

Series VENTS VUT H



Speed controller A6

Air handling units with the air flow up to **2200 m³/h** and the heat recovery efficiency up to 88 % in the compact sound- and heat-insulated casing

Description

Air handling unit VUT H is a complete ventilation units designed for air filtration and supply to the premises and exhaust air removal. During the operation process the extract air heat is transferred to the supply air through the plate heat exchanger. All the models are designed for connection with Ø 125, 150, 160, 200, 250, 315 mm round ducts.

Casing

The casing is made of aluminium profile, double skinned with 20 mm mineral wool heat-and sound-insulating layer.

Filter

Two incorporated G4 panel filters for extract air ventilation are supplied with the unit.

Fans

The unit is equipped with supply and exhaust centrifugal double-inlet fans with forward curved blades and built-in thermal overheating protection with automatic restart. The electric motors and impellers are dynamically balanced in two planes. The ball-bearings used with motors are designed for at least 40 000 hours operation and are maintenance-free.

Heat exchanger

The cross-flow air-to-air heat exchanger is made of polystyrol. 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 water drainage as well as built-in freezing protection system. Its operating principle is based on switching the supply fan off as the temperature sensor requires. Warm extract air heats the heat exchanger. Then the supply fan switches on and the unit continues operating under rated conditions.

Control

The motor speed is controlled by means of 4-step control switch by means of selecting the minimum, average or maximum speed or the unit shutdown.

Mounting

Air handling unit is mounted on the floor and suspended to the ceiling by means of a seat angle with anti-vibration mounts or attached to a wall with brackets. The unit can be mounted either in service spaces or in main premises above the suspended ceiling, in the pocket or can be placed directly in the room. Mounting in any position shall provide correct condensate drainage. Access for the fan maintenance and filter cleaning shall be provided from outside of the side panels.

Accessories to air handling units

Model	G4 panel filter	Silencers		Back valves	Air dampers	Clamps	Summer blocks
VUT 350 H	SF 378x210x48 G4	SR 125 600/900/1200	SRF 125 600/900/1200	KOM 125	KR 125	C 125	VL C4 200/384
VUT 500 H		SR 150 600/900/1200	SRF 150 600/900/1200	KOM 150	KR 150	C 150	VL C4 300/384
VUT 530 H		SR 160 600/900/1200	SRF 160 600/900/1200	KOM 160	KR 160	C 160	VL C4 300/384
VUT 600 H		SR 200 600/900/1200	SRF 200 600/900/1200	KOM 200	KR 200	C 200	VL C4 300/384
VUT 1000 H	SF 450x295x48 G4	SR 250 600/900/1200	SRF 250 600/900/1200	KOM 250	KR 250	C 250	VL C4 300/450
VUT 2000 H	SF 750x295x48 G4	SR 315 600/900/1200	SRF 315 600/900/1200	KOM 315	KR 315	C 315	VL C4 300/750

Designation key

Series	Rated air flow, m³/h	Duct connection
VENTS VUT	350; 500; 530; 600; 1000; 2000	H: horizontal

Technical data

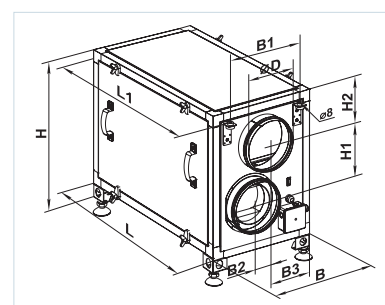
	VUT 350 H	VUT 500 H	VUT 530 H
Voltage [V/Hz]	1~230/50-60	1~230/50-60	1~230/50-60
Maximum fan power [W]	2pcs. x 130	2pcs. x 150	2pcs. x 150
Fan current [A]	2pcs. x 0.60	2pcs. x 0.66	2pcs. x 0.66
Total unit power [W]	260	300	300
Total unit current [A]	1.2	1.32	1.32
Air flow [m³/h]	350	500	530
RPM	1150	1100	1100
Noise level at 3m [dBA]	24-45	28-47	28-47
Transported air [°C]	-25 ... +40	-25 ... +40	-25 ... +40
Casing material	aluzinc	aluzinc	aluzinc
Insulation	25 mm mineral wool	25 mm mineral wool	25 mm mineral wool
Extract filter	G4	G4	G4
Supply filter	G4	G4	G4
Connected air duct diameter [mm]	Ø125	Ø150	Ø160
Weight [kg]	45	49	49
Heat recovery efficiency	up to 78 %	up to 88 %	up to 88 %
Heat exchanger type	cross-flow type	cross-flow type	cross-flow type
Heat exchanger material	polystyrol	polystyrol	polystyrol

Technical data

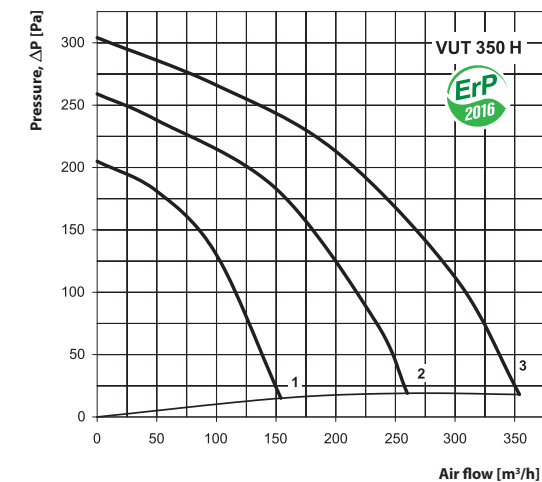
	VUT 600 H	VUT 1000 H	VUT 2000 H
Voltage [V/Hz]	1~230/50-60	1~230/50-60	1~230/50-60
Maximum fan power [W]	2pcs. x 195	2pcs. x 410	2pcs. x 650
Fan current [A]	2pcs. x 0.86	2pcs. x 1.8	2pcs. x 2.84
Total unit power [W]	390	820	1300
Total unit current [A]	1.72	3.6	5.68
Air flow [m³/h]	600	1200	2200
RPM	1350	1850	1150
Noise level at 3m [dBA]	32-48	60	65
Transported air [°C]	-25 ... +40	-25 ... +40	-25 ... +40
Casing material	aluzinc	aluzinc	aluzinc
Insulation	25 mm mineral wool	50 mm mineral wool	50 mm mineral wool
Extract filter	G4	G4	G4
Supply filter	G4	G4	G4
Connected air duct diameter [mm]	Ø200	Ø250	Ø315
Weight [kg]	54	85	96
Heat recovery efficiency	up to 85 %	up to 88 %	up to 87 %
Heat exchanger type	cross-flow type	cross-flow type	cross-flow type
Heat exchanger material	polystyrol	polystyrol	polystyrol

Unit overall dimensions

Type	Dimensions [mm]									
	ØD	B	B1	B2	B3	H	H1	H2	L	L1
VUT 350 H	124	416	300	54	207	603	230	148	722	768
VUT 500 H	149	416	300	54	207	603	230	148	722	768
VUT 530 H	159	416	300	54	207	603	230	148	722	768
VUT 600 H	199	416	300	54	207	603	230	148	722	768
VUT 1000 H	248	548	496	60	213	794	290	200	802	850
VUT 2000 H	313	846	796	235	588	968	360	246	1000	1050

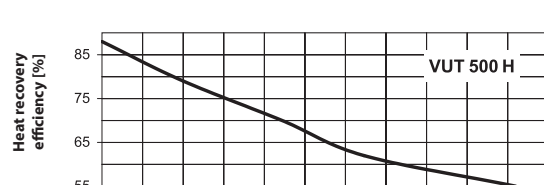
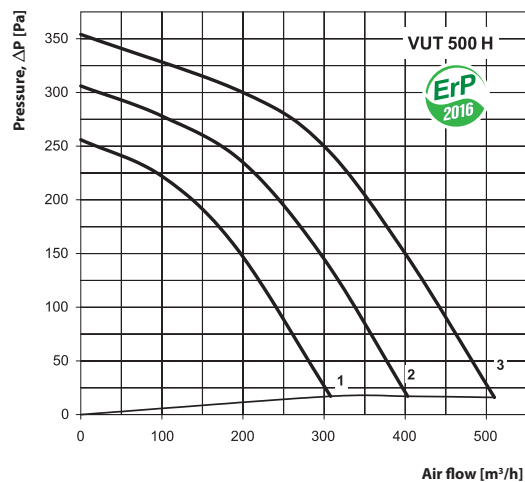


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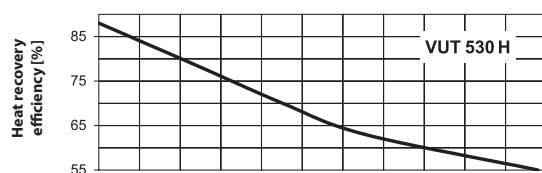
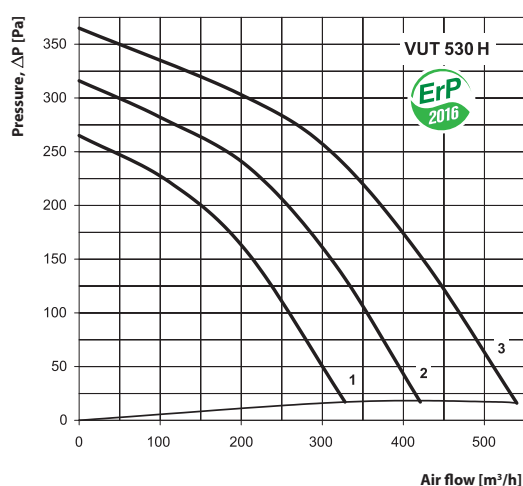
Sound-power level		Octave-frequency band [Hz]								
	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	52	30	48	47	37	43	40	32	20
L_{WA} to outlet	dBA	61	39	56	58	53	48	47	37	23
L_{WA} to environment	dBA	31	22	23	30	27	21	16	20	22

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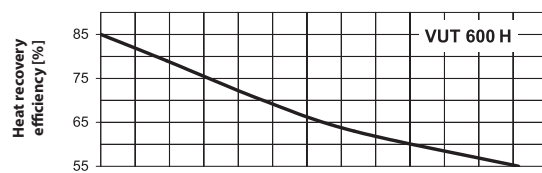
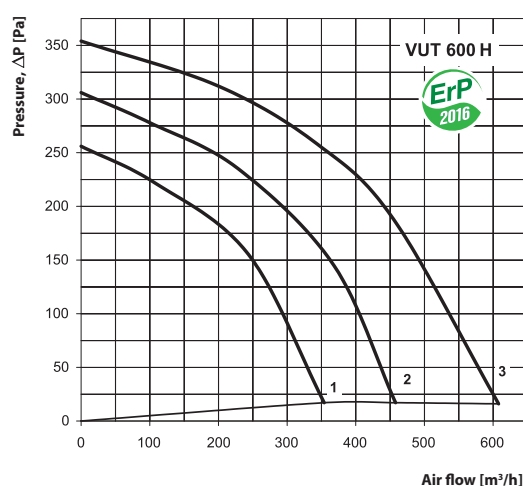
Sound-power level		Octave-frequency band [Hz]								
	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	54	33	49	51	40	45	43	34	22
L_{WA} to outlet	dBA	65	41	58	59	55	48	48	39	27
L_{WA} to environment	dBA	37	25	26	33	29	20	19	22	23

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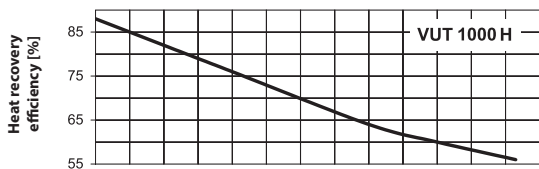
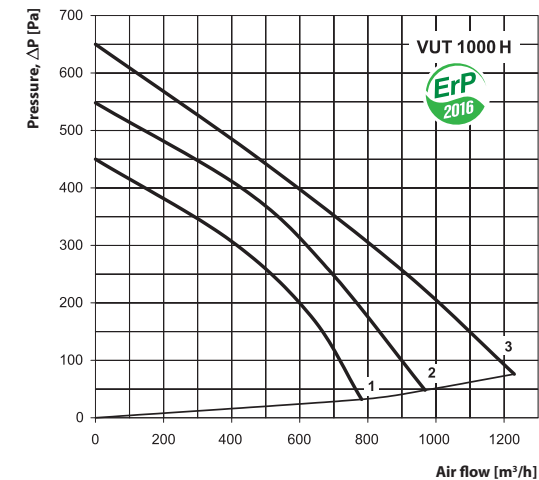
Sound-power level		Octave-frequency band [Hz]								
	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	55	33	51	50	39	46	41	34	21
L_{WA} to outlet	dBA	62	43	58	60	57	49	48	38	26
L_{WA} to environment	dBA	36	25	26	33	30	20	18	23	25

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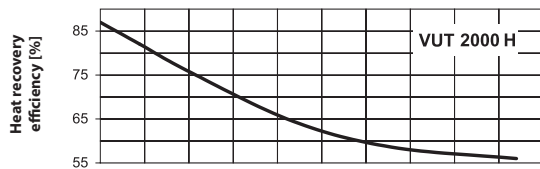
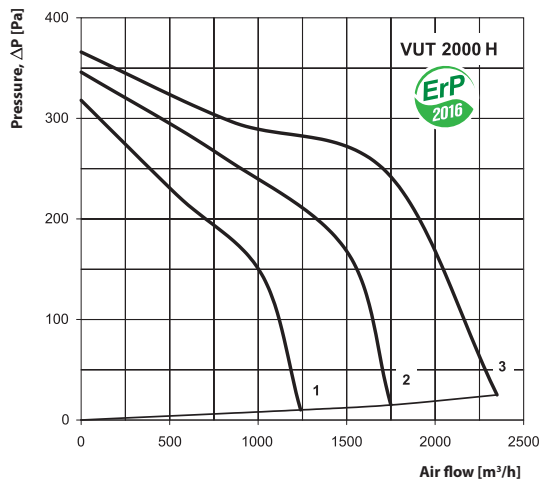
Sound-power level		Octave-frequency band [Hz]								
	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	57	36	53	53	41	48	46	38	25
L_{WA} to outlet	dBA	66	44	61	63	59	50	50	39	29
L_{WA} to environment	dBA	40	26	29	37	35	25	23	26	27

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Sound-power level		Octave-frequency band [Hz]								
	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	67	70	66	66	67	63	62	60	56
L_{WA} to outlet	dBA	70	70	70	68	68	66	62	59	57
L_{WA} to environment	dBA	46	57	54	49	54	39	39	34	32

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Sound-power level		Octave-frequency band [Hz]								
	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	79	82	83	79	71	70	69	68	60
L_{WA} to outlet	dBA	81	82	82	77	72	79	73	74	67
L_{WA} to environment	dBA	55	65	66	60	52	49	46	40	38



VUT H unit air exchange example in the flat

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AIR HANDLING UNIT WITH
HEAT RECOVERY SERIES