



# VORT HR NETI RANGE

WALL-MOUNTED HEAT RECOVERY UNIT

A

CENTRALIZED VENTILATION

WALL AND FLOOR MOUNTING

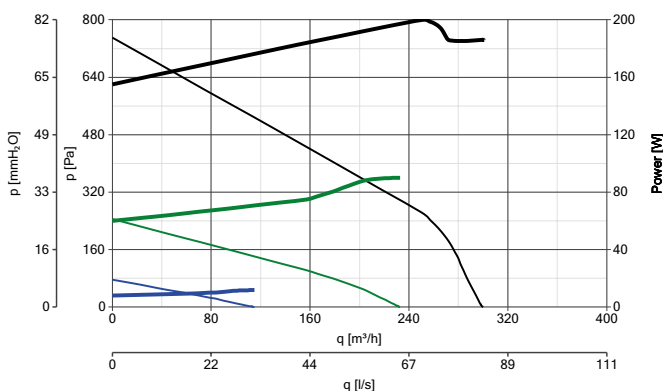
UP TO 180 M<sup>2</sup>

Centralized dual flow ventilation unit with heat recovery for floor and wall installation, ideal for ventilation of homes and residential and commercial premises with a surface area of up to 180 m<sup>2</sup>.



- Internal structure in high density expanded polypropylene 40kg/m<sup>3</sup>.
- Aesthetic front panel in plastic resin, glossy white finish.
- Connection spigots to pipes with a nominal diameter of 125 mm, backward curved centrifugal fans directly coupled to EC motors.
- High efficiency counter flow heat exchanger in plastic material (PS).
- Automatic mechanical by-pass for free-cooling.
- Filters ePM10 50% (M5) and Coarse 65% (G4), located respectively in correspondence with the inlet and outlet ducts.
- Integrated control panel (Remote control panel with optional wired connection)
- Supporting bracket for wall installation integrated in the product
- Can be integrated into residential home automation systems (ModBus protocol) on RS485 SLAVE mode.

## PERFORMANCE AND ABSORPTION



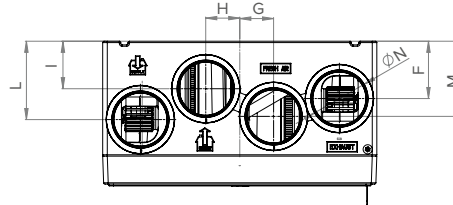
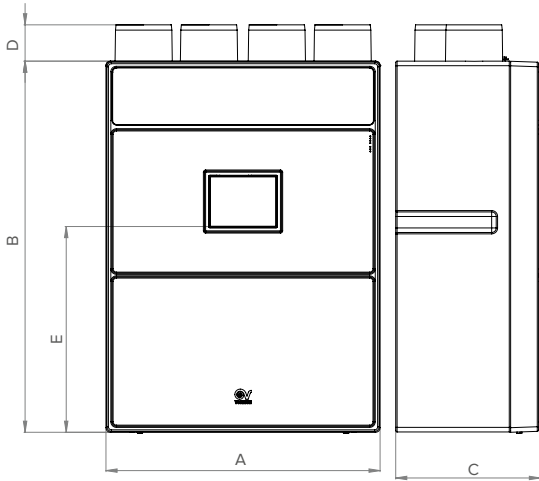
## TECHNICAL DATA

PRODUCT	CODE	Nom. Ø (mm)	(m <sup>3</sup> /h)	(W)	(PA)	Lp [dB (A)] 3m
VORT HR 300 NETI	10935	125	300	190	735	24

CONSUMPTION CURVES  
 — max  
 — med  
 — min

PERFORMANCE CURVES  
 — max  
 — med  
 — min

**DIMENSIONS**



PRODUCTS	A	B	C	D	E	F	G	H	I	L	M	ØN
VORT HR 300 NETI	600	812	317	80	450	125	74	74	104	172	165	125

Dimensions in mm

**ENERGY DATA**

	UNIT OF MEASURE	VORT HR 300 NETI
MANUFACTURER'S NAME OR TRADE NAME	-	VORTICE
CLASS OF SPECIFIC ENERGY CONSUMPTION FOR TEMPERATE CLIMATE	-	A
SPECIFIC ENERGY CONSUMPTION SEC (TEMPERATE CLIMATE)	kWh/m <sup>2</sup> year	- 35
SPECIFIC ENERGY CONSUMPTION SEC (COLD CLIMATE)		- 74
SPECIFIC ENERGY CONSUMPTION SEC (WARM CLIMATE)		- 11
DECLARED TYPE OF THE VENTILATION UNIT	-	UVR-B**
DRIVE TYPE	-	VSD***
HRS TYPE HEAT EXCHANGER	-	recovery
THERMAL EFFICIENCY OF HEAT RECOVERY AT THE HRS REFERENCE FLOW RATE	%	87.9
MAXIMUM FLOW RATE	m <sup>3</sup> /h	270
TOTAL ELECTRIC POWER ABSORBED BY THE FAN AT MAXIMUM FLOW RATE	w	190
Sound LEVEL	LWA [dB(A)]	57.2
REFERENCE FLOW RATE	m <sup>3</sup> /s	0.0525
REFERENCE PRESSURE DIFFERENCE	Pa	56
SPI****	W/(m <sup>3</sup> /h)	0.4392
CTRL CONTROL FACTOR	-	0.85
CONTROL TYPE	-	centralized env.
MAXIMUM PERCENTAGE OF INTERNAL LEAKAGE	%	2.8
MAXIMUM PERCENTAGE OF EXTERNAL LEAKAGE	%	2.3
MIXING RATE	-	NA*
POSITION AND DESCRIPTION OF THE VISUAL FILTER SIGNAL	-	See instruction booklet
AIR FLOW SENSITIVITY AT PRESSURE VARIATIONS OF ± 20 PA	-	NA*
INDOOR/OUTDOOR AIR SEALING	m <sup>3</sup> /h	NA*
AEC ANNUAL ELECTRICITY CONSUMPTION	kWh of electricity/year	442
TEMPERATE AHS ANNUAL HEATING SAVINGS	kWh of primary energy /year	4573
COLD AHS ANNUAL HEATING SAVINGS		8946
WARM AHS ANNUAL HEATING SAVING		2068

\* NA: Not applicable. \*\* UVR-U: Residential Ventilation Unit - Uni-directional. \*\*\* VM: Multiple speeds. VSD: Variable Speed Drive.

\*\*\*\* SPI: Specific power input.



# VORT HR NETI RANGE

WALL-MOUNTED HEAT RECOVERY UNIT

## TECHNICAL CHARACTERISTICS

### • 1 model.



- Fire resistant expanded polypropylene casing (DIN EN 13501). Brackets for wall installation included in the standard equipment.
- Aesthetic front panels in white polycarbonate (alternative colors available on request), integrating the panels for direct access to the filters.
- Intake and delivery spigots compatible with the connection to pipes with a nominal diameter of 125 mm.
- Pair of motor fans driven by EC (brushless) motors of the external rotor type, with shafts mounted on ball bearings to ensure a virtually “maintenance free” operation, directly coupled to backward curved centrifugal impellers to guarantee high aerualic efficiency. 3 operating speeds, independently settable at installation.
- High efficiency counter flow heat exchanger in plastic material (PS).
- Anti frost protection with automatic activation, to prevent the formation of frost at the heat exchanger.
- Mechanical, automatic and 100% filtered by-pass, to guarantee the comfort of the occupants of the rooms in mid seasons, or whenever the outside temperature does not require the action of the heat exchanger.
- Control unit with LCD display, for:
  - turning the product on and off;
  - the initial configuration of the product;
  - manual setting of the operating mode;
  - automatic management of the product and monitoring of its correct operation;
  - system diagnostics;
  - constant monitoring of the filters condition and signaling the need for their maintenance/replacement;
  - updating the firmware release.
- Pair of M5 filters (F7 filter available as an option for the delivery duct), easily accessible for periodic maintenance.
- Condensate collection tray with drain devices.
- Possibility of integration in home automation environments through the ModBus communication protocol.
- Possibility of interlocking with external environmental sensors (optional), for the automatic control of the operating mode.
- Degree of protection from dust and water: IPX2.
- Electrical insulation class: I (grounding required).

## TECHNICAL DATA

PRODUCTS	CODE	V~50 / 60HZ	W max	A max	MAX FLOW RATE		MAX PRESSURE		°C* MAX	KG
					m³/h	l/s	mmH <sub>2</sub> O	Pa		
VORT HR 300 NETI	10935	220 - 240	190	1.33	300	83	75	735	40	15

\* Maximum temperature with continuous operation of the product.

## FILTERS

MODELS	DESCRIPTION	DIMENSIONS	CODE	VORT HR NETI code 10935
	<b>M5 FILTER</b>	275X125X48	21410	✓
	<b>G4 FILTER</b>	275X125X48	21411	✓


## REGULATORS

MODELS	DESCRIPTION	DIMENSIONS	CODE	VORT HR NETI code 10935	CB LCD R code 21194
	<b>CB LCD R</b> remote control unit with wired LCD panel, For recessed installation.	116x83x65	21194	✓	
	<b>WALL BOX HRW RC</b>	-	22732	✓	✓
	<b>BUILT-IN BOX TYPE 503</b>	-	22461	✓	✓
	<b>C HCS</b> Humidity detector	144x54x55.8	12994	✓	
	<b>C PIR</b> Presence detector	144x54x55.8	12998	✓	
	<b>C TEMP</b> Temperature detector	144x54x55.8	12992	✓	
	<b>C SMOKE</b> Polluted air detector	144x54x55.8	12993	✓	

System components (description and data from page 96).

Regulators (description and data from page 152).

## ACCESSORIES

MODELS	DESCRIPTION	CODE	VORT HR NETI code 10935
	<b>HEATER 750</b> Pre-heater to prevent the formation of frost in correspondence of the heat exchanger, also in particularly harsh climates. Power 750W	22735	✓