



Mechanical Ventilation with Heat Recovery MVHR



Selection Data





Company Profile

ECE UK Ltd is a privately owned company that was established in 1979 by the existing directors and shareholders. We operate from our 4,000m² manufacturing facility in Rochester where we produce air handling / conditioning units and controls of the highest quality; which is reflected by our level of customer retention.

With forty years of experience, we are a leader in the field of air handling, conditioning and control systems.

Our experienced and knowledgeable members of staff have obtained qualifications from HNC to Master's Degree. To compliment this we provide an in-house and external training programme. We are committed to working in partnership with Consultants, Contractors and End-Users, providing added value through technical innovation, service excellence and the ability to provide energy efficient solutions.

ECE UK offers a wide range of Products and Services that complement our SU range of Air Handling Units including

Air Conditioning

Heat pump units and interconnecting refrigeration pipe work.

Controls

Trend Control systems either mounted internal to AHU or remote.

Site Wiring

Our qualified engineers would install all interconnecting control wiring external to the air handling unit along agreed routes.

Plant Movement

Refurbishment, Removal, and Installation of Air Handling Units, Air Conditioning Units and Controls.

After Sales

Warranty assistance and troubleshooting of site issues for Air Handling Units, Air Conditioning Units and Control Systems.

Service & Maintenance

Platinum, Gold and Silver maintenance packages for Air Handling Units, Air Conditioning Units and Control Systems.

By providing the many Products and Services in one place we can offer you the convenience of obtaining all your ventilation, air conditioning and control requirements from one manufacturer.



MVHR Explained

Heat Recovery Efficiency

Counterflow heat exchanger with summer bypass offering up to 95% efficiency. Most applications will not need a top up heater. Resulting in reduced boiler plant or electrical load. Capital and running costs are further reduced.

User Friendly

Access from top, bottom or side allows for easy inspection of the heat recovery unit. Multiple accesses offers the best solution for restricted areas such as ceiling voids and internal plant rooms. Units can be suspended via drop rods.

EC Fans

Highly efficient EC Fans offering great energy saving solutions. Low specific fan power helps to achieve Part L2 building compliance. 0-10VDC input allows smooth speed control from BMS or demand ventilation inputs. Reduced maintenance and easy to change.

Filtration

All units complete with F7 supply and M5 return panel filters.

Low Height

Low height offering space saving solutions, starting from 310mm high. Ideal for modern buildings with reduced ceiling void depth. Available with optional acoustic lining to reduce noise breakout.

Location

Internal or externally located with roofs, cowls and external coating. External mounted units offer solutions where ceiling voids are restricted. Ideal for noise sensitive areas as unit is removed from the ceiling void.

Controls

The ECE-Tech controller is fully expandable to suit your project requirements, up to 2060 Digital I/O and 511 Analogue I/O ports.

Our latest model, the ECE-Tech 6 has been specially designed to run heat recovery units to a high efficiency with the maximum feedback to allow small and accurate adjustments.

The controller facilitates the use of BACnet and Modbus.

The controller can be provided fully fitted or supplied separately to be mounted remotely

Outputs available:

- External dampers
- Bypass dampers
- Alarm output
- Enable signal
- Frost heater Contactor
- Thyristor control
- DX hot signal 24v
- DX cold signal 24v
- Supply fan 0-10v
- Extract fan 0-10v

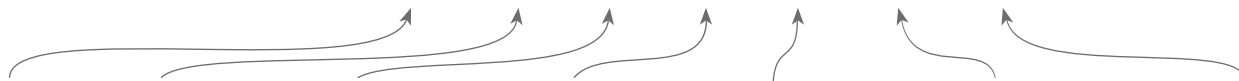
Inputs available:

- Fire alarm
- Remote I/O
- PIR sensors
- Filter pressure switches
- Supply fan
- Extract fan
- Thermal overload switch
- Airflow proving switch
- CO2 switch 0-10v
- Frost probe
- Temperature sensors
- Extract fan 0-10v



How To Specify Your MVHR

MVHR-1 / IN / SLA / FEA / CF / LPHW / SI



MVHR Model	Location	Access of unit	Shut Off Dampers	Controls	Heat/Cool Module	Special Requirements
MVHR Model	Internal or External	Unit Access & Orientation	Shut off dampers fitted or not fitted	Controls Fitted or Not Fitted	Module Type	Enhanced Acoustic Infill or Special Construction
MVHR-1	IN = Internal Plantroom Version	SLA = Side Left Access/Handing Configuration	FFAEA = Fitted Fresh Air & Exhaust Air Shut-Off Dampers	CF = Fitted controls	EAHBO = Electric Heater Battery (On/Off)	SC = Special Construction
MVHR-2		SRA = Side Right Access/Handing Configuration	FEA = Fitted Exhaust Air Shut-Off Damper only	CNF = No Controls fitted	EAHBT = Electric Heater Battery (Thyristor Controlled)	EAI = Enhanced Acoustic Infill
MVHR-3	EX = External Weatherproof Version	BLA = Bottom Left Access/Handing Configuration	FFA = Fitted Fresh Air Shut-Off Damper only	CL = Controls sent loose for fitting on site.	LPHW = Low Pressure Hot Water Coil	SI = Standard Infill
MVHR-4		BRA = Bottom Right Access/Handing Configuration	NDF = No Shut-off Dampers fitted.		CW = Chilled Water Coil	
MVHR-5		TLA = Top Left Access/Handing Configuration			DXHP = DX Heat Pump Coil	
MVHR-6		TRA = Top Right Access/Handing Configuration			NM = No Module	

Please note when selecting

- Bypass Damper located on the Plate Heat Exchanger included as Standard.
- External Units not available with bottom or top access.
- Dampers to be selected if using LPHW or CHW coils.
- No Valves are supplied with LPHW or CHW coils.
- Dampers come complete with spring return actuators.
- HP coils only compatible with Toshiba condensers.
- Ensure bolt on pressure drops are considered when selecting your MVHR.
- All units complete with F7 Supply and M5 Return filters as standard.
- Where controls are fitted, filter pressure switches and bypass actuators are included.
- Cooling only available up to 2.5m/s coil velocity, so the MVHR may require oversizing to use a cooling bolt on. Eliminator fitted as standard.
- Cooling is for tempered air only with circa 6°C delta t available.
- Confirmation should be sought from ECE if sizing beyond this.



Spares & Replacements

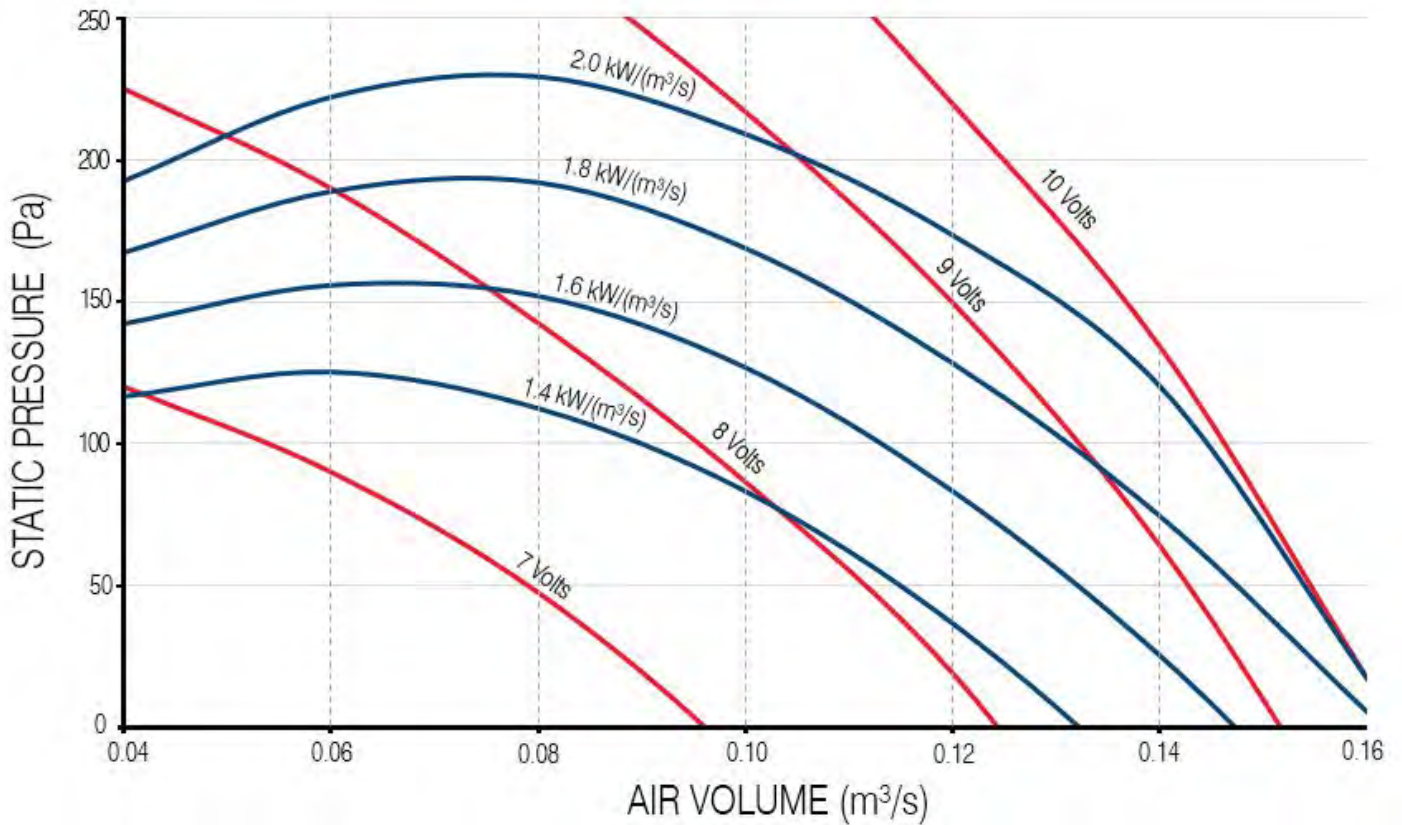
ECE offers a large variety of stock items that enable you to keep your unit, running throughout its lifetime.

Single click Basket for consumables with Anything Air Handling, our Spares & Parts shop www.aahuk.com

				
FILTERS	HEATING ELEMENTS	EC FANS	SILENCERS	FLEXIBLE CONNECTIONS
				
ROTARY ACTUATORS	DRAIN BALL TRAP VALVE	CO₂ SENSORS	SHUT OFF DAMPERS	PRESSURE SWITCHES



MVHR-1 Technical Data



Electrical Data

Motor Type	EC
Impeller	Backward curved
Max. power input (W)	2 x 170
Full load current (A)	2 x 1.75
Protection level : IP	IP54
Insulation class	B
Power supply	230 V AC, 1 ~ 50Hz

Acoustic Data

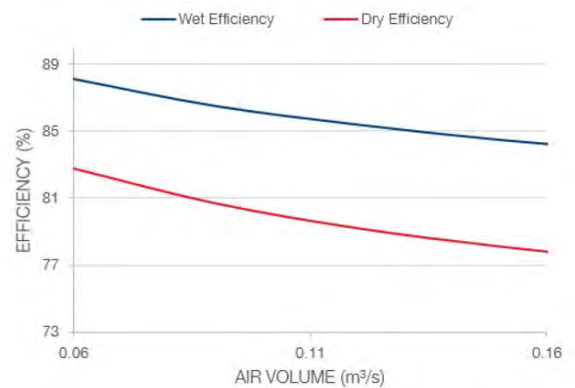
Duty Curve	Sound Power Lw In-Duct Levels (dB) AHU Air Inlet / Outlet Ducts								LpA
	125	250	500	1K	2K	4K	8K	LpA	
10 V	Inlet	61	64	67	66	67	64	62	36
	Outlet	62	65	69	71	73	69	62	
9 V	Inlet	61	63	65	65	66	62	60	34
	Outlet	61	65	68	69	71	67	63	
8 V	Inlet	63	64	63	62	62	58	55	32
	Outlet	63	65	65	67	67	63	58	
7 V	Inlet	65	65	62	60	59	55	51	31
	Outlet	65	66	63	65	65	60	54	

Inlet - fresh air and extract air inlet duct. **Outlet** - supply air and exhaust air outlet duct. Sound power levels are calculated from the fan pressure level measured at a distance of 1m in conformity to DIN 45635 and ISO 3744/3745 according to precision class 2.

Counterflow Heat Exchanger Data - Winter

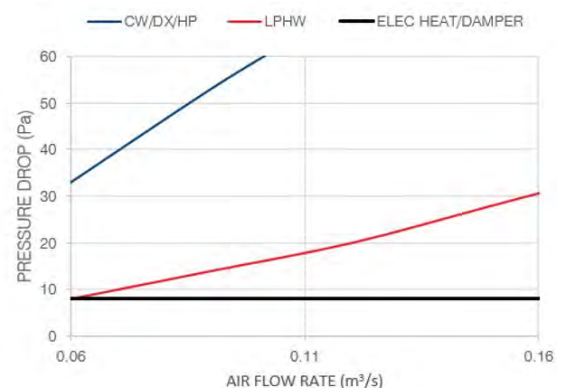
		Supply Air	Extract Air
Inlet Condition	Temperature	-5°C	21°C
	Relative Humidity	100%	50%

Counterflow Efficiency

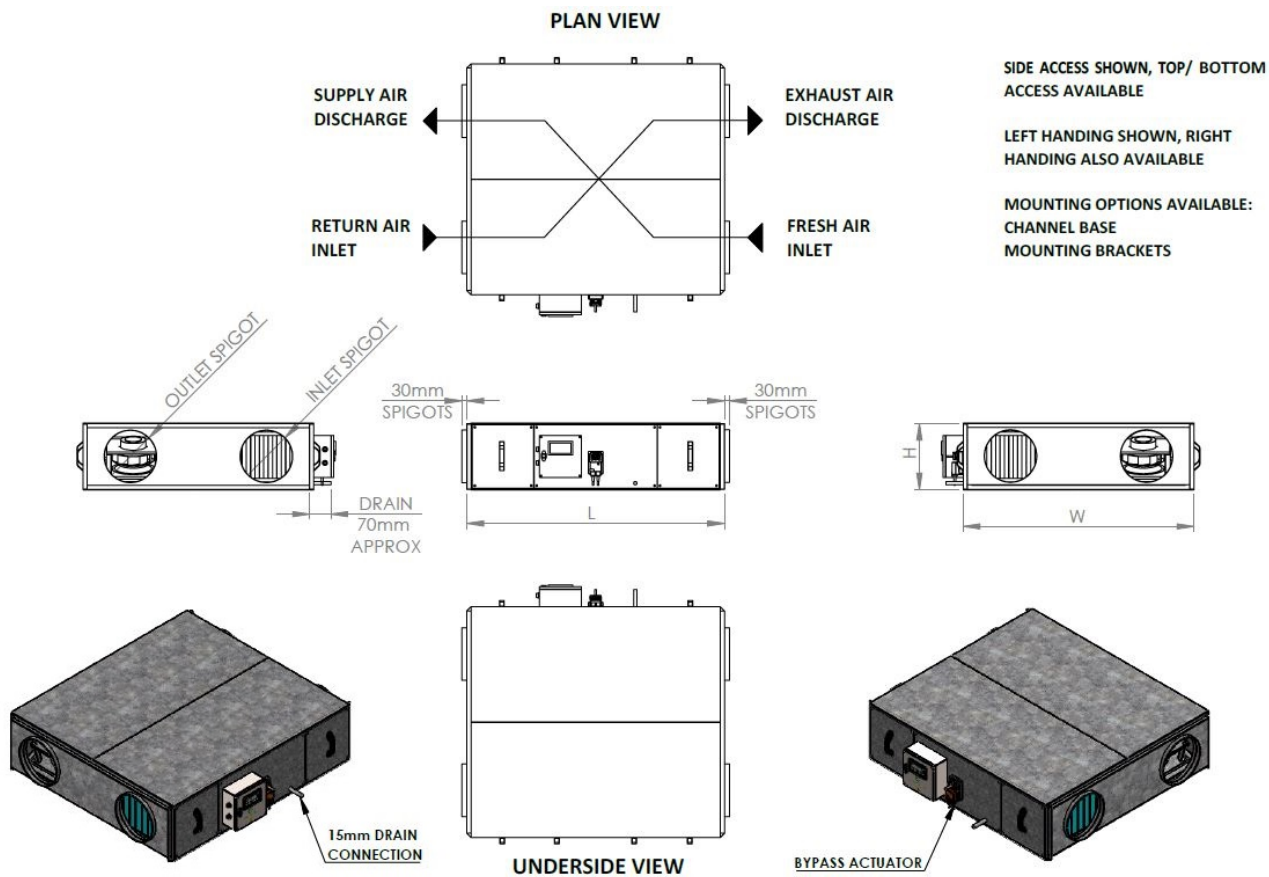


ERP2018 compliant
Nominal duty : 0.13m³/s @ 100Pa ; 1.31kW/m³/s

Bolt On Module Pressure Drops



MVHR-1 Dimensions, Weight & Technical Data



Unit Dimensions

Width	Height	Length	Inlet Spigot	Outlet Spigot	Weight
750mm	310mm	1225mm	Ø 200 mm	Ø 200 mm	90 kg

Electric Heater Battery Bolt On Module (On/Off Control)

Heater Model	Output (kW)	Power Supply	Nom. Current (A)	Inlet Spigot	Dimensions W x H x L (mm)
EAHBO1/1.5	1.5	230V/1PH/50Hz	6.6	Ø 200 mm	450 x 310 x 490

Electric Heater Battery Bolt On Module (Thyristor Control)

Heater Model	Output (kW)	Power Supply	Nom. Current (A)	Inlet Spigot	Dimensions W x H x L (mm)
EAHBT1/1.5	1.5	230V/1PH/50Hz	6.6	Ø 200 mm	450 x 310 x 490

Low Pressure Hot Water Coil Bolt On Module

Heater Model	Nominal Output (kW)	Outlet Spigot	Dimensions W x H x L (mm)
LPHW1/1R	2.0	Ø 200 mm	450 x 310 x 490

Chilled Water Coil Bolt On Module

Cooler Model	Nominal Output (kW)	Outlet Spigot	Dimensions W x H x L (mm)
CW1/2R	1.0	Ø 200 mm	450 x 310 x 490

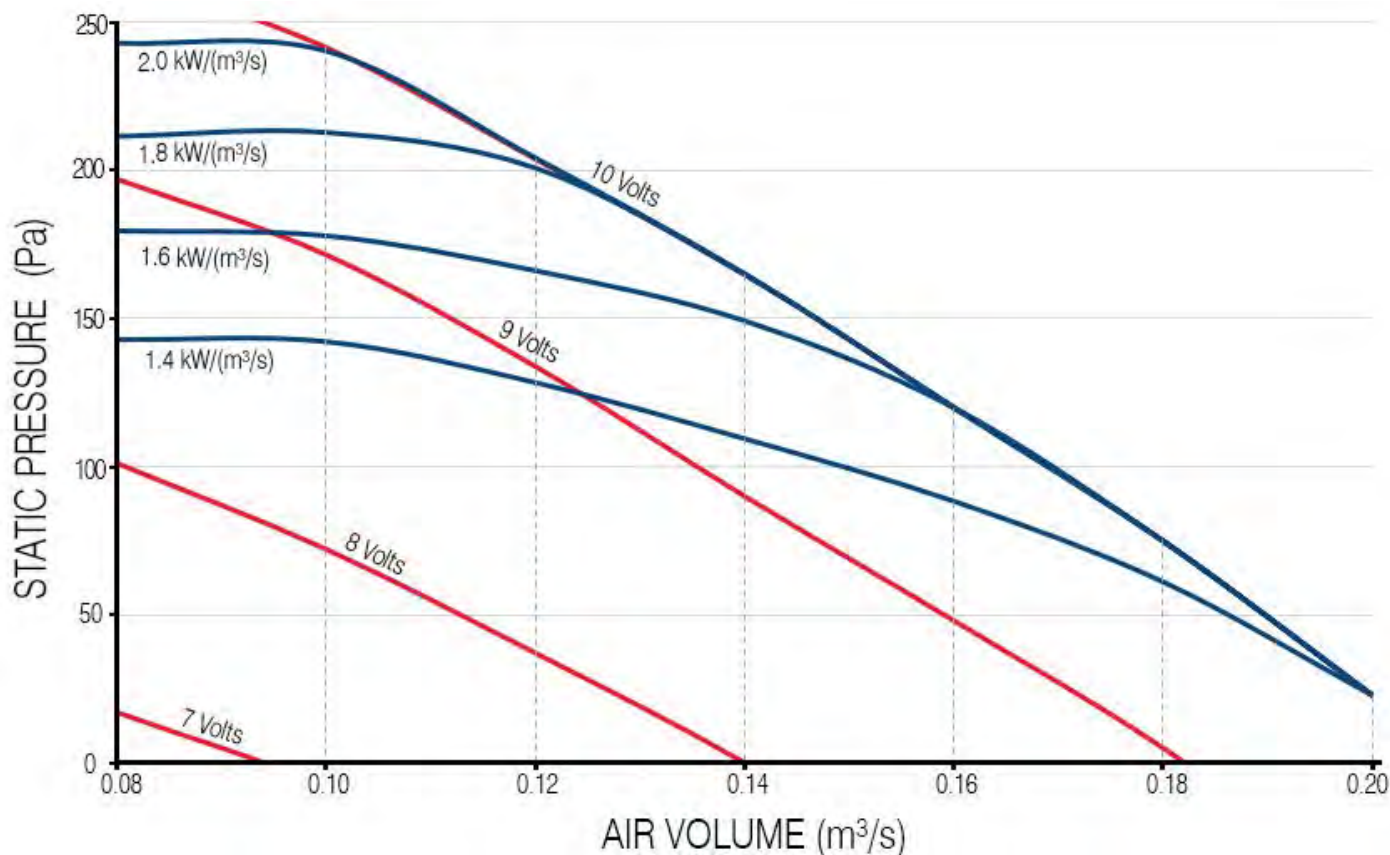
DX Heat Pump Coil Bolt On Module

Heater Model	Output (kW)	Refrigerant	Condenser	Inlet Spigot	Dimensions W x H x L (mm)
DXHP1/2R	1.0	R410A	SM564ATP-E	Ø 200 mm	450 x 310 x 490

DX Cooling only is possible using the DXHP Module



MVHR-2 Technical Data



Electrical Data

Motor Type	EC
Impeller	Backward curved
Max. power input (W)	2 x 170
Full load current (A)	2 x 1.65
Protection level : IP	IP54
Insulation class	B
Power supply	230 V AC, 1 ~ 50Hz

Acoustic Data

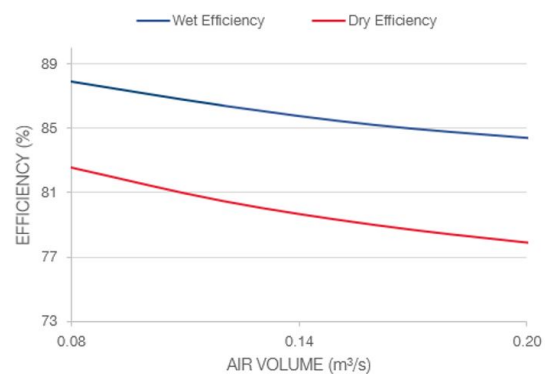
Duty Curve	Sound Power Lw In-Duct Levels (dB) AHU Air Inlet / Outlet Ducts								LpA
	125	250	500	1K	2K	4K	8K		
10 V	Inlet	64	67	63	63	63	63	59	36
	Outlet	65	74	69	70	71	66	62	
9 V	Inlet	63	66	62	61	60	60	55	35
	Outlet	64	72	66	67	68	62	59	
8 V	Inlet	65	66	61	59	57	56	51	34
	Outlet	67	71	65	65	65	59	54	
7 V	Inlet	65	62	57	56	54	53	47	30
	Outlet	66	67	61	62	62	56	50	

Inlet - fresh air and extract air inlet duct. **Outlet** - supply air and exhaust air outlet duct. Sound power levels are calculated from the fan pressure level measured at a distance of 1m in conformity to DIN 45635 and ISO 3744/3745 according to precision class 2.

Counterflow Heat Exchanger Data - Winter

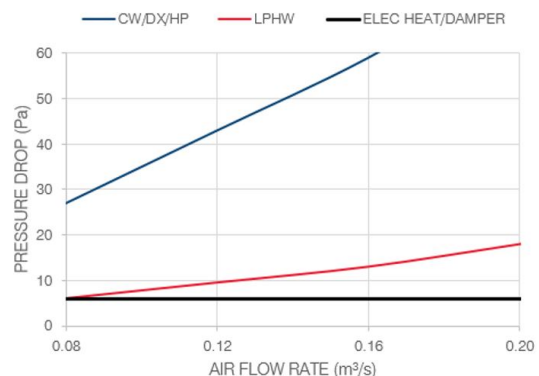
		Supply Air	Extract Air
Inlet Condition	Temperature	-5°C	21°C
	Relative Humidity	100%	50%

Counterflow Efficiency

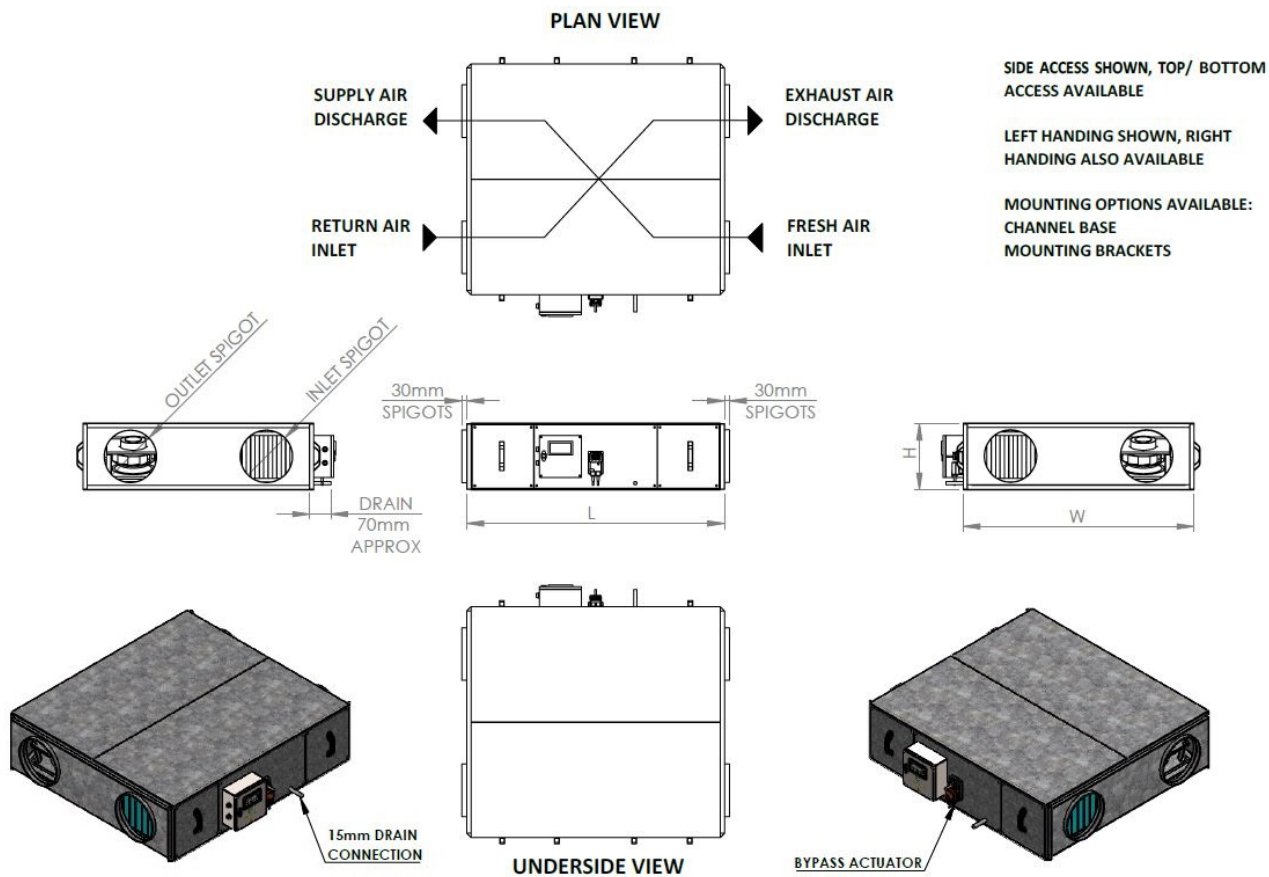


ERP2018 compliant
Nominal duty : 0.16m³/s @ 100Pa ; 0.891kW/m³/s

Bolt On Module Pressure Drops



MVHR-2 Dimensions, Weight & Technical Data



Unit Dimensions

Width	Height	Length	Inlet Spigot	Outlet Spigot	Weight
800mm	365mm	1410mm	Ø 250 mm	Ø 250 mm	120 kg

Electric Heater Battery Bolt On Module (On/Off Control)

Heater Model	Output (kW)	Power Supply	Nom. Current (A)	Inlet Spigot	Dimensions W x H x L (mm)
EAHBO2/1.5	1.5	230V/1PH/50Hz	6.6	Ø 250 mm	500 x 365 x 490

Electric Heater Battery Bolt On Module (Thyristor Control)

Heater Model	Output (kW)	Power Supply	Nom. Current (A)	Inlet Spigot	Dimensions W x H x L (mm)
EAHBT2/2.0	2.0	230V/1PH/50Hz	8.7	Ø 250 mm	500 x 365 x 490

Low Pressure Hot Water Coil Bolt On Module

Heater Model	Nominal Output (kW)	Outlet Spigot	Dimensions W x H x L (mm)
LPHW2/1R	2.5	Ø 250 mm	500 x 365 x 490

Chilled Water Coil Bolt On Module

Cooler Model	Nominal Output (kW)	Outlet Spigot	Dimensions W x H x L (mm)
CW2/2R	1.9	Ø 250 mm	500 x 365 x 490

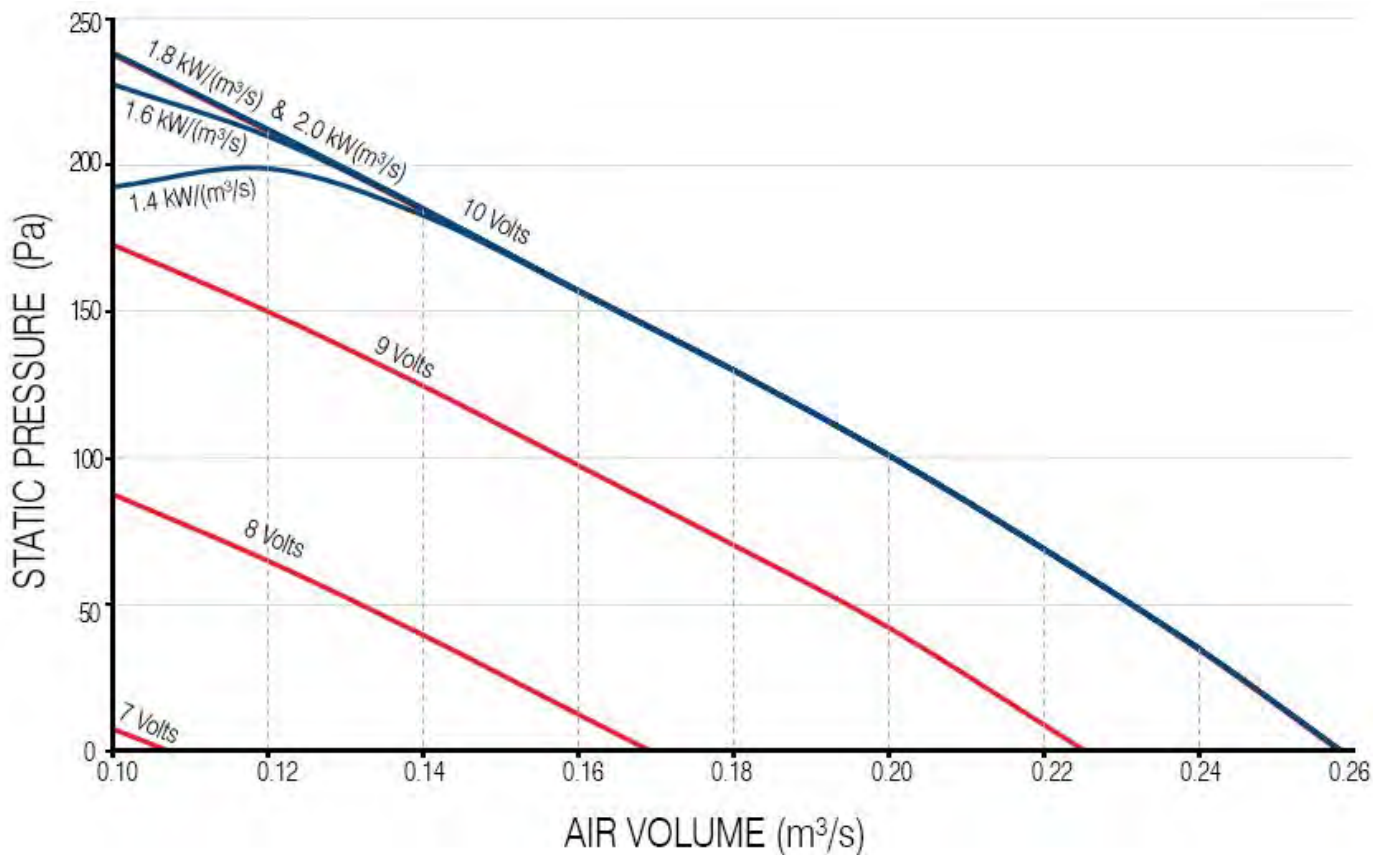
DX Heat Pump Coil Bolt On Module

Heater Model	Output (kW)	Refrigerant	Condenser	Inlet Spigot	Dimensions W x H x L (mm)
DXHP2/2R	1.8	R410A	SM564ATP-E	Ø 250 mm	500 x 365 x 490

DX Cooling only is possible using the DXHP Module



MVHR-3 Technical Data



Electrical Data

Motor Type	EC
Impeller	Backward curved
Max. power input (W)	2 x 170
Full load current (A)	2 x 1.75
Protection level : IP	IP54
Insulation class	B
Power supply	230 V AC, 1 ~ 50Hz

Acoustic Data

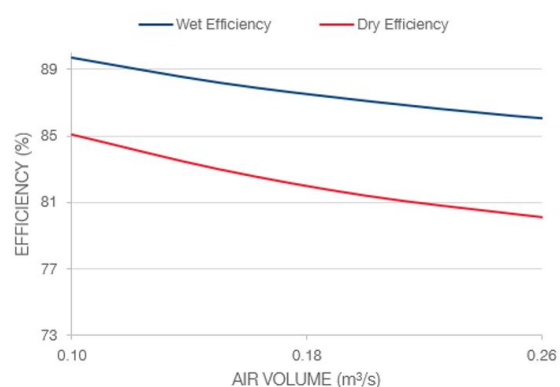
Duty Curve	Sound Power Lw In-Duct Levels (dB) AHU Air Inlet / Outlet Ducts								LpA
	125	250	500	1K	2K	4K	8K		
10 V	Inlet	64	67	64	64	62	62	56	36
	Outlet	65	73	68	69	69	64	58	
9 V	Inlet	65	67	63	62	60	59	53	35
	Outlet	66	72	66	67	67	61	55	
8 V	Inlet	69	65	61	60	57	54	48	34
	Outlet	69	71	65	65	65	57	50	
7 V	Inlet	67	61	58	56	54	50	43	30
	Outlet	67	67	61	62	61	53	45	

Inlet - fresh air and extract air inlet duct. **Outlet** - supply air and exhaust air outlet duct. Sound power levels are calculated from the fan pressure level measured at a distance of 1m in conformity to DIN 45635 and ISO 3744/3745 according to precision class 2.

Counterflow Heat Exchanger Data - Winter

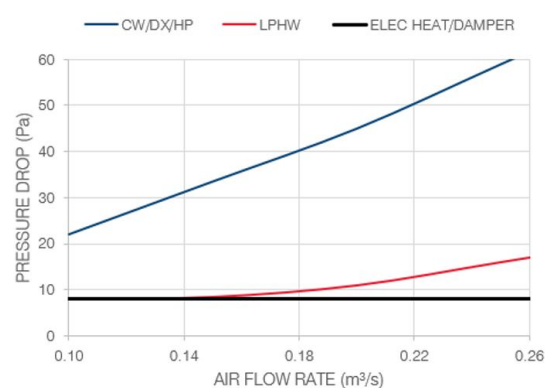
		Supply Air	Extract Air
Inlet Condition	Temperature	-5°C	21°C
	Relative Humidity	100%	50%

Counterflow Efficiency



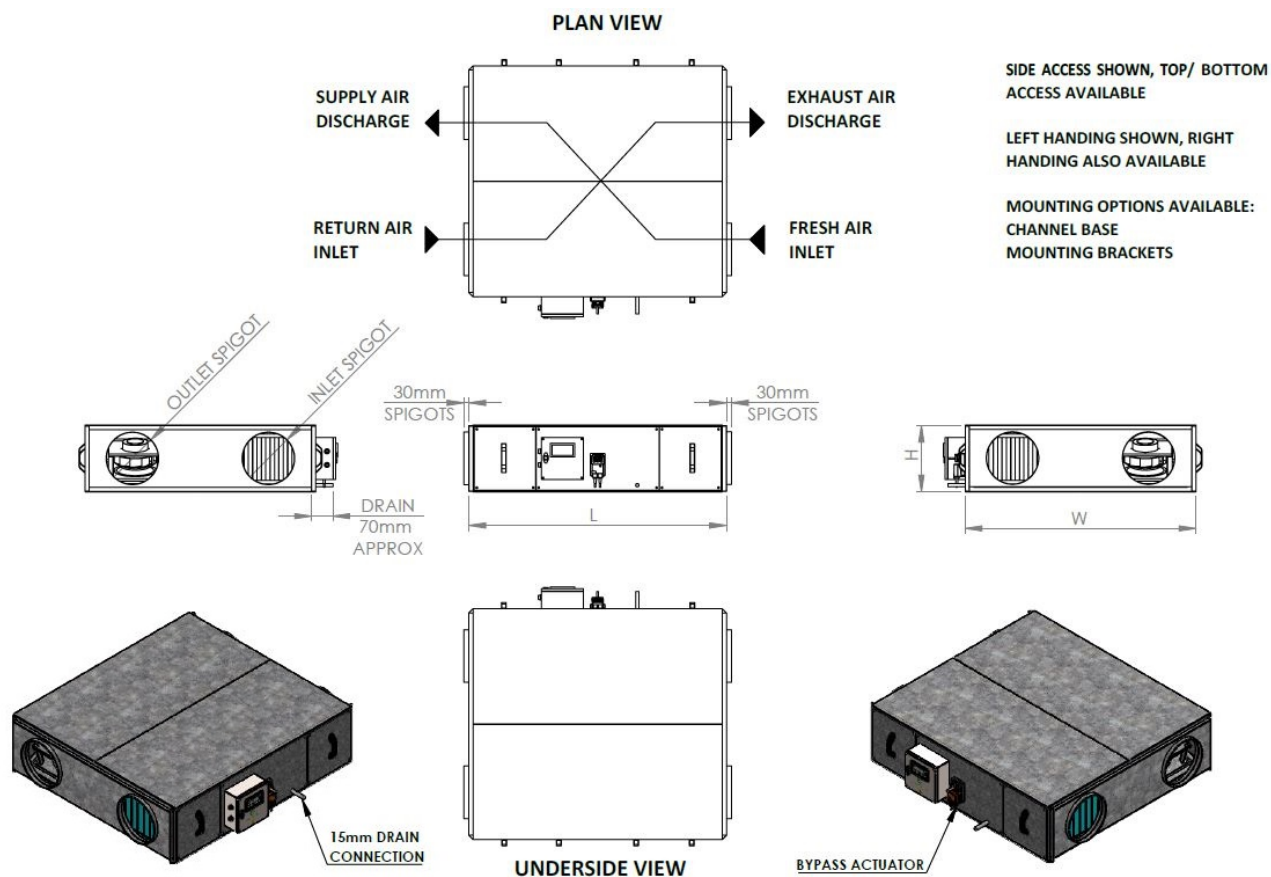
ERP2018 compliant
Nominal duty : 0.19m³/s @ 100Pa ; 0.47kW/m³/s

Bolt On Module Pressure Drops





MVHR-3 Dimensions, Weight & Technical Data



Unit Dimensions

Width	Height	Length	Inlet Spigot	Outlet Spigot	Weight
1375mm	400mm	1535mm	Ø 315 mm	Ø 315 mm	215 kg

Electric Heater Battery Bolt On Module (On/Off Control)

Heater Model	Output (kW)	Power Supply	Nom. Current (A)	Inlet Spigot	Dimensions W x H x L (mm)
EAHBO3/2.0	2.0	230V/1PH/50Hz	8.7	Ø 315 mm	585 x 400 x 490

Electric Heater Battery Bolt On Module (Thyristor Control)

Heater Model	Output (kW)	Power Supply	Nom. Current (A)	Inlet Spigot	Dimensions W x H x L (mm)
EAHBT3/2.5	2.5	230V/1PH/50Hz	10.9	Ø 315 mm	585 x 400 x 490

Low Pressure Hot Water Coil Bolt On Module

Heater Model	Nominal Output (kW)	Outlet Spigot	Dimensions W x H x L (mm)
LPHW3/1R	3.5	Ø 315 mm	585 x 400 x 490

Chilled Water Coil Bolt On Module

Cooler Model	Nominal Output (kW)	Outlet Spigot	Dimensions W x H x L (mm)
CW3/2R	2.0	Ø 315 mm	585 x 400 x 490

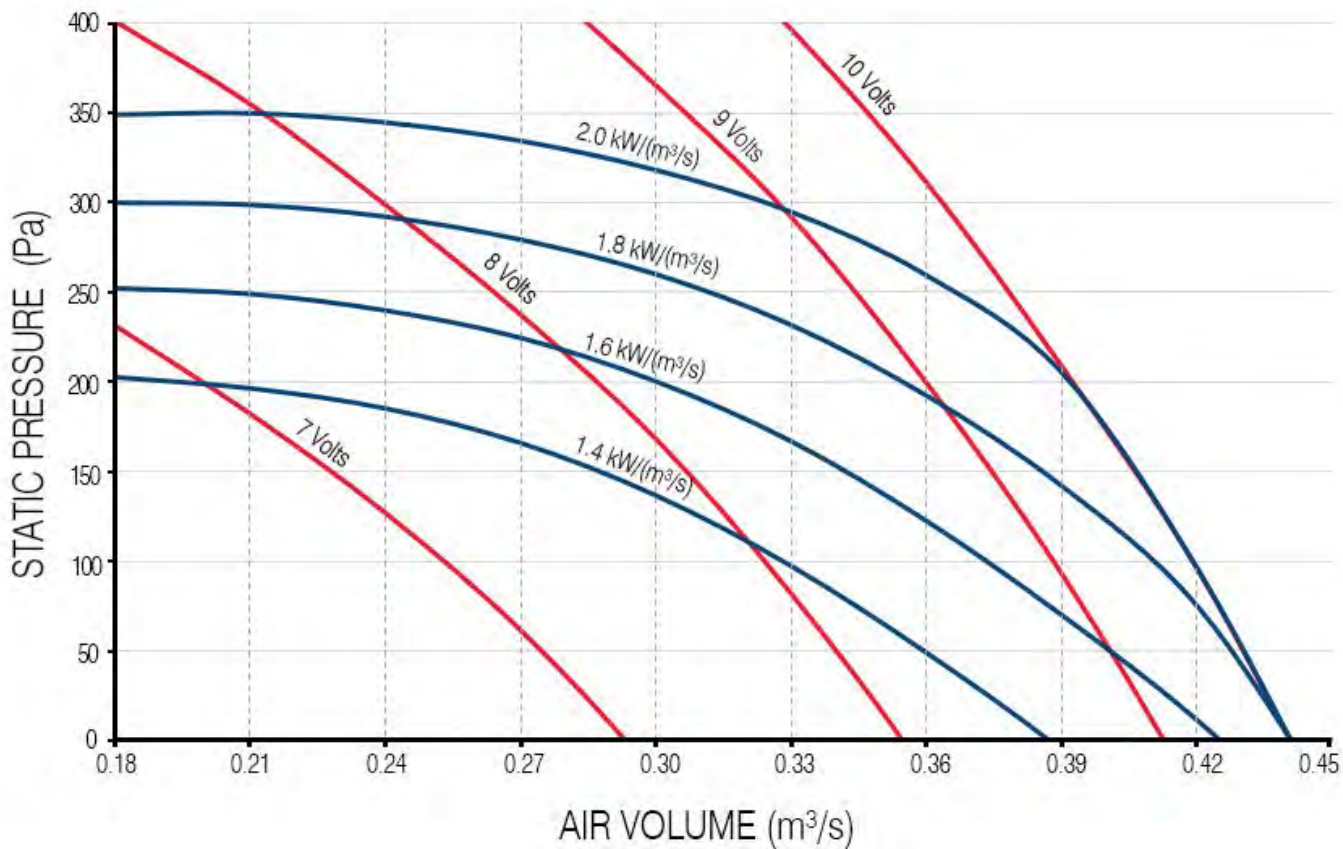
DX Heat Pump Coil Bolt On Module

Heater Model	Output (kW)	Refrigerant	Condenser	Inlet Spigot	Dimensions W x H x L (mm)
DXHP3/2R	2.5	R410A	SM564ATP-E	Ø 315 mm	585 x 400 x 490

DX Cooling only is possible using the DXHP Module



MVHR-4 Technical Data



Electrical Data

Motor Type	EC
Impeller	Backward curved
Max. power input (W)	2 x 500
Full load current (A)	2 x 2.20
Protection level : IP	IP54
Insulation class	B
Power supply	230 V AC, 1 ~ 50Hz

Acoustic Data

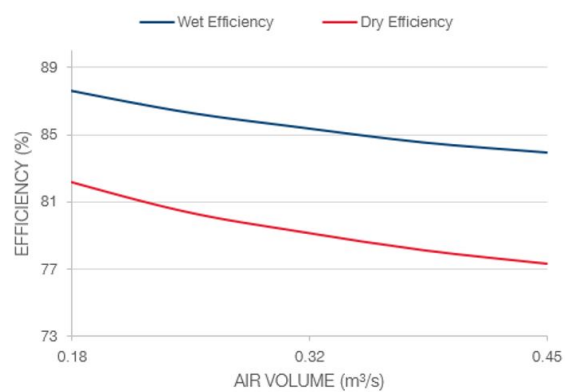
Duty Curve	Sound Power Lw In-Duct Levels (dB) AHU Air Inlet / Outlet Ducts								LpA
	125	250	500	1K	2K	4K	8K		
10 V	Inlet	72	73	76	76	75	71	69	45
	Outlet	76	78	81	81	80	76	74	
9 V	Inlet	69	72	74	74	73	69	66	44
	Outlet	74	77	79	79	78	74	71	
8 V	Inlet	67	70	70	70	68	65	61	40
	Outlet	72	75	75	75	74	70	66	
7 V	Inlet	66	67	67	67	65	61	56	37
	Outlet	71	72	72	72	70	66	61	

Inlet - fresh air and extract air inlet duct. **Outlet** - supply air and exhaust air outlet duct. Sound power levels are calculated from the fan pressure level measured at a distance of 1m in conformity to DIN 45635 and ISO 3744/3745 according to precision class 2.

Counterflow Heat Exchanger Data - Winter

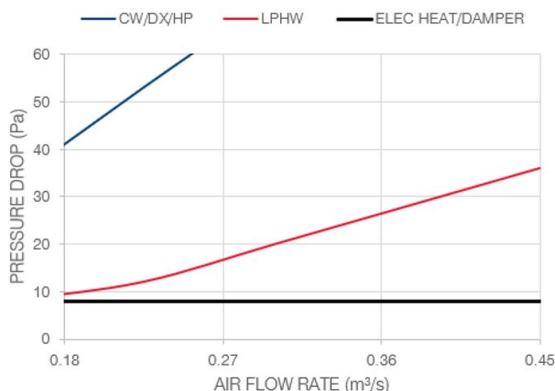
		Supply Air	Extract Air
Inlet Condition	Temperature	-5°C	21°C
	Relative Humidity	100%	50%

Counterflow Efficiency



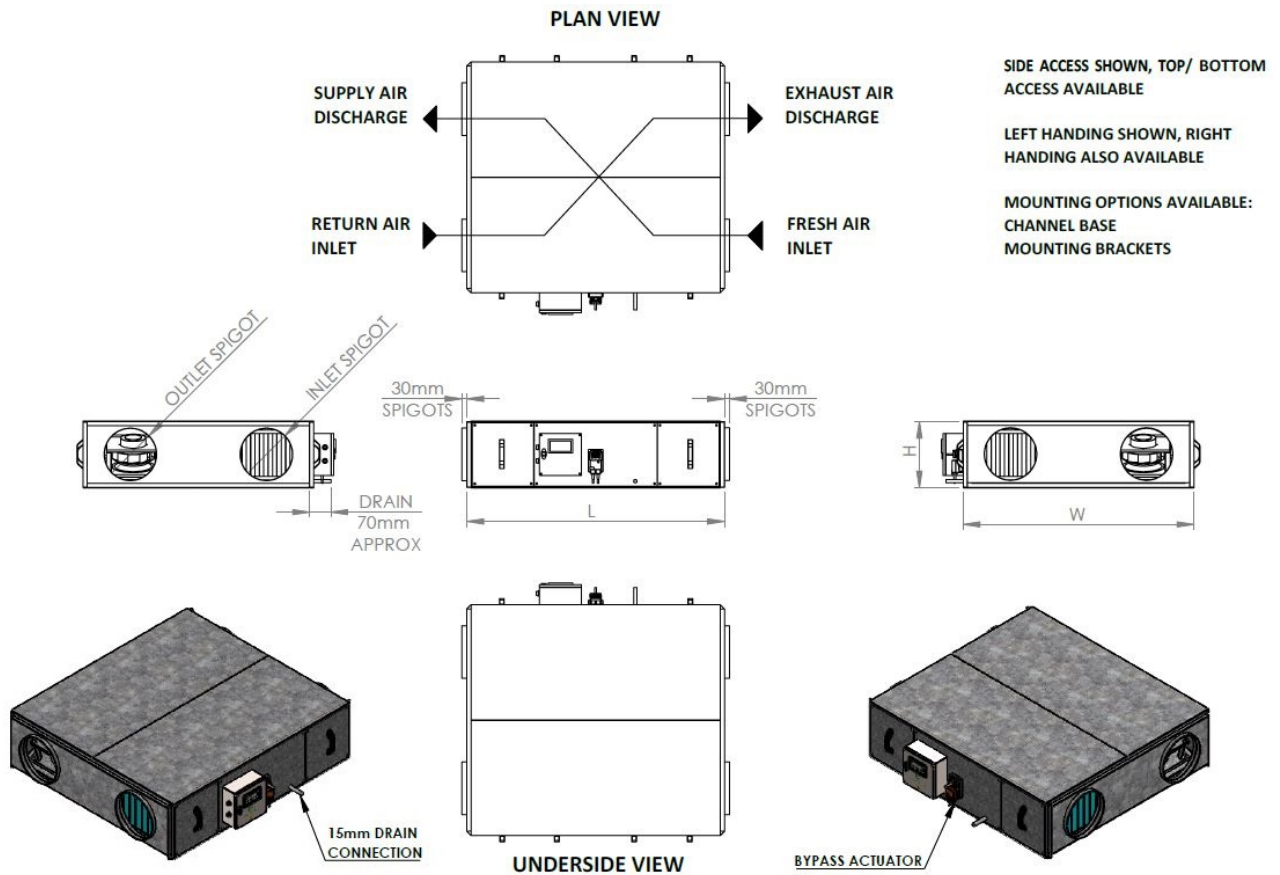
ERP2018 compliant
Nominal duty : 0.39m³/s @ 100Pa ; 0.94kW/m³/s

Bolt On Module Pressure Drops





MVHR-4 Dimensions, Weight & Technical Data



Unit Dimensions

Width	Height	Length	Inlet Spigot	Outlet Spigot	Weight
1375mm	400mm	1535mm	Ø 315 mm	Ø 315 mm	215 kg

Electric Heater Battery Bolt On Module (On/Off Control)

Heater Model	Output (kW)	Power Supply	Nom. Current (A)	Inlet Spigot	Dimensions W x H x L (mm)
EAHBO4/3.0	3.0	230V/1PH/50Hz	13.0	Ø 315 mm	585 x 400 x 490

Electric Heater Battery Bolt On Module (Thyristor Control)

Heater Model	Output (kW)	Power Supply	Nom. Current (A)	Inlet Spigot	Dimensions W x H x L (mm)
EAHBT4/3.5	3.5	230V/1PH/50Hz	15.2	Ø 315 mm	585 x 400 x 490

Low Pressure Hot Water Coil Bolt On Module

Heater Model	Nominal Output (kW)	Outlet Spigot	Dimensions W x H x L (mm)
LPHW4/1R	3.5	Ø 315 mm	585 x 400 x 490

Chilled Water Coil Bolt On Module

Cooler Model	Nominal Output (kW)	Outlet Spigot	Dimensions W x H x L (mm)
CW4/2R	2.0	Ø 315 mm	585 x 400 x 490

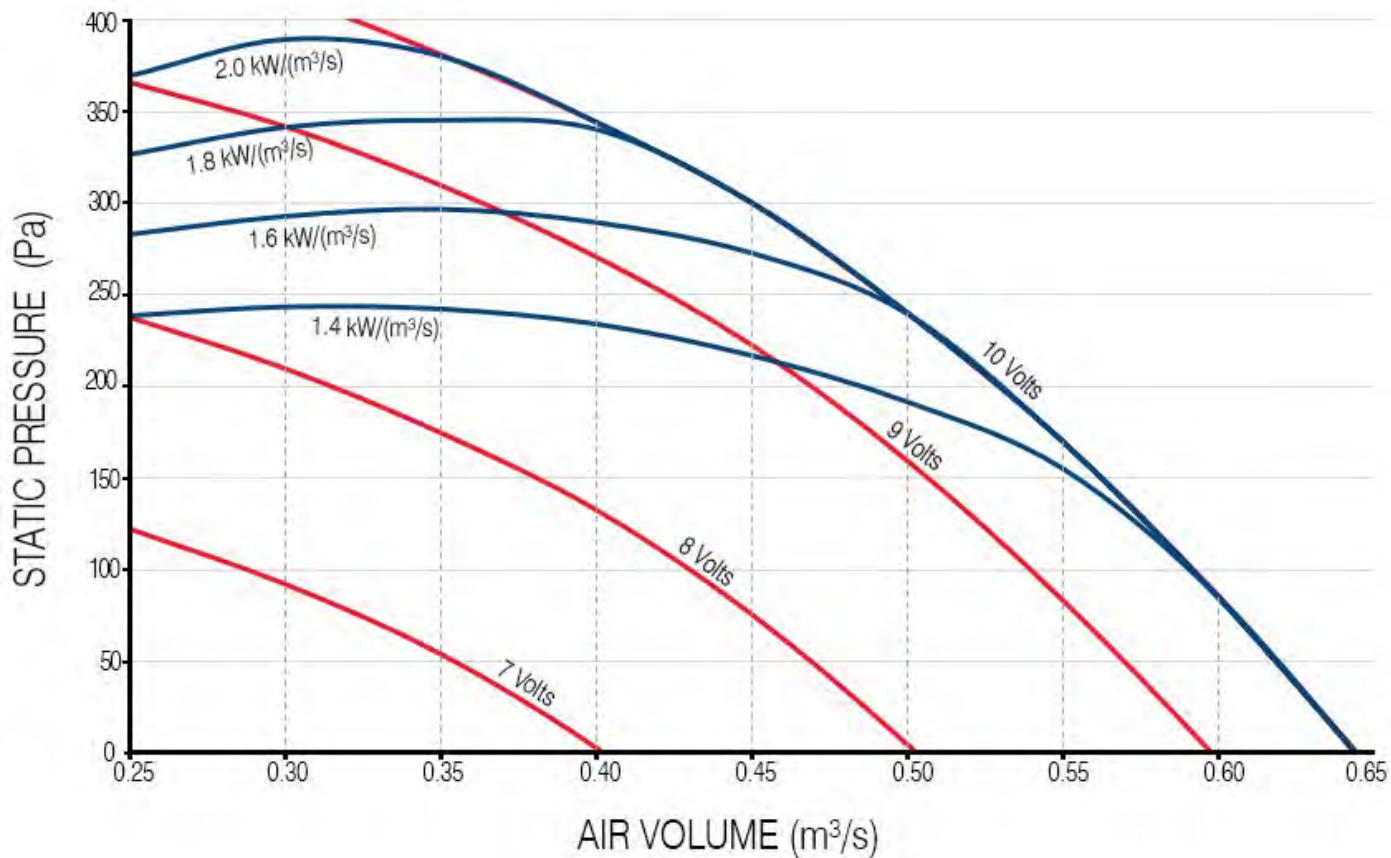
DX Heat Pump Coil Bolt On Module

Heater Model	Output (kW)	Refrigerant	Condenser	Inlet Spigot	Dimensions W x H x L (mm)
DXHP4/2R	3.0	R410A	SM564ATP-E	Ø 315 mm	585 x 400 x 490

DX Cooling only is possible using the DXHP Module



MVHR-5 Technical Data



Electrical Data

Motor Type	EC
Impeller	Backward curved
Max. power input (W)	2 x 500
Full load current (A)	2 x 2.20
Protection level : IP	IP54
Insulation class	B
Power supply	230 V AC, 1 ~ 50Hz

Acoustic Data

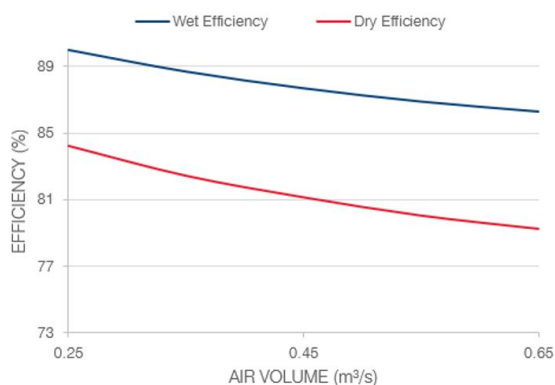
Duty Curve	Sound Power Lw In-Duct Levels (dB) AHU Air Inlet / Outlet Ducts								LpA
	125	250	500	1K	2K	4K	8K		
10 V	Inlet	72	74	72	70	67	67	64	42
	Outlet	77	79	77	75	72	72	69	
9 V	Inlet	71	72	71	68	66	65	61	41
	Outlet	76	77	76	73	71	70	66	
8 V	Inlet	69	69	68	65	62	60	55	38
	Outlet	74	74	73	70	67	65	60	
7 V	Inlet	66	66	65	62	59	57	51	35
	Outlet	71	71	70	67	64	62	56	

Inlet - fresh air and extract air inlet duct. **Outlet** - supply air and exhaust air outlet duct. Sound power levels are calculated from the fan pressure level measured at a distance of 1m in conformity to DIN 45635 and ISO 3744/3745 according to precision class 2.

Counterflow Heat Exchanger Data - Winter

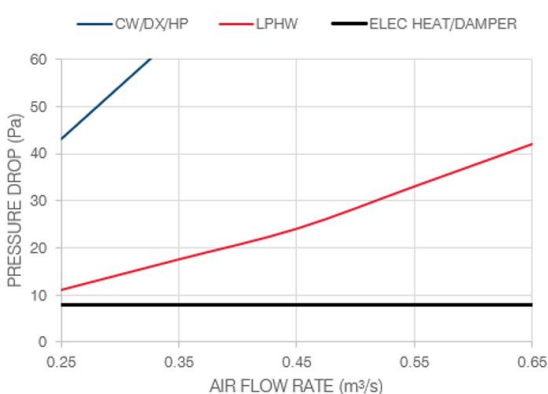
		Supply Air	Extract Air
Inlet Condition	Temperature	-5°C	21°C
	Relative Humidity	100%	50%

Counterflow Efficiency



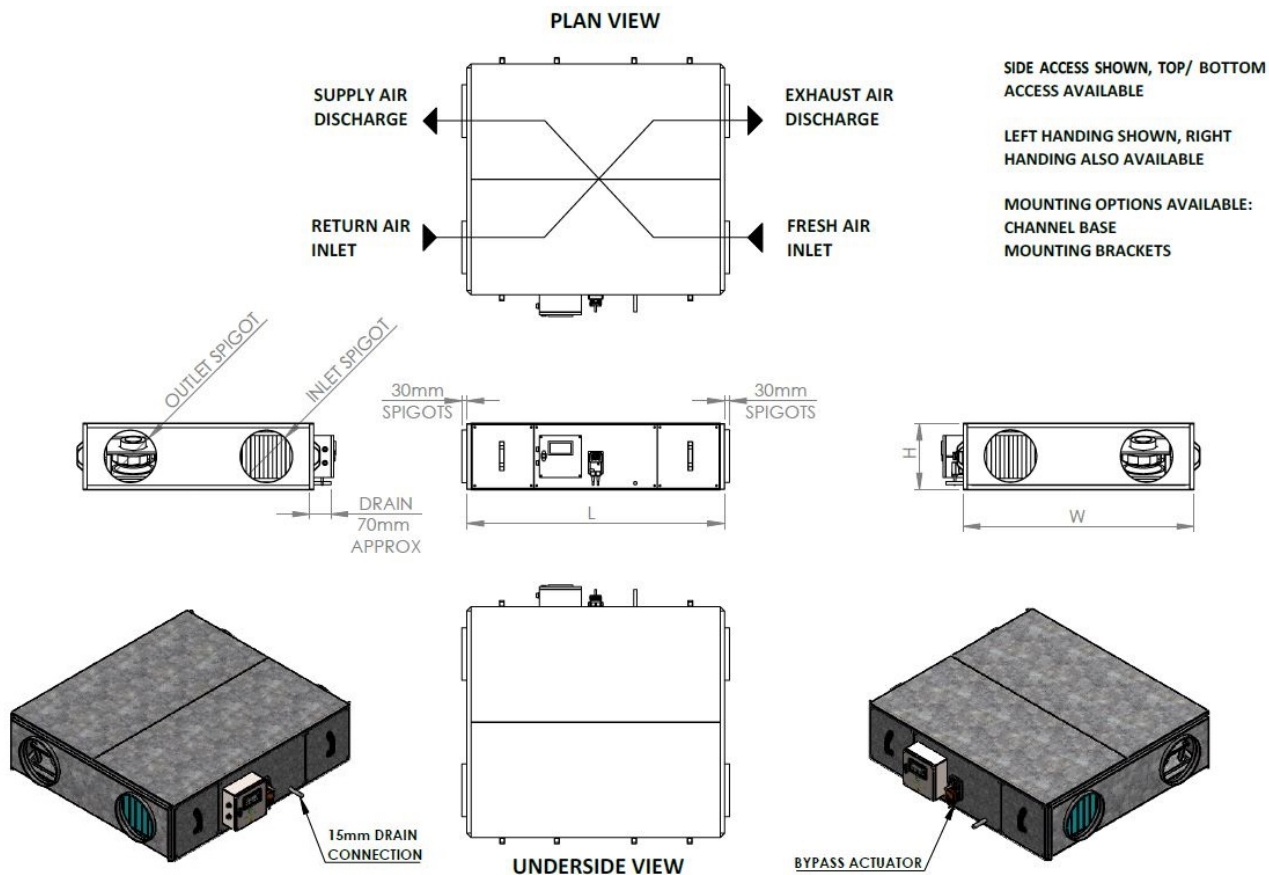
ERP2018 compliant
Nominal duty : 0.55m³/s @ 100Pa ; 0.654kW/m³/s

Bolt On Module Pressure Drops





MVHR-5 Dimensions, Weight & Technical Data



Unit Dimensions

Width	Height	Length	Inlet Spigot	Outlet Spigot	Weight
1635mm	480mm	1950mm	Ø 400 mm	Ø 400 mm	305 kg

Electric Heater Battery Bolt On Module (On/Off Control)

Heater Model	Output (kW)	Power Supply	Nom. Current (A)	Inlet Spigot	Dimensions W x H x L (mm)
EAHBO5/5.0	5.0	230V/1PH/50Hz	21.7	Ø 400 mm	585 x 480 x 490

Electric Heater Battery Bolt On Module (Thyristor Control)

Heater Model	Output (kW)	Power Supply	Nom. Current (A)	Inlet Spigot	Dimensions W x H x L (mm)
EAHBT5/6.0	6.0	230V/1PH/50Hz	26.0	Ø 400 mm	585 x 480 x 490

Low Pressure Hot Water Coil Bolt On Module

Heater Model	Nominal Output (kW)	Outlet Spigot	Dimensions W x H x L (mm)
LPHW5/1R	6.5	Ø 400 mm	585 x 480 x 490

Chilled Water Coil Bolt On Module

Cooler Model	Nominal Output (kW)	Outlet Spigot	Dimensions W x H x L (mm)
CW5/2R	3.0	Ø 400 mm	585 x 480 x 490

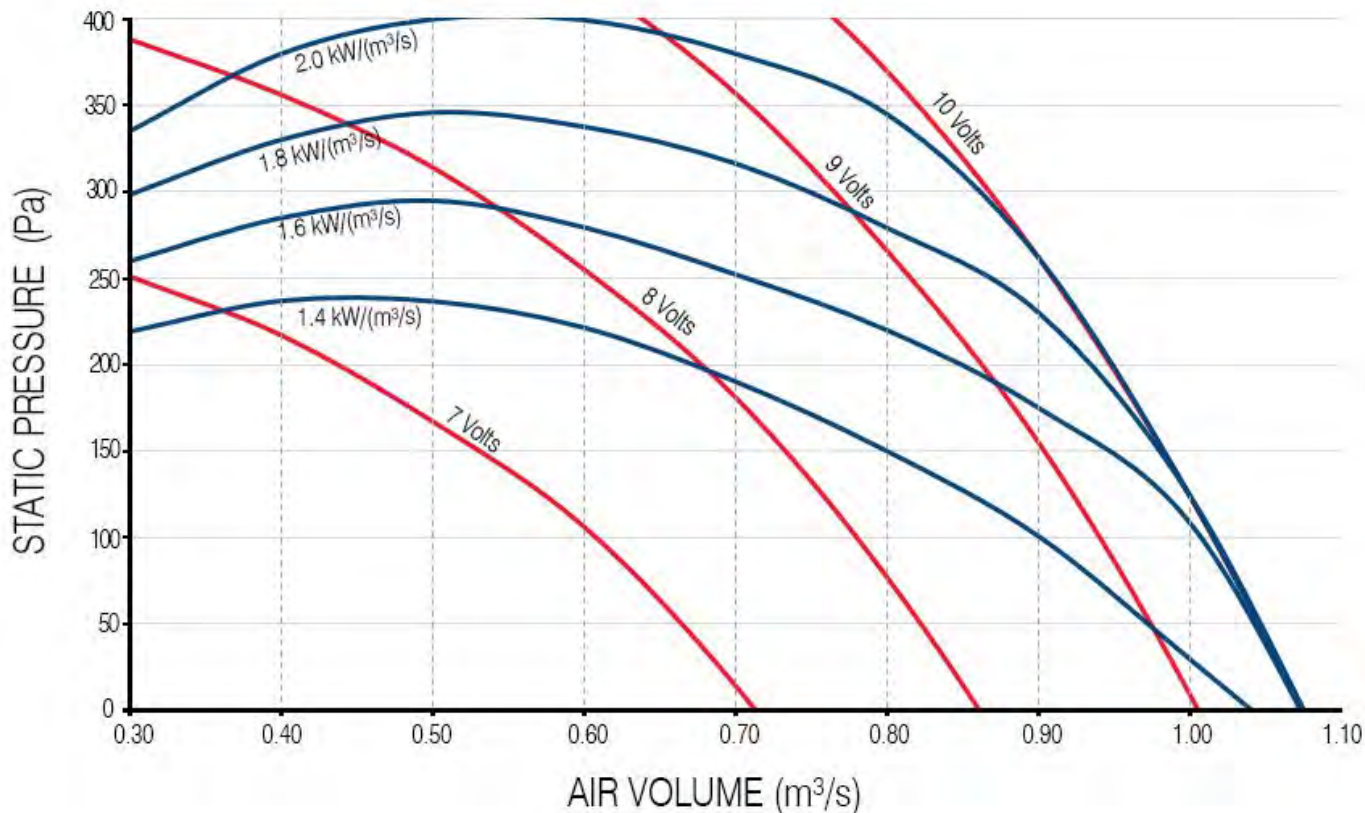
DX Heat Pump Coil Bolt On Module

Heater Model	Output (kW)	Refrigerant	Condenser	Inlet Spigot	Dimensions W x H x L (mm)
DXHP5/2R	3.5	R410A	SM804ATP-E	Ø 400 mm	585 x 480 x 490

DX Cooling only is possible using the DXHP Module



MVHR-6 Technical Data



Electrical Data

Motor Type	EC
Impeller	Backward curved
Max. power input (W)	2 x 1000
Full load current (A)	2 x 1.63
Protection level : IP	IP54
Insulation class	B
Power supply	400 V AC, 3 ~ 50Hz

Acoustic Data

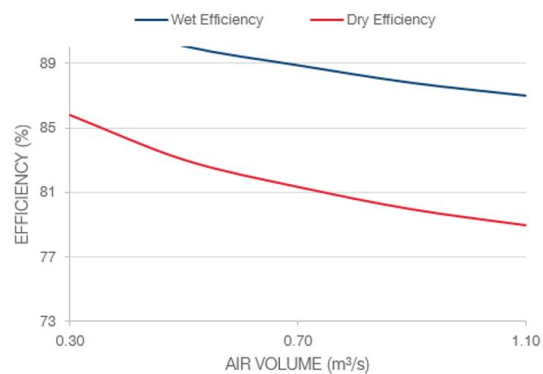
Duty Curve	Sound Power Lw In-Duct Levels (dB) AHU Air Inlet / Outlet Ducts								
	125	250	500	1K	2K	4K	8K	LpA	
10 V	Inlet	66	75	74	71	73	71	69	42
	Outlet	67	74	76	80	80	77	74	
9 V	Inlet	64	74	72	69	71	70	67	41
	Outlet	66	72	75	79	78	75	71	
8 V	Inlet	64	69	69	67	69	67	62	38
	Outlet	65	71	72	77	75	72	67	
7 V	Inlet	63	66	66	64	66	63	58	35
	Outlet	65	68	69	74	72	70	63	

Inlet - fresh air and extract air inlet duct. **Outlet** - supply air and exhaust air outlet duct. Sound power levels are calculated from the fan pressure level measured at a distance of 1m in conformity to DIN 45635 and ISO 3744/3745 according to precision class 2.

Counterflow Heat Exchanger Data - Winter

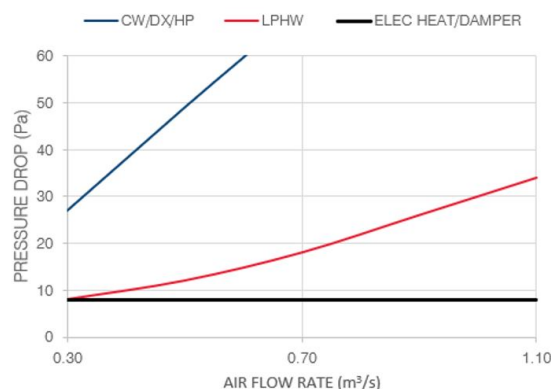
		Supply Air	Extract Air
Inlet Condition	Temperature	-5°C	21°C
	Relative Humidity	100%	50%

Counterflow Efficiency



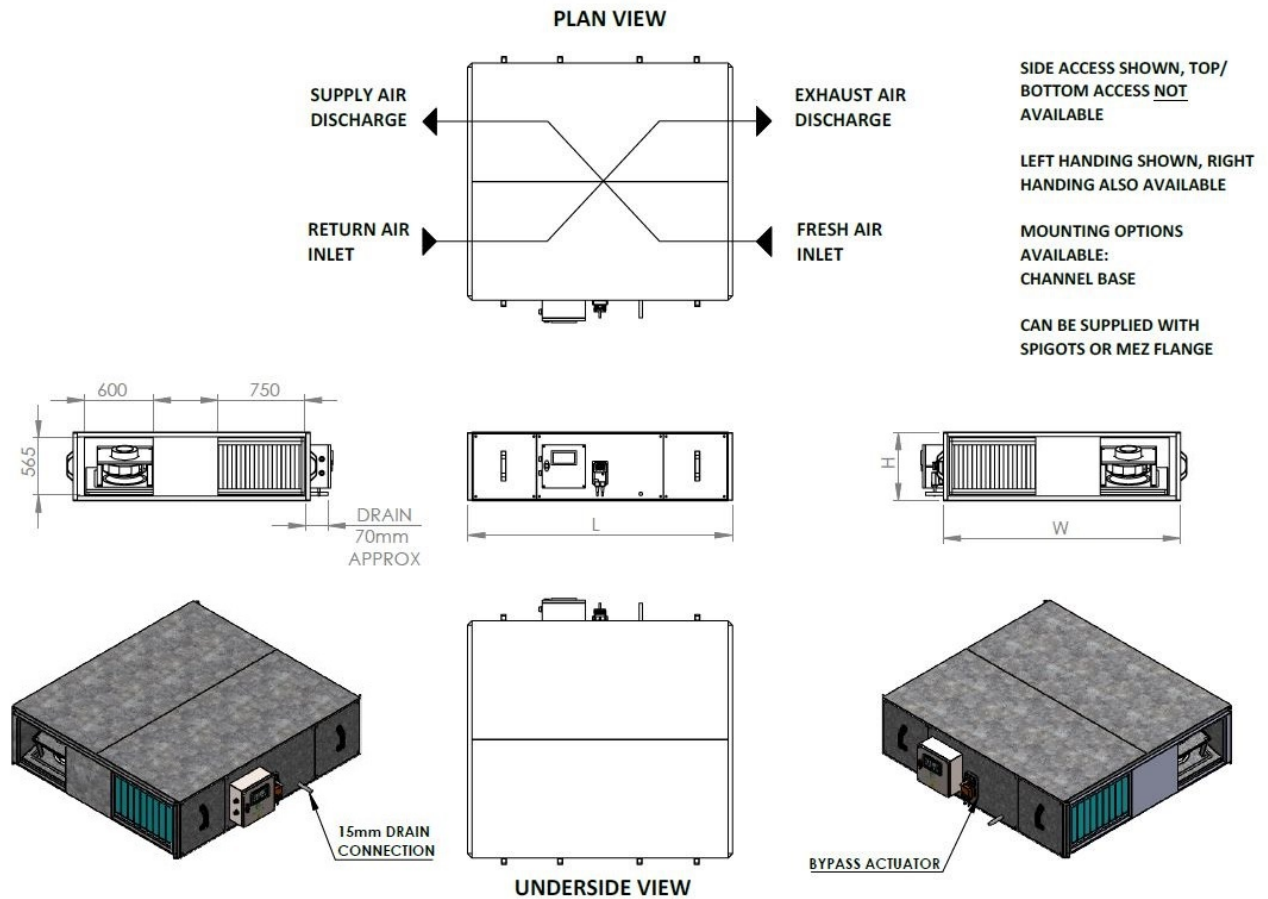
ERP2018 compliant
Nominal duty : 0.90m³/s @ 100Pa ; 1.153kW/m³/s

Bolt On Module Pressure Drops





MVHR-6 Dimensions, Weight & Technical Data



Unit Dimensions

Width	Height	Length	Inlet Spigot	Outlet Spigot	Weight
1665mm	715mm	2155mm	750 x 565 mm	600 x 565 mm	400 kg

Electric Heater Battery Bolt On Module (On/Off Control)

Heater Model	Output (kW)	Power Supply	Nom. Current (A)	Inlet Spigot	Dimensions W x H x L (mm)
EAHBO6/9.0	9.0	230V/1PH/50Hz	39.1	750 x 565 mm	720 x 615 x 490

Electric Heater Battery Bolt On Module (Thyristor Control)

Heater Model	Output (kW)	Power Supply	Nom. Current (A)	Inlet Spigot	Dimensions W x H x L (mm)
EAHBT6/9.0	9.0	230V/1PH/50Hz	39.1	600 x 565 mm	720 x 615 x 490

Low Pressure Hot Water Coil Bolt On Module

Heater Model	Nominal Output (kW)	Outlet Spigot	Dimensions W x H x L (mm)
LPHW6/1R	10.0	600 x 565 mm	720 x 615 x 490

Chilled Water Coil Bolt On Module

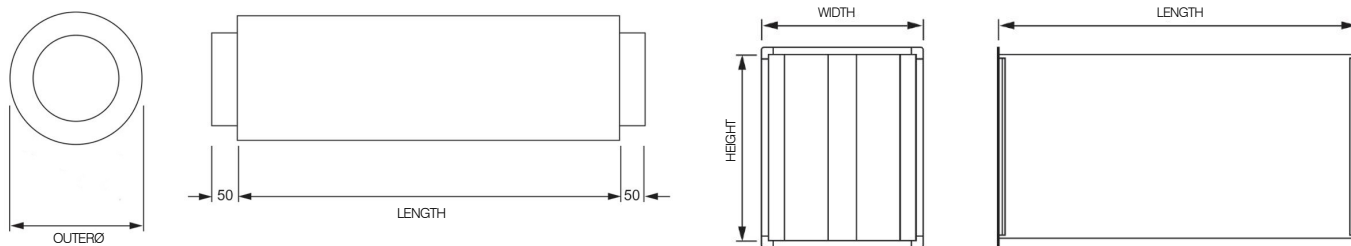
Cooler Model	Nominal Output (kW)	Outlet Spigot	Dimensions W x H x L (mm)
CW6/2R	4.5	600 x 565 mm	720 x 615 x 490

DX Heat Pump Coil Bolt On Module

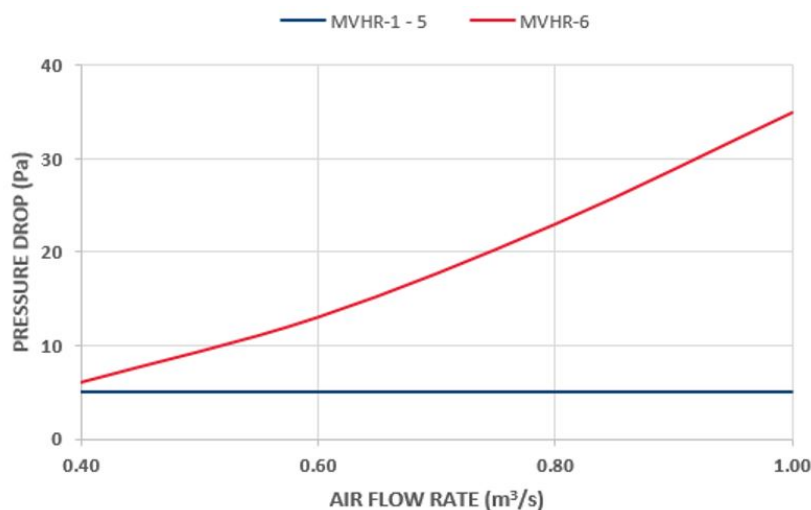
Heater Model	Output (kW)	Refrigerant	Condenser	Inlet Spigot	Dimensions W x H x L (mm)
DXHP6/2R	4.5	R410A	SM804ATP-E	600 x 565 mm	720 x 615 x 490

DX Cooling only is possible using the DXHP Module

Duct Silencers



All silencers are matched to MVHR connection sizes. Circular silencers have minimal pressure drop due to being straight through type. MVHR-6 uses rectangular silencers and therefore has a pressure profile as below curve:

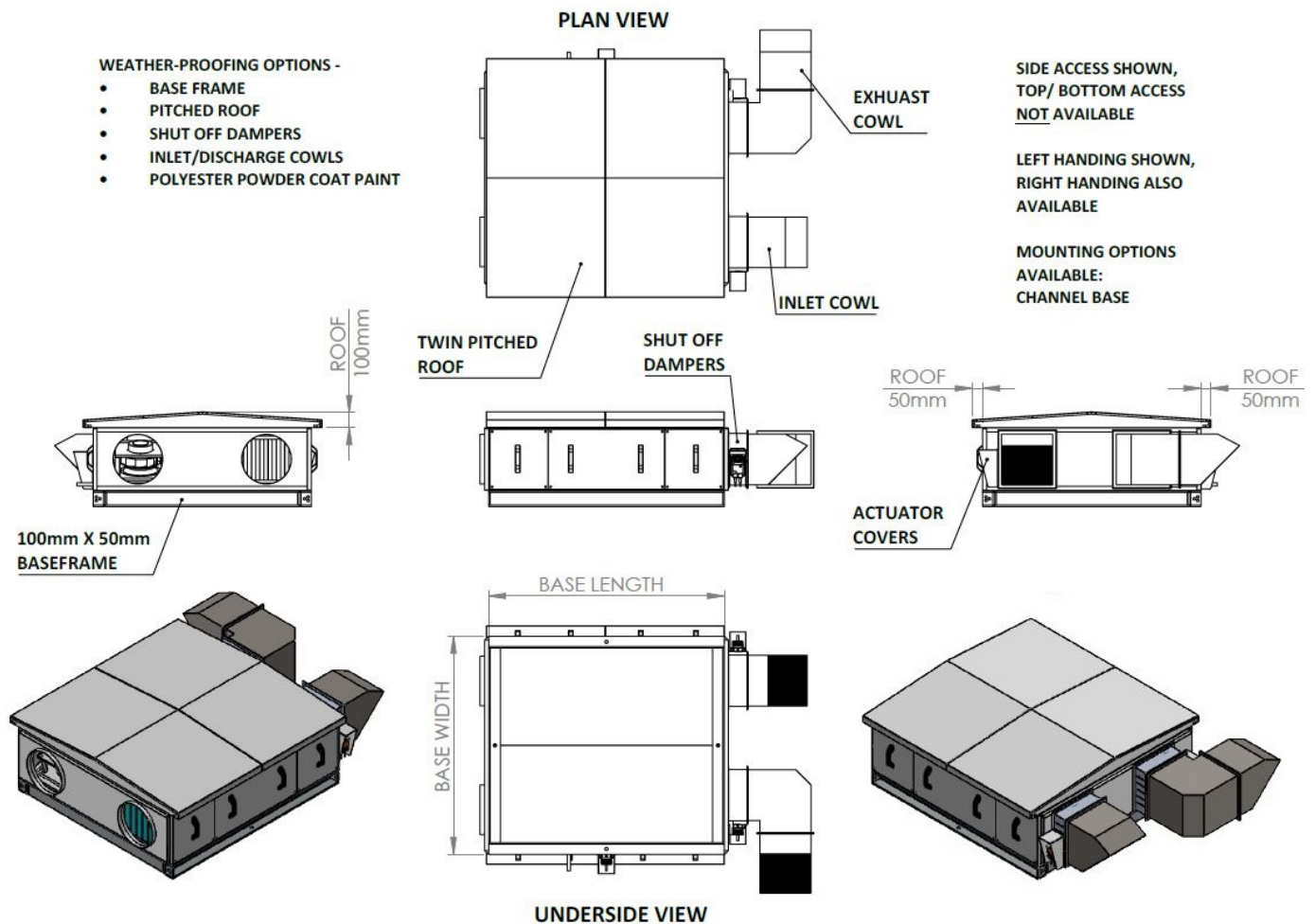


Attenuator Insertion Losses

MODEL	INSERTION LOSSES (dB)							DETAILS	
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	OUTER Ø	WEIGHT
MVHR-1 - 200Ø - 615 Long	3	7	14	29	21	16	15	310	8
MVHR-1 - 200Ø - 915 Long	4	10	20	38	27	19	18		12
MVHR-1 - 200Ø - 1215 Long	4	12	25	47	33	22	21		15
MVHR-2 - 250Ø - 615 Long	2	5	12	27	17	13	13	360	10
MVHR-2 - 250Ø - 915 Long	3	7	17	36	21	15	15		14
MVHR-2 - 250Ø - 1215 Long	4	9	23	45	26	18	17		18
MVHR-3 - 315Ø - 615 Long	2	4	11	22	13	11	10	425	12
MVHR-3 - 315Ø - 915 Long	2	6	15	30	16	13	12		17
MVHR-3 - 315Ø - 1215 Long	3	8	19	38	18	15	14		21
MVHR-4 - 315Ø - 615 Long	2	4	11	22	13	11	10	425	12
MVHR-4 - 315Ø - 915 Long	2	6	15	30	16	13	12		17
MVHR-4 - 315Ø - 1215 Long	3	8	19	38	18	15	14		21
MVHR-5 - 400Ø - 615 Long	2	4	9	15	7	7	6	510	14
MVHR-5 - 400Ø - 915 Long	2	5	12	19	9	9	7		20
MVHR-5 - 400Ø - 1215 Long	2	6	16	24	10	10	9		26
MVHR-6 - 600 x 565 x 650 Long	7	14	22	17	13	10	7	N/A	32
MVHR-6 - 750 x 565 x 650 Long	7	14	22	17	13	10	7		38
MVHR-6 - 600 x 565 x 950 Long	10	18	29	23	16	12	8		43
MVHR-6 - 750 x 565 x 950 Long	10	18	29	23	16	12	8		51
MVHR-6 - 600 x 565 x 1250 Long	12	22	36	30	20	13	9		54
MVHR-6 - 750 x 565 x 1250 Long	12	22	36	30	20	13	9		65



External MVHR Dimensions



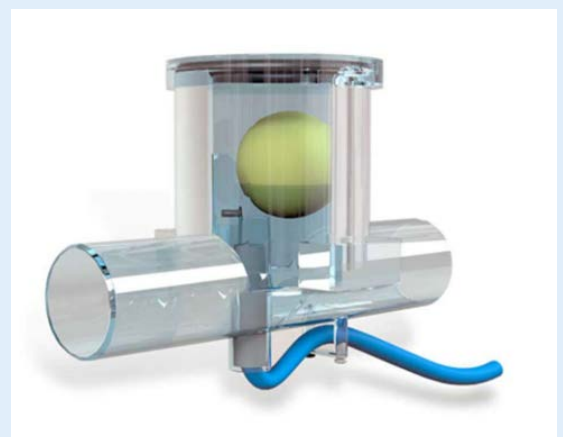
MODEL	Unit Length	Unit Width	Unit Height	Cowl Length	Roof Height	Base Length	Base Width	Total Length	Total Width	Total Height	Weight kg
MVHR-1	1225	750	306	250	85	1175	750	1545	790	491	100
MVHR-2	1407	795	358	300	115	1357	795	1777	835	573	155
MVHR-3	1537	1375	393	365	120	1487	1375	1972	1415	613	310
MVHR-4	1537	1375	393	365	120	1487	1375	1972	1415	613	310
MVHR-5	1972	1630	478	450	125	1892	1630	2462	1670	703	400
MVHR-6	2155	1665	715	500	130	2105	1665	2725	1705	945	580

ECE-MVHR Drain Trap

Built-in ball valve effectively traps the drainage system in the absence of condensate. It is easy to install and maintain. When connecting socket with pipe work, socket should be moistened with water and soap. Each ECE-MVHR condensate drain system should be provided with a separate siphon.

Casing Constructed to the following classes in accordance with BS EN1886:2007:

- Used by many European major manufacturers
- The size is very compact no additional height required
- It works in both -ve and +ve pressure conditions
- Suitable for most HVAC pressures – customer dry pressure tests up to 1500Pa +ve / -ve
- Available in Grey or Clear plastic
- Connection size 32 mm OD – 2x transformation to 40mm available as extra
- Supplied with sealing cap inner sealing ring, fixing bracket and heater cable screws / retainer
- It is possible to add a heater at 230 V or 24 V to avoid freezing
- Please note: Not included as standard and can be supplied loose for fitting by others at an additional cost.



Did you know...?

- Our MVHR's contain Counter-flow heat exchangers with summer bypass offering up to 95% efficiency.
- Highly efficient EC Fans offering great energy saving solutions.
- Low specific fan power helps to achieve Part L2 building compliance.
- All MVHR units come complete with F7 supply and M5 return panel filters as standard.
- Low height offering space saving solutions, starting from 310mm high.
- The ECE-Tech controller is fully expandable to suit your project requirements, up to 2060 Digital I/O and 511 Analogue I/O ports.
- The controller facilitates the use of BACnet and Modbus.
- External Units not available with bottom or top access.
- Dampers need to be selected if using LPHW or CHW coils.
- Dampers come complete with spring return actuators.
- Where controls are fitted, filter pressure switches and bypass actuators are included.
- Cooling only available up to 2.5m/s coil velocity, so the MVHR may require oversizing to use a cooling bolt on. Eliminators fitted as standard.
- ECE offers a large variety of stock items that enable you to keep your unit, running throughout its lifetime. Single click Basket for consumables with Anything Air Handling, our Spares & Parts shop www.aahuk.com
- We also offer a bespoke design option for any projects that might not currently fit into our standard range of products.

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