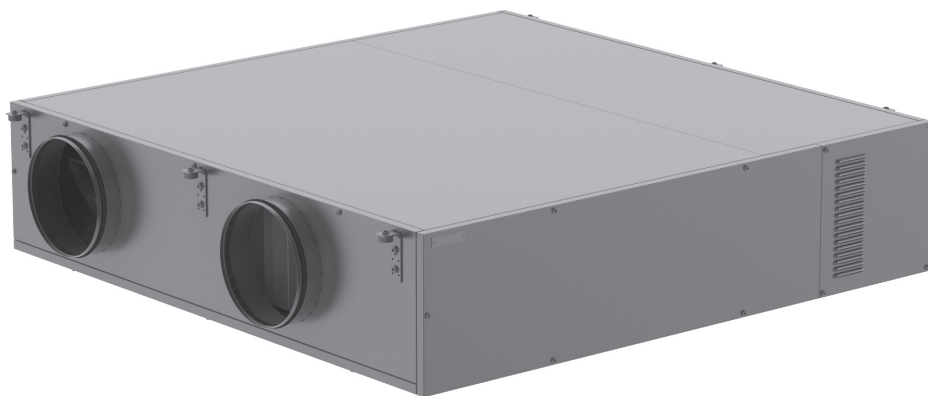
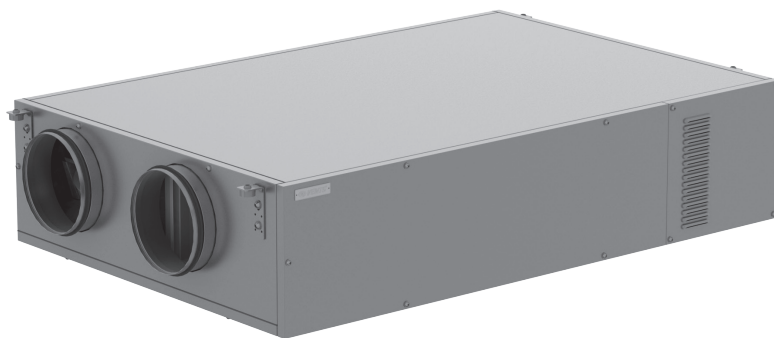


VUT 600 PW EC
VUT 1000 PW EC



Heat recovery air handling unit

CONTENTS

Safety requirements	3
Introduction	4
Use	4
Delivery set	4
Designation key	4
Technical data	5
Unit design and operating logic	7
Mounting and set-up	8
Connection to power mains	12
Functional diagram	13
Maintenance	14
Fault handling	16
Storage and transportation rules	16
Manufacturer's warranty	17
Acceptance certificate	19
Seller information	19
Mounting certificate	19
Warranty card	19

SAFETY REQUIREMENTS

- Please read the user's manual carefully prior to installing and operating the unit.
- All user's manual requirements as well as the provisions of all the applicable local and national construction, electrical, and technical norms and standards must be observed when installing and operating the unit.
- The warnings contained in the user's manual must be considered most seriously since they contain vital personal safety information.
- Failure to follow the rules and safety precautions noted in this user's manual may result in an injury or unit damage.
- After a careful reading of the manual, keep it for the entire service life of the unit.
- While transferring the unit control, the user's manual must be turned over to the receiving operator.

UNIT INSTALLATION AND OPERATION SAFETY PRECAUTIONS



- Disconnect the unit from power mains prior to any installation operations.



- Unpack the unit with care.



- The unit must be grounded!



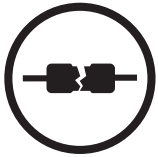
- While installing the unit, follow the safety regulations specific to the use of electric tools.



- Do not change the power cable length at your own discretion. Do not bend the power cable. Avoid damaging the power cable. Do not put any foreign objects on the power cable.



- Do not lay the power cable of the unit in close proximity to heating equipment.



- Do not use damaged equipment or cables when connecting the unit to power mains.



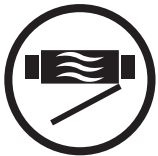
- Do not touch the unit controls with wet hands. Do not carry out the installation and maintenance operations with wet hands.



- Do not allow children to operate the unit.



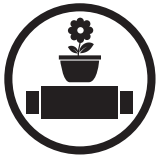
- Do not store any explosive or highly flammable substances in close proximity to the unit.



- Do not open the unit during operation.



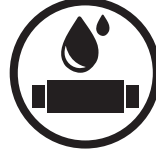
- Do not block the air duct when the unit is switched on.



- Do not sit on the unit and avoid placing foreign objects on it.



- Do not operate the unit outside the temperature range stated in the user's manual. Do not operate the unit in aggressive or explosive environments.



- Do not wash the unit with water. Protect the electric parts of the unit against ingress of water.



- Disconnect the unit from power mains prior to any technical maintenance.



- When the unit generates unusual sounds, odour, or emits smoke, disconnect it from power supply and contact the Seller.



- Do not direct the air flow produced by the unit towards open flame or ignition sources.



- In case of continuous operation of the unit, periodically check the security of mounting.



- Use the unit only for its intended purpose.



**THE PRODUCT MUST BE DISPOSED SEPARATELY AT THE END OF ITS SERVICE LIFE.
DO NOT DISPOSE THE UNIT AS UNSORTED MUNICIPAL WASTE.**

INTRODUCTION

This user's manual includes technical description, operation, installation and mounting guidelines, technical data for the heat recovery air handling unit VENTS VUT 600-1000 PW EC, hereinafter referred to as «the unit».

USE

The unit is designed to ensure continuous mechanical air exchange in houses, offices, hotels, cafés, conference halls, and other utility and public spaces as well as to recover the heat energy contained in the air extracted from the premises to warm up the filtered stream of supply air.

The unit is not intended for organizing ventilation in swimming pools, saunas, greenhouses, summer gardens, and other spaces with high humidity.

Due to the ability to save heating energy by means of energy recovery, the unit is an important element of energy-efficient premises. The unit is a component part and is not designed for stand-alone operation.

It is rated for continuous operation.

Transported air must not contain any flammable or explosive mixtures, evaporation of chemicals, sticky substances, fibrous materials, coarse dust, soot and oil particles or environments favourable for the formation of hazardous substances (toxic substances, dust, pathogenic germs).

Relative humidity of transported air must not exceed 80 % at an ambient temperature of +20 °C.



THE UNIT SHOULD NOT BE OPERATED BY CHILDREN OR PERSONS WITH REDUCED PHYSICAL, MENTAL, OR SENSORY CAPACITIES, OR THOSE WITHOUT THE APPROPRIATE TRAINING.

THE UNIT MUST BE INSTALLED AND CONNECTED ONLY BY PROPERLY QUALIFIED PERSONNEL AFTER THE APPROPRIATE BRIEFING.

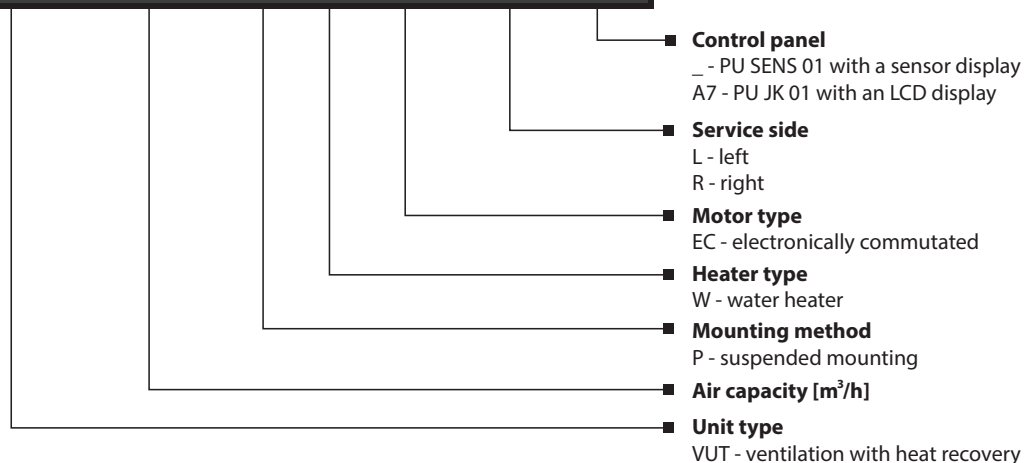
THE CHOICE OF UNIT INSTALLATION LOCATION MUST PREVENT UNAUTHORIZED ACCESS BY UNATTENDED CHILDREN.

DELIVERY SET

Name	Number
Unit	1 item
User's manual	1 item
Control panel	1 item
Packing box	1 item

DESIGNATION KEY

VUT XXX P W EC - X - X



TECHNICAL DATA

The unit is designed for indoor application with the ambient temperature ranging from +1 °C up to +40 °C and relative humidity up to 80 %.

In order to prevent condensation on the internal walls of the units, it is necessary that the surface temperature of the casing is 2-3 °C higher than the dew point temperature of the transported air.

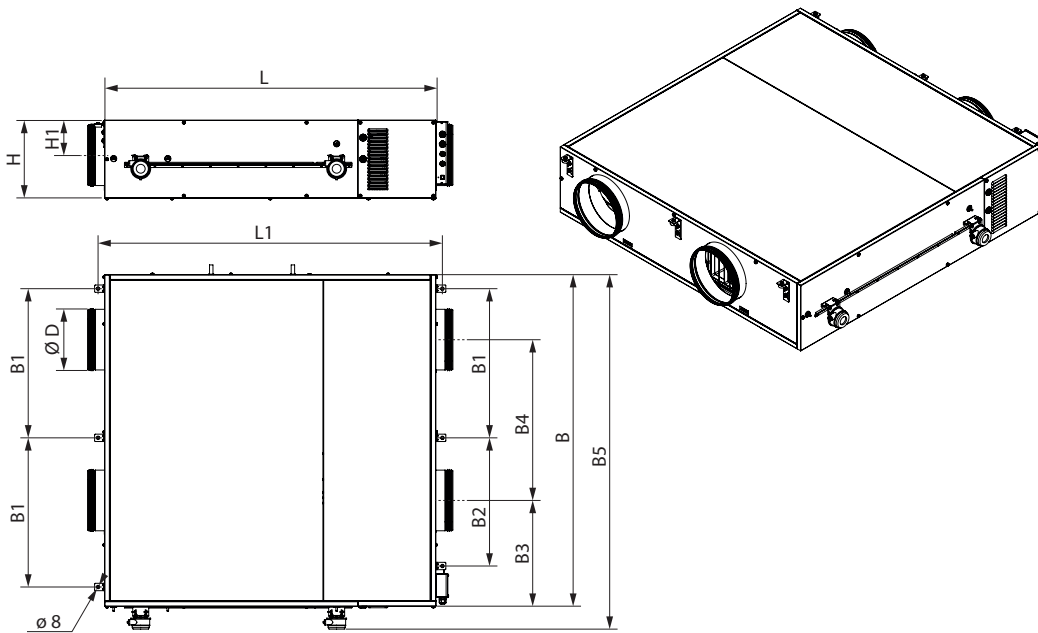
The unit is rated as a Class I electrical appliance.

Hazardous parts access and water ingress protection rating:

- IP22 for the unit connected to the air ducts
- IP44 for the unit motors

The unit design is constantly being improved, thus some models may be slightly different from those described in this manual.

OVERALL DIMENSIONS OF THE UNIT, MM

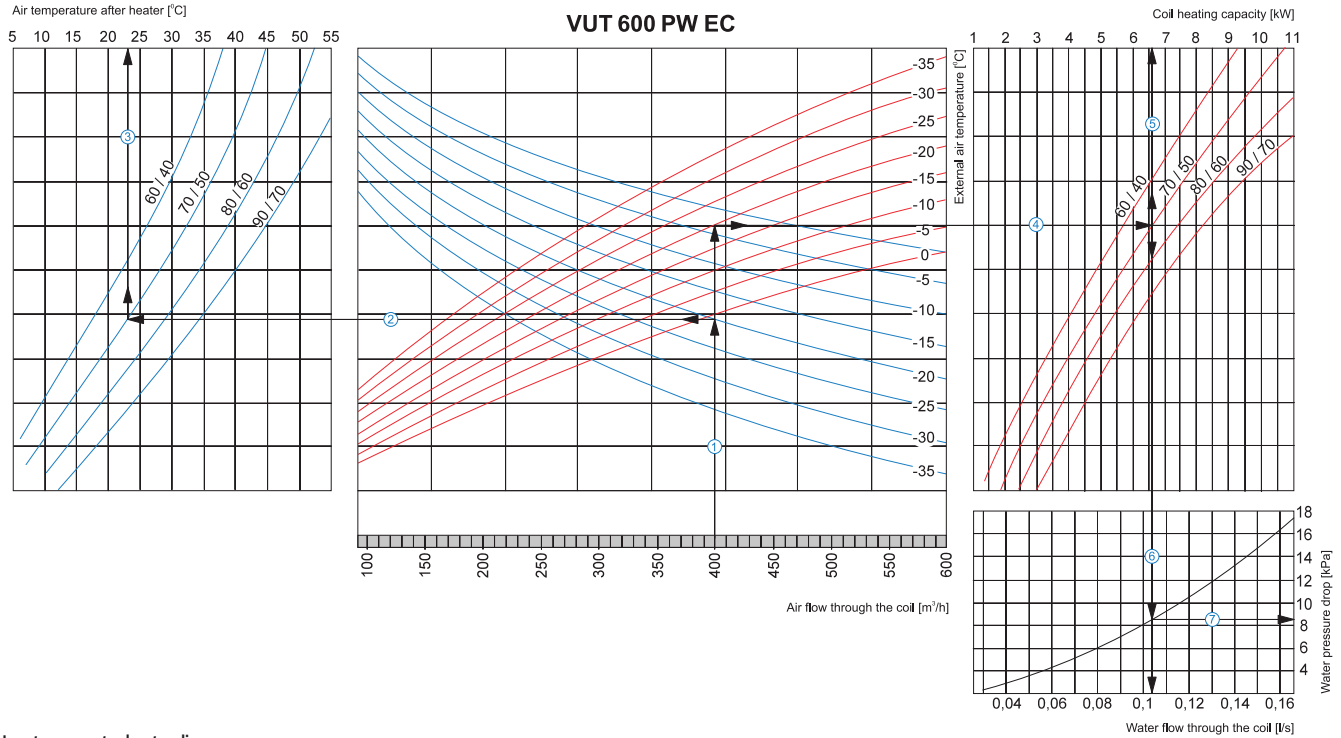


Model	VUT 600 PW EC	VUT 1000 PW EC
Ø D	199	249
B	827	1350
B1	713	608
B2	623	522
B3	294	430
B4	345	655
B5	920	1444
H	283	317
L	1238	1346
L1	1286	1395

UNIT TECHNICAL DATA

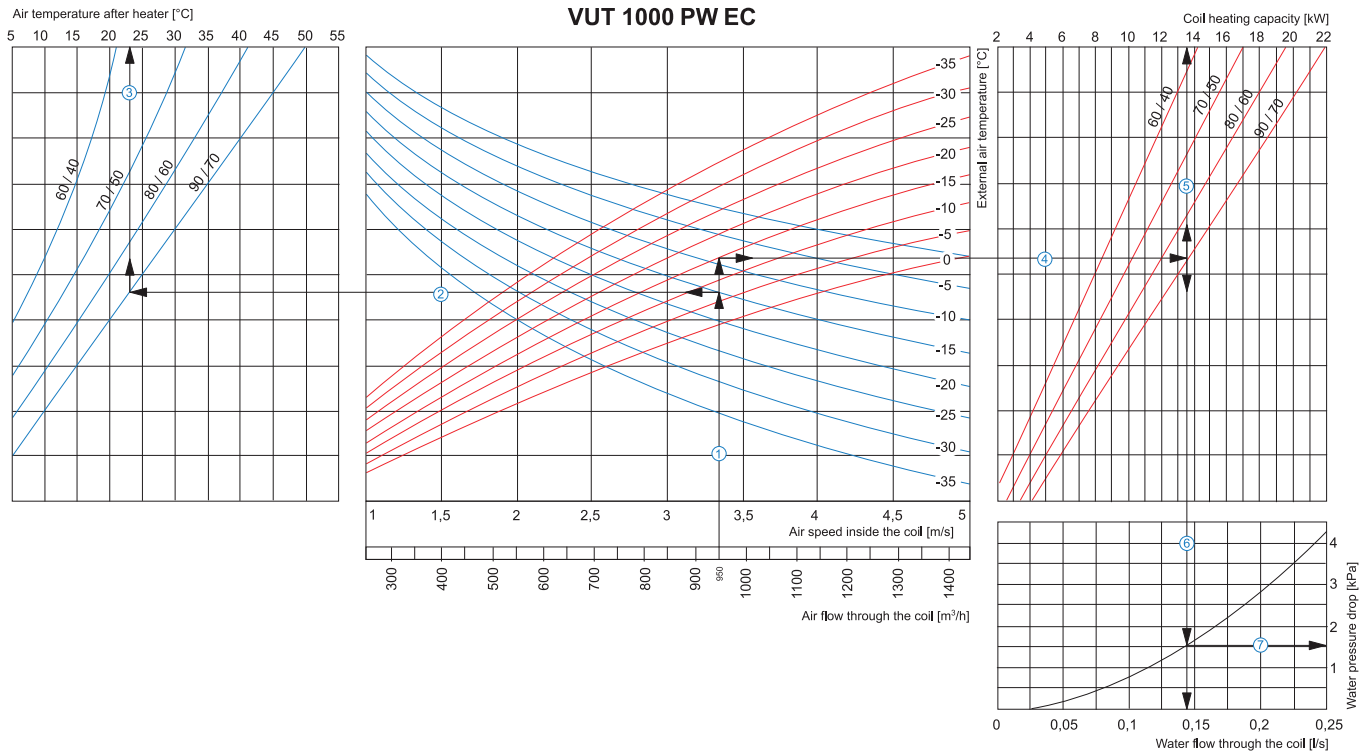
Model	VUT 600 PW EC	VUT 1000 PW EC
Unit voltage [V /50-60 Hz]	1 ~ 230	
Max. fan power [W]	270	400
Max. fan current [A]	1,6	2,26
Number of water heating coils	2	4
Total unit power [kW]	0,27	0,4
Total unit current [A]	1,6	2,26
Max. air capacity [m ³ /h]	600	1000
RPM	3060	2780
Sound pressure level at 3 m distance [dBA]	53	52
Max. transported air temperature [°C]	from -25 up to +40	
Casing material	Aluzinc	
Insulation	20 mm mineral wool	
Filter:	Extract filter	G4
	Supply filter	G4(F7)
Connected air duct diameter [mm]	Ø200	Ø250
Weight [kg]	77	98
Heat recovery efficiency	up to 90%	
Heat exchanger type	Counterflow	
Heat exchanger material	Polystyrene	

PERFORMANCE CHARTS FOR THE WATER HEATER PARAMETERS OF THE UNIT

**How to use water heater diagrams**

System Parameters: Air flow = 400 m³/h. Outside air temperature = -20 °C. Water temperature (in/out) = 70/50 °C.

- Supply air temperature. Prolong the line of air flow (e.g., 400 m³/h) ① up to the point where it crosses the outside air temperature (blue curve, e.g. -20 °C); then draw a horizontal line ② from this point to the left till crossing water in/out temperature curve (e.g. 70/50 °C). From this point draw a vertical line ③ to the supply air temperature axis on top of the graphic (+23 °C).
- Heating coil capacity. Prolong the line ① up to the point where it crosses the outside air temperature (e.g. -20 °C, red curve) and draw a horizontal line ④ from this point to the right until it crosses water in/out temperature curve (e.g., 70/50 °C), from here draw a vertical line ⑤ up to the scale representing the heating coil capacity (6.6 kW).
- Water flow. Prolong the line ⑤ down to water flow axis at the bottom of the graphic ⑥ (0.105 l/s).
- Water pressure drop. Draw the line ⑦ from the point where the line ⑥ crosses the black curve to the pressure drop axis. (8.5 kPa).

**How to use water heater diagrams**

Air Speed. Starting from 950 m³/h on the air flow scale draw a vertical line ① till the air speed axis which makes about 3.35 m/s.

- Supply air temperature. Prolong the line ① up to the point where it crosses the outside air temperature (blue curve), e.g. -15 °C; then draw a horizontal line ② from this point to the left till crossing water in/out temperature curve (90/70 °C). From this point draw a vertical line ③ to the supply air temperature axis on top of the graphic (+23 °C).
- Heating coil capacity. Prolong the line ① up to the point where it crosses the outside air temperature indicated as red curve (e.g., -15 °C) and draw a horizontal line ④ from this point to the right to the intersection of water in/out temperature curve (e.g., 90/70 °C). From this point draw a vertical line ⑤ up to the scale of heating coil capacity (13.5 kW).
- Water flow. Prolong the line ⑤ down to water flow axis at the bottom of the graphic (0.14 l/s).
- Water pressure drop. Draw the line ⑦ from the point where line ⑥ crosses the black curve to the pressure drop axis. (1.5 kPa).

UNIT DESIGN AND OPERATING LOGIC

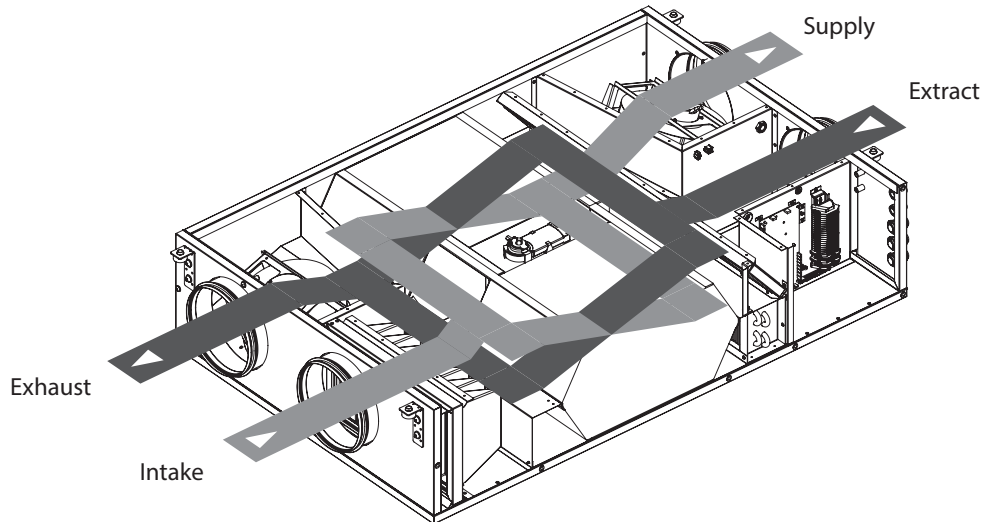
The unit has the following operating logic:

Warm stale extract air from the room flows to the unit, where it is filtered, then air flows through the heat exchanger and is exhausted outside by the extract fan. Clean cold air from outside is moved to the supply filter. Then filtered air flows through the heat exchanger and is moved to the room with the supply fan.

Heat energy of warm extract air is transferred to clean intake fresh air from outside and warms it up. Heat recovery minimizes thermal energy losses and space heating expenses in cold seasons.

The unit is equipped with a detachable service panel for repair and maintenance operations and a cover enabling access to the control system components.

Unit operating logic based on VUT 600 PW EC unit example



The basic unit delivery set includes a control panel for connection to the control system inside the unit casing using a data cable.

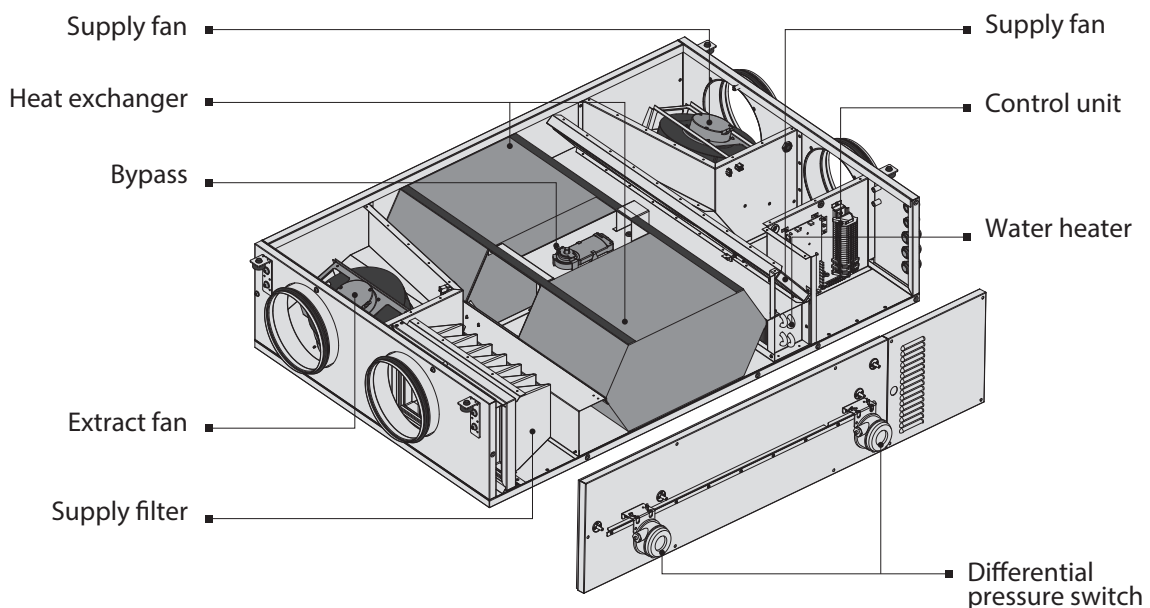
The unit is equipped with a supply and an extract centrifugal single-inlet fans with backward curved blades; maintenance-free EC motors with an external rotor and a built-in overheating protection; a plate counterflow heat exchanger and a water heater.

The supply G4 filter cleans supply air flow and prevents contamination of the unit parts. The extract G4 filter prevents contamination of the unit components.

Some condensate may form during heat recovery. The condensate is collected in the drain pan and is removed from the unit through the drain pipes.

The unit is equipped with a heat exchanger(s) freeze protection. If the air temperature in the intake air duct is below $+3^{\circ}\text{C}$, the bypass damper opens and automatically controls the air temperature.

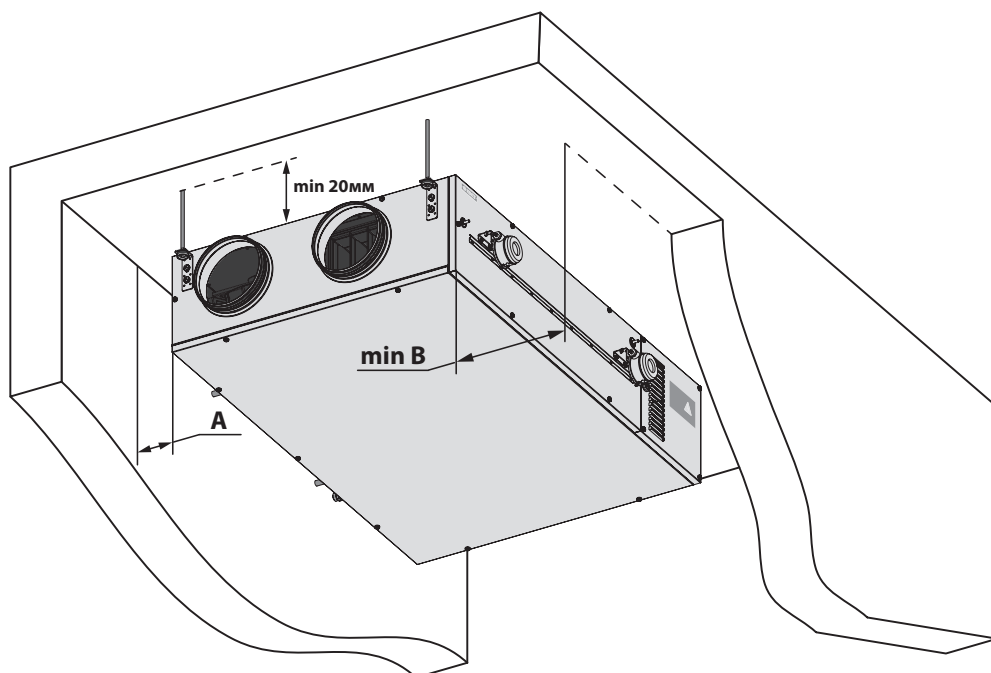
Unit design based on VUT 600 PW EC unit example



MOUNTING AND SET-UP

MINIMUM DISTANCE FOR ACCESSING THE UNIT

While mounting the unit provide enough space for its maintenance or repair work.



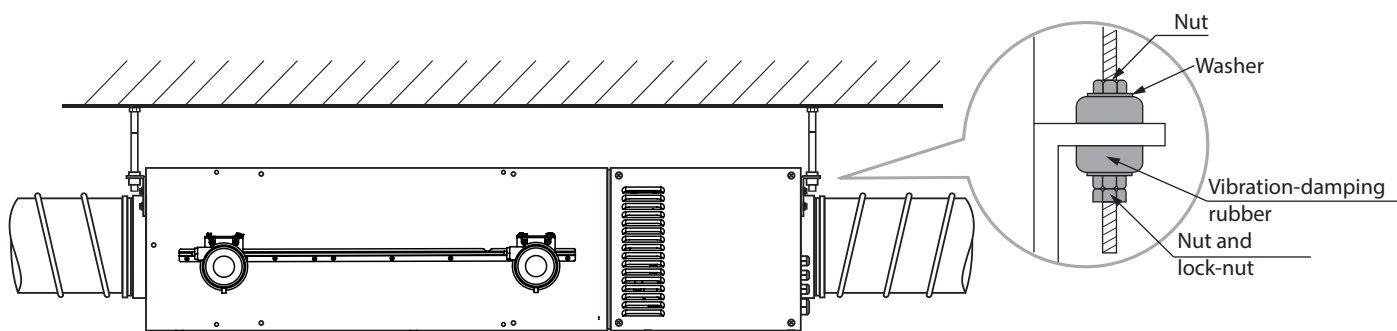
Model	VUT 600 PW EC	VUT 1000 PW EC
min B, mm	850	800

A - distance required for water heater connection. The distance is selected depending on the installation conditions at the discretion of the installer.

UNIT MOUNTING

The unit must be suspended to the ceiling on the threaded rod that is fixed inside a dowel.

Example



To attain the best performance of the unit and to minimise turbulence-induced air pressure losses connect a straight air duct section on both sides of the unit while mounting.

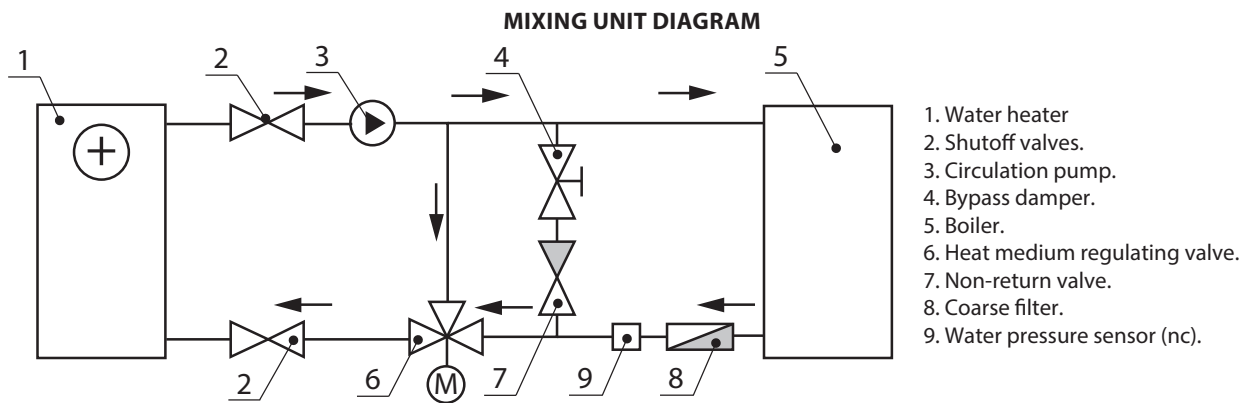
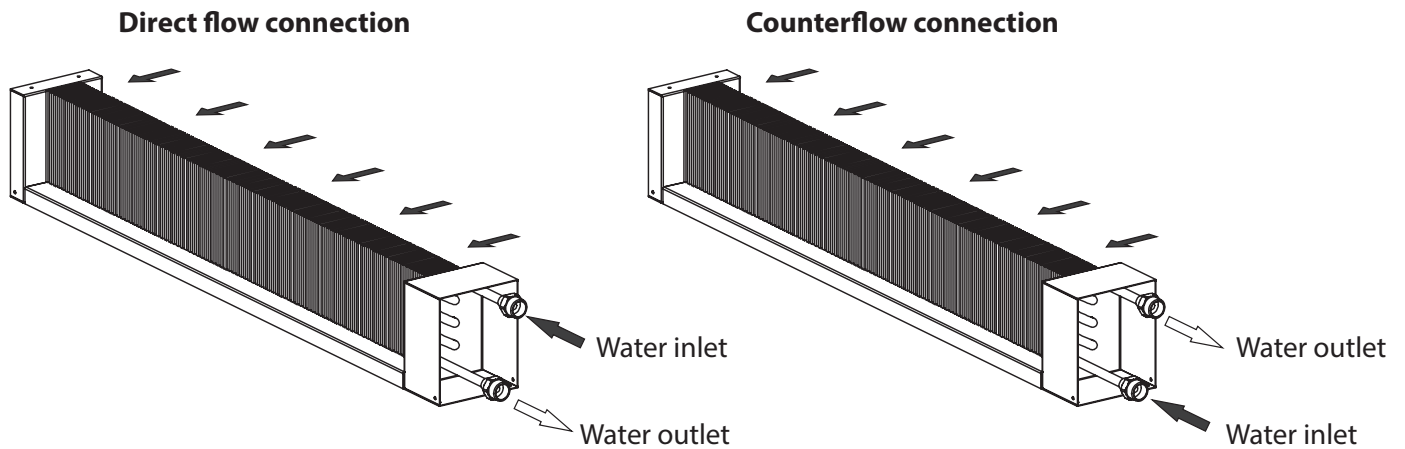
Minimum straight air duct length:

- equal to 1 air duct diameter on intake side.
- equal to 3 air duct diameters on outlet side.

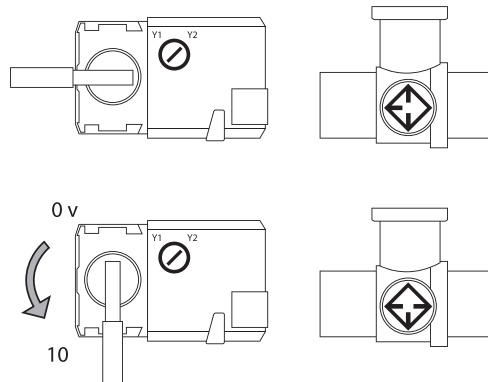
If the air ducts are too short or not connected, protect the unit parts from ingress of foreign objects, e.g. by covering the spigots with a protecting grille or other protecting device with mesh width not more than 12.5 mm to prevent uncontrollable access to the fans.

WATER HEATER CONNECTION

In order to attain maximum power the water heater should be counterflow connected. In case of the direct-flow connection the water heater has lower power but higher frost-resistant properties. Mixing unit diagram (not included in the delivery set) of the water heater is shown in the following figure.



HEAT MEDIUM REGULATING VALVE ACTUATOR



WARNING!

The unit operates either in Winter or Summer mode. If the outside air temperature is below $+10\text{ }^{\circ}\text{C}$ the Winter mode is activated. If the outside temperature accedes $+10\text{ }^{\circ}\text{C}$ the unit operates in Summer mode.

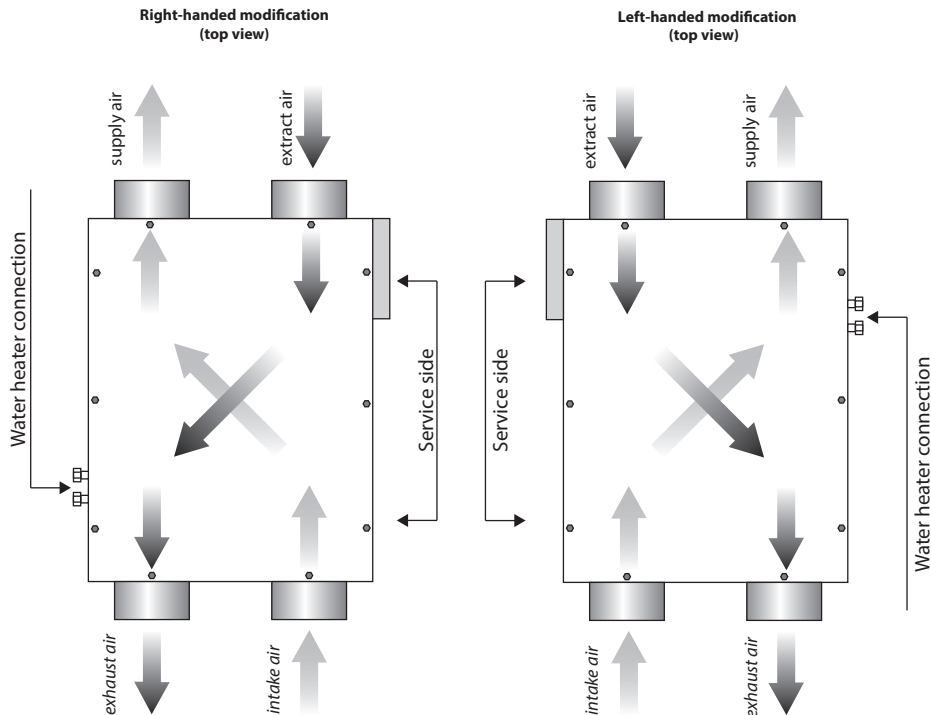
In Summer mode the unit operates regardless of the return heat medium temperature in the mixing unit.

In Winter mode the unit has following temperature limits:

- The unit may not be started when the return heat medium temperature is below $+40\text{ }^{\circ}\text{C}$. If the return heat medium temperature is $+40\text{ }^{\circ}\text{C}$ and higher the unit will be turned on with a 90 seconds delay.
- The unit turns off when the return heat medium temperature falls below $+20\text{ }^{\circ}\text{C}$.

SERVICE SIDES OF THE UNIT

The unit is available both in left- and right-handed modifications for easy installation and providing minimum distances for access to the unit.



Safety precautions:

The unit must be mounted to a rigid and stable structure.

The unit must be suspended using threaded rods. Before starting mounting check that the mounting structure has sufficient loading capacity for the unit weight. Otherwise reinforce the mounting location with beams or similar elements.

If the threaded rods used for the unit mounting are too short, the unit can generate abnormal noise resulting from resonance with the ceiling. Use threaded rods of sufficient length to prevent resonance.

If the abnormal noise is generated at the spiral air duct joint replace the spiral air duct with a flexible one to prevent resonance. Flexible anti-vibration connectors are another alternative for dealing with resonance.

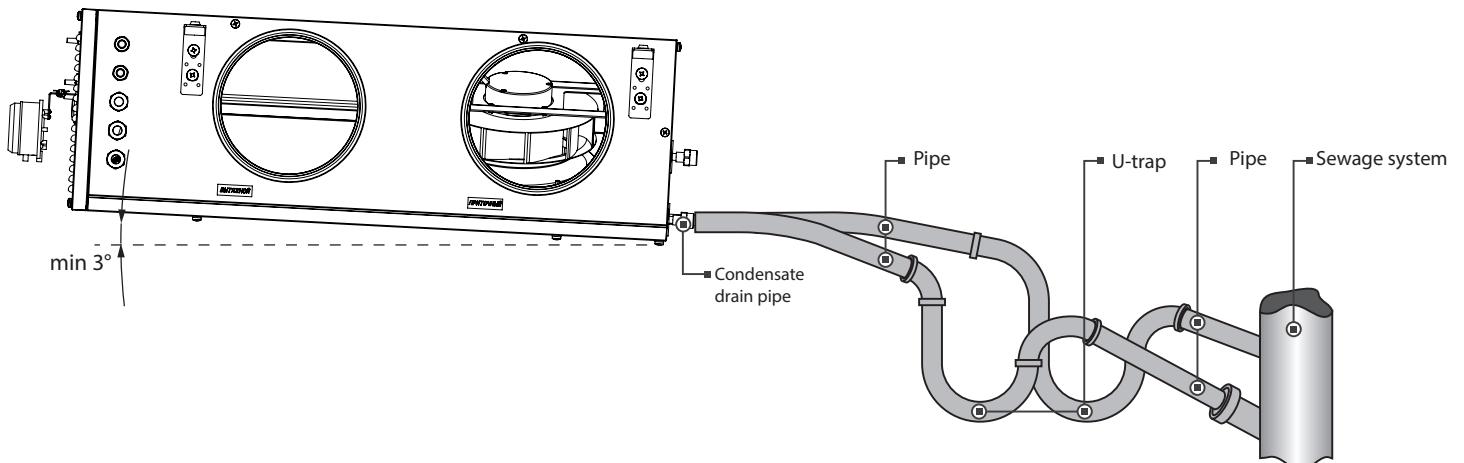
CONDENSATE DRAINAGE

The drain pan is equipped with two drain pipes for condensate removal outside the unit.

Connect the drain pipe, the U-trap (not included in the standard delivery set) and the sewage system with metal, plastic or rubber pipes.

While laying the hoses provide the slope downwards min. 3%. Fill the system with water prior to connecting it to power supply! During operation the U-trap must always be filled with water. Provide free drainage for the condensed water, otherwise it is accumulated inside the unit that may cause the equipment damage and condensate outflow to the room.

The condensate drainage system is designed for normal operation in premises with air temperatures above 0 °C! If the expected ambient air temperatures are below 0 °C the condensate drainage system must be equipped with heat insulation and pre-heating facilities.

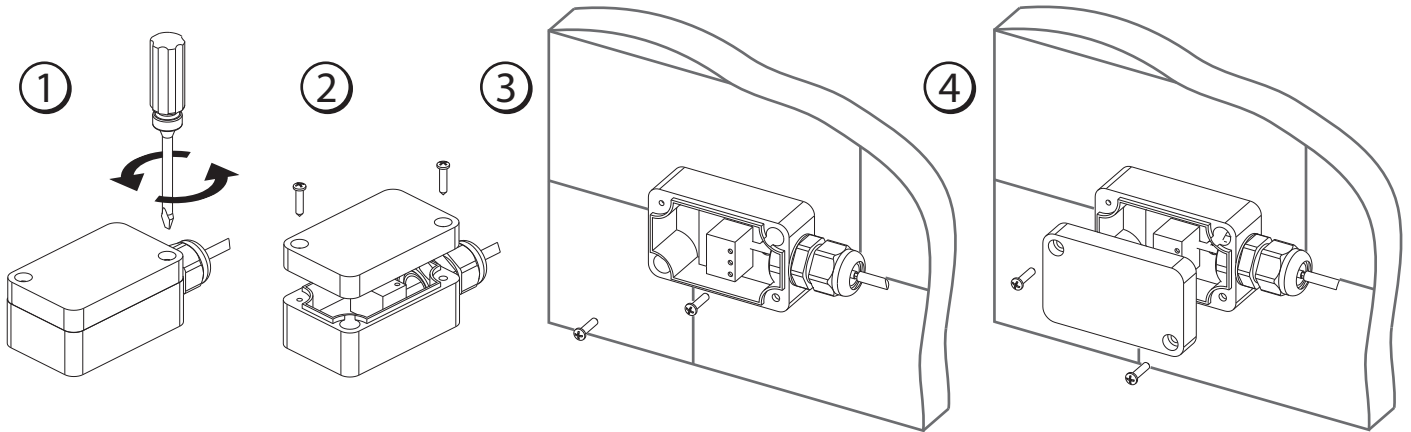


OUTDOOR TEMPERATURE SENSOR MOUNTING AND CONNECTION

The unit is supplied with an outdoor temperature sensor.

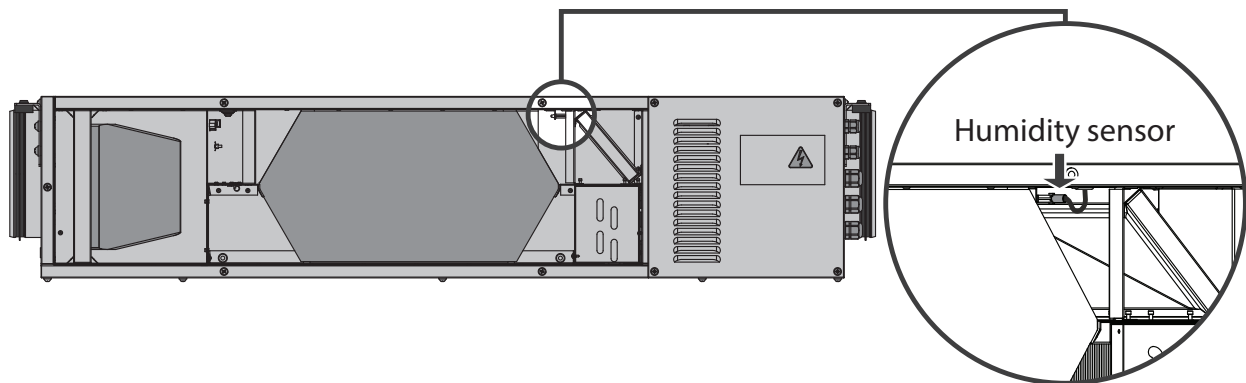
The outdoor temperature sensor mounting is as follows:

1. Remove two screws that retain the sensor cover.
2. Take off the sensor cover.
3. Install the sensor on the outer wall. The installation place must not be subjected to direct solar light.
4. Install the sensor cover back.
5. Connect the sensor to the X1 terminal block in compliance with the electric wiring diagram.



DUCT HUMIDITY SENSOR MOUNTING AND CONNECTION

The HV1 duct humidity sensor is a special accessory and is purchased separately. Connect the contact socket of the humidity sensor to the contact socket located inside of the heat recovery unit. After that fix the sensor using the clamp and the holder in the air duct upstream of the heat exchanger.



DUCT HUMIDITY SENSOR CONNECTION



CONNECTION TO POWER MAINS



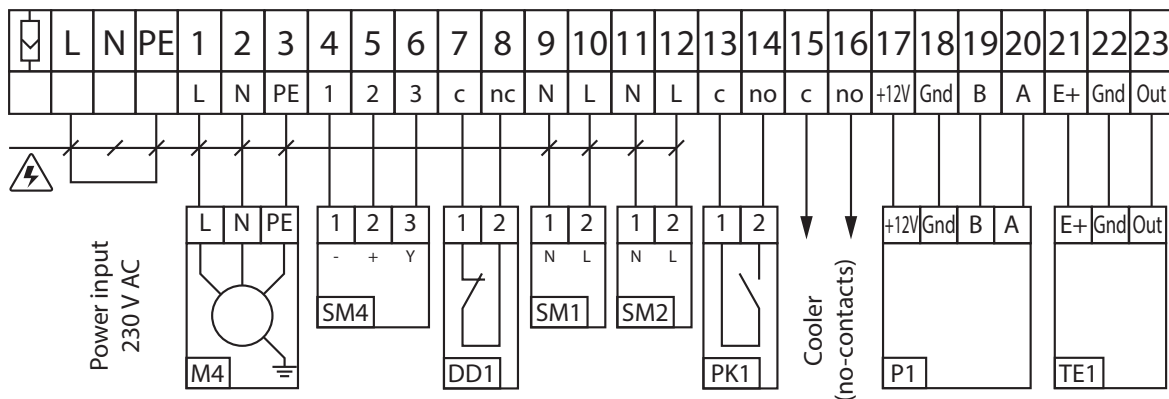
DISCONNECT THE POWER SUPPLY PRIOR TO ANY OPERATIONS WITH THE UNIT.
CONNECTION OF THE UNIT TO POWER MAINS IS ALLOWED BY A QUALIFIED ELECTRICIAN WITH A WORK PERMIT FOR THE ELECTRIC UNITS UP TO 1000 V AFTER CAREFUL READING OF THE PRESENT USER'S MANUAL. THE RATED ELECTRICAL PARAMETERS OF THE UNIT ARE GIVEN ON THE MANUFACTURER'S LABEL.
ANY TAMPERING WITH THE INTERNAL CONNECTIONS IS PROHIBITED AND WILL VOID THE WARRANTY.

Connect the unit to single-phase AC 230 V / 50 (60) Hz power mains by using the pre-wired power cord with the Euro Plug, pre-wired at the factory.

Connect the unit to power mains through the external automatic circuit breaker with a magnetic trip integrated into the fixed wiring system with the rated current not below the rated current consumption (refer to the table on p. 6).

The terminal block with the pre-wired control unit is located inside the control unit compartment. To connect the power and the ground cable route the cables through the airtight electric lead-in in the unit casing and connect these to the terminal block. The wiring diagram for connection of the air handling unit to power supply is on the back side of the lid.

X1

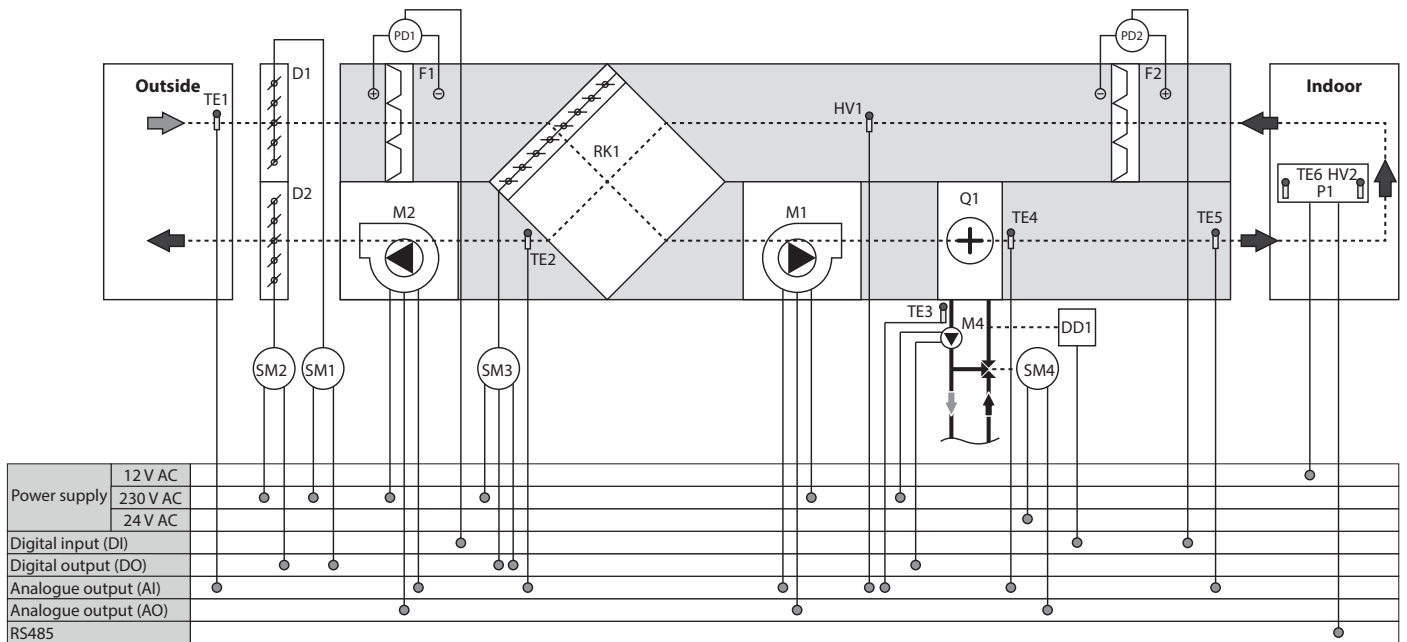


— **ELECTRIC SHOCK HAZARD!**

1. The unit delivery set includes P1 and TE1 only.
2. ** - Max. connecting cable length is 20 m!

Design.	Name	Model	Wire
Cooler	DX cooler	NO	2 x 0,75 mm ²
DD1	Pump dry run protection relay	NC	2 x 0,75 mm ²
M4	Circulation pump of the heater	max 0.3 kW	2 x 0,75 mm ²
SM1	Supply air damper actuator	LF230	2 x 0,75 mm ²
SM2	Exhaust air damper actuator	LF230	2 x 0,75 mm ²
SM4	3-way valve actuator	LR24 SR	2 x 0,75 mm ²
PK1	Contact from fire alarm panel	NO	2 x 0,75 mm ²
P1**	Control panel		2 x 0,75 mm ²
TE1	Intake air temperature sensor		2 x 0,75 mm ²

FUNCTIONAL DIAGRAM



Designation	Name
D1*	Supply air damper.
D2*	Exhaust air damper.
F1	Supply filter.
F2	Extract filter.
M1	Supply fan.
M2	Extract fan.
P1	Control panel.
Q1	Water heater.
HV1*	Duct humidity sensor.
HV2	Indoor humidity sensor.
PD1	Differential pressure switch supply filter clogging control.
PD2	Differential pressure switch extract filter clogging control.
RK1	Plate heat exchanger.
SM1*	Supply air damper actuator.
SM2*	Exhaust air damper actuator.
SM3	Bypass damper electric actuator.
SM4*	3-way valve actuator.
TE1	Intake air temperature sensor.
TE2	Temperature sensor downstream of the heat exchanger.
TE3	Return heat medium temperature sensor.
TE4	Water heater freeze protection sensor.
TE5	Air temperature duct sensor.
TE6	Room air temperature sensor.
DD1*	Pump dry run protection relay.
M4*	Circulation pump of the water heater.

* - The appliances are not included in the delivery set, can be purchased separately.

MAINTENANCE

Maintenance operations of the unit are required 3-4 times per year. Maintenance includes general cleaning of the unit and the following operations:

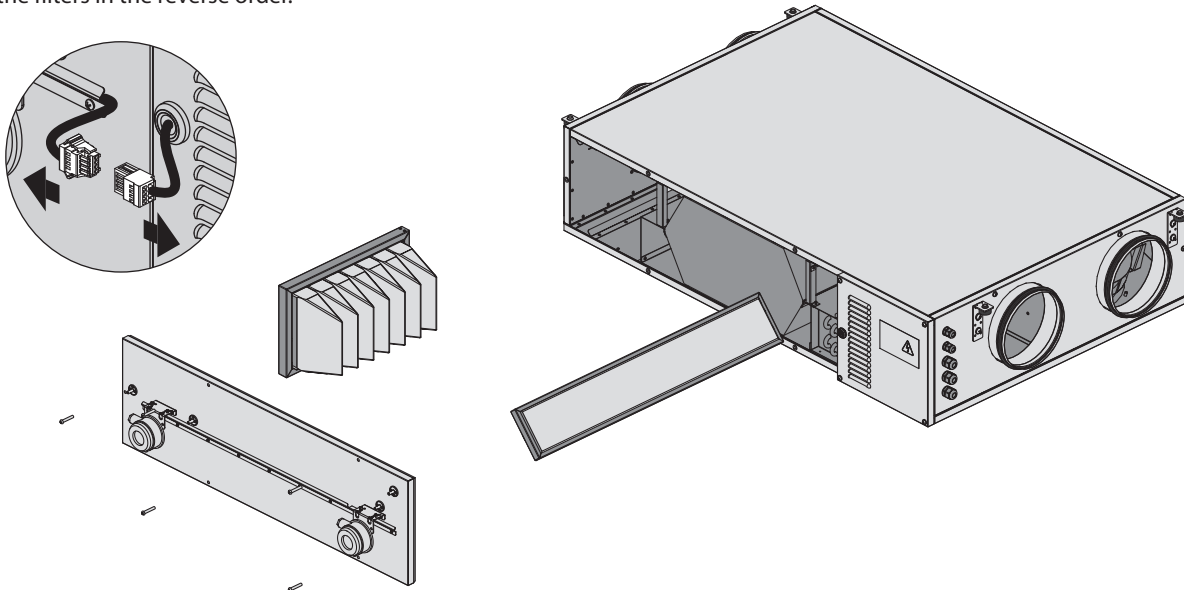
1. Filter maintenance (3-4 times per year).

Dirty filters increase air resistance in the system and reduce supply air volume. The filters require cleaning not less than 3-4 times per year. Vacuum cleaning is allowed. After two consecutive cleanings filters must be replaced. For new filters contact your Seller.

Sequence of filter removal:

1. Disconnect the socket connector of the differential pressure switches.
2. In the VUT 1000 PB EC, disconnect the silicone tube from the pressure switch nozzle (+) on the side of the control unit.
3. Remove the 5 screws and take the service panel off. Remove the panel with care.
4. Pull the filters until they slide off the guides.

Install the filters in the reverse order.



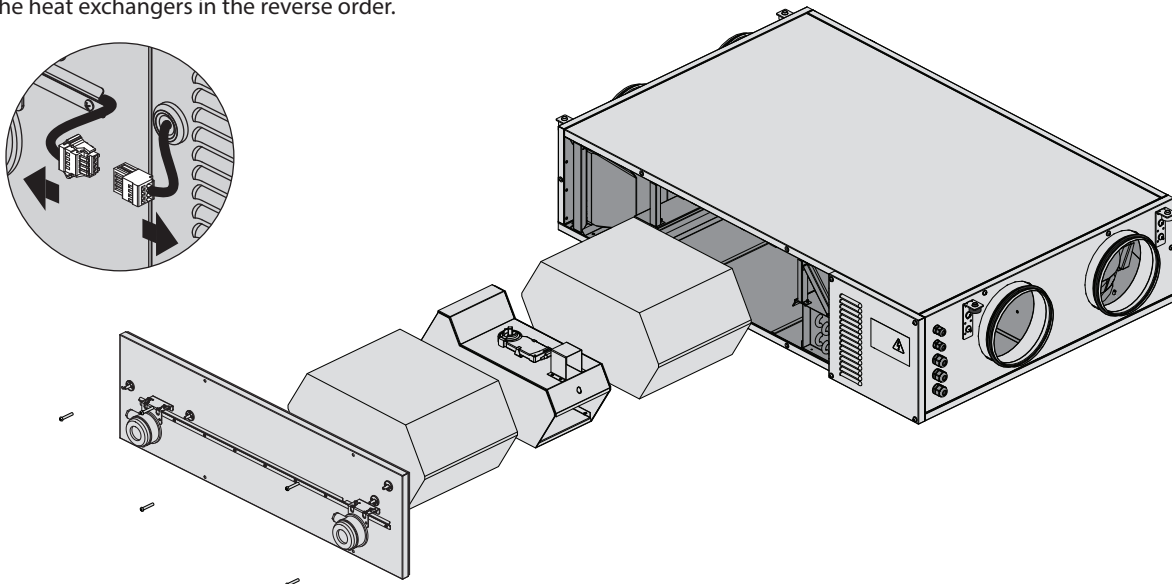
2. Heat exchanger inspection (once per year).

Some dust may accumulate on the heat exchanger block even in case of regular maintenance of the filters. To maintain the high heat recovery efficiency, regular cleaning is required. To clean the heat exchanger pull it out, flush the heat exchanger with warm detergent solution. After cleaning install the dry heat exchanger back to the unit.

Sequence of heat exchangers removal:

1. Disconnect the socket connector of the differential pressure switches.
2. In the VUT 1000 PB EC, disconnect the silicone tube from the pressure switch nozzle (+) on the side of the control unit.
3. Remove the 5 screws and take the service panel off. Remove the panel with care.
4. Pull the first heat exchanger and remove it from the unit.
5. Disconnect the contact socket on the bypass wall and remove the bypass.
6. Pull the second heat exchanger and remove it from the unit.

Install the heat exchangers in the reverse order.



3. Fan inspection (once per year).

Even in case of regular maintenance of the filters, some dust may accumulate inside the fans and reduce the fan performance and supply air flow.

Clean the filters with a vacuum cleaner, a soft cloth or brush. Do not use water, aggressive solvents or sharp objects as they may damage the impeller.

Access to the fans is from the side of air ducts connections.

4. Condensate drainage inspection (once per year).

The condensate drainage (drain line) may get clogged by dirt and dust particles contained in the exhaust air. Check the drain line operation by filling the drain pan under the unit with water, clean the U-trap and the drain line, if necessary.

5. Exhaust louvre shutters and intake diffusers cleaning (as required).

Wash the diffusers and the louvre shutters with warm detergent solution.

6. Supply air flow control (twice per year).

The supply duct grille may get clogged with leaves and other objects reducing the unit performance and supply air delivery. Check the supply grille twice per year and clean it as required.

7. Ductwork system inspection (once in 5 years).

Even regular fulfilling of all the prescribed above maintenance operations may not completely prevent dirt accumulation in the air ducts which reduces the unit capacity. Duct maintenance means regular cleaning or replacement.

FAULT HANDLING

Problem	Possible reasons	Fault handling
The fan(s) do(es) no start.	No power supply.	Make sure the power supply line is connected correctly, otherwise troubleshoot a connection error.
	The motor is jammed, the impeller blades are soiled.	Turn the unit off. Troubleshoot the motor jam and the impeller clogging. Clean the blades. Restart the unit.
	Alarm in the system.	For troubleshooting of the control system errors refer to the control panel manual.
Automatic circuit breaker tripping following the unit turning on.	Overcurrent resulted from short circuit in the electric circuit.	Turn the unit off. Contact the service centre.
Low air flow.	Low set fan speed.	Set higher speed.
	The filters and the fans are soiled, the heat exchanger is soiled.	Clean or replace the filters. Clean the fans and the heat exchanger.
	The ventilation system components (air ducts, diffusers, louvre shutters, grilles) are soiled or damaged.	Clean or replace the ventilation system components (air ducts, diffusers, louver shutters, grilles).
	The air dampers, diffusers or the louvre shutters are closed.	Make sure that the air dampers, diffusers or louver shutters are fully opened.
Cold supply air.	The extract filter is soiled.	Clean or replace the extract filter.
	The heat exchanger is frozen.	Check the heat exchanger for freezing. Turn the unit off if required and restart it after the freezing danger is no longer imminent.
	Malfunction of the water heater.	Contact the service centre.
Noise, vibration.	The impeller(s) is soiled.	Clean the impeller(s).
	The screw connections are loose.	Tighten the screw connection of the fans or the casing against stop.
	No anti-vibration connectors.	Install anti-vibration connectors.
Water leakage.	The drainage system is soiled, damaged or arranged not correctly.	Clean the drain line. Check the drain line slope angle. Make sure that the U-trap is filled with water and the drain pipes are frost protected.

STORAGE AND TRANSPORTATION RULES

- Store the unit in the manufacturer's original packaging box in a dry closed ventilated premise with temperature range from + 5°C to + 40°C and relative humidity up to 70 %.
- Storage environment must not contain aggressive vapors and chemical mixtures provoking corrosion, insulation, and sealing deformation.
- Use suitable hoist machinery for handling and storage operations to prevent possible damage to the unit.
- Follow the handling requirements applicable for the particular type of cargo.
- The unit can be carried in the original packaging by any mode of transport provided proper protection against precipitation and mechanical damage. The unit must be transported only in the working position.
- Avoid sharp blows, scratches, or rough handling during loading and unloading.
- Prior to the initial power-up after transportation at low temperatures allow the unit to warm up at operation temperature for at least 3-4 hours.

MANUFACTURER'S WARRANTY

The product is in compliance with EU norms and standards on low voltage guidelines and electromagnetic compatibility. We hereby declare that the product complies with the provisions of Electromagnetic Council Directive 2014/30/EU, Low Voltage Directive 2014/35/EU and CE-marking Directive 93/68/EEC. This certificate is issued following test carried out on samples of the product referred to above.

The manufacturer hereby warrants normal operation of the unit for 24 months after the retail sale date provided the user's observance of the transportation, storage, installation, and operation regulations. Should any malfunctions occur in the course of the unit operation through the Manufacturer's fault during the guaranteed period of operation, the user is entitled to get all the faults eliminated by the manufacturer by means of warranty repair at the factory free of charge. The warranty repair includes work specific to elimination of faults in the unit operation to ensure its intended use by the user within the guaranteed period of operation. The faults are eliminated by means of replacement or repair of the unit components or a specific part of such unit component.

The warranty repair does not include:

- routine technical maintenance
- unit installation/dismantling
- unit setup

To benefit from warranty repair, the user must provide the unit, the user's manual with the purchase date stamp, and the payment paperwork certifying the purchase. The unit model must comply with the one stated in the user's manual. Contact the Seller for warranty service.

The manufacturer's warranty does not apply to the following cases:

- User's failure to submit the unit with the entire delivery package as stated in the user's manual including submission with missing component parts previously dismantled by the user.
- Mismatch of the unit model and the brand name with the information stated on the unit packaging and in the user's manual.
- User's failure to ensure timely technical maintenance of the unit.
- External damage to the unit casing (excluding external modifications as required for installation) and internal components caused by the user.
- Redesign or engineering changes to the unit.
- Replacement and use of any assemblies, parts and components not approved by the manufacturer.
- Unit misuse.
- Violation of the unit installation regulations by the user.
- Violation of the unit control regulations by the user.
- Unit connection to power mains with a voltage different from the one stated in the user's manual.
- Unit breakdown due to voltage surges in power mains.
- Discretionary repair of the unit by the user.
- Unit repair by any persons without the manufacturer's authorization.
- Expiration of the unit warranty period.
- Violation of the unit transportation regulations by the user.
- Violation of the unit storage regulations by the user.
- Wrongful actions against the unit committed by third parties.
- Unit breakdown due to circumstances of insuperable force (fire, flood, earthquake, war, hostilities of any kind, blockades).
- Missing seals if provided by the user's manual.
- Failure to submit the user's manual with the unit purchase date stamp.
- Missing payment paperwork certifying the unit purchase.



FOLLOWING THE REGULATIONS STIPULATED HEREIN WILL ENSURE A LONG AND TROUBLE-FREE OPERATION OF THE UNIT.



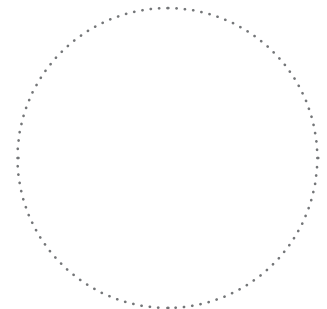
USER'S WARRANTY CLAIMS SHALL BE SUBJECT TO REVIEW ONLY UPON PRESENTATION OF THE UNIT, THE PAYMENT DOCUMENT AND THE USER'S MANUAL WITH THE PURCHASE DATE STAMP.

ACCEPTANCE CERTIFICATE

Unit Type	Heat recovery air handling unit
Model	VUT _____ PW EC
Serial Number	
Manufacture Date	
Quality Inspector's Stamp	

SELLER INFORMATION

Seller	
Address	
Phone Number	
E-mail	
Purchase Date	
This is to certify acceptance of the complete unit delivery with the user's manual. The warranty terms are acknowledged and accepted.	
Customer's Signature	

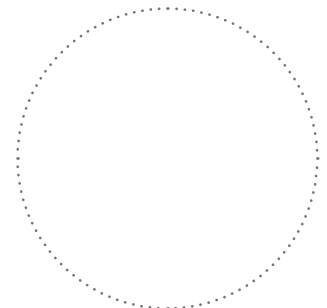


Seller's Stamp

MOUNTING CERTIFICATE

The VUT _____ PW EC unit has been connected to power mains pursuant to the requirements stated in the present user's manual.

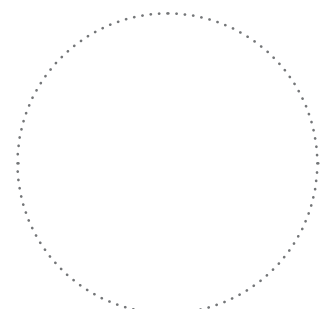
Seller	
Address	
Phone Number	
Installation Technician's Full Name	
Installation Date:	Signature:
The unit has been installed in accordance with the provisions of all the applicable local and national construction, electrical and technical codes and standards. The unit operates normally as intended by the manufacturer.	
Signature:	



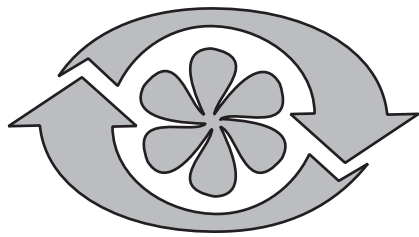
Installation Stamp

WARRANTY CARD

Unit Type	Heat recovery air handling unit
Model	VUT _____ PW EC
Serial Number	
Manufacture Date	
Purchase Date	
Warranty Period	
Seller	



Seller's Stamp



VENTS

