

VENTS VUT H SERIES

Air Handling Unit Designed for Air Filtration



SPEED CONTROLLER A6

DESCRIPTION

Air handling unit VUT H is a complete ventilation unit 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 5", 6", 6.5", 8", 10", 12.5" round ducts.

AIR HANDLING UNITS WITH THE AIR CAPACITY UP TO 1300 CFM AND THE HEAT RECOVERY EFFICIENCY UP TO 88% IN THE COMPACT SOUND- AND HEAT-INSULATED CASING.

NOMENCLATURE

Series	Rated Air Capacity (CFM)	Duct Connection
VENTS VUT	200; 300; 310; 350; 590; 1200	H - Horizontal

CASING

The casing is made of aluminum profile, double skinned with 3/4" mineral wool heat and sound insulating layer.

FILTER

Two incorporated MERV8 panel filters for extract air ventilation and MERV13 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 is made of 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 speed, average speed, maximum speed, or the unit shutdown.

MOUNTING

The air handling unit is mounted on the floor, 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, in the 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	MERV8 Replaceable Filter	MERV13 Replaceable Filter	Summer Block
VUT 350 H VUT 500 H VUT 530 H VUT 600 H	SF VUT 350-600 H G4	SF VUT 350-600 H F7	VL VUT 350 H VL VUT 500-600 H VL VUT 500-600 H VL VUT 500-600 H
VUT 1000 H VUT 2000 H	SF VUT 1000 H G4 SF VUT 2000 H G4	SF VUT 1000 H F7 SF VUT 2000 H F7	VL VUT 1000 H VL VUT 2000 H

ACCESSORIES





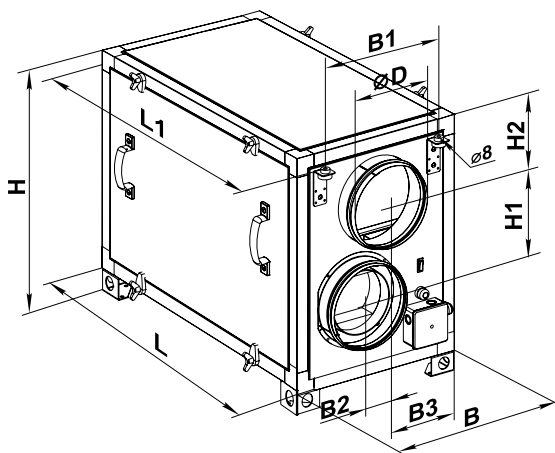
VENTS VUT H SERIES

Air Handling Unit Designed for Air Filtration

TECHNICAL DATA

Specification	VUT 350 H	VUT 500 H	VUT 530 H	VUT 600 H	VUT 1000 H	VUT 2000 H
Voltage [V / Hz]	1~ 220-240 / 50-60	1~ 220-240 / 50-60	1~ 220-240 / 50-60	1~ 220-240 / 50-60	1~ 220-240 / 50-60	1~ 220-240 / 50-60
Maximum fan power [W]	2pcs. x 130	2pcs. x 150	2pcs. x 150	2pcs. x 195	2pcs. x 410	2pcs. x 650
Fan current [A]	2pcs. x 0.60	2pcs. x 0.66	2pcs. x 0.66	2pcs. x 0.86	2pcs. x 1.8	2pcs. x 2.84
Total unit power [W]	260	300	300	390	820	1300
Total unit current [A]	1.2	1.32	1.32	1.72	3.6	5.68
Air capacity [CFM]	206	295	312	353	707	1296
RPM	1150	1100	1100	1350	1850	1150
Noise level at 3m [dBA]	24-45	28-47	28-47	32-48	60	65
Transported air [°F]	-13 up to +131	-13 up to +122	-13 up to +122	-13 up to +131	-13 up to +104	-13 up to +104
Casing material	aluzinc	aluzinc	aluzinc	aluzinc	aluzinc	aluzinc
Insulation	1" mineral wool	1" mineral wool	1" mineral wool	1" mineral wool	2" mineral wool	2" mineral wool
Extract filter	MERV8	MERV8	MERV8	MERV8	MERV8	MERV8
Supply filter	MERV13	MERV13	MERV13	MERV13	MERV13	MERV13
Connected air duct diameter [in]	Ø5	Ø6	Ø6.5	Ø8	Ø10	Ø12.5
Weight [lbs]	99	108	108	119	187	211
Heat recovery efficiency	up to 78%	up to 88%	up to 88%	up to 85%	up to 88%	up to 87%
Heat exchanger type	cross-flow type	cross-flow type	cross-flow type	cross-flow type	cross-flow type	cross-flow type
Heat exchanger material	aluminum	aluminum	aluminum	aluminum	aluminum	aluminum

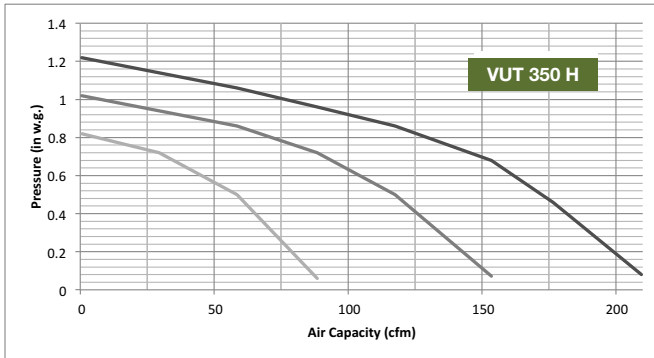
DIMENSIONS



TYPE	DIMENSIONS (in)									
	ØD	B	B1	B2	B3	H	H1	H2	L	L1
VUT 350 H	4.88	16.38	11.81	2.13	8.15	23.74	9.06	5.83	28.43	30.24
VUT 500 H	5.87	16.38	11.81	2.13	8.15	23.74	9.06	5.83	28.43	30.24
VUT 530 H	6.26	16.38	11.81	2.13	8.15	23.74	9.06	5.83	28.43	30.24
VUT 600 H	7.83	16.38	11.81	2.13	8.15	23.74	9.06	5.83	28.43	30.24
VUT 1000 H	9.76	21.57	19.53	2.36	8.39	31.26	11.42	7.87	31.57	33.46
VUT 2000 H	12.32	33.31	31.34	9.25	23.15	38.11	14.17	9.69	39.37	41.34

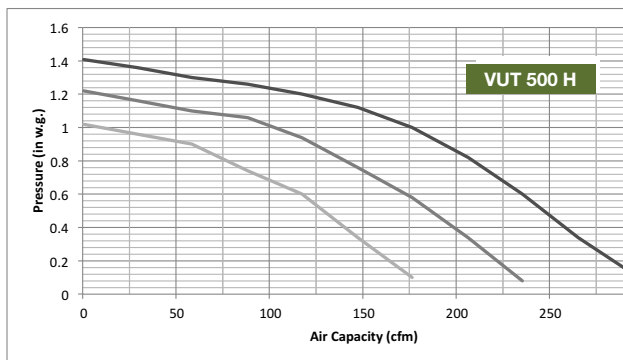
PERFORMANCE CURVES VUT H SERIES

VUT 350 H



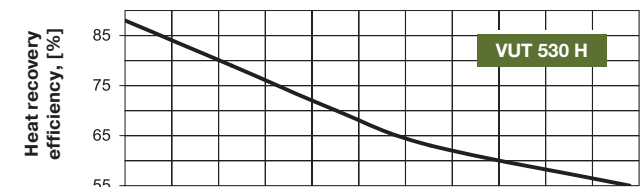
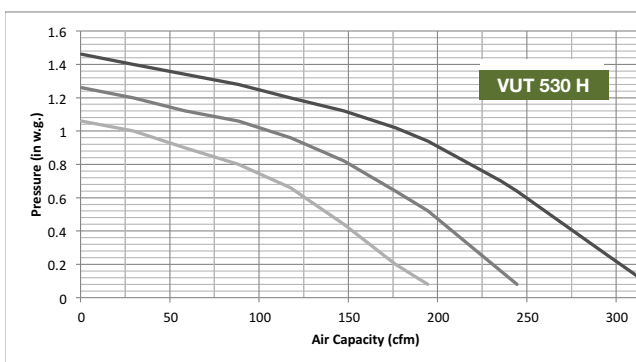
Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet	dBA	52	30	48	47	37	43	40	32	20
L _{WA} to outlet	dBA	61	39	56	58	53	48	47	37	23
L _{WA} to environment	dBA	31	22	23	30	27	21	16	20	22

VUT 500 H



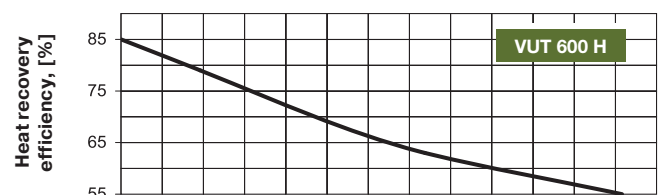
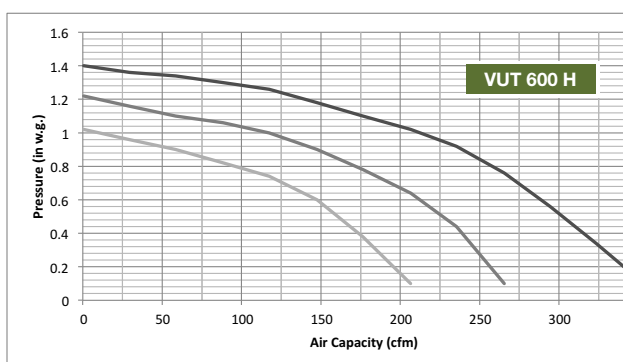
Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet	dBA	54	33	49	51	40	45	43	34	22
L _{WA} to outlet	dBA	65	41	58	59	55	48	48	39	27
L _{WA} to environment	dBA	37	25	26	33	29	20	19	22	23

VUT 530 H



Sound-power level	Hz	Octave-frequency band [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

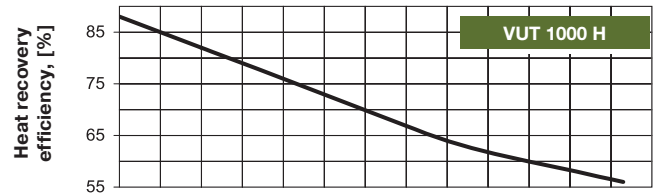
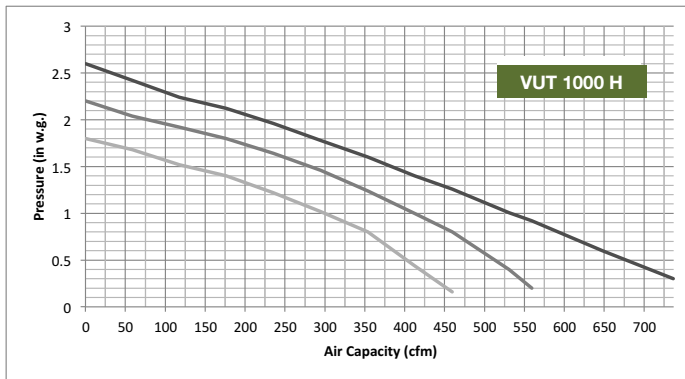
VUT 600 H



Sound-power level	Hz	Octave-frequency band [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

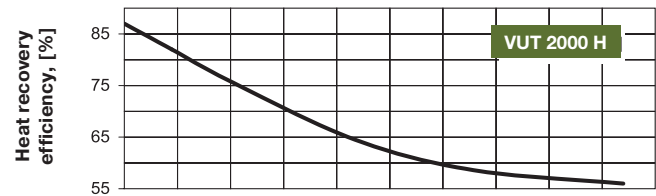
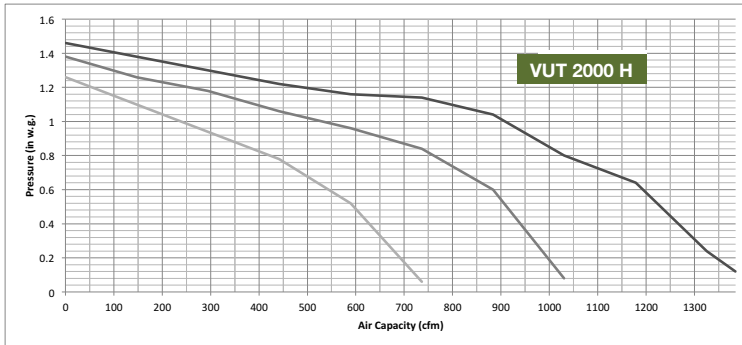
PERFORMANCE CURVES VUT H SERIES

VUT 1000 H



Sound-power level	Hz	Octave-frequency band [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

VUT 2000 H



Sound-power level	Hz	Octave-frequency band [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 APARTMENT

