

Series  
**VENTS VUT H**



Speed controller P3-1-300

Air handling units with the air capacity up to **2200 m<sup>3</sup>/h** and the recuperation 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 and F7 filters for supply 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 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 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:**

Type	G4 replaceable filter	F7 replaceable filter	Summer block
VUT 350 H			VL VUT 350 H
VUT 500 H	SF VUT 350-600 H G4	SF VUT 350-600 H F7	VL VUT 500-600 H
VUT 530 H			VL VUT 500-600 H
VUT 600 H			VL VUT 500-600 H
VUT 1000 H	SF VUT 1000 H G4	SF VUT 1000 H F7	VL VUT 1000 H
VUT 2000 H	SF VUT 2000 H G4	SF VUT 2000 H F7	VL VUT 2000 H

**Designation key:**

Series	Rated air capacity, m <sup>3</sup> /h	Duct connection
<b>VENTS VUT</b>	350; 500; 530; 600; 1000; 2000	<b>H – horizontal</b>



page 240

page 240

page 294

page 296

page 305

page 323

page 325

**Offered options to the units**

page 192

page 192

**Technical data:**

	<b>VUT 350 H</b>	<b>VUT 500 H</b>	<b>VUT 530 H</b>
Unit supply voltage [V / 50 Hz]	1~ 230	1~ 230	1~ 230
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 power of the unit [W]	260	300	300
Total current of the unit [A]	1,2	1,32	1,32
Air capacity [m³/h]	350	500	530
RPM	1150	1100	1100
Noise level at 3m [dB(A)]	24-45	28-47	28-47
Operating temperature [°C]	-25 up to +55	-25 up to +50	-25 up to +50
Casing material	aluzink	aluzink	aluzink
Insulation	25 mm mineral wool	25 mm mineral wool	25 mm mineral wool
Filter: exhaust	G4	G4	G4
intake	F7 (EU7)	F7 (EU7)	F7 (EU7)
Duct connection diameter, [mm]	Ø125	Ø150	Ø160
Weight, [kg]	45	49	49
Recuperation 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	aluminum	aluminum	aluminum

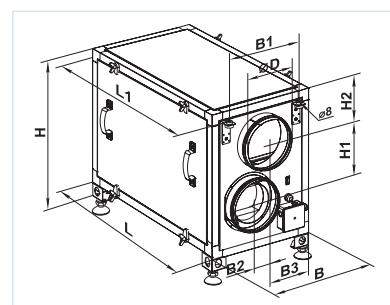
**Technical data:**

	<b>VUT 600 H</b>	<b>VUT 1000 H</b>	<b>VUT 2000 H</b>
Unit supply voltage [V / 50 Hz]	1~ 230	1~ 230	1~ 230
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 power of the unit [W]	390	820	1300
Total current of the unit [A]	1,72	3,6	5,68
Air capacity [m³/h]	600	1200	2200
RPM	1350	1850	1150
Noise level at 3m [dB(A)]	32-48	60	65
Operating temperature [°C]	-25 up to +55	-25 up to +40	-25 up to +40
Casing material	aluzink	aluzink	aluzink
Insulation	25 mm mineral wool	50 mm mineral wool	50 mm mineral wool
Filter: exhaust	G4	G4	G4
intake	F7 (EU7)	G4 (F7)*	G4 (F7)*
Duct connection diameter, [mm]	Ø200	Ø250	Ø315
Weight, [kg]	54	85	96
Recuperation 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	aluminum	aluminum	aluminum

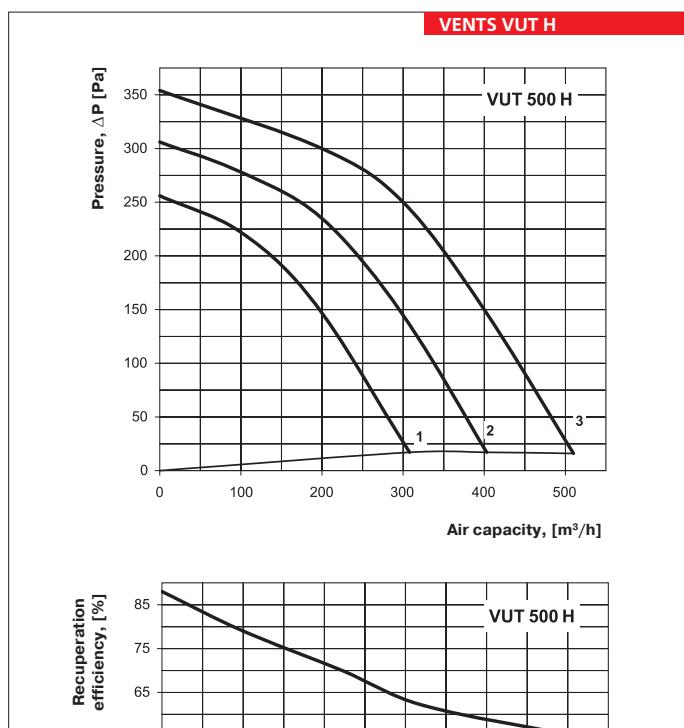
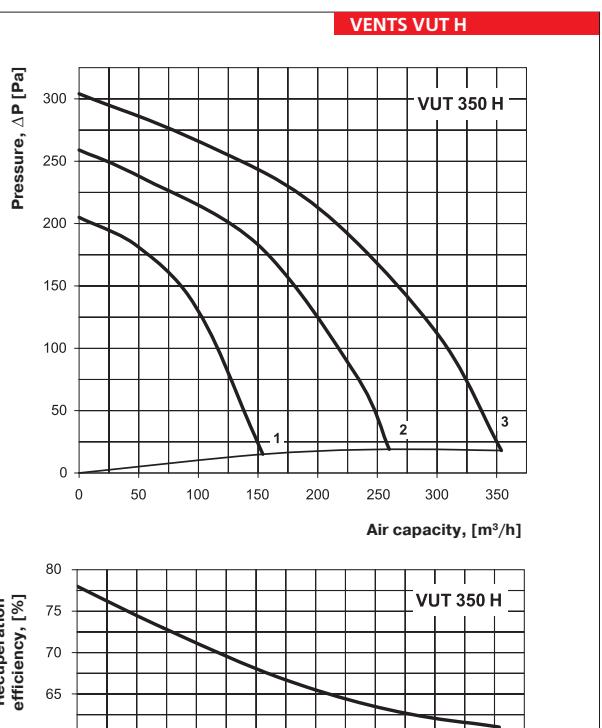
\*option

**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	

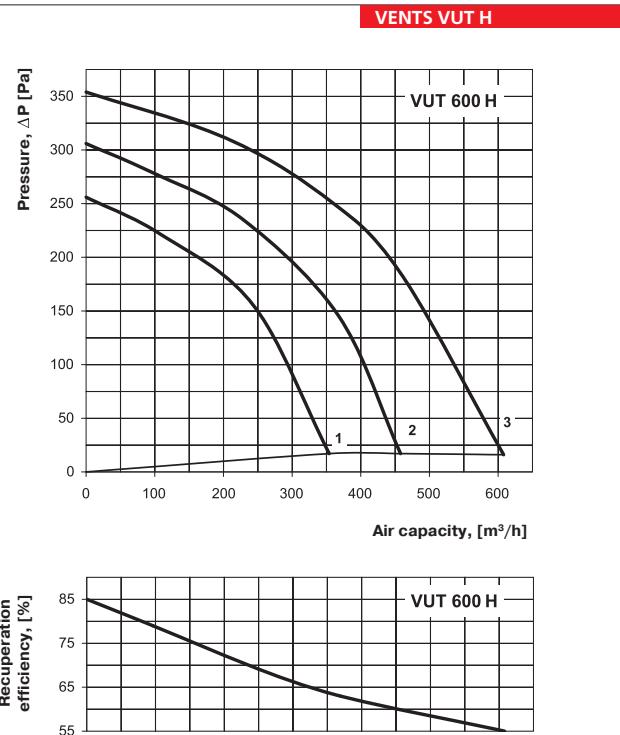
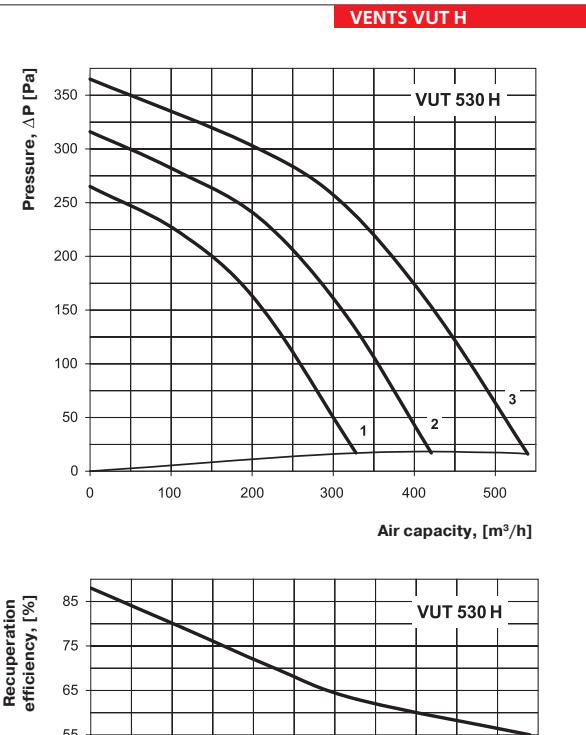


## AIR HANDLING UNITS WITH HEAT RECOVERY



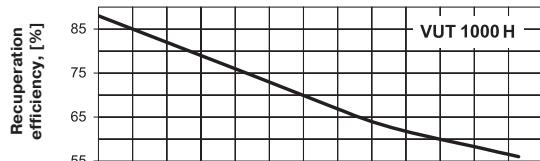
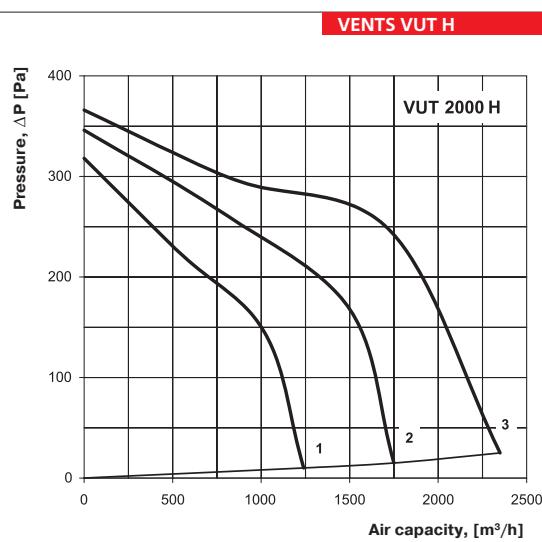
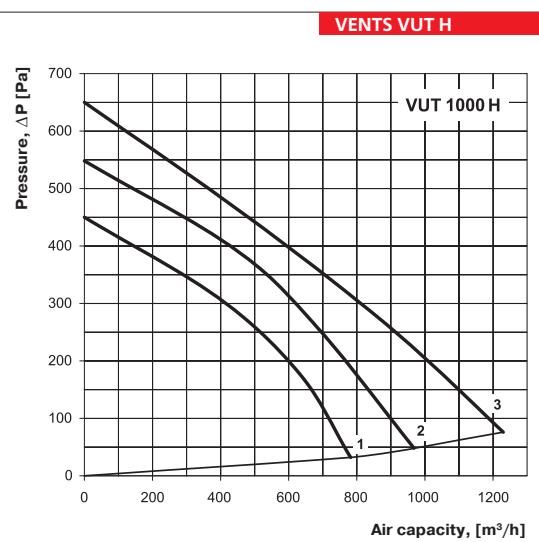
Sound-power level		Octave-frequency band [Hz]								
Hz	Tot.	63	125	250	500	1000	2000	4000	8000	
$L_{WA}$ to inlet	dB(A)	52	30	48	47	37	43	40	32	20
$L_{WA}$ to outlet	dB(A)	61	39	56	58	53	48	47	37	23
$L_{WA}$ to environment	dB(A)	31	22	23	30	27	21	16	20	22

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



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

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



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

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



VUT H unit air exchange example in the flat.