

ERV-PAC PACKAGED AIRCONDITIONING

XEP PACKAGED AIRCONDITIONING UNIT W/ ECONOMY CYCLE

XEP500P3EC TECHNICAL DATA



TECHNICAL SPECIFICATIONS

NOMINAL AIRFLOW

Supply Air (l/sec)	300 - 500
Return Air (l/sec)	300 - 500
Fresh Air (l/sec)	300 - 500
Condensor Air (l/sec)	460
Exhaust Air (l/sec)	960

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 Fan
Motor Power (Watts)	1900
External Static (Pa)	250
Fan Diameter	355
Number of Fans	1

ELECTRICAL

Supply Fan FLA (A)	3.0
Exhaust Fan FLA (A)	2.6 - 2.6 - 2.6
Compressor Current (A)	5.0 - 5.0 - 5.0
Nominal Run Current (A)	10.6 - 7.6 - 7.6
Maximum Full Load (A)	14.0 - 14.0 - 14.0
Volt/Phase	415V/3ph
Switchboard	Yes
Circuit Breakers	Yes

CONTROLS

0-10V DC (Fan Control)	Included
24V AC Control Relays	Included
Fan Fault Signal	Included
Fan Status	Available

HEAT EXCHANGER

*RATED AT STANDARD CONDITIONS OF 35.5° db/24.0° wb

Enthalphy Media	Standard
Sensible Media	Available
Module Size (mm)	500 x 500 x 400D
Number of Modules	2
Face Velocity (m/sec)	1.43
Pressure Drop (Pa)	80.2
Kw Recovered (Cooling)*	8.1
Kw Recovered (Heating)*	10.2

CABINET CONSTRUCTION

Casing	50mm Insulated Panel
Finish	Surf Mist Colourbond
Insulation Value	R2.0
Side Access Panels	Included

DESIGN TEMPERATURES

Ambient (DB/WB) Summer	35°C/24°C
Return Air (DB/WB) Summer	24°C/17°C
Ambient Winter	7°C
Return Air Winter	21°C

COIL SELECTION

Indoor Coil FL x FH (mm)	740 x 400
Face Velocity (m/sec)	1.7
Outdoor Coil FL x FH (mm)	740 x 500
Face Velocity (m/sec)	2.6
Anti-Corrosion Coil Coating	Included
Drain Tray	Stainless Steel

REFRIGERATION *At standard design temperatures

Heating Capacity (kW)*	12
Cooling Capacity (kW)*	12
Compressor	1 - Fixed Speed
Refrigerant Gas	R407C
Expansion Device	TX Biflow Valves
Head Pressure Control	Included

ECONOMY CYCLE

Economy Cycle Dampers/Motors	Included 0 - 10V
Return Air Bypass Damper/Motor	Included 0 - 10V

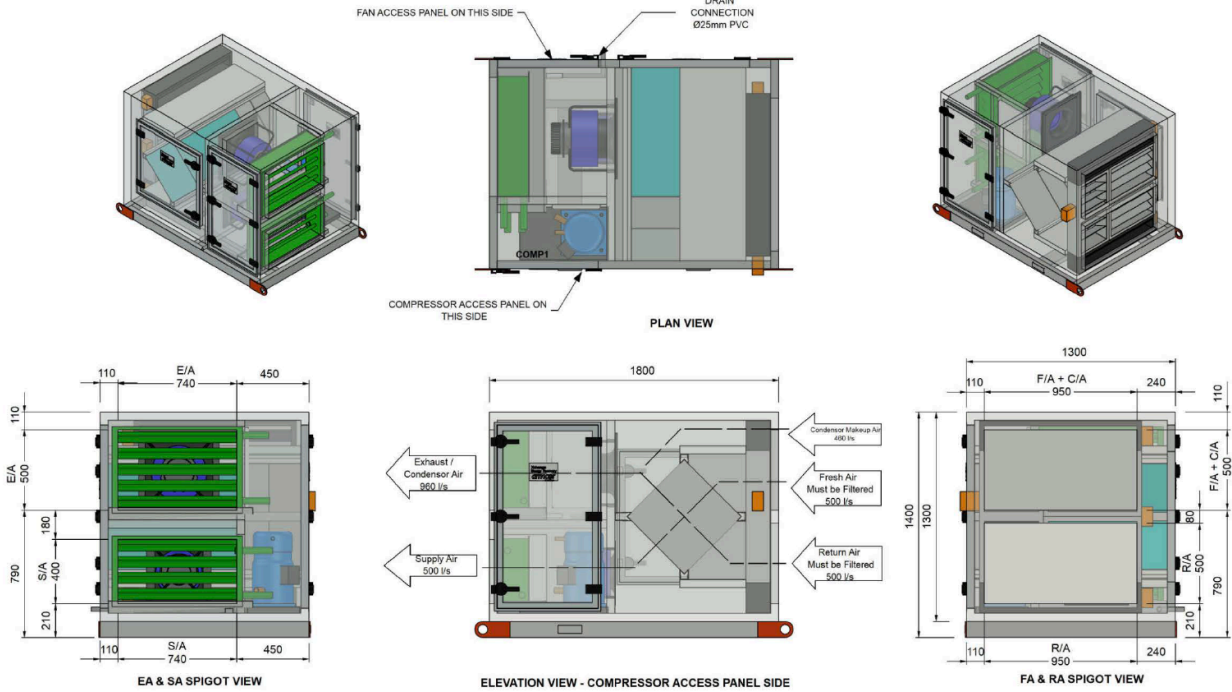
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TECHNICAL DRAWINGS - XEP500P3EC PAC UNIT W/ ECONOMY CYCLE



DIMENSION		DUCT SIZES	
Height (mm)	1400	Supply Air (mm)	740 x 400
Width (mm)	1300	Return Air (mm)	950 x 500
Length (mm)	1800	Fresh Air/Condensor Air Inlet	950 x 500
Weight (Kg)	545	Exhaust/Condensor Air	740 x 500
Access Clearance (mm)	900 (Fan & Media Access)	Recommended min F/A Filter size	950 x 500
Access Clearance (mm)	900 (Electrical Controls)		

COMPRESSOR PERFORMANCE DATA

COMPRESSOR CAPACITY (KW) - COOLING

RETURN AIR TEMPERATURES	OUTDOOR COIL ENTERING AIR TEMPERATURE (E.A.T) °C db											
	23		27		31		35		39		43	
24°C/17°C db/wb	Total	Sens.	Total	Sens.	Total	Sens.	Total	Sens.	Total	Sens.	Total	Sens.
	13	10	12.7	10	12.5	9.9	12	9.6	11.2	9.1	10.3	7

COMPRESSOR CAPACITY (KW) - HEATING

RETURN AIR TEMPERATURES	OUTDOOR COIL ENTERING AIR TEMPERATURE (E.A.T) °C db											
	-1		1		3		5		7		9	
22°C	9.2	9.8	10.4	11.3	12	12.5						

For winter operation the air on to the DX coil must be a minimum of 15°C. If this cannot be achieved, we recommend using a EDH or hot water coil to maintain the correct temperature onto the DX coil.

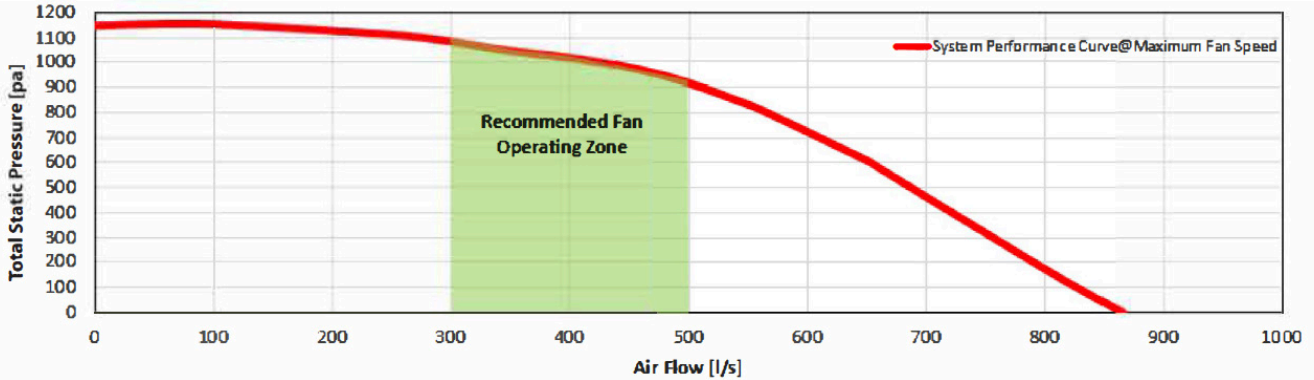
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FAN PERFORMANCE DATA

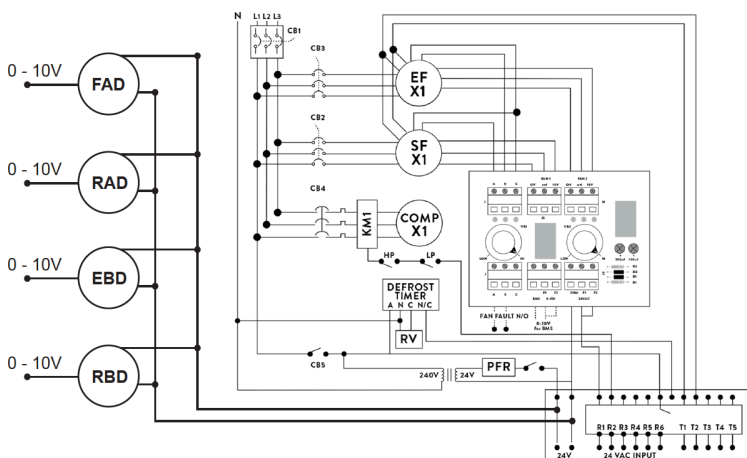


SOUND POWER LEVELS*

INLET RATING dB		OUTLET RATING dB	
63 Hz	65.1	63 Hz	67.7
125 Hz	63.7	125 Hz	65.8
250 Hz	66.9	250 Hz	67.7
500 Hz	71.2	500 Hz	72.2
1 K Hz	68.2	1K Hz	74.1
2K Hz	68.1	2K Hz	76.1
4K Hz	68.2	4K Hz	73.7
8K Hz	65.5	8K Hz	70.5
LwA	74.2	LwA	81

* Sound Power Levels @600 Pa Total Static Pressure and 500 l/s Total Air Volume.

WIRING DIAGRAM



FAN CONTROLLER

0-10V DC BMS CONNECTION or
24V AC FAN SPEED VIA POTS

STANDARD INCLUSIONS

- CB CIRCUIT BREAKERS
- R1 TIME DELAY RELAY
- PFR PHASE FAILURE RELAY
- RV REVERSING VALVE
- HP HIGH PRESSURE
- LP LOW PRESSURE
- MCB COMPRESSOR OVERLOAD
- CCH COMP. SUMP HEATER

OPTIONS

- CSR CURRENT SENSING RELAY (T1 T2)
- T3 T4 0-10V DIGITAL COMP.

DAMPER MOTORS

- FAD FRESH AIR DAMPER MOTOR
- RAD RETURN AIR DAMPER MOTOR
- EBD ECONOMY BYPASS DAMPER MOTOR
- RBD RETURN AIR BYPASS DAMPER MOTOR

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