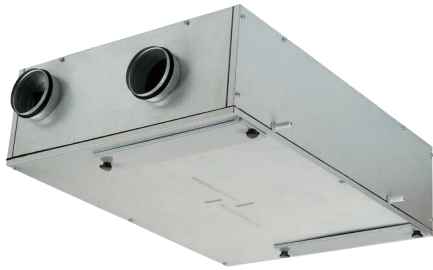


Series
VENTS VUT PB EC



Air handling units in heat- and sound-insulated casing.
Air flow up to 410 m³/h.
Heat recovery efficiency up to 94 %

■ **Description**

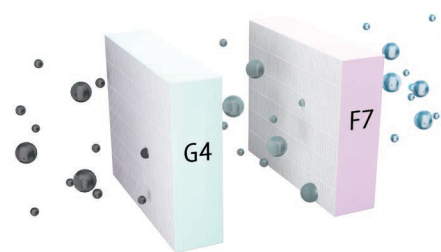
The VUT PB EC air handling units are the fully-featured ventilation units that ensure air filtration, fresh air supply and stale air extract.

■ **Casing**

Made of galvanised steel, internally filled with a 40 mm heat- and sound-insulating layer of mineral wool.

■ **Filter**

Built-in panel filters with filtration class F7 provide efficient supply air filtration.
Panel filters with filtration class G4 provide extract air

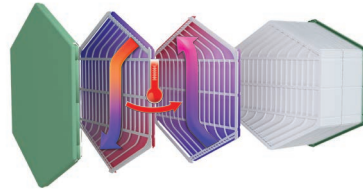


■ **Fans**

High-efficient electronically-commutated motors with an external rotor and backward curved blades.

■ **Heat exchanger**

The units are equipped with a high-efficient counter-flow polystyrene heat exchanger. In the cold season the extract air heat is captured and transferred to the supply air stream which reduces the ventilation-generated heat losses.



■ **Freeze protection**

To protect the heat exchanger from freezing in the cold season, the unit has a Frost Protection mode based on the temperature sensor readings. The Frost Protection mode is activated at an exhaust air temperature of +3 °C. After temperature increase the unit returns to the previous operation mode. In case of freezing danger, the supply fan is turned off in VUT 160/250/350 PB EC A14 units.

Three modes of freeze protection are available in VUT 160/250/350 PB EC A21 models:

- gradual reduction of the supply fan speed
- with the bypass
- with the electric preheater (available as an accessory).

■ **Bypass**

The units are equipped with a 100 % bypass which can be opened for summer cooling.

■ **Control and automation**

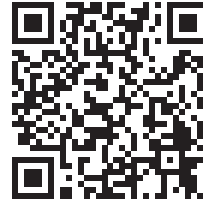
The **VUT PB EC A21** units are equipped with an integrated automation system.

The A21 controller enables integration of the unit into the **Smart Home System** or **BMS (Building Management Systems)**.

To control the unit via Wi-Fi, download the VENTS Home mobile app.



Google play



Download on the App Store



The **VUT PB EC A14** units are equipped with an integrated automation system and a wall-mounted control panel A14 with LED indication.





■ **Mounting**

The units are designed for ceiling or wall mounting (horizontal spigot orientation) in a position allowing condensate collection and removal into a special drain pan. The access for filter maintenance and replacement is available from the bottom panel.

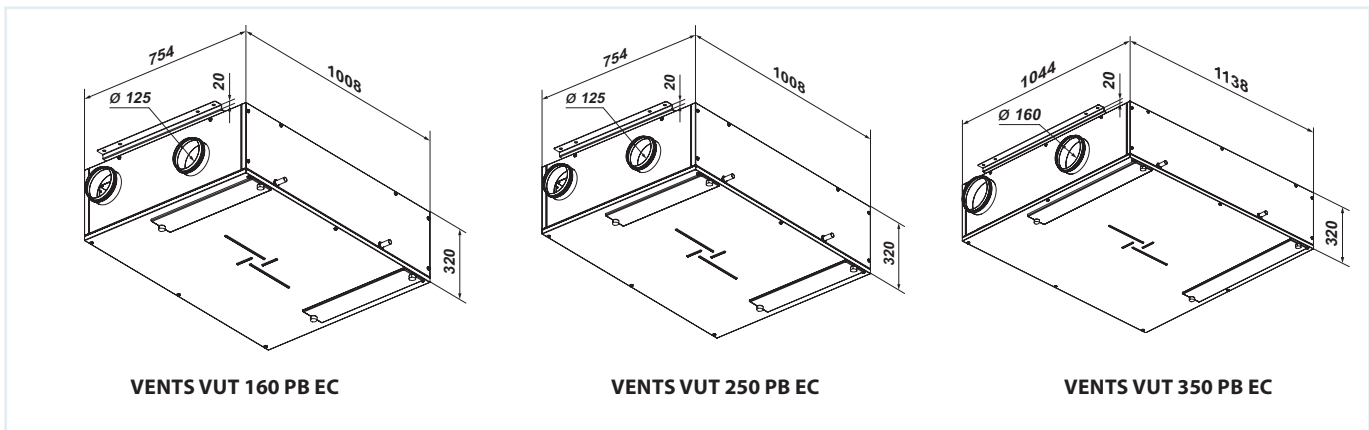
Designation key

Series	Rated air flow [m ³ /h]	Installation type	Bypass	Motor type	Service side	Automation
VENTS VUT	160; 250; 350	P: suspended installation	B: bypass	EC: synchronous electronically commutated motor	L: left R: right	A14 A21

Control and automation

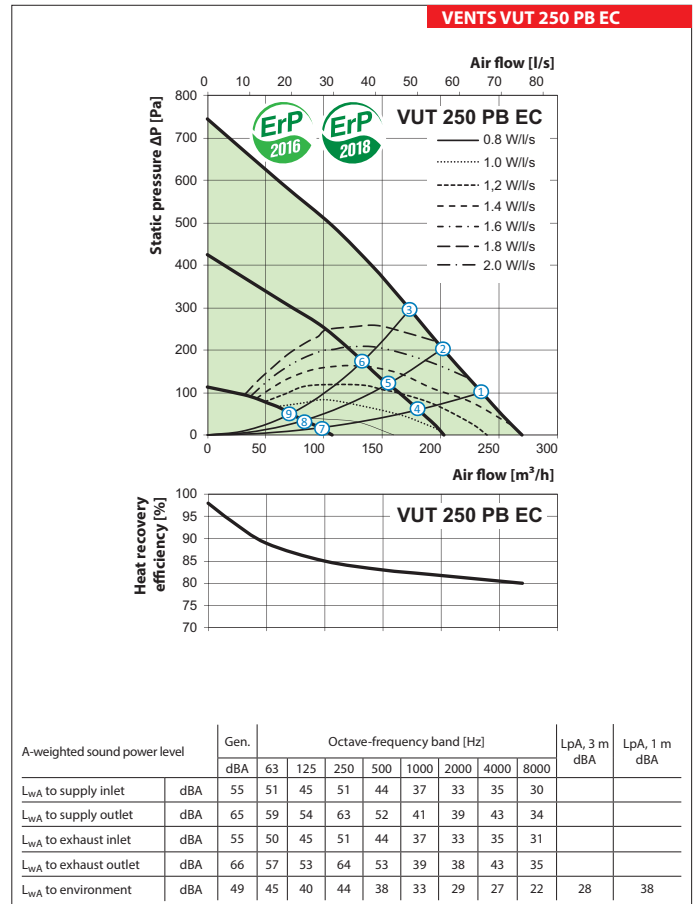
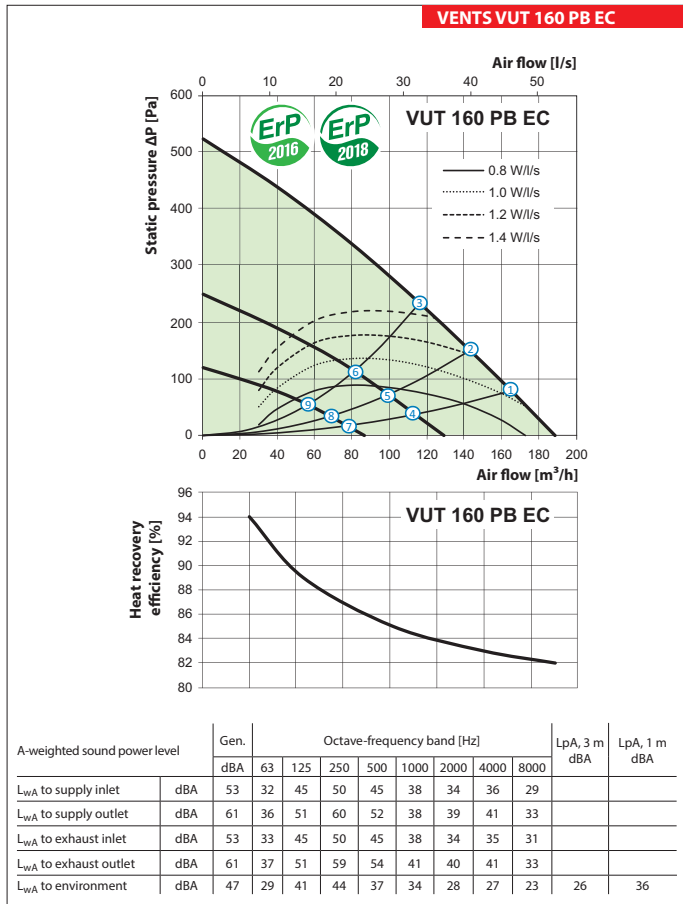
Functions	A21	A14
Wired remote control panel	Option (A22) 	A14 
Control via a wired remote LCD control panel	Option (A25) 	-
Wireless remote control panel	Option (A22 Wi-Fi) 	-
BMS	RS-485 Wi-Fi Ethernet MODBUS (RTU, TCP)	-
Vents Cloud Server service	+	-
Control via Wi-Fi using a mobile application	+	-
Freeze protection	+	+
Bypass	Auto + manual	Manual
Week-scheduled operation	+	-
Filter replacement indication	According to filter timer	According to filter timer
	According to filter clogging differential pressure switch readings	
Alarm indication	+	+
Speed selection	+	+
Timers	+	-
RH% sensor	Option	Option
CO ₂ sensor	Option	Option
VOC sensor	Option	Option
PM2.5 sensor	Option	Option
Boost mode	+	-
Fireplace mode	+	-
Preheater connection	Option	-
Reheater connection	Option	-
Cooler connection	Option	-
Fire alarm sensor	Option	Option
Minimum supply air temperature control	+	-

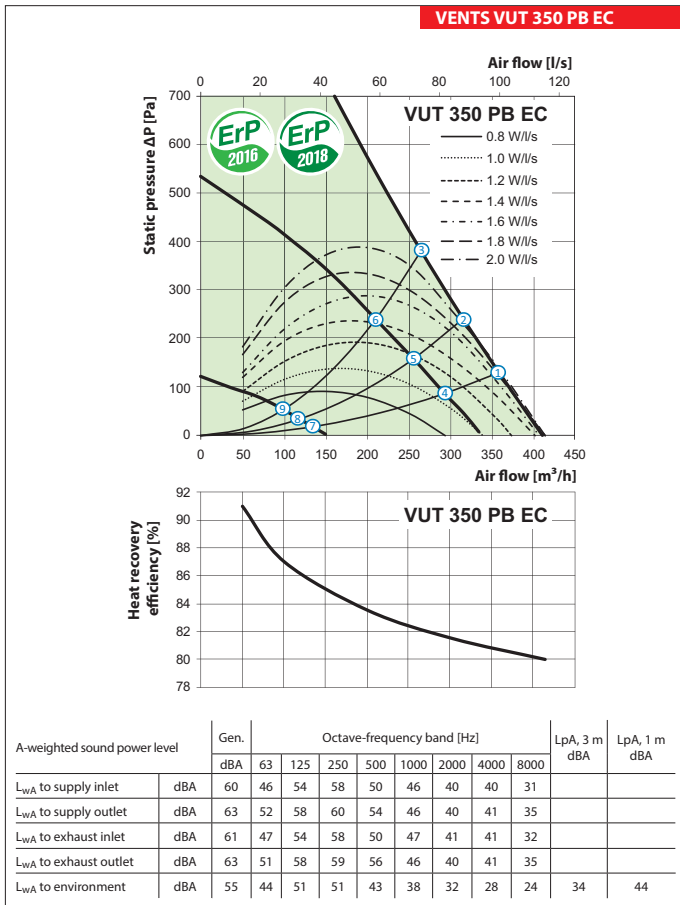
Overall dimensions



Technical data

	VUT 160 PB EC	VUT 250 PB EC	VUT 350 PB EC
Unit voltage [V/50 (60) Hz]		1~230	
Maximum unit power [W]	50	101	170
Maximum unit current [A]	0.4	0.8	1.3
Maximum air flow [m ³ /h]	190	270	410
RPM [min ⁻¹]	3770	4480	3200
Sound pressure level at 3 m distance [dBA]	26	28	34
Transported air temperature [°C]		-25...+40	
Casing material	Aluzinc steel		
Insulation	40 mm mineral wool		
Filter (extract/supply)	G4/F7		
Connected air duct diameter [mm]	Ø 125	Ø 125	Ø 160
Weight [kg]	48	48	70
Heat recovery efficiency [%]	82-94	80-98	80-91
Heat exchanger type	Counter-flow		
SEC class	A+	A	A
Heat exchanger material	Polystyrene		





Point	Power [W]			Sound pressure level at 3 m (1 m) distance [dBA]		
	VUT 160 PB EC	VUT 250 PB EC	VUT 350 PB EC	VUT 160 PB EC	VUT 250 PB EC	VUT 350 PB EC
1	49	100	169	26 (36)	28 (38)	34 (44)
2	49	99	169	26 (36)	27 (37)	34 (44)
3	48	98	169	25 (35)	27 (37)	33 (43)
4	21	55	87	22 (32)	23 (33)	28 (38)
5	21	54	86	22 (32)	22 (32)	28 (38)
6	20	54	84	21 (31)	22 (32)	27 (37)
7	8	17	20	19 (29)	15 (25)	22 (32)
8	8	17	19	18 (28)	14 (24)	22 (32)
9	8	16	19	18 (28)	14 (24)	21 (31)

AIR HANDLING UNITS WITH HEAT RECOVERY

Accessories for air handling units

Model	G4 panel filter	F7 panel filter	Control panel	Control panel with Wi-Fi	LCD control panel	Indoor humidity sensor	Outdoor CO ₂ sensor with indication	Outdoor CO ₂ sensor
VUT 160 PB EC A14	SF 403x253x48 G4	SF 403x253x48 F7	-	-	-	HV2	CO2-1	CO2-2
VUT 160 PB EC A21			A22	A22 WiFi	A25			
VUT 250 PB EC A14			-	-	-			
VUT 250 PB EC A21			A22	A22 WiFi	A25			
VUT 350 PB EC A14			-	-	-			
VUT 350 PB EC A21			SF 603x253x48 G4	SF 603x253x48 F7	A22			

Model	Outdoor humidity sensor	VOC sensor (0-10 V)	CO ₂ sensor (0-10 V)	Humidity sensor (0-10 V)	Electric heater for preheating	Electric reheater	Hydraulic U-trap	Air damper	Electric actuator
VUT 160 PB EC A14	HR-S	-	-	-	-	-	SH-32	KRV 125	LF230
VUT 160 PB EC A21		DPWQ30600	DPWQ40200	DPWC11200	NKP-125	NKD-125			
VUT 250 PB EC A14		-	-	-	-	-			
VUT 250 PB EC A21		DPWQ30600	DPWQ40200	DPWC11200	NKP-125	NKD-125			
VUT 350 PB EC A14		-	-	-	-	-			
VUT 350 PB EC A21		DPWQ30600	DPWQ40200	DPWC11200	NKP-160	NKD-160			

Application options

