

Series  
**VENTS VUTR VE EC**



Air handling units in heat- and sound-insulated casing.  
Air flow up to **670 m<sup>3</sup>/h**.  
Heat recovery efficiency up to **92 %**.

**Description**

The VUTR VE EC air handling units are the fully-featured ventilation units that ensure air filtration, fresh air supply and stale air extraction.

Used in ventilation that require an economical solution and a controlled ventilation system.

**Casing**

Made of polymer-coated steel, internally filled with a mineral wool heat- and sound-insulating layer.

**Kitchen hood**

All units are equipped with a 5th spigot for connection of a kitchen hood (see the «Application options» section).

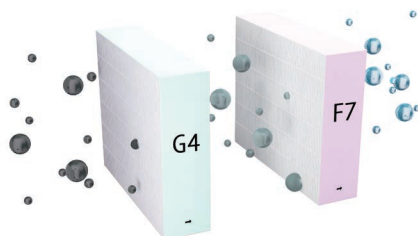
The distinctive feature of the VUTR 200 VE2 EC unit is the ability to connect a KH-1 kitchen hood (available upon separate order) directly to the unit.



**Filter**

The two integrated G4 and F7 filters ensure sufficient intake air purification.

Extract air is cleaned by the integrated G4 filter.



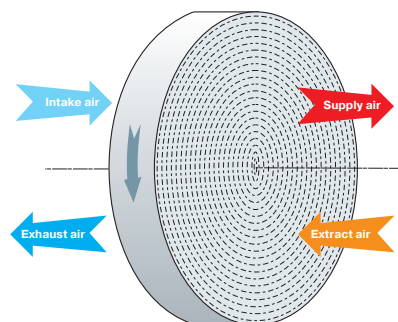
**Motor**

The units are equipped with high-efficient EC motors with an external rotor and a centrifugal impeller.

These state-of-the-art motors offer the very best in energy efficiency today.

**Rotary heat exchanger**

Unit equipped with a rotary heat exchanger. As compared to plate heat exchangers, the rotary heat exchangers are distinguished with no condensate forming, ability to maintain comfortable air humidity and extremely low freezing danger.



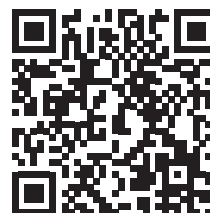
Rotary heat exchanger operation principle

**Heater**

Units are equipped with an electric heater. The heaters are equipped with protecting devices to ensure safe and reliable operation of the unit.

**Automation**

The **VUTR V(2)E EC 21** units are equipped with an integrated control system. The A21 controller allows integrating the unit into the Smart Home system or BMS (Building Management Systems). To control the unit using a mobile application via Wi-Fi, you need to download the VENTs Home mobile application.



Google play



Download on the App Store



**Mounting**

The unit is designed for wall or floor mounting.




The access for unit and filter maintenance is available from the front panel.

The service and the back panels can be rearranged allowing connection both on the right and on the left side.

**Designation key**

Series	Heat exchanger type	Rated air flow [m <sup>3</sup> /h]	Mounting type	Insulation thickness	Heater type	Motor type	Control panel
<b>VENTS VUT</b>	<b>R:</b> rotary	200; 280; 400; 600	<b>V:</b> vertical	<b>_:</b> 40 mm <b>2:</b> 20 mm	<b>E:</b> with an electric heater	<b>EC:</b> synchronous motor with electronic control	A21

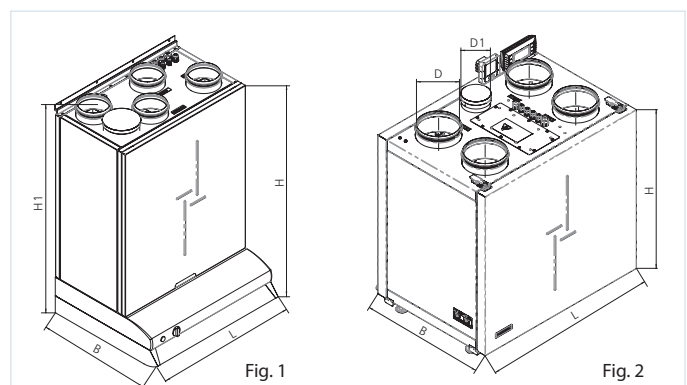
**Control and automation**

<b>Functions</b>	<b>A21</b>
Control via Wi-Fi using a mobile application	+
Control via a wired remote control panel	A22 (option) 
Control via a wireless remote control panel	A22 Wi-Fi (option) 
Control via a wired remote LCD control panel	A25 (option) 
BMS	RS-485 WI-FI Ethernet MODBUS (RTU, TCP)
Service Vents Cloud Server	+
Speed selection	+
Filter replacement indication	according to hour meter readings
Alarm indication	full alarm description in the mobile application
Week-scheduled operation	+
Timers	+
Boost mode	+
Fireplace mode	+
Reheater connection	integrated in E models, external reheater cannot be connected
Cooler connection	option
Kitchen hood connection	option
Minimum supply air temperature control	+
Humidity control	option
CO <sub>2</sub> controller	option
VOC controller	option
Fire alarm sensor connection	option

\*Option. The functionality is available when you purchase the appropriate accessory.










**Overall dimensions**

Model	Dimensions [mm]						
	Ø D	Ø D1	B	L	H	H1	Fig.
VUTR 200 V2E EC	125	-	347	600	700	901	1
VUTR 280 VE EC	122	-	508	598	630	754	2
VUTR 400 VE EC	159	99	528	745	675	755	2
VUTR 600 VE EC	199	124	628	819	772	852	2



## HEAT RECOVERY AIR HANDLING UNITS

### Accessories

Model	G4 panel filter	F7 panel filter	LCD control panel	Control panel	Control panel with Wi-Fi	VOC sensor 0-10 V	CO <sub>2</sub> sensor 0-10 V	Humidity sensor 0-10 V	Humidity sensor NO
									
VUTR 200 V2E EC A21	SF 284x103x60 G4	SF 284x103x60 F7	A25	A22	A22 Wi-Fi	DPWQ 30600	DPWQ 40200	DPWC 11200	HR-S
VUTR 280 VE EC A21	SF 400x196x40 G4	SF 400x196x40 F7							
VUTR 400 VE EC A21	SF 436x196x40 G4	SF 436x196x40 F7							
VUTR 600 VE EC A21	SF 536x220x40 G4	SF 536x220x40 F7							

Model	Humidity sensor 0-10 V	Kitchen hood	Silencers		Back valves	Air dampers	Clamps	Electric actuator	
									
VUTR 200 V2E EC A21	HV-2	KH-1	SR 125	SRF 125	KOM 125	KRV 125	C 125	LF230	TF230
VUTR 280 VE EC A21			SR 160	SRF 160	KOM 160	KRV 160	C 160		
VUTR 400 VE EC A21			SR 200	SRF 200	KOM 200	KRV 200	C 200		
VUTR 600 VE EC A21									

### Technical data

	VUTR 200 V2E EC	VUTR 280 VE EC
Unit voltage [V/50 (60) Hz]	1~230	
Max. unit power without electric heater [W]	118	195
Max. power of electric heater [W]	700	650
Max. unit power [W]	818	845
Max. unit current without electric heater [A]	1.0	1.9
Max. unit current of electric heater [A]	3.0	2,8
Max. unit current [A]	4.0	4.7
Maximum air flow [m <sup>3</sup> /h]	270	300
RPM [min <sup>-1</sup> ]	1800	2050
Sound pressure level at 3 m distance [dBA]	28	26
Transported air temperature [°C]	-25...+40	
Casing material	painted steel	
Insulation	20 mm mineral wool	40 mm mineral wool
Filter	Extract	G4
	Intake	G4, F7
Connected air duct diameter [mm]	125	
Weight [kg]	48	64
Heat recovery efficiency	from 76 up to 92	from 81 up to 90
Heat exchanger type*	rotary	
Heat exchanger material	aluminium	
SEC class	A	

\*Heat recovery efficiency is specified in compliance with EN 13141-7

## Technical data

		VUTR 400 VE EC	VUTR 600 VE EC
Unit voltage [V/50 (60) Hz]		1~230	
Max. unit power without electric heater [W]		200	405
Max. power of electric heater [W]		1400	2800
Max. unit power [W]		1600	3205
Max. unit current without electric heater [A]		1.4	2.6
Max. unit current of electric heater [A]		6.1	12.2
Max. unit current [A]		7.5	14.8
Maximum air flow [m <sup>3</sup> /h]		440	670
RPM [min <sup>-1</sup> ]		3280	3230
Sound pressure level at 3 m distance [dBA]		33	35
Transported air temperature [°C]		-25...+40	
Casing material		painted steel	
Insulation		40 mm mineral wool	
Filter	Extract	G4	
	Intake	G4, F7	
Connected air duct diameter [mm]		160	200
Weight [kg]		82	92
Heat recovery efficiency		from 76 up to 85	from 81 up to 89
Heat exchanger type*		rotary	
Heat exchanger material		aluminium	
SEC class		A	

\*Heat recovery efficiency is specified in compliance with EN 13141-7

Calculation of air temperature downstream of the heat exchanger:

$$t = t_{\text{outd}} + k_{\text{hr}} * (t_{\text{extr}} - t_{\text{outd}}) / 100,$$

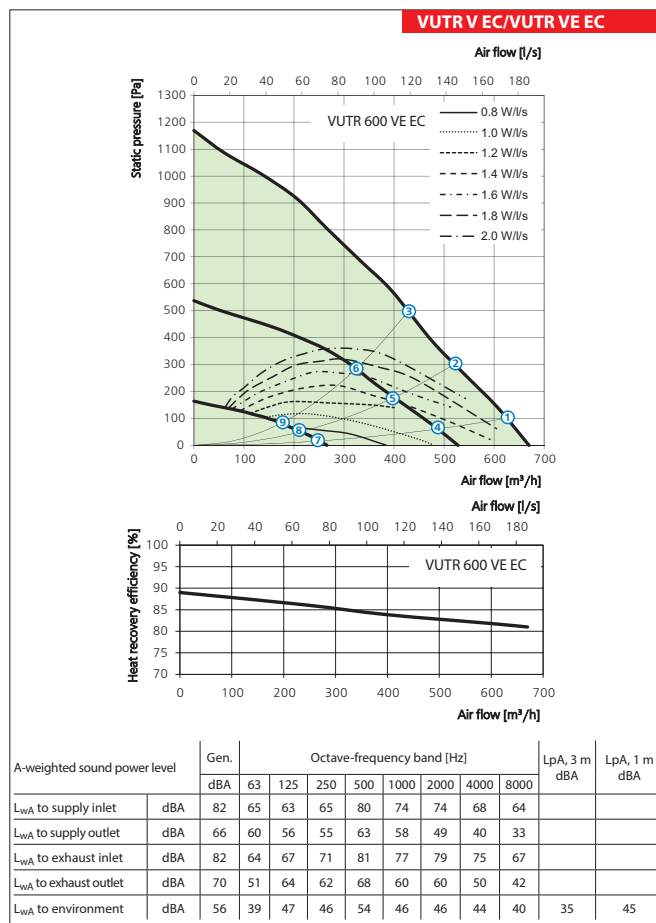
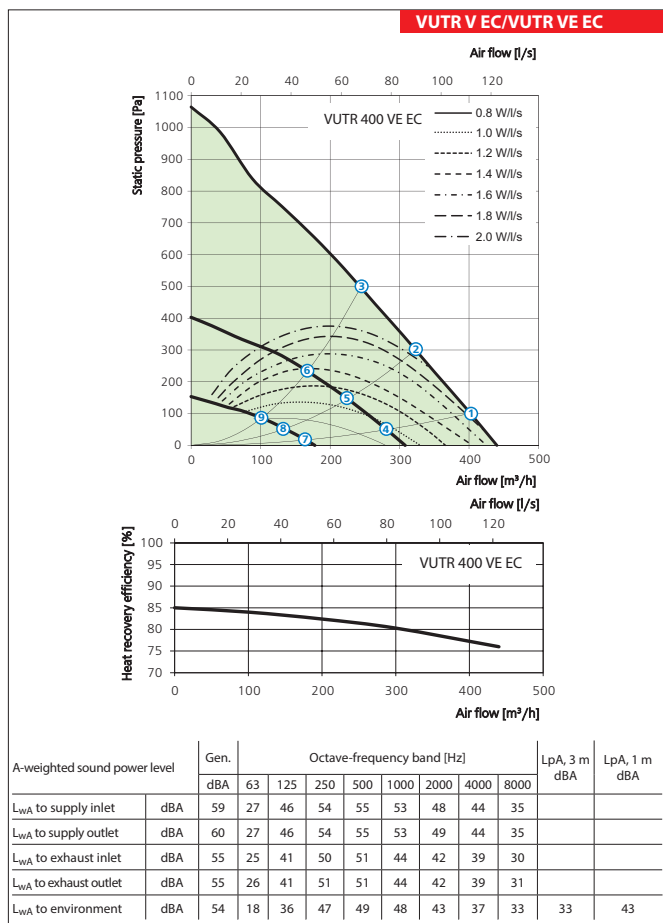
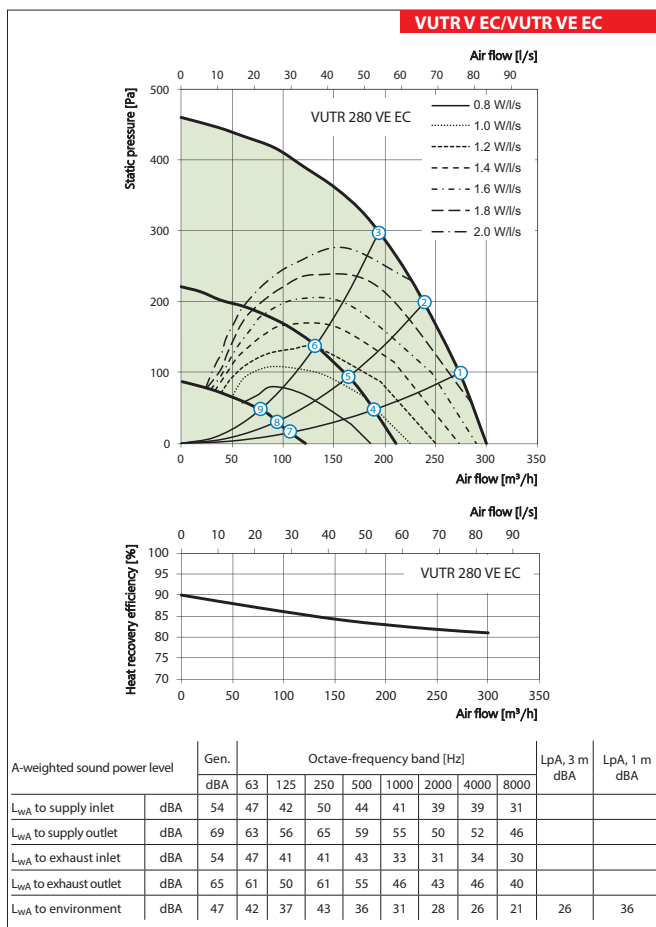
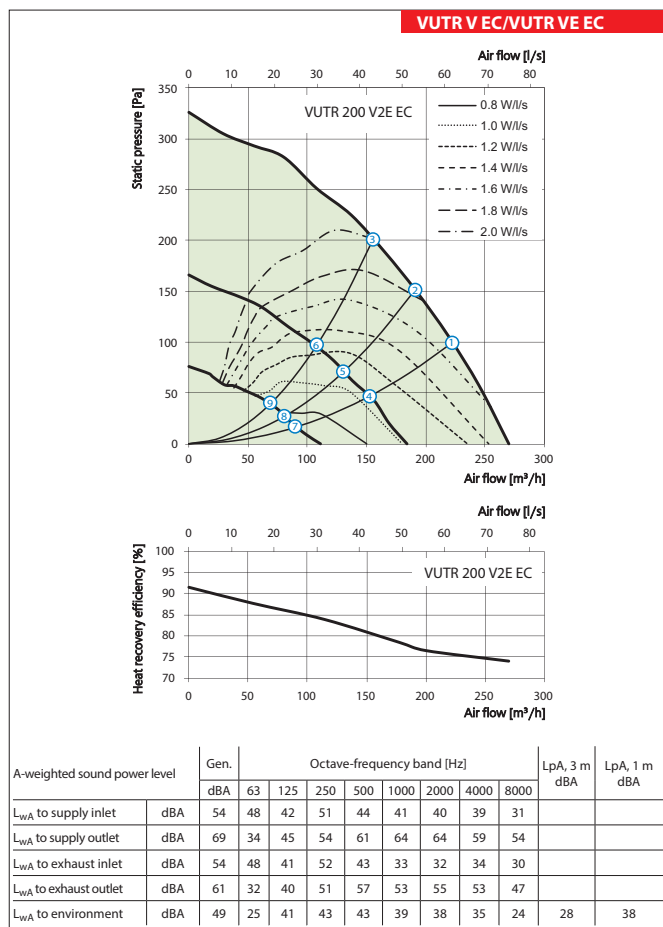
where

$t_{\text{outd}}$  : outdoor air temperature [°C]

$t_{\text{extr}}$  : extract air temperature [°C]

$k_{\text{hr}}$  : heat exchanger efficiency (according to the diagram) [%]

Point	Total unit power [W]				Sound pressure level at 3 m (1 m) distance [dBA]			
	VUTR 200 V2E EC	VUTR 280 VE EC	VUTR 400 VE EC	VUTR 600 VE EC	VUTR 200 V2E EC	VUTR 280 VE EC	VUTR 400 VE EC	VUTR 600 VE EC
1	103	154	170	375	28 (38)	26 (36)	33 (43)	35 (45)
2	98	132	170	375	27 (37)	26 (36)	33 (43)	35 (45)
3	85	110	170	375	26 (36)	25 (35)	32 (42)	34 (44)
4	43	55	68	163	21 (31)	24 (34)	31 (41)	30 (40)
5	40	47	65	155	21 (31)	24 (34)	28 (38)	29 (39)
6	37	38	59	151	20 (30)	22 (32)	27 (37)	28 (38)
7	18	19	26	43	19 (29)	15 (25)	23 (33)	27 (37)
8	17	18	25	42	19 (29)	14 (24)	21 (31)	23 (33)
9	16	17	25	39	17 (27)	13 (23)	19 (29)	23 (33)

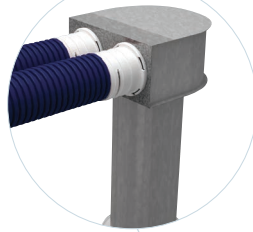


### Application options

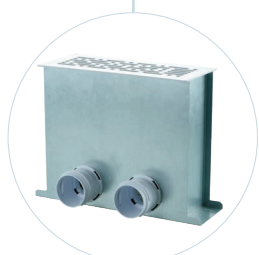
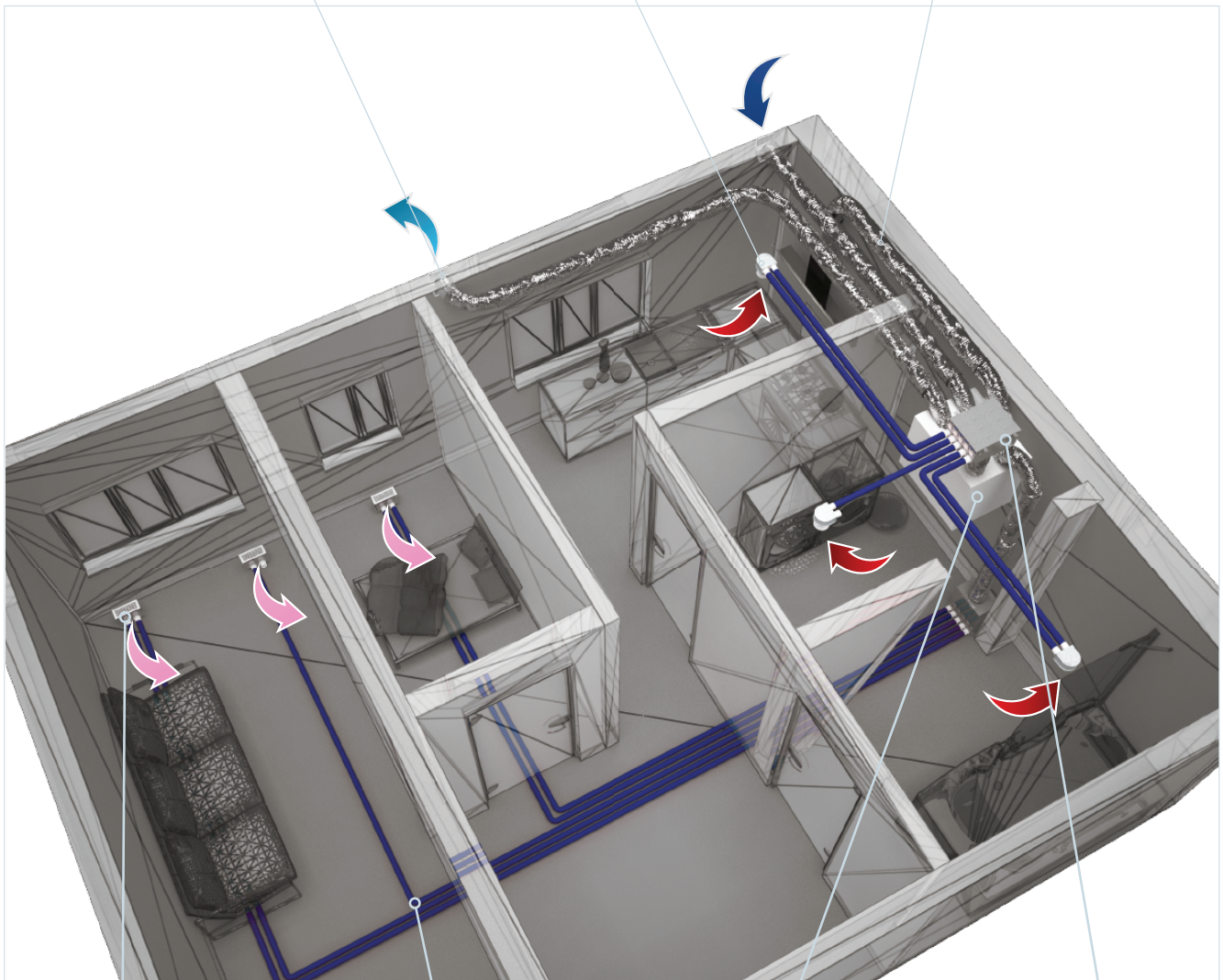
Ventilation hood



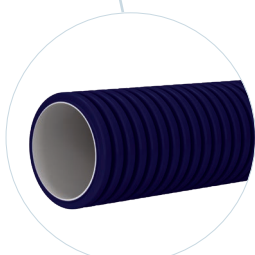
Ceiling connector with a disk valve



Isovent 150 insulated air duct



Floor connector with a grille



FlexiVent air duct



Air handling unit



Manifold