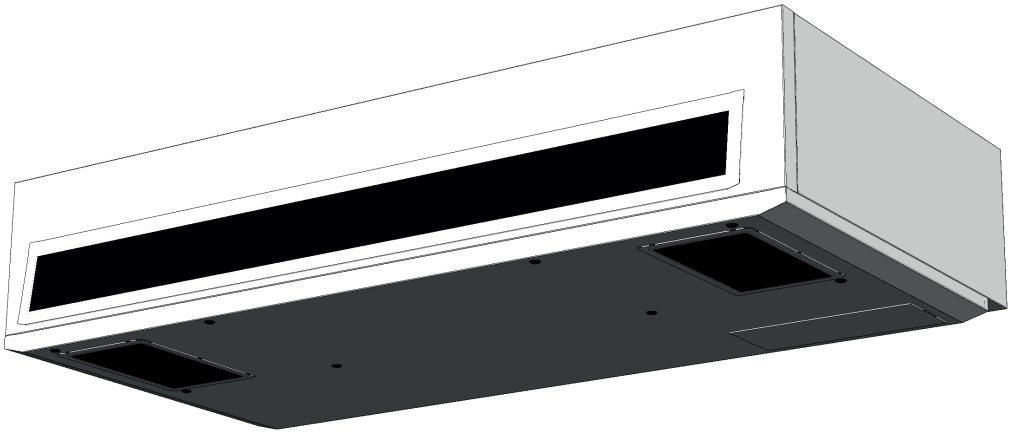
PARTNER
IN VENTILATION
2VV.CZ

EN

Whisper Air



INSTALLATION MANUAL

4-118-0411

ver. 2 12.06.25

CE

1. BEFORE STARTING

Please familarize yourself with the following symbols below to assist in the set up of the unit.

Symbol	Meaning
	Warning or Caution
 ATTENTION!	
 PLEASE NOTE!	Important instructions
 YOU WILL NEED	Practical tips and information
 TECHNICAL INFORMATION	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 an proper use of the product.

This manual includes important instructions for safe connection of the ventilation unit. Before connecting the unit, please read carefully and follow all instructions below! The manufacturer reserves the right to make changes including technical documentation without previous notification. Please keep this manual for further references. Consider this manual an integral part of the product.

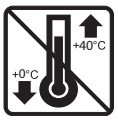
EC DECLARATION OF COMPLIANCE
The product was designed, and manufactured to comply with all relevant provisions and is in compliance with the requirements of the European Parliament and Council of the EU, including the amendment, which it was classified under. It is considered safe when installed in the specified conditions and operated according to the instructions of the operations manual. It was assessed according to harmonized European standards listed in the relevant EC declaration of conformity. For the current and full version of the EC declaration of conformity visit www.2vv.cz

2. UNPACKING

PLEASE CHECK THE DELIVERED PRODUCT

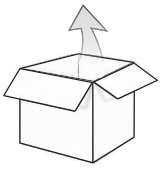
PLEASE NOTE!

- Unpack the product upon delivery and inspect 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 contact the supplier immediately.
- After unpacking, check that the unit and accessories are in good order. Contact the supplier in case of any doubt.
- Do not attempt to commission a damaged ventilation unit.
- If unit is not intended for immediate installation, 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 no let children play with the unit.

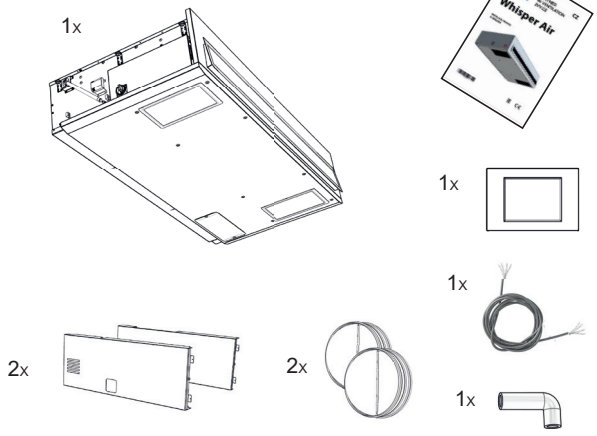


All the packing material is environmentally friendly and can be reused or recycled. Please, contribute actively to the protection of the environment and procure the regular disposal or recycling of packing materials.

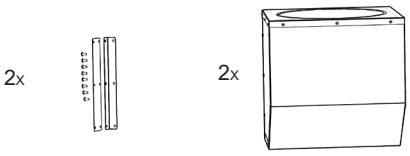
UNPACKING THE UNIT



Components Included



The UPPER version includes two modules for top connection and brackets.

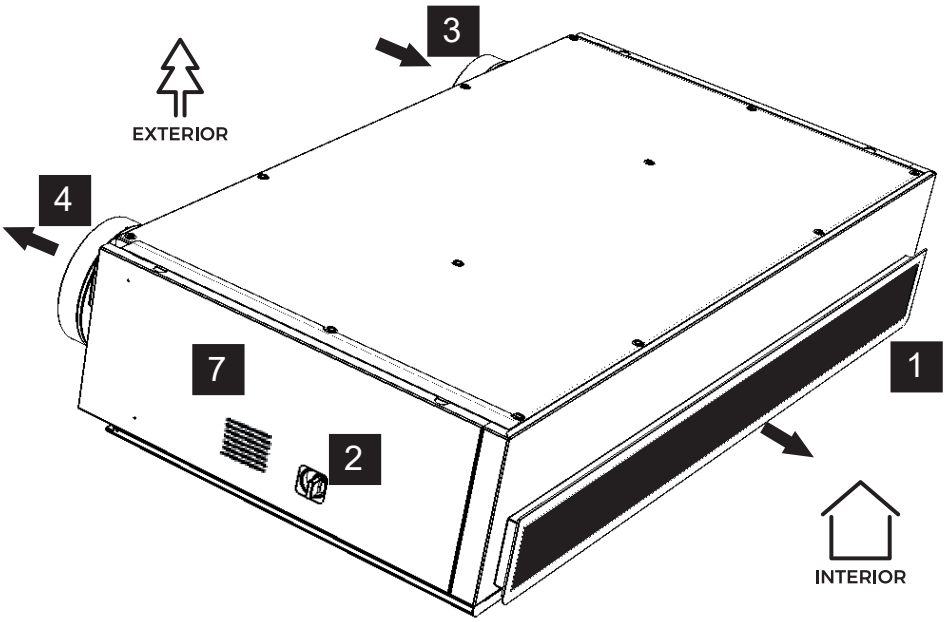


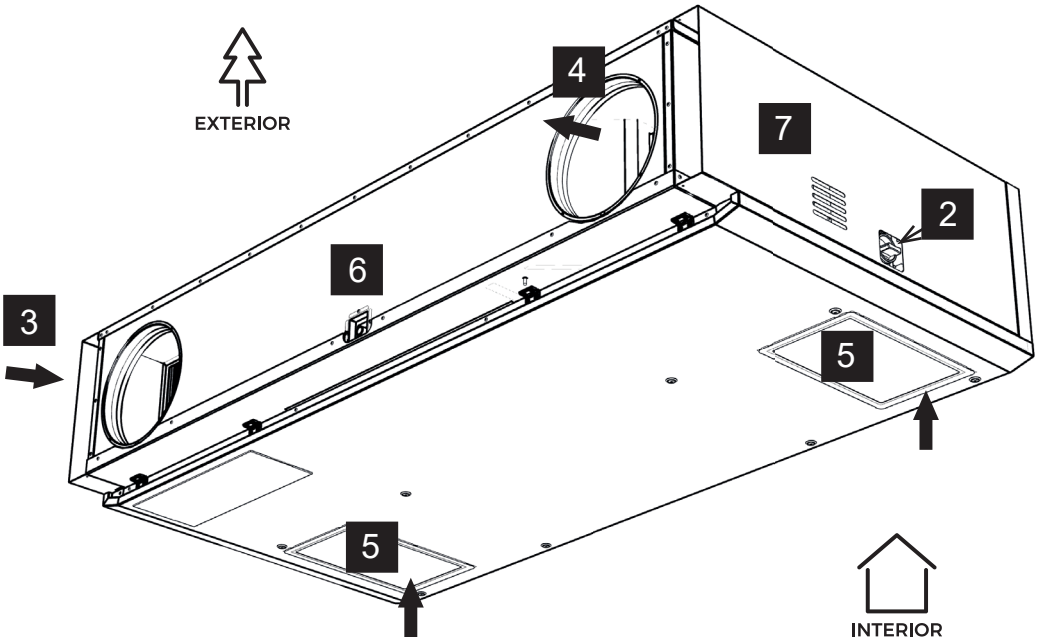
PLEASE NOTE!

- If the ventilation unit was exposed to temperatures lower than 0 ° C during transport, please unpack unit and let it sit at room temperature for at least 2 hours before connecting the unit in order to balance temperature inside unit.

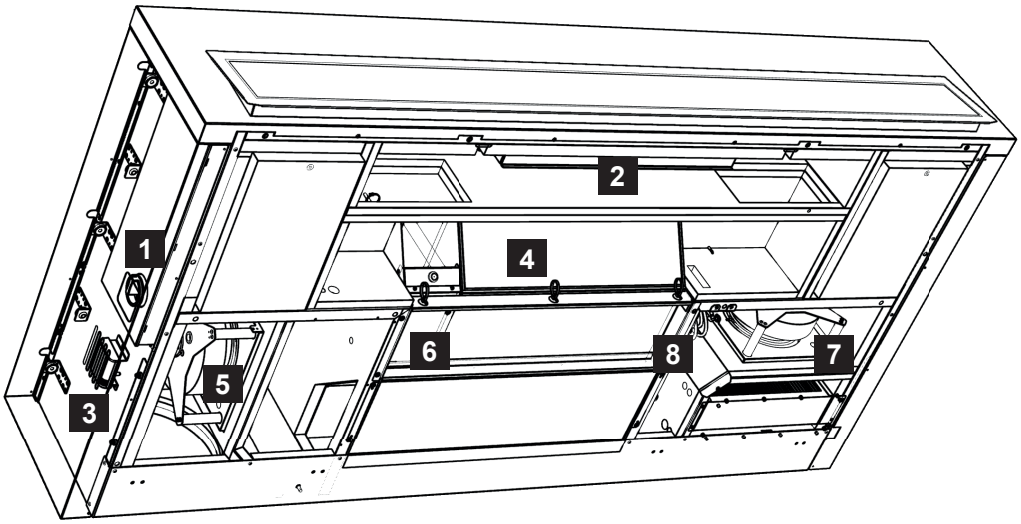
3. MAIN COMPONENTS

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
7	CO^2 sensor





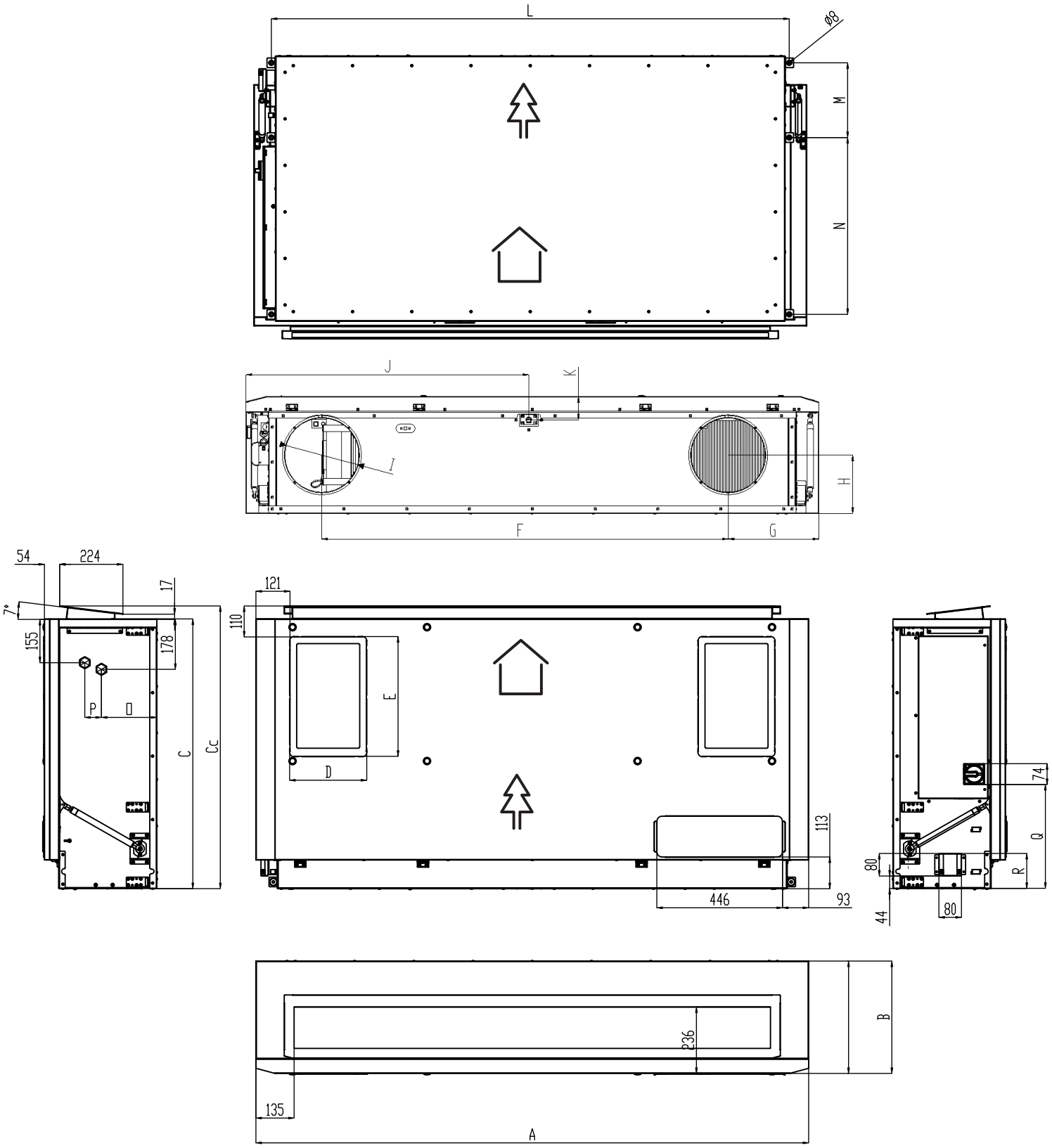
SPARE PARTS



	Description
1	Controls
2	Water coil
	Electric heater
3	CO_2 sensor
4	Heat exchanger
5	Fan motor (exhaust air)
6	Actuator for the bypass
7	Fan motor (fresh air)
8	Preheater

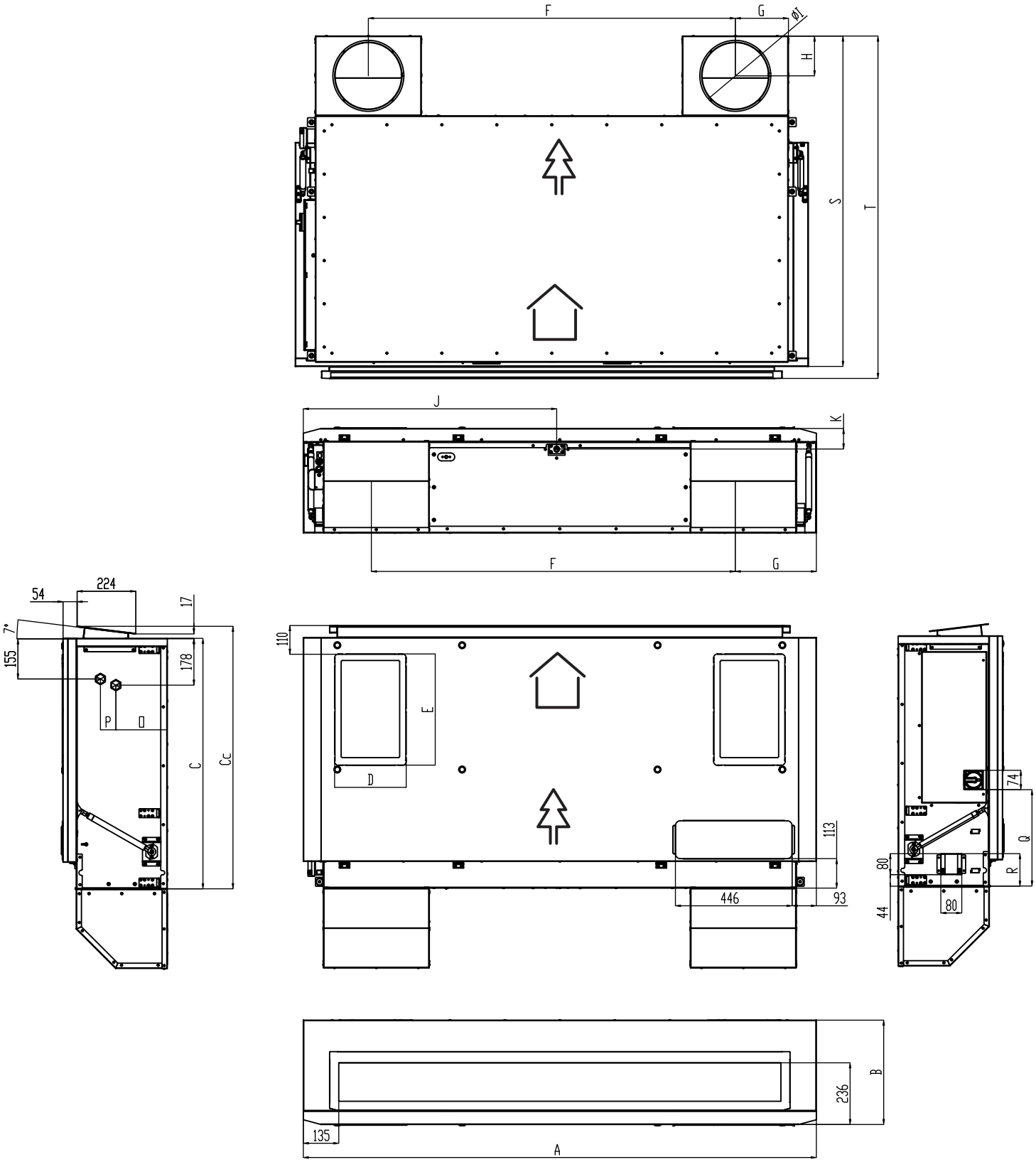
The filters and filter codes are specified in the chapter “Maintenance”, filter replacement section

4. DIMENSIONS



	[mm]																		
Tips	A	B	C	Cc	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
HRWA3-040	1960	399	957	1003	274	425	1390	310	199	255	968	79	1836	265	627	197	59	370	124
HRWA3-070	2230	459	1113	1159	285	452	1650	290	225	320	1083	79	2106	469	469	231	69	522	433
HRWA3-100	2553	576	1280	1326	410	542	1920	317	289	320	1277	79	2430	519	519	313	69	691	543

4. DIMENSIONS UPPER



	[mm]																				
Tips	A	B	C	Cc	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
HRWA3-040	1960	399	957	1003	274	425	1402	202	152	255	968	79	1836	265	627	197	59	370	124	1262	1308
HRWA3-070	2230	459	1113	1159	285	452	1672	202	188	320	1083	79	2106	469	469	231	69	522	433	1490	1536
HRWA3-100	2553	576	1280	1326	410	542	1946	227	188	320	1277	79	2430	519	519	313	69	691	543	1655	1700

5. TECHNICAL PARAMETERS

Type	Voltage [V]	Frequency [Hz]	Total consumption [W]	Total current [A]	Weight [kg]	Weight [kg] Top connection
HRWA3-040..-XC3	230	50	350	2,45	169	174
HRWA3-040..-XS0	230	50	350	2,45	167	172
HRWA3-040..-XV1	230	50	350	2,45	169	174
HRWA3-040..-XE1	230	50	1850	9,00	169	174
HRWA3-040..-EC3	230	50	1850	9,00	170	175
HRWA3-040..-ES0	230	50	1850	9,00	168	173
HRWA3-040..-EV1	230	50	1850	9,00	170	175
HRWA3-040..-EE1	230	50	3350	15,51	170	175
HRWA3-070..-XC3	230	50	350	2,45	201	207
HRWA3-070..-XS0	230	50	350	2,45	200	206
HRWA3-070..-XV1	230	50	350	2,45	201	207
HRWA3-070..-XE1	230	50	2600	12,30	202	208
HRWA3-070..-EC3	230	50	2350	11,20	203	209
HRWA3-070..-ES0	230	50	2350	11,20	201	207
HRWA3-070..-EV1	230	50	2350	11,20	203	209
HRWA3-070..-EE1	400	50	4600	9,80	203	209
HRWA3-100..-XC3	230	50	900	4,00	270	277
HRWA3-100..-XS0	230	50	900	4,00	267	274
HRWA3-100..-XV1	230	50	900	4,00	270	277
HRWA3-100..-XE1	400	50	3900	8,30	270	277
HRWA3-100..-EC3	400	50	3900	7,50	270	277
HRWA3-100..-ES0	400	50	3900	7,50	268	275
HRWA3-100..-EV1	400	50	3900	7,50	270	277
HRWA3-100..-EE1	400	50	6900	12,70	270	277
HRWA3-100..-XE0	230	50	2900	12,70	270	277
HRWA3-100..-GC3	230	50	2900	12,70	270	277
HRWA3-100..-GS0	230	50	2900	12,70	270	277
HRWA3-100..-GV1	230	50	2900	12,70	270	277

The rest of technical data can be found in the technical catalogue

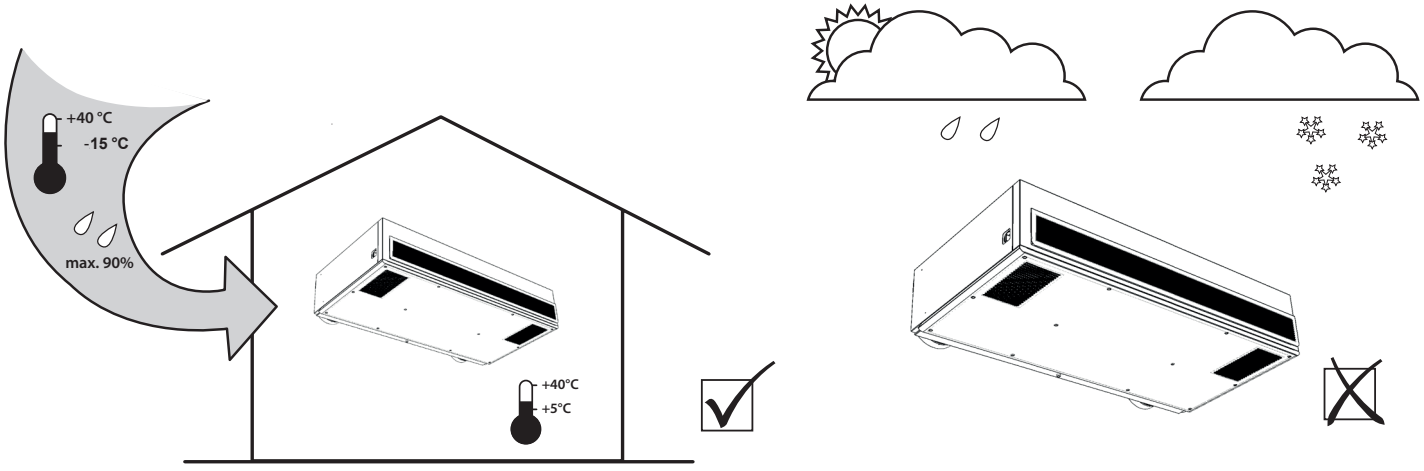
6. INSTALLATION

Select unit location

It is recommended that a ventilation system should always be designed by a licensed HVAC designer or Engineer.

TECHNICAL INFORMATION

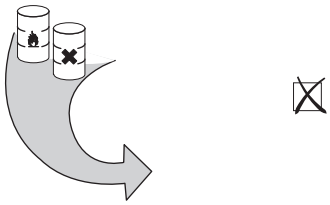
Unit is designed for indoor installation only, with an interior temperature between **+5C and 40C .**



The incoming air must have a temperature ranging from -15°C to +40°C and a relative humidity of up to 90%.
If exterior air coming into the unit is lower than -15C then unit may intitiate anti-frost protection mode to prevent the damage of interior componets due to freezing.

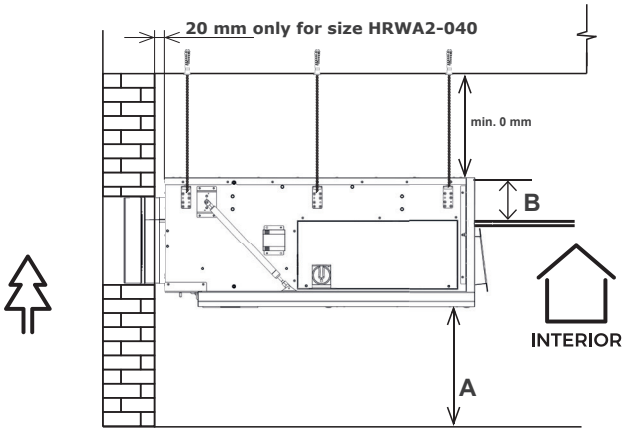
6. INSTALLATION

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

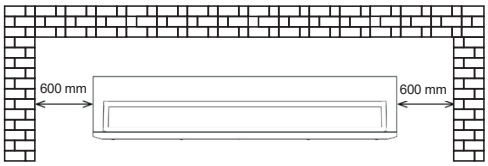


The IP protection level of the unit in the ducts is IP 20 (protection against objects bigger than 12.5 mm, does not protect against water).

Installation distance

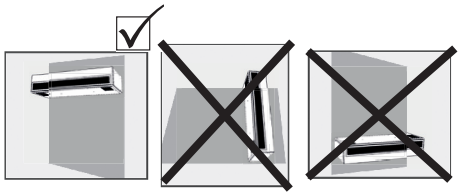


A	HRWA3-040	min. 1500mm
	HRWA3-070	
	HRWA3-100	
B	HRWA3-040	90 mm
	HRWA3-070	155 mm
	HRWA3-100	265 mm



TECHNICAL INFORMATION

- **All models of this heat recovery unit can be installed in the following position:**



- **Any other position is forbidden.**
- 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 to unit is via bottom access panel door.

Required distance

CAUTION!

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

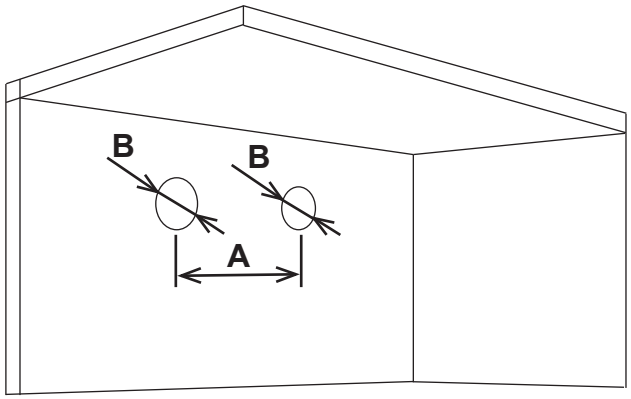
- The safe distance between combustible materials and the intake is 250 mm.

Installing the unit

- The unit is attached to the ceiling with built-in brackets, and threaded rods, and the duct connections facing the wall.

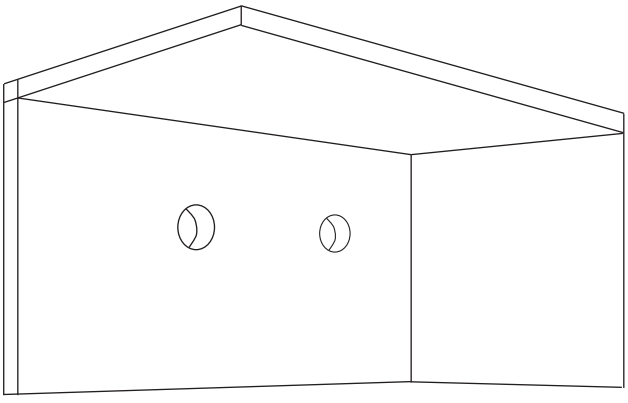
A) Preparing the holes for the duct connections

1) Measure carefully the position of the holes in the wall where the ducts are to be connected.



A	HRWA3-040	1390 mm
	HRWA3-070	1650 mm
	HRWA3-100	1920 mm
B	HRWA3-040	255 mm
	HRWA3-070	320 mm
	HRWA3-100	320 mm

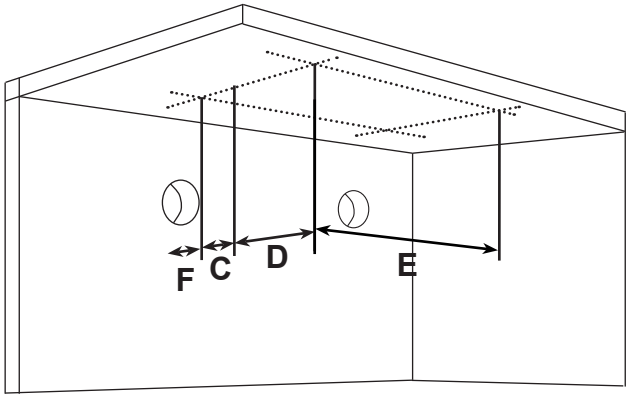
2) Drill the holes



6. INSTALLATION

B) Preparing mounting area on the ceiling

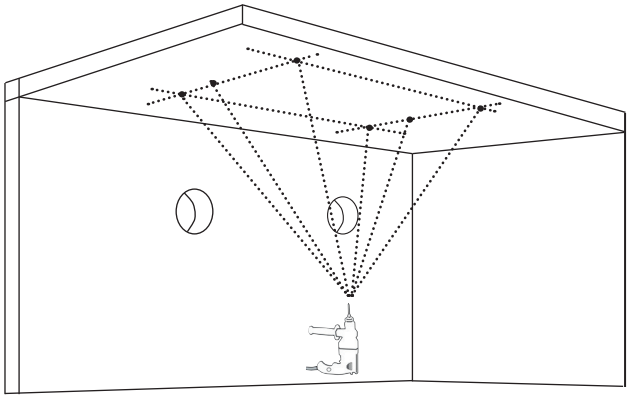
1) Measure carefully the position of the holes for the threaded rods *(not included)*



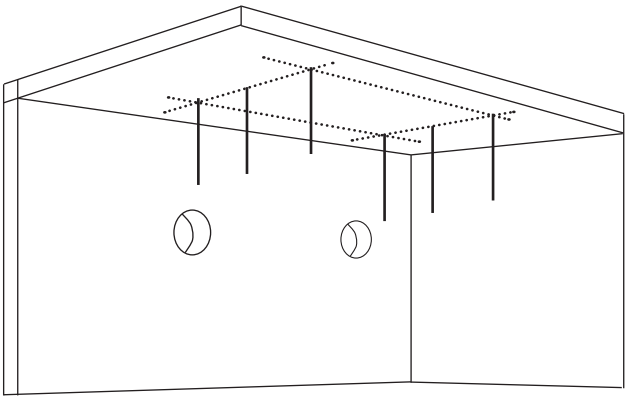
C	HRWA3-040	265 mm
	HRWA3-070	469 mm
	HRWA3-100	519 mm
D	HRWA3-040	627 mm
	HRWA3-070	469 mm
	HRWA3-100	519 mm
E	HRWA3-040	1836 mm
	HRWA3-070	2106 mm
	HRWA3-100	2430 mm
F*	HRWA3-040	46 mm
	HRWA3-070	81 mm
	HRWA3-100	115 mm

* minimum possible distance between the unit and the wall

2) Drill the holes

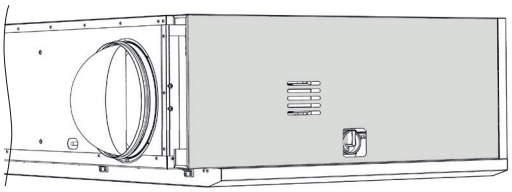


3) Install threaded rods of the appropriate length

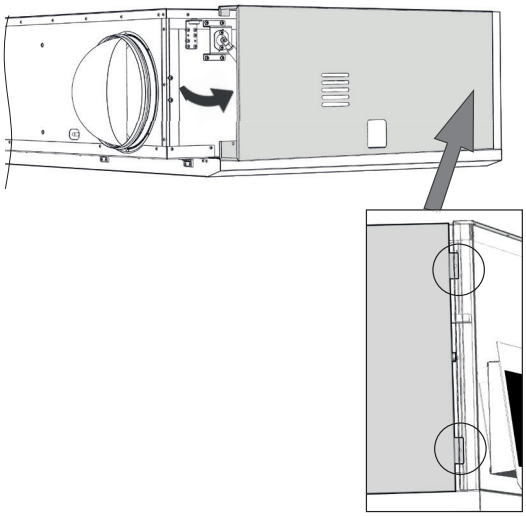


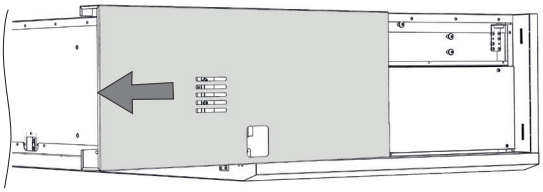
C) Preparing the unit

Remove the side covers. The side cover is secured with fasteners and magnets. No tools are needed to remove the designer side cover.

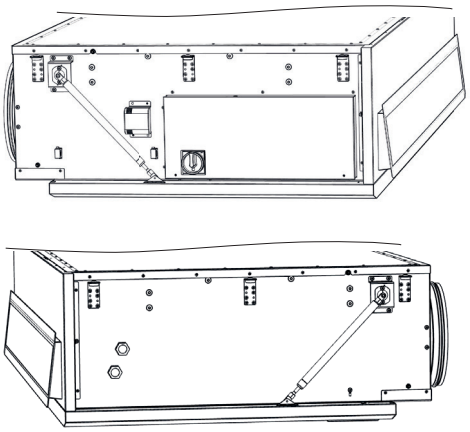


Tilt the side cover slightly to the side and remove it.

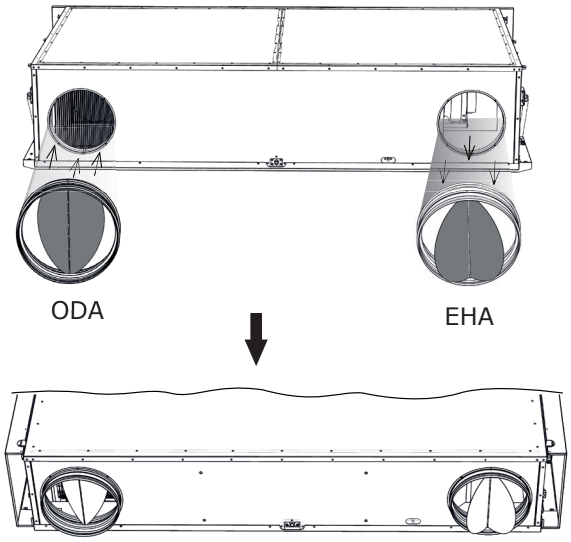




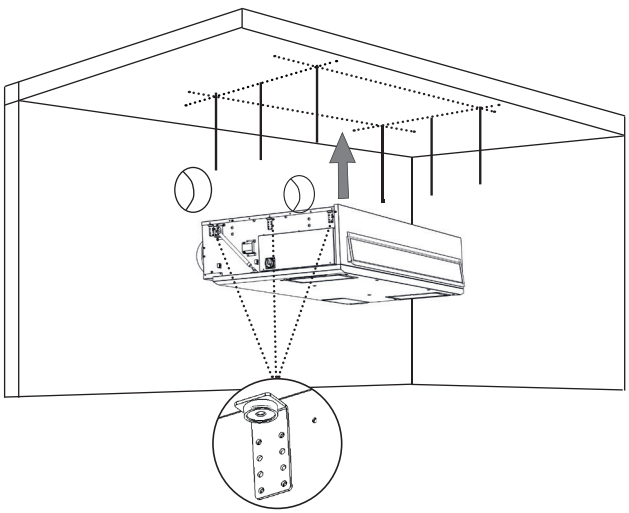
6. INSTALLATION



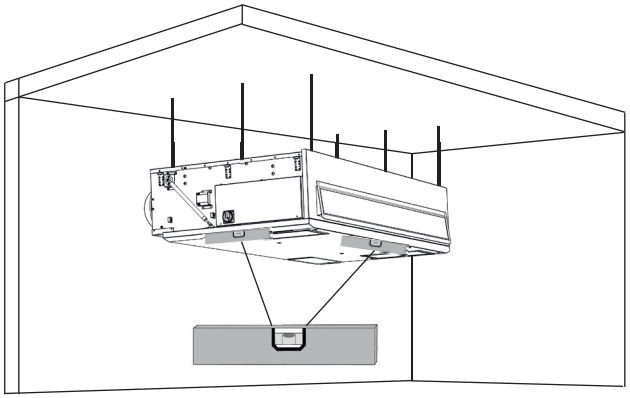
Install the flaps supplied in the package



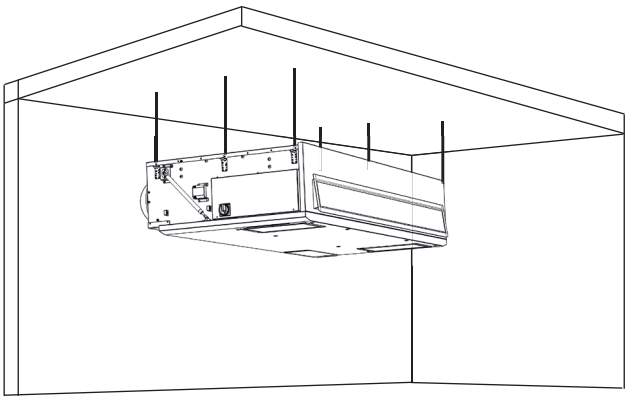
- Hang the unit from the rods and secure the holes in the wall appropriately.



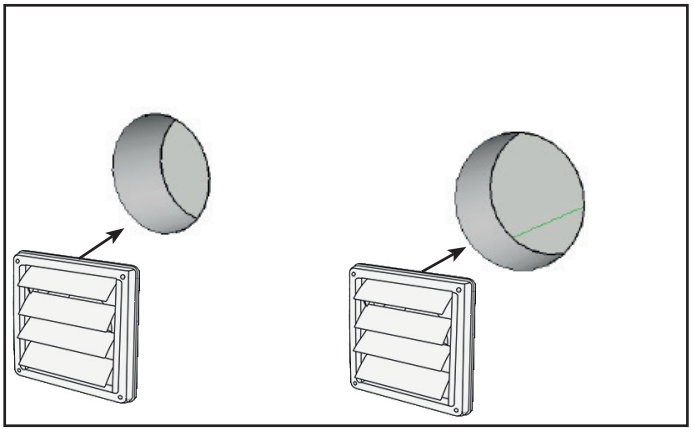
⚠ Inspect that the unit is installed horizontally.



- Inspect all mounting brakets and screws



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



6. INSTALLATION

Required distances - connection from the top

To connect the unit's air duct

ATTENTION!

Non-combustible materials must not obstruct the intake and exhaust openings.

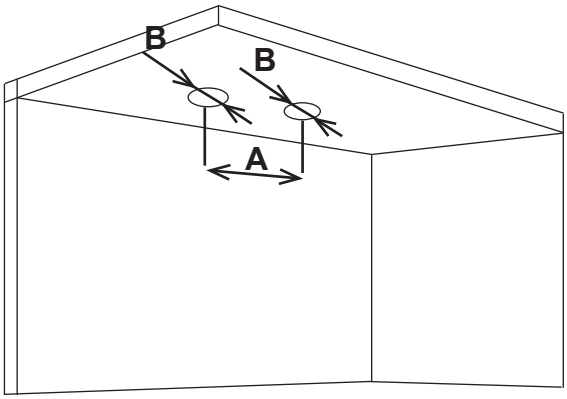
The safe distance of combustible materials from the inlet of the unit is 250 mm.

Mounting the unit

- The unit is installed using integrated brackets on the ceiling, using threaded rods so that the throat of the unit faces the wall.

Preparation of holes for pipes

1) Carefully measure the position of the holes on the ceiling, where the unit's ductwork will be connected

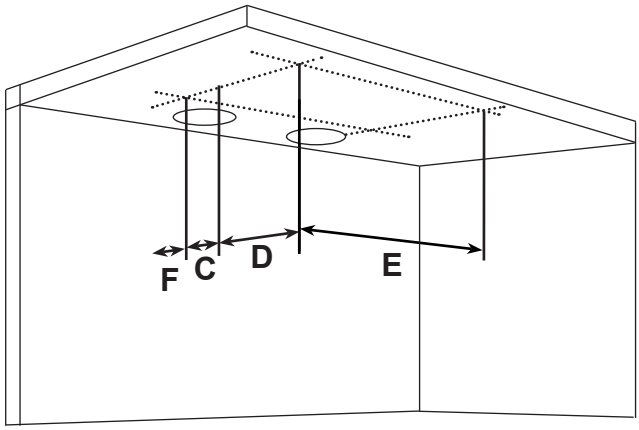


A	HRWA3-040	1402 mm
	HRWA3-070	1672 mm
	HRWA3-100	1946 mm
B	HRWA3-040	255 mm
	HRWA3-070	320 mm
	HRWA3-100	320 mm

2) Create openings for the air ducts

Preparation of fixing to the ceiling

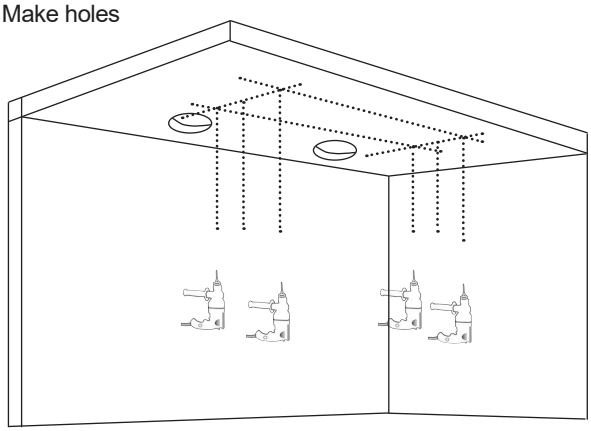
1) Carefully measure the position of the holes in the ceiling for the threaded rods
(threaded rods not included)



C	HRWA3-040	265 mm
	HRWA3-070	469 mm
	HRWA3-100	519 mm
D	HRWA3-040	627 mm
	HRWA3-070	469 mm
	HRWA3-100	519 mm
E	HRWA3-040	1836 mm
	HRWA3-070	2106 mm
	HRWA3-100	2430 mm
F*	HRWA3-040	330 mm
	HRWA3-070	458 mm
	HRWA3-100	490 mm

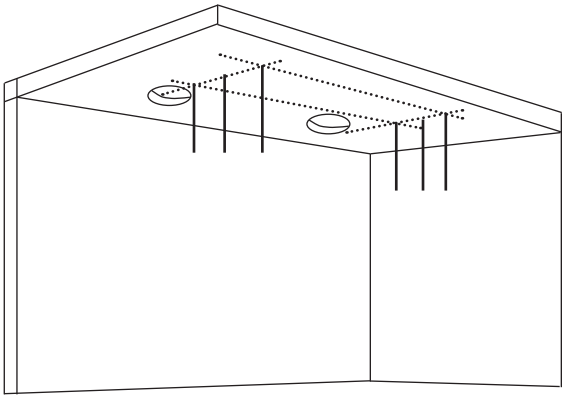
* minimum possible distance between the unit and the wall

2) Make holes

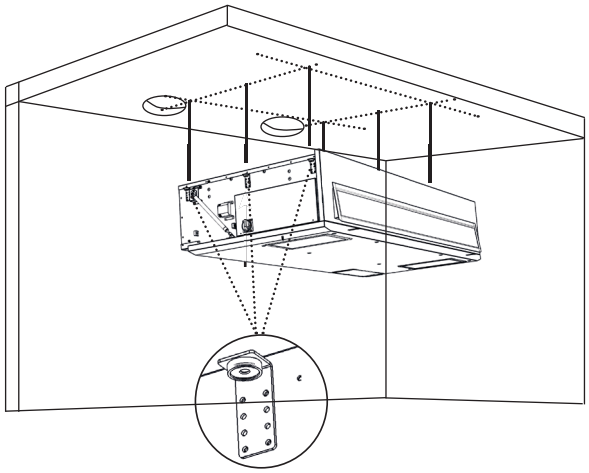


6. INSTALLATION

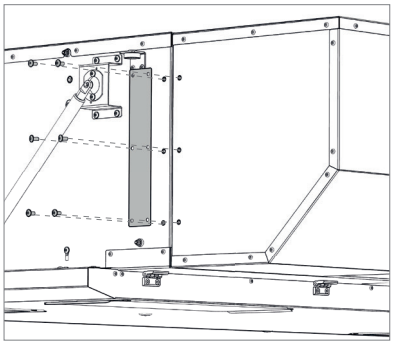
3) install threaded rods of the required length

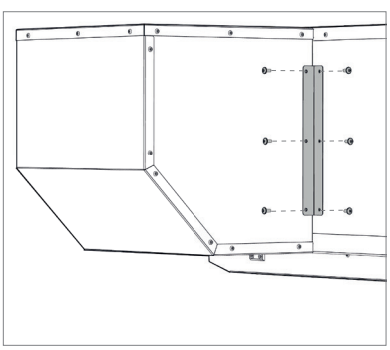


- Hang the unit on the prepared threaded rods and holes in the wall and properly secure

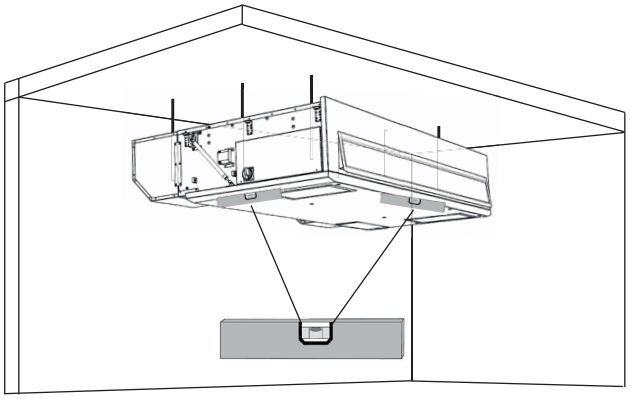


- Connect and secure the modules for connection from the top

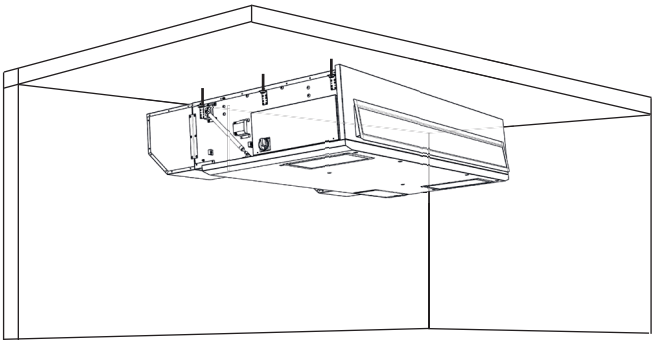




⚠ • Inspect that the unit is installed horizontally.

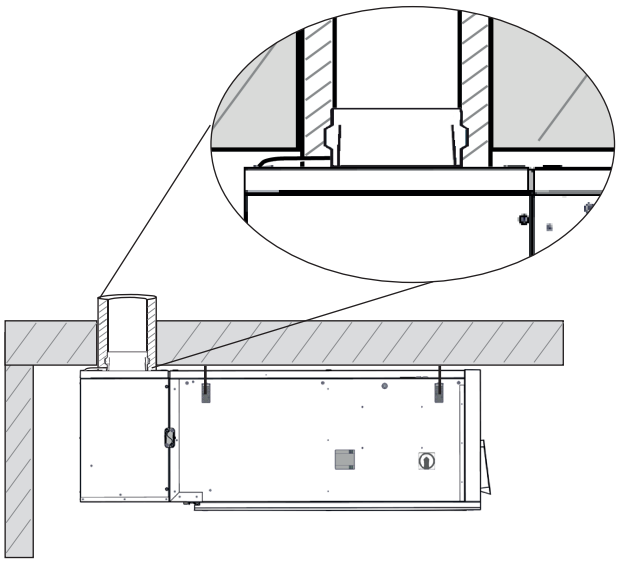


- Check securing



ATTENTION!

For ductwork connected to the unit from the top, the use of a condensate header is recommended due to the potential for condensed water to run into the unit.

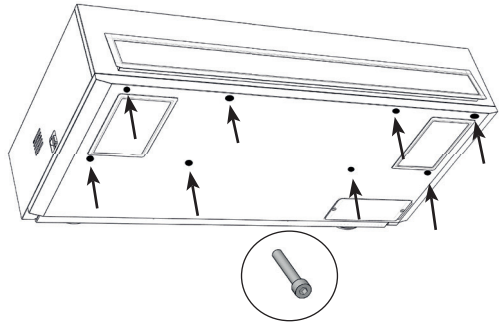


6. INSTALLATION

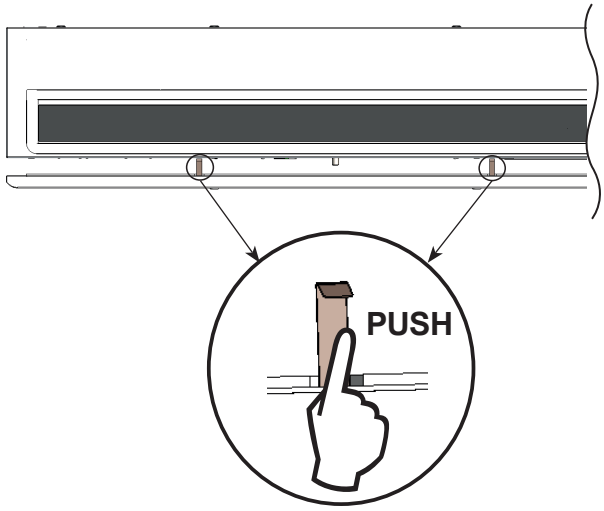
How to open the bottom access door panel

Disconnect the unit with the main switch before opening the door. Please be careful when opening the access door panel.

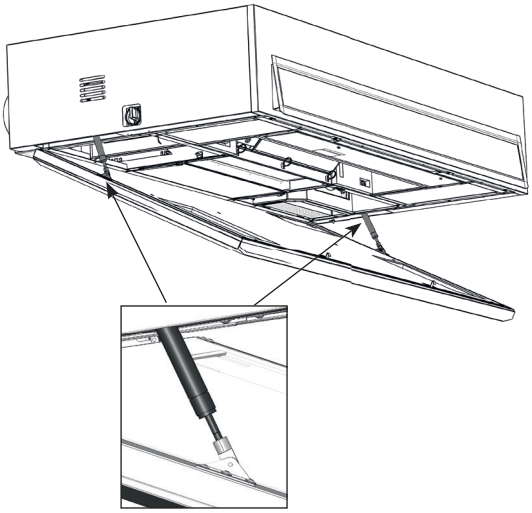
1) Remove all screws on the lower side
When removing the screw, hold the lid to prevent it from opening freely.



After removing the bolt, squeeze to release the hinge holding system.

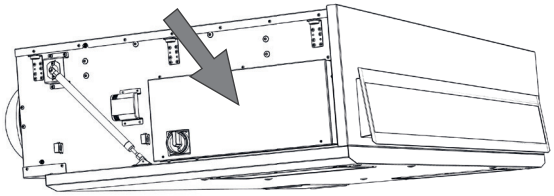


The cover is secured by struts. Carefully lower the lid downwards.

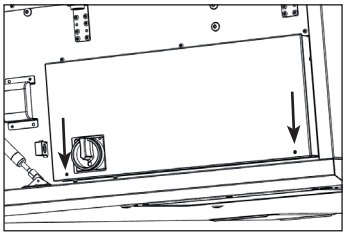


Access to controls box

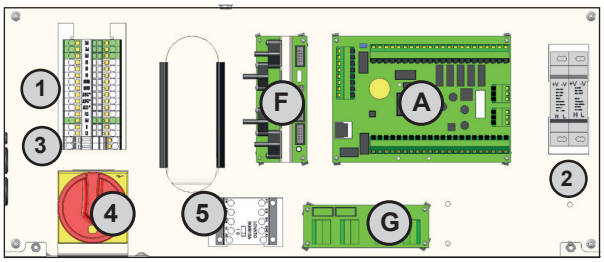
The control box is located outside the unit, on the left side under the design side cover.



To access the electronics, remove the following screws



Electronic parts:



A	Electronic board - main control module
G	Electronic board - module for units with water coil
F	Electronic board - pressure measurement module
1	Terminals for the power supply (L), connect N and PE cables and the output of the auxiliary power supply (12V, 24V)
2	Auxiliary power supply (12V, 24V)
3	Engine fuse
4	Main power switch
5	Safety Contactor (units with electric heater)

6. INSTALLATION

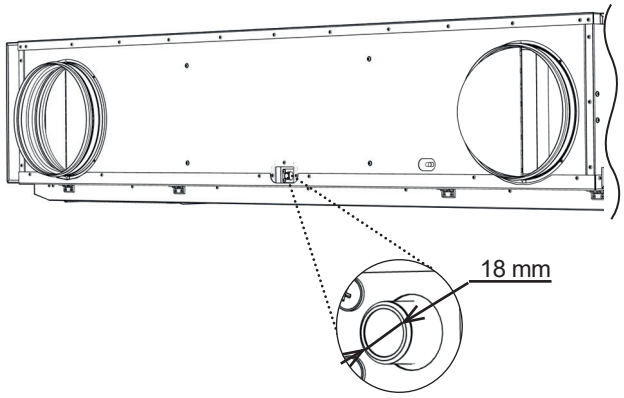
CONNECTING THE CONDENSATE DRAIN WITHOUT CONDENSATE PUMP

PLEASE NOTE!

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

ATTENTION!

If siphon is not properly connected, the unit may be flooded and damaged.

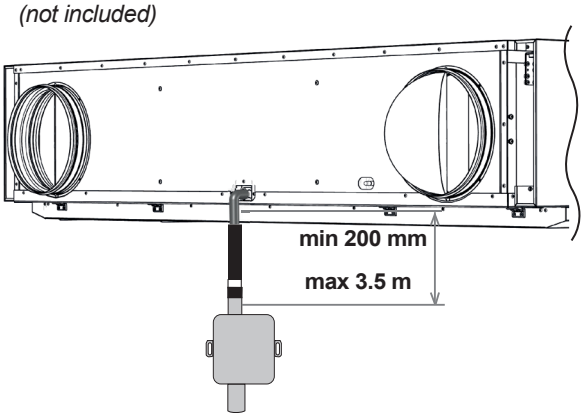


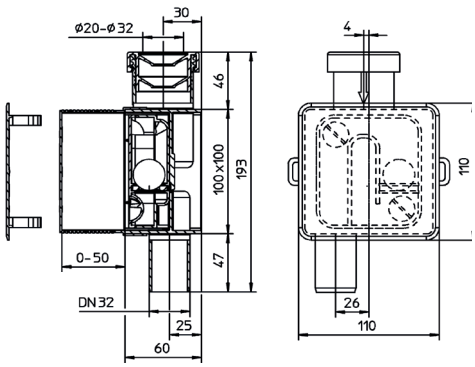
RECOMMENDED SIPHON TYPES:

Siphon (SK-HL138)

Wall mounted or embedded in wall type.

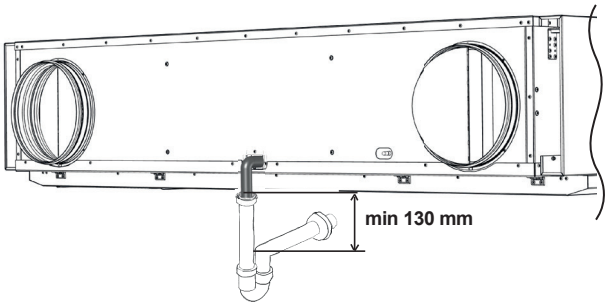
(not included)

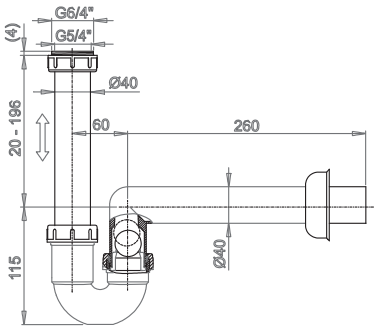




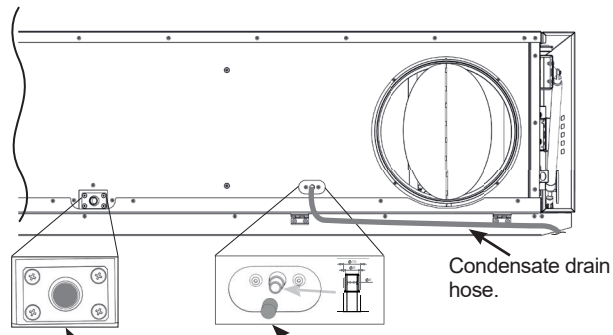
Siphon (SK-AKS3)

(not included)





CONNECTING THE CONDENSATE DRAIN WITH CONDENSATE PUMP

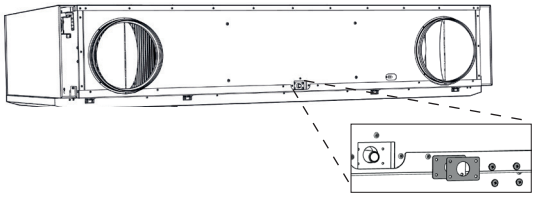


6. INSTALLATION

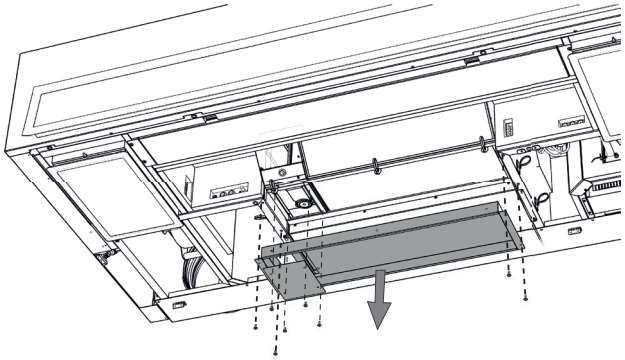
INSTALLATION OF A CONDENSATE PUMP

More information can be found in the instructions/technical sheet of the pump (not included in the delivery).

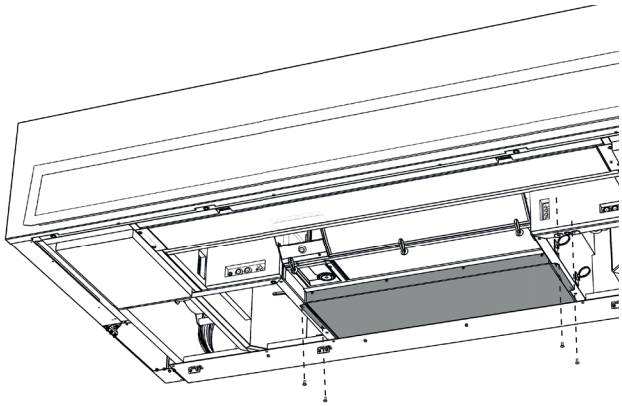
Unscrew of the condensation pipe holder and remove the pipe holder.

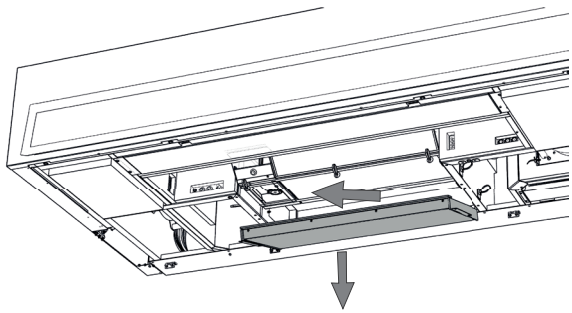


Unscrew the heat exchanger holder screws and remove the holder.

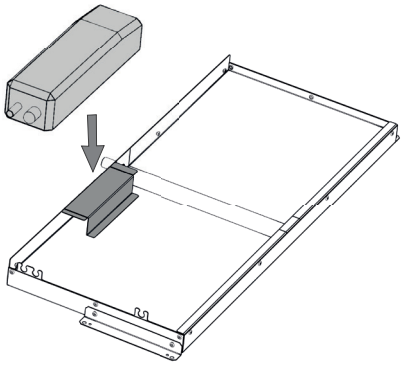


Once that has been removed, unfasten the screws holding the condensate drain pan. Pull the condensate drain pan towards the heat exchanger, down, and out.

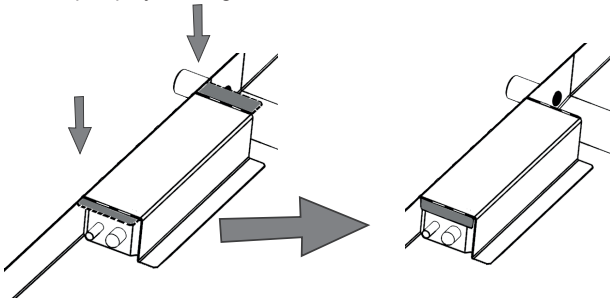




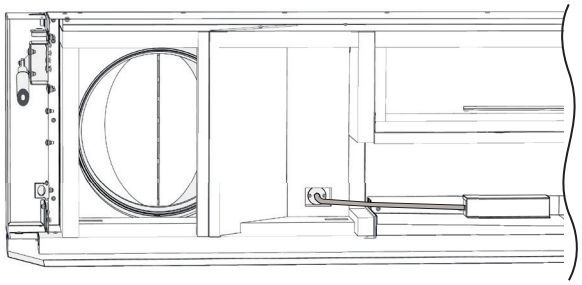
Insert the condensation pump into the prepared holder in the condensation tub.



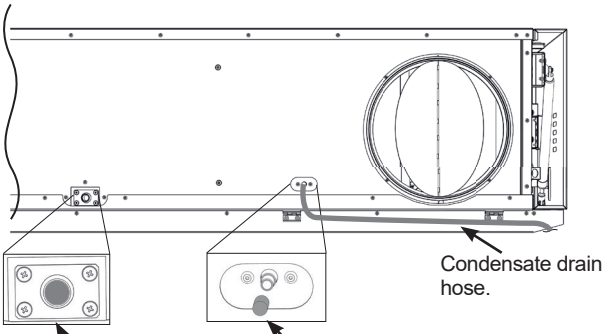
Fix the pump by bending the holder from the sides.



Connect the condensation hose to the pump and connect it to the drain hole (see picture below).

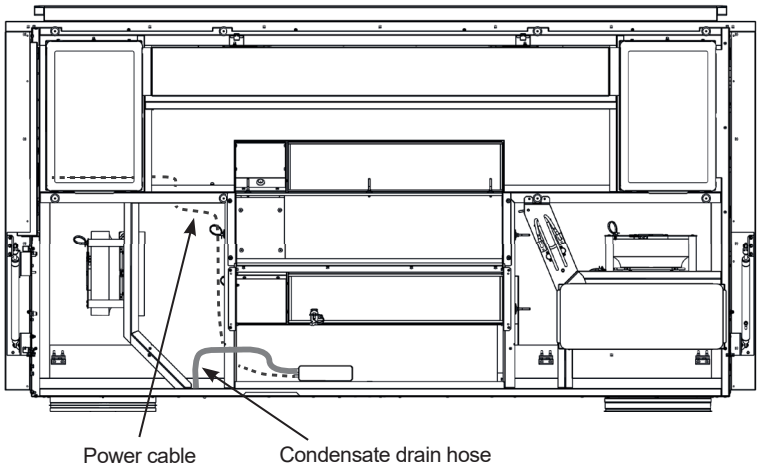


Install the condensate drain back into the unit.

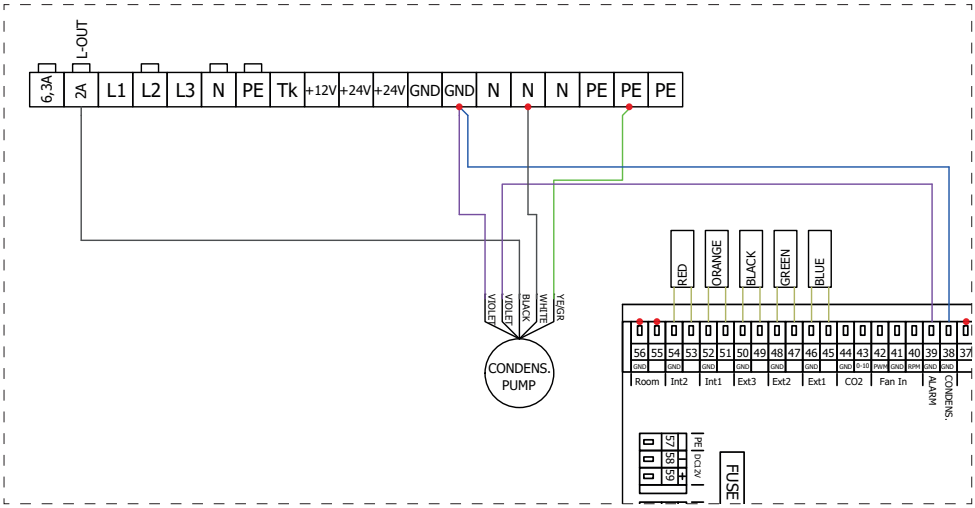


6. INSTALLATION

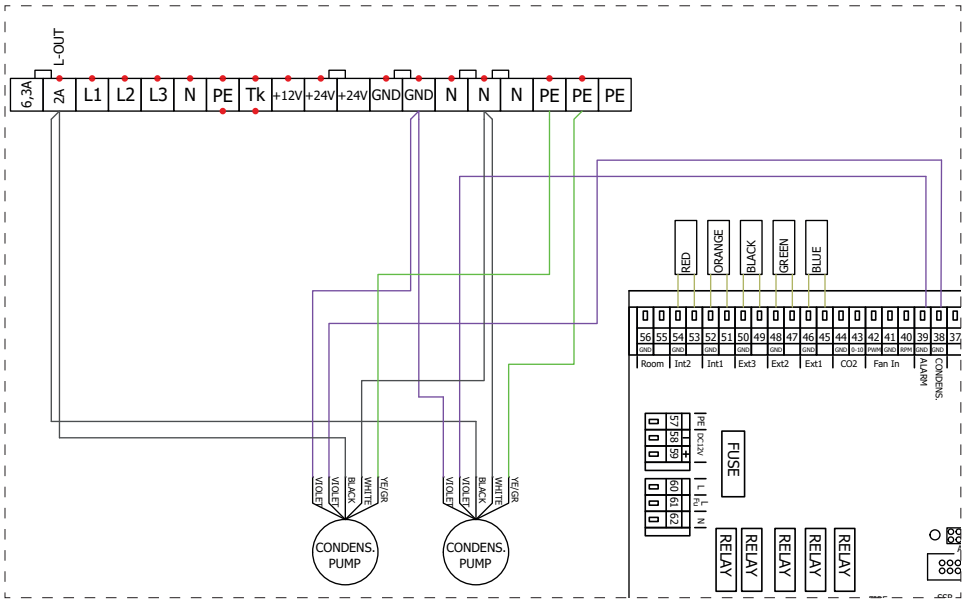
Pull the power cable through the grommets inside the unit and connect to the terminals in the controller (see diagram below).



1) Wiring diagram of condensate pump without water exchanger for heating/cooling (C/O)



2) Wiring diagram of condensate pump with water exchanger for heating/cooling (C/O)

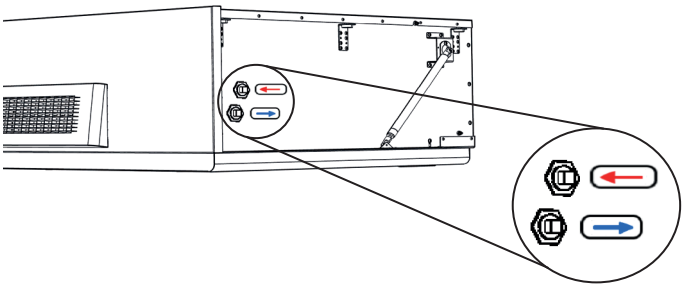


6. INSTALLATION

CONNECTION OF THE WATER COIL / C/O

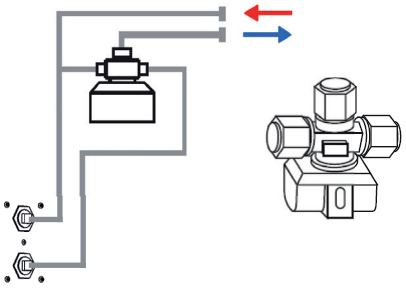
Be careful when you connect water pipes.

- use flexible hoses to connect the water heater.
- the connection and pressure tests of the heater must be carried out by a person with qualifications in plumbing and in compliance with the applicable regulations.
- the diameters of the pipes to connect the water heater are listed in the section DIMENSIONS.
- the heater is designed for water with a maximum pressure of 1.6 MPa and a maximum temperature of 100°C.

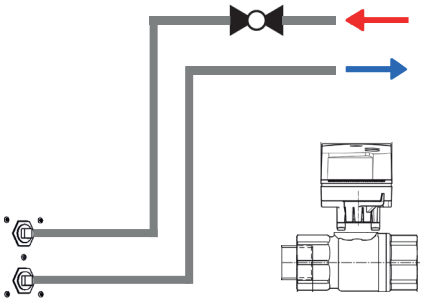


SENSE CX xxx V1	**2x G ¾“**
SENSE CX xxx C3	**2x G ¾“**

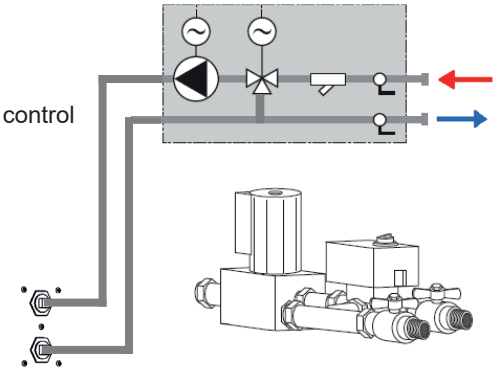
1. 3-way valve with 0-10V control



2. 2-way valve with 0-10V control



3. 3-way valve mixing unit with 0-10V control



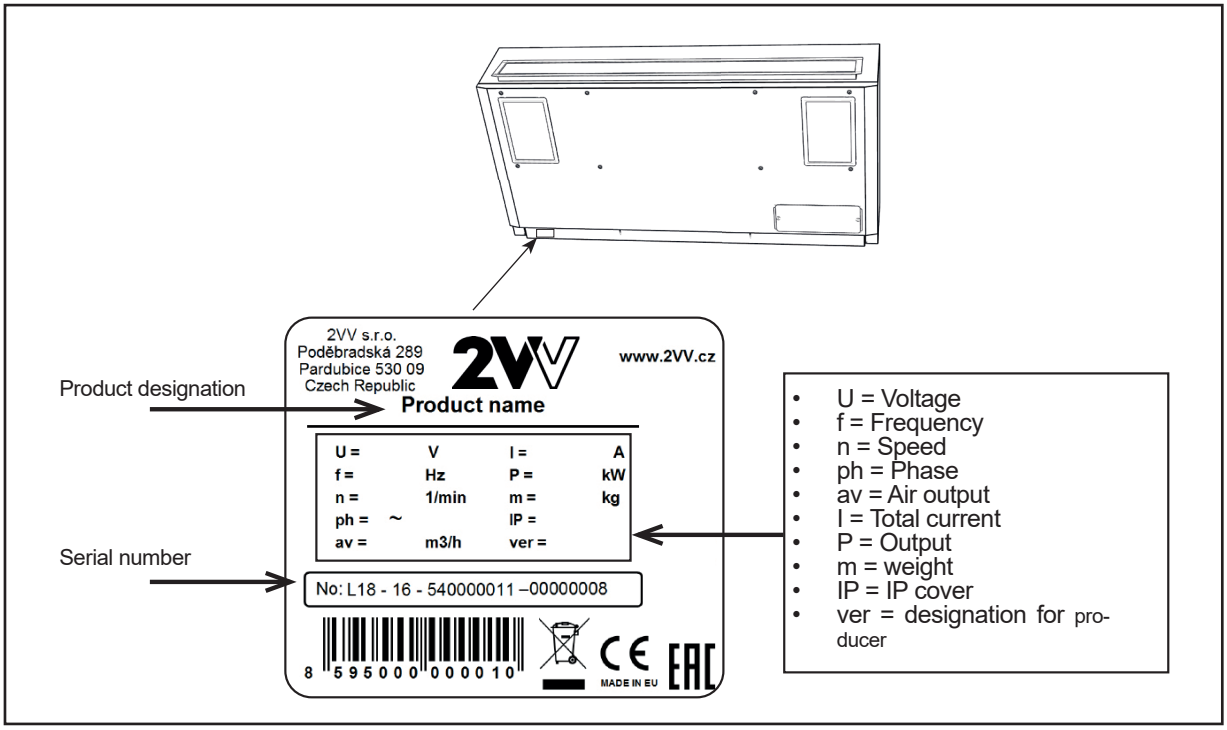
6. INSTALLATION

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 unit installation should be done by a qualified technition with experience in electrical applications. The manual must observed, together with the laws and regulations applicable in the country.**
- **The wiring diagrams located on 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 via isolated cable with a heat resistance in compliance with the diameter and the applicable laws and regulations of the country where the unit is installed.**
- **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 components guarantees the correct function of the unit.**

(Fig. 1) Location of unit label and explaination of abbreviations .



6. INSTALLATION

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 power consumption and the specific requirements of the place of installation.

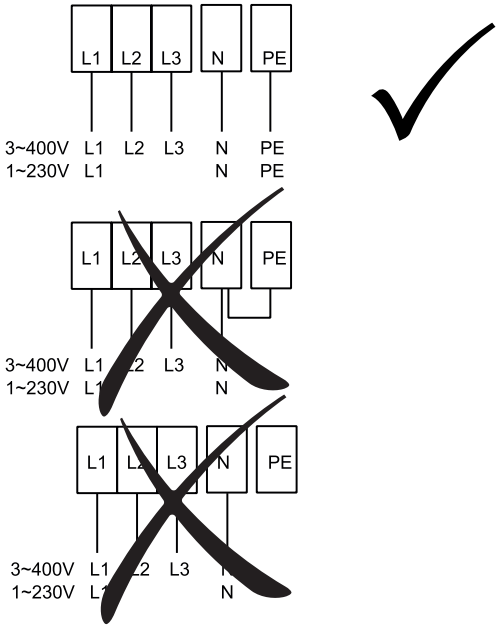
The unit must be connected with a TN-S system, meaning that the neutral conductor must be always connected.

All the phases of the power supply must be connected through the appropriate type of circuit breaker. The distance between open contacts must be greater than 3 mm.

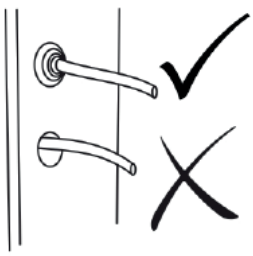
The unit must be connected in a way that it may be disconnected from the power supply with a single switch.

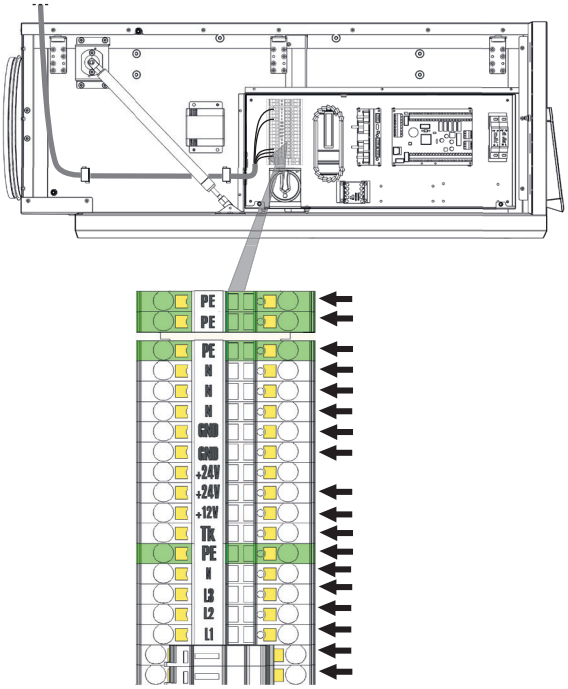
TECHNICAL INFORMATION

- The electrical parameters can be found on the manufacturer's labels inside and on the side of the unit
- The connection diagram is glued to the internal side of the removable lid of the regulator box.
- Each element must be connected using an original cable or cable as per the specification for each element.



Run the power cables through the V-TEC cable gland on the controller.





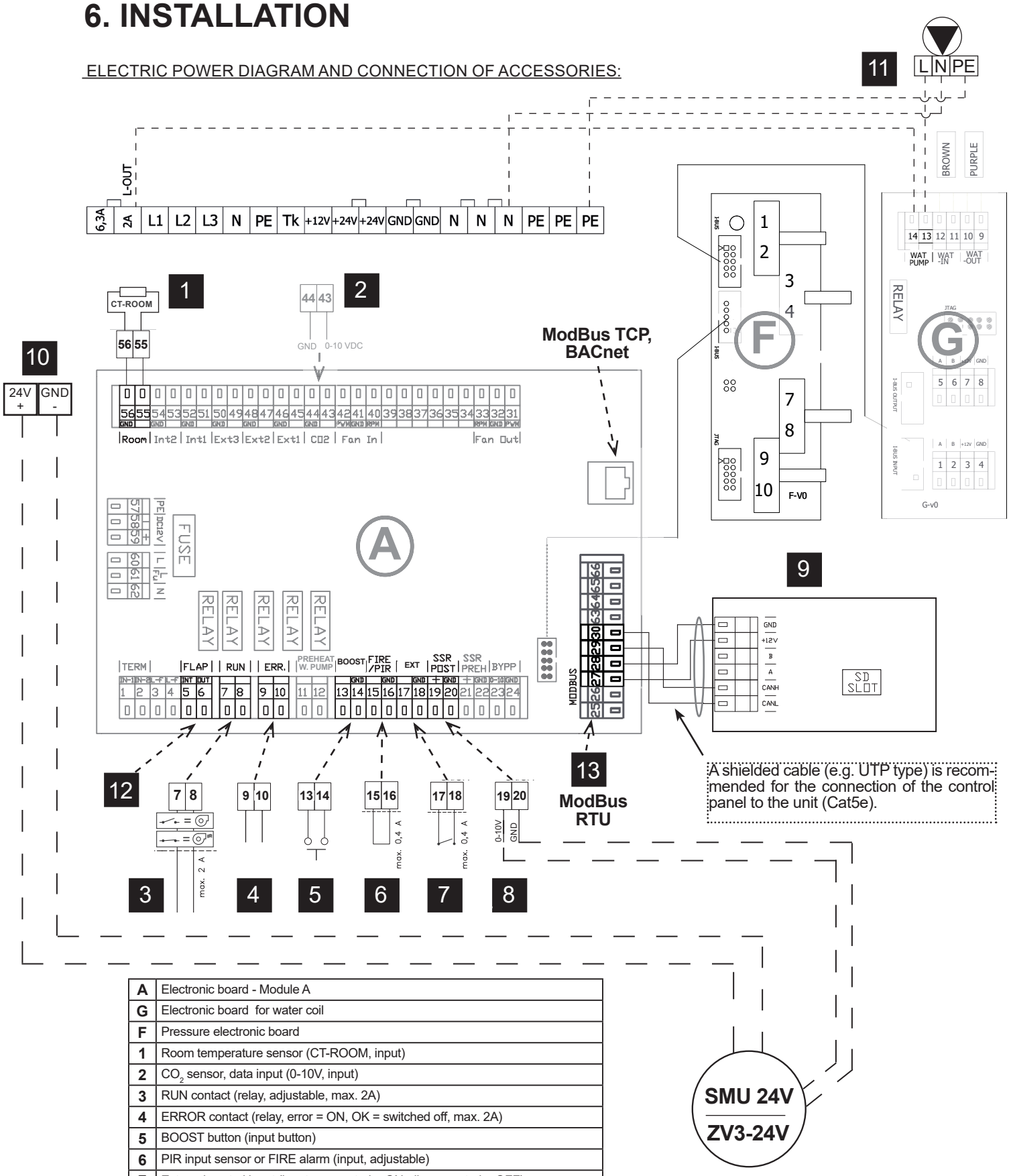
⚠ The power supply connection must be designed by an electrical engineer.

Accessories

Connect electrical accessories for the unit to the electronic terminals as shown in the wiring diagrams located on the unit.

6. INSTALLATION

ELECTRIC POWER DIAGRAM AND CONNECTION OF ACCESSORIES:



A	Electronic board - Module A
G	Electronic board for water coil
F	Pressure electronic board
1	Room temperature sensor (CT-ROOM, input)
2	CO_2 sensor, data input (0-10V, input)
3	RUN contact (relay, adjustable, max. 2A)
4	ERROR contact (relay, error = ON, OK = switched off, max. 2A)
5	BOOST button (input button)
6	PIR input sensor or FIRE alarm (input, adjustable)
7	External control input (input, connected = ON, disconnected = OFF)
8	Output for SMU actuator (output, 0-10V), only in version HRWA3-...-.V1/C3...
9	Control panel (must be connected – cable not included)
10	24V power supply for the mixing junction or specific components (output)
11	Circulation pump (relay max. 2A)
12	230V output for air dampers (Flap IN, Flap Out)
13	Modbus RTU (A-25, B-26, 28 or 66-GND)

6. INSTALLATION

External control

TECHNICAL DATA

- *Low voltage switching contact - maximum possible contact load 12 V, 0.4 A.*
- *CABLE: Cable with two conductors of cross section min. 0.5 mm² Maximum length 50 m.*
- *The contact is normally closed. When the contacts open, the unit turns off.*

Fire contact

TECHNICAL DATA

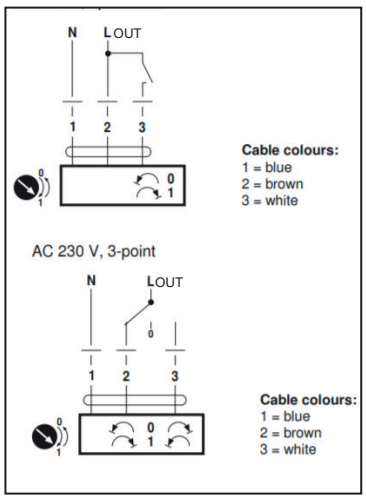
- *Low voltage switching contact - maximum possible contact load 12 V, 0.4 A.*
- *CABLE: Cable with two conductors of cross section min. 0.5 mm² Maximum length 50 m.*
- *The contact is normally closed. When the contact disconnects, the unit operates according to the settings.*

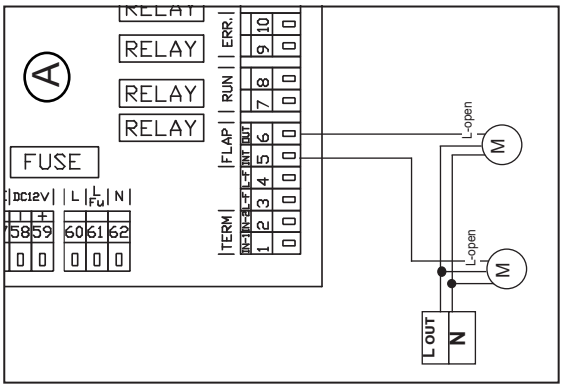
Actuator to close the air supply regulator with a spring (accessory)

TECHNICAL DATA

- *The actuator is supplied by 230 V AC – control with a cable with three conductors*
- *CABLE: cable with three conductors of a cross section min. 0.5 mm². Maximum length 50 m.*

Not included!





Movement sensor

Need to be activated in menu 1616 - HW settings. The motion sensor can only be used in CAV mode.

Low voltage switching contact - maximum possible contact load 12 V, 0.4 A.
CABLE: Cable with two conductors of cross section min. 0.5 mm2 Maximum length 50 m. The contact is normally open. When the contact closes, the unit operates according to the ventilation rate settings.

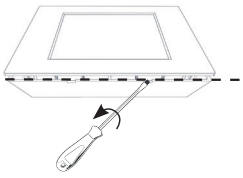
Control unit

To start the unit, connect the remote control to the unit with the control cable (UTP).

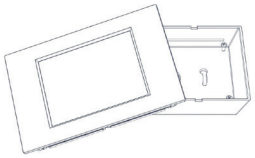
- *There should be as much distance as possible between the supply and control cables.*
- *Make sure that the cable snaps into the connector.*

1.

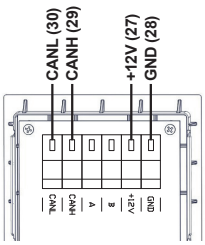
2.

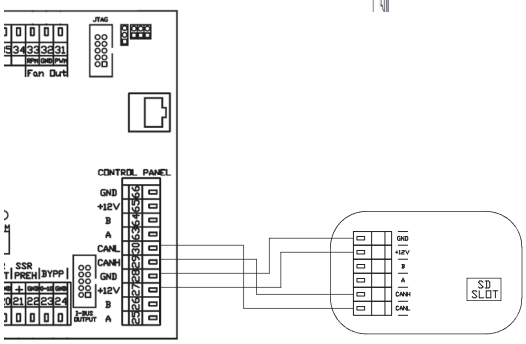


3.



4.

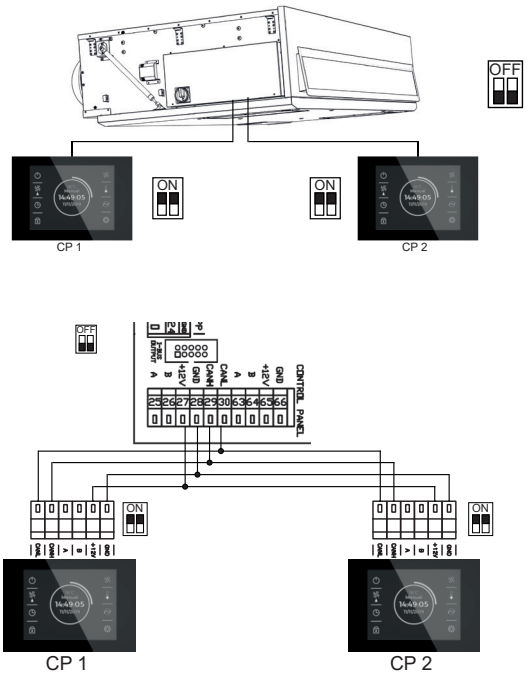




(+12V- 27, GND- 28, CANH- 29, CANL- 30)

6. INSTALLATION

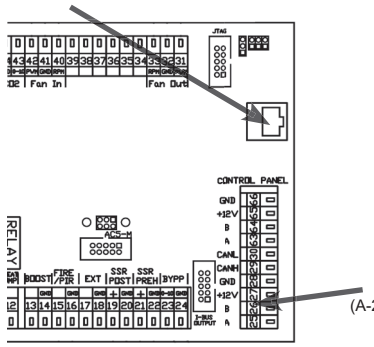
2nd Control panel



Connecting the unit to a BMS control system

The control of the unit is fitted with a RS-485 and and RJ45 interface as standard. Insert the cable into one of the connectors on the unit's electronic board. Connect the other end to the main control unit. For protocol details (Modbus-TCP, Modbus-RTU), contact 2VV.

RJ45 connecteur- Ethernet, Modbus TCP, BACnet



MODBUS RTU
(A-25, B-26, 28 or 66-GND)

7. COMISSIONING

READ CAREFULLY!

Before the initial commissioning, check:

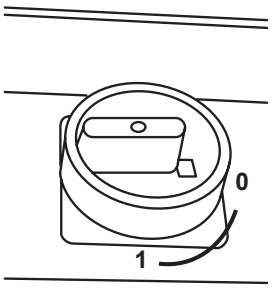
- *that the unit is properly fastened to the supporting structure*
- *that the unit is properly closed and that all collars are connected to ducts or are fitted with rain blinds to prevent water from coming into contact with any moving or heating parts.*
- *that the wiring is well connected, including earthing and protection against external start-up.*
- *that all the accessories are well connected.*
- *that the condensate drain is well connected to the drainage piping (units with cooling).*
- *that the connection complies with the instructions herein.*
- *that no tools or other objects have been left inside the unit – it could result damage.*

CAUTION!

- *Any intervention or modifications to the internal connection are forbidden and shall result on loss of warranty.*
- *We recommend using the accessories we supply. In case of doubt regarding the use non-original accessories, contact 2VV.*

ACTIVATION

To activate the unit (Stand by mode), it is necessary to turn the main switch on (position I). After activation, the display on the control panel lights up and data download will start. After complete download of these data, the unit is ready for operation.



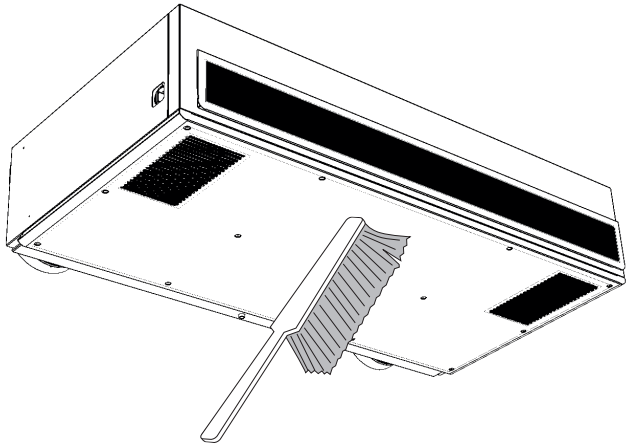
8. MAINTENANCE

REGULAR CLEANING OF THE UNIT

- We advise the unit be inspected at regular intervals or according to the demands of the operating environment.
- 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 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.



Clean the heat recovery unit with a vacuum cleaner, a small brush, cloth and soapy water, especially the heat exchanger. Do not clean the unit with the following agents: Sharp objects, aggressive chemicals, solvents, harsh cleaning agents, pressurized water, pressurized air or steam.

ERROR MESSAGES

Clogged filter

- Checking for possible filter clogging is signaled on the unit controller

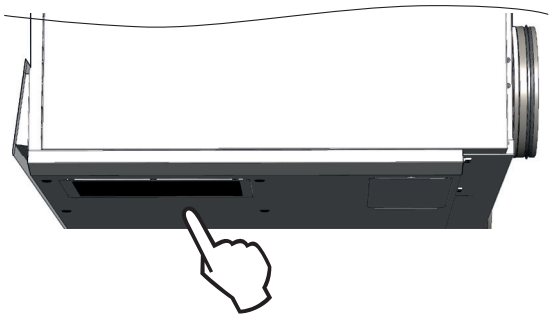
- The clogging of the filters is automatically assessed. The unit will automatically recognize that a new filter has been installed.

CHANGE FILTERS

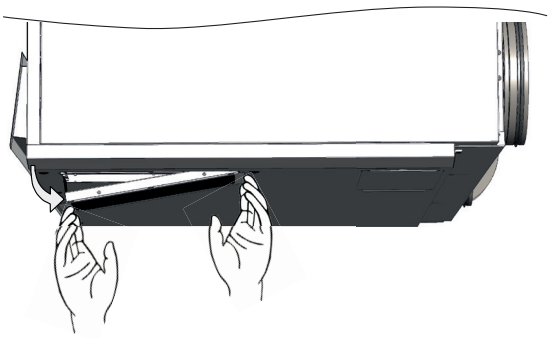
CAUTION!

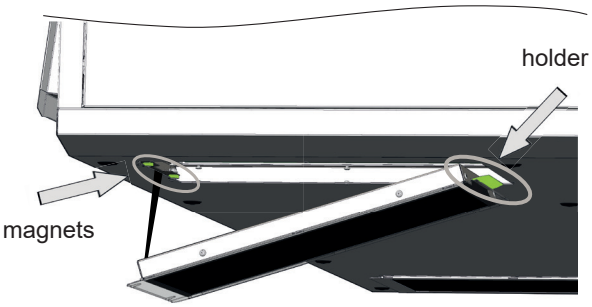
Failure to properly clean (change) the filters may reduce the performance of the unit and damage the fan.
Disconnect the unit with the main switch before opening the lid. Be especially careful when manipulating it.

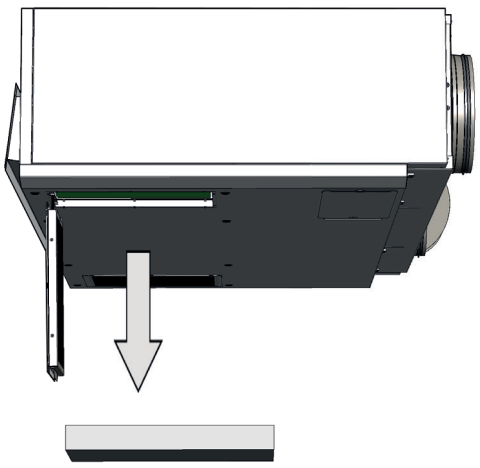
FILTER G4 (M5)



The filter cover is held in place by magnets and a holder.



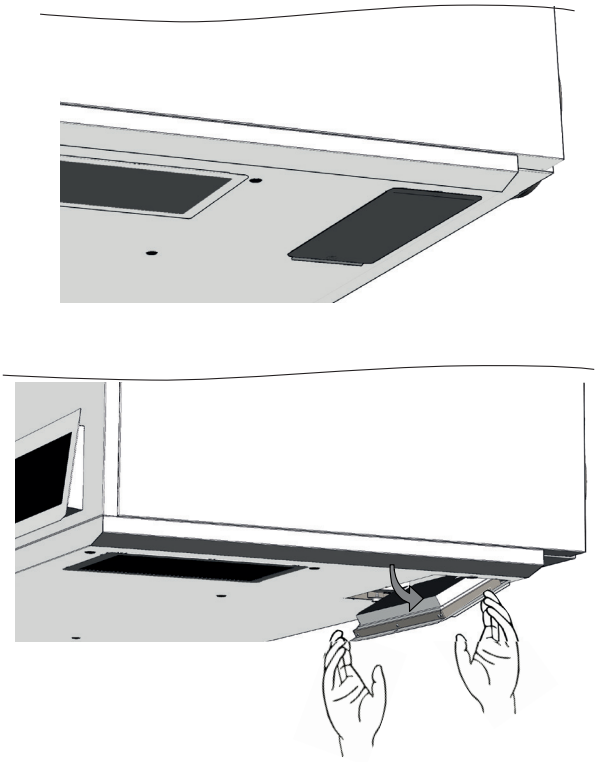




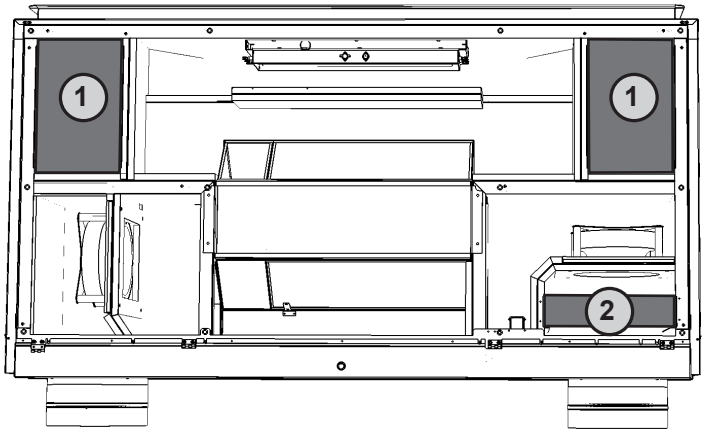
8. MAINTENANCE

FILTER **F7**

The filter cover is held on by magnets.



2) Replacing filters.
After replacing filters, 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.



Description	HRWA3-xxx
	code
Filtr Coarse 65% (G4) (2 ps)	HRWA3-xxxH-FI-G4-0A0
Filtr ePM 1 60% (F7) (1ps)	HRWA3-xxxH-FI-F7-0A0

xxx = 040 / 070 / 100

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 over-heated	Unit is working	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 working	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 working	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 working	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 working	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 working	Temperature sensor failure	Check that the sensor is correctly connected to the electronics or test it measuring its resistance (the resistance value at +20°C is around 10kW)
17 – Inlet – Failure of the temperature sensor behind the exchanger (T-EXT2)	Unit is working	Temperature sensor failure	Check that the sensor is correctly connected to the electronics or test it measuring its resistance (the resistance value at +20°C is around 10kW)
18 – Inlet – Temperature sensor failure in the supply canal (T-EXT3)	Unit is working	Temperature sensor failure	Check that the sensor is correctly connected to the electronics or test it measuring its resistance (the resistance value at +20°C is around 10kW)
21 – Exhaust – Temperature sensor failure in the exhaust canal (T-INT1)	Unit is working	Temperature sensor failure	Check that the sensor is correctly connected to the electronics or test it measuring its resistance (the resistance value at +20°C is around 10kW)
22 – Exhaust – Failure of the temperature sensor of the exchanger's anti-freeze protection (T-INT2)	Unit is working	Temperature sensor failure	Check that the sensor is correctly connected to the electronics or test it measuring its resistance (the resistance value at +20°C is around 10kW)
23 - Temperature sensor failure of the exchanger's water supply (T_WATER_IN)	Unit is not working	Temperature sensor failure	Check that the sensor is correctly connected to the electronics or test it measuring its resistance (the resistance value at +20°C is around 10kW)
24 - Failure in the return water sensor of exchanger (T_WATER_OUT)	Unit is not working	Temperature sensor failure	Check that the sensor is correctly connected to the electronics or test it measuring its resistance (the resistance value at +20°C is around 10kW)
25 – Room temperature sensor failure (T_Room)	Unit is working	Temperature sensor failure	Check that the sensor is correctly connected to the electronics or test it measuring its resistance (the resistance value at +20°C is around 10kW)
70 - Anti-freeze protection of the water heat exchanger	Unit is ventilating	The anti-freeze protection of the water heat exchanger is active	The automatic protection of the water exchanger has been activated in order to prevent damages due to low air temperature. This is an autonomous function and will be terminated once the risk of frost disappears.
73 - WCO detects temperature of the water supply (cold / hot)	Unit is ventilating	The unit controls the temperature of the liquid in the exchanger	The automatic process that assess the water temperature in the exchanger to activate the next steps is in progress
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

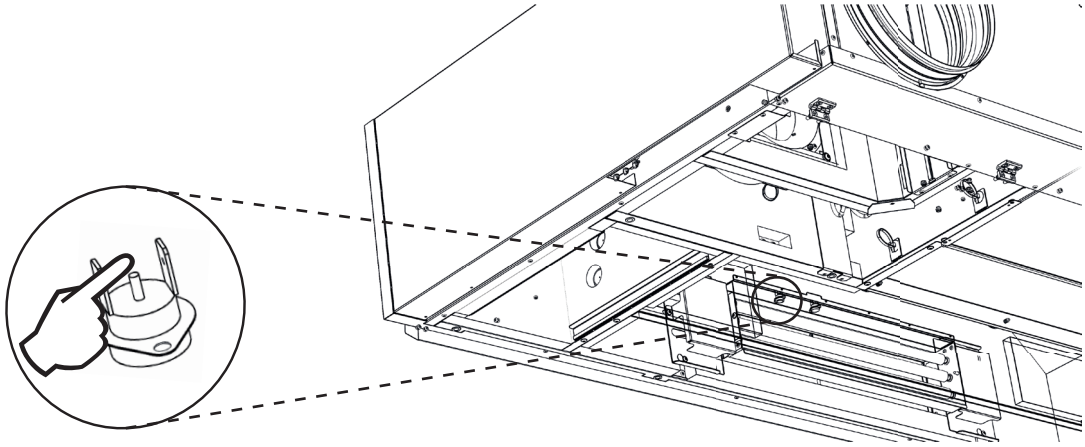
9. TROUBLESHOOTING

REPAIRING OVERHEATED ELECTRIC PREHEATER AND AFTER-HEATER

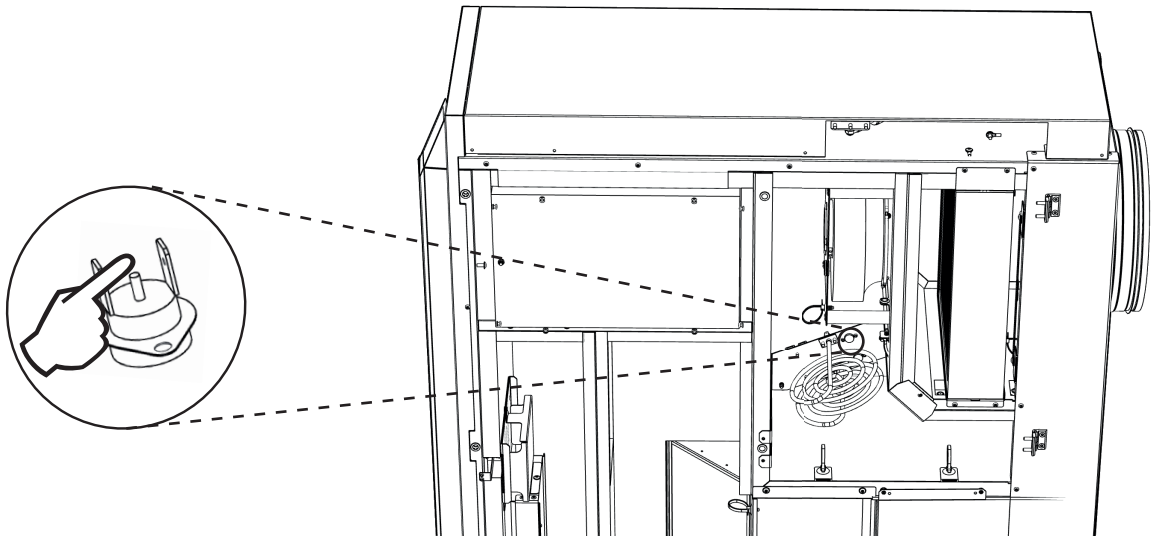
CAUTION!

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 preheater and after-heater.

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



- The reset of the electric preheating is located here:



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.

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