

VUT 300 HBE EC A21



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

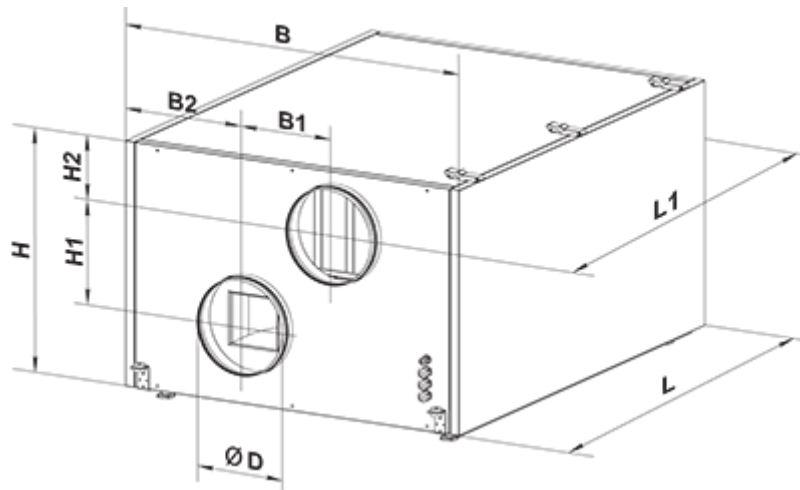
- Power of electrical reheater: 2800
- Maximum airflow: 380
- Sound pressure level LpA at 3 m: 24
- Heat exchanger type: Counter flow
- Extract filter: G4
- Supply filter: G4+F7
- Sound insulation
- Motor type: EC
- Bypass: Auto
- Reheater: Electric
- Preheater: Optional
- BMS protocol: ModBus
- Control: Smartphone
- Casing material: Galvanized steel
- Humidity sensor: Optional
- CO2 sensor: Optional
- VOC sensor: Optional
- PM2.5 sensor: Optional

	Unit of measurement	VUT 300 HBE EC A21
Connected air duct size	mm	160
Speed	-	1
Minimum supply voltage	V	230
Maximum supply voltage	V	230
Power supply frequency	Hz	50/60
Rated power	W	182
Power of electrical reheater	W	2800
Unit current	A	13.6
Maximum airflow	m ³ /h	380
Sound pressure level LpA at 3 m	dB(A)	24
Heat recovery efficiency, max	%	98
Heat exchanger type	-	Counter flow
Heat exchanger material	-	Polystyrene
Weight	kg	64.3
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	-	IP44
ErP compliance	-	2016, 2018
Cold - Specific energy consumption (SEC)	kWh/(m ² /a)	81.3
SEC Class Cold	-	A+
Average - Specific energy consumption (SEC)	kWh/(m ² /a)	42.4
SEC Class Average	-	A+
Warm - Specific energy consumption (SEC)	kWh/(m ² /a)	17.4
SEC Class Warm	-	E
Unit category	-	RVU
Type of ventilation unit	-	Bidirectional
Type of drive installed	-	Variable speed
Type of heat recovery system	-	Recuperative
Thermal efficiency of heat recovery	%	87
Maximum flow rate	m ³ /h	335
Electric power input	W	155
Reference flow rate	m ³ /s	0.064
Reference pressure difference	Pa	50
Specific power input (SPI)	W/(m ³ /h)	0.265
Control typology	-	Local demand control
Maximum internal leakage rates	%	2.7
Maximum external leakage rates	%	2.7
Cold - The annual electricity consumption (AEC)	kWh/a	722
Average - The annual electricity consumption (AEC)	kWh/a	185
Warm - Jährlicher Stromverbrauch (JSV)	kWh/a	140
Cold - The annual heating saved (AHS)	kWh/a	9060
The annual heating saved (AHS) Average	kWh/a	4631
The annual heating saved (AHS) Warm	kWh/a	2094
Declared typology	-	RVU BVU
Sound power level	dB(A)	40




Dimensions

ØD	B	B1	B2	H	H1	H2	L	L1
157	568	190	189	479	193	118	1083	1180








Accessories



Control Panels for AHU

Name	Photo	Description
A25		The control panel with a sensor display
A22		The A22/A22 WiFi control panels are used for control of industrial and domestic air handling units with an A21 automation system.
A22 WiFi		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
HV2		Humidity sensor
CO2-1		CO2 sensors
CO2-2		CO2 sensors
HR-S		Electro-mechanical humidistats
DPWC11200		Humidity sensor







VOC sensors

Name	Photo	Description
DPWQ30600		VOC sensors
DPWQ40200		CO2 sensor



Electrical heaters

Name	Photo	Description
NKP 160-0,8-1 A21 V.2		Heater for heat exchanger freeze protection
NKP 160-1,2-1 A21 V.2		Heater for heat exchanger freeze protection
NKP 160-1,7-1 A21 V.2		Heater for heat exchanger freeze protection
NKP 160-2,0-1 A21 V.2		Heater for heat exchanger freeze protection


For round ducts

Name	Photo	Description
SR 160/600		Silencer is applied for noise absorption produced during the ventilating equipment operation and spread along the ducting systems
SR 160/900		Silencer is applied for noise absorption produced during the ventilating equipment operation and spread along the ducting systems
SR 160/1200		Silencer is applied for noise absorption produced during the ventilating equipment operation and spread along the ducting systems
SRF 160/600		Silencer is applied for noise absorption produced during the ventilating equipment operation and spread along the ducting systems
SRF 160/900		Silencer is applied for noise absorption produced during the ventilating equipment operation and spread along the ducting systems
SRF 160/2000		Silencer is applied for noise absorption produced during the ventilating equipment operation and spread along the ducting systems



For round ducts

Name	Photo	Description
KOM 160		Spring-loaded backdraft damper for round ducts
KRV 160		Air damper for air flow cut-off in round air ducts


Condensation drainage

Name	Photo	Description
DN-2		The drain pump provides extraction and discharge of condensate in ventilation systems

Electric actuators

Name	Photo	Description
Belimo LF230		The Belimo LF series actuators are designed for controlling air dampers with cross section up to 0.8 m ² performing protection functions
Belimo TF230		The actuators are designed for controlling air dampers with cross section up to 0.4 m ² performing protection functions

Other accessories

Name	Photo	Description
SF 484x178x48 G4		Panel filter G4
SF 484x178x48 F7		F7 panel filter