Series

VENTS ENAVE-C 100 P A14

EC motor

Heat recovery air handling units in sound- and heat-insulated casings. Air flow up to **130 m³/h**. Heat recovery efficiency up to **94 %**

Description

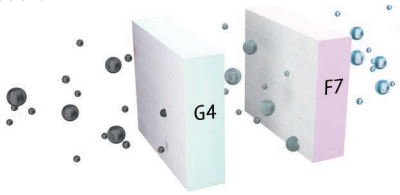
The air handling units are the fully featured ventilation units with heat recovery for air filtration, fresh air supply and stale air extract. The units offer energy-efficient ventilation for small appartments.

Casing

The casing is made of expanded polypropylene (EPP) possessing high heat- and sound-insulating properties.

Filter

Two built-in G4 and F7 filters provide efficient air filtration.

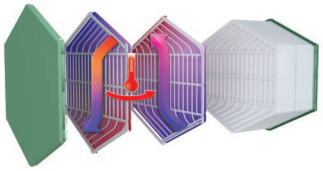


Fans

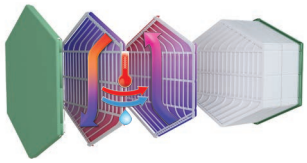
Efficient electronically commutated motors with external rotor and impeller with forward curved blades.

Heat exchanger

Enave-C units are equipped with a counter-flow polystyrene heat exchanger.



Enave-CT units are equipped with an enthalpy heat exchanger.



Automation

Enave-C 100 P A14 units are equipped with an integrated control system and an A14 wall-mounted control panel with LED indication.

Freeze protection

In the Enave-C 100 P A14 units freeze protection is provided by the shutdown of the supply fan.

Mounting

The unit is designed for suspended ceilling mounting. The mounting position of the unit must provide service access for maintenance and repair.

Control and automation

Functions	**A14**
Control via external wired control panel	A14 
Speed selection	+
Filter replacement indication	According to filter timer
Alarm indication	Alarm LED indication
Freeze protection	Cyclic shutdown of supply fan
Humidity control	Option
CO2 control	Option
Fire alarm connection	Option

Accessories for air handling units

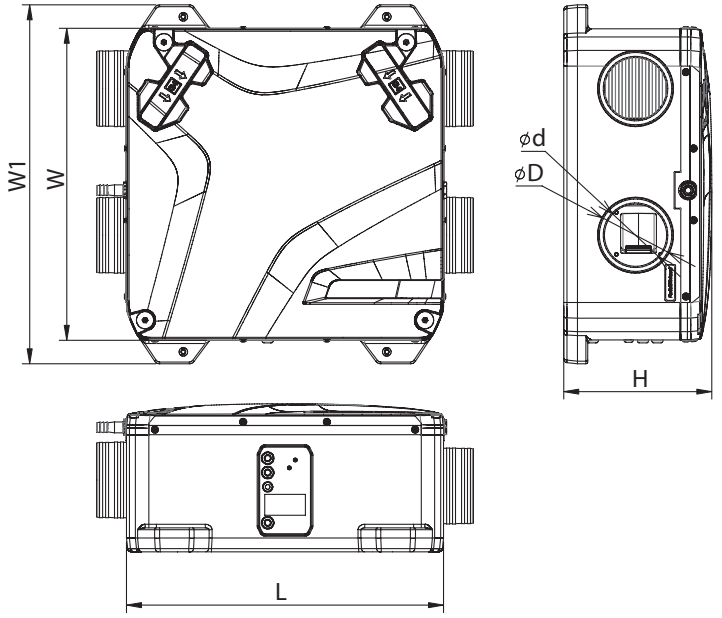
Model	G4 panel filter	F7 panel filter	Internal humidity sensor	CO_2 sensor with indication	CO_2 sensor	Humidity sensor	U-trap kit	Air damper	Electric actuator
									
Enave-C 100 P A14	SF 176x150x22 G4	SF 176x150x22 F7	HV2	CO2-1	CO2-2	HR-S	SG-32	KRV 125	LF230
Enave-CT 100 P A14									

Designation key

TM	Model	Casing modification	Heat exchanger type	Nominal size	Modification	Casing type	Heater	Controller	Service side
VENTS	Enave	C – Compact	_ – heat recovery T – energy recovery	Air flow m^3/h / 10	0 – standard	P – suspended	_ – w/o heater	A14	_ – universal

Overall dimensions

Model	Dimensions [mm]						
	ØD	Ød	H	W	L	W1	B
Enave-C 100 P	125	104	247	522	530	600	630

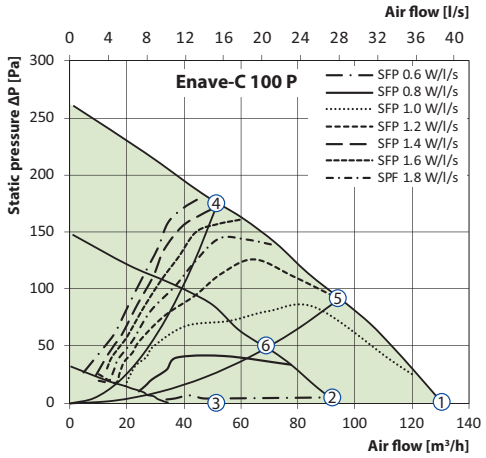


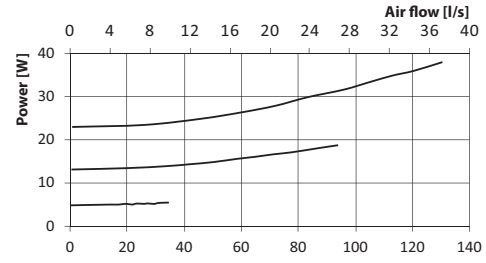
Technical data

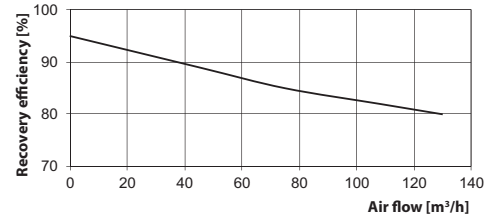
	Enave-C 100 P	Enave-CT 100 P
Voltage [V/50-60 Hz]	1~ 230	
Max. unit power [W]	38	
Max. unit current [A]	0.34	
Max air flow [m³/h]	130	
Max. sound pressure level at 3 m distance (breakout) [dBA]	32	
Max. operating temperature [°C]	- 23...+40	
Case material	EPP	
Insulation [mm]	25	
Extract filter	G4 / Coarse > 60%	
Supply filter	G4 / Coarse > 60% (option F7 / ePM1 60%)	
Connected air duct diameter [mm]	100 / 125	
Weight [kg]	8	
Heat recovery efficiency [%]	82-94	73-88
Heat exchanger type	Counter-flow	
Heat exchanger material	Polystyrene	Enthalpy
SEC class	A+	A

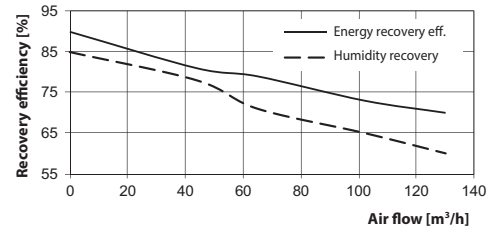
Point	Air flow [m³h] (ls)	Total sound pressure level (breakout) at 3 m (1 m) distance [dBA]
	Enave-C(T) 100 P	**Enave-C(T) 100 P**
1	130 (36)	32 (42)
2	91 (25)	25 (35)
3	52 (14)	16 (26)
4	52 (14)	31 (41)
5	96 (27)	33 (42)
6	68 (19)	25 (34)

VENTS Enave-C 100 P









A-weighted sound power level (p.5 on the diagram)		Gen.	Octave-frequency band [Hz]							LpA, 3 m	LpA, 1 m
		dBA	200	400	800	1000	2000	4000	8000	[dBA]	[dBA]
L_{WA} to exhaust inlet	dBA	59	44	45	49	51	44	37	38	38	48
L_{WA} to supply outlet	dBA	47	41	36	33	31	29	22	24	27	36
L_{WA} to environment	dBA	53	37	41	43	42	38	34	29	33	42

Calculation of air temperature downstream of the heat exchanger:

$$t=t_{outd}+k_{hr}*(t_{extr}-t_{outd})/100,$$

where

t_{outd} is outdoor air temperature [°C]

t_{extr} is extract air temperature [°C]

k_{hr} is heat exchanger efficiency (according to the diagram) [%]