

XCHANGE ERV

PACKAGED AIR CONDITIONING UNIT

XEP500P3 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	Surfmist Colorbond
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

OPTIONS

Economy Cycle	Available (XEP500P3EC)
Return Air Bypass Damper	Available

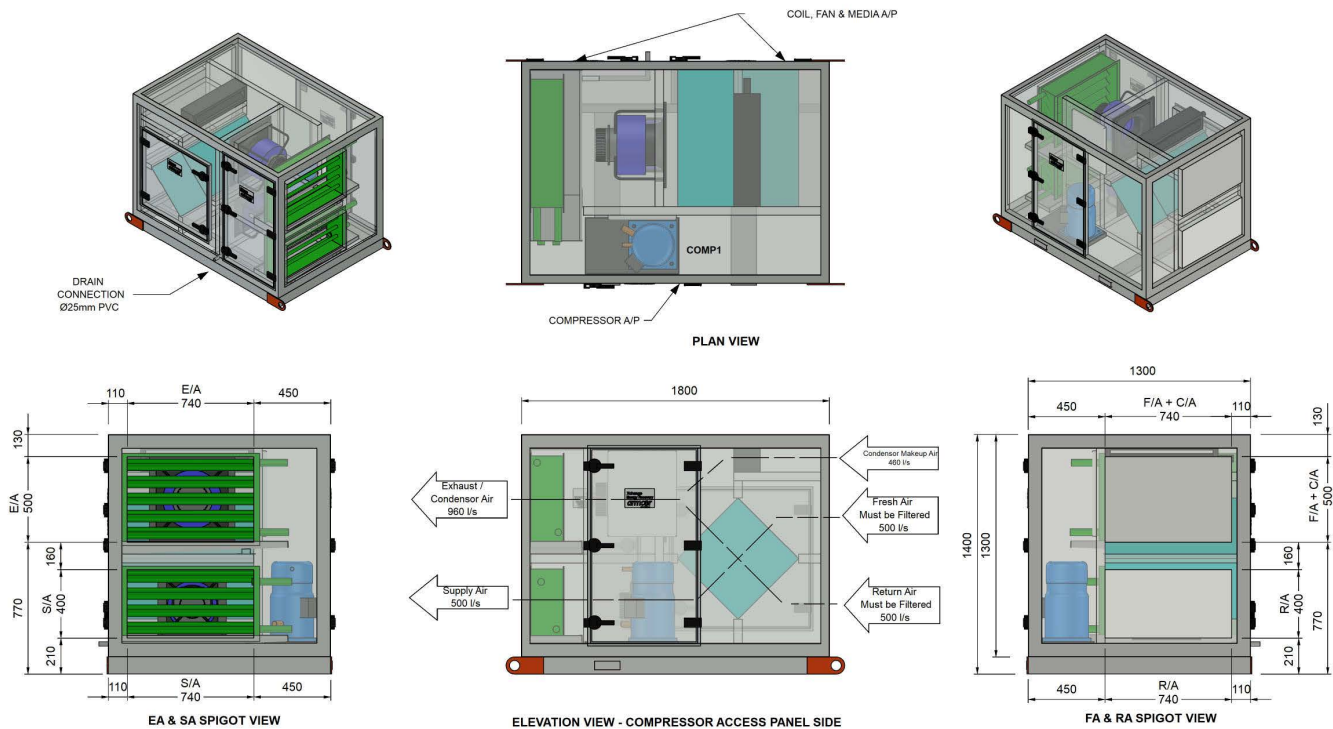
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TECHNICAL DRAWINGS - XEP500P3 STANDARD PAC UNIT



DIMENSIONS	
Height (mm)	1400
Width (mm)	1300
Length (mm)	1800
Weight (Kg)	490
Access Clearance (mm)	900 (Fan & Media Access)
Access Clearance (mm)	900 (Electrical Controls)

DUCT SIZES	
Supply Air (mm)	740x400
Return Air (mm)	740x400
Fresh Air/Condensor Air Inlet	740x500
Exhaust/Condensor Air	740x500
Recommended min F/A Filter size	740x300

COMPRESSOR PERFORMANCE DATA

COMPRESSOR CAPACITY (KW) - COOLING														
RETURN AIR TEMPERATURE		OUTDOOR COIL ENTERING AIR TEMPERATURE (E.A.T) °C db												
24°C/17°C db/wb		23		27		31		35		39		43		
	Total	Sens.	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 TEMPERATURE		OUTDOOR COIL ENTERING AIR TEMPERATURE (E.A.T) °C db												
22°C		-1		1		3		5		7		9		
	9.2	9.8	10.4	11.3	12	12.5								

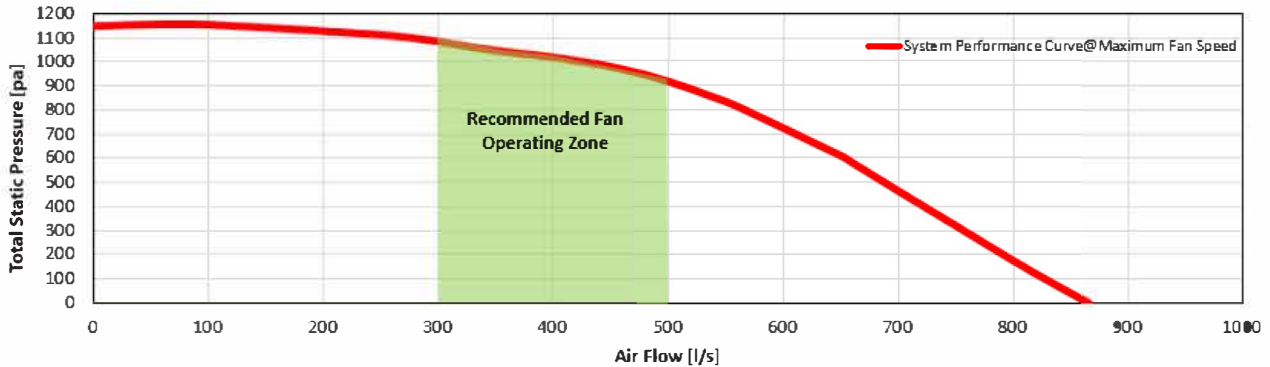
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FAN PERFORMANCE DATA

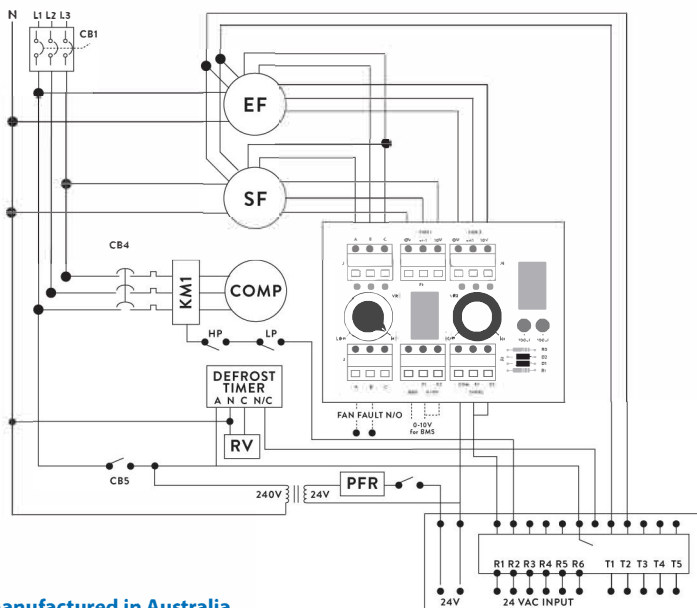


SOUND POWER LEVELS*

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
1K 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	75.2	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.

Designed and manufactured in Australia

Armcor Air Solutions

109-111 Northcorp Blvd, Broadmeadows 3047

P 1800 244 556 E sales@armcor.com.au

www.armcor.com.au

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