

EVHRC EC Highly efficient decentralized heat recovery unit for flow rates up to 1150 m³/h



Description

Ventilation unit with high flow rate heat recovery for decentralised applications specifically for ventilation in rooms requiring ventilation and air handling, such as schools, commercial environments, offices and small service sector applications. Possibility of installing an electric or water coil as an accessory. Constant flow rate selectable in 3 levels.

Characteristics

Self-supporting sheet metal frame with polyethylene insulated internal structure.

High efficiency counter-current cross-flow polypropylene heat exchanger. Low freezing temperatures. Very high heat exchange efficiency.

Forward-curved Brushless centrifugal fans with electronic motor and modulating control; very high efficiency and low noise levels.

ePM1 70% filters with low pressure drop for both supply and exhaust, easily removable in both horizontal and vertical configuration.

Free cooling made inside the unit with large air passage and damper with motorised actuator.

Electric or water coil.

Use

Schools, commercial environments, offices and small service sector applications for air exchange with up to 90% reduction in energy waste.

Control electronics for version IN2

Electronic board for 3-step speed management, antifreeze function and automatic bypass.

Wall-mounted remote touch panel on 503 box.

Temperature sensors on board the machine. Humidity / air quality regulators built into the remote display.

EVCNV2-N: advanced remote control with built-in humidity and VOC/CO₂ sensors, black.

EVCNV2-B: advanced remote control with built-in humidity and VOC/CO₂ sensors, white.

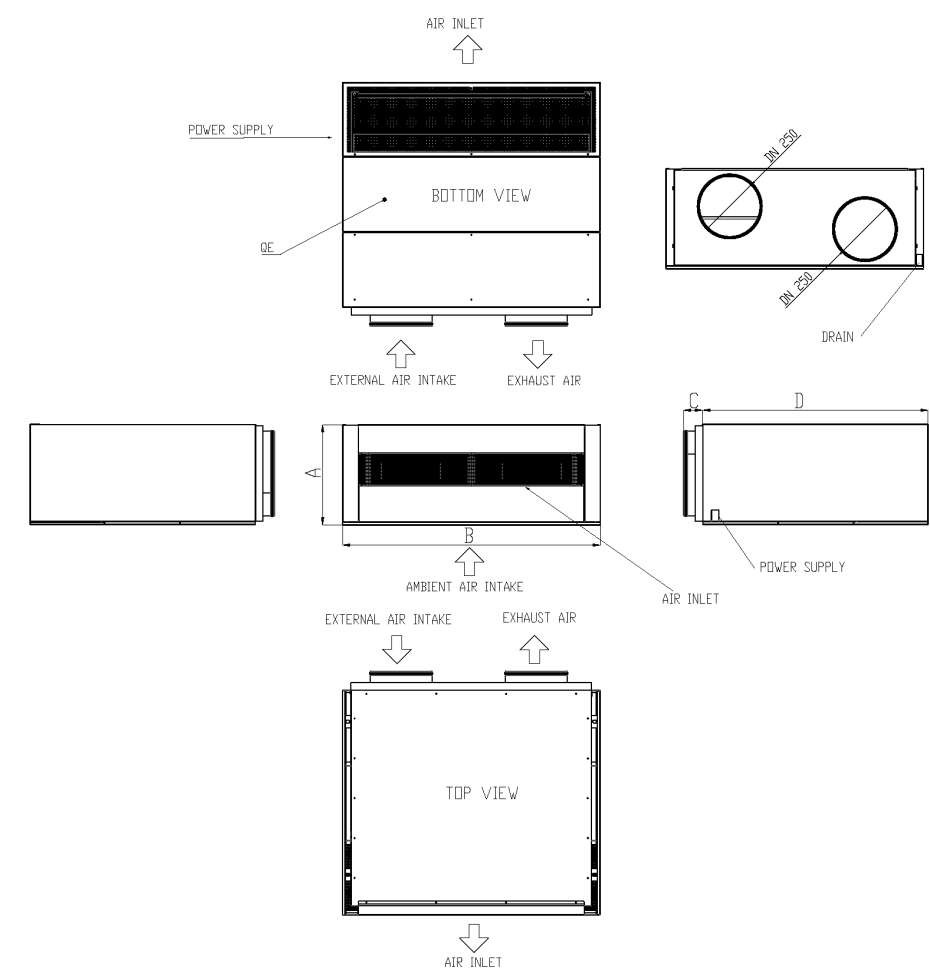
EVCNW2-N: advanced remote control with built-in humidity and VOC/CO₂ sensors and built-in Wi-Fi, black.

EVCNW2-B: advanced remote control with built-in humidity and VOC/CO₂ sensors and built-in Wi-Fi, white.

Technical Specifications

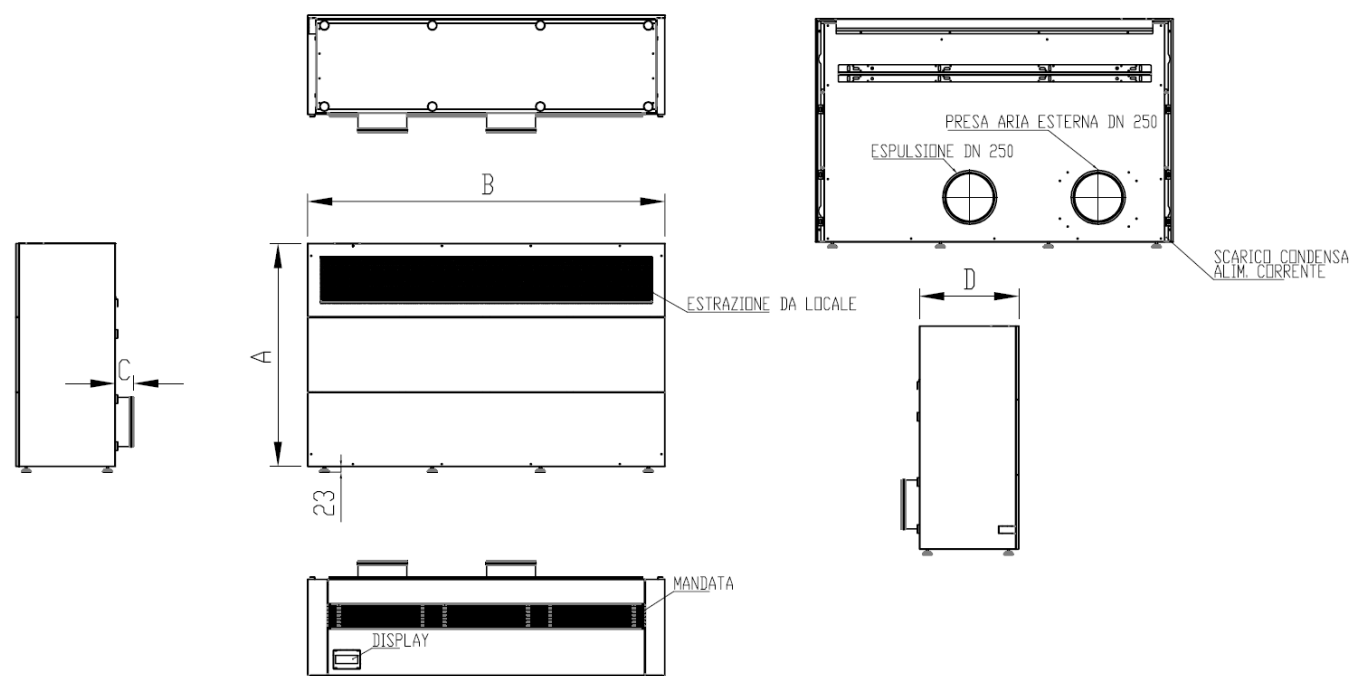
Size EVHRC EC		60	120
Fan Type		Forward-Curved Centrifugal Fans – Direct-Coupled Brushless Electronic Motor – 0-10 V Signal	
Nr. Funs	Nr.	2 Supply + 1 Exhaust	3 Supply + 2 Exhaust
Portata aria V3/V2/V1	m³/h	620 / 355 / 165	1150 / 750 / 255
Available Pressure	Pa	15	15
Heat Exchanger (Data according to UNI EN 13141-7: Indoor Temp. 20°C – Indoor Humidity 28% – Outdoor Temp. 7°C – Outdoor Humidity 72%)			
Recovery Efficiency		Ounterflow Plates – Polypropylene Material	
Number of Heat Exchangers	Nr.	2	3
Heat Recovery Efficiency EN 13141-7	%	86,1	84,9
Heat Recovery Efficiency EN 305	%	91,8	90,4
Filters			
Tipo di Filters		Filters Pleated	
Filtration Class		ePM1 70%	
Acoustic data (Data according to UNI EN 3741 and UNI EN 3744)			
Sound Power Lw Transmitted Through the Structure	dB(A)	59	62
Sound Pressure at 3 m – V1	dB(A)	41	43
Sound Pressure at 3 m – V2	dB(A)	36	37
Sound Pressure at 3 m – V3	dB(A)	33	34
Electrical data			
Power Supply	V / ph / Hz	230 / 1 / 50	
Current Consumption	A	3,5	4,8
Power Input	W	340	620
Power Consumption at Maximum Speed with Clean Filters	W	165	355
Maximum Power Consumption with Electric Heater	kW	1,34	2,12
Maximum Absorbed Current with Electric Heater	A	7,8	11,3
Protection Rating	IP	X0	X0

Horizontal Configuration Dimensions



Dimensions – Horizontal Configuration		60 H	120 H
Height A	mm	405	405
Width B	mm	1040	1440
Pipe Connection Collars C	mm	76	76
Depht D	mm	905	905
Connection Diameter	mm	200	250
Condensate Drain	mm	20	20
Weight	Kg	71	88

Vertical Configuration Dimensions

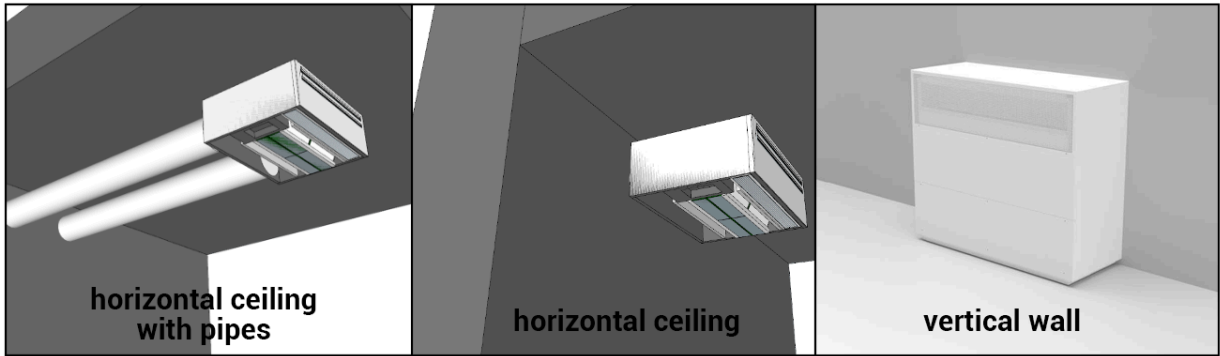


Dimensions - Vertical Configuration		60 V	120 V
Height A	mm	905	905
Width B	mm	1040	1440
Pipe Connection Collars C	mm	76	76
Depht D	mm	405	405
Connection Diameter	mm	200	250
Condensate Drain	mm	20	20
Weight	Kg	71	88

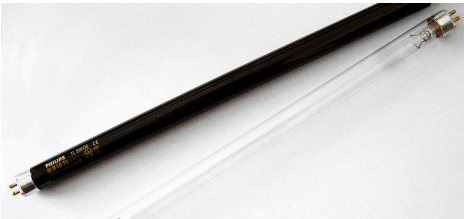
Installation

Horizontal configuration: the unit can be installed close to the wall with the ducts pointing directly outwards or away from the wall with minimum ducting to reach the outside.

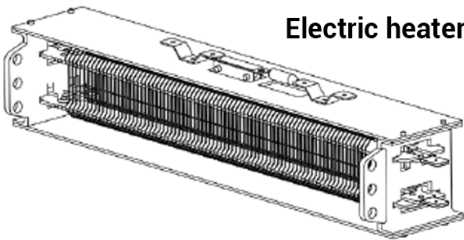
Vertical configuration: the unit can be installed close to the wall with minimum ducting to reach the outside.



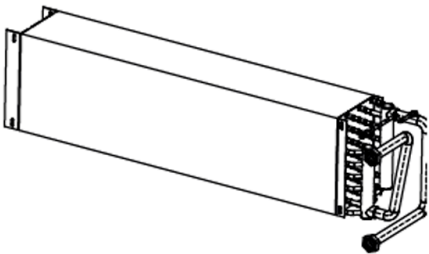
Lampada UV-C



Electric heater



Water coil



Electric Coils		
Models	EVRES 1	EVRES 2
Models Compatible Unit	EVHRC EC 60 H / V	EVHRC EC 120 H / V
Rated Electrical Power (kW)	1 (0,5x2)	1,5 (0,5x3)
Power Supply V / ph / Hz	230V / 1F / 50Hz	

Hydronic Coils			
Models		EVBACN 1	EVBACN 2
Models Compatible Unit		EVHRC EC 60 H / V	EVHRC EC 120 H / V
Rated Thermal Power (1)	kW	3,38	4,17
Rated Water Flow (1)	m³/h	0,3	0,37
Water-Side Pressure Drop (1)	KPa	1	5
Water Supply Temperature	°C	50	50
Air-Side Pressure Drop	Pa	14	27
Water Connections	Ø	3/4"	3/4"

(1) Yields and technical data with nominal flow rates and temperatures:
- Water IN / OUT 50°C / 40°C - Air IN 20°C

IN2 Version Price List

In the VERTICAL versions, the EVCNW2 control is built into the machine case.

Models	EVHRC EC	EVCNV2-N - Black	EVCNV2-B - White	EVCNW2-N - Wi-Fi - Black	EVCNW2-B - Wi-Fi - White	Filter Pair Kit
	Eur	Eur	Eur	Eur	Eur	Eur
60 H	5.539,89	240,12	240,12	296,45	296,45	184,95
120 H	7.724,30					270,32
60 V	6.239,15	n.d.	n.d.	n.d.	n.d.	184,95
120 V	8.576,66					270,32

n/a – not available



Accessories Price List

Germicidal lamps, heating elements and water coils must be ordered when purchasing the machine, as they are installed on the machine.

Description	Eur
Germicidal UV-C Lamp with Power Supply and Mounting Brackets. Lamp life is estimated at 10,000 operating hours.	392,67
EVRES 1 Electric Heater 2×0.5 kW (for EVHRC EC 60)	391,39
EVRES 2 Electric Heater 3×0.5 kW (for EVHRC EC 120)	545,81
EVBACN 1 Hydronic Coil (for EVHRC EC 60)	769,46
EVBACN 2 Hydronic Coil (for EVHRC EC 120)	1.272,68
Ø 200 mm External Grille Kit (for EVHRC EC 60)	179,26
Ø 250 mm External Grille Kit (for EVHRC EC 120)	194,92
ESIV silencer D.200 for EVHRC-EC 60	328,65
ESIV silencer D.250 for EVHRC-EC 120	328,65

Spare Parts Price List

Description	Eur
Replacement UV-C Lamp	261,78