

ROTARY HEAT WHEEL ERV



External Mount Unit

REM500P1 Technical Data

Technical Specifications

Nominal Airflow

Supply Air (l/sec)	300 - 500
Exhaust Air (l/sec)	300 - 500
Return Air (l/sec)	300 - 500
Fresh Air (l/sec)	300 - 500

Supply Fan

Fan Type	EC Plug Fan
Motor Power (Watts)	750
External Static (Pa)	200
Fan Diameter	250
Number of Fans	1

Exhaust Fan

Fan Type	EC Plug
Motor Power (Watts)	750
External Static (Pa)	200
Fan Diameter	250
Number of Fans	1

Electrical

Supply Fan FLA (A)	3.0
Exhaust Fan FLA (A)	3.0
Rotary Wheel (A)	0.36 - 0.36 - 0.36
Nominal Run Current (A)	0.36 - 0.36 - 0.36
Volt/Phase	415V/3ph
Switchboard	Yes
Circuit Breakers	Yes

Controls

0-10V DC (Fan Control)	Included
24V AC Enable Heat Wheel	Included
Heat Wheel VSD	Included

Rotary Heat Wheel

*Rated at standard conditions of Summer 35.5° db/40% RH Winter 3° db/68%RH

Sensible Heat Wheel	Standard
Enthalpy Heat Wheel	Available
Wheel Diameter (mm)	705
Efficiency %	81.3
Size L x W x D (mm)	800 x 950 x 400
Media Face Velocity (m/sec)	2.6
Pressure Drop (Pa)	193
Kw Recovered (Cooling)*	7.42
Kw Recovered (Heating)*	12.44

Cabinet Construction

Casing	50mm Insulated Panel
Insulation Value	R2.0
Side Access Panels	Included

Filters

Type	Deep Bed Filters F6
Size L x W x D (mm)	610 x 305 x 380
Number of Filters	2

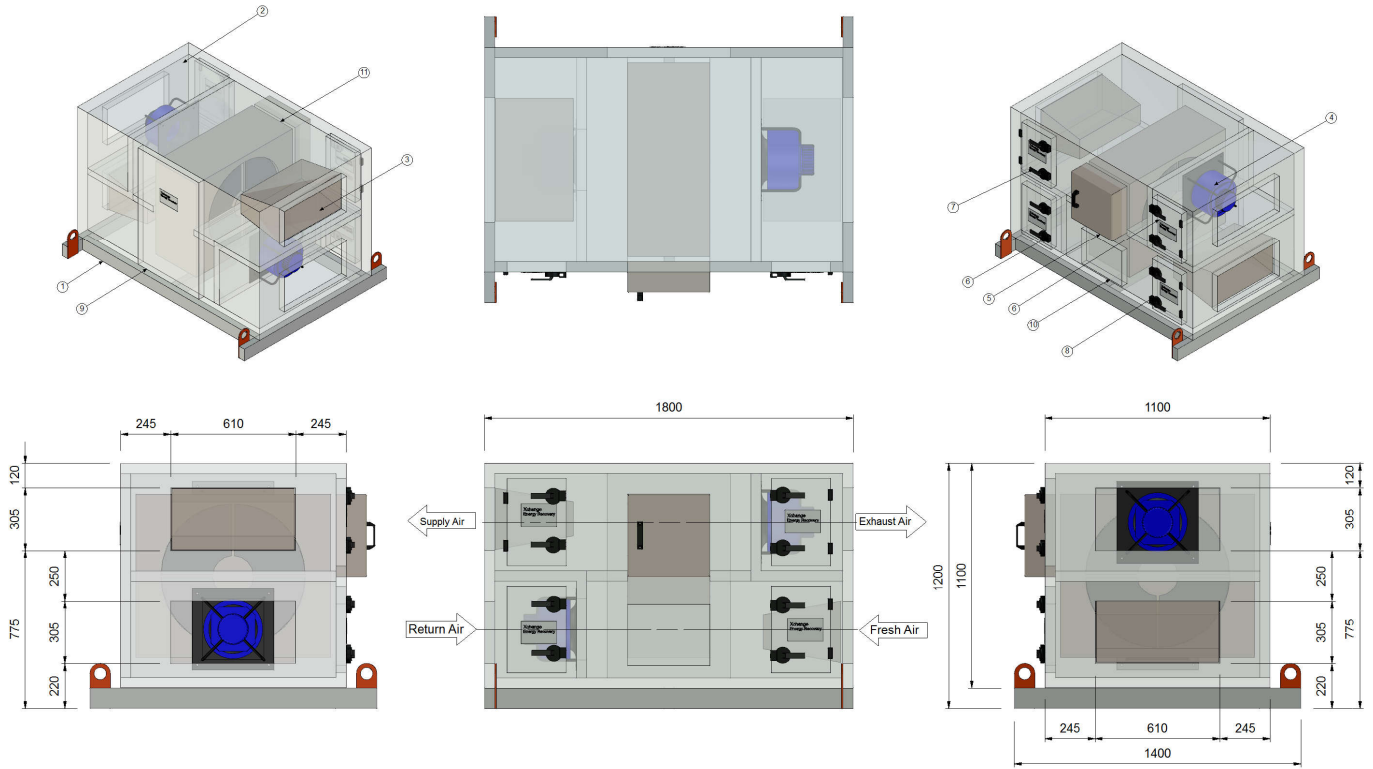
Options

Chilled Water/ Hot Water Coil	Available (Model REC500)
Corrosion Resistant Lining	Available
Stainless Steel Drain Tray	Available

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Technical Drawings – REM500P1

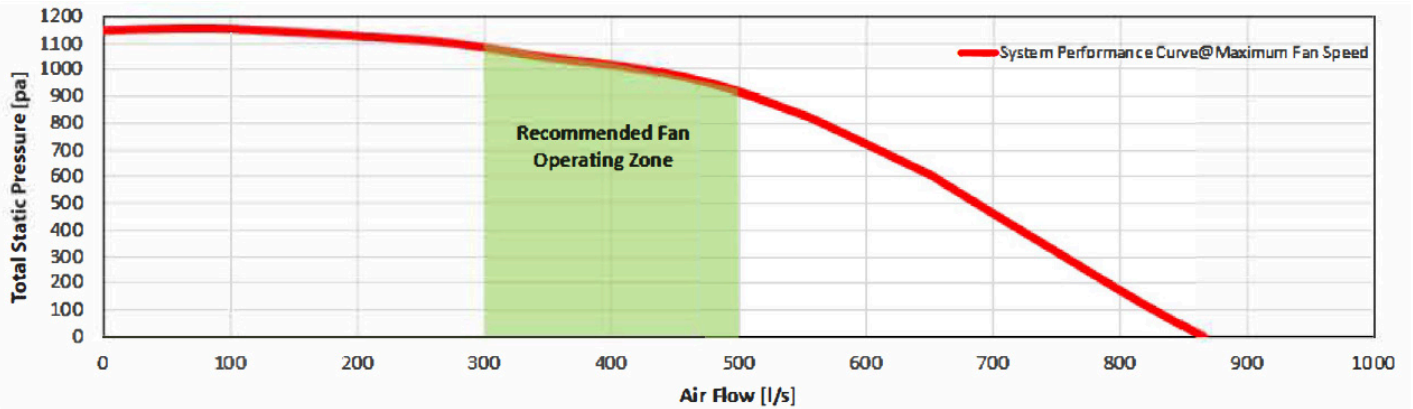


Dimension	
Height (mm)	1200
Width (mm)	1100
Length (mm)	1800
Weight (Kg)	425
Access Clearance (mm)	800 (Controls & Filter Access)
Access Clearance (mm)	300

Duct Sizes	
Exhaust Air (mm)	610 x 305
Return Air (mm)	610 x 305
Supply Air (mm)	610 x 305
Fresh Air (mm)	610 x 305

Fan Performance Data

*Duty point - 500 L/s at 600 Pa Total Static Pressure (250Pa External Static Pressure)

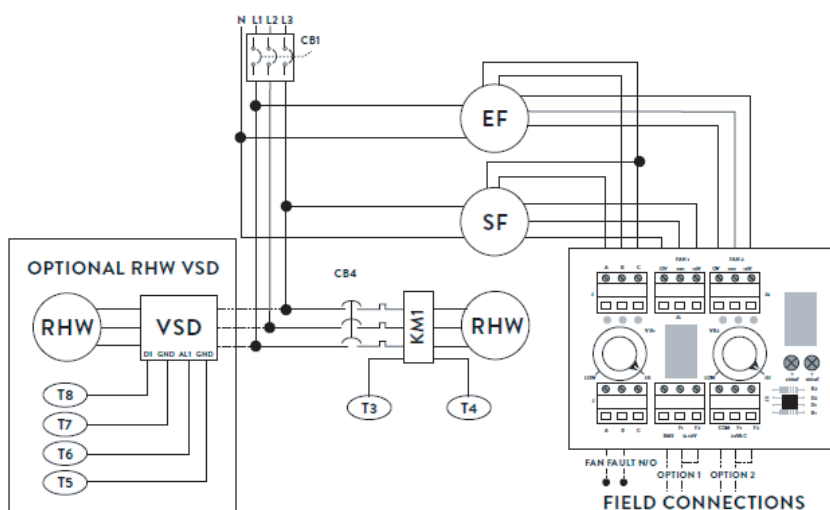


Sound Power Levels

*Sound power levels at 500 Pa Total Static Pressure and 500 L/s Total Air Volume

Inlet Rating dB (A)		Outlet Rating dB (A)	
63 Hz	64.5	63 Hz	67.2
125 Hz	63.5	125 Hz	65.1
250 Hz	66.5	250 Hz	67.1
500 Hz	70.8	500 Hz	71.6
1 K Hz	67.7	1K Hz	73.6
2K Hz	67.2	2K Hz	75.3
4K Hz	66.9	4K Hz	72.3
8K Hz	63.9	8K Hz	68.8
LwA	74.3	LwA	80.1

Wiring Diagram



Option 1

0-10V DC CONTROL VIA CONNECTION TO BMS

Option 2

24V AC ENABLE REGULATE FAN SPEED VIA POTS

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

