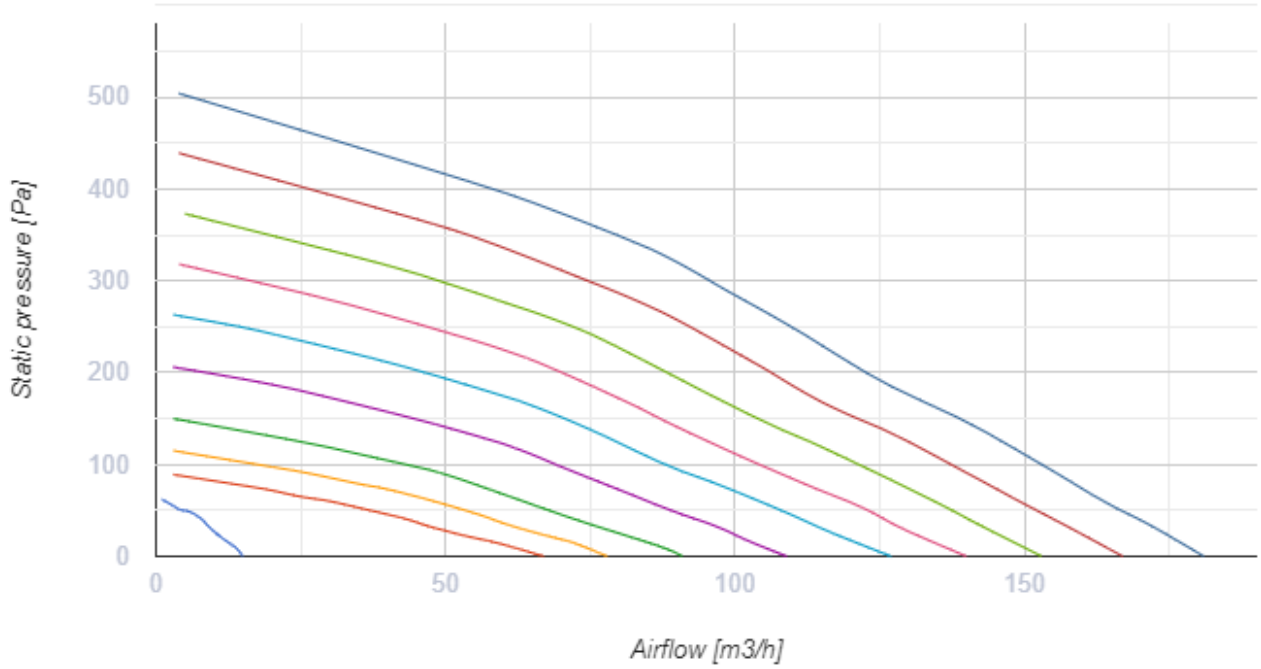
Enave-T 180 P A21

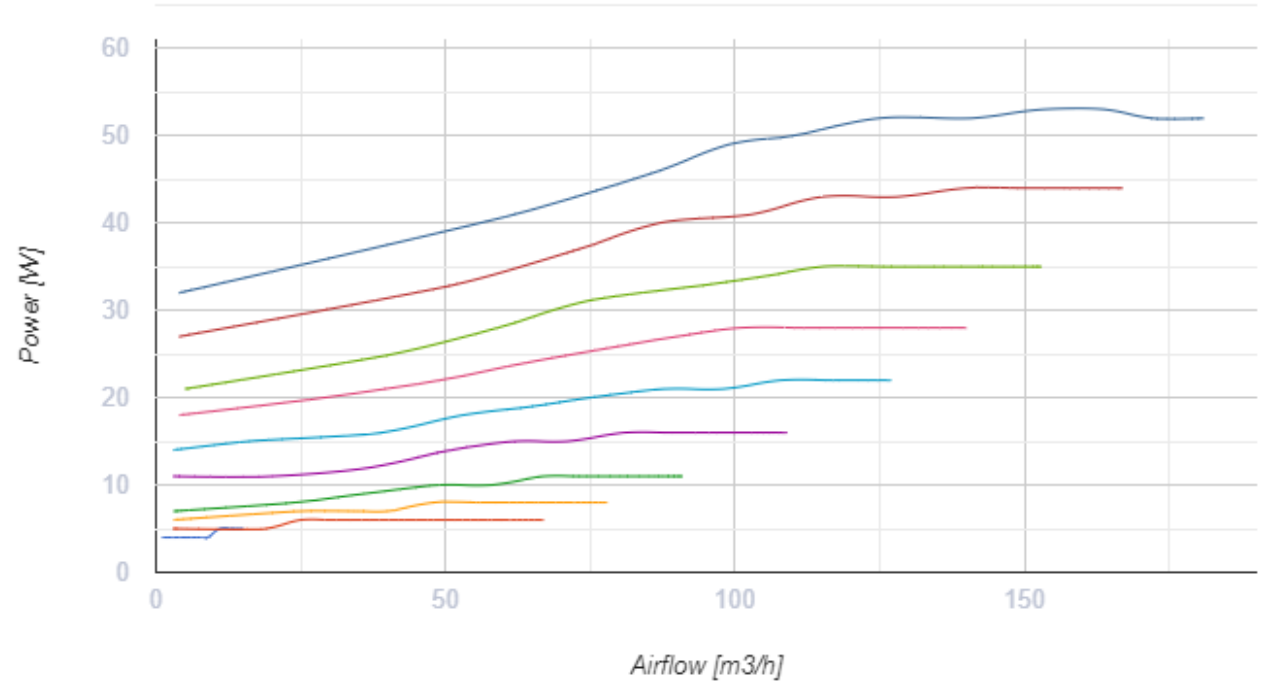
Heat recovery air handling unit in sound- and heat-insulated casing made of expanded polypropylene

- Maximum airflow: 181
- Sound pressure level LpA at 3 m: 29
- Heat exchanger type: Counter flow
- Extract filter: Coarse > 60 % (G4)
- Supply filter: Coarse > 60 % (G4) (option ePM1 60 % (F7))
- Sound insulation
- Motor type: EC
- Enthalpy heat exchanger
- Bypass: Auto
- Reheater: Optional
- Preheater: Optional
- BMS protocol: ModBus
- Control: Smartphone
- Casing material: EPP
- Humidity sensor: Optional
- CO2 sensor: Optional
- VOC sensor: Optional
- PM2.5 sensor: Optional

	Unit of measurement	Enave-T 180 P A21
Connected air duct size	mm	160
Phases	-	1
Minimum supply voltage	V	230
Maximum supply voltage	V	230
Power supply frequency	Hz	50/60
Rated power	W	53
Unit current	A	0.49
Maximum airflow	m^3/h	181
Sound pressure level LpA at 3 m	dB(A)	29
Heat recovery efficiency, max	%	84
Heat exchanger type	-	Counter flow
Heat exchanger material	-	Enthalpy
Weight	kg	15
Extract filter	-	Coarse > 60 % (G4)
Supply filter	-	Coarse > 60 % (G4) (option ePM1 60 % (F7))
Transported air temperature (max)	°C	45
Ambient air temperature min	°C	1
Ambient air temperature max	°C	40
Ambient air humidity max	%	60
Ingress protection rating	-	IP22

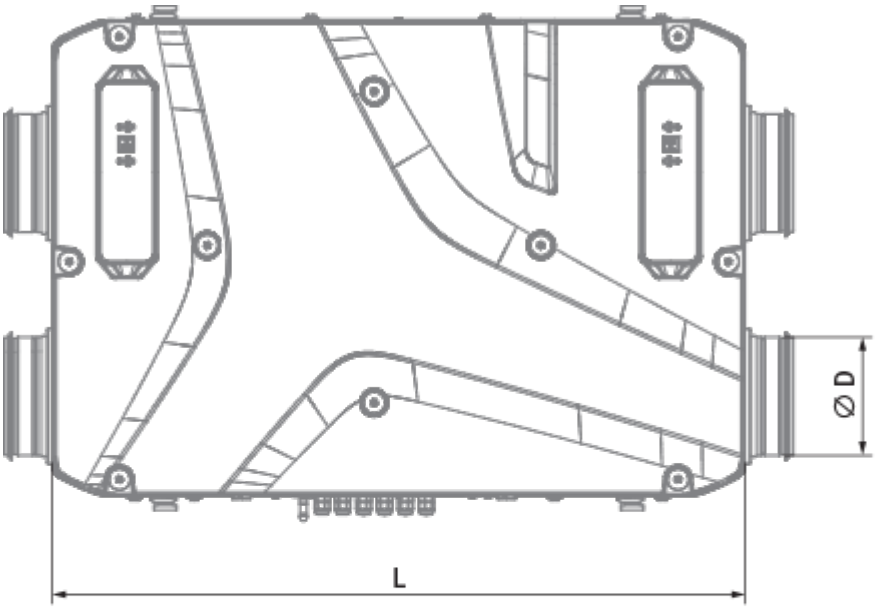
Ingress protection rating of the drive	-	IP44

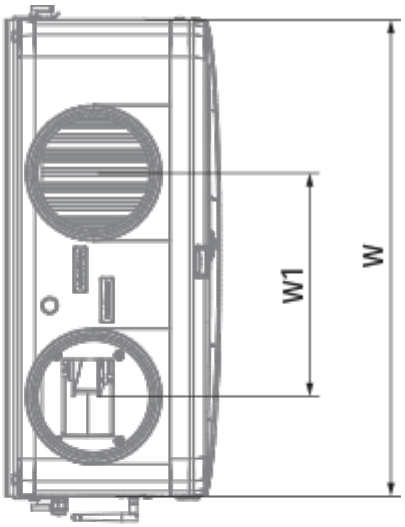


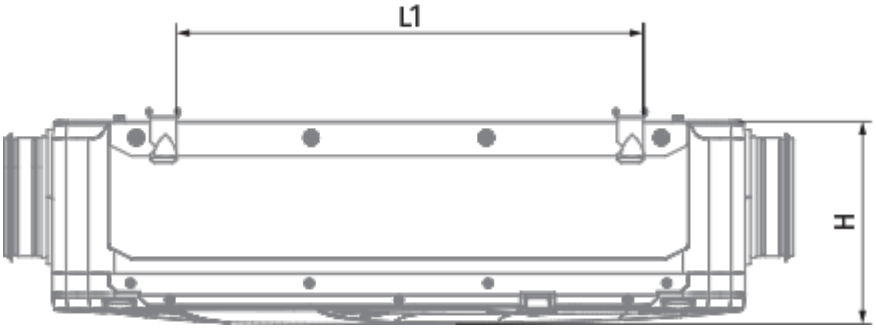


Dimensions

H	W	L	D	W1	L1
272	640	930	160	300	627







Accessories

Other accessories

Name	Photo	Description
SF 205x200x48 Coarse 90% G4		Panel filter G4
SF 205x200x48 ePM1 60% F7		F7 panel filter

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
CO2-3		CO2 sensor
CO2-1		CO2 sensors
CO2-2		CO2 sensors
HR-S		Electro-mechanical humidistats

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
NKD 160-0,8-1 A21 V.2		Duct heater for supply air post-heating with external control
NKD 160-1,2-1 A21 V.2		Duct heater for supply air post-heating with external control

NKD 160-1,7-1 A21 V.2		Duct heater for supply air post-heating with external control
NKD 160-2,0-1 A21 V.2		Duct heater for supply air post-heating with external control

Condensation drainage

Name	Photo	Description
SH-32		The hydraulic U-trap for condensate drainage from heat exchangers and coolers in ventilation and air conditioning systems

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

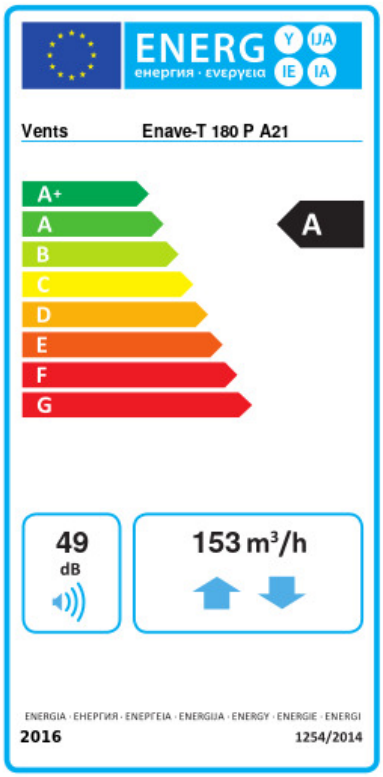
For round ducts

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

Electric actuators

Name	Photo	Description
Belimo TF230		The actuators are designed for controlling air dampers with cross section up to 0.4 m² performing protection functions

Ecodesign



Trademark	Vents					
Model	Enave-T 180 P A21					
Specific energy consumption (SEC) (kWh/(m²/a))	Cold		Average		Warm	
	78	A+	41.1	A	17.3	E
Type of ventilation unit	Bidirectional					
Type of drive installed	Variable speed					
Type of heat recovery system	Recuperative					
Thermal efficiency of heat recovery (%)	77					
Maximum flow rate (m³/h)	153					
Electric power input (W)	53					
Reference flow rate (m³/s)	0.03					
Reference pressure difference (Pa)	50					
Specific power input (SPI) (W/(m³/h))	0.204					
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))	49					
The annual electricity consumption (AEC) (kWh/a)	Cold		Average		Warm	
	690		153		108	
The annual heating saved (AHS) (kWh/a)	Cold		Average		Warm	
	8655		4424		2001	