

Series
VENTS VUT V mini EC



Speed controller R-1/010



Series
VENTS VUT H mini EC



Speed controller R-1/010



with the high efficiency and perfect control over the whole speed range. Premium efficiency (reaching 90%) is an absolute advantage of electronically commutated motors.

■ **Heat exchanger**

The cross-flow air-to-air plate heat exchanger block is manufactured from aluminum plates. Whenever heat recovery is not required the heat exchanger block can be easily replaced by a "summer" block. The unit is also equipped with the drain pan for condensate drainage as well as built-in icing protecting system. Its operating principle is based on switching the supply fan off as the temperature sensor requires. Warm exhaust air heats the heat exchanger. Then the supply fan switches on and the unit continues operating under normal rated conditions.

■ **Control**

The unit is controlled by means of external control signal 0-10 V (e.g., R-1/010 controller for EC-motors). Air capacity as a function of temperature level, pressure and smoke conditions and other system parameters. Should the value of the control parameter get changed the EC-motor changes its speed and the fan boosts as much air flow to the ventilation system as required.

■ **Mounting**

Air handling unit is mounted on the floor and suspended to the ceiling by means of a seat angle with inserted vibration-damping element or attached to a wall with brackets. The unit can be mounted either in service spaces as balcony, storeroom, basement, roof space or in main premises above the suspended ceiling, in the pocket or the unit can be placed directly in the room. Mounting in any position shall provide correct condensate drainage. Access for the maintenance shall be reserved at the side of the swing-out access door.

Air handling units with the air capacity up to **345 m³/h** and the recuperation efficiency up to 85% in the compact sound- and heat-insulated casing with vertical duct connections.

Air handling units with the air capacity up to **345 m³/h** and the recuperation efficiency up to 85% in the compact sound- and heat-insulated casing with horizontal duct connections.

■ **Description**

VUT mini air handling unit is a complete air handling unit designed for air filtration, heating and supply to the premises and removal of exhaust air. During the operating process the heat of the exhausted air is transferred to the supply air through the plate heat exchanger. Applied in ventilation and conditioning systems for various premises that require economic solution and controllable air exchange. EC-motors reduce energy consumption by 1.5-3 times and ensure high efficiency and low noise level at the same time. All the models are compatible with Ø 100 and 125 mm round ducts.

■ **Modifications**

VUT V mini EC series are energy saving Air Handling Units (AHU) equipped with intake and exhaust centrifugal fans powered by EC motors, cross-flow heat recovery elements and air filters. Vertical duct connections.
VUT H mini EC series are energy saving Air Handling

Units (AHU) equipped with supply and exhaust centrifugal fans powered by EC motors, cross-flow heat recovery elements and air filters. Horizontal duct connections.

■ **Casing**

The casing is manufactured from aluminum-zinc compound with 20 mm thick mineral wool layer for heat and sound insulation.

■ **Filter**

Two incorporated G4 panel filters for intake and supply air filtration are applied in the unit.

■ **Motor**

The impeller with backward curved blades is powered by high-efficient electronically commutated (EC) direct current motor. As of today the ventilation system based on heat exchangers is the most state-of-the-art and progressive solution for air exchange organization in the premises. EC motors are featured

Designation key:

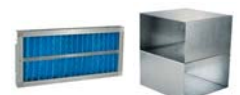
Series	Rated air capacity, m ³ /h	Duct connection	Type	Motor type
VENTS VUT	200; 300	V – vertical H – horizontal	mini	EC – electronically commutated synchronous motor

Accessories



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Offered options to the units

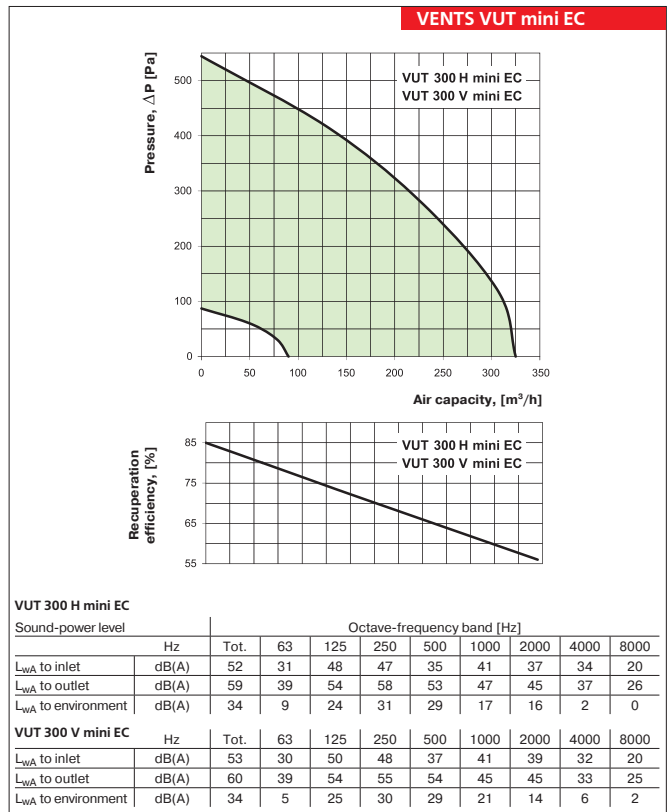
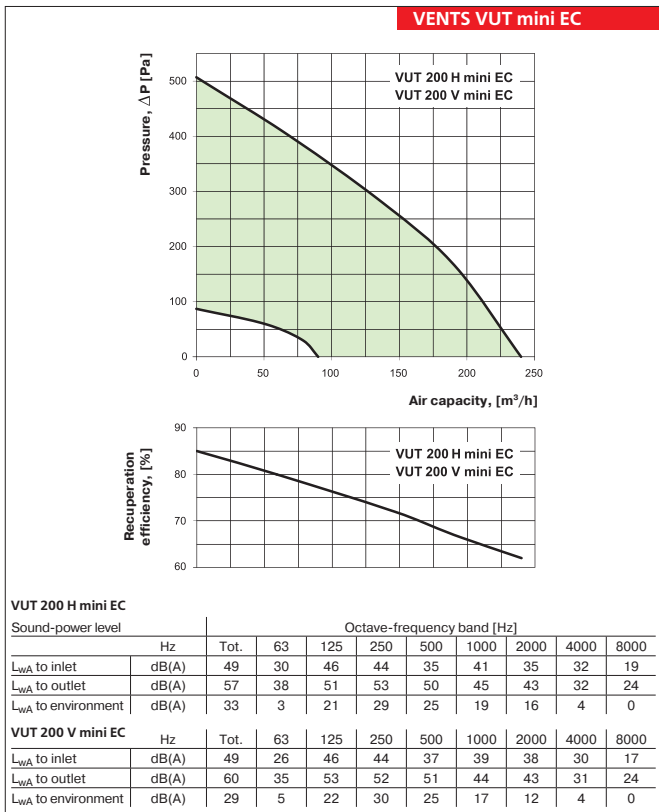


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Technical data:

	VUT 200 H mini EC	VUT 200 V mini EC	VUT 300 H mini EC	VUT 300 V mini EC
Unit supply voltage [V / 50 Hz]	1~ 230		1~ 230	
Maximum fan power [W]	2pcs. x 105		2pcs. x 105	
Fan current [A]	2pcs. x 0,9		2pcs. x 0,9	
Total power of the unit [W]	210		210	
Total current of the unit [A]	1,80		1,80	
Air capacity [m ³ /h]	240		345	
RPM	3550		3570	
Noise level at 3m [dB(A)]	24-45		28-47	
Operating temperature [°C]	-25 up to +60		-25 up to +60	
Casing material	aluzink		aluzink	
Insulation	20 mm mineral wool		20 mm mineral wool	
Filter: exhaust / supply	panel filter G4		panel filter G4	
Replaceable filter*	SF VUT mini G4		SF VUT mini G4	
Summer block*	VL VUT mini		VL VUT mini	
Duct connection diameter, [mm]	∅ 100		∅ 125	
Weight, [kg]	30		30	
Recuperation efficiency	up to 85%		up to 85%	
Heat exchanger type	cross-flow type		cross-flow type	
Heat exchanger material	aluminum		aluminum	

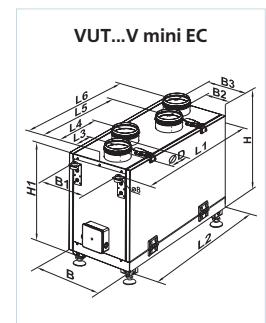
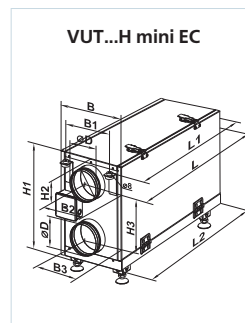
*additional sets of replaceable filters and summer blocks are accessories and supplied separately



Unit overall dimensions:

Type	Dimensions, [mm]											
	∅D	B	B1	B2	B3	H	H1	H2	H3	L	L1	L2
VUT 200 H mini EC	99	278	200	121	192	481	431	84	191	699	640	600
VUT 300 H mini EC	124	278	200	139	139	481	431	89	296	699	640	600

Type	Dimensions, [mm]												
	∅D	B	B1	B2	B3	H	H1	L1	L2	L3	L4	L5	L6
VUT 200 V mini EC	99	278	200	109	169	481	431	640	600	73,5	204	396	526,5
VUT 300 V mini EC	124	278	200	100	178	481	431	640	600	74	210	390	526



VENTS
 AIR HANDLING UNIT WITH
 HEAT RECOVERY SERIES
 VUT mini EC