

Range of decentralized heat recovery units, enhanced with new models with WI-FI module, able to establish mutual communication among products via local MESH network.

MADE IN ITALY





**VORTICE S.p.A.** is part of a multinational group, **VORTICE GROUP**, which operates through its own companies or local distributors in over 90 countries worldwide and has a rich product portfolio that guarantees air quality and climate comfort. The headquarters of VORTICE S.p.A are in Tribiano (Milan).



With the development and evolution of this technology, VORTICE takes a further step towards the future, confirming its commitment to the value that has always distinguished the company: improving the well-being of people by improving the air they breathe.

# HEAT RECOVERY TECHNOLOGY

Heat recovery or controlled mechanical ventilation (MCV) is a technology that through devices equipped with latest generation, variable speed, low consumption and low noise extractor fans, guarantees:

- The introduction into the rooms of fresh air sucked in from the outside and suitably filtered.
- The expulsion of stale air from the inside.
- The recovery of the energy contained in the expulsion air through a high efficiency exchanger, transferring it to the air introduced into the rooms.

Thanks to this technology, we optimize the energy efficiency of the buildings in which we live and reduce heating and air conditioning costs, but above all we guarantee well-being and living comfort. Furthermore, through proper ventilation and air exchange, we significantly reduce the risk of infection transmitted by air, protecting our health.

# Regulatory standards

The products of the VORT MONO range comply with the following European Standards, Directives and Regulations:

- Electrical Safety Regulations: EN 60335-1; EN 60335-2-80; EN 60529; EN 62233;
- Aeraulic Performances Regulations: UNI EN ISO 5810;
- Electromagnetic Compatibility Regulations: EN 55014-1 EN 55014-2 EN 61000-3-2 EN 61000-3-3
- European Directives for CE marking
- Low Voltage Directive (2006/42/EC)
- Electromagnetic Compatibility Directive (2004/108/EC)
- RED Radio Equipment Directive (2014/53/EU)
- ErP 2009/125/EC Ecocompatible Design Directive according to the following regulations:
- European Regulation No. 1253/2014/EU Residential Ventilation Units



DECENTRALIZED HEAT RECOVERY UNITS WITH WI-FI MODULE
ABLE TO ESTABLISH MUTUAL COMMUNICATION AMONG PRODUCTS
VIA LOCAL MESH NETWORK

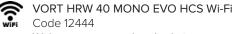
# RANGE EXPANSION







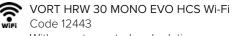




With remote control and relative humidity, temperature and light sensor



VORT HRW 30 MONO EVO Wi-Fi Code 12441 On-board controls



With remote control and relative humidity, temperature and light sensor





# **INSTALLER BENEFITS**



# **Easy installation**

Low weight: 3.10 kg - 3.30 kg

Universal duct connection nominal Ø 100-160 mm.

Can be installed on perimeter walls between 260 mm and 700 mm thick

No condensation drains required.

No wired connection in case of installation of multiple products.

Easy to operate manual closing system, with machine closing indicator (red lever)



# Easy maintenance

Easily accessible internal components.

# **USER BENEFITS**



# Clean air in all the rooms in an "intelligent" and cost-effective way.

The Wi-Fi module is able to establish a mutual communication among VORT HRW MONO Wi-Fi, without installing a router and issuing any contract with an Internet provider, instead through a local MESH network, without the need for a wired connection among the products.

Therefore, there will be:

- the introduction into the rooms of fresh and filtered air taken from the outside
- the expulsion of stale air from the inside
- the recovery of the energy contained in the expulsion air through a high efficiency exchanger, transferring it to the air introduced into the rooms.



# Stylish design

It integrates perfectly into any residential environment.



# Silent

Sound pressure levels at 3m: 19dB(A) first speed 25.4dB(A) third speed 31.8dB(A) fifth speed (equivalent to a whisper from 1 m away)



# Low consumption

<5 W at maximum flow rate



# High efficiency 90%

High heat exchange efficiency values up to 90% at minimum flow rate.



# **VORT MONO**

# **RANGE**

# Decentralized heat recovery units.

Ventilation unit with heat recovery specifically designed for the exchange of air in residential and commercial premises, newly built or renovated, characterized by high levels of thermal insulation.

Can be installed on perimeter walls between 260 mm and 700 mm thick. Available in the manual control version, in the variants with controls on the machine and the version with remote control and relative humidity, temperature and ambient light sensors.



VORT HRW 40 MONO EVO Code 12435 On-board controls

VORT HRW 40 MONO EVO HCS

Code 12437 With remote control and relative humidity, temperature and light sensor VORT HRW 30 MONO EVO Code 12434 On-board controls

VORT HRW 30 MONO EVO HCS

Code 12436

With remote control and relative humidity, temperature and light sensor





# **INSTALLER BENEFITS**



# **Easy installation**

Low weight: 3.10 kg - 3.30 kg

Universal duct connection Ø nominal 100-160 mm.

No condensation drains required.

Easy to operate manual closing system, with machine closing indicator (red lever)



# Easy maintenance

Easily accessible internal components.

# **USER BENEFITS**



# Clean air in all the rooms in a cost-effective way.

These products ensure:

- the introduction into the rooms of fresh and filtered air taken from the outside
- the expulsion of stale air from the inside
- the recovery of the energy contained in the expulsion air through a high efficiency exchanger, transferring it to the air introduced into the rooms.



# Stylish design

It integrates perfectly into any residential environment.



# High efficiency 90%

High heat exchange efficiency values up to 90% at minimum flow rate.



# Low consumption

<5 W at maximum flow rate



# Silent

Sound pressure levels at 3m: 19dB(A) first speed 25.4dB(A) third speed 31.8dB(A) fifth speed (equivalent to a whisper from 1m away)





# VORT HRW 30 MONO EVO HCS - Wi-Fi



# **VORT HRW 30 MONO EVO - HCS**

Decentralized heat recovery units Ø 100 mm, with on-board controls or with remote control and HCS sensor. Also available with Wi-Fi module.

WALL INSTALLATION FLANGE WITH PRE-INSTALLED EXCHANGE PACK OF THE TERMINAL BLOCK. ACCUMULATION TYPE, MADE OF THE PROTECTION CLASS OF THE TERMINAL BLOCK CERAMIC MATERIAL WITH ALLOWS AN INEXPERIENCED USER TO REMOVE THE ASSEMBLED EXTERNAL FILTER. FAN BODY AND TO PROCEED WITH THE REMOVAL AND CLEANING OF THE EXCHANGE PACK, OF THE G3 FILTER AND TO RESET THE SYSTEM. G3 FILTER 8 EXTERNAL GRILLE, IN PLASTIC MATERIAL, MECHANICAL CLOSING DISK SUPPLIED WITH ANTI-LEVER. PREVENTS THE PASSAGE EXTRACTION CABLE **INSECT NET** OF AIR WHEN THE MACHINE IS NOT **EXCHANGE PACKAGE** WORKING.

### CO-MOLDED FRONT DISC:

IT HELPS TO ATTENUATE THE SOUND WAVE CREATED BY THE VENTILATING MACHINE AND BY THE AIR FLOW DURING THE INTRODUCTION INTO THE ENVIRONMENT. ITS SURFACE WITH SPHERICAL CAPS TENDS TO REFLECT THE NOISE IN DIFFERENT DIRECTIONS, REDUCING ITS EFFECT.

BY REMOVING THE FRONT DISC, IT IS POSSIBLE TO ACCESS THE DUST FILTER THAT PROTECTS THE EXCHANGER FROM THE INSIDE AND BY REMOVING IT CAN BE EASILY CLEANED OR REPLACED





EXTRACTION/AUTO COMFORT

LED

INTRODUCTION/AUTO HR%

LED

RECOVERY/AUTO NIGHT



SPEED BUTTON

5-position selector

# **FUNCTION BUTTON**

To activate or deactivate the 3 different AUTO functions available and activate or deactivate the stand-by mode

## MODE BUTTON

3-position selector

Selects the recovery:

- inlet
- extraction
- natural ventilation modes



# VORT HRW 40 MONO EVO HCS - Wi-Fi



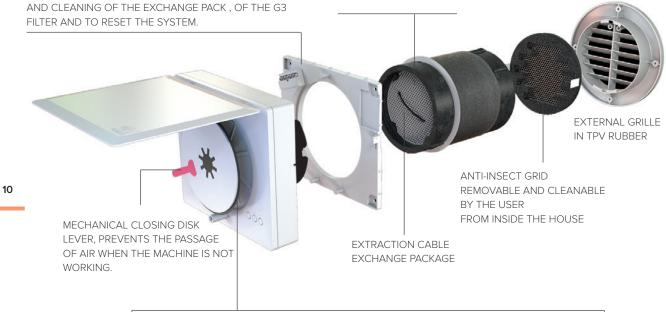
# **VORT HRW 40 MONO EVO - HCS**

Decentralized heat recovery units Ø 160 mm, with on-board controls or with remote control and HCS sensor. Also available with Wi-Fi module.

WALL INSTALLATION FLANGE WITH PRE-INSTALLED TERMINAL BLOCK.

THE PROTECTION CLASS OF THE TERMINAL BLOCK ALLOWS AN INEXPERIENCED USER TO REMOVE THE FAN BODY AND TO PROCEED WITH THE REMOVAL

THE POLYPROPYLENE RINGS FEATURE SOME PROTUBERANCES FOR THE ALIGNMENT OF THE FRONT SURFACE OF THE EXCHANGER WITH THE OUTLET/INLET OF THE FAN AND THE CORRECT INCLINATION OF THE EXCHANGER WITH RESPECT TO THE CONTAINMENT PIPE INSERTED IN THE WALL



# CO-MOLDED FRONT DISC:

IT HELPS TO ATTENUATE THE SOUND WAVE CREATED BY THE VENTILATING MACHINE AND BY THE AIR FLOW DURING THE INTRODUCTION INTO THE ENVIRONMENT. ITS SURFACE WITH SPHERICAL CAPS TENDS TO REFLECT THE NOISE IN DIFFERENT DIRECTIONS REDUCING ITS EFFECT.

BY REMOVING THE FRONT DISC, IT IS POSSIBLE TO ACCESS THE DUST FILTER THAT PROTECTS THE EXCHANGER FROM THE INSIDE AND BY REMOVING IT CAN BE EASILY CLEANED OR **REPLACED** 





# **FUNCTION BUTTON**

To activate or deactivate the 3 different AUTO functions available and activate or deactivate the stand-by mode

## MODE BUTTON

3-position selector

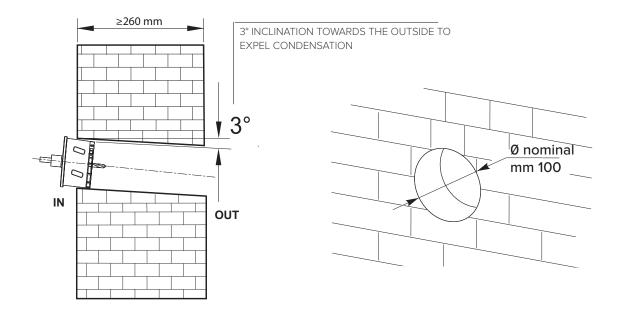
Selects the recovery:

- inlet
- extraction
- natural ventilation modes

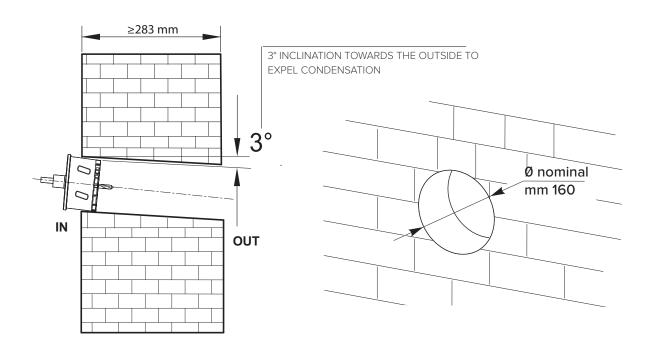
SPEED BUTTON
5-position selector



VORT HRW 30 MONO EVO HCS - Wi-Fi •)) - VORT HRW 30 MONO EVO - HCS It must be mounted inside a perimeter wall with a thickness of at least 260 mm.

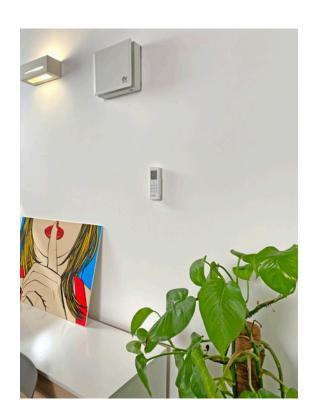


VORT HRW 40 MONO EVO HCS - Wi-Fi 1) - VORT HRW 40 MONO EVO - HCS It must be mounted inside a perimeter wall with a thickness of at least 283 mm.





# **APPLICATIONS**







# TECHNICAL CHARACTERISTICS

## 8 models available

# VORT HRW 30 MONO EVO WI-FI 🔌

(code 12441) - Ø100 mm With on-board controls.

# VORT HRW 30 MONO EVO HCS WI-FI 3)

(code 12443)- Ø100 mm

With remote control and relative humidity, temperature and light sensors.

# VORT HRW 40 MONO EVO WI-FI

(code 12442) - Ø160 mm With on-board controls.

# VORT HRW 40 MONO EVO HCS WI-FI

(code 12444) - Ø160 mm With remote control and relative humidity, temperature and light sensors.

## **VORT HRW 30 MONO EVO**

(code 12434) - Ø100 mm With on-board controls.

## **VORT HRW 30 MONO EVO HCS**

(code 12436)- Ø100 mm With remote control and relative humidity, temperature and light sensors.

### **VORT HRW 40 MONO EVO**

(code 12435) - Ø160 mm With on-board controls.

### **VORT HRW 40 MONO EVO HCS**

(code12437) - Ø160 mm With remote control and relative humidity, temperature and light sensors.

### Casing

Pressed wall casing made of aesthetic plastic resin, resistant to impacts and degradation induced by light; it integrates controls for switching the appliance on or off and regulating the operating modes and the treated flow. In the HCS models, it also integrates a relative humidity and light sensor for the automatic operation of the product.

### Fan

The fans used on products of the VORT MONO RANGE comply with the European ErP Directive no. 2009/125.

#### Fan motors

EC motor fans, to guarantee very low consumption, powered by low voltage and with shafts mounted on ball bearings. Characterized by 5 operating speeds, for the best compromise between air flow rate, consumption and noise emission, they are designed to work in a clockwise and anticlockwise direction, and thus allow the product to operate in the Intake, Ventilation and Ventilation with heat recovery modes.

### Heat exchanger

High efficiency 90% storage heat exchangers, made of ceramic material of the hexagonal cell type to maximize the heat exchange surface. In winter operation (in summer the logic is reversed), thanks to the periodic inversion of the rotation direction of the motor fan, the exchange pack is cyclically heated by the extracted hot air and subsequently transfers most of this heat to the incoming cold renewal

## **Filters**

Washable G3 filters, easily accessible for maintenance/cleaning.

Pre-filters, housed on the internal side.

### 3 operating modes:

## Ventilation with heat recovery:

the fan periodically reverses the direction of rotation for the transfer of the flow at a lower temperature than the heat previously accumulated in the exchanger.

### Ventilation in extraction mode:

stale air, full of humidity, is expelled outside.

# Ventilation in introduction mode:

external air, rich in oxygen and suitably filtered, is introduced into the room.

### Grilles

External molded rubber grilles, fit from the inside through the hole in the target wall, to simplify the installation of the product.

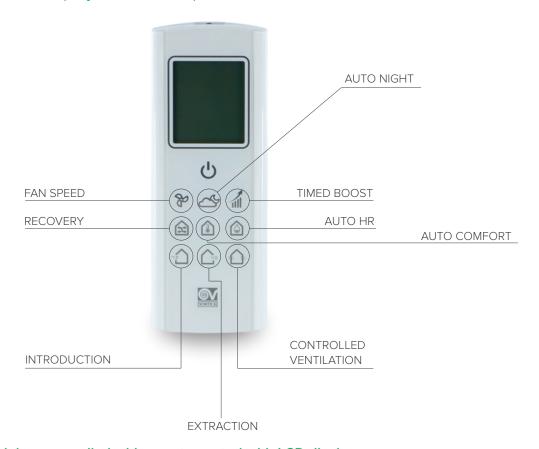
The grilles include an easily removable insect net to simplify cleaning operations.

# Insulation class: II

Grounding not required.



# IR remote control (only for HCS model)



# HCS models are supplied with remote control with LCD display.

By default the recovery function and the auto-comfort, auto HR% and auto night modes are active. The humidity threshold is set at the maximum value (90%) and the fan is set at maximum speed to obtain the maximum flow rate (5 fans displayed). The remote control transmits its default status to the product and updates the status on the appliance accordingly. If the status of the machine does not synchronize with the status of the remote control, point the remote control at the appliance and press a button on the remote control to activate the synchronization.

# **AUTO NIGHT**

The ambient light sensor detects the presence or absence of light in the environment.

Therefore, if it is night and no daylight is detected, the product will run at minimum speed and will not be allowed to go above minimum speed.

When the presence of daylight is detected again, the product returns to operate at the previously set speed, and the switch to higher boost speeds is allowed via remote input or HR% sensor.

# AUTO HR%

In case of humidity above the alarm threshold (60%, 75% or 90% - the default value is 75%), the extraction mode at maximum speed is automatically selected.

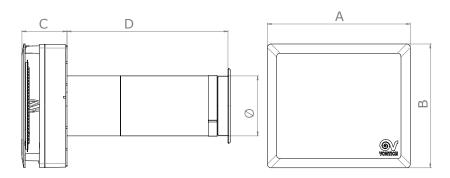
## **AUTO COMFORT**

In heat recovery mode, the timing that determines the inverted rotation of the fans is fixed according to the temperature of the air released into the environment: if the weather is too cold the cycle time is reduced.

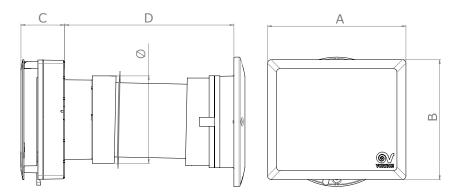


# **VORT MONO RANGE**DECENTRALIZED HEAT RECOVERY UNITS

# **Dimensions**



12434 VORT HRW 30 MONO EVO - 12436 VORT HRW 30 MONO EVO HCS
12441 VORT HRW 30 MONO EVO Wi-Fi ) - 12443 VORT HRW 30 MONO EVO HCS Wi-Fi )



12435 VORT HRW 40 MONO EVO - 12437 VORT HRW 40 MONO EVO HCS 12442 VORT HRW 40 MONO EVO Wi-Fi \*\*)- 12444 VORT HRW 40 MONO EVO HCS Wi-Fi \*\*)

PRODUCTS	Α	В	С	D	Ø
VORT HRW 30 MONO EVO	231	200	73	260	97
VORT HRW 30 MONO EVO HCS	231	200	73	260	97
VORT HRW 40 MONO EVO	231	200	73	283	146
VORT HRW 40 MONO EVO HCS	231	200	73	283	146
VORT HRW 30 MONO EVO Wi-Fi	231	200	73	260	97
VORT HRW 30 MONO EVO HCS Wi-Fi ·))	231	200	73	260	97
VORT HRW 40 MONO EVO Wi-Fi 🔌	231	200	73	283	146
VORT HRW 40 MONO EVO HCS Wi-Fi	231	200	73	283	146

Dimensions in mm



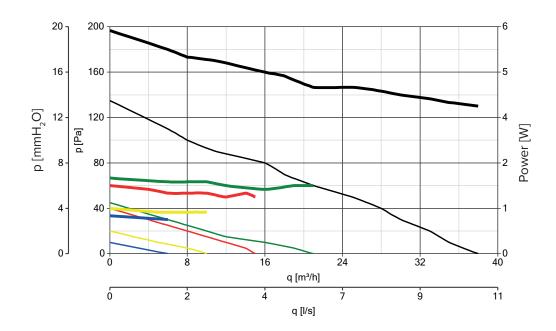
# **Technical data**

					MAX FLO	OW RATE	MAX PR	ESSURE			
PRODUCTS	CODE	V~50-60HZ	W max	A max	m³/h min/max	l/s min/max	mmH <sub>2</sub> O min / max	Pa min/max	LP DB (A) 3 m min/max	°C MAX	KG
VORT HRW 30 MONO EVO	12434	220-240	4	0.04	6 38	1.7 10.5	1 13.7	10 130	19.1 49.2	30	3.1
VORT HRW 30 MONO EVO HCS	12436	220-240	4	0.04	6 38	1.7 10.5	1 13.7	10 130	19.1 49.2	30	3.1
VORT HRW 40 MONO EVO	12435	220-240	5	0.05	15 40	4.2 11.1	1.7 4.8	17 47	19 31.8	30	3.3
VORT HRW 40 MONO EVO HCS	12437	220-240	5	0.05	14 40	4.2 11.1	1.7 4.8	17 47	19 31.8	30	3.3
VORT HRW 30 MONO EVO Wi-Fi •))	12441	220-240	4	0.04	6 38	1.7 10.5	1 13.7	10 130	19.1 49.2	30	3.1
VORT HRW 30 MONO EVO HCS Wi-Fi •))	12443	220-240	4	0.04	6 38	1.7 10.5	1 13.7	10 130	19.1 49.2	30	3.1
VORT HRW 40 MONO EVO Wi-Fi •))	12442	220-240	5	0.05	15 40	4.2 11.1	1.7 4.8	17 47	19 31.8	30	3.3
VORT HRW 40 MONO EVO HCS Wi-Fi **))	12444	220-240	5	0.05	15 40	4.2 11.1	1.7 4.8	17 47	19 31.8	30	3.3





12434 VORT HRW 30 MONO EVO - 12436 VORT HRW 30 MONO EVO HCS



# LEGEND:







# **Energy data**

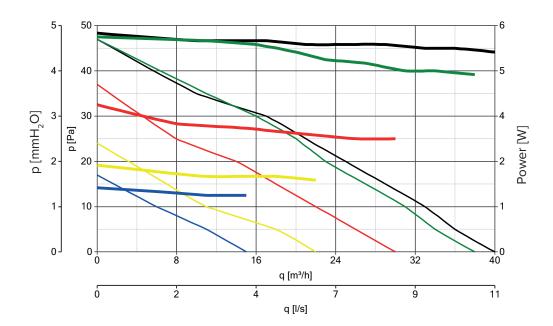
	UNIT OF MEASURE	VORT HRW 30 MONO EVO CODE 12434	VORT HRW 30 MONO EVO HCS CODE 12436
MANUFACTURER'S NAME OR TRADE NAME		VORTICE	VORTICE
CLASS OF SPECIFIC ENERGY CONSUMPTION FOR TEMPERATE CLIMATE	-	Α	
SPECIFIC ENERGY CONSUMPTION SEC (TEMPERATE CLIMATE)		- 41.2	- 44.4
SPECIFIC ENERGY CONSUMPTION SEC (COLD CLIMATE)	kWh/m² — vear	- 85.4	- 89.5
SPECIFIC ENERGY CONSUMPTION SEC (WARM CLIMATE)	— yeai	- 17.0	- 19.3
DECLARED TYPE OF THE VENTILATION UNIT	-	UVR-U**	UVR-U**
DRIVE TYPE	-	VM***	VM***
HRS TYPE HEAT EXCHANGER	-	recovery	recovery
THERMAL EFFICIENCY OF HEAT RECOVERY AT THE HRS REFERENCE FLOW RATE	%	89.0	89.0
MAXIMUM FLOW RATE	m³/h	35	35
TOTAL ELECTRIC POWER CONSUMED BY THE FAN AT MAXIMUM FLOW RATE	W	4	4
NOISE LEVEL	LWA [dB(A)]	53.1	53.1
REFERENCE FLOW RATE	m³/s	0.0097	0.0097
REFERENCE PRESSURE DIFFERENCE	Pa	10	10
SPI****	W/(m <sup>3</sup> /h)	0.11429	0.11429
CTRL CONTROL FACTOR	-	1	0.65
CONTROL TYPE	-	manual	local premise
MAXIMUM PERCENTAGE OF INTERNAL LEAKAGE	%	NA*	NA*
MAXIMUM PERCENTAGE OF EXTERNAL LEAKAGE	%	NA*	NA*
MIXING RATE	-	NA*	NA*
POSITION AND DESCRIPTION OF THE VISUAL FILTER SIGNAL	-	see instruction booklet	see instruction booklet
AIR FLOW SENSITIVITY TO PRESSURE VARIATIONS AT ± 20PA	-	0.48	0.48
INDOOR/OUTDOOR AIR TIGHTNESS	m³/h	0.0	0.0
AEC ANNUAL ELECTRICITY CONSUMPTION	kWh of electricity/year	157	83
TEMPERATE AHS ANNUAL HEATING SAVINGS		4515	4650
COLD AHS ANNUAL HEATING SAVINGS	kWh of energy	8901	9141
WARM AHS ANNUAL HEATING SAVING	/year	2057	2113



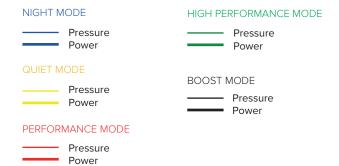
<sup>\*</sup> NA: Not applicable. \*\* UVR-U: Residential Ventilation Unit - Uni-directional. \*\*\* VM: Multiple speeds. VSD: Variable Speed Drive.

<sup>\*\*\*\*</sup> SPI: Specific power input.

## 12435 VORT HRW 40 MONO EVO - 12437 VORT HRW 40 MONO EVO HCS



## LEGEND:







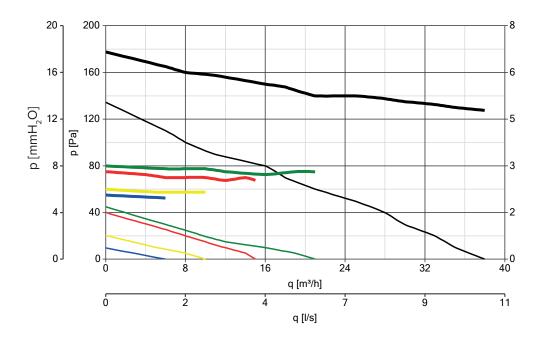
# **Energy data**

	UNIT OF MEASURE	VORT HRW 40 MONO EVO CODE 12435	VORT HRW 40 MONO EVO HCS CODE 12437
MANUFACTURER'S NAME OR TRADE NAME	-	VORTICE	VORTICE
CLASS OF SPECIFIC ENERGY CONSUMPTION FOR TEMPERATE CLIMATE	-	А	
SPECIFIC ENERGY CONSUMPTION SEC (TEMPERATE CLIMATE)		- 39.7	- 43.7
SPECIFIC ENERGY CONSUMPTION SEC (COLD CLIMATE)	kWh/m² year	- 84.1	- 88.8
SPECIFIC ENERGY CONSUMPTION SEC (WARM CLIMATE)	year	- 15.7	- 18.6
DECLARED TYPE OF THE VENTILATION UNIT	-	UVR-U**	UVR-U**
DRIVE TYPE	-	VM	VM
HRS TYPE HEAT EXCHANGER	-	recovery	recovery
THERMAL EFFICIENCY OF HEAT RECOVERY AT THE HRS REFERENCE FLOW RATE	%	89	89
MAXIMUM FLOW RATE	m³/h	32.6	32.6
TOTAL ELECTRIC POWER CONSUMED BY THE FAN AT MAXIMUM FLOW RATE	W	5.4	5.4
NOISE LEVEL	LWA [dB(A)]	48.1	48.1
REFERENCE FLOW RATE	m <sup>3</sup> /s	0.0085	0.0085
REFERENCE PRESSURE DIFFERENCE	Pa	10	10
SPI****	W/(m <sup>3</sup> /h)	0.15686	0.15686
CTRL CONTROL FACTOR	-	1	0.65
CONTROL TYPE	-	manual	local premise
MAXIMUM PERCENTAGE OF INTERNAL LEAKAGE	%	NA*	NA*
MAXIMUM PERCENTAGE OF EXTERNAL LEAKAGE	%	NA*	NA*
MIXING RATE	-	NA*	NA*
POSITION AND DESCRIPTION OF THE VISUAL FILTER SIGNAL	-	see instruction booklet	see instruction booklet
AIR FLOW SENSITIVITY TO PRESSURE VARIATIONS AT ± 20PA	-	0.48	0.48
INDOOR/OUTDOOR AIR TIGHTNESS	m³/h	0.0	0.0
AEC ANNUAL ELECTRICITY CONSUMPTION	kWh of electricity/year	216	113
TEMPERATE AHS ANNUAL HEATING SAVINGS	·	4515	4650
COLD AHS ANNUAL HEATING SAVINGS	kWh of energy /vear	8901	9141
WARM AHS ANNUAL HEATING SAVING	/yeai	2057	2113

<sup>\*</sup> NA: Not applicable. \*\* UVR-U: Residential Ventilation Unit - Uni-directional. \*\*\* VM: Multiple speeds. VSD: Variable Speed Drive. \*\*\*\* SPI: Specific power input.



# 12441 VORT HRW 30 MONO EVO Wi-Fi ) - 12443 VORT HRW 30 MONO EVO HCS Wi-Fi



## LEGEND:









# **Energy data**

	UNIT OF MEASURE	VORT HRW 30 MONO EVO Wi-Fi か CODE 12441	VORT HRW 30 MONO EVO HCS Wi-Fi ﴿) CODE 12443
MANUFACTURER'S NAME OR TRADE NAME		VORTICE	VORTICE
CLASS OF SPECIFIC ENERGY CONSUMPTION FOR TEMPERATE CLIMATE		A	A+
SPECIFIC ENERGY CONSUMPTION SEC (TEMPERATE CLIMATE)		-84,4	- 43,8
SPECIFIC ENERGY CONSUMPTION SEC (COLD CLIMATE)	kWh/m² — year	- 40,0	- 89,0
SPECIFIC ENERGY CONSUMPTION SEC (WARM CLIMATE)	year	- 15.9	- 18.7
DECLARED TYPE OF THE VENTILATION UNIT		UVR-U**	UVR-U**
DRIVE TYPE		VM***	VM***
HRS TYPE HEAT EXCHANGER	-	recovery	recovery
THERMAL EFFICIENCY OF HEAT RECOVERY AT THE HRS REFERENCE FLOW RATE	%	89.0	89.0
MAXIMUM FLOW RATE	m³/h	35	35
TOTAL ELECTRIC POWER CONSUMED BY THE FAN AT MAXIMUM FLOW RATE	W	5,2	5,2
NOISE LEVEL	LWA [dB(A)]	53.1	53.1
REFERENCE FLOW RATE	m <sup>3</sup> /s	0.0097	0.0097
REFERENCE PRESSURE DIFFERENCE	Pa	10	10
SPI***	W/(m <sup>3</sup> /h)	0.14857	0.14857
CTRL CONTROL FACTOR	-	1	0.65
CONTROL TYPE	-	manual	local premise
MAXIMUM PERCENTAGE OF INTERNAL LEAKAGE		NA*	NA*
MAXIMUM PERCENTAGE OF EXTERNAL LEAKAGE		NA*	NA*
MIXING RATE		NA*	NA*
POSITION AND DESCRIPTION OF THE VISUAL FILTER SIGNAL	-	see instruction booklet	see instruction booklet
AIR FLOW SENSITIVITY TO PRESSURE VARIATIONS AT ± 20PA		0.48	0.48
INDOOR/OUTDOOR AIR TIGHTNESS	m <sup>3</sup> /h	0.0	0.0
AEC ANNUAL ELECTRICITY CONSUMPTION	kWh of electricity/year	205	107
TEMPERATE AHS ANNUAL HEATING SAVINGS		4515	4650
COLD AHS ANNUAL HEATING SAVINGS	kWh of energy /vear	8901	9141
WARM AHS ANNUAL HEATING SAVING	/yeai	2057	2113



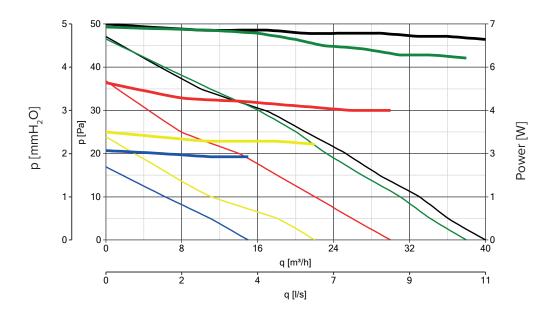
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<sup>\*\*\*\*</sup> SPI: Specific power input.

# VORT MONO RANGE DECENTRALIZED HEAT RECOVERY UNITS

# Curves

12442 VORT HRW 40 MONO EVO Wi-Fi 3) - 12444 VORT HRW 40 MONO EVO HCS Wi-Fi 3)



## LEGEND:







# **Energy data**

	UNIT OF MEASURE	VORT HRW 40 MONO EVO Wi-Fi か CODE 12442	VORT HRW 40 MONO EVO HCS Wi-Fi ﴿) CODE 12444
MANUFACTURER'S NAME OR TRADE NAME	-	VORTICE	VORTICE
CLASS OF SPECIFIC ENERGY CONSUMPTION FOR TEMPERATE CLIMATE	-	A	A+
SPECIFIC ENERGY CONSUMPTION SEC (TEMPERATE CLIMATE)		-38,4	- 43,0
SPECIFIC ENERGY CONSUMPTION SEC (COLD CLIMATE)	kWh/m² year	- 82,9	- 88,2
SPECIFIC ENERGY CONSUMPTION SEC (WARM CLIMATE)	year	- 14.4	- 17.9
DECLARED TYPE OF THE VENTILATION UNIT	-	UVR-U**	UVR-U**
DRIVE TYPE	-	VM	VM
HRS TYPE HEAT EXCHANGER	-	recovery	recovery
THERMAL EFFICIENCY OF HEAT RECOVERY AT THE HRS REFERENCE FLOW RATE	%	89.0	89.0
MAXIMUM FLOW RATE	m <sup>3</sup> /h	32,6	32,6
TOTAL ELECTRIC POWER CONSUMED BY THE FAN AT MAXIMUM FLOW RATE	W	6,6	6,6
NOISE LEVEL	LWA [dB(A)]	48.1	48.1
REFERENCE FLOW RATE	m <sup>3</sup> /s	0.0085	0.0085
REFERENCE PRESSURE DIFFERENCE	Pa	10	10
SPI***	W/(m <sup>3</sup> /h)	0.19608	0.19608
CTRL CONTROL FACTOR	-	1	0.65
CONTROL TYPE	-	manual	local premise
MAXIMUM PERCENTAGE OF INTERNAL LEAKAGE	%	NA*	NA*
MAXIMUM PERCENTAGE OF EXTERNAL LEAKAGE	%	NA*	NA*
MIXING RATE	-	NA*	NA*
POSITION AND DESCRIPTION OF THE VISUAL FILTER SIGNAL	-	see instruction booklet	see instruction booklet
AIR FLOW SENSITIVITY TO PRESSURE VARIATIONS AT ± 20PA	-	0.48	0.48
INDOOR/OUTDOOR AIR TIGHTNESS	m <sup>3</sup> /h	0.0	0.0
AEC ANNUAL ELECTRICITY CONSUMPTION	kWh of electricity/year	270	142
TEMPERATE AHS ANNUAL HEATING SAVINGS		4515	4650
COLD AHS ANNUAL HEATING SAVINGS	kWh of energy /vear	8901	9141
WARM AHS ANNUAL HEATING SAVING	/yeai	2057	2113



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

<sup>\*\*\*\*</sup> SPI: Specific power input.

# VORT MONO RANGE DECENTRALIZED HEAT RECOVERY UNITS

# **Accessories**

MODELS	DESCRIPTION	CODE	PRODUCTS
<b>XIXIII</b>	MWS Ø 100 Windproof metal panel for outdoor use in stainless steel sheet	21883	12434 12436 12443 12441
	WA Ø 100 90° round/square adapter for intake and discharge through the window jamb. Circular connection diameter 100 mm	21884	12434 12436 12443 12441
	<b>KIT FTR</b> Filter kit	21891	12434 12436 12443 12441
	PVC PIPE Ø 100	21879	12434 12436 12443 12441
	C TEMP Ambient air temperature sensor	12992	12435 12437 12442 12444
	C HCS Relative humidity (RH) sensor	12994	12435 12437 12442 12444
	PVC PIPE Ø 160	22599	12435 12437 12442 12444
	KIT FTR Filter kit	22466	12435 12437 12442 12444
	MWS Outside stainless steel windshield panel	21148	12435 12437 12442 12444
	RGR External rubber grille	21190	12435 12437 12442 12444
	WSG-INOX Rectangular stainless steel grid for WA kit	21192	12435 12437 12442 12444
	WSG-W Powder coated stainless steel rectangular grid for WA kit	21193	12435 12437 12442 12444
	FTR M5 Filters	21926	12435 12437 12442 12444
	WA 90° round/square adapter for intake and discharge through the window jamb. Circular attachment diameter for 160 mm	21191	12435 12437 12442 12444







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TOLL-FREE NUMBER 800 555 777 eptember 2021



