

ROTARY HEAT WHEEL ERV



External Mount Unit

REM5000P3 Technical Data

Technical Specifications

Nominal Airflow

Supply Air (l/sec)	5000
Exhaust Air (l/sec)	5000
Return Air (l/sec)	5000
Fresh Air (l/sec)	5000

Supply Fan

Fan Type	EC Plug Fan
Motor Power (Watts)	4500
External Static (Pa)	250
Fan Diameter	450
Number of Fans	2

Exhaust Fan

Fan Type	EC Plug
Motor Power (Watts)	4500
External Static (Pa)	250
Fan Diameter	450
Number of Fans	2

Electrical

Supply Fan FLA (A)	13.6 - 13.6 - 13.6
Exhaust Fan FLA (A)	13.6 - 13.6 - 13.6
Rotary Wheel (A)	1.2 - 1.2 - 1.2
Nominal Run Current (A)	28.4 - 28.4 - 28.4
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)	2590
Efficiency %	85.3
Size L x W x D (mm)	2750 x 2750 x 440
Media Face Velocity (m/sec)	1.93
Pressure Drop (Pa)	141
Kw Recovered (Cooling)*	77.34
Kw Recovered (Heating)*	130.16

Cabinet Construction

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

Filters

Type	Deep Bed Filters F6
Size L x W x D (mm)	610 x 610 x 380
Number of Filters	8
Size L x W x D (mm)	610 x 305 x 380
Number of Filters	8

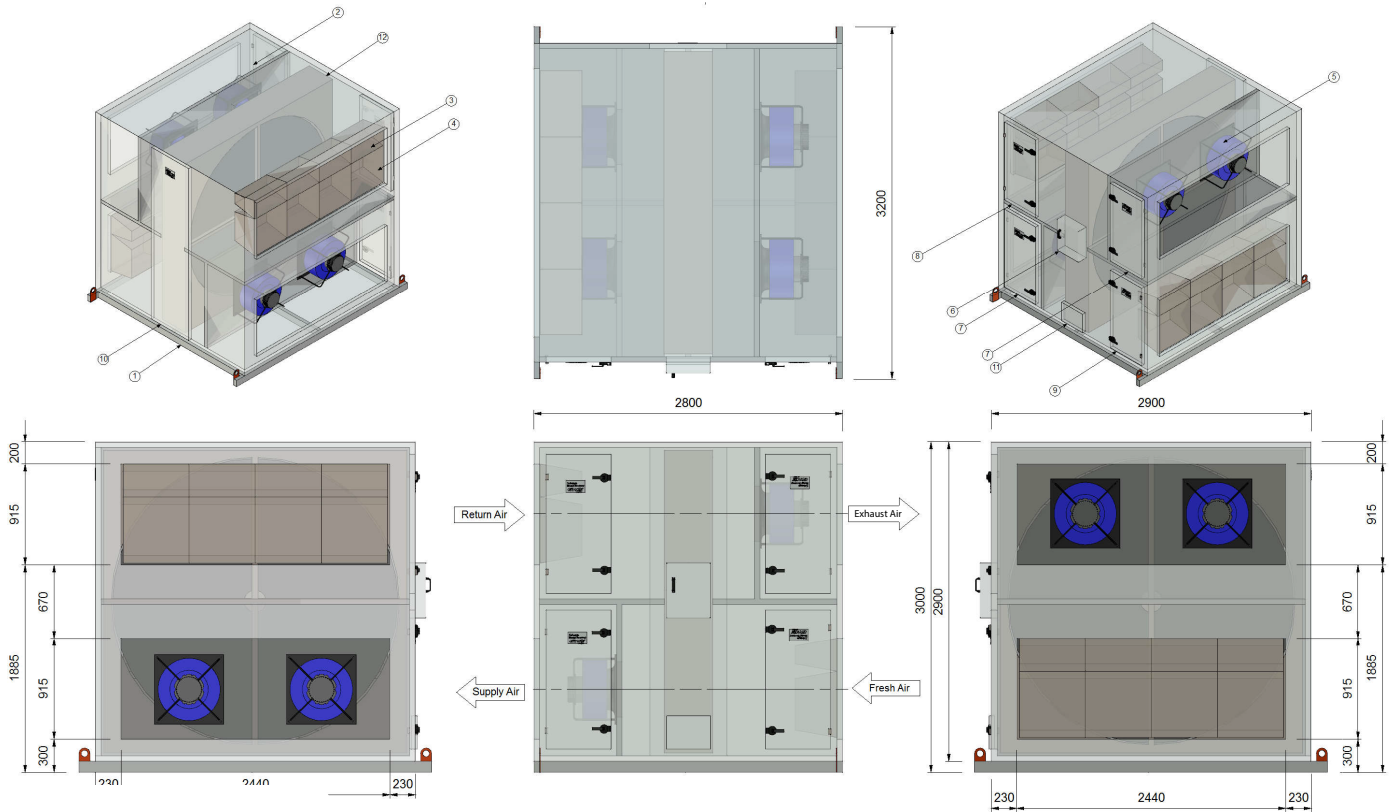
Options

Chilled Water/ Hot Water Coil	Available (Model REC5000)
Corrosion Resistant Lining	Available
Stainless Steel Drain Tray	Available

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Technical Drawings – REM5000P3



Dimension	
Height (mm)	3000
Width (mm)	2900
Length (mm)	2800
Weight (Kg)	1990
Access Clearance (mm)	1200 (Controls & Filter Access)
Access Clearance (mm)	300

Duct Sizes	
Exhaust Air (mm)	2440 x 915
Return Air (mm)	2440 x 915
Supply Air (mm)	2440 x 915
Fresh Air (mm)	2440 x 915

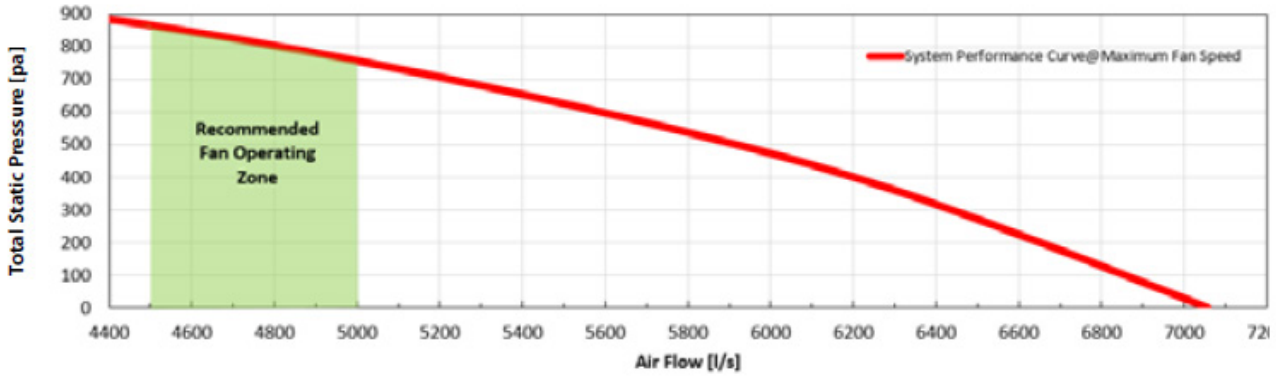
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Fan Performance Data

*Duty point - 5000 L/s at 600 Pa Total Static Pressure (250Pa External Static Pressure)

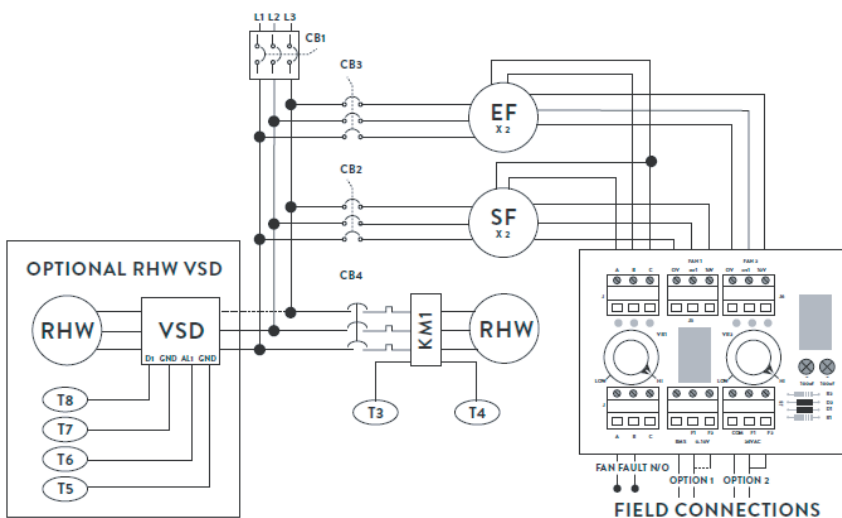


Sound Power Levels

*Sound power levels at 550 Pa Total Static Pressure and 5000 L/s Total Air Volume

Inlet Rating dB (A)		Outlet Rating dB (A)	
63 Hz	70.1	63 Hz	72.1
125 Hz	71	125 Hz	73.5
250 Hz	79.3	250 Hz	79.6
500 Hz	75.9	500 Hz	81.1
1 K Hz	73.7	1K Hz	82.7
2K Hz	74.3	2K Hz	79.8
4K Hz	71.7	4K Hz	76
8K Hz	70.3	8K Hz	73
LwA	80.6	LwA	86.5

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.



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