

USER'S MANUAL

VUT 800 WH VUT 1000 WH
VUT 1500 WH VUT 2000 WH



HEAT RECOVERY AIR HANDLING UNIT

CONTENTS

Safety requirements	3
Introduction	5
Use	5
Delivery set	5
Designation key	5
Technical data	6
Unit design and operating logic	12
Mounting and set-up	13
Condensate drainage	16
Functional diagram	17
Connection to power mains	18
Unit control	19
Maintenance	19
Fault handling	20
Storage and transportation rules	20
Manufacturer's warranty	21
Acceptance certificate	22
Seller information	22
Connection certificate	22
Warranty card	23

SAFETY REQUIREMENTS

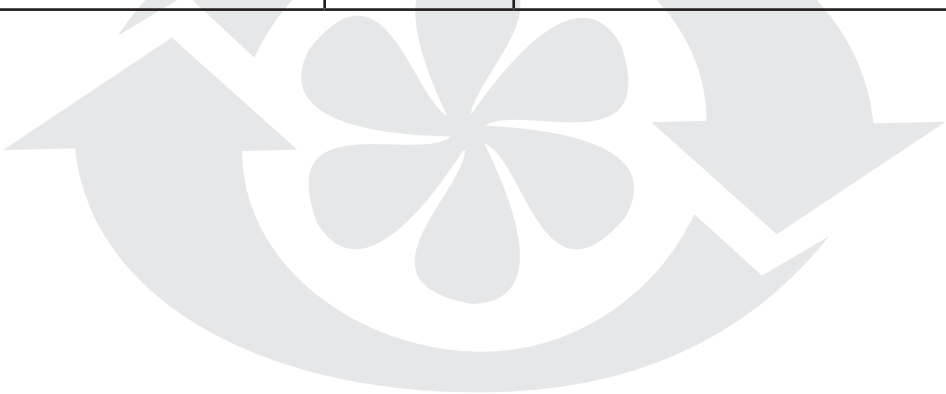
Read the user's manual carefully prior to the operation and installation of the heat recovery air handling unit. Fulfill the operation manual requirements as well as the provisions of all the applicable local and national construction, electrical and technical codes and standards. The warnings contained in the user's manual must be considered most seriously since they contain vital personal safety information. Failure to follow the safety requirements may result in an injury or unit damage. Read the manual carefully and keep it as long as you use the unit. While transferring the unit control the control panel user's manual must be turned over to the receiving operator.

Symbol legend used in the manual:

	WARNING!
	DO NOT!

UNIT MOUNTING AND OPERATION SAFETY PRECAUTIONS

	The unit must be disconnected from power supply prior to any installation or repair operation.		The unit must be grounded!
	The unit must not be operated outside the temperature range stated in the user's manual and in aggressive or explosive environments.		Do not use damaged equipment or conductors to connect the unit to power mains.
	While installing the unit follow the safety regulations specific to the use of electric tools.		Unpack the unit with care.
	Do not change the power cable length at your own discretion. Do not bend the power cable. Avoid damaging the power cable.		Do not position any heating devices or other equipment in close proximity to the unit power cable.



	<p>Do not touch the unit controls with wet hands. Do not carry out the unit maintenance with wet hands.</p>		<p>Use the unit only as intended by the manufacturer. Do not connect a clothes dryer or other similar equipment to the unit or the ventilation system.</p>
	<p>Do not wash the unit with water. Protect the unit electric parts from water ingress.</p>		<p>Do not put any water containers on the unit, i.e. flower vases.</p>
	<p>Keep combustible gases and inflammable products away of the unit.</p>		<p>Disconnect the unit from power supply prior to maintenance.</p>
	<p>Do not let children operate the unit.</p>		<p>Do not damage the power cable while operating the unit. Do not put any objects on the power cable.</p>
	<p>Do not sit on the unit and do not put any objects on it.</p>		<p>Do not open the operating unit.</p>
	<p>In case of unusual sounds, odours or smoke disconnect the unit from power supply and contact the service centre.</p>		<p>During a long-term operation of the unit periodically check the mounting for reliability.</p>
	<p>Do not block the air duct when the unit is on.</p>		<p>Do not let air flow from the unit be directed to the open flame devices or candles.</p>

■ INTRODUCTION

This user's manual includes technical description, operation, installation and mounting guidelines, technical data for the heat recovery air handling unit VENTS VUT ... WH, hereinafter referred as the unit.

■ USE

The unit with heat recovery and a water heater is designed to save heat energy by means of heat recovery and is one of the energy saving components used in the buildings and premises. The unit is a component part and is not designed for independent operation.

The unit is designed to provide permanent controlled air exchange by means of mechanical ventilation in houses, offices, hotels, cafés, meeting halls and other mechanically ventilated premises as well as utilization of extract air heat energy to warm up supply purified air.

Transported air must not contain any flammable or explosive mixtures, evaporation of chemicals, coarse dust, soot and oil particles, sticky substances, fibrous materials, pathogens or any other harmful substances.



THE UNIT IS NOT INTENDED TO BE USED BY CHILDREN, PHYSICALLY OR MENTALLY DISABLED PERSONS, PERSONS WITH SENSORY DISORDER, PERSONS WITH NO APPROPRIATE QUALIFICATION. ANY OPERATIONS WITH THE UNIT MUST BE PERFORMED ONLY BY PROPERLY QUALIFIED PERSONNEL AFTER THE APPROPRIATE SAFETY BRIEFING. THE UNIT INSTALLATION SITES MUST PREVENT ACCESS BY UNATTENDED CHILDREN.

■ DELIVERY SET

- Unit - 1 item
- Wall-mounted control panel - 1 item
- User's manual - 1 item
- Control panel user's manual - 1 item
- Packing box - 1 item

■ DESIGNATION KEY

VUT X WH - X - X

Modification (VUT 1500 WH, VUT 2000 WH)

L - left
R - right

Number of water heating coils

2, 4

Spigot orientation

H - horizontal

Heater type

W - water heater

Air capacity [m³/h]

800, 1000, 1500, 2000

Unit type

VUT - ventilation with heat recovery

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 %.

Hazardous parts access and water ingress protection rating:

- IP 44 for the unit motors;
- IP 22 for the assembled unit connected to the air ducts.

The unit overall and connecting dimensions, external view, technical data are shown in Fig. 1 and in Tables 1 and 2. The unit design is regularly improved, so some models can slightly differ from those ones described in this manual.

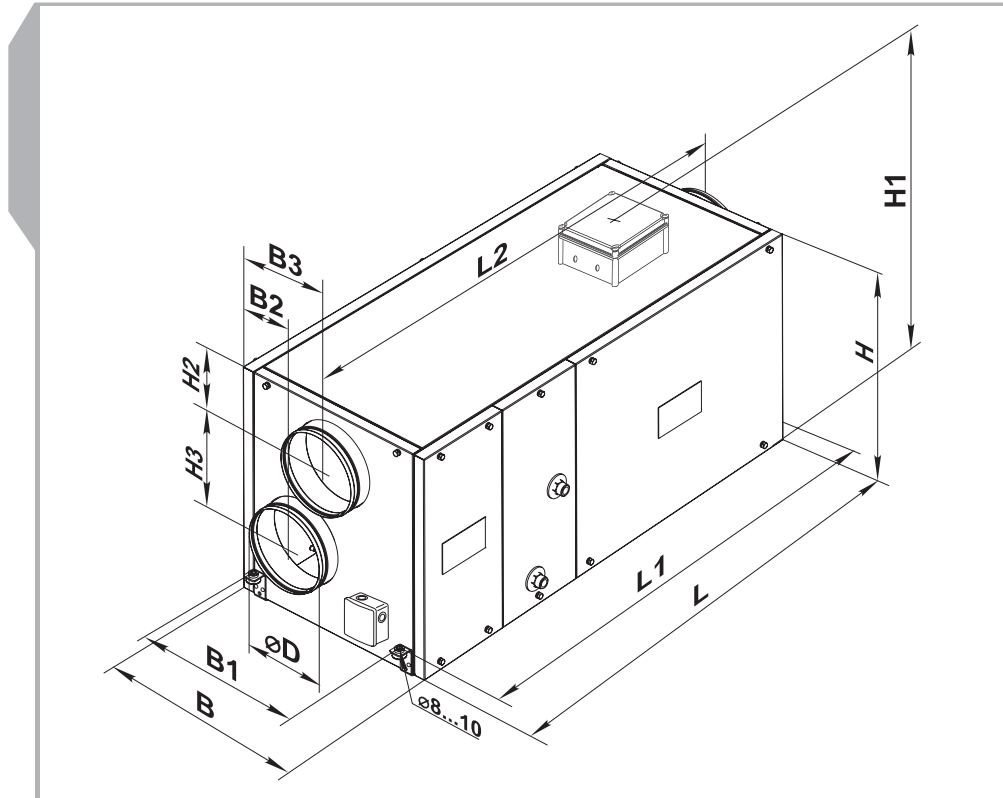


Fig. 1. Overall and connecting dimensions

Table 1

Model	VUT 800 WH	VUT 1000 WH	VUT 1500 WH	VUT 2000 WH
Ø D	249	249	314	314
B	613	613	842	842
B1	460	460	581	581
B2	306	306	320	320
B3	386	386	520	520
H	698	698	814	814
H1	832	832	947	947
H2	154	154	201	201
H3	280	280	595	595
L	1071	1071	1345	1345
L1	1117	1117	1388	1388
L2	1171	1171	1445	1445

Table 2

Model		VUT 800 WH-2	VUT 800 WH-4	VUT 1000 WH-2	VUT 1000 WH-4	VUT 1500 WH-2	VUT 1500 WH-4	VUT 2000 WH-2	VUT 2000 WH-4
Voltage, 50 Hz [V]		1 ~ 230							
Number of water heating coils		2	4	2	4	2	4	2	4
Total unit power [kW]		0,49		0,82		0,98		1,30	
Total unit current [A]		2,16		3,6		4,3		5,68	
Max. air capacity [m ³ /h]		780		1100		1700		2100	
Rotation speed [min ⁻¹]		1650		1850		1100		1150	
Noise level, 3 m [dB(A)]		48		60		49		65	
Max. transported air temperature [°C]		-25 up to +45		-25 up to +40		-25 up to +45		-25 up to +40	
Casing material		Aluzinc							
Insulation		50 mm mineral wool							
Filter:	extract	G4							
	supply	G4 (F7-optional)							
Connected duct diameter [mm]		Ø 250				Ø 315			
Weight [kg]		88				99			
Heat recovery efficiency		up to 78 %				up to 77 %			
Heat exchanger type		Cross flow							
Heat exchanger material		Aluminium							

Performance chart for the VUT 800 WH-2 water heater parameters is shown in Fig. 2.

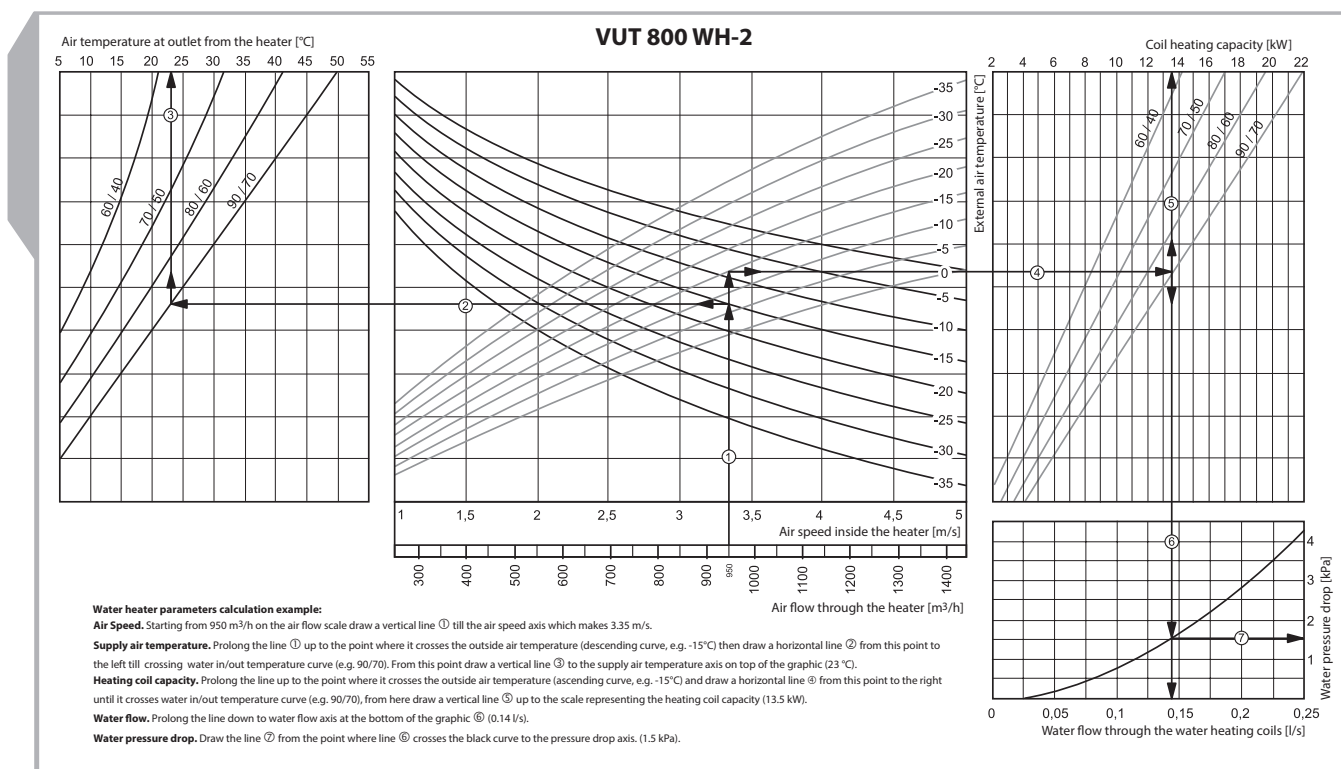


Fig. 2 Calculation of the VUT 800 WH-2 water heater parameters

Performance chart for the VUT 800 WH-4 water heater parameters is shown in Fig. 3.

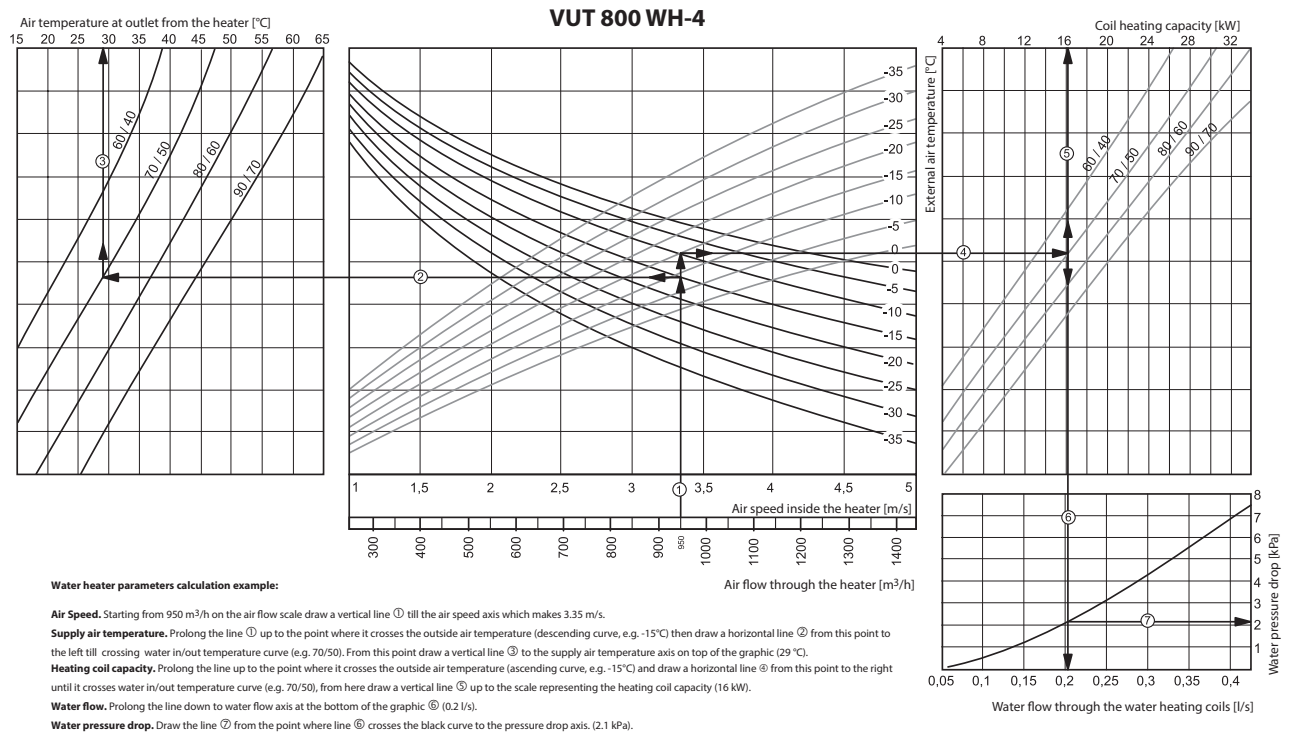


Fig. 3 Calculation of the VUT 800 WH-4 water heater parameters

Performance chart for the VUT 1000 WH-2 water heater parameters is shown in Fig. 4.

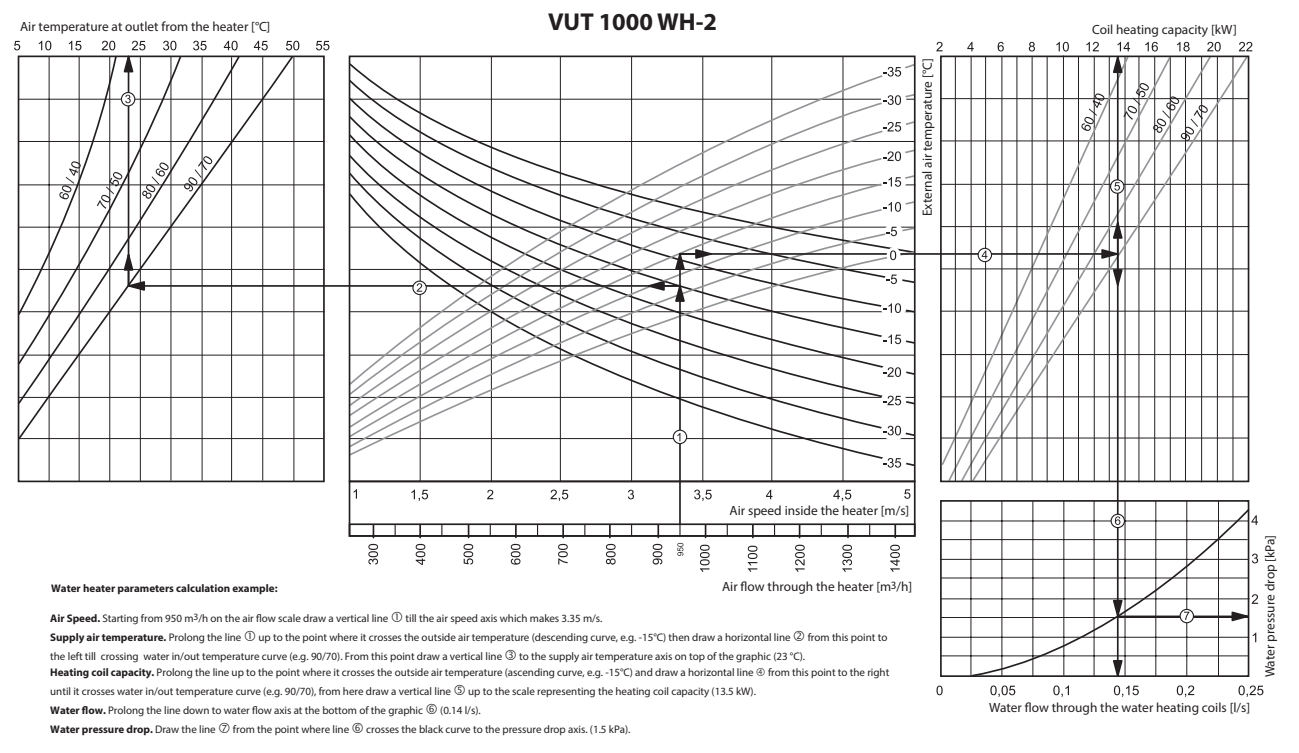


Fig. 4 Calculation of the VUT 1000 WH-2 water heater parameters

Performance chart for the VUT 1000 WH-4 water heater parameters is shown in Fig. 5.

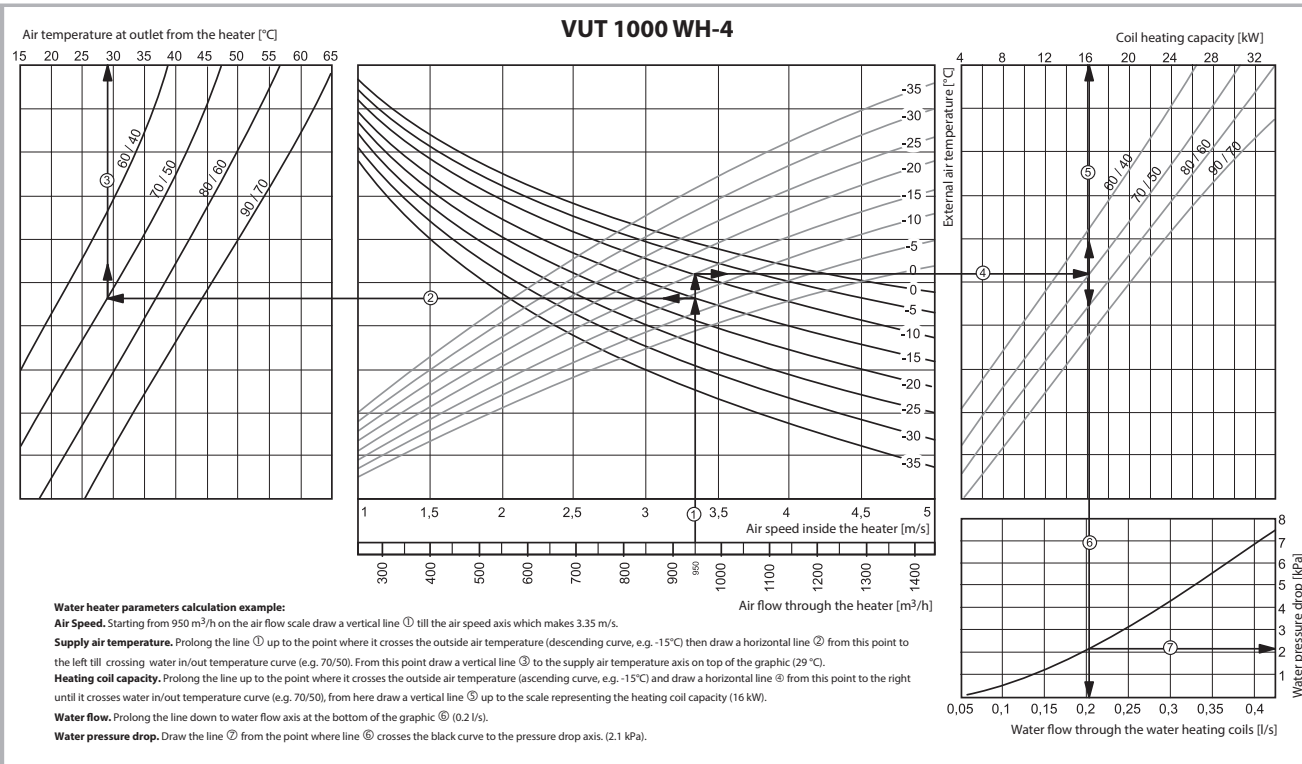


Fig. 5 Calculation of the VUT 1000 WH-4 water heater parameters

Performance chart for the VUT 1500 WH-2 water heater parameters is shown in Fig. 6.

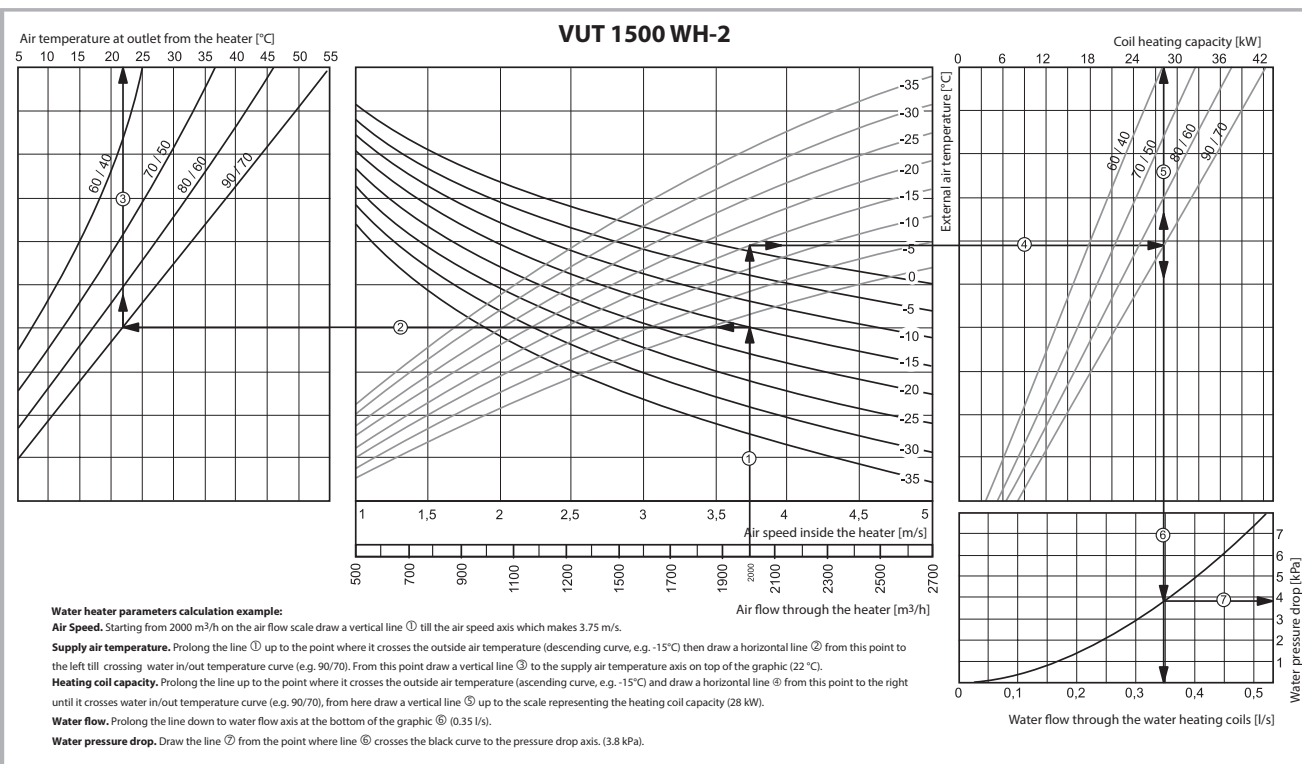


Fig. 6 Calculation of the VUT 1500 WH-2 water heater parameters

Performance chart for the VUT 1500 WH-4 water heater parameters is shown in Fig. 7.

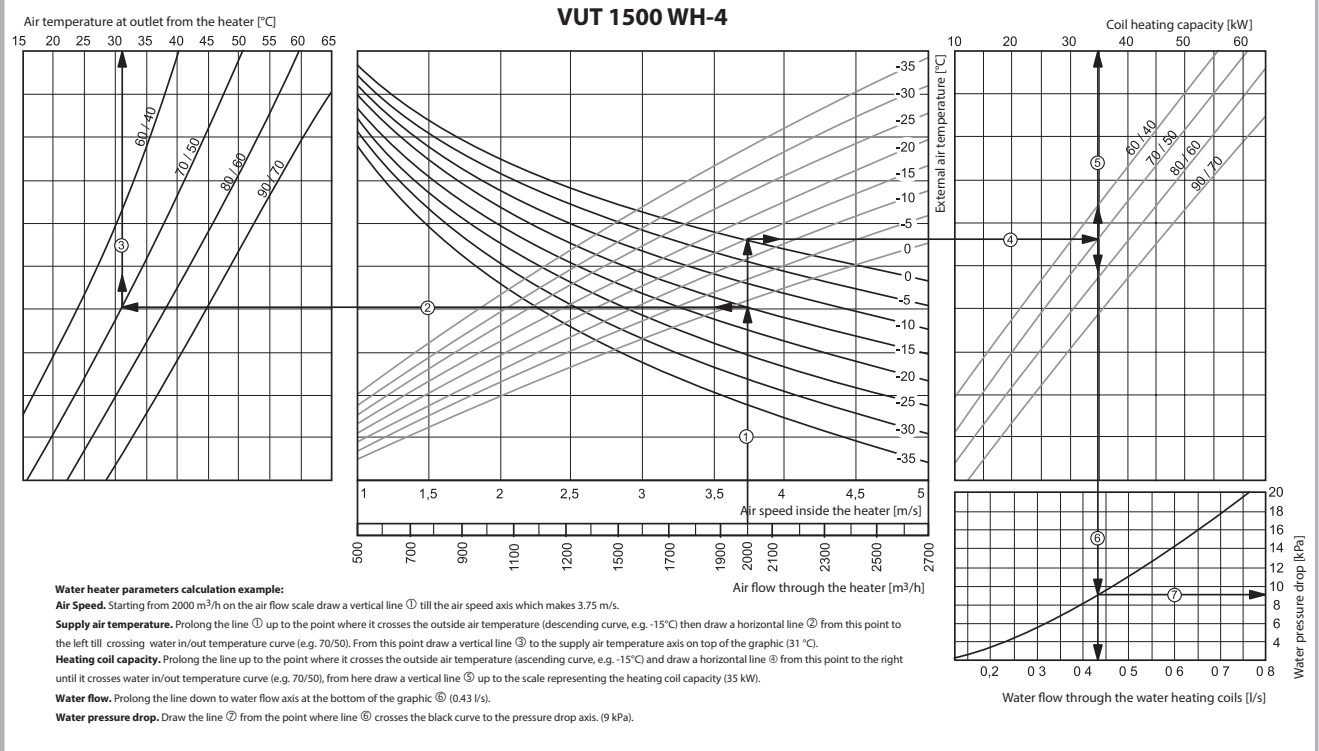


Fig. 7 Calculation of the VUT 1500 WH-4 water heater parameters

Performance chart for the VUT 2000 WH-2 water heater parameters is shown in Fig. 8.

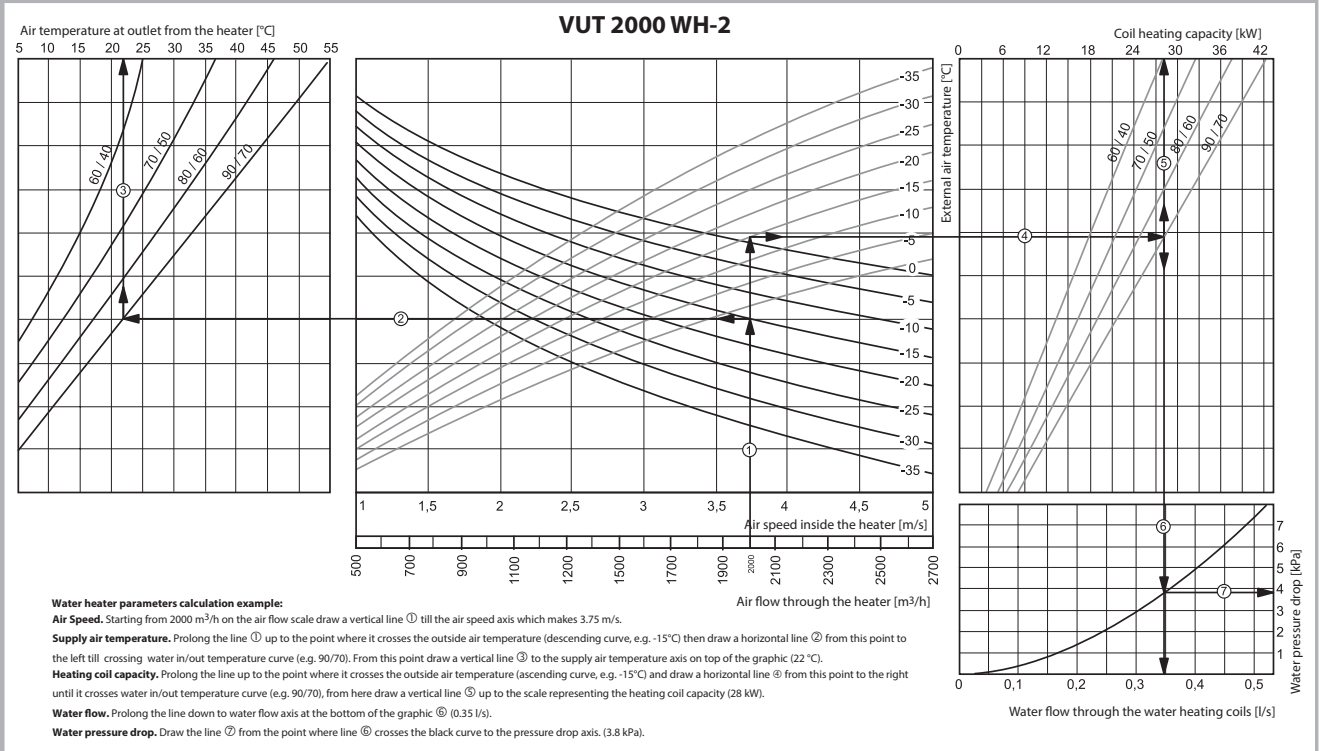


Fig. 8 Calculation of the VUT 2000 WH-2 water heater parameters

Performance chart for the VUT 2000 WH-4 water heater parameters is shown in Fig. 9.

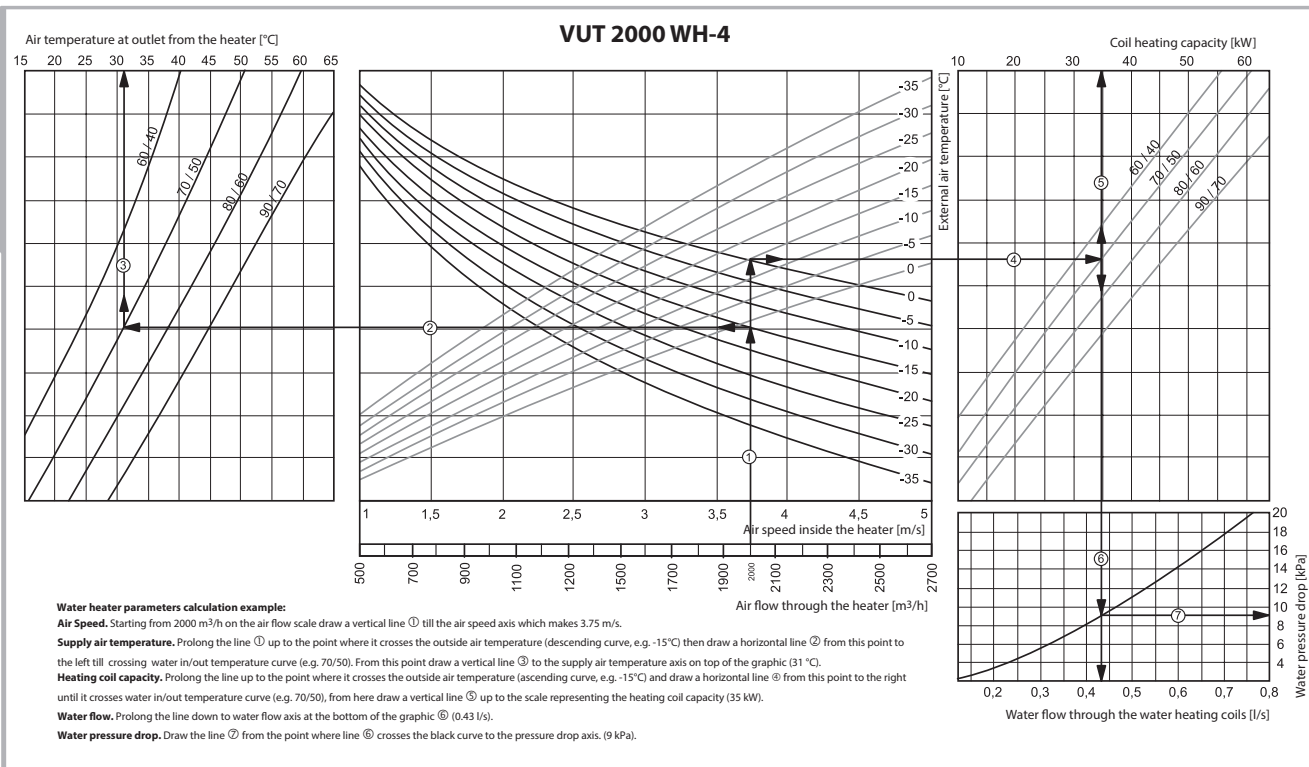


Fig. 9 Calculation of the VUT 2000 WH-4 water heater parameters



UNIT DESIGN AND OPERATING LOGIC

The unit has the following operating logic (Fig. 10):

Warm stale extract air from the room flows through the air ducts to the unit, is purified in the extract filter, supplied to the heat exchanger and exhausted outside by the exhaust fan. Clean cold air from outside is moved by supply fans to the unit where from it is directed to the supply filter. Then cleaned air flows through the heat exchanger and is supplied to the room through the air ducts. Heat energy of warm extract air is transferred to clean intake fresh air from outside and warms it up. Heat recovery minimizes heat losses, energy demand and operating costs for warming up supply air in cold seasons.

The unit is a framework construction that includes a frame made of six rigidly fixed 50 mm thick sandwich panels. The three-layer sandwich panels are made of two galvanized sheets, internally filled with heat- and sound-insulated mineral wool layer.

The air handling unit is equipped with quick-detachable service panels for scheduled repair and maintenance operations. The panels are specially sealed.

There is a control unit on the top panel of the unit, where the terminal box is located.

The cables must be routed to the terminal box through the cable lead-ins.

The wiring diagram for connection of the unit to power mains is shown on the inner side of the control unit.

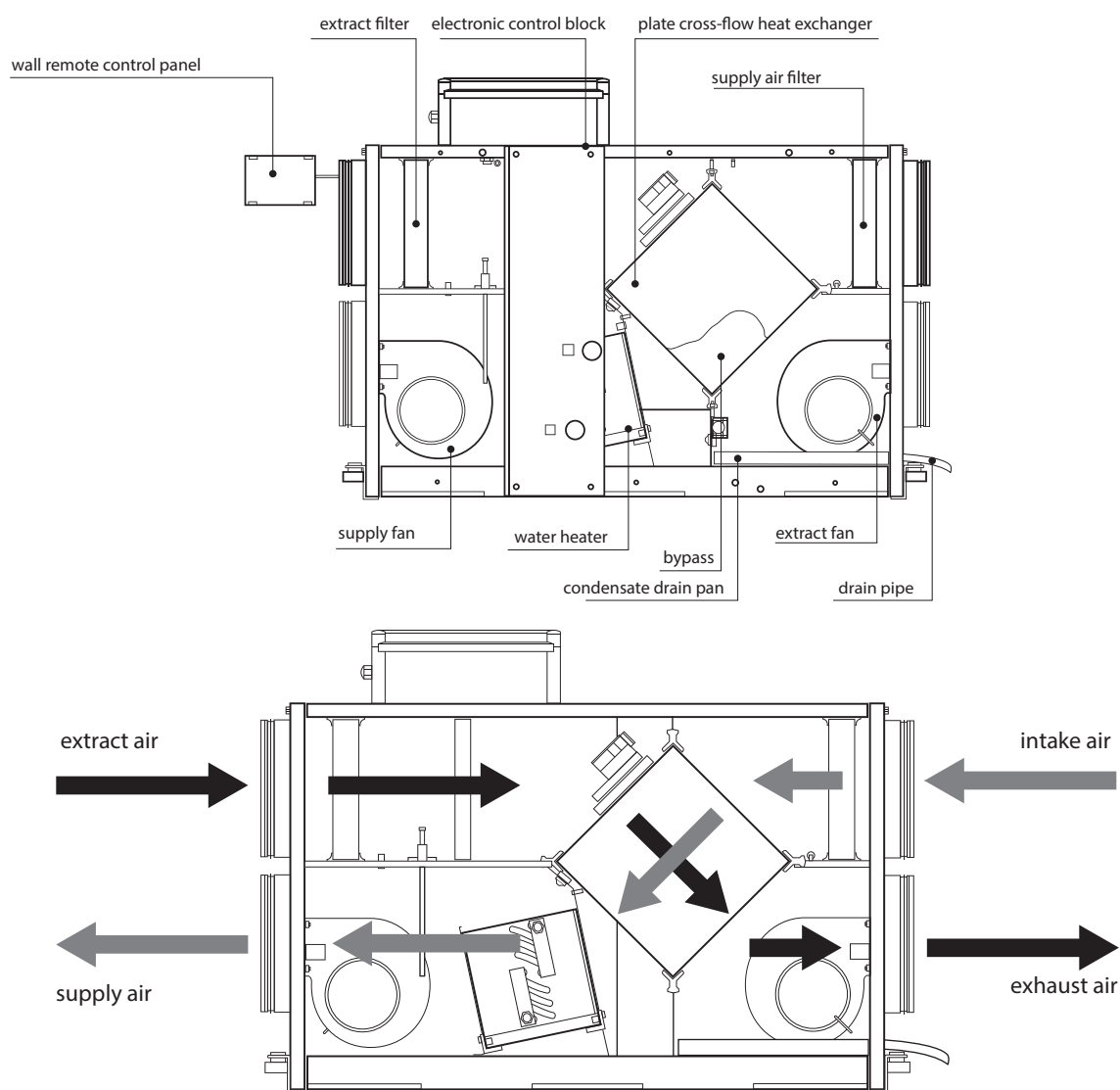


Fig. 10 Unit design and operating logic

The unit basic modification includes:

- external wall-mounted control panel that is connected to the control system via a cable;
- supply and extract fan with forward curved blades and maintenance-free external rotor motors with integrated overheating protection;
- plate cross-flow heat exchanger;
- water heater;
- supply filter with G4 filter class (F7 is optional);
- extract filter with G4 filter class.

MOUNTING AND SET-UP

The unit may be suspended on a threaded rod that is fixed inside a dowel or may be rigidly fixed on a horizontal plane (Fig.11). While mounting the unit provide enough access for unit servicing and maintenance. The minimum distances from the unit to the mounting planes is shown in Fig.12.

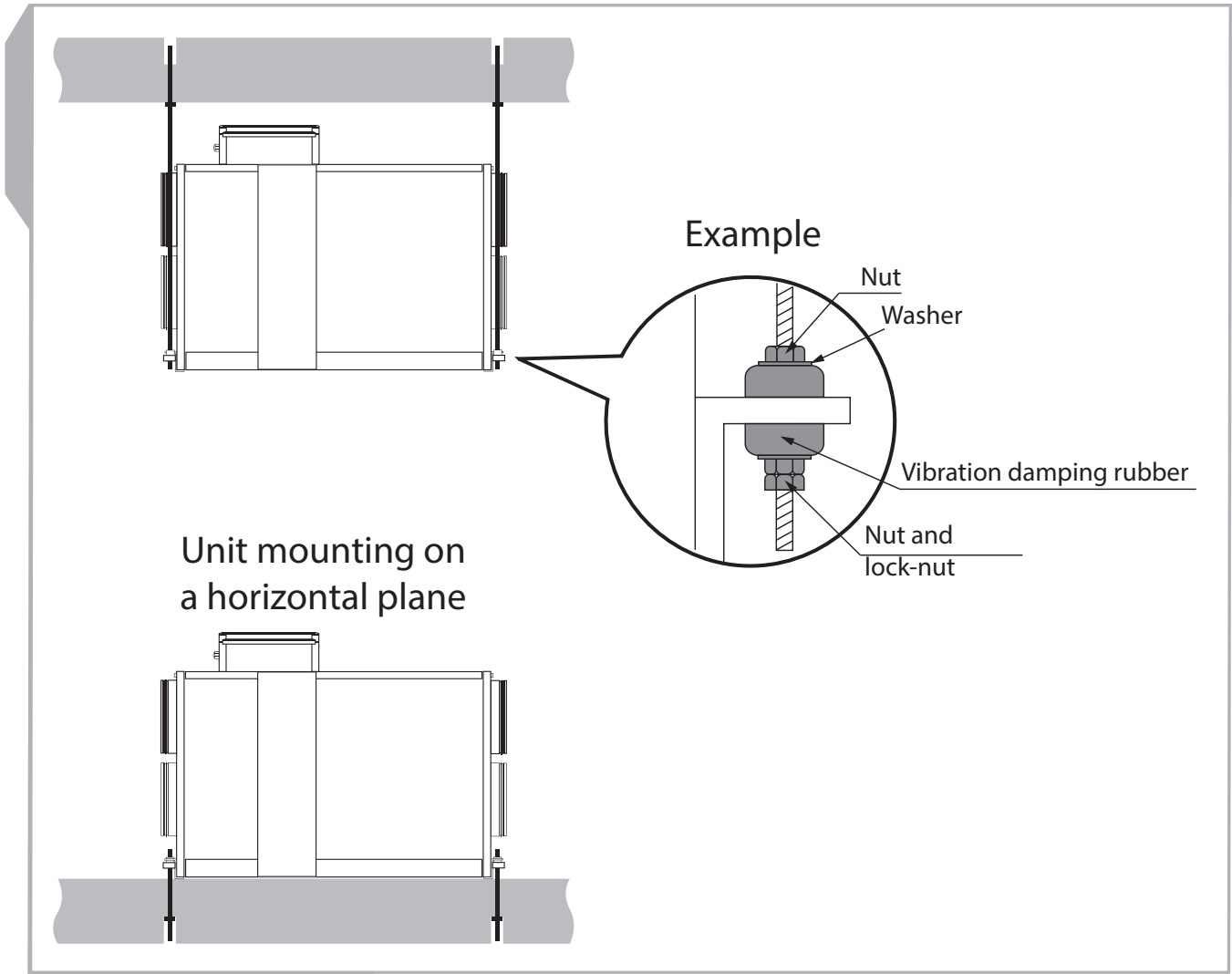


Fig. 11 Unit mounting

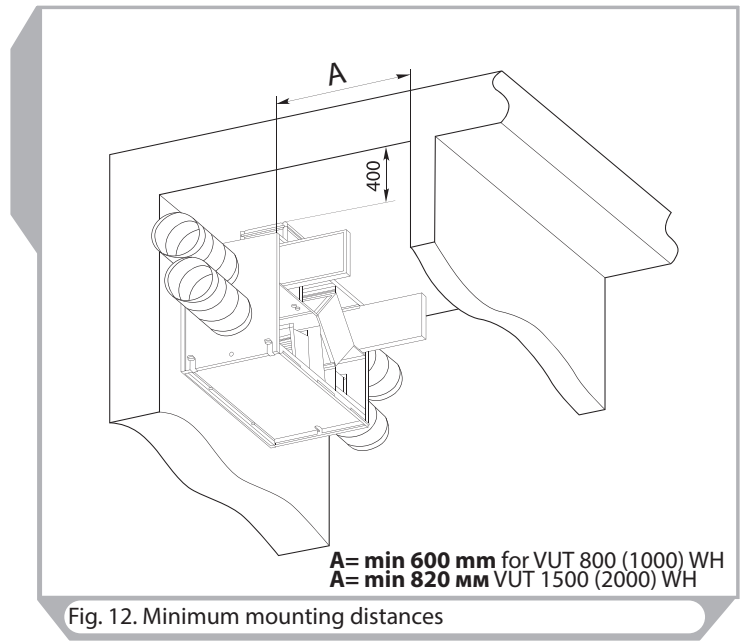
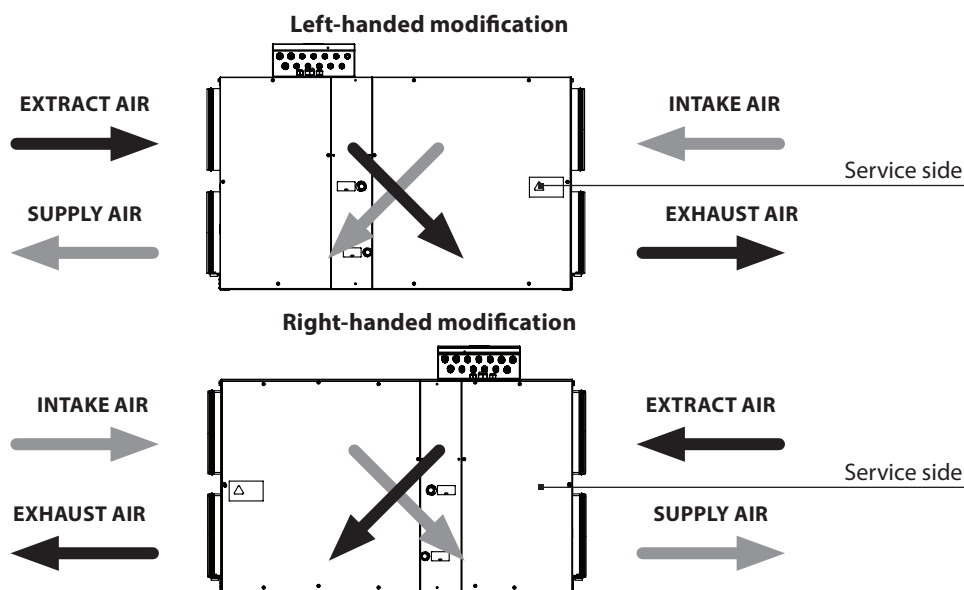


Fig. 12. Minimum mounting distances

VUT 1500 WH AND VUT 2000 WH UNITS MODIFICATIONS DEPENDING ON THE SERVICE SIDE

Left- and right-handed modifications are provided for ease of mounting and maintenance:



Safety precautions:

The unit must be mounted to a rigid and stable structure. Check the technical parameters and the unit weight.

The unit must be suspended using anchor bolts. Before starting mounting check that the mounting structure has sufficient loading capacity for the unit weight, otherwise reinforce it with beams, etc. After that fix the bolts. If the construction strength or surface is not rigid enough it can resonate with the unit and create abnormal noise and vibration.

While mounting the unit provide enough service space and an access door in the ceiling for inspection and maintenance of the filters, heat exchanger and fans. One access door is required for each unit. For details, refer the outline drawing (ref. Fig. 1).

Insert the anchor bolt inside the mount for the fixing bracket and fix it with nuts and washers.

Make sure the unit casing has no foreign objects inside, like paper and foil.

If the bolts used for the unit mounting are too short the unit can generate abnormal noise and resonate with the ceiling.

If the connection point to the spiral seam duct is supposed to be the source of the abnormal noise, install a flexible air duct instead of the spiral seam one. The precautions referred above are normally sufficient to solve the resonance problem.

For the better effect you may use anti-vibration connectors. To ensure the best performance of the unit provide a straight 1 m duct section on both sides of the unit while mounting. Access to the unit must be prevented by installing a protecting grille or any other device with the mesh width up to 12.5 mm. In order to attain maximum power the water heater should be counter-flow connected (Fig. 13).

All calculation diagrams (ref. Fig. 2-9, page 5-9) are valid for the counter-flow connection of the water heater. In case of the direct-flow connection the water heater has lower power but higher frost-resistant properties.

a) direct-flow connection

b) counter-flow connection

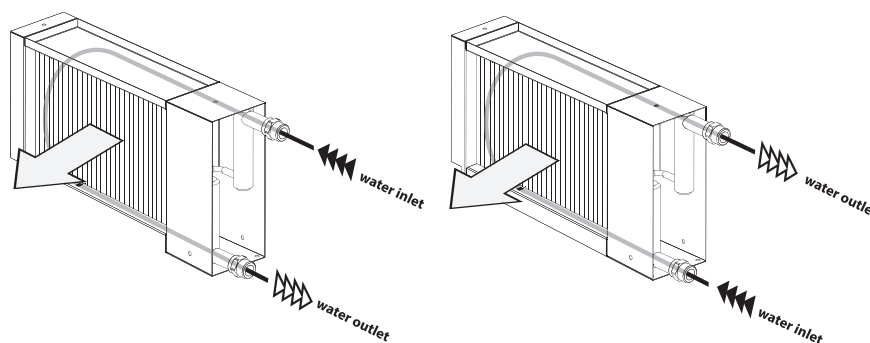
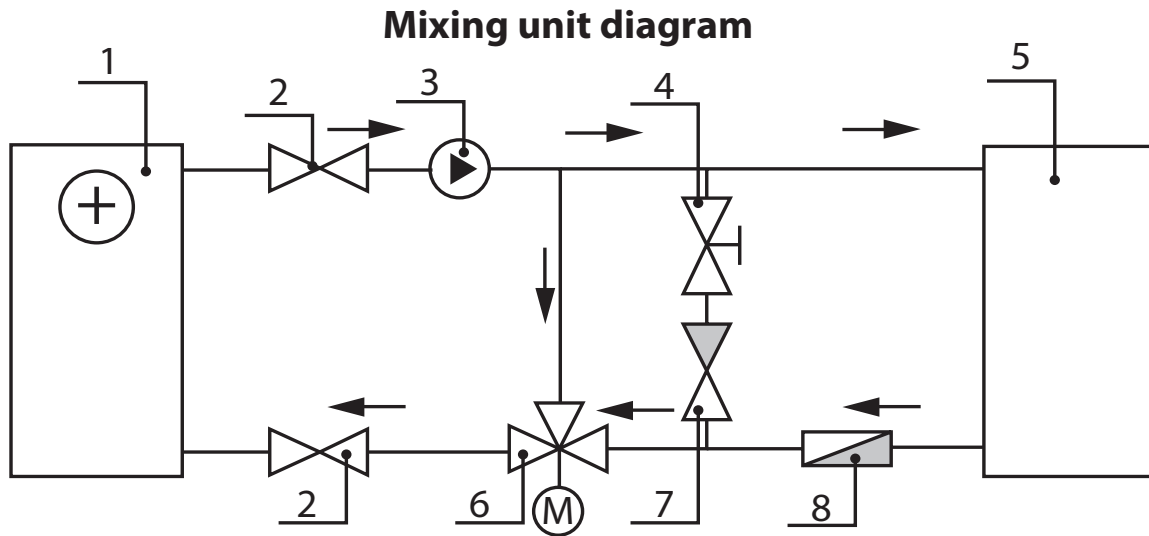


Fig. 13. Water heat connection

Mixing unit diagram (not included into delivery set) of the water heater is shown in Fig. 14.



1. Water heater.
2. Shutoff valves.
3. Circulation pump.
4. Bypass damper.
5. Boiler.
6. Heat medium regulating valve.
7. Non-return valve.
8. Coarse filter.

Heat medium regulating valve actuator

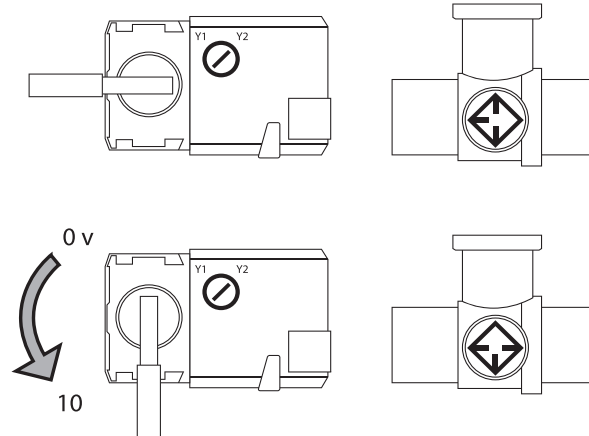


Fig. 14. Mixing unit diagram



CONDENSATE DRAINAGE

The unit must be connected to the drainage system (Fig. 15). Connect the condensate drain pipe, the U-trap (not included into delivery set) and the sewage system with metal, plastic or rubber pipes (Fig. 15). The pipes must be sloped down by min. 3°.

Before starting the unit fill the system with water and check that the U-trap is always filled with water. Make sure that the water drainage is correct. Wrong connection to sewage system may result in condensate accumulation inside the unit.

The condensate drainage system is designed for operation at the ambient temperature above 0 °C!

If the ambient temperature is below 0 °C, the condensate drainage system must be heat insulated and pre-heated.

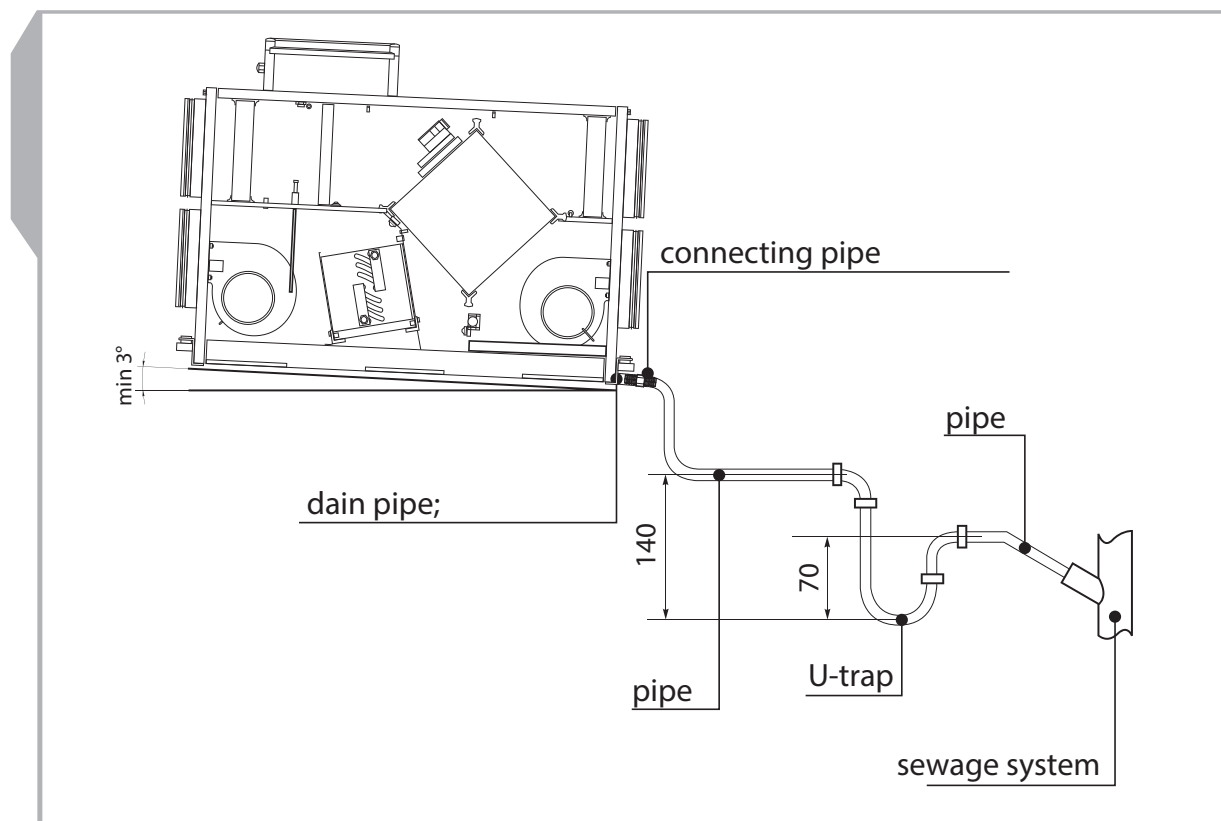


Fig. 15. Condensate drainage



DO NOT CONNECT SEVERAL UNITS OF THE SAME OR VARIOUS TYPES TO A SINGLE U-TRAP. DIRECT CONDENSATE DRAINAGE OUTSIDE WITHOUT CONNECTION TO SEWAGE SYSTEM IS NOT ALLOWED.

CONNECTION TO POWER MAINS



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 SHOWN ON THE RATING PLATE. ANY INTERNAL CONNECTION MODIFICATIONS ARE NOT ALLOWED AND RESULT IN WARRANTY LOSS.

The unit is rated for connection to 230 V / 50 Hz single-phase alternating current power mains (Fig. 17, 18) via insulated, durable and heat resistant conductors (cables, wires) with respective cross section, in any case no less than 2.5 mm².

The above cross section is for reference only. The applicable cable cross section must be selected depending on the wire type, its maximum temperature and insulation, the maximum current, the wire length and its installation method.

Use copper wires only.

The unit must be grounded.

Connect the unit to power mains through the terminal block which is located in the control unit on the top of the unit, in compliance with the wiring diagram and the terminal marking. Connect all the control and supply cables in compliance with the terminal marking and polarity!

Connect the unit to power mains through the external automatic switch with thermal-magnetic circuit breaker integrated into the fixed wiring system. The trip current should be not lower than the current consumption (ref. Table 2).

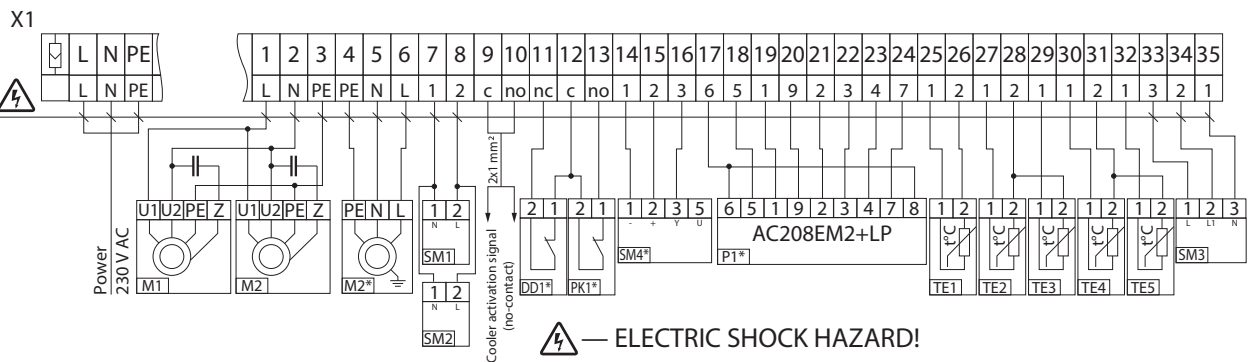


Fig. 17. External wiring diagram for VUT 800 (1000) WH

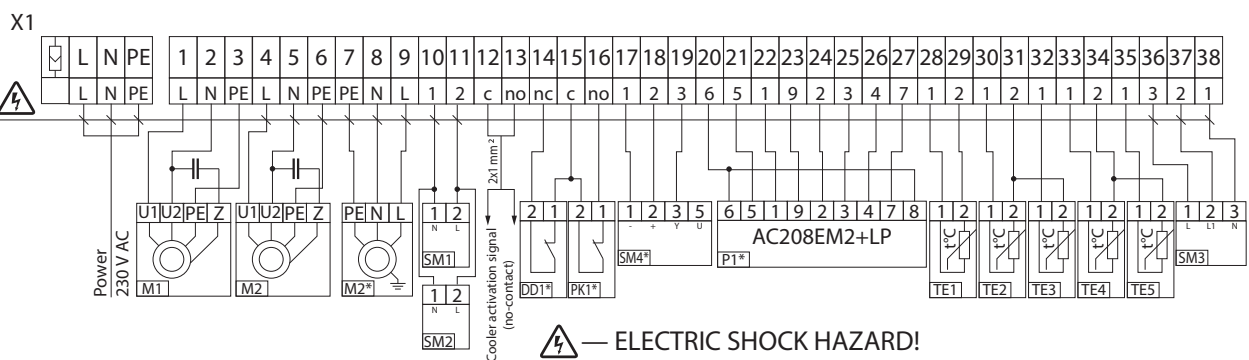


Fig. 18. External wiring diagram for VUT 1500 (2000) WH



ATTENTION! MOUNTING AND CONNECTING OF THE AUTOMATIC CONTROL SYSTEM IS ALLOWED BY A QUALIFIED ELECTRICIAN WITH A WORK PERMIT FOR THIS TYPE OF OPERATIONS. DISCONNECT THE UNIT FROM POWER MAINS BEFORE ANY SERVICING OR MAINTENANCE OPERATIONS.

Table 4

Design.	Name	Type	Wire***
M1	Supply fan	max. 1 kW	
M2	Extract fan	max. 1 kW	
M3*	Circulation pump	max. 0.3 kW	3x0,75 mm ²
DD1*	Pump dry run protection relay****	NC	2x0,75 mm ²
SM1*, SM2	Air damper actuator	LF 230	2x0,75 mm ²
SM4*	Water heater valve actuator	LR 24 SR	3x0,75 mm ²
SM3	Heat exchanger bypass damper actuator	LM 230	
PK1*	Contact from fire alarm panel	NO	2x0,75 mm ²
P1*	Control panel**	SAS908PIT	
TE1	Intake air temperature sensor	ST-01	
TE2	Exhaust air temperature sensor	STa-02	
TE3	Return heat medium temperature sensor	STw-02	
TE4	Water heater freeze protection sensor	STw-02	
TE5	Supply air temperature sensor	STa-02	

* - The appliances are not supplied with the unit, are available on the separate order.

** - Cable length from P1 must not exceed 10 meters.

** - Max. connecting cable length is 20 m!

**** - The system can operate without a heat medium pressure relay in the DD1 heater, in this case a jumper should be installed between the contacts 11 and 12 for VUT 800...1000 WH or between the contacts 14 and 15 for VUT 1500...2000 WH.

UNIT CONTROL

The unit is equipped with a built-in electronic automatic control unit and a control panel (ref. Control panel user's manual).

MAINTENANCE

Maintenance operations of the unit are required 3-4 times per year. Maintenance includes regular cleaning 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. Contact the unit Seller to purchase new filters.

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 exchange efficiency, regular cleaning is required. To clean the heat exchanger pull it out of the unit and clean it with flush it with warm detergent solution. After cleaning install the dry heat exchanger back to the unit.

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 fans with a soft brush or cloth. No water and abrasive detergent, sharp objects or solvents are allowed for cleaning to prevent the impeller damage.

4. Condensate drainage inspection (once per year).

The drain pipes may get clogged with the extracted particles. Pour some water inside the drain pan to check the pipe for clogging. Clean the U-trap and the drain pipe if required.

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

Leaves and other pollutions can clog the supply air grille and reduce the unit performance and supply air volume. Check the supply grille twice per year and clean it as required.

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

Even if you follow all the listed maintenance guidelines, some dust can get accumulated inside the air ducts and reduce the unit performance. Duct maintenance means regular cleaning or replacement.

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

Remove the diffusers and the grilles and wash them with warm water and mild detergent solution. Do not change locations of the diffusers and the louvre shutters.



INSPECT THE HOOD AND THE INTAKE GRILLE ONCE PER YEAR AND CLEAN AS REQUIRED.

■ FAULT HANDLING

Table 5

Faults and fault handling

Problem	Possible reasons	Fault handling
The fan(s) do(es) not get started.	No power supply.	Make sure the power supply line is connected correctly, otherwise troubleshoot the connection error.
	Motor is jammed, the blades are soiled.	Turn the unit off. Troubleshoot the motor jamming. Clean the blades. Restart the unit.
	Alarm in the system.	Remove the system alarm. Restart the unit.
Automatic circuit breaker tripping.	High current consumption due to short circuit in power line.	Turn the unit off. Contact the service centre.
Low air flow.	Low set air flow.	Switch the unit to higher speed.
	Filters, fans or the heat exchanger are soiled.	Clean or replace the filters; clean the fan(s) and the heat exchanger.
	The ventilation system components (air ducts, diffusers, louver shutters, grilles) are soiled or damaged.	Clean or replace the ventilation system components (air ducts, diffusers, louver shutters, grilles).
	Air dampers, diffusers or louver 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.
High noise, vibration.	The impeller(s) is clogged.	Clean the impeller(s).
	Loose screw tightening.	Tighten the screws.
	No anti-vibration mounts.	Install the rubber anti-vibration mounts (not included into delivery set).
Water leakage.	The drainage system is soiled, damaged or arranged not correctly.	Clean the drainage system. 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 packing box in a closed ventilated premise with temperature range from +10°C to +40°C and relative humidity maximum 60% (at +20°C).

Vapours or particles which can cause corrosion or damage the insulation or connection tightness are not allowed in the storage environment.

Use hoist machinery for handling and transportation to prevent possible mechanical damages of the unit. Fulfill the requirements for transportation of the specified cargo type during cargo-handling operations.

Use any vehicle types for the unit transportation provided that it is protected against mechanical or weather damage. Avoid any mechanical shocks and strokes during handling operations.

MANUFACTURER'S WARRANTY

The manufacturer hereby warrants normal operation of the unit over the period of 24 months from the retail sale date provided the user's observance of the transportation, storage, installation and operation regulations.

Should any malfunctions occur during the unit operation due to manufacturer's fault during the warranty period the user is entitled to elimination of faults by means of warranty repair performed by the manufacturer.

The warranty repair includes work specific to elimination of faults in the unit operation to ensure its intended use by the user within the warranty period. The faults are eliminated by means of replacement or repair of the complete unit or the faulty part thereof.

The warranty repair does not include:

- routine maintenance;
- unit installation / dismantling;
- unit setup.

To benefit from warranty repair the user must provide the unit, the user's manual with stamped sale date and the payment document certifying the purchase.

The unit model must comply with the one stated in the user's manual.

Contact the unit Seller for warranty service.

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

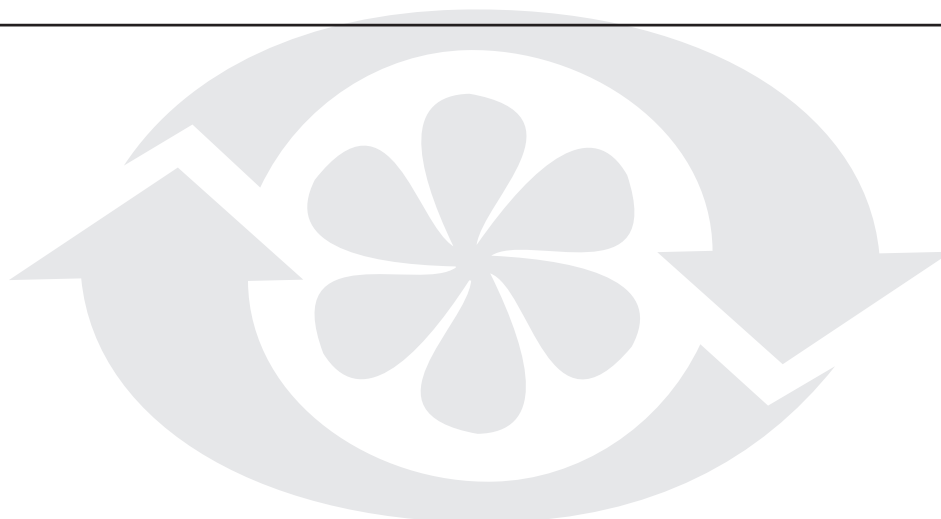
- user's failure to provide the unit with the entire delivery package as stated in the user's manual or with missing component parts previously dismantled by the user;
- mismatch of the unit model and make with the respective details stated on the unit packing and in the user's manual;
- user's failure to ensure timely technical maintenance of the unit;
- external damage to the casing (excluding external modifications of the unit as required for its installation) and the internal components of the unit;
- alteration of the unit design or engineering changes of the unit;
- replacement and use of the unit assemblies, parts and components not approved by the manufacturer;
- unit misuse;
- user's violation of the unit installation regulations;
- user's violation of the unit management regulations;
- unit connection to the power mains with a voltage different from the one stated in the user's manual;
- unit breakdown due to voltage surges in the power mains;
- user's discretionary repair of the unit;
- unit repair performed by any persons not authorized by the manufacturer;
- expiry of the unit warranty period;
- user's violation of the established regulations specific to the unit transportation;
- user's violation of the unit storage regulations;
- wrongful acts against the unit committed by third persons;
- unit breakdown due to circumstances of insuperable force (fire, flood, earthquake, war, hostilities of any kind, or blockade);
- missing seals if provided by the user's manual;
- failure to provide the user's manual with the sale date stamp;
- missing payment document certifying the unit purchase.



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



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



ACCEPTANCE CERTIFICATE

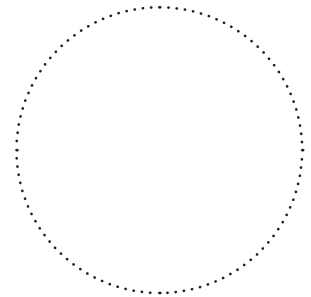
Product Type	Heat recovery air handling unit
Model	VUT____ WH
Serial Number	
Manufacturing Date	
is compliant with the technical specifications and is hereby declared ready for service.	
Quality Inspector's Stamp	

SELLER INFORMATION

Shop name	
Address	
Phone number	
E-mail	
Sales date	

This is to certify delivery of the complete unit with the user's manual. The warranty terms are acknowledged and accepted.

Customer's signature

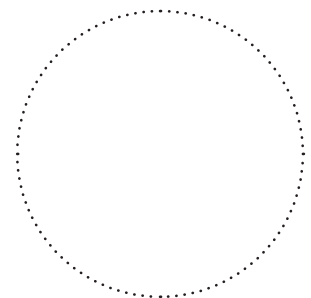


Seller's seal

CONNECTION CERTIFICATE

VUT____ WH heat recovery air handling unit has been connected to power mains pursuant to the requirements stated in the present user's manual.

Company name	
Address	
Phone number	
Installation technician's full name	
Installation date:	Signature:



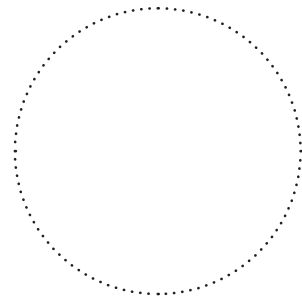
Installation technician's company seal

This is to certify that the works specific to the unit installation has been performed in accordance with all the applicable provisions of local and national construction, electrical and technical codes and standards. The unit operates normally as intended by the manufacturer.

Signature:

■ **WARRANTY CARD**

Product type	Heat recovery air handling unit
Model	VUT _____ WH
Serial number	
Manufacturing date	
Sales date	
Warranty period	
Sales company	



Seller's seal

■ **NOTES**



