

DEHUMIDIFICATION

HTC Humidity Temperature Control Unit

HTC1800-90P3 Technical Data

Technical Specifications

Nominal Airflow

Fresh Air (l/sec)	1800
Supply Air (l/sec)	1800
Condenser Air (l/sec)	6000

Supply Fan

Fan Type	EC Plug
Motor Power (Watts)	4450
External Static (Pa)	250
Fan Diameter	450
Number of Fans	1

Exhaust Fan

Fan Type	EC Plug
Motor Power (Watts)	3700
Fan Diameter	630
Number of Fans	2

Electrical

*Cable to be sized to Maximum FLA

Supply Fan (A)	6.8 - 6.8 - 6.8
Condenser Fan (A)	11.2 - 11.2 - 11.2
Compressor (A)	60.0 - 60.0 - 60.0
Nominal Run Current (A)	78.0 - 78.0 - 78.0
Maximum Full Load (A)	85.8 - 85.8 - 85.8
Volt/Phase	415V/3ph

Controls

0-10V DC (Fan Control)	Included
24V AC Control Relay	Included
Fan Fault Signal	Included
Fan Run Status	Available
Switchboard	Yes
Circuit Breakers	Yes

Cabinet Construction

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

Coil Selection

Evaporator Coil FL x FH (mm)	750 x 1219.2
Face Velocity (m/sec)	1.97
Reheat Coil FL x FH (mm)	750 x 1219.2
Face Velocity (m/sec)	1.97
Condenser Coil FL x FH (mm)	(2x) 750 x 1625.6
Face Velocity (m/sec)	2.46
Anti-Corrosion Coil Coating	Included
Drain Tray	Stainless Steel

Refrigeration

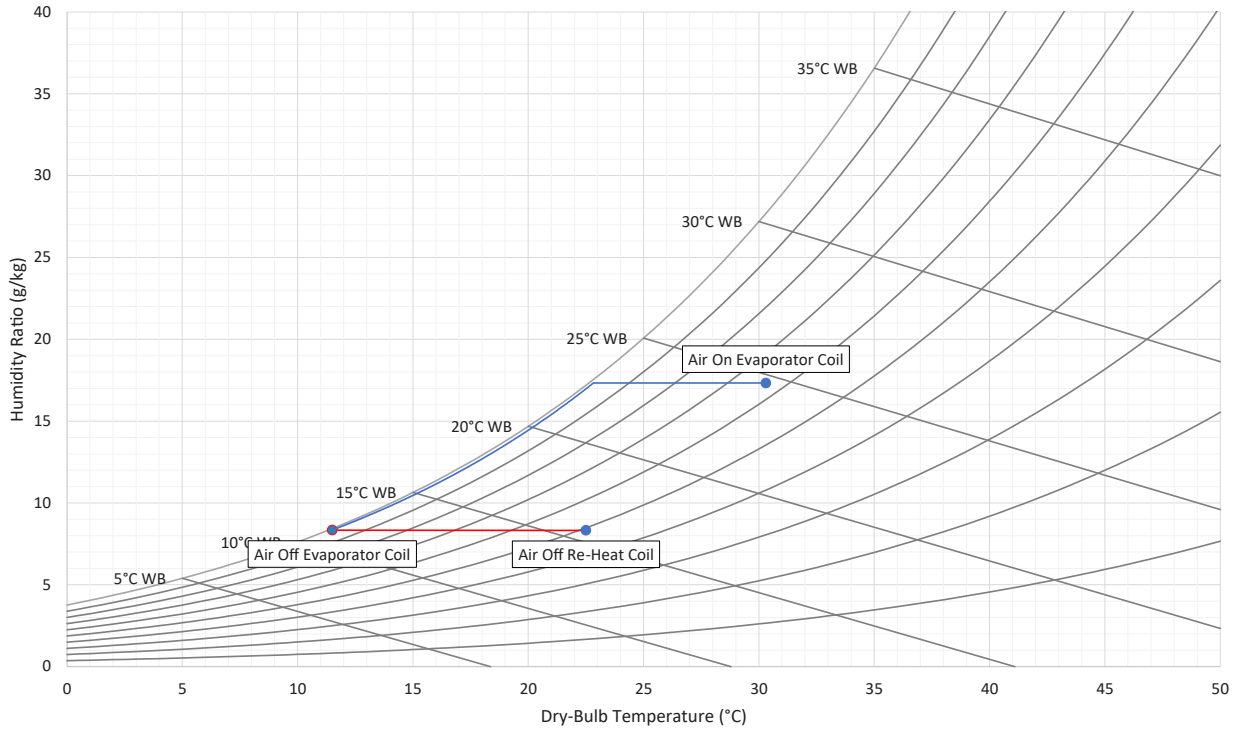
Cooling Capacity (kW)	87.7
Reheat Capacity (kW)	25.4
Inverter Compressor	Standard (x2)
Expansion Device	Electronic Valve
Head Pressure Control	Included

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Psychometric Chart – HTC1800-90P3



Design Conditions

Based on Brisbane Aero

Ambient (DB/WB) Summer 30.3/24.7

Moisture Content In 17.34

Moisture Content Out 8.35

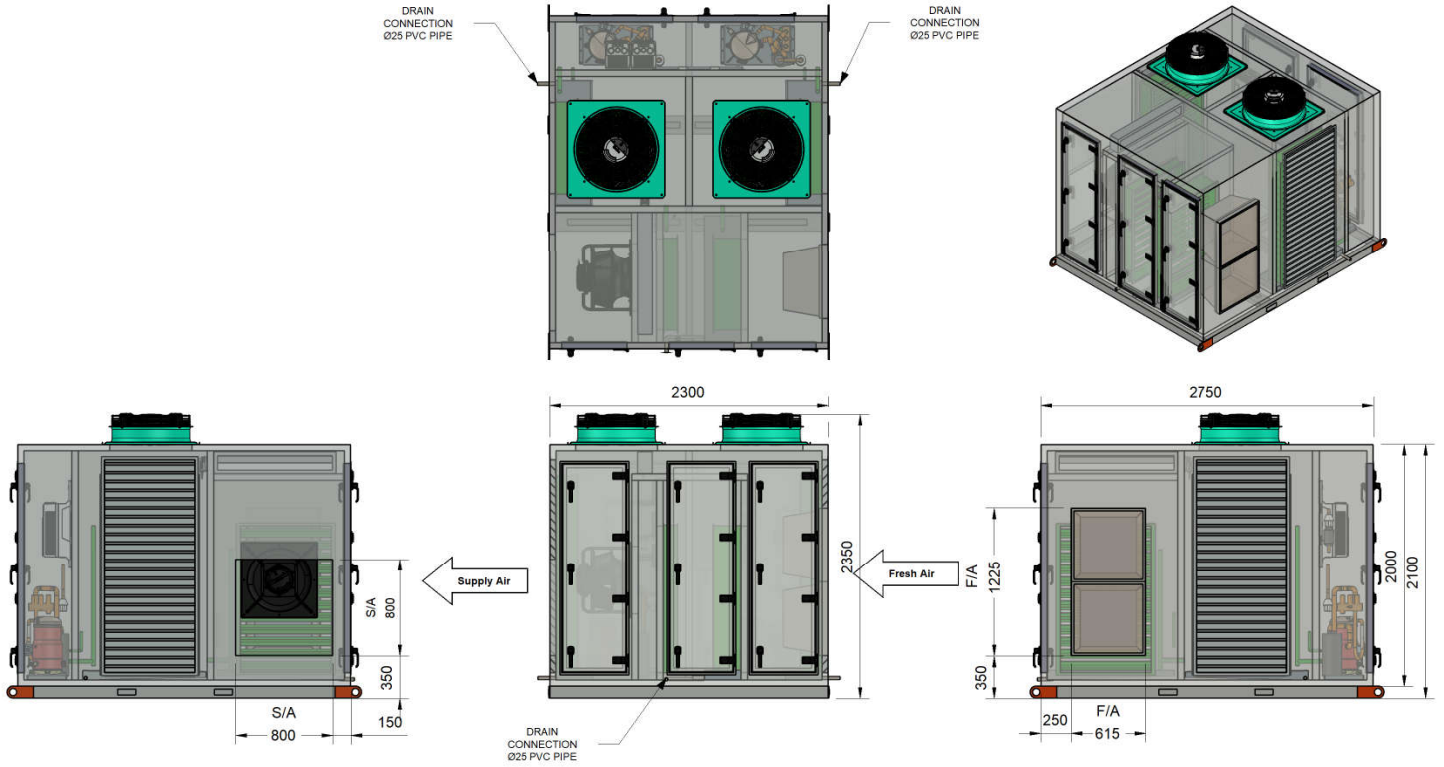
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Technical Drawings – HTC1800-90P3



Dimension	
Height (mm)	2100
Width (mm)	2750
Length (mm)	2300
Weight (Kg)	2150

Duct Sizes	
Fresh Air (mm)	615 x 1225
Supply Air (mm)	800 x 800

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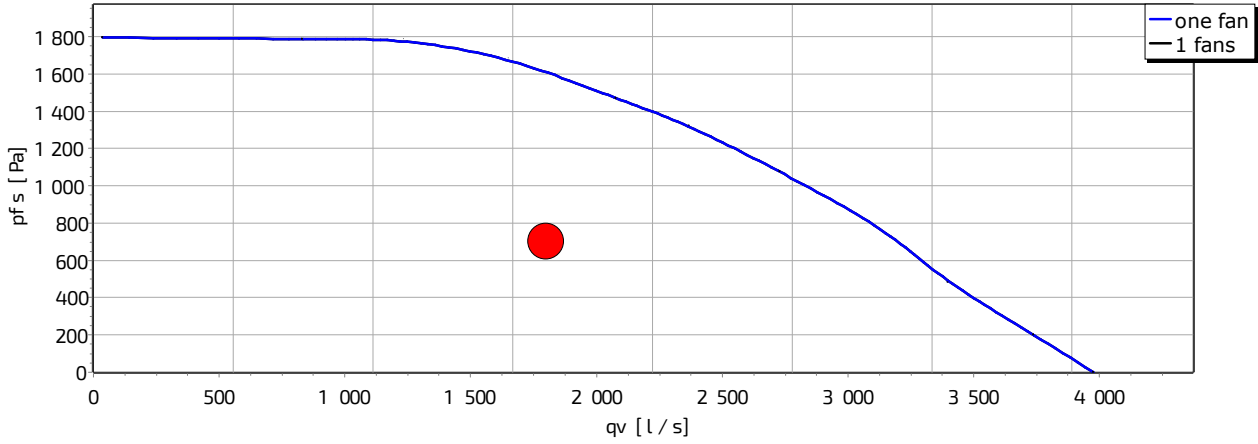
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Supply Fan Performance Data

*Duty point - 1800 L/s at 700 Pa Total Static Pressure (300Pa External Static Pressure)



Sound Power Levels

*Sound power levels at 700 Pa Total Static Pressure and 1800 L/s Total Air Volume

Inlet Rating dB		Outlet Rating dB	
63 Hz	48.0	63 Hz	49.3
125 Hz	59.5	125 Hz	60.6
250 Hz	66.1	250 Hz	66.5
500 Hz	68.9	500 Hz	74.0
1K Hz	70.6	1K Hz	78.6
2K Hz	70.7	2K Hz	78.1
4K Hz	71.9	4K Hz	75.9
8K Hz	61.9	8K Hz	67.3
LwA	77.2	LwA	83.2

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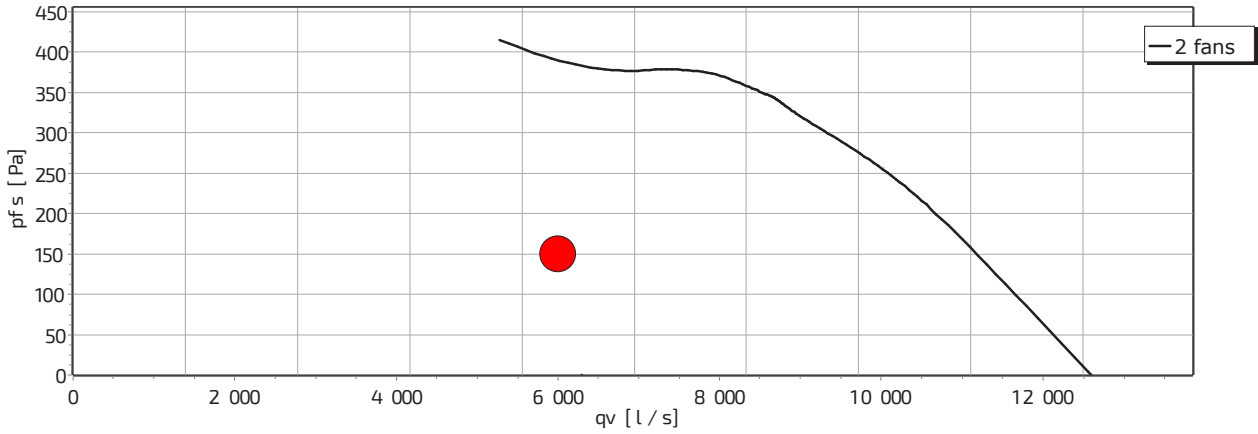
HTC Humidity Temperature Control Unit –

HTC1800-90P3 Technical Data



Condenser Fan Performance Data

*Duty point - 6000 L/s at 150 Pa Total Static Pressure



Sound Power Levels

*Sound power levels at 150 Pa Total Static Pressure and 6000 L/s Total Air Volume

Inlet Rating dB		Outlet Rating dB	
63 Hz	48.7	63 Hz	49.5
125 Hz	60.7	125 Hz	62.0
250 Hz	65.0	250 Hz	64.1
500 Hz	69.3	500 Hz	68.7
1K Hz	69.6	1K Hz	70.0
2K Hz	67.7	2K Hz	66.9
4K Hz	63.4	4K Hz	61.5
8K Hz	55.2	8K Hz	52.5
LwA	74.8	LwA	74.5



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