

AIR HANDLING UNITS WITH HEAT RECOVERY

Series

VENTS VUTR P EC



Air handling units in heat- and sound-insulated casing.
Air flow up to **798 m³/h**.
Heat recovery efficiency up to 88 %.

Description

The **VUTR P 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

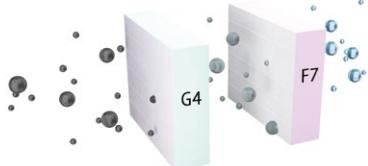
Made of polymer-coated steel, internally filled with a mineral wool heat- and sound-insulating layer.

VUTR P EC L – left-handed version.

VUTR P EC R – right-handed version.

Filter

Two built-in Coarse 90% (G4) filters provide efficient air filtration. ePM1 65% (F7) supply filter can be installed as an option.



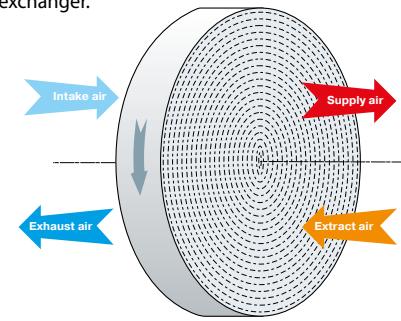
Fans

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

Rotary heat exchanger

The units are equipped with a rotary heat exchanger. **VUTR P** units are equipped with condensing rotary heat exchanger.

VUER P units are equipped with sorption rotary heat exchanger.



Rotary heat exchanger operation principle

Heater

The units **VUTR PE** are equipped with an electric heater.

Automation

The units are equipped with an integrated control system. The **A21** controller allows to integrate the unit into the **Smart Home system** or **BMS (Building Management System)**. To control the unit via Wi-Fi, download the **Vents Home** smartphone app.



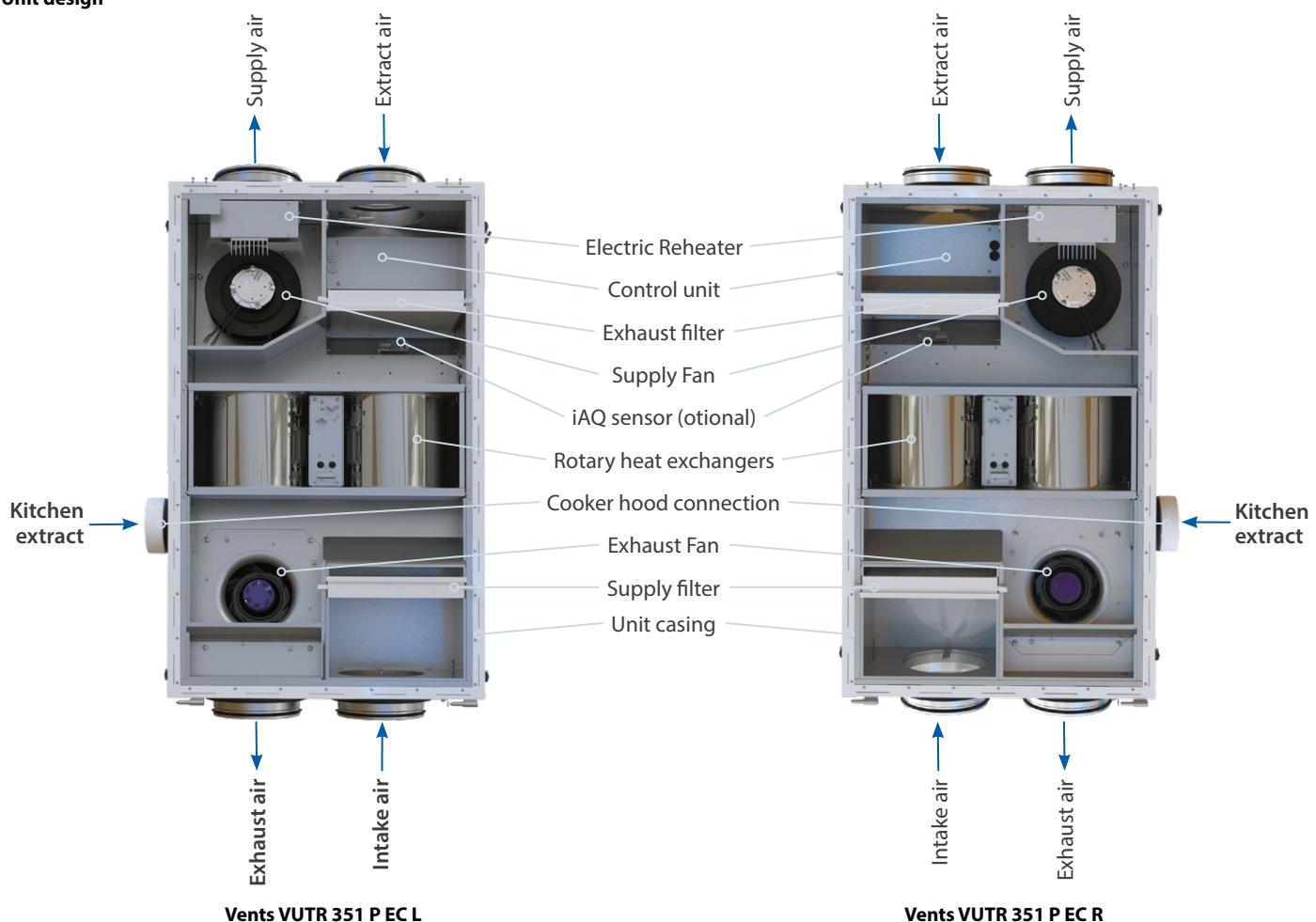
Control and automation

Functions	A21
Wired remote control panel	A22 (option)
Control via a wired remote LCD control panel	A25 (option)
Wireless remote control panel	A22 Wi-Fi (option)
BMS	ModBus RTU (RS-485) ModBus TCP/IP (Wi-Fi, Ethernet)
Vents Cloud Server service	+
Control via Wi-Fi using a smartphone app	+
Frost protection	+
Bypass	Auto, manual
Week-scheduled operation	+
Filter replacement indication	Filter timer
Alarm indication	+
Speed selection	+
Timer	+
RH% sensor	Option
CO ₂ sensor	Option
VOC sensor	Option
PM2.5 sensor	Option
Boost mode	+
Fireplace mode	+
Cooler connection	+
Fire alarm sensor connection	+
Minimum supply air temperature control	+

Designation key

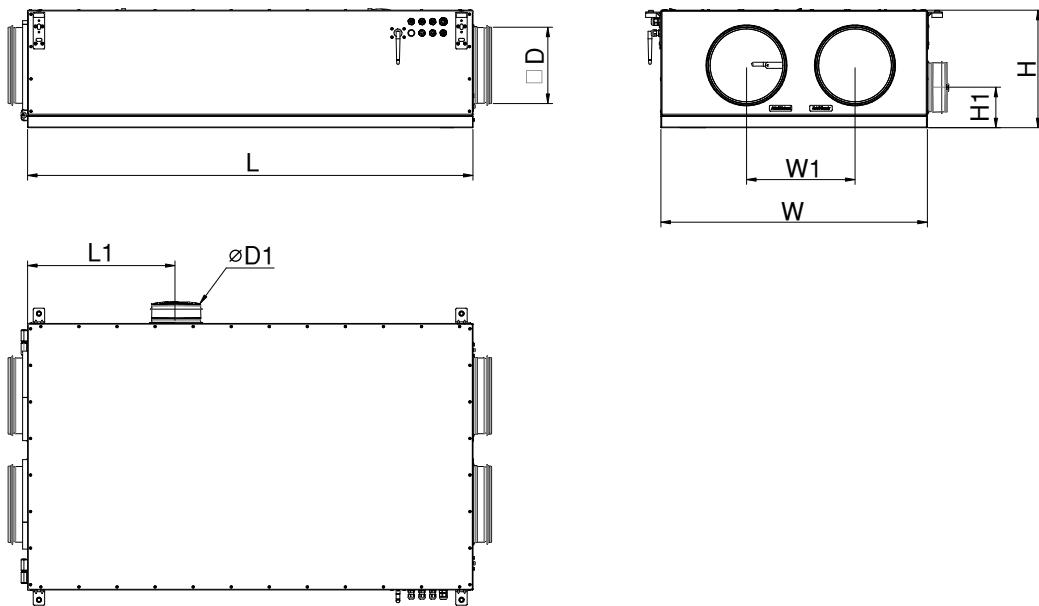
TM	Series	Size	Modification	Mounting	Heater	Motor	Service Side	Control panel
VENTS	VUTR : unit with condensation rotary heat exchanger VUER : unit with sorption rotary heat exchanger	m ³ /h/10	0, 1, 2...	P: suspended	–: w/o heater E: electric re-heater	EC : EC-motor	R: right L: left	A21

Unit design



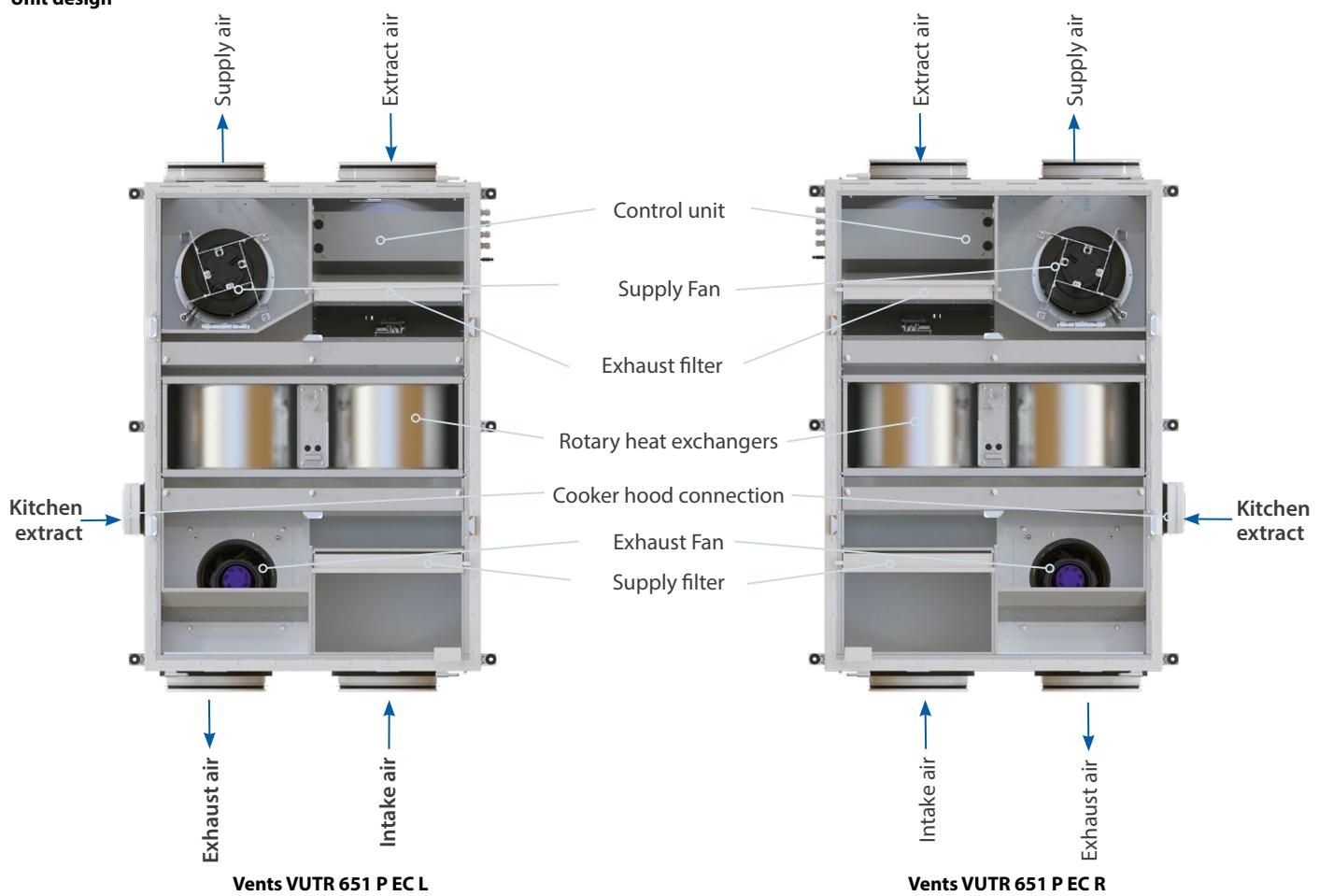
Overall dimensions

Model	Dimensions [mm]								
	H	W	L	H1	W1	L1	D	D1	
Vents VUTR 351 P EC	308	700	1170	106	285	387	200	125	



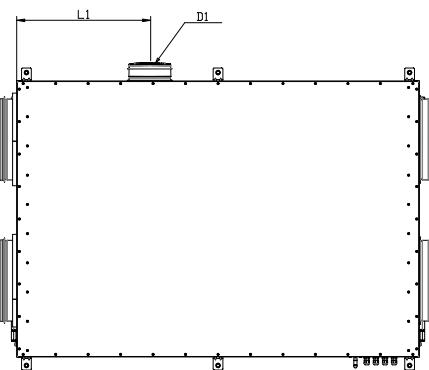
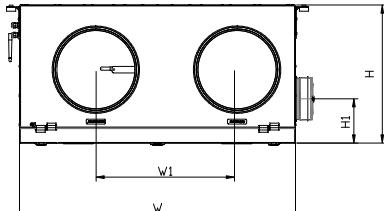
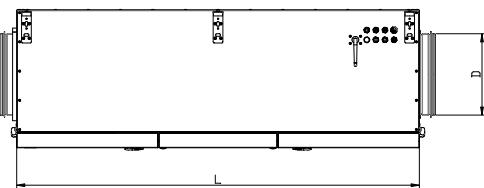
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Unit design



Overall dimensions

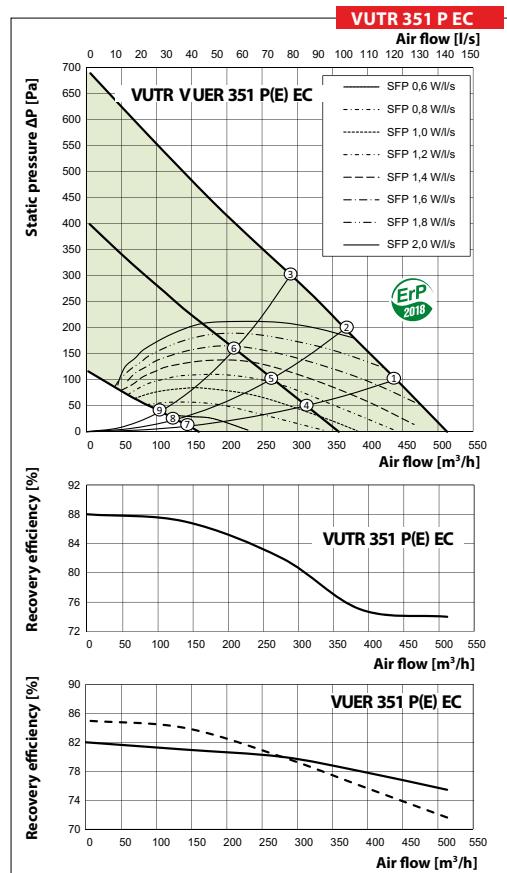
Model	Dimensions [mm]								
	H	W	L	H1	W1	L1	D	D1	
Vents VUTR 651 P EC	425	850	850	136	435	410	250	125	



Technical data

	VUTR 351 P EC A21	VUER 351 P EC A21	VUTR 351 PE EC A21	VUER 351 PE EC A21
Voltage [V / 50-60 Hz]	230	230	230	230
Max. unit power without electric heater [W]	247	247	247	247
Integrated electric heater power [W]	-	-	1200	1200
Max. unit power [W]	247	247	1447	1447
Max. unit current without electric heater [A]	1,62	1,62	1,62	1,62
Integrated electric heater current [A]	-	-	5,32	5,32
Max. unit current [A]	1,62	1,62	6,94	6,94
Max air flow [m³/h]	513	513	513	513
Sound pressure level at 3 m distance [dBA]	31	31	31	31
Max. operating temperature [°C]	- 25...+40	- 25...+40	- 25...+40	- 25...+40
Case material	painted steel	painted steel	painted steel	painted steel
Insulation	40	40	40	40
Extract filter	G4 / Coarse > 60%			
Supply filters	G4 / Coarse > 60% (option F7 / ePM1 60%)	G4 / Coarse > 60% (option F7 / ePM1 60%)	G4 / Coarse > 60% (option F7 / ePM1 60%)	G4 / Coarse > 60% (option F7 / ePM1 60%)
Connected air duct diameter [mm]	200	200	200	200
Weight [kg]	72	72	72	72
Heat recovery efficiency [%]	88	82	88	82
Heat exchanger type	condensing	sorption	condensing	sorption
SEC class	A	A	A	A

*Sound pressure level at 3 m distance is specified at point 4 [dBA]



VUTR 351 P EC	Sound-power level, A - weighted (p.1 on the diagram)	General	Octave frequency band, Hz								LpA, 3m dB(A)	LpA, 1m dB(A)
		dB(A)	63	125	250	500	1000	2000	4000	8000		
LwA to supply inlet	dB(A)	59	42	45	48	49	42	36	28	24	40	48
LwA to supply outlet	dB(A)	62	44	47	51	52	44	38	29	25	42	51
LwA to exhaust inlet	dB(A)	62	44	47	51	52	44	38	28	24	42	51
LwA to exhaust outlet	dB(A)	59	42	45	48	49	42	36	27	23	40	48
LwA to environment	dB(A)	59	42	50	49	46	47	45	36	31	39	48

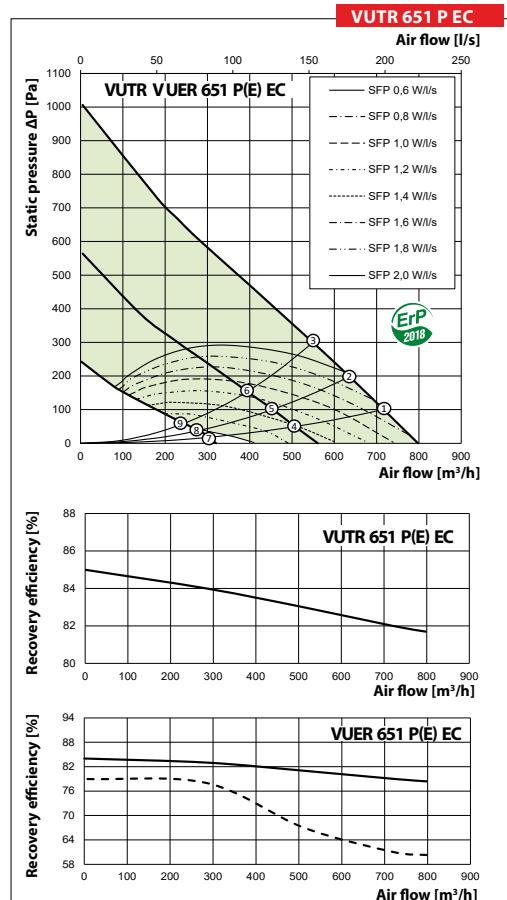
VUTR 351 P EC	Sound-power level, A - weighted (p.4 on the diagram)	General	Octave frequency band, Hz								LpA, 3m dB(A)	LpA, 1m dB(A)
		dB(A)	63	125	250	500	1000	2000	4000	8000		
LwA to supply inlet	dB(A)	49	33	36	40	38	31	26	21	23	29	39
LwA to supply outlet	dB(A)	51	35	38	42	40	33	27	22	24	30	40
LwA to exhaust inlet	dB(A)	50	35	38	42	40	33	25	21	23	30	39
LwA to exhaust outlet	dB(A)	53	37	40	44	42	35	26	22	24	32	41
LwA to environment	dB(A)	51	39	47	46	39	39	36	27	25	31	40

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Technical data

	VUTR 651 P EC A21	VUER 651 P EC A21	VUTR 651 PE EC A21	VUER 351 PE EC A21
Voltage [V / 50-60 Hz]	230	230	230	230
Max. unit power without electric heater [W]	377	377	377	377
Integrated electric heater power [W]	-	-	1400	1400
Max. unit power [W]	377	377	1777	1777
Max. unit current without electric heater [A]	2,58	2,58	2,58	2,58
Integrated electric heater current [A]	-	-	6,21	6,21
Max. unit current [A]	2,58	2,58	8,79	8,79
Max air flow [m³/h]	798	798	798	798
Sound pressure level at 3 m distance [dBA]	31	31	31	31
Max. operating temperature [°C]	- 25...+40	- 25...+40	- 25...+40	- 25...+40
Case material	painted steel	painted steel	painted steel	painted steel
Insulation	40	40	40	40
Extract filter	G4 / Coarse > 60%			
Supply filters	G4 / Coarse > 60% (option F7 / ePM1 60%)	G4 / Coarse > 60% (option F7 / ePM1 60%)	G4 / Coarse > 60% (option F7 / ePM1 60%)	G4 / Coarse > 60% (option F7 / ePM1 60%)
Connected air duct diameter [mm]	250	250	250	250
Weight [kg]	103	103	104	104
Heat recovery efficiency [%]	85	84	85	84
Heat exchanger type	condensing	sorption	condensing	sorption
SEC class	A	A	A	A

*Sound pressure level at 3 m distance is specified at point 4 [dBA]



VUTR 651 P EC	Sound-power level, A - weighted (p.1 on the diagram)	General	Octave frequency band, Hz								LpA, 3m dB(A)	LpA, 1m dB(A)
		dB(A)	63	125	250	500	1000	2000	4000	8000		
LwA to supply inlet	dB(A)	67	45	48	51	57	57	50	48	43	47	56
LwA to supply outlet	dB(A)	71	47	50	54	60	60	53	51	45	51	60
LwA to exhaust inlet	dB(A)	63	44	47	51	50	46	43	36	28	43	52
LwA to exhaust outlet	dB(A)	60	42	45	48	48	44	41	34	27	40	49
LwA to environment	dB(A)	61	38	46	45	51	50	50	43	38	41	50

VUTR 651 P EC	Sound-power level, A - weighted (p.4 on the diagram)	General	Octave frequency band, Hz								LpA, 3m dB(A)	LpA, 1m dB(A)
		dB(A)	63	125	250	500	1000	2000	4000	8000		
LwA to supply inlet	dB(A)	58	42	45	48	48	48	41	35	28	38	47
LwA to supply outlet	dB(A)	60	44	47	51	50	50	43	37	29	40	49
LwA to exhaust inlet	dB(A)	54	44	47	51	41	36	32	23	23	34	43
LwA to exhaust outlet	dB(A)	57	46	49	54	43	38	34	24	24	37	46
LwA to environment	dB(A)	51	38	46	45	40	39	40	28	25	31	40

Accessories for air handling units

Type	Filter G4	Supply filter F7	Control panel	Control panel	WiFi Control panel	Internal humidity sensor	Internal CO ₂ sensor
							
VUTR 351 P EC A21	SF 302x256x48 Coarse 90% G4	SF 302x256x48 ePM1 60% F7					
VUTR 351 PE EC A21			A25	A22	A22 Wi-Fi	HV-2	CO2-3
VUTR 651 P EC A21	SF 377x330x48 Coarse 90% G4	SF 377x330x48 ePM1 60% F7					
VUTR 651 PE EC A21							

Type	External CO ₂ sensor with indication	External humidity sensor	Silencer	Air damper	Electric actuator
					
VUTR 351 P EC A21					
VUTR 351 PE EC A21	CO2-1	HR-S	SR 200	KRV 200	TF 230
VUTR 651 P EC A21					
VUTR 651 PE EC A21			SR 250	KRV 250	