

# VORT HR AVEL RANGE

CENTRALISED MECHANICAL SUPPLY AND EXTRACT UNIT WITH HEAT RECOVERY



- Centralised mechanical supply and extract unit with heat recovery
- Kitchen + 7 wet rooms
- Product Characteristics Database Listed (PCDB)
- Fresh air is 100% fully filtered even in bypass mode
- Fully automatic bypass with optional timed manual activation
- Automatic frost protection and summer bypass
- Includes 1x G4 and 1x M5 filter
- Removable hinged door for easy maintenance
- Wired electronic controller with LCD panel which displays status
- IPX2 rated



Products equipped  
with EC Brushless motors



Energy efficient

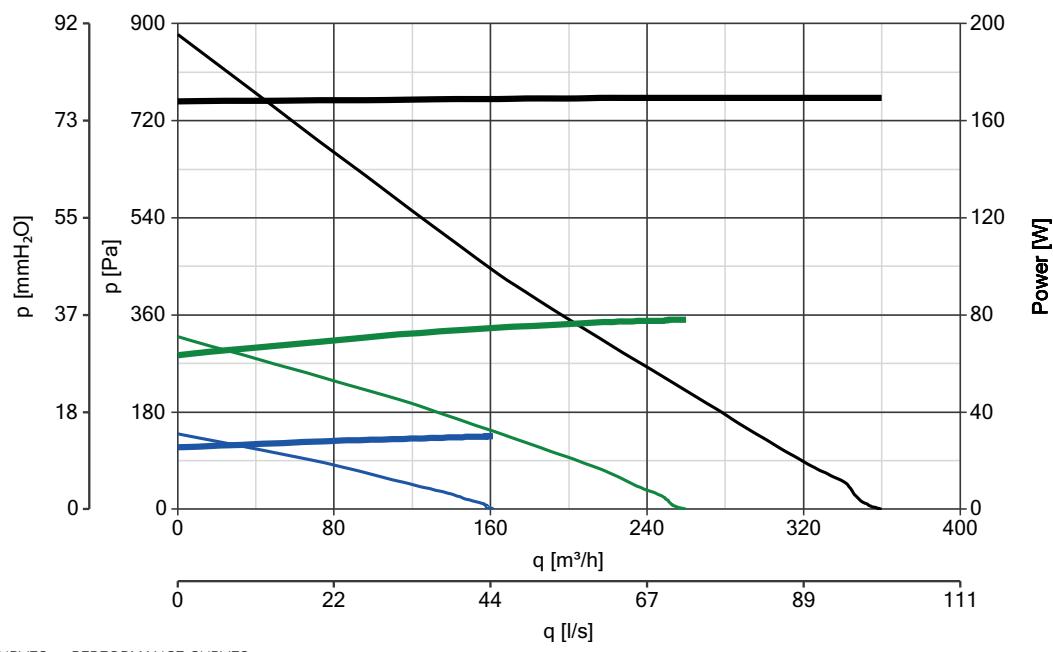


Low noise



Products with  
air filtration system

## PERFORMANCE AND ABSORPTION



CONSUMPTION CURVES

max
med
min

PERFORMANCE CURVES

max
med
min



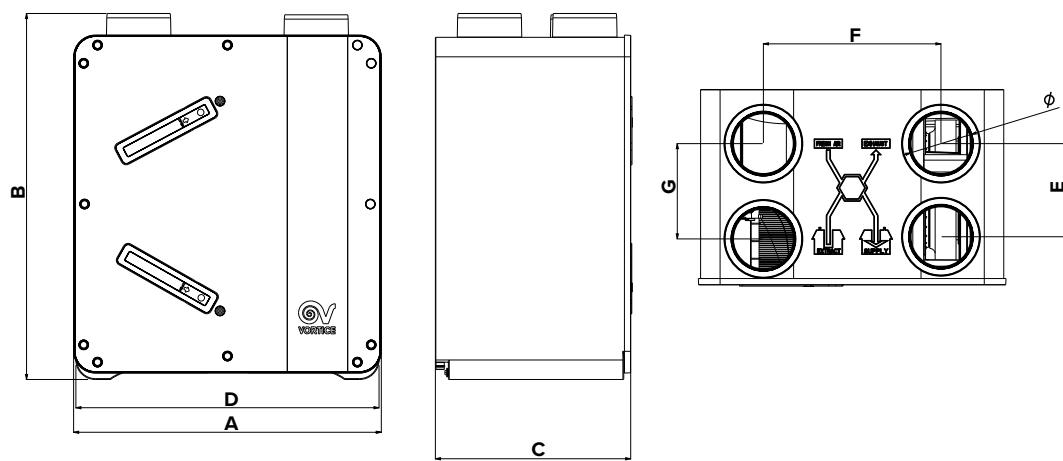


## TECHNICAL DATA

PRODUCTS	CODE	V <sub>50HZ</sub>	W <sub>max</sub>	A <sub>max</sub>	MAX AIRFLOW m <sup>3</sup> /h	MAX AIRFLOW l/s	MAX PRESSURE mmH <sub>2</sub> O	MAX PRESSURE Pa	°C* MAX	KG
VORT HR 350 AVEL TOP HCS	12096/10915	230	165	1.4	350	100	90	880	40	23

\* Maximum temperature with continuous operation of the product.

## DIMENSIONS



PRODUCTS	A	B	C	D	E	F	G	Ø
VORT HR 350 AVEL	712	845	455	700	215	410	220	150

Dimensions in mm

## TECHNICAL FEATURES

- Fire resistant expanded polypropylene casings (DIN EN 13501). Front panel in loaded plastic resin with panels for direct access to the filters
- Spigots for **intake and delivery** compatible with pipes with a nominal diameter of 150 mm
- **Pair of fans driven by EC motors** (brushless) of the external rotor type, with shafts mounted on ball bearings to ensure a virtually “maintenance free” operation, directly coupled to centrifugal impellers with backward curved blades to guarantee high aeraulic efficiency. 2 operating speeds
- **High efficiency heat exchanger**, of the cross-flow type made of plastic resin (PS)
- **Automatic activation anti frost protection**, 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
- **Pair of M5 filters** (F7 filter available as an option for the delivery pipe) and **pair of filters Class ePM1 70%**
- **Condensate collection tray** with drain devices
- **Brackets for wall installation** included in the standard equipment
- 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)

**VORT HR AVEL RANGE**  
CENTRALISED MECHANICAL EXTRACT UNIT WITH HEAT RECOVERY

**PCDB DATA**

<b>K+n wet rooms</b>	<b>SFP (W/l/s)</b>	<b>Efficiency (%) [2012]</b>
	<b>[2012]</b>	
n=1	0.60	91%
n=2	0.63	90%
n=3	0.72	89%
n=4	0.88	89%
n=5	1.05	88%
n=6	1.31	88%
n=7	1.58	88%

**SOUND LEVELS**

		Lw dB (A)							Lw dB (A)
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	
<b>MIN. SPEED K+1</b>	<b>Supply</b>	14.06	23.99	31.78	29.63	19.94	7.7	-1.87	13.0
	<b>Extract</b>	-2.09	11.53	15.86	11.59	-0.77	-6.47	-12.10	2.7
	<b>Breakout</b>	13.46	18.6	24.11	12.03	9.44	3.53	-4.8	10.5
<b>MED. SPEED K+3</b>	<b>Supply</b>	20.48	27.21	35.15	34.18	28.51	19.92	11.18	22.8
	<b>Extract</b>	5.72	25.16	23.98	21.62	10.59	-3.55	-12.06	11.8
	<b>Breakout</b>	21.36	37.61	32.22	22.43	19.19	3.29	1.17	20.1
<b>MAX SPEED K+7</b>	<b>Supply</b>	24.07	46.54	46.47	47.52	42.26	41.99	32.7	35.7
	<b>Extract</b>	2.39	38.06	36.52	33.82	24.25	15.83	7.53	23.4
	<b>Breakout</b>	29.42	45.40	44.87	41.06	42.18	32.89	18.6	32.4

\* Sound pressure calculated at 3 m in free field in accordance with ISO 9614.

Tests carried out using the reference source method in a reverberation booth.





## ACCESSORIES

MODELS	DESCRIPTION	CODE	FOR MODEL
	G3 Filter	22661	12096 10915
	M5 Filter	22662	12096 10915
	F7 Filter	22664	12096 10915
	7500W Pre Heater HR350 Avel	22735	12096 10915
	150m Flexible Attenuator	22316	12096 10915
	CB Touch LCD W	21933	12096

## CONTROLLER INFORMATION

- Wired connection
- Compatible with standard DIN flush-mounted box

**Provides the following displays:**

- Set relative humidity threshold
- Activation of the defrosting procedure (defrost)
- Saturated filters
- Error codes

