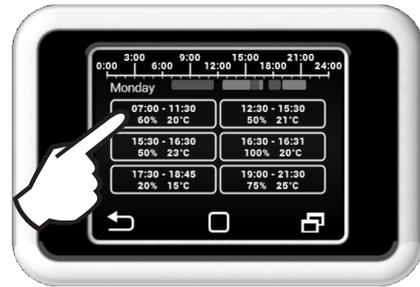
### Unit's time switch



## Weekly mode



Touch a day to set ventilation modes

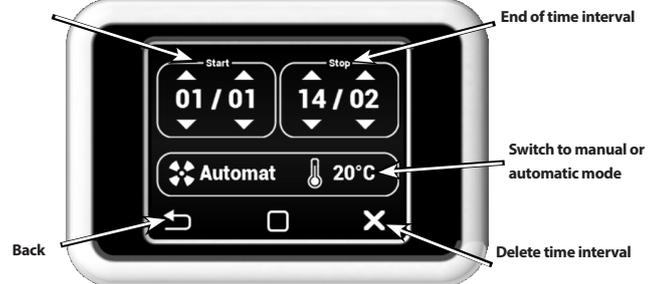


Touch to set ventilation time modes

## Annual mode



Start of time interval



In manual mode, in addition to the temperature, you can also set the ventilation rate.

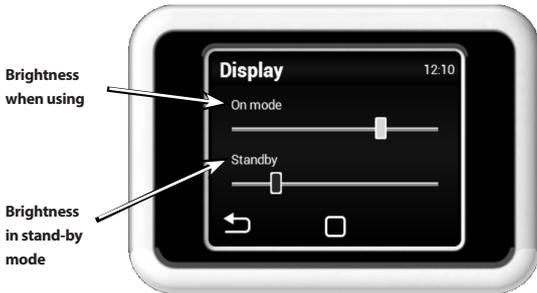
when the time interval ends, the unit goes into stand-by mode



## Language settings



## Display settings



## NFC SETTINGS



In the NFC menu you can display the information after placing an NFC compatible mobile device.

## TIME AND DATE SETTINGS



## App



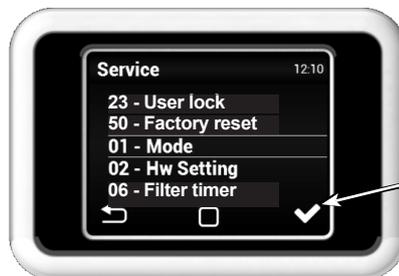
Link to download software for your mobile devices

Pairing a mobile device with a unit when using a QR code.



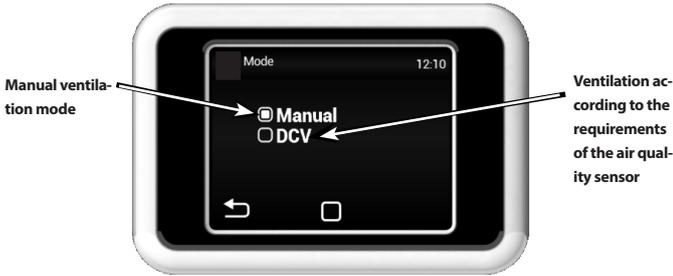
## SERVICE MENU

Enter code 1616 to access the service menu



Scroll to select menu

## MENU 01 - MODE



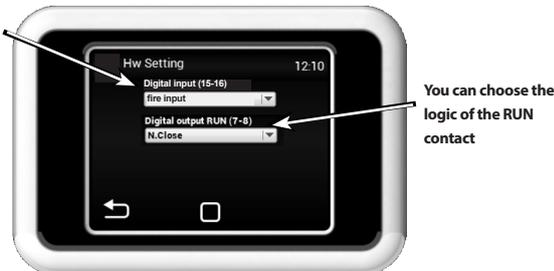
**MANUAL:**  
The unit ventilates according to the selected rate

**DCV:**  
The unit ventilates according to the requirements of the air quality sensor, e.g.: CO<sub>2</sub>, RH (0-10V control signal)

## MENU 02 - HW SETTING



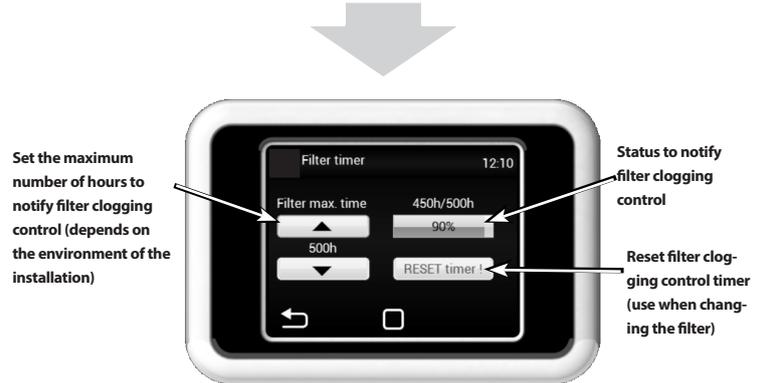
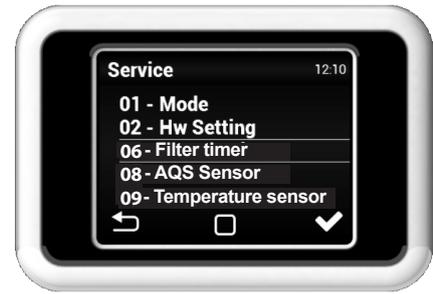
You can choose the contact to switch the PIR sensor or the FIRE contact



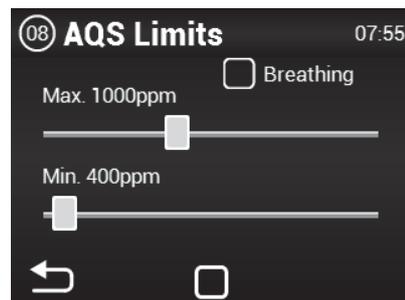
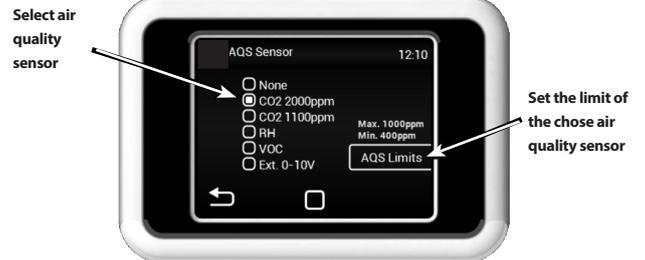
This menu lets you set the logic using the digital input and RUN output.

- Input (15-16) – Lets you choose to control the unit with the movement sensor or as a fire contact. In case of fire, the behavior of the unit can be set (settings in service menu no. 09)
- Output (7-8) – Lets you set the logic of the RUN contact switch as follows: N.close (normally closed) or N.Open (normally open)

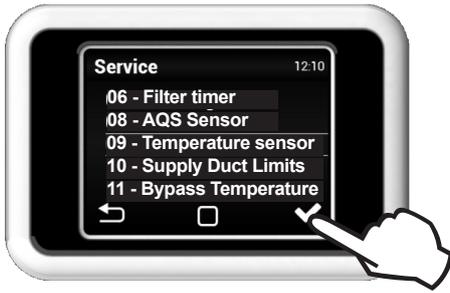
## MENU 06 - FILTER TIMER



## MENU 08 - AQS SENSOR



## MENU 09 - TEMPERATURE SENSOR



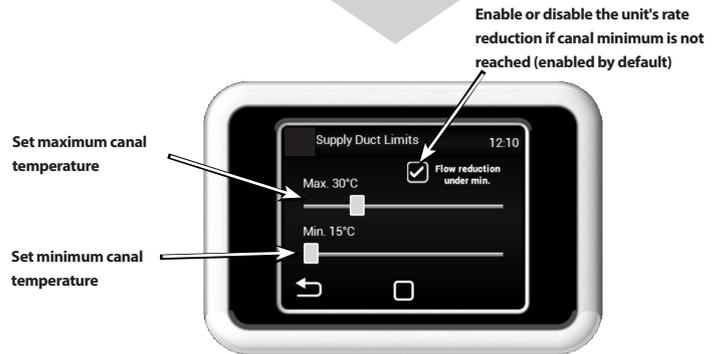
You can choose the output temperature sensor to control the unit.

Supply duct:  
Temperature sensor at the fresh air intake

Extract duct:  
Temperature sensor at the exhaust air

Room:  
Room temperature sensor (optional)

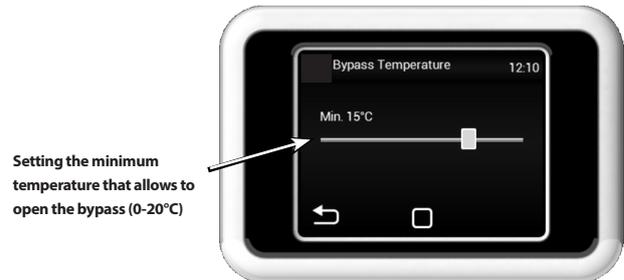
## MENU 10 - SUPPLY DUCT LIMITS



Due to possible condensation on the surface of the ventilation ductwork, it is recommended to leave enabled the reduction of flow if canal minimum is not reached.

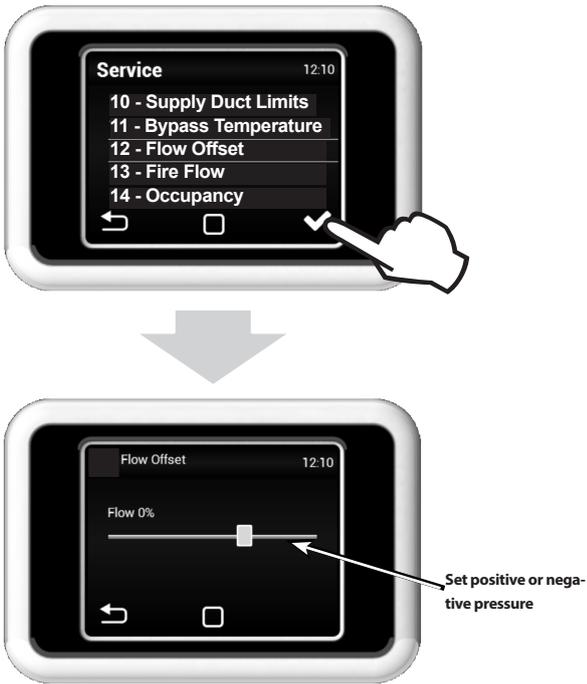
 Selecting the sensor in the supply ductwork disables the maximum temperature setting in the ductwork

## MENU 11 - BYPASS TEMPERATURE



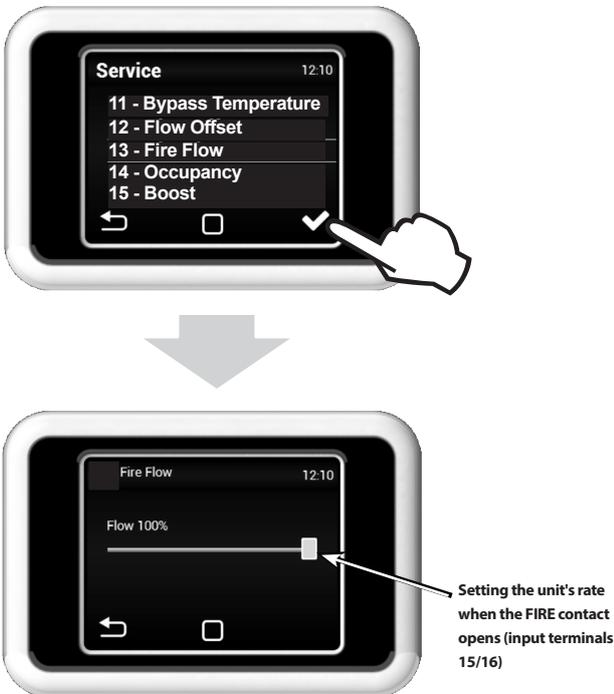
Setting the minimum temperature that allows to open the bypass (0-20°C)

## MENU 12 - FLOW OFFSET



## MENU 13 - FIREFLOW

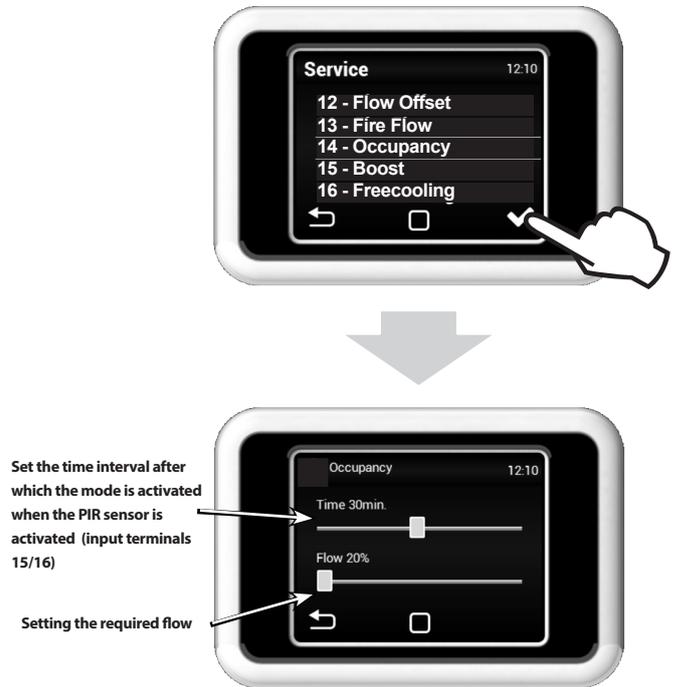
**!** The FIRE FLOW and OCCUPANCY modes can not be used simultaneously. One of the modes must be chosen in the HW setting menu.



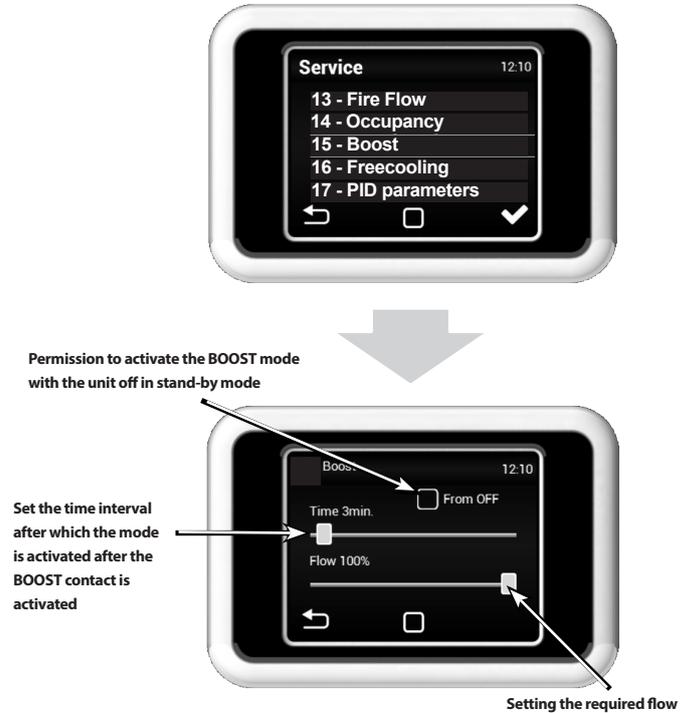
**!** The FIRE input has the highest priority (it disables all the other modes, including anti-freeze protection)

## MENU 14 - OCCUPANCY

**!** The FIRE FLOW and OCCUPANCY modes can not be used simultaneously

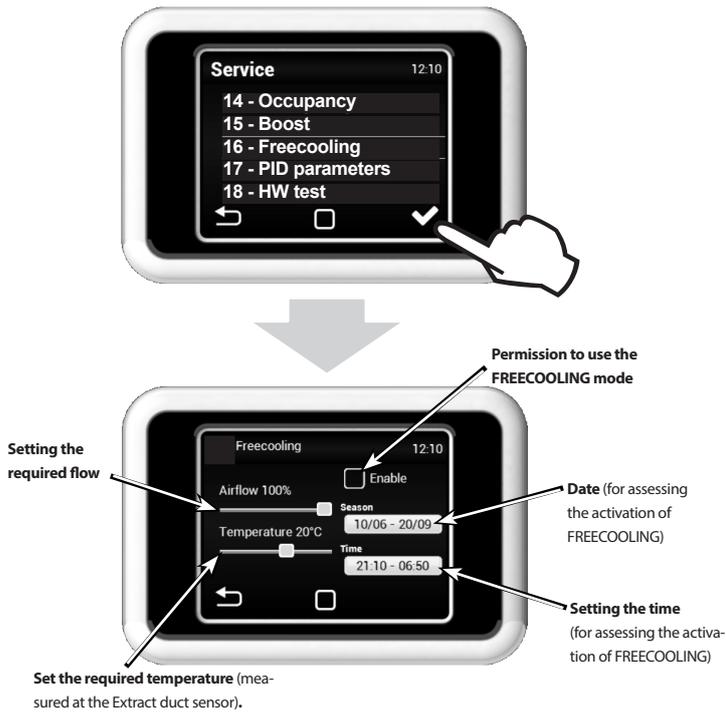


## MENU 15 - BOOST



**!** Boost can be activated with the button connected to the input 13/14, or with the Boost button (Fig. Boost) on the main screen

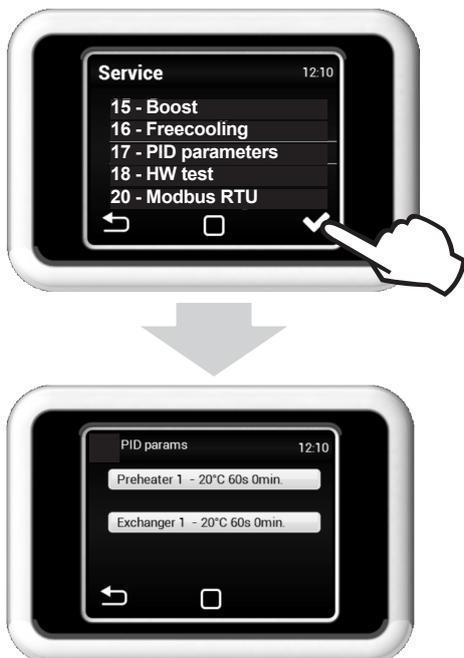
## MENU 16 - FREECOOLING



The FREECOOLING mode is suitable for night ventilation in summer. If mode is activated and all the selected conditions are met, the bypass fully opens to let cooler air into the building.

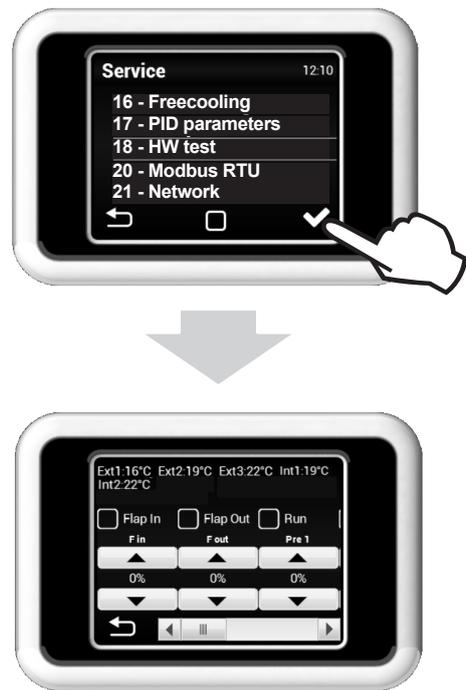
 Freecooling is assessed also if the unit is in stand-by (at a selected time and date the unit starts-up and assesses if the freecooling may be activated)

## MENU 17 - PID PARAMETERS



Set control features. If the control is unsteady or variable, this configuration can be done only after consulting the manufacturer.

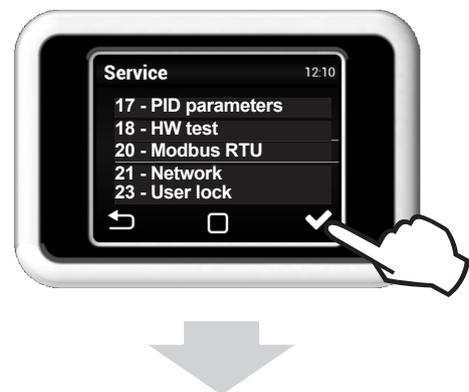
## MENU 18 - HW TEST



The HW TEST menu is used to test all the connected components and accessories. These parameters are not stored

F in - Intake fan rate configuration  
 F out - Exhaust fan rate configuration  
 Pre 1 - Electric preheating rate configuration  
 H 1 - Electric reheating rate configuration  
 By/Ro - Bypass settings (open / close bypass flap)  
 Ext1 - Intake air temperature sensor (fresh air supply)  
 Ext2 - Temperature sensor behind the exchanger (inlet)  
 Ext3 - Air intake temperature sensor (inlet)  
 Int1 - Exhaust air temperature sensor (exhaust)  
 Int2 - Anti-freeze sensor of the heat exchanger (exhaust)

## MENU 20 - Modbus RTU





The MODBUS menu is used to set the Modbus communication.

## MENU 21 - NETWORK



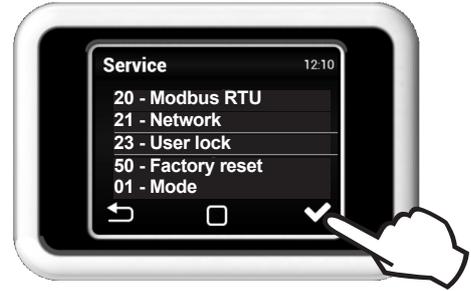
The NETWORK is used to set the unit's network communication (ModBus TCP)

## MENU 38 - BACnet



The BACnet is used to set the unit's network communication (ModBus TCP)

## MENU 23 - USER LOCK



Numeric password to unlock

User security level

Several security levels can be chosen for possible password-free operation:

**ON/OFF** - to turn the unit on or off without password

**ON/OFF, Temp., Flow** - to turn the unit on or off, set the required temperature and rate of the ventilation. Without password

**Temp., Flow** - to set the required temperature and ventilation rate Without password

**Full** - it does not allow any configuration without entering the password.

**User Mode** - enables to control unit, see the following screen:



⚠ After entering the password, the unit can be fully operated and set

## 8. MAINTENANCE

### MENU 48 - Software reset

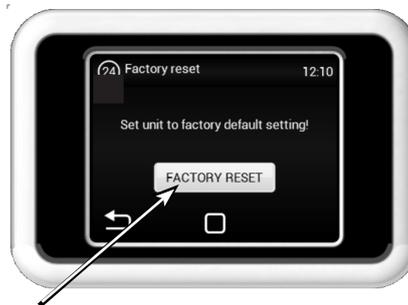
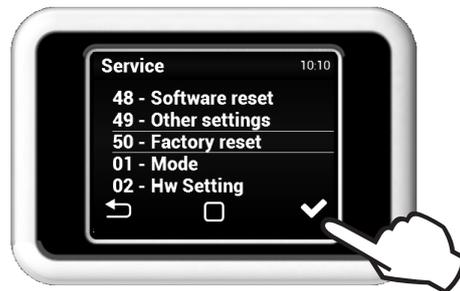


Reset power supply

### MENU 49 - OTHER SETTINGS



### MENU 50 - FACTORY RESET



Pressing **FACTORY RESET** resets the unit is reset to its factory settings

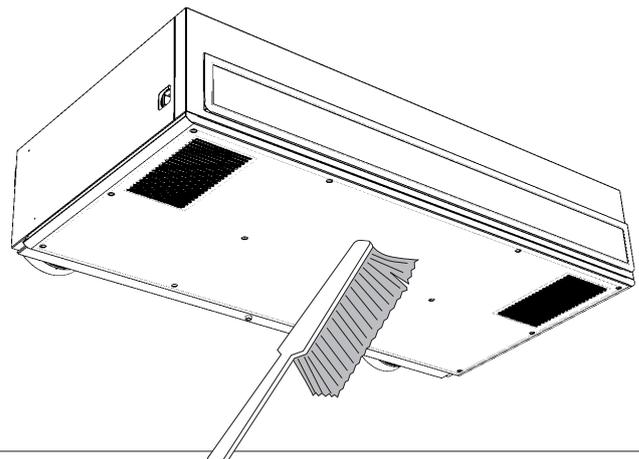
- ⚠ without change - The configuration of the AQS type
  - Ventilation Mode
  - HW settings
  - Temperature sensor
  - ModBus settings

### REGULAR CLEANING OF THE UNIT

- We advise the unit be controlled at regular intervals adjusted depending on the current conditions.
- If the unit is out of service for a long period, it is advisable to turn it on for one hour at least every six months.

### ⚠ CAUTION!

The service of internal components and the cleaning of the unit must be done only by a professional. It is forbidden to operate the unit without filters. It may damage the unit.



## 8. MAINTENANCE

Clean the unit with a vacuum cleaner, a small brush, cloth and soapy water, especially the exchanger. Do not use the following product to clean the unit: Sharp objects, corrosive chemicals, solvents, abrasive cleaners, pressurized water, pressurized air or steam.

### ERROR MESSAGES

#### Clogged filter

- The control of filter clogging is indicated on the unit remote.



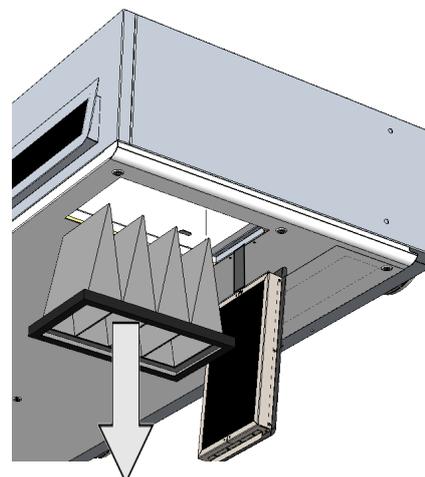
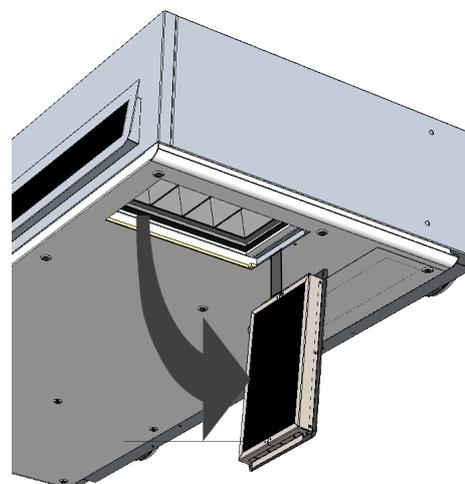
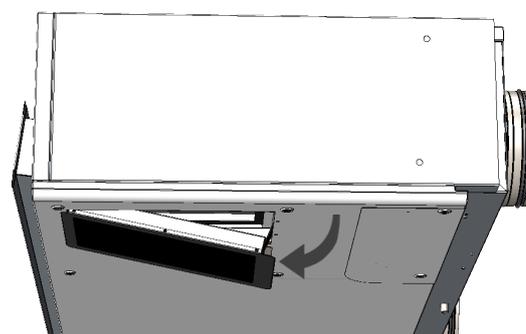
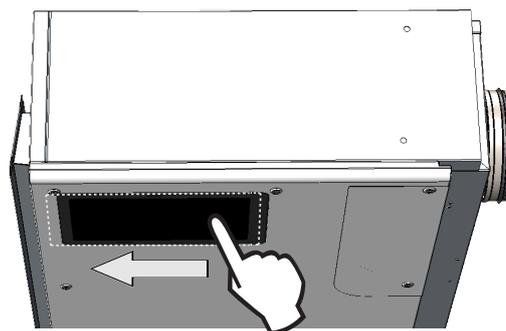
- The clogging of the filters is automatically assessed. The unit will automatically recognize that a new filter has been installed.

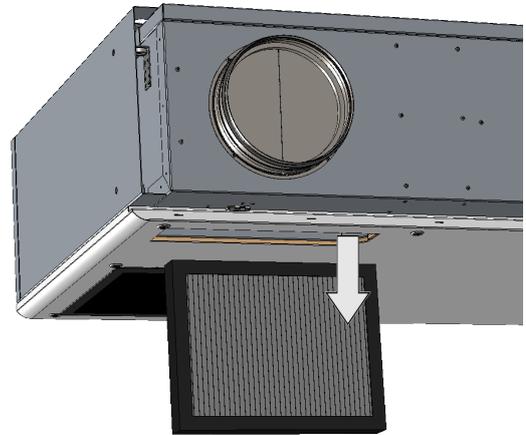
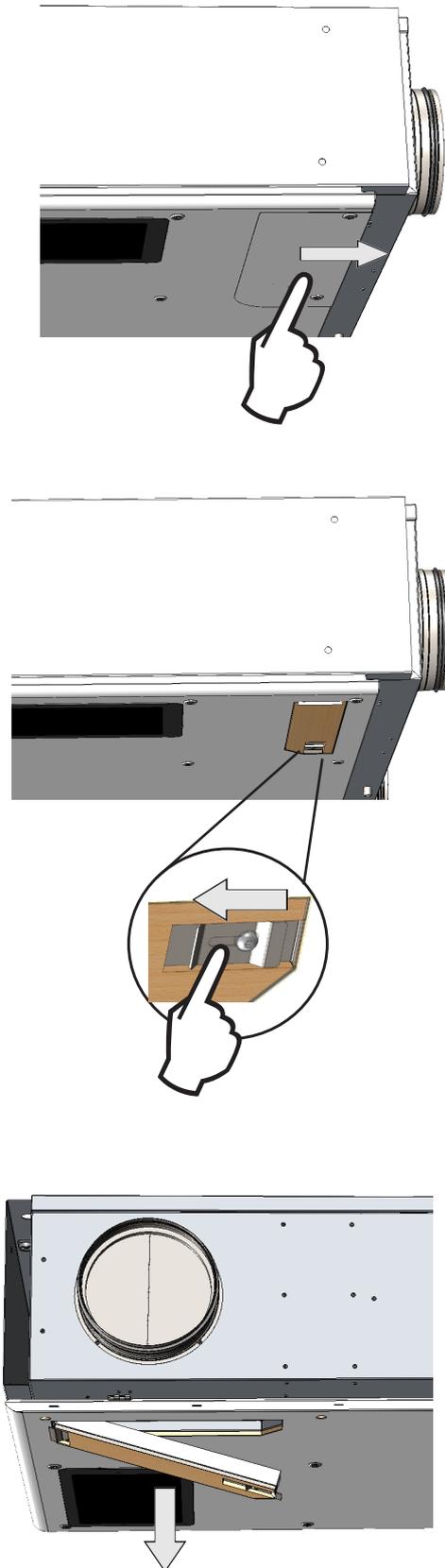
### CHANGE FILTERS

#### ⚠ CAUTION!

Failure to properly clean (change) the filters may reduce the performance of the unit and damage the fan.

- ⚠ Disconnect the unit with the main switch before opening the lid. Be especially careful when manipulating it.

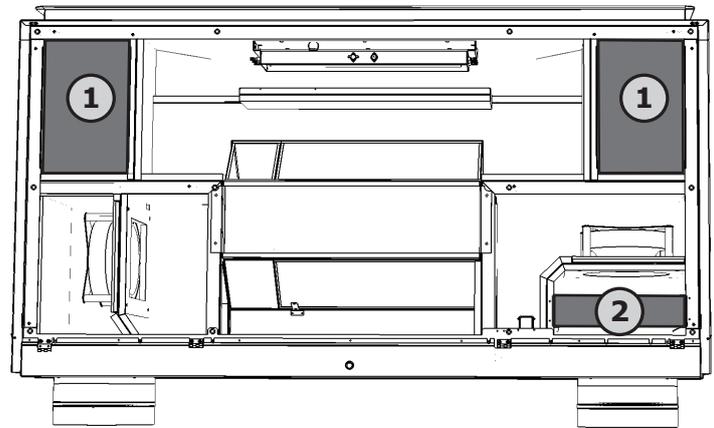




## 2) replace filters.

After replacing them, check that the filters are properly secured and close the door. The following picture shows the location of the filters in the unit and the table lists the appropriate types of spare filters.

There are 2 type 1 filters and it will be therefore necessary to order 2.



	Description	Susurro 400	Susurro 700	Susurro 1000
Standard	① Coarse 60% (G4)	90000902	90000903	90000904
	② ePM1 60% (F7)	90000905	90000906	90000907
Optional	① ePM10 60% (M5)	90000908	90000909	90000910
	② ePM1 70% (F8)	90000911	90000912	90000913

## 9. TROUBLESHOOTING

The unit error is indicated with a red exclamation mark in the middle of the control display. Pressing the exclamation mark shows the information on the error, see table below.



Reports on the display	Unit's behavior	Likely problem	SOLUTION
1 – Exchanger 1 overheated	unit is ventilating	Preheated electric exchanger or damaged sensor	Check that the air is flowing freely through the unit, that the electric exchanger cools down sufficiently, or that the safety thermostat of the el. reheating isn't damaged.
3 – Overheated preheating	unit is ventilating	Preheated electric preheater or damaged sensor	Check that the air is flowing freely through the unit, that the electric exchanger cools down sufficiently, or that the safety thermostat of the el. reheating isn't damaged.
4 – Supply fan error	Unit is not working	Overheated fan or defect on thermal contact of inlet fan	Determine the cause of the overheating: defective bearing, short-circuit...
5 – Exhaust fan error	Unit is not working	Overheated fan or defect on thermal contact of inlet fan	Determine the cause of the overheating: defective bearing, short-circuit...
6 – Inlet filter clogged	unit is ventilating	Check clogged filter	If the filter has been replaced or if it does not need to be replaced, reset the filter clogging
7 – Exhaust filter clogged	unit is ventilating	Check clogged filter	If the filter has been replaced or if it does not need to be replaced, reset the filter clogging
12 – CO2 sensor failure	unit is ventilating	Defective air quality sensor	Control the air quality sensor and its connection to the unit
16 – Inlet – External temperature sensor failure (T-EXT1)	unit is ventilating	Defective contact or sensor	Control the connection of the sensor and replace if needed (professional service)
17 – Inlet – Failure of the temperature sensor behind the exchanger (T-EXT2)	unit is ventilating	Defective contact or sensor	Control the connection of the sensor and replace if needed (professional service)
18 – Inlet – Temperature sensor failure in the supply canal (T-EXT3)	unit is ventilating	Defective contact or sensor	Control the connection of the sensor and replace if needed (professional service)
21 – Exhaust – Temperature sensor failure in the exhaust canal (T-INT1)	unit is ventilating	Defective contact or sensor	Control the connection of the sensor and replace if needed (professional service)
22 – Exhaust – Failure of the temperature sensor of the exchanger's anti-freeze protection (T-INT2)	unit is ventilating	Defective contact or sensor	Control the connection of the sensor and replace if needed (professional service)
25 – Room temperature sensor failure (T_Room)	unit is ventilating	Defective contact or sensor	Control the connection of the sensor and replace if needed
74 – Flow reduction, minimum temperature in the canal not reached	Limited operation of the unit	The minimum temperature in the canal was not reached	The temperature of the inlet and exhaust air is too low. Risk of undercooling of the building or condensation in the ventilation ductwork Possible failure of temperature sensor T-EXT3
Condensation fault	Unit is working	High level of condensate in the unit	Check if the sink is connected to the outlet of the condensate tank, the condition of the connection, and whether the sink is full of water. Check the flow of the pipes and whether the position of the unit allows runoff.
The unit ventilates insufficiently or is noisy	Unit is working	Clogged filter or ductwork.	Check the filters and whether the ductwork is not clogged

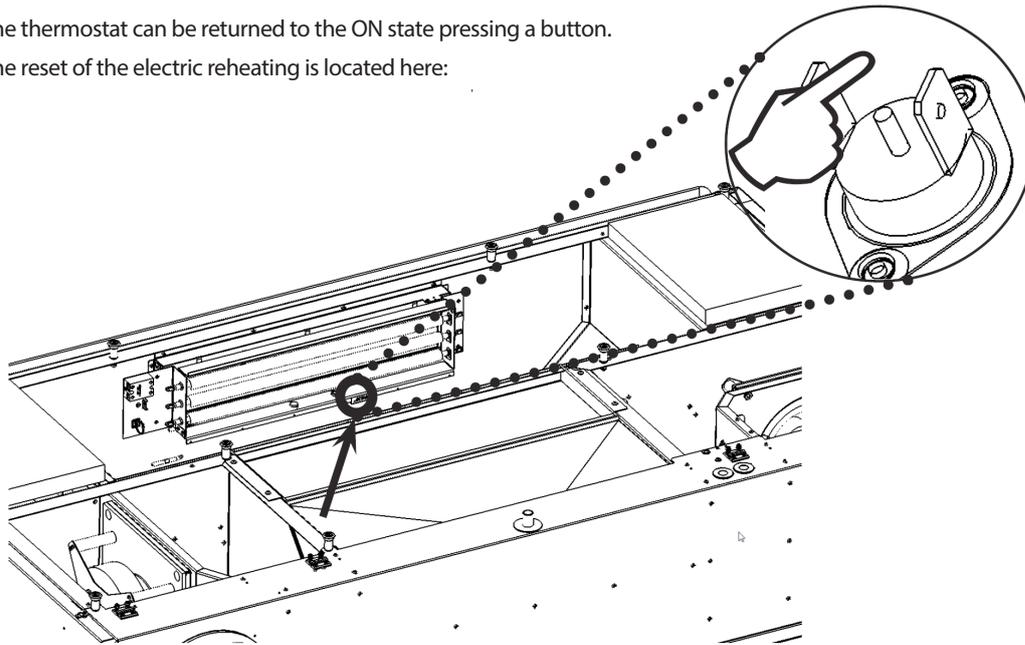
## 9. TROUBLESHOOTING

### REPAIRING OVERHEATED ELECTRIC PREHEATING AND REHEATING

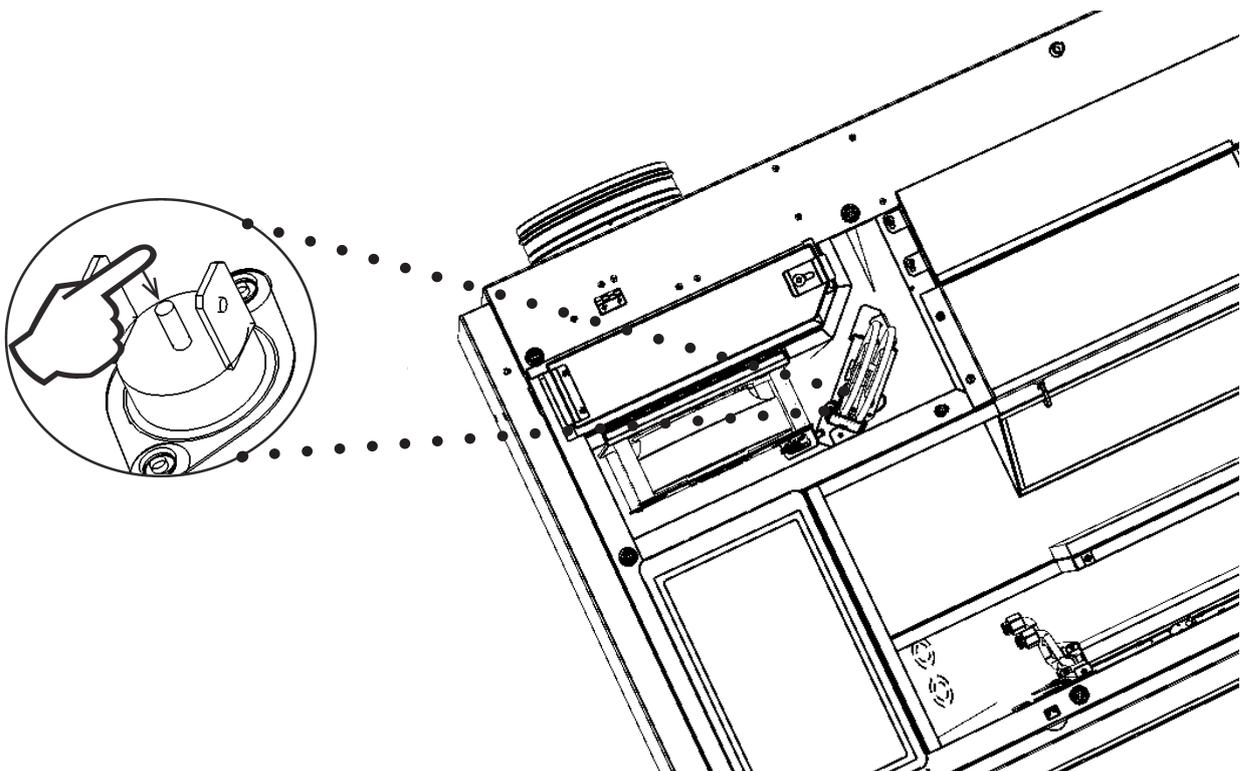
#### CAUTION!

The service of internal components must be done only by a professional.  
Always disconnect the unit before servicing.  
Firstly, remove the cause of the overheated electric preheating and reheating.

- The thermostat can be returned to the ON state pressing a button.
- The reset of the electric reheating is located here:



- The reset of the electric preheating is located here:



**Disassembling the engine**

Release the bracket from the set – square bit no. 2  
Release the engine from the bracket – Allen bit no. 4

**Printed circuit**

Open boards with a flat screwdriver

**Removing the boards from the plastic frame – pliers for precision mechanics**

Releasing the printed circuit – Philips screw no. 0

**Plastic parts**

Ceiling insulation of front panels – box cutter

## 10. CONCLUSION



Once the it has been installed, read carefully the safe operation manual of the unit. That manual includes examples of possible problems and recommended solutions. In case of any requests or inquiries, contact our sales or technical department.



Call: 01494 525252

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