

# VUT 400 HB EC A21



Heat recovery air handling units in sound- and heat-insulated casings equipped with a counter-flow polystyrene heat exchanger

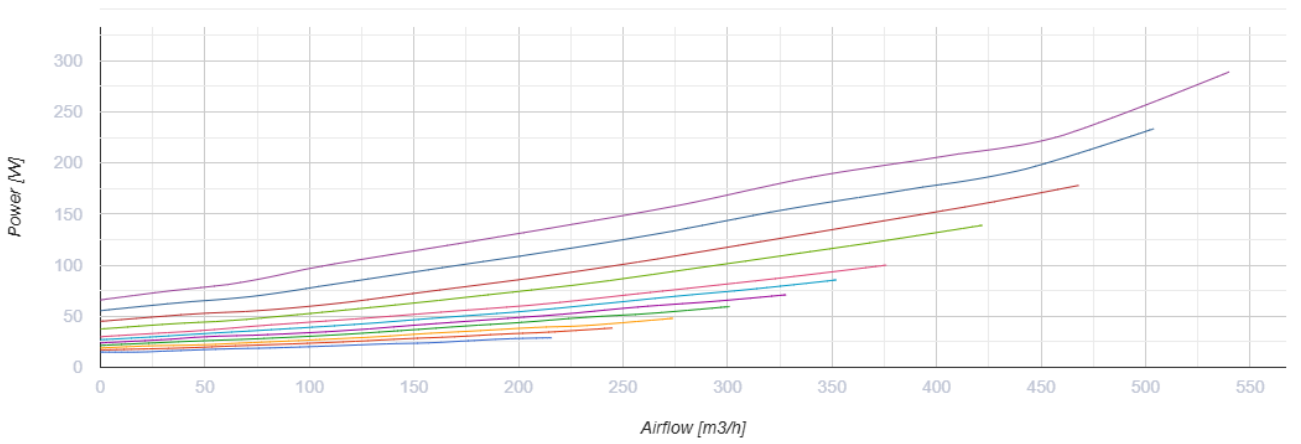
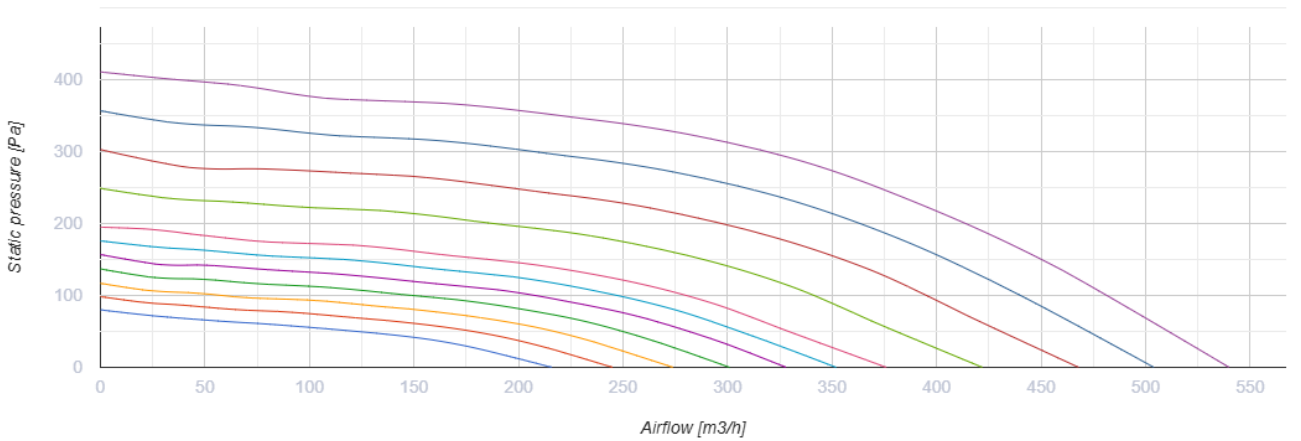
- Maximum airflow: 540
- Sound pressure level LpA at 3 m: 27
- Heat exchanger type: Counter flow
- Extract filter: G4
- Supply filter: G4+F7
- Sound insulation
- Motor type: EC
- Bypass: Auto
- Reheater: Optional
- Preheater: Optional
- BMS protocol: ModBus
- Control: Smartphone
- Casing material: Galvanized steel
- Humidity sensor: Optional
- CO2 sensor: Optional
- VOC sensor: Optional
- PM2.5 sensor: Optional

	Unit of measurement	VUT 400 HB EC A21
Connected air duct size	mm	200
Speed	-	1
Minimum supply voltage	V	230
Maximum supply voltage	V	230
Power supply frequency	Hz	50/60
Rated power	W	289
Unit current	A	2.1
Maximum airflow	m <sup>3</sup> /h	540
Sound pressure level LpA at 3 m	dB(A)	27
Heat recovery efficiency, max	%	98
Heat exchanger type	-	Counter flow
Heat exchanger material	-	Polystyrene
Weight	kg	74.8
Extract filter	-	G4
Supply filter	-	G4+F7
Transported air temperature (max)	°C	40
Transported air temperature (min)	°C	-25
Ambient air temperature min	°C	1
Ambient air temperature max	°C	40
Ambient air humidity max	%	80
Ingress protection rating	-	IP22

Ingress protection rating of the drive

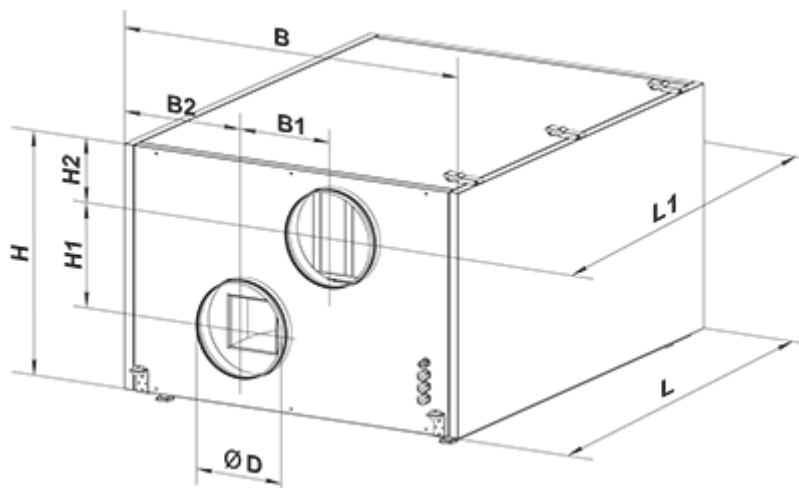
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IP44






## Dimensions

ØD	B	B1	B2	H	H1	H2	L	L1
197	682	248	217	504	201	141	1094	1191







## Accessories





### Control Panels for AHU



Name	Photo	Description
<a href="#">A25</a>		The control panel with a sensor display
<a href="#">A22</a>		The A22/A22 WiFi control panels are used for control of industrial and domestic air handling units with an A21 automation system.
<a href="#">A22 WiFi</a>		The A22/A22 WiFi control panels are used for control of industrial and domestic air handling units with an A21 automation system.

### Sensors




Name	Photo	Description
<a href="#">HV2</a>		Humidity sensor
<a href="#">CO2-1</a>		CO2 sensors
<a href="#">CO2-2</a>		CO2 sensors
<a href="#">HR-S</a>		Electro-mechanical humidistats

### Electrical heaters



Name	Photo	Description
<a href="#">NKD 200-1,2-1 A21 V.2</a>		Duct heater for supply air post-heating with external control
<a href="#">NKD 200-1,7-1 A21 V.2</a>		Duct heater for supply air post-heating with external control
<a href="#">NKD 200-2,0-1 A21 V.2</a>		Duct heater for supply air post-heating with external control
<a href="#">NKP 200-1,2-1 A21 V.2</a>		Heater for heat exchanger freeze protection

<a href="#">NKP 200-1,7-1 A21 V.2</a>		Heater for heat exchanger freeze protection
<a href="#">NKP 200-2,0-1 A21 V.2</a>		Heater for heat exchanger freeze protection


### For round ducts

Name	Photo	Description
<a href="#">SR 200/600</a>		Silencer is applied for noise absorption produced during the ventilating equipment operation and spread along the ducting systems
<a href="#">SR 200/900</a>		Silencer is applied for noise absorption produced during the ventilating equipment operation and spread along the ducting systems
<a href="#">SR 200/1200</a>		Silencer is applied for noise absorption produced during the ventilating equipment operation and spread along the ducting systems


### For round ducts

Name	Photo	Description
<a href="#">KOM 200</a>		Spring-loaded backdraft damper for round ducts
<a href="#">KRV 200</a>		Air damper for air flow cut-off in round air ducts

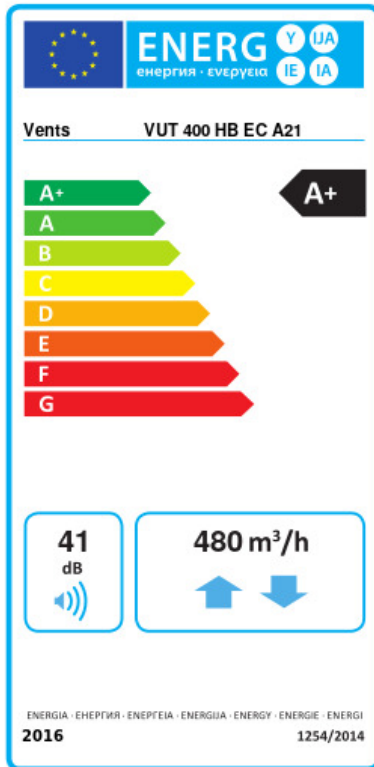
### Electric actuators

Name	Photo	Description
<a href="#">Belimo TF230</a>		The actuators are designed for controlling air dampers with cross section up to 0.4 m <sup>2</sup> performing protection functions

### Other accessories

Name	Photo	Description
SF 600x205x48 G4		Panel filter G4
SF 600x205x48 F7		F7 panel filter

## Ecodesign



Trademark	Vents					
Model	VUT 400 HB EC A21					
Specific energy consumption (SEC) (kWh/(m <sup>2</sup> /a))	Cold		Average		Warm	
	-81.6	A+	-42.5	A+	-17.5	E
Type of ventilation unit	Bidirectional					
Type of drive installed	Variable speed					
Type of heat recovery system	Recuperative					
Thermal efficiency of heat recovery (%)	88					
Maximum flow rate (m <sup>3</sup> /h)	480					
Electric power input (W)	240					
Reference flow rate (m <sup>3</sup> /s)	0.092					
Reference pressure difference (Pa)	50					
Specific power input (SPI) (W/(m <sup>3</sup> /h))	0.268					
Control typology	Local demand control					
Maximum internal leakage rates (%)	2.7					
Maximum external leakage rates (%)	2.7					
Declared typology	RVU BVU					
Sound power level (dB(A))	41					
The annual electricity consumption (AEC) (kWh/a)	Cold		Average		Warm	
	724		187		142	
The annual heating saved (AHS) (kWh/a)	Cold		Average		Warm	
	9100		4652		2104	