



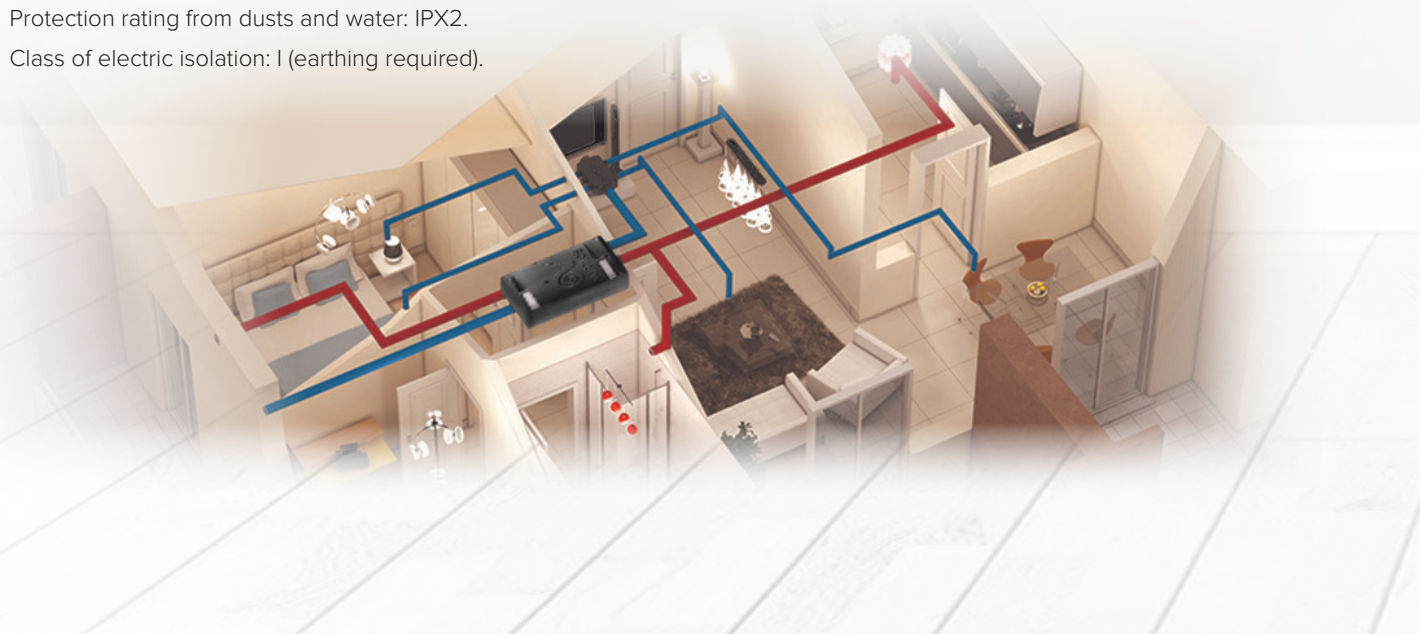
VORT HRI PHANTOM RANGE

Ceiling-mounted heat recovery systems

A

Dual flow, false-ceiling, centralised ventilation unit with heat recovery. Ideal for ventilation of homes and residential and commercial premises measuring up to 90 m² (VORT HRI 200 PHANTOM) or 240 m² (VORT HRI 350 PHANTOM), characterised by high levels of heat insulation.

- 4 models, different regarding dimensions and performance, equipped with thermodynamic and mechanical by-pass.
- Galvanised steel sheet casings incorporating the support brackets for ceiling-mounting. Body lined with fireproof, sound-proofing and heat insulating material (DIN EN 13501). Tie-rods for suspended installation included in standard supply.
- Lower, thermoformed plastic resin covers incorporating the panels for direct access to the air filters.
- Extraction and delivery spigots compatible with pipes having nominal diameter equal to 125 mm (VORT HRI 200 PHANTOM) and 150 mm (VORT HRI 350 PHANTOM).
- Pair of electric fans driven by external rotor EC motors (brushless) with shafts mounted on ball bearings, directly coupled to backward-curved centrifugal impellers for high aerodynamic efficiency. 3 operating speeds, can be set independently on installation.
- High efficiency counter cross flow heat exchanger, made in plastic resin (PS).
- Automatically activated anti-freeze protection to prevent the formation of frost at the heat exchanger.
- Thermodynamic or mechanical by-pass (BP models), automatic and 100% filtered to guarantee the comfort of the occupants of the rooms in mid-season, or however when the outdoor temperature does not require the action of the heat exchanger.
- Wired remote control unit with LCD supplied as per standard, which allows:
 - product switch-on and switch-off;
 - the initial configuration of the product;
 - the choice of minimum, medium or maximum operating speed;
 - programming operation;
 - display of the time and room temperature,
 - monitoring of the correct operation of the product (any malfunctioning is highlighted through error messages shown on the display);
 - indication of the condition of the saturated filters on the display.
- Pair of M5 filters (F7 filter available as an optional for the delivery duct), easily accessible for periodic maintenance interventions.
- Condensate collection tray with drain devices.
- Possibility of interlocking (BP models) to outdoor environmental sensors (optionals) for automatic control of the operating mode.
- Safety certified by third party body (CE).
- Protection rating from dusts and water: IPX2.
- Class of electric isolation: I (earthing required).





KEY FEATURES

- Reduced thickness, suitable for installation in false-ceilings.
- 100% filtered by-pass, for natural ventilation (free-cooling) on summer evenings, with automatic drive (BP models).
- Wired remote control unit with LCD as per standard.



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TECHNICAL DATA

MODELS	CODE	V ~ 50 Hz	W _{max}	A _{max}	MAX AIRFLOW		MAX PRESSURE		°C _{max}	Kg
					m ³ /h	l/s	mmH ₂ O	Pa		
VORT HRI 200 PHANTOM BP	11291	230	102	1.0	206	57,2	43.5	426	40	24
VORT HRI 350 PHANTOM BP	11293	230	165	1.4	350	97	58	568	50	33

ENERGY DATA

	UNIT OF MEASUREMENT	VORT HRI 200 PHANTOM 11291	VORT HRI 350 PHANTOM 11293
Supplier's name or trade mark	-	Vortice	Vortice
Specific Energy Consumption class SEC in average climate zone	-	A	A
Specific Energy Consumption class SEC average	-	-36,3	-38
Specific Energy Consumption class SEC cold	kWh/m ² year	-74,7	-77
Specific Energy Consumption class SEC warm	-	-11,7	-13
Declared typology	-	BRVU*	BRVU*
Type of drive	-	VSD**	VSD**
Type of heat recovery system HRS	-	recuperative	recuperative
Thermal efficiency of heat recovery at reference air flow	%	87,8	90,4
Maximum flow rate [m ³ /s]	m ³ /h	163	280
Electric power input of the fan drive, including any motor control equipment, at maximum flow rate	W	100	165
Sound power level LWA	LWA [dB(A)]	43	51
Reference flow rate	m ³ /s	0,0317	0,0544
Reference pressure difference	Pa	50	70
SPI***	W/(m ³ /h)	0,39474	0,35204
Control factor CTRL	-	0,85	0,85
Control typology	-	central demand control	central demand control
Maximum internal leakage rates	%	8,5	8,7
Maximum external leakage rates	%	8,5	5,2
Mixing rate	-	NA	NA
Position and description of visual filter warning	-	see user manual	see user manual
Airflow sensitivity to pressure variations at + 20Pa and - 20 Pa	-	NA	NA
Indoor/outdoor air tightness	m ³ /h	NA	NA
Annual electricity consumption (AEC)	kWh electricity/year	402	364
AHS average Annual heating saved	-	4570	4641
AHS cold Annual heating saved	kWh primary energy/year	8940	9078
AHS warm Annual heating saved	-	2067	2098

Energy data pursuant to 1254/2014 EU Regulation

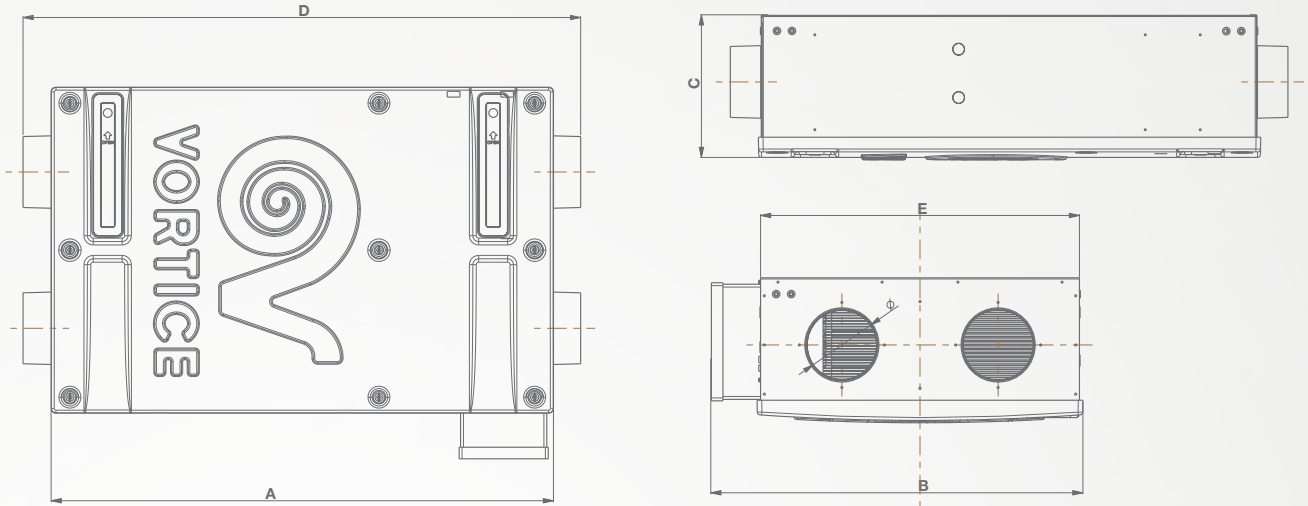
*BRVU: Bidirectional Residential Ventilation Unit
*URVU: Unidirectional Residential Ventilation Unit

**VSD: Variable Speed Drive
**MSD: Multi Speed Drive

***SPI: Specific Power Input

NA: data not applicable

DIMENSIONS



MODELS	CODE	A	B	C	D	E	Ø
VORT HRI 200 PHANTOM	11291	868	643	240	963.5	551	125
VORT HRI 350 PHANTOM	11293	1183	740	288	1287	650	150

Dimensions (mm)

SOUND LEVELS

								Sound power	Sound power Tot.	Pressure power Tot.						
								Lw dB (A)		Lw dB (A)	Lp dB (A)*					
								125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz		
VORT HRI 200 PHANTOM																
Nom. speed	Supply to internal		22.7	31.4	17.4	14.9	10.1	n.a.**	n.a.**	43.3	22.8					
	Extract to internal		24.2	36.8	23	15.4	14.0	7.3	n.a.**	36.5	16.0					
	Breakout		35.7	36.9	29.2	22.2	17.0	9.8	n.a.**	43.1	22.6					
VORT HRI 350 PHANTOM																
Nom. speed	Supply to internal		16.7	27.4	24.3	17.1	16.9	7.1	n.a.	37.2	16.7					
	Extract to internal		16.3	32.1	22.2	11.3	15.5	6.2	n.a.	37.8	17.3					
	Breakout		33.4	35.6	41.6	38.0	37.2	30.4	27.3	51.0	30.5					

Tests carried out according EN9614 standard, product featuring 270 m³/h at 110 Pa.

*Sound pressure calculated at 3 m distance in free-field.

n.a. = data not available.

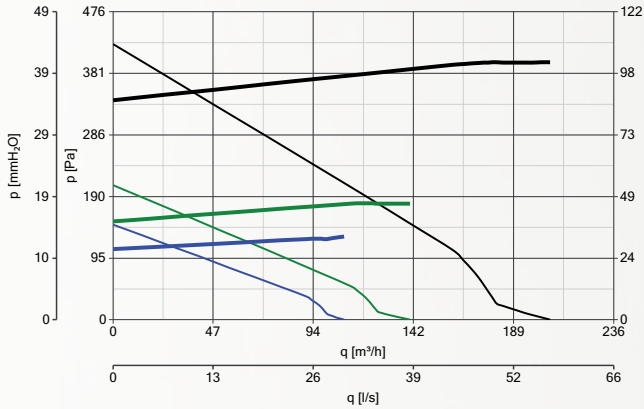


VORT HRI PHANTOM RANGE

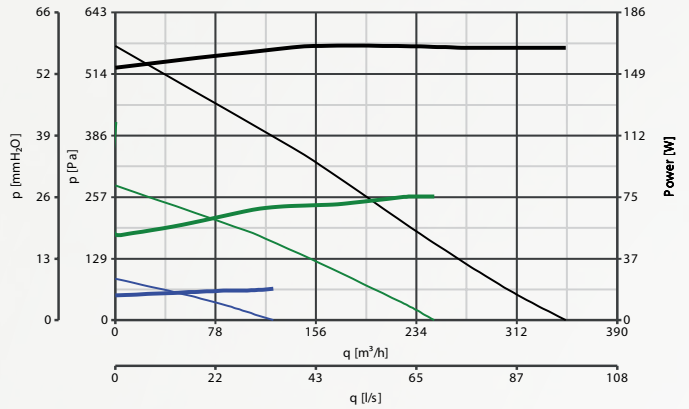
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PERFORMANCE CURVES

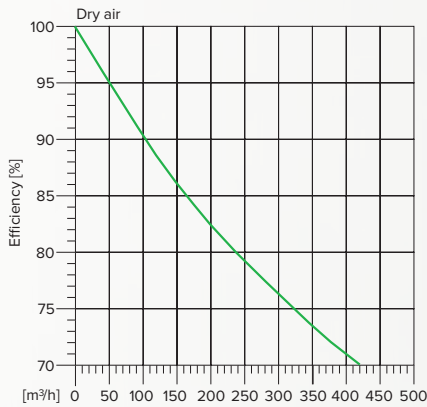
VORT HRI 200 PHANTOM



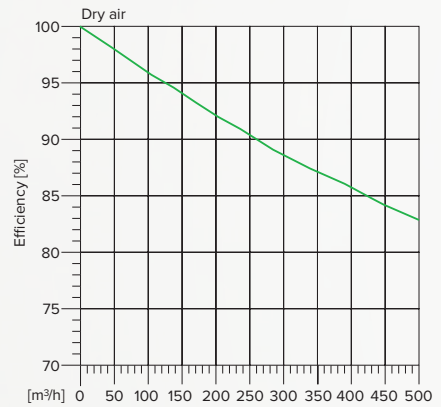
VORT HRI 350 PHANTOM



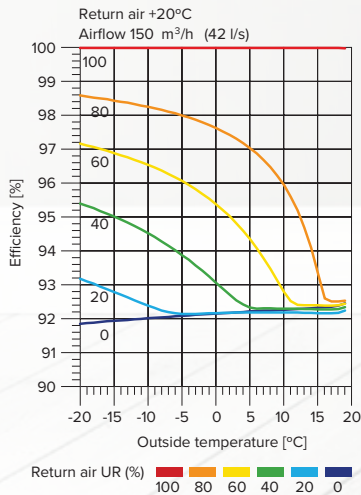
Efficiency as a function of the airflow



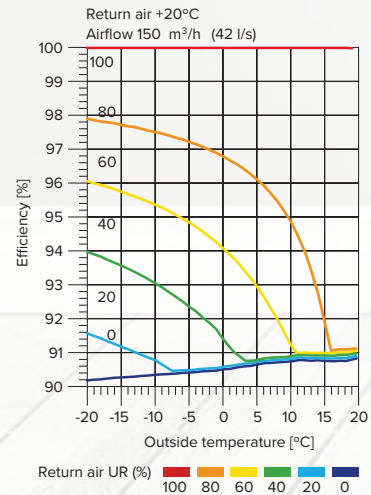
Efficiency as a function of the airflow



Influence on efficiency due to condensation heat



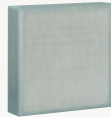
Influence on efficiency due to condensation heat



ACCESSORIES



F7 Internal filter - code 22625
only for code 11291



F7 Internal filter - code 22628
only for code 11293



SKP10 - code 22629
Control panel



Electric heater - code 22734
only for code 11291



Electric heater - code 22735
only for code 11293



NRG DCW (Water battery for
HRI PHANTOM) - code 24146
for all models

VKC619 - code 46313
Circular adapter 150-125



NA 125 - code 22781
Noise attenuator



NA 150 - code 22756
Noise attenuator



Flexible Silencer diam. 125 -
code 22366



Flexible Silencer diam. 150
(500 mm) - code 22316

CONTROLS



C TEMP - code 12992
Temperature sensor



C HCS - code 12994
Humidity sensor



C SMOKE - code 12993
Temperature sensor



C PIR - code 12998
Motion sensor

LCD CONTROL PANEL FULL VERSIONS



TIMER

TEMPERATURE

Icons	Functions
	No-Frost
P1 - P2	Programs profile
	Speeds
	OFF
	Allarms
	By-pass
	Time/Programmable timetable
FILT	Filter warning
HA	Antibacterial function

- To switch the machine on/off.
- To select one of the 3 speed settings.
- Selecting the By-pass function.
- Programmable timetable setting.
- Set point environmental temperature.
- Warnings display.
- Time or external temperature display.