

RESIDENTIAL VENTILATION 

VORT HRW 20 MONO RANGE

Decentralized heat recovery units

NEW



air is life

We work to promote life quality
and to contribute to the social evolution
through eco-friendly products
that move air **safely and efficiency.**



vortice.com



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VORT HRW 20 MONO RC

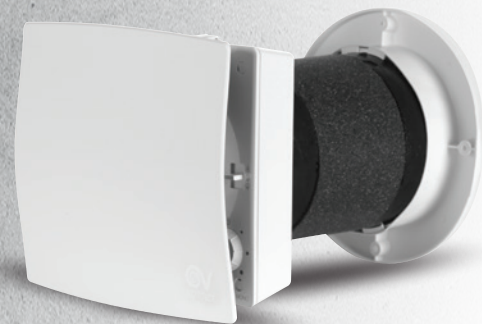
Decentralized heat recovery units with separate remote control unit

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VORT HRW 20 MONO

Decentralized heat recovery units with operating controls built into the appliance

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VORT HRW 20 MONO HCS

Decentralized heat recovery units with operating controls built into the appliance and humidity sensor

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NEW

VORT HRW 20 MONO D

Decentralized heat recovery units with separate remote control unit and compliant to German regulation


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VORT HRW 20 MONO RANGE

Decentralized heat recovery units

Decentralized ventilation system with heat recovery, high efficiency, suitable for recessed installation (nominal hole diameters 160 mm) in outside walls of thickness between 300 mm and 700 mm. Quiet, efficient, energy saving and antiallergic (thanks to built-in filters preventing the release of pollutants and allergens into the surrounding air), easy to install and maintain, the VORT HRW 20 MONO, represents the ideal alternative to traditional dual flow centralized ventilation systems.

- 3 models: VORT HRW 20 MONO with operating controls built into the appliance and VORT HRW 20 MONO RC with separate Remote Control unit and VORT HRW 20 MONO HCS.
- Expanded polypropylene (PPE) enclosure.
- Inner panel made of V0 self-extinguishing aesthetic plastic polymer (ABS), clad with heat-insulating material.
- EC brushless motor affording high performance and extremely low power consumption; mounting bracket with ball bearings.
- Accumulator heat exchanger made of ceramic material, high efficiency.
- 5 selectable speeds.
- 3 operating modes for both versions: ventilation with heat recovery; with stale air extraction only; with fresh air supply only.
- Moulded rubber outer grille, which can be mounted externally with masonry plugs, or inserted internally through the hole prepared in the wall with no need for external scaffolding.
- Separate insect mesh, positionable in the duct together with the external grille at the moment of installation.
- Stale internal air extracted around the perimeter of the front panel.
- Outlet port of circular section, nominal diameter 160 mm.
- Washable G3 filter, easily accessible for maintenance purposes.
- Factory-prepared for wall wiring.
- Diagnostics and filter status Leds.
- HCS models are equipped with a relative humidity sensor (four threshold values: 60%, 70%, 80%, 90%, can be set at installation), which automatically start the extraction mode at max speed when indoor relative humidity exceeds the pre-set limit.
- Possibility of operation in automatic mode, enabled by installing optional temperature and relative Humidity sensors.
- Protection rating: IPX4.
- Insulation class: II .

VORT HRW MONO
(code 11634)

VORT HRW MONO HCS
(code 11631) 





VORT HRW MONO RC
(code 11635)



VORT HRW 20 MONO RANGE

Decentralized heat recovery units

KEY FEATURES

- Elegant aesthetics, perfectly fitting in the residential.
- Small indoor dimensions (240 x 224 x 95 mm version equipped with on-board commands, 240 x 224 x 64 mm version controlled through wired control box).
- Five airflows comprehended in the range between 10 m³/h and 38 m³/h, to allow the best compromise among performances, consumptions and noise emissions.
- Very low consumptions (≤ 2 W when running at Min speed, ≤ 5 W when at Max speed), compatible with continuous operation.
- Low noise levels (16 dB(A) at Min speed according to DIN 52210-6), compatible. with use in studies, bedrooms, living rooms, etc.
- High values of heat transfer efficiency (90% at minimum flow rate according to EN 308), to grant the comfort of users.
- Easy to install, set and use.
- No need to install systems for removal of condensate.
- Wired control box integrating the power supply (no external device needed), allowing switching on/off and selection of operating mode. Up to 4 products can be wired simultaneously to 1 controller.
- Complying with the requirements of Regulation N° 1253/2016/UE set out by the EUP/ErP Directive, effective starting from 01.01.2018.



Rubber made grille, to easy mount from outside or even from inside, without any scaffolding.

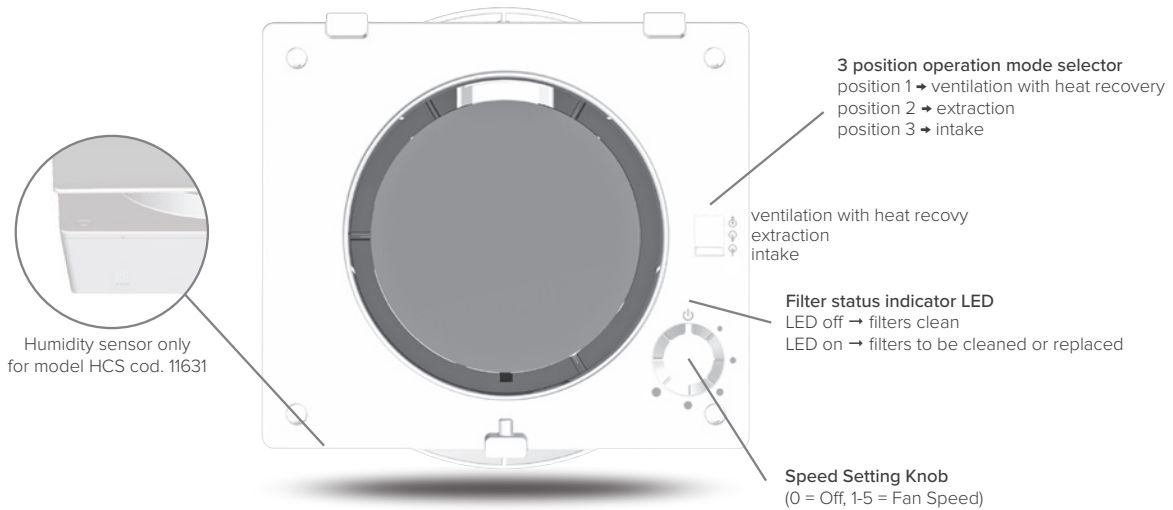
High efficiency ceramic made heat accumulator.

Inner panel made of V0 self-extinguishing

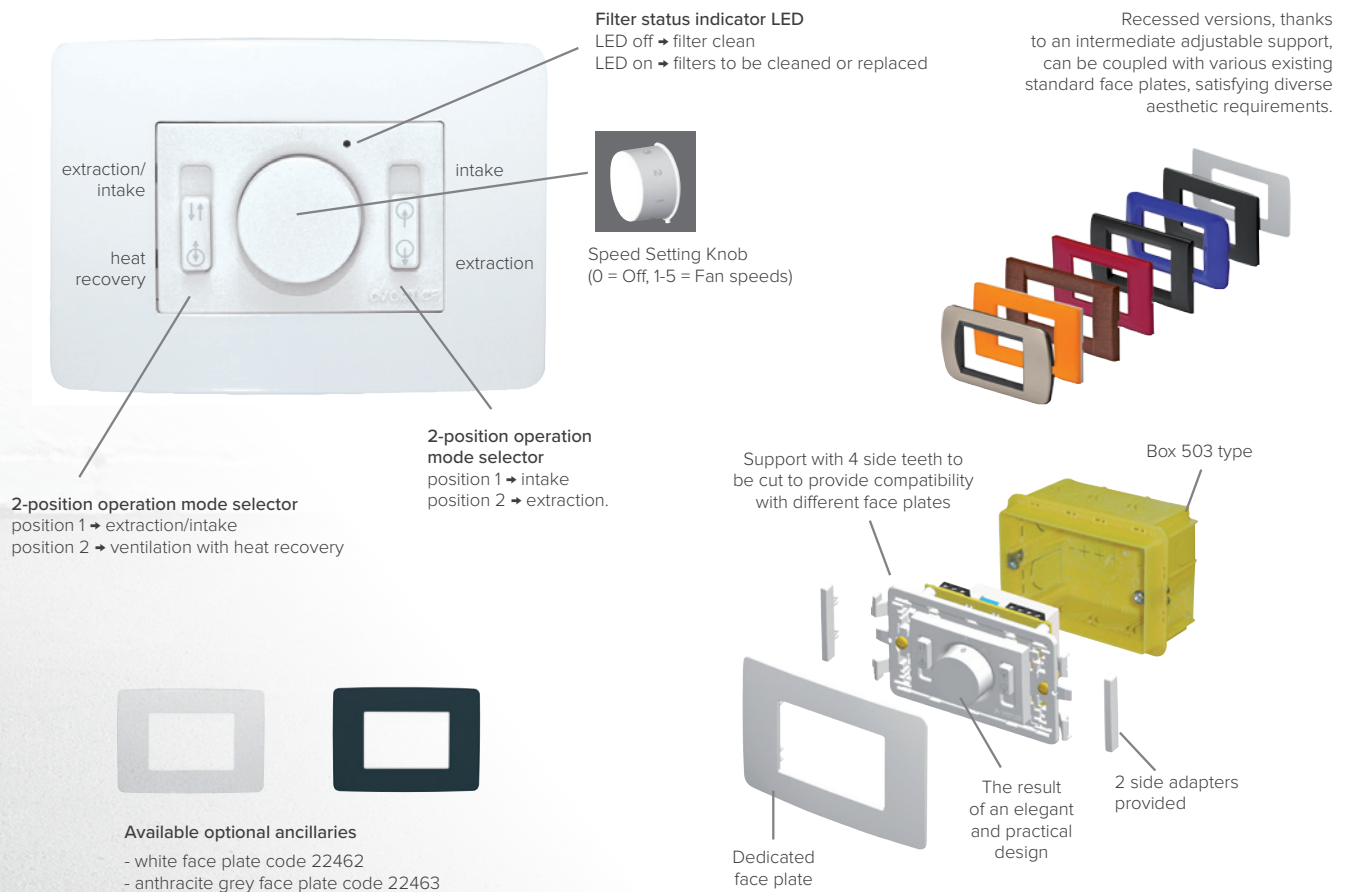
Mesh, to be inserted in the duct together with the external grille at installation.

High efficiency EC motor extremely low power consumption

CONTROL PANEL VORT HRW 20 MONO AND VORT HRW 20 MONO HCS



REMOTE CONTROL VORT HRW 20 MONO RC





VORT HRW 20 MONO RANGE

Decentralized heat recovery units

TECHNICAL DATA

MODELS	CODE	V ~ 50/60 Hz	W min/max	A min/max	MAX AIRFLOW		MAX PRESSURE		Lp dB(A)* 3 m	°C max	Kg
					m ³ /h min/max	l/s min/max	mmH ₂ O min/max	Pa min/max			
VORT HRW 20 MONO	11634										2.55
VORT HRW 20 MONO RC	11635	220-240	1.0 5.5	0.015 0.053	10.0 40.0	2.77 11.10	0.64 4.10	6.22 40.60	<16.0 23.6	30	2.25
VORT HRW 20 MONO HCS	11631										2.60

ENERGY DATA

Code	Unit of measurement	VORT HRW 20 MONO HCS	VORT HRW 20 MONO	VORT HRW 20 MONO RC
		11631	11634	11635
Supplier's name or trade mark	-	Vortice	Vortice	Vortice
Specific Energy Consumption class SEC in average climate zone	-	NA*	NA*	NA*
Specific Energy Consumption class SEC average	-	- 37.2	- 37.2	- 37.2
Specific Energy Consumption class SEC cold	kWh/m ² year	- 80.8	- 80.8	- 80.8
Specific Energy Consumption class SEC warm	-	- 12.3	- 12.3	- 12.3
Declared typology	-	URVU*	URVU*	URVU*
Type of drive	-	VSD**	VSD**	VSD**
Type of heat recovery system HRS	-	regenerative	regenerative	regenerative
Thermal efficiency of heat recovery at reference air flow	%	90	90	90
Maximum flow rate [m ³ /s]	m ³ /h	31	31	31
Electric power input of the fan drive, including any motor control equipment, at maximum flow rate	W	5.1	5.1	5.1
Sound power level LWA	LWA [dB(A)]	44	44	44
Reference flow rate	m ³ /s	0.006	0.006	0.006
Reference pressure difference	Pa	19	19	19
SPI***	W/(m ³ /h)	0.23963	0.23963	0.23963
Control factor CTRL	-	1	1	1
Control typology	-	manual	manual	manual
Maximum internal leakage rates	%	NA*	NA*	NA*
Maximum external leakage rates	%	NA*	NA*	NA*
Mixing rate	-	NA*	NA*	NA*
Position and description of visual filter warning	-	NA*	NA*	NA*
Airflow sensitivity to pressure variations at + 20Pa and - 20 Pa	-	0.27	0.27	0.27
Indoor/outdoor air tightness	m ³ /h	NA*	NA*	NA*
Annual electricity consumption (AEC)	kWh electricity/year	330	330	330
AHS average Annual heating saved	-	4550	4550	4550
AHS cold Annual heating saved	kWh primary energy/year	8901	8901	8901
AHS warm Annual heating saved	-	2057	2057	2057

*URVU: Unidirectional Residential Ventilation Unit

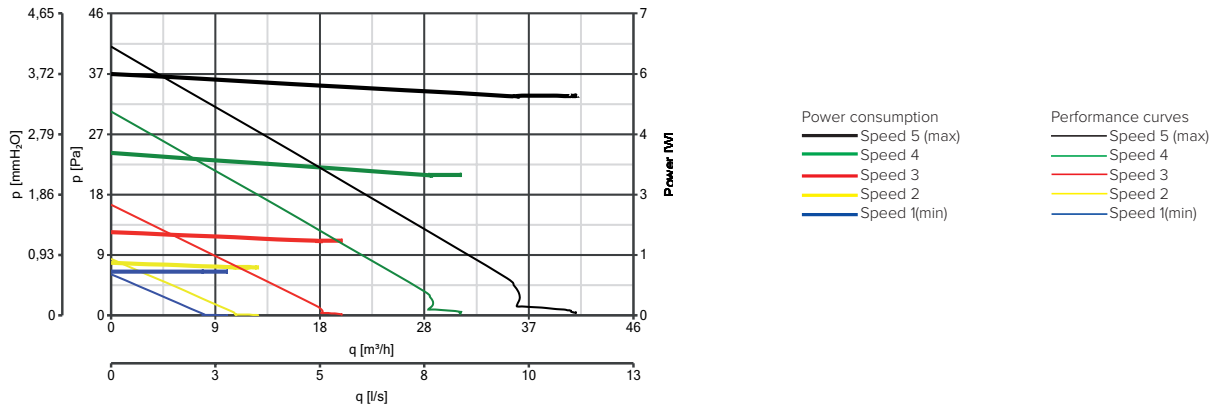
**VSD: Variable Speed Drive

***SPI: Specific Power Input

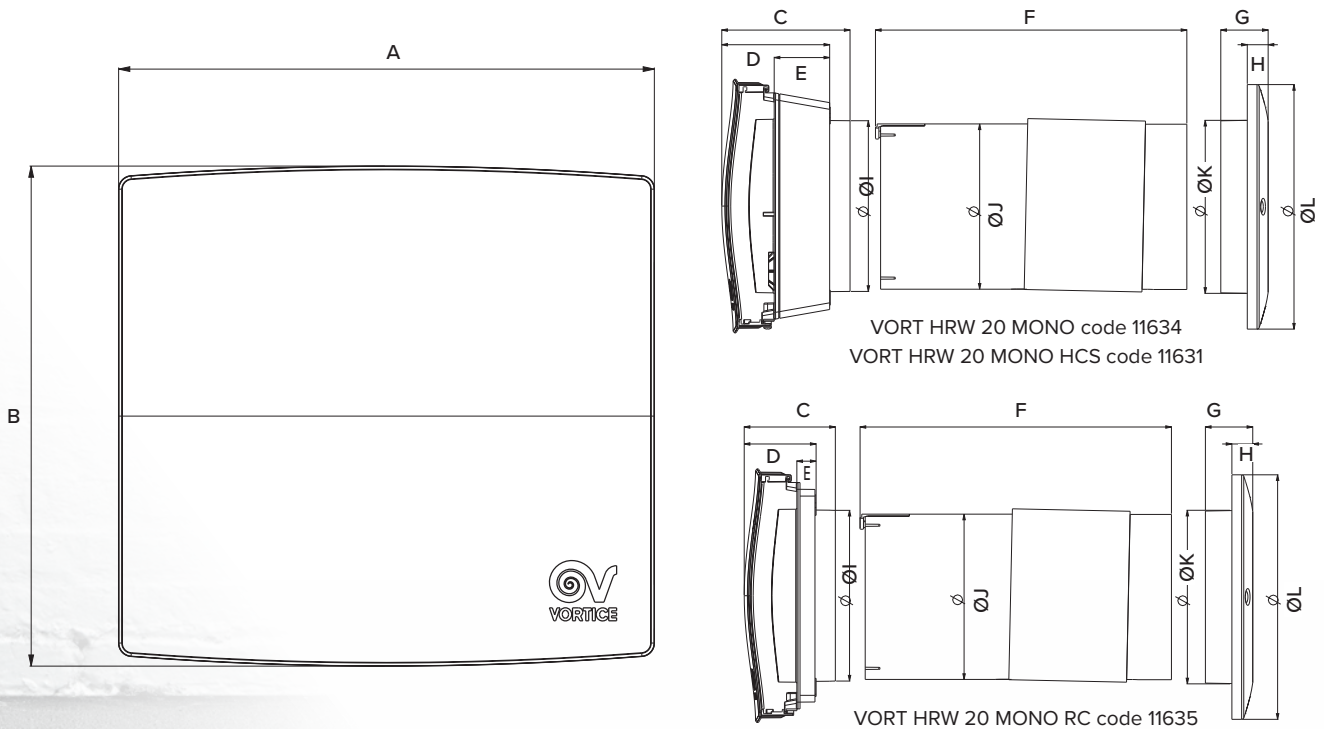
NA: data not applicable

PERFORMANCE CURVES

VORT HRW 20 MONO code 11634 - 11635 - 11631



DIMENSIONS



MODELS	CODE	A	B	C	D	E	F	G	H	$\varnothing I$	$\varnothing J$	$\varnothing K$	$\varnothing L$
VORT HRW 20 MONO	11634			113	95	49							
VORT HRW 20 MONO RC	11635	240	224	80	64	17	275	42	18	151	146	153	216
VORT HRW 20 MONO HCS	11631			113	95	49							

Dimensions (mm)