ecovent®
midi

- Sustainable Heat Recovery Units
- High efficiency heat recovery up to 90%
- Best in class low energy EC fans
- Lower embodied carbon and reduced carbon footprint
- Compact design, lightweight construction, simple installation and easy maintenance
- Low SFP to help meet L2 Building Regulations
- Options for filter grades to suit a range of requirements
- Low noise to help meet acoustic requirements, including BB93
- Ancillary duct-mounted heating options
- Fitted BlueSense controls for simple installation
- BIM files available

DUTIES UP TO
0.60 m³/s
(600 l/s)

ecovent® midi
part of the Ecovent range of innovative, flexible products from the HVAC experts

VES

ecovent®

Sustainable Heat Recovery Units

As our flagship heat recovery range, VES has chosen to make ecovent® midi the first to use ArcelorMittal's XCarb® steel which is produced using advanced, low-emissions steelmaking methods. These include:

- **Electric Arc Furnace technology**, which uses electricity rather than coal-based blast furnaces
- **High recycled steel content**, significantly reducing the need for virgin raw materials
- **100% renewable electricity**, sourced from wind, solar, and other renewable energy systems

Together, these processes dramatically reduce CO_2 emissions when compared to conventional steel production.

Carbon Savings

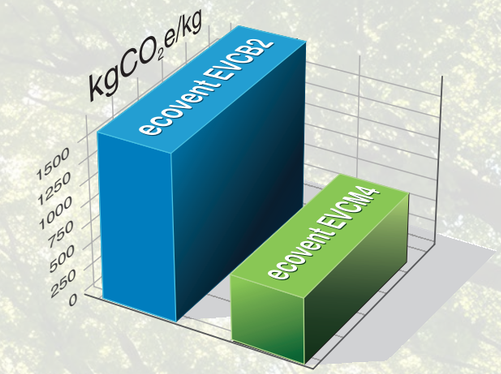
- Up to **75% lower CO_2 emissions** compared to traditional blast furnace steel
- Enables customers to meet sustainability, ESG, and regulatory targets

Key Benefits

- Lower carbon footprint without sacrificing strength, durability, or formability
- Supports circular economy principles through recycled content
- Future-ready steel aligned with global decarbonisation goals

As a core component of a building's mechanical infrastructure, Air Handling Units play a meaningful role in overall embodied carbon. By selecting low-carbon steel, these units deliver a substantial reduction in total embodied carbon - supporting the achievement of leading sustainability certifications and project targets.

Through the use of low-carbon steel alongside other innovative material and construction choices, this new range achieves an impressive **62% reduction in embodied carbon** compared to the previous iteration*. The results are compelling.



* ecovent EVCB262 versus ecovent midi EVCM422, using CIBSE TM65 A1 methodology

VES

ecovent midi heat recovery - redesigned for efficiency, built for sustainability

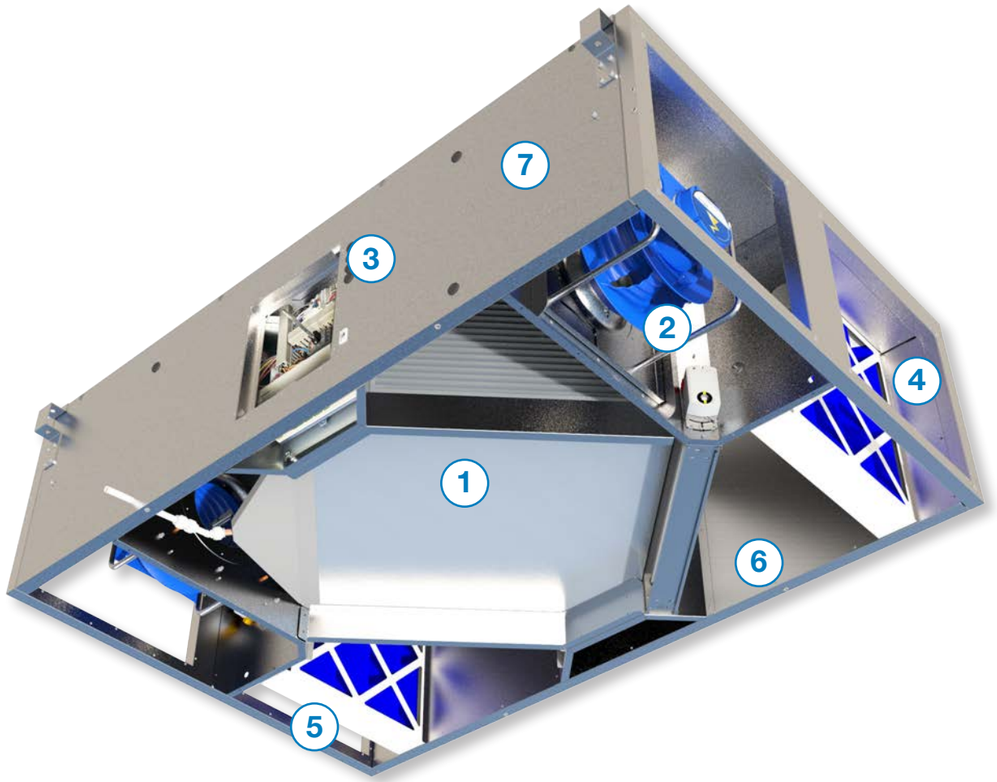
ecovent® midi

For over 30 years, VES has been at the forefront of heat recovery air handling solutions, delivering reliable, high-performance systems to countless projects.

Now, we've taken our most popular units and completely reimagined them for the demands of today and tomorrow. The redesigned models are more compact and lighter, making installation easier and more flexible. With improved energy efficiency, lower embodied carbon, and a smaller overall carbon footprint, they support ambitious sustainability goals without compromising performance. Fully integrated controls ensure intelligent, seamless operation, giving you precise control and peace of mind.

These next-generation units combine decades of experience with cutting-edge innovation, setting new standards in sustainable air handling

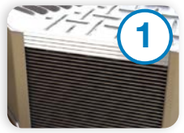
ecovent midi - *redesigned for efficiency, built for sustainability*



ecovent® midi
Features and Benefits

Energy Saving
Meet regulations, minimise noise and maximise performance.

Energy saving packages combine intelligent controls technology, products and services.



Premium Efficiency Heat Recovery
Using the latest Computational Fluid Dynamics simulations, the counterflow plate heat exchangers in **ecovent midi** units have been designed to optimise airflow. This enables a true rate of heat transfer, giving efficiencies of up to 90% to BS EN 308:2022 specification and exceeding ErP requirements. The **ecovent midi** range also achieves zero cross contamination of moisture, smells or fumes.

Energy Efficient
Energy efficient units with low SFPs to help achieve Building Regulations and other technical guides. Units are fully tested to BS EN ISO 5801:2017 (airside performance).

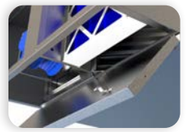
Noise Reduction
Independently tested to BS EN ISO 3744:2010, units can help meet acoustic requirements for sensitive applications including BB93 (School Acoustics).

High Performance Fans
EC fans offering maximum efficiency, minimum energy consumption. Fully controllable and ErP2015 compliant.

Sustainability
Our complete product range features TM65 reports, which detail the embodied carbon calculated from energy consumption across the product's entire lifecycle.

Simple Installation and Maintenance
Simple connection and pre-installed features save onsite costs and reduce lead times. Carefully designed maintenance features minimise downtime and total cost of ownership.

Pre-wired Controls
Energy saving packages combine intelligent technologies.
The unit is pre-wired to an integral controls package to reduce onsite wiring requirements.



Hinged Access
Units feature hinged access doors, providing safe and convenient access for routine inspection, maintenance, and servicing, while minimising downtime and ensuring efficient, reliable long-term operation.

Case Construction
The unit is constructed from double skinned galvanised sheet steel panels with mineral wool slab infill, incorporating mounting brackets compatible with drop-rod systems.

Duct Connections
Easy duct connections sutable for quick on site ductwork connection ensures an efficient fit whilst minimising potential noise breakout.

Versatile Options
Versatile location, handing and access options meet the widest range of project requirements.

Heating Options
Duct mounted EHB and LPHW Coil modules are available for direct connection to the unit spigot outlets. Heaters are designed to suit a range of conditions and systems.

Filter Options
Filters are pleated media as standard, to BS EN ISO 16890 classification Coarse 65% (G4 EN 779:2012), with optional supply filters to ePM1 55% (F7 EN 779:2012).

Sustainable Manufacturing
Creating quality products, minimising impact, maximising resource value.

Sustainable Steel
Leading our drive towards greater sustainability, using XCarb Steel significantly reduces embodied carbon, whilst maintaining high performance, durability and quality.

Made in Britain
VES is proud to state that our products are **Made in Britain**, a commitment to quality and excellence that directly embodies our core values.

VES

Energy Saving

Intelligent controls enhance performance whilst saving energy and money.

ecovent® midi with integral controls

+

EC fan with full control

+

Sensor options

=

BlueSense

The sign of energy saving products, services and expertise

UNIT EVCM422-1

Selection data

ecovent midi EVCM422

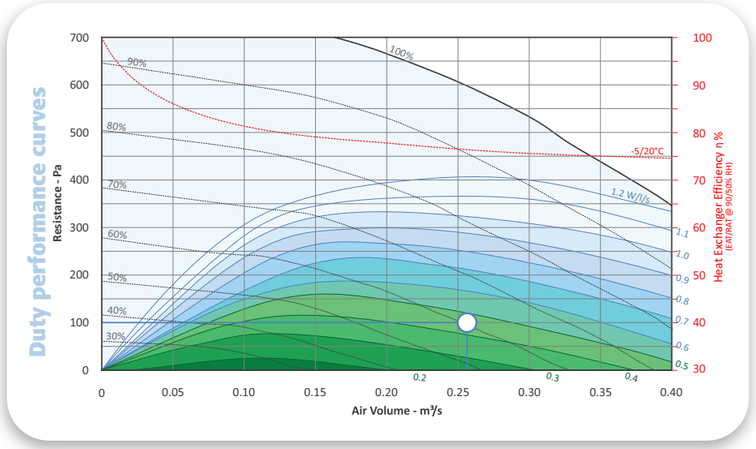
Performance

SFP (Watts/litres/second) = *Electrical input power (Watts)* / *Air volume flow rate (litres/second)*

Note: SFP figures quoted at voltages tested in accordance with BS EN ISO 5801:2017 for each of the two fans.

Nominal working conditions: 0.256 m^3/s (256 l/s)
100 Pa approx = 230 W = 0.90 W/l/s
(Total Unit SFP, balanced airflow)

Heat exchanger efficiency is calculated based upon EAT -5 °C and RAT +20 °C.
The fan performance is calculated using standard G4 filters (BS EN ISO 16890 Coarse 65%).



Size	Phase	Motor Size	Voltage	Fan Speed	Fan FLC	Speed Control
EVCM422-1	1 Phase	0.500 kW	230 VAC	3170 rpm	2.10 A	EC

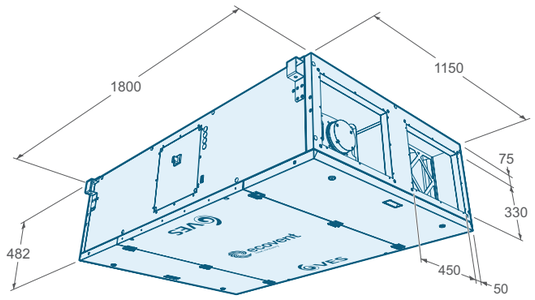
Acoustic data

Fan Speed		Sound Power Level, dB re 1 pW, @ Octave Band Centre Frequency (Hz)								Casing Radiated			
		63	125	250	500	1k	2k	4k	8k	NR@1m	NR@3m	dBA@1m	dBA@3m
100%	Casing Radiated	74	72	65	51	48	44	38	35	41	34	45	38
	Intake (ODA/ETA)	77	76	74	74	70	65	62	53				
	Outlet (SUP/EHA)	86	83	84	79	87	83	79	73				
80%	Casing Radiated	70	68	63	48	43	37	31	28	39	31	41	35
	Intake (ODA/ETA)	72	71	72	68	65	60	55	47				
	Outlet (SUP/EHA)	79	79	82	77	81	77	72	66				
60%	Casing Radiated	63	68	50	40	33	30	26	27	36	28	37	30
	Intake (ODA/ETA)	66	73	60	61	57	52	45	38				
	Outlet (SUP/EHA)	70	78	70	68	73	69	62	58				
40%	Casing Radiated	57	62	40	31	25	24	26	26	29	21	31	24
	Intake (ODA/ETA)	59	64	51	49	47	37	35	19				
	Outlet (SUP/EHA)	62	67	60	56	61	55	53	38				

Units are independently tested at ISVR in accordance with BS EN ISO 3744:2010

Unit dimensions

Dimensions



Weight: 182 kg

Note: *Data for design guidance only. Detailed information is available upon request.*

UNIT EVCM524-1

Selection data

ecovent midi EVCM524

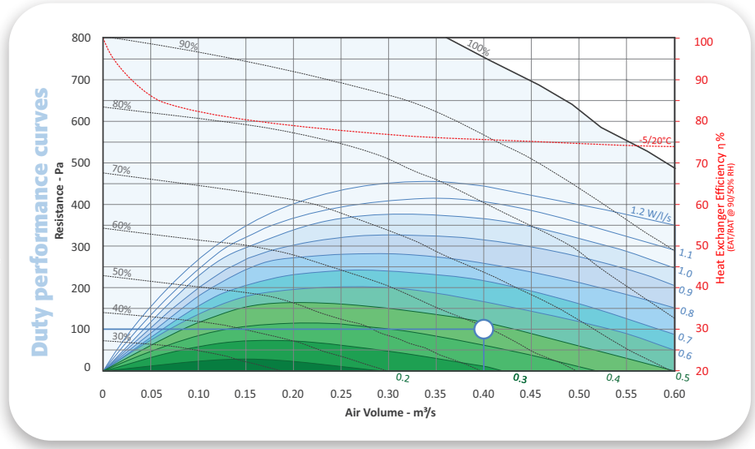
Performance

SFP (Watts/litres/second) = *Electrical input power (Watts)* / *Air volume flow rate (litres/second)*

Note: SFP figures quoted at voltages tested in accordance with BS EN ISO 5801:2017 for each of the two fans.

Nominal working conditions: 0.400 m^3/s (400 l/s)
100 Pa approx = 380 W = 0.950 W/l/s
(Total Unit SFP, balanced airflow)

Heat exchanger efficiency is calculated based upon EAT -5 °C and RAT +20 °C.
The fan performance is calculated using standard G4 filters (BS EN ISO 16890 Coarse 65%).



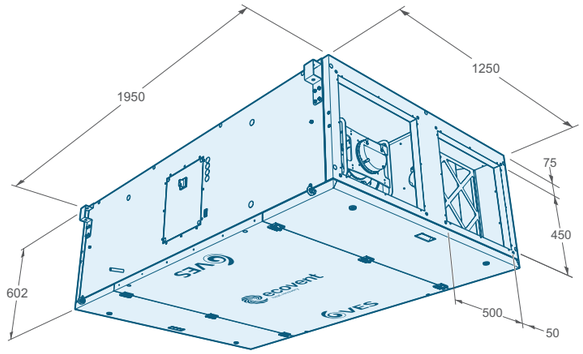
Size	Phase	Motor Size	Voltage	Fan Speed	Fan FLC	Speed Control
EVCM524-1	1 Phase	0.780 kW	230 VAC	3110 rpm	4.00 A	EC

Acoustic data

Fan Speed		Sound Power Level, dB re 1 pW, @ Octave Band Centre Frequency (Hz)								Casing Radiated			
		63	125	250	500	1k	2k	4k	8k	NR@1m	NR@3m	dBA@1m	dBA@3m
100%	Casing Radiated	79	75	71	55	52	53	48	45	47	40	49	43
	Intake (ODA/ETA)	79	77	79	79	71	65	61	62				
	Outlet (SUP/EHA)	90	92	95	87	91	86	80	77				
80%	Casing Radiated	74	71	69	50	46	47	41	39	45	38	46	40
	Intake (ODA/ETA)	75	73	77	74	65	59	60	48				
	Outlet (SUP/EHA)	85	87	91	80	84	79	73	71				
60%	Casing Radiated	68	69	58	44	37	38	33	30	37	29	40	33
	Intake (ODA/ETA)	69	71	64	64	56	51	51	38				
	Outlet (SUP/EHA)	78	89	79	72	75	70	64	62				
40%	Casing Radiated	61	67	50	30	26	27	27	27	34	26	36	29
	Intake (ODA/ETA)	63	68	56	52	45	37	33	19				
	Outlet (SUP/EHA)	72	82	68	59	62	56	53	40				

Units are independently tested at ISVR in accordance with BS EN ISO 3744:2010

Unit dimensions

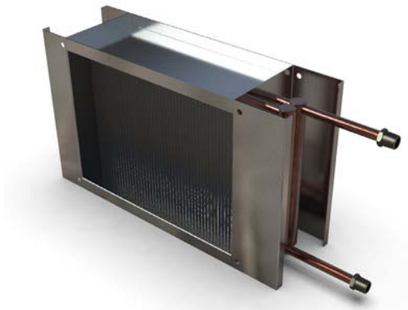


Weight: 216 kg

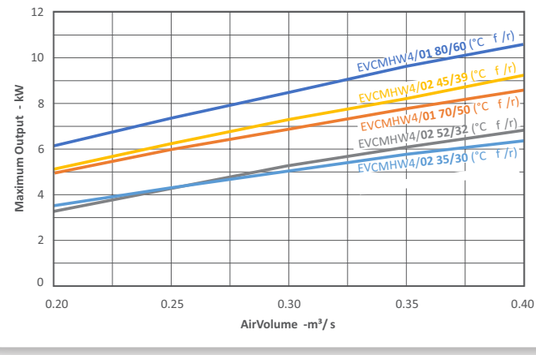
Note: *Data for design guidance only. Detailed information is available upon request.*

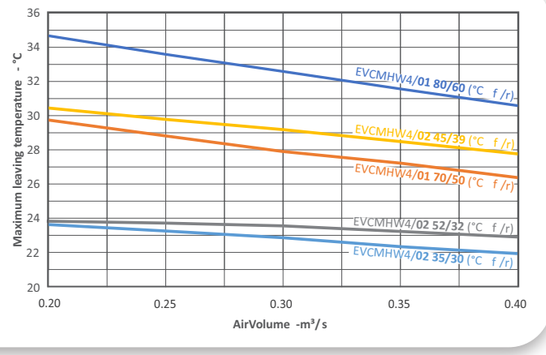
ecovent® *Duct mounted Coil*

ecovent EVCMHW4



Performance



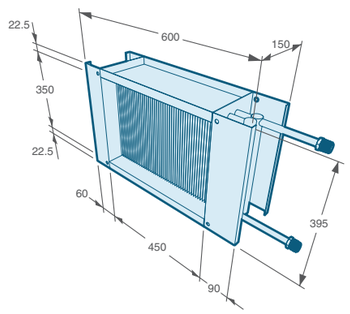


EVCMHW4/01 Flow/Return °C	Duty m³/s	Max Leaving Temperature °C	Max Output kW	Water Flow Rate l/s	Water Pressure Drop kPa	Air Pressure Drop Pa
80/60	0.20	34.40	6.16	0.075	3.00	5
	0.30	32.30	8.53	0.104	3.00	10
	0.40	30.30	10.58	0.129	4.30	16
70/50	0.20	29.50	4.97	0.060	3.00	5
	0.30	27.60	6.90	0.084	3.00	10
	0.40	26.20	8.57	0.104	3.00	16

EVCMHW4/02 Flow/Return °C	Duty m³/s	Max Leaving Temperature °C	Max Output kW	Water Flow Rate l/s	Water Pressure Drop kPa	Air Pressure Drop Pa
52/32	0.20	22.50	3.27	0.040	3.00	10
	0.30	23.30	5.27	0.064	3.00	21
	0.40	22.60	6.82	0.082	3.00	36
45/39	0.20	30.20	5.13	0.206	4.10	10
	0.30	28.80	7.27	0.292	7.50	21
	0.40	27.50	9.21	0.371	11.30	36
35/30	0.20	23.50	3.52	0.170	3.00	10
	0.30	22.60	5.01	0.241	5.50	21
	0.40	21.70	6.37	0.307	8.30	36

Air off temperature based upon entering air FAT -5 °C, RAT 12 °C, taken after the heat exchanger.
Coil construction copper tubes, aluminium fins, coil connections ¾" BSP.
Bespoke coils to suit alternative flow and return temperatures available upon request.

Unit dimensions

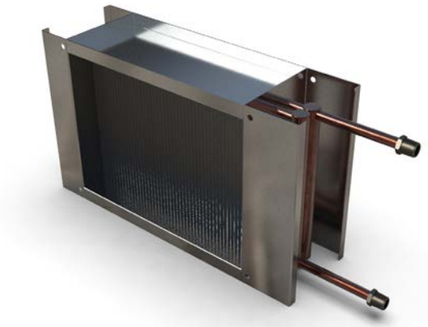


Weight: 10 kg (wet, approx)

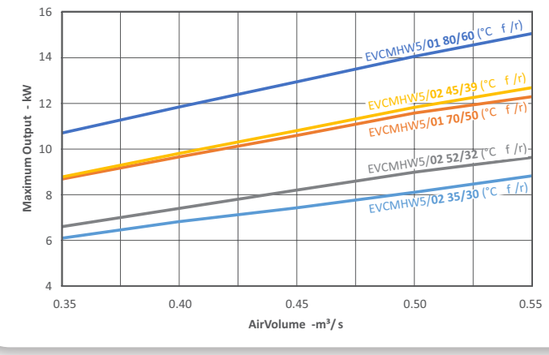
Note: *Data for design guidance only. Detailed information is available upon request.*

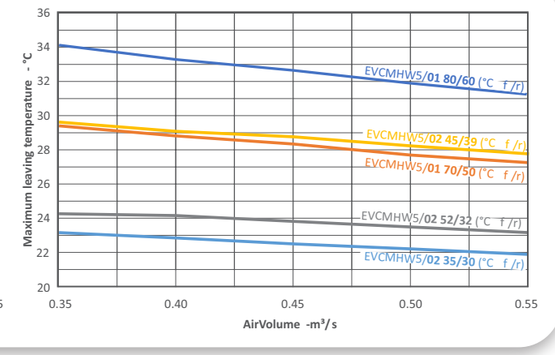
ecovent® *Duct mounted Coil*

ecovent EVCMHW5



Performance



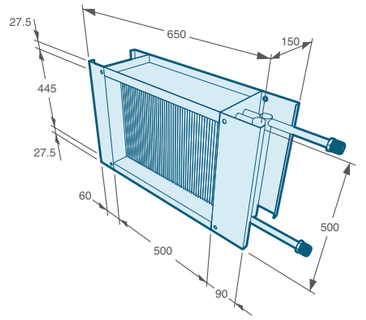


EVCMHW5/01 Flow/Return °C	Duty m³/s	Max Leaving Temperature °C	Max Output kW	Water Flow Rate l/s	Water Pressure Drop kPa	Air Pressure Drop Pa
80/60	0.35	34.10	10.67	0.130	5.30	7
	0.45	32.60	12.99	0.159	7.60	11
	0.55	31.20	15.09	0.184	9.90	15
70/50	0.35	29.40	8.71	0.106	3.70	7
	0.45	28.30	10.61	0.129	5.30	11
	0.55	27.20	12.31	0.150	7.00	15

EVCMHW5/02 Flow/Return °C	Duty m³/s	Max Leaving Temperature °C	Max Output kW	Water Flow Rate l/s	Water Pressure Drop kPa	Air Pressure Drop Pa
52/32	0.35	24.20	6.49	0.078	3.00	15
	0.45	23.80	8.19	0.099	3.00	23
	0.55	23.20	9.69	0.117	3.00	34
45/39	0.35	29.60	8.78	0.353	6.10	15
	0.45	28.70	10.85	0.437	8.80	24
	0.55	27.80	12.75	0.513	12.75	34
35/30	0.35	23.20	6.06	0.292	4.50	15
	0.45	22.50	7.49	0.361	6.50	23
	0.55	21.90	8.86	0.426	8.60	34

Air off temperature based upon entering air FAT -5 °C, RAT 12 °C, taken after the heat exchanger.
Coil construction copper tubes, aluminium fins, coil connections 1" BSP.
Bespoke coils to suit alternative flow and return temperatures available upon request.

Unit dimensions



Weight: 13 kg (wet, approx)

Note: *Data for design guidance only. Detailed information is available upon request.*

ecovent® *Duct mounted EHB*

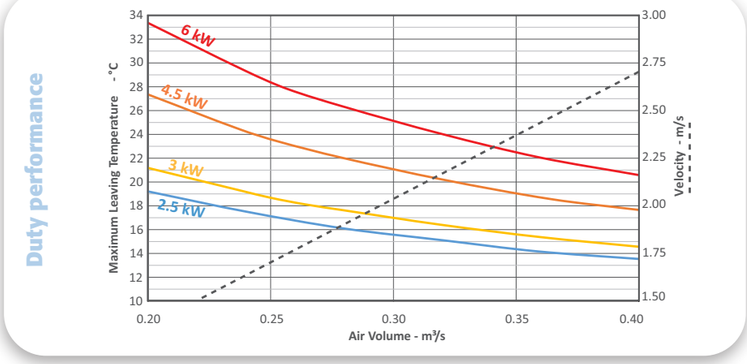
ecovent EVCMEH4

Performance

These heaters are designed to work with Ecovent midi units only, mounted directly to the unit or in-line with the adjacent ductwork. There are two sizes to match the appropriate unit, suitable for single or three phase supply as standard.
The size 4 is fitted with a 20mm MEZ flange.

The integrated controls features a thyristor for modulating the temperature output, and an airflow pressure switch to shut off the heater in the event of airflow failure. The controls must be connected directly to the Ecovent midi unit for correct operation.

Recommended minimum velocity is 1.5 m/s.
For selection points outside the range shown please contact VES for further information.

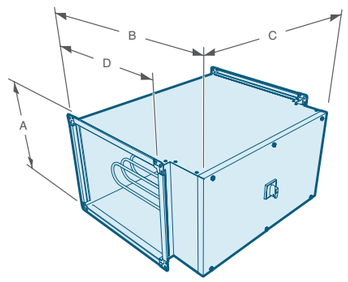


	Duty m³/s	Air on Temp °C	Max Air Off Temp °C	Maximum Output kW	1Φ Electric Heater	3Φ Electric Heater
EVCM4	0.20	9.0	21.2	3.00	EVCMEH4/3KW/1X1	EVCMEH4/3KW/1X3
	0.25	8.9	23.5	4.50	EVCMEH4/4.5KW/1X1	EVCMEH4/4.5KW/1X3
	0.30	8.8	21.0	4.50	EVCMEH4/4.5KW/1X1	EVCMEH4/4.5KW/1X3
	0.35	8.6	22.5	6.00	EVCMEH4/6KW/1X1	EVCMEH4/6KW/1X3
	0.40	8.5	20.7	6.00	EVCMEH4/6KW/1X1	EVCMEH4/6KW/1X3

Air off temperature based upon entering air FAT -5 °C, RAT 12 °C, after the heat exchanger.
Power = Air Volume x Constant x Temperature Rise kW = m^3/s x 1.21 x ΔT °C

Unit dimensions

EHB	Dimensions mm				Weight kg
	A	B	C	D	
EVCMEH4__	330	572	630	450	18



Note: *Data for design guidance only. Detailed information is available upon request.*

ecovent® *Duct mounted EHB*

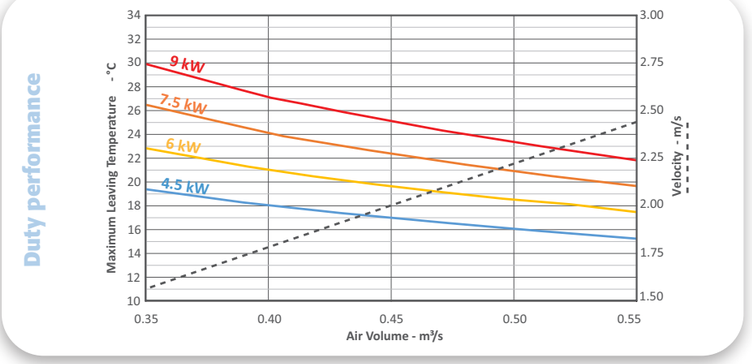
ecovent EVCMEH5

Performance

These heaters are designed to work with Ecovent midi units only, mounted directly to the unit or in-line with the adjacent ductwork. There are two sizes to match the appropriate unit, suitable for single or three phase supply as standard.
The size 5 is fitted with a 20mm MEZ flange.

The integrated controls features a thyristor for modulating the temperature output, and an airflow pressure switch to shut off the heater in the event of airflow failure. The controls must be connected directly to the Ecovent midi unit for correct operation.

Recommended minimum velocity is 1.5 m/s.
For selection points outside the range shown please contact VES for further information.

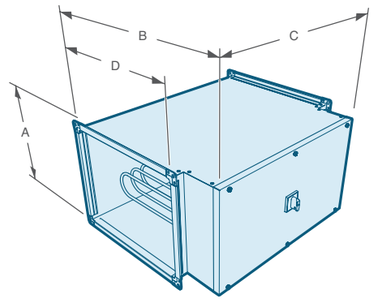


	Duty m³/s	Air on Temp °C	Max Air Off Temp °C	Maximum Output kW	1Φ Electric Heater	3Φ Electric Heater
EVCM5	0.35	8.9	22.8	6.00	EVCMEH5/6KW/1X1	EVCMEH5/6KW/1X3
	0.40	8.8	21.0	6.00	EVCMEH5/6KW/1X1	EVCMEH5/6KW/1X3
	0.45	8.8	22.4	7.50	EVCMEH5/7.5KW/1X1	EVCMEH5/7.5KW/1X3
	0.50	8.7	23.3	9.00	EVCMEH5/9KW/1X1	EVCMEH5/9KW/1X3
	0.55	8.6	21.9	9.00	EVCMEH5/9KW/1X1	EVCMEH5/9KW/1X3

Air off temperature based upon entering air FAT -5 °C, RAT 12 °C, after the heat exchanger.
Power = Air Volume x Constant x Temperature Rise kW = m^3/s x 1.21 x ΔT °C

Unit dimensions

EHB	Dimensions mm				Weight kg
	A	B	C	D	
EVCMEH5__	450	622	630	500	22



Note: *Data for design guidance only. Detailed information is available upon request.*

ecovent® *Silencers*

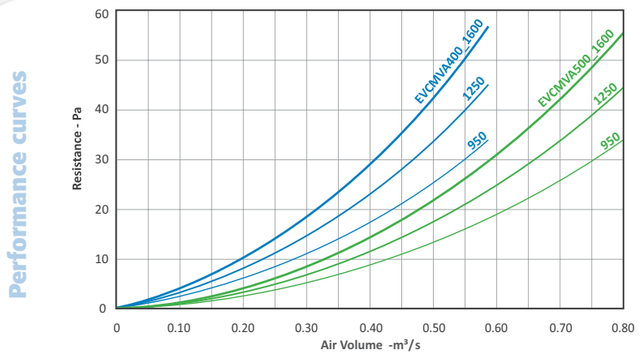
ecovent EVCMVA4 & 5

Performance

Notes:
Units are independently tested in accordance with BS EN ISO 3741:2010.

EVCM4 & 5 silencers are fitted with a 20mm flange.

Tolerances:
On flow rates: +/- 5%
On acoustic power and pressure: Levels: +/- 3 dB
By octave band: +/- 5 dB



Acoustic data

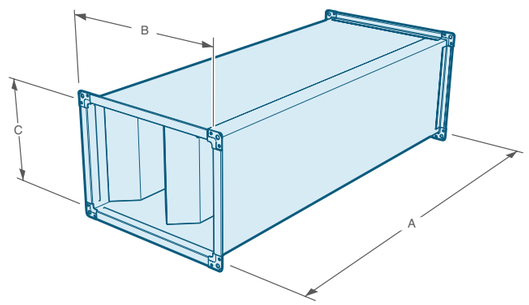
Silencer Induct Losses	Frequency Hz							
	63	125	250	500	1k	2k	4k	8k
EVCMVA400/SS/0950 / EVCMVA500/SS/0950	-5	-8	-16	-33	-37	-28	-20	-16
EVCMVA400/SS/1250 / EVCMVA500/SS/1250	-7	-10	-20	-40	-47	-36	-24	-18
EVCMVA400/SS/1600 / EVCMVA500/SS/1600	-9	-13	-25	-49	-55	-45	-28	-20

Units are independently tested in accordance with BS EN ISO 7235:2003.

Unit dimensions

Dimensions

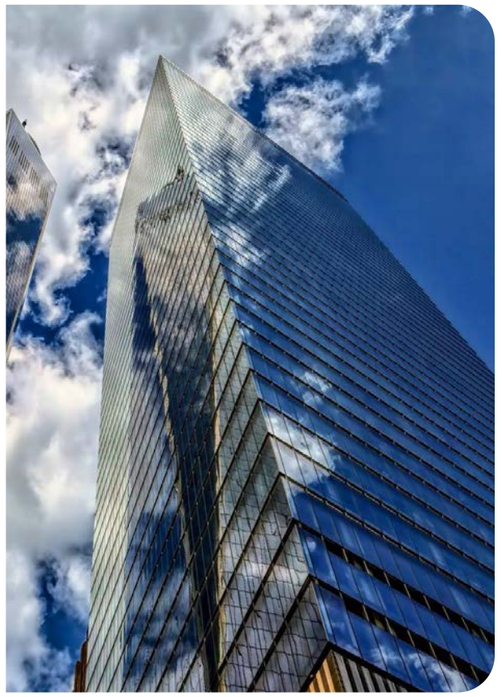
Silencers	Dimensions mm			Weight kg
	A	B	C	
EVCMVA400/SS/0950	950	450	330	25.0
EVCMVA400/SS/1250	1250	450	330	32.0
EVCMVA400/SS/1600	1600	450	330	40.0
EVCMVA500/SS/0950	950	500	450	28.0
EVCMVA500/SS/1250	1250	500	450	35.0
EVCMVA500/SS/1600	1600	500	450	44.0



Note: *Data for design guidance only. Detailed information is available upon request.*

ecovent® *Controls*

Control packages for performance and efficiency



BlueSense™

Demand ventilation solutions

BlueSense philosophy combines intelligent control technologies with energy saving products, services and engineering expertise.

BlueSense helps meet energy reduction commitments by optimising equipment performance, improving energy efficiency, saving money and increasing equipment life expectancy.

BlueSense can be applied to a variety of projects and applications, providing efficient solutions whilst supporting design for best practice and sustainability.

Features

- Designed, manufactured and supported by VES engineers
- Default settings for “out of the box” operation and to minimise commissioning time
- Versatile user interface and open protocol integration option
- Easily identified field terminals to assist installation and maintenance
- Extensive parameter adjustment to optimise installation and further improve system efficiency

Specification for CPEVCM for Heat Recovery Applications

The **ecovent midi** unit with integrated controls is specifically designed for use in heat recovery applications.
The CPEVCM control system is supplied fully integrated into an **ecovent midi** air handling unit to reduce installation time and costs, and can be supplied as a loose panel for installation by others if required.

Features	CPEVCM
Fitted & pre-wired within Ecovent **midi** or traditional loose panel options	√
Heat recovery damper modulation, free heating and cooling optimisation	√
Modulating electric heating control option	√
Frost protection and heating demand output for water coils option	√
Temperature philosophy; supply or return + supply limits	√
7 day time clock	√
Condensate pump control	O
Demand ventilation; Air Quality, constant pressure, PIR	O
Filter dirty indication; inputs for DP switches	√
Fan run-on and safety interlocks	√
Remote start / stop via removable link	√

Features	CPEVCM
Common trip indication	√
Fire alarm shutdown, 24 VDC	O
Inlet and return damper	O
Remote user interface, full function	√
Modbus over RS485 open protocol or ethernet BACnet MS/TP	√
Integration by BACnet/IP open protocol	O
Bespoke to suit requirement	O
BlueSense - Energy Saving Package	√
Energy efficient speed control	√
Demand Control	√
Post installation Commissioning	O

O = Option

Note: *Data for design guidance only. Detailed information is available upon request.*

Product Specification

ecovent® midi (EVCM) Compact Heat Recovery Units

1.1. General

A. Provide a heat recovery air handling unit to meet the performance and configuration as indicated in the schedule and detail drawings. The heat recovery air handling unit shall be tested to BS EN ISO 5801:2017+A1:2025 and shall be of the Ecovent type as manufactured by VES Andover Ltd, a company accredited with BS EN ISO 9001:2015.

1.2. Unit Construction

A. The unit shall be provided pre-assembled comprising double skinned galvanised sheet steel panels, supply and extract centrifugal fans with direct drive motor, supply and extract G4 pleated panel filters, and plate heat exchanger with drain pan.

B. The construction shall be tested in accordance with BS EN 1886:2007.

C. The galvanised steel shall be low-embodied carbon-type, produced using electric arc furnaces (EAF) using 100% renewable electricity

D. The unit shall be available in plantroom construction as indicated in the schedule and detail drawings.

E. The unit shall be fitted with a heat exchanger bypass duct, incorporating a face and bypass damper to allow heating / cooling recovery.

F. The units shall have rectangular connections compatible with 20mm MEZ flange connections as indicated in the schedule and detail drawings.

G. The unit casework shall incorporate high quality rubber gasket seals on service doors and panels.

H. Access for maintenance shall be via a removable panel, allowing access for the cleaning or removal of internal components as indicated in the detail drawings. The filters shall be bottom withdrawal as standard.

I. Flat plantroom casework shall incorporate mounting brackets compatible with drop-rod systems.

J. The unit shall be supplied in the configuration: flat, plantroom. Access and handing options shall be as indicated in the schedule and detail drawings.

1.3. Fans

A. The fan impellers shall be statically and dynamically balanced to G 2.5 / G 6.3 according to ISO 21940-11:2016.

B. The fan impellers shall be mated with aerodynamic bell inlet eyes for high efficiency and low noise generation.

C. The fan impellers shall be supplied in natural uncoated finish as standard.

1.4. Motors

A. The fans shall incorporate external rotor motors to insulation class F, IP4X environmental protection rating and shall be supplied with thermal protection cut-out as standard.

1.5. Plate Heat Exchanger

A. The unit shall be supplied with a Counterflow heat exchanger tested in accordance with BS EN 308:2022.

B. The heat exchanger shall be to an efficiency of at least 75% (-5/+20 °C, 90/50% RH).

C. The plate heat exchanger matrix shall be aerodynamically designed, with built-in spacers ensuring a constant plate separation.

1.6. Drain Pan

A. The unit shall include a built-in condensate drain pan as standard.

1.7. Filtration

A. The filters shall be pleated filter media as standard, with rigid wax treated cardboard moisture resistant frame.

B. Filters shall be to BS EN ISO 16890 classification Coarse 65% (G4 EN 779:2012) as standard, grade as indicated in the schedule and detail drawings.

1.8 Heating

A. The unit shall come with no heating as standard. Options for duct mounted ancillary heating are available as indicated in the schedule.

Product Specification continued

1.9. Operation Environment

A. The unit shall be designed to operate in ambient temperatures from -20 °C up to +40 °C and to run continuously at up to 90% relative humidity level.

2.0. Controls

A. The unit shall be fitted with an EC fan speed control system with maximum/minimum speed

B Temperature sensor shall be fitted as standard.

C. Fitted controls shall be positioned as indicated in the schedule and detail drawings.

D. Controls shall be supplied with internally mounted circuit breakers.

E. Fitted controls shall be fully pre-wired to internal components.

2.1. Ancillaries

A. The unit shall be fully compatible with a standard range of spigot mounted silencers. The silencers shall be suitable for direct mounting to the unit.

B. The silencer shall be a rigidly constructed galvanised sheet steel case lined with resin bonded mineral wool.

C. The silencer casework shall be provided naturally finished in high quality galvanised steel as standard. External powder coat shall be available as indicated in the schedule. Colour shall be in accordance with schedule.

D. The units shall be available with duct mounted hot water or electric element heating as indicated in the schedule and detail drawings, suitable for direct fitting to the end of the unit.

E. The duct mounted hot water heater battery shall be of copper tube, aluminium fin block construction, with galvanised sheet steel casework.

F. The duct mounted hot water heater battery shall be available with alternative fin coatings by special order, as indicated in the schedule.

G. The duct mounted electric heater battery shall be suitable for single or three-phase supply and compatible with thyristor control as indicated in the schedule and detail drawings.

H. The duct mounted electric heater battery shall consist of an element array, sized to suit the steps and phases as indicated in the schedule and detail drawings. The elements shall consist of a tubular incoloy shroud containing compressed magnesium oxide powder packed around a nickel chromium resistance wire. The element array shall be evenly spread across the open area of the duct.

I. Where multiple elements are required to achieve the steps and phases as indicated in the schedule, elements shall be linked by copper busbar or terminated with electrical connectors.

J. The duct mounted electric heater battery shall be fitted as standard with a thermal safety cut out, adjustable from +40 °C to +80 °C, with automatic reset.

K. All duct mounted electric heaters shall be 1500 V flash tested, and resistance tested for correct component assembly. Test certificates shall be available on request.

ecoventmidi

Product	HREC Type	Unit Size	Fan Type	Fan Size	Phase	Unit Config	Heating	Infill	Handing	Main Filter	Control Panel Section	Colour
EV	CM	4	2	2	-1	/FP	[null]	/DS	/RB	/G4	/ISC	[null]
		5	2	4	-1				/LB	/F7	/CPSC	/R9010LT

Ancillaries Examples

Name	Part No.
Duct Mounted LPHW Coil	EVCMHW4/01
Duct Mounted EHB	EVCMEH5/3kW/1X3
Valve & Acuator Kit	EVCMCWKT400
Silencer	EVCMVA500/SS/1200

Product
EV (ecovent)

Unit Config
/FP= Flat Plantroom

Heating
[null] =No Heating

Infill
DS (38mm)

Handing
Plantroom /RB=Right Bottom
Flat /LB=Left Bottom

Main Filter
/G4
/F7

Control Panel Section
/CPSC=Control Panel and built in Speed Controller

Colour
NULL = Galvanised
/R9010LT= RAL9010 in leatherette finish

Example Codes

Plantroom EVCM422-1/FP/RB/G4/CPSC

Products and Services from VES HVAC Solutions

Air Handling Units

- **MAX bespoke ventilation**
  Customer driven solution, designed to fit any application with duties up to 32.0 m³/s.
- **ecovent counterflow**
  Premium efficiency heat recovery with duties up to 0.70 m³/s
- **ecovent mini**
  Compact heat recovery with duties up to 0.18 m³/s
- **ecovent midi**
  Sustainable heat recovery with duties up to 0.60 m³/s

Supply and Extract Fans

- **Colourfan Supply Acoustic**
  Premium efficiency, low noise supply units
- **Colourfan Extract Acoustic**
  Premium efficiency, low noise extract units
- **Colourfan Twin Extract Acoustic**
  Premium efficiency, low noise twin extract units

Classroom Ventilation Units

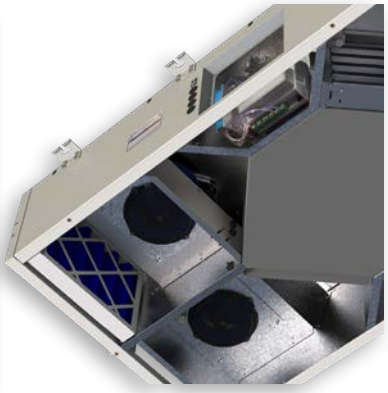
- **ecovent hybrid**
  Natural classroom ventilation enhanced by low powered fans
- **ecovent synergy education solutions**
  Net zero classroom solution, optimised for cross ventilation strategies

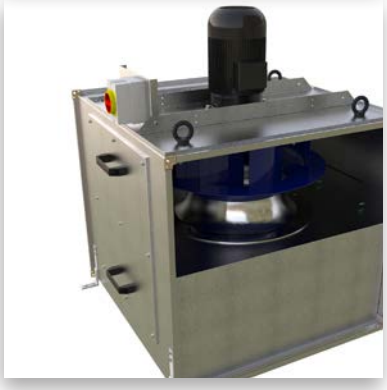
Kitchen Extract & Roof Extract

- **T-Line**
  High temperature extract units with duties up to 11.0 m³/s and operating temperatures up to 120°C
- **Dome**
  Premium efficiency, lightweight, roof extract unit

Controls & Services

- **Controls**
  Design, manufacturing, assembling and testing in house
  Bespoke solutions for any project or application
- **Specialist Site Service Projects**
  Plant refurbishment, energy saving upgrades
  AHU flat pack installation where access is restricted
  Maintenance and spares services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