

XCHANGE Energy Recovery

XCM-COMPACT MULTIFLOW ERV

XCM225P1 Technical Data



Technical Specifications

Nominal Airflow

Supply Air (l/sec)	205
Return Air (l/sec)	205

Supply Fan

Fan Type	EC Plug Fan
Fan Motor	EC External Rotor
Motor Power (Watts)	300
External Static (Pa)	215
Fan Diameter	190
Motor Start	Soft Start
Control Input	0-10V DC
Motor Protection	Thermal Overload

Exhaust Fan

Fan Type	EC Plug Fan
Fan Motor	EC External Rotor
Motor Power (Watts)	300
External Static (Pa)	215
Fan Diameter	190
Motor Start	Soft Start
Control Input	0-10V DC
Motor Protection	Thermal Overload

Electrical

Supply Fan (A)	1.0
Exhaust Fan (A)	1.0
Nominal Run Current (A)	2.0
Maximum Full Load (A)	3.0
Volt/Phase	240V/1ph
Connection	Lead & Plug

Controls

0-10V DC (Fan Control)	Included
24V AC Control	Included
Fan Fault	Not Available

Heat Exchanger

*Rated at standard conditions of 35.5° db/24.0° wb

Enthalpy Media	Standard (Model XCM225P1E)
Sensible Media	Available (Model XCM225P1S)
Corrosion Resistant Media	Available
Velocity (m/sec)	1.41
Pressure Drop (Pa)	146.6
Kw Recovered (Cooling)*	3.60
Kw Recovered (Heating)*	4.81

Cabinet Construction

Casing	Galvanised Metal
Insulation Thickness (mm)	15/25
Hanging Brackets	Included

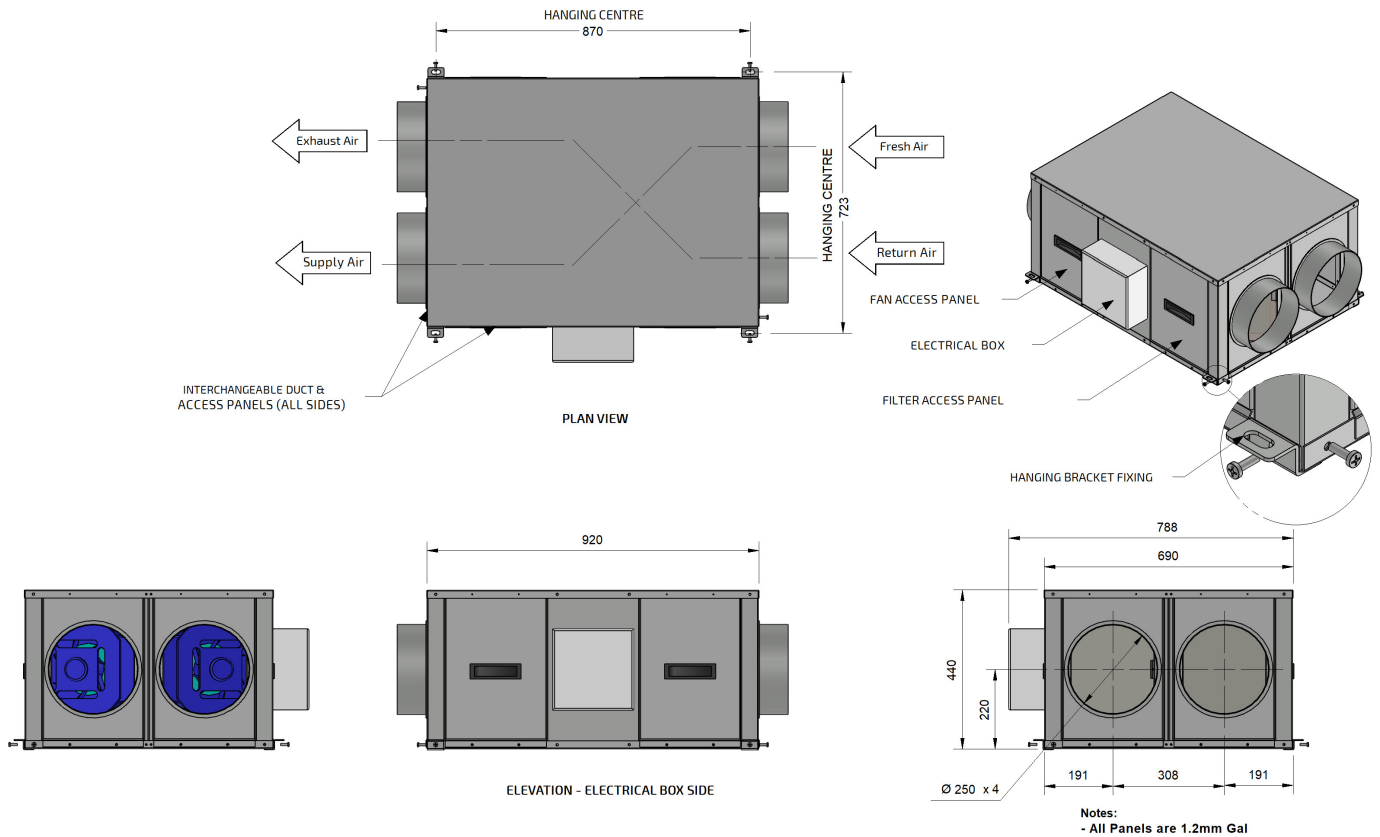
Filters

Type	45mm V Form Panel - G4
Disposable / Washable	Disposable
Size L x W x D (mm)	395 x 395 x 45
Number of Filters	2

Options

Internal Drain Tray	Available (Model XCM225P1-T)
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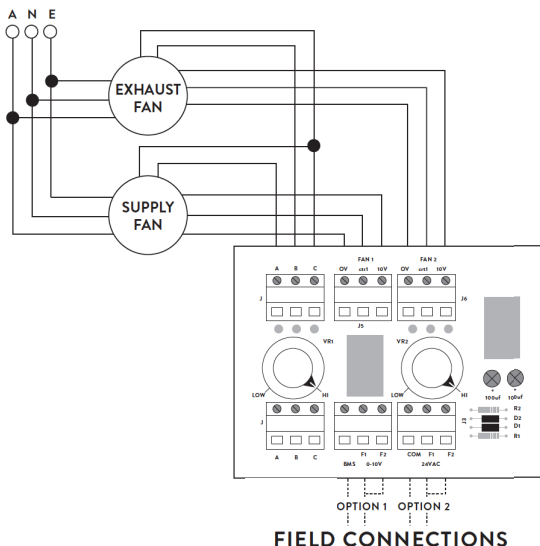
Technical Drawings – XCM225P1



Dimensions	
Height (mm)	440
Width (mm)	690
Length (mm)	920
Weight (Kg)	80
Access Clearance (mm)	600 (Controls & Filter Access)
Access Clearance (mm)	600 (Filter Access)

Duct Sizes	
Exhaust Air (mm)	250 Ø
Return Air (mm)	250 Ø
Supply Air (mm)	250 Ø
Fresh Air (mm)	250 Ø

Wiring Diagram



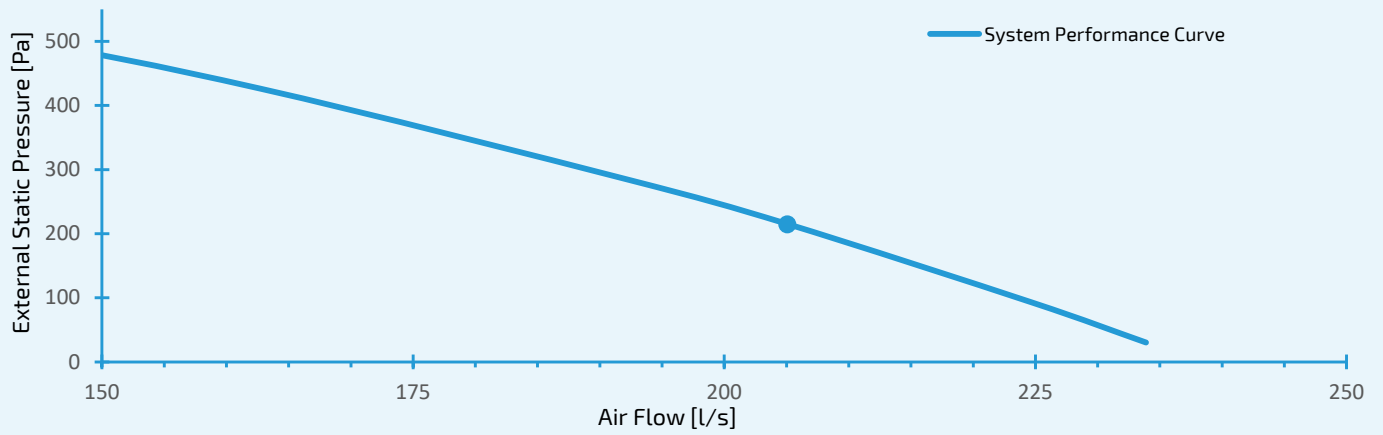
OPTION 1
 0-10V DC CONTROL VIA CONNECTION TO BMS
 0V = STOP / 1.5V = START / 10V = FULL SPEED

OPTION 2
 24V AC ENABLE REGULATE FAN SPEED VIA POTS
 EXTERNAL 24V PROVIDED BY OTHERS

Do not turn main power on/off to enable/disable the unit operation. This must be done through the control circuit.

FAN FAULT NOT AVAILABLE.

Fan Performance Data

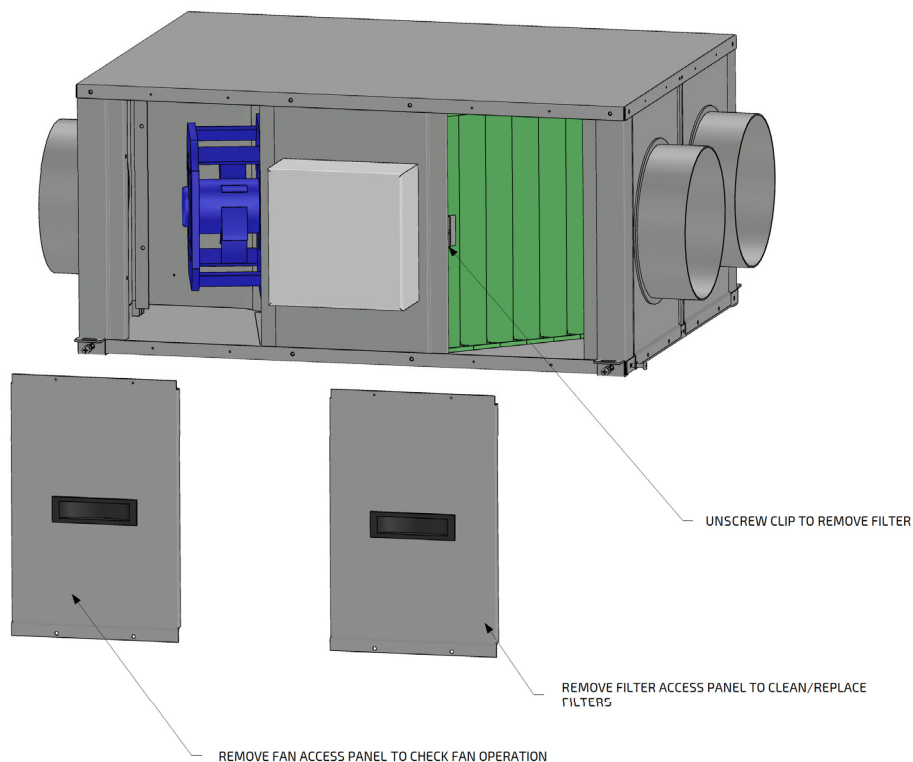


Sound Power Levels*

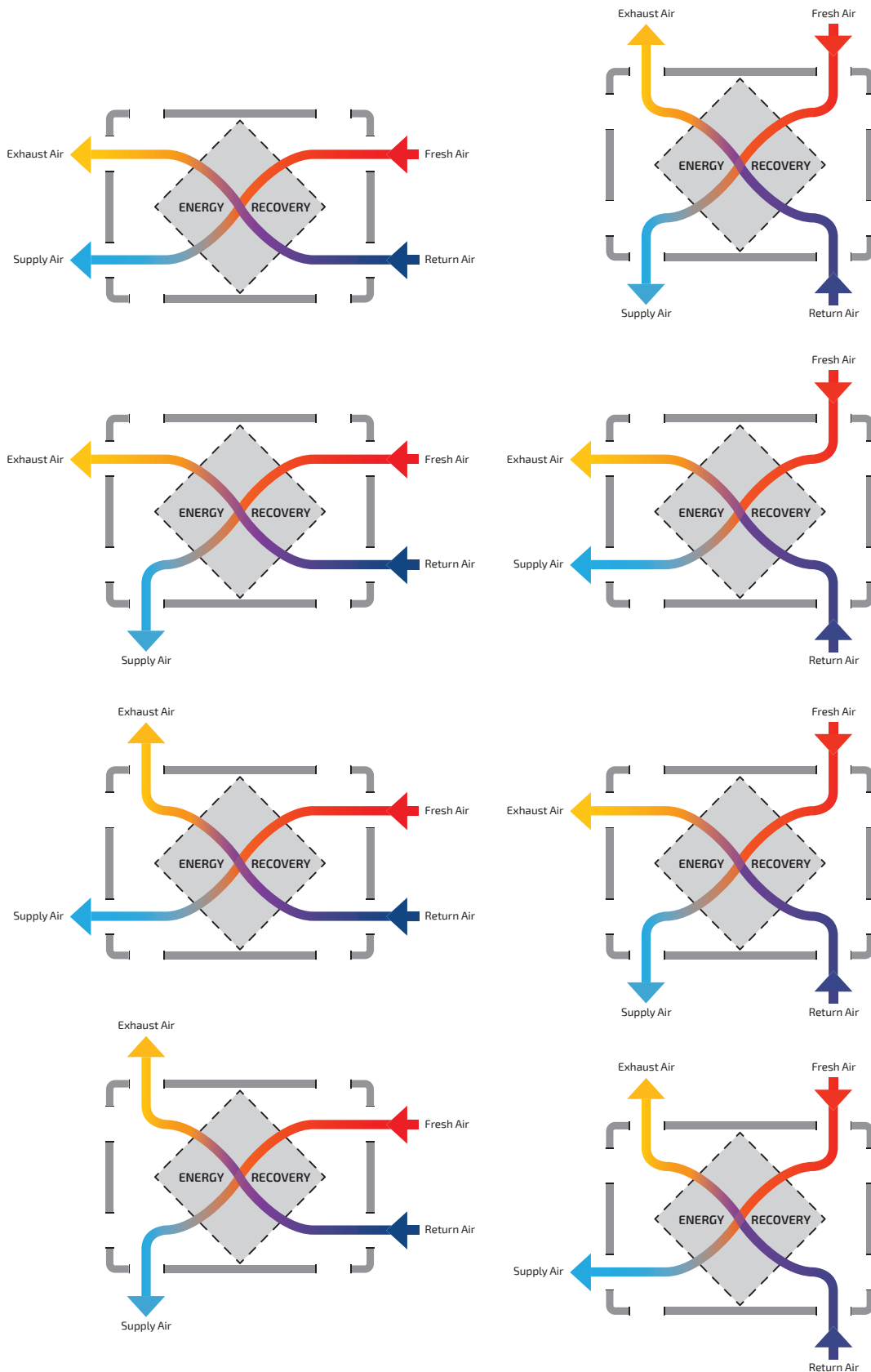
Inlet Rating dB		Outlet Rating dB	
63 Hz	69	63 Hz	71
125 Hz	62	125 Hz	64
250 Hz	68	250 Hz	70
500 Hz	78	500 Hz	80
1k Hz	70	1k Hz	72
2k Hz	62	2k Hz	64
4k Hz	53	4k Hz	55
8k Hz	62	8k Hz	64
LwA	79	LwA	81

* Sound Power Levels Recommended Operating Point.

Filter and Fan Access



Ductwork Connections



RETURN AIR: Air that is drawn from conditioned areas.

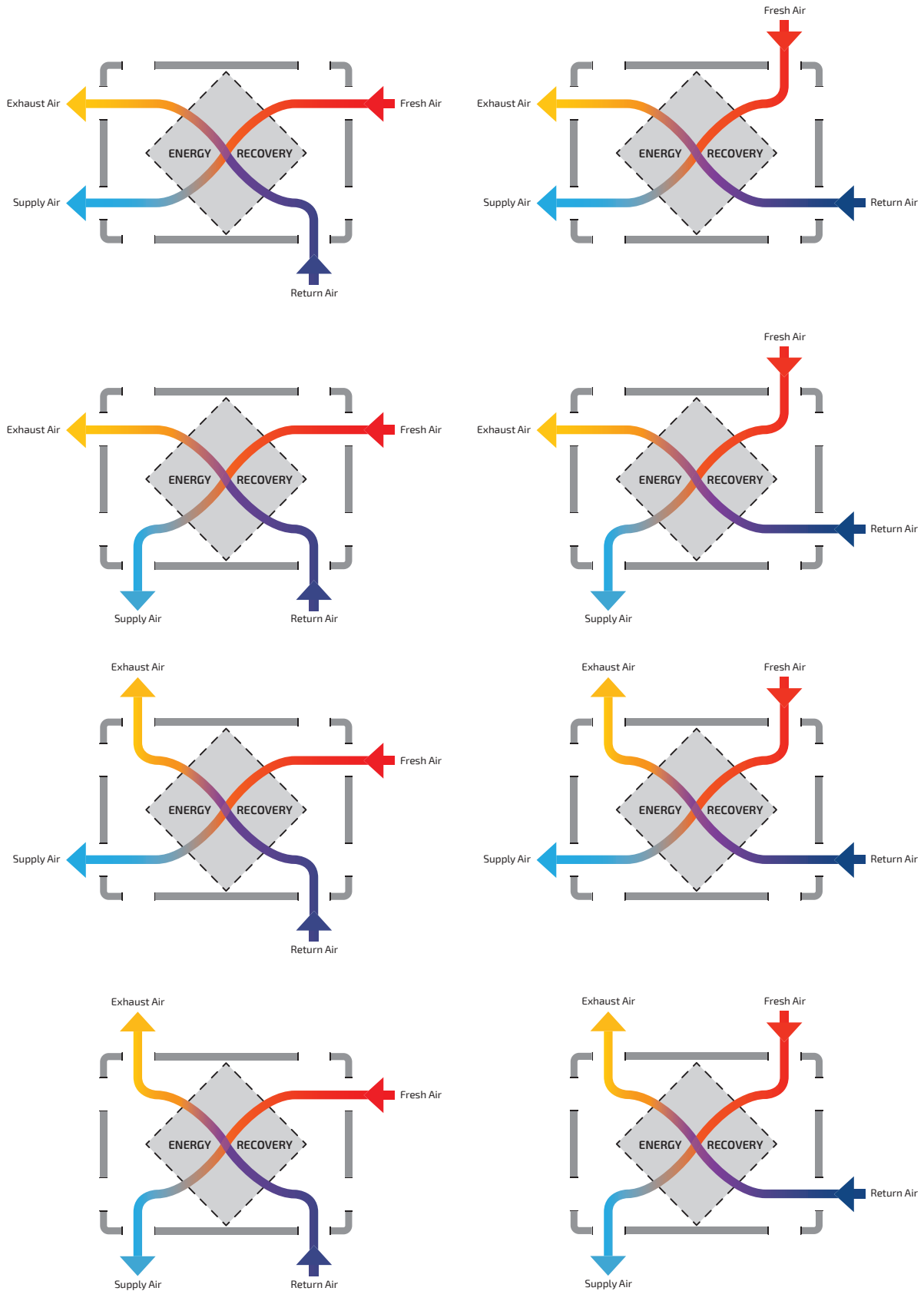
EXHAUST AIR: Ducted to outside the building or into the roof space if adequate ventilation to the outside air is available.

FRESH AIR: Use a fresh air cowl or grill to introduce fresh air.

SUPPLY AIR: Connect to the airconditioning system or directly into the conditioned area.

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