

DEHUMIDIFICATION

HTC Humidity Temperature Control Unit

HTC400-20P3 Technical Data

Technical Specifications

Nominal Airflow

Fresh Air (l/sec)	400
Supply Air (l/sec)	400
Condenser Air (l/sec)	1450

Supply Fan

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

Exhaust Fan

Fan Type	EC Plug
Motor Power (Watts)	980
Fan Diameter	500
Number of Fans	1

Electrical

*Cable to be sized to Maximum FLA

Supply Fan (A)	3.0 - 3.0 - 3.0
Condenser Fan (A)	1.6 - 1.6 - 1.6
Compressor (A)	15.0 - 15.0 - 15.0
Nominal Run Current (A)	19.6 - 19.6 - 19.6
Maximum Full Load (A)	21.6 - 21.6 - 21.6
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)	260 x 762
Face Velocity (m/sec)	2.02
Reheat Coil FL x FH (mm)	260 x 762
Face Velocity (m/sec)	2.02
Condenser Coil FL x FH (mm)	500 x 1016
Face Velocity (m/sec)	2.85
Anti-Corrosion Coil Coating	Included
Drain Tray	Stainless Steel

Refrigeration

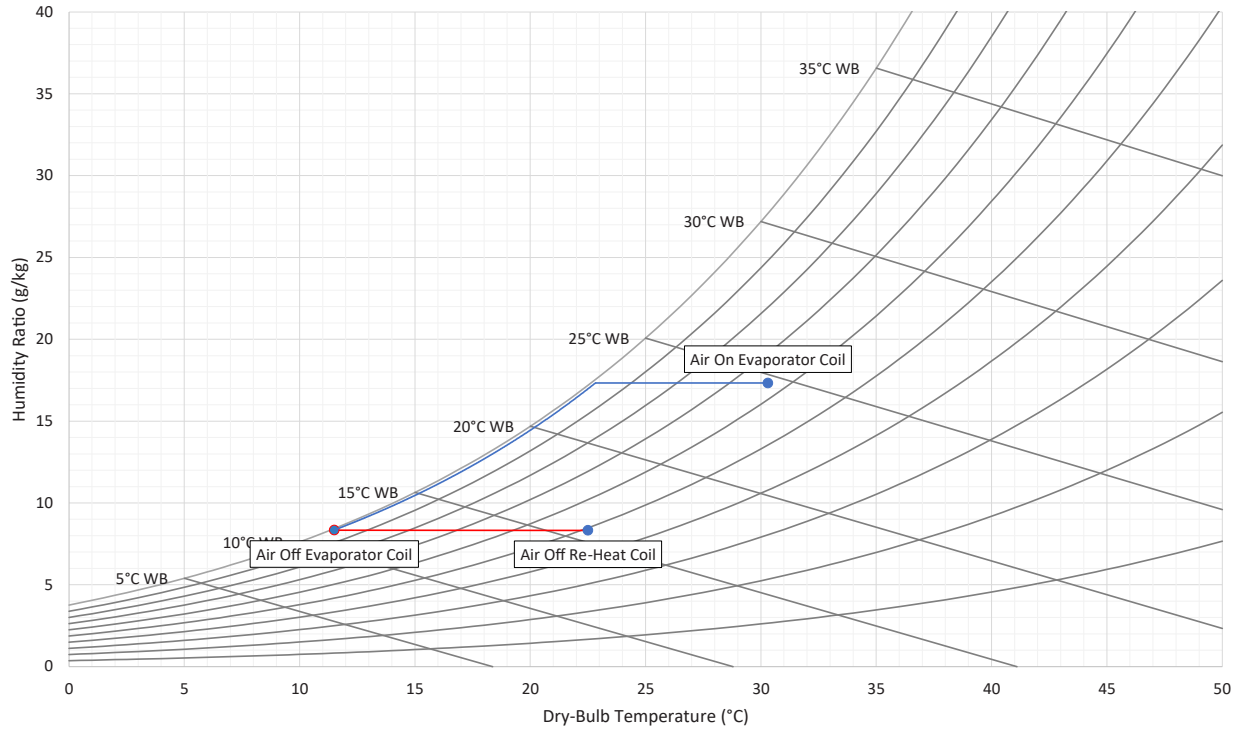
Cooling Capacity (kW)	19.5
Reheat Capacity (kW)	5.5
Inverter Compressor	Standard (x1)
Expansion Device	Electronic Valve
Head Pressure Control	Included

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Psychometric Chart – HTC400-20P3



Design Conditions

Based on Brisbane Aero

Ambient (DB/WB) Summer 30.3/24.7

Moisture Content In 17.34

Moisture Content Out 8.35

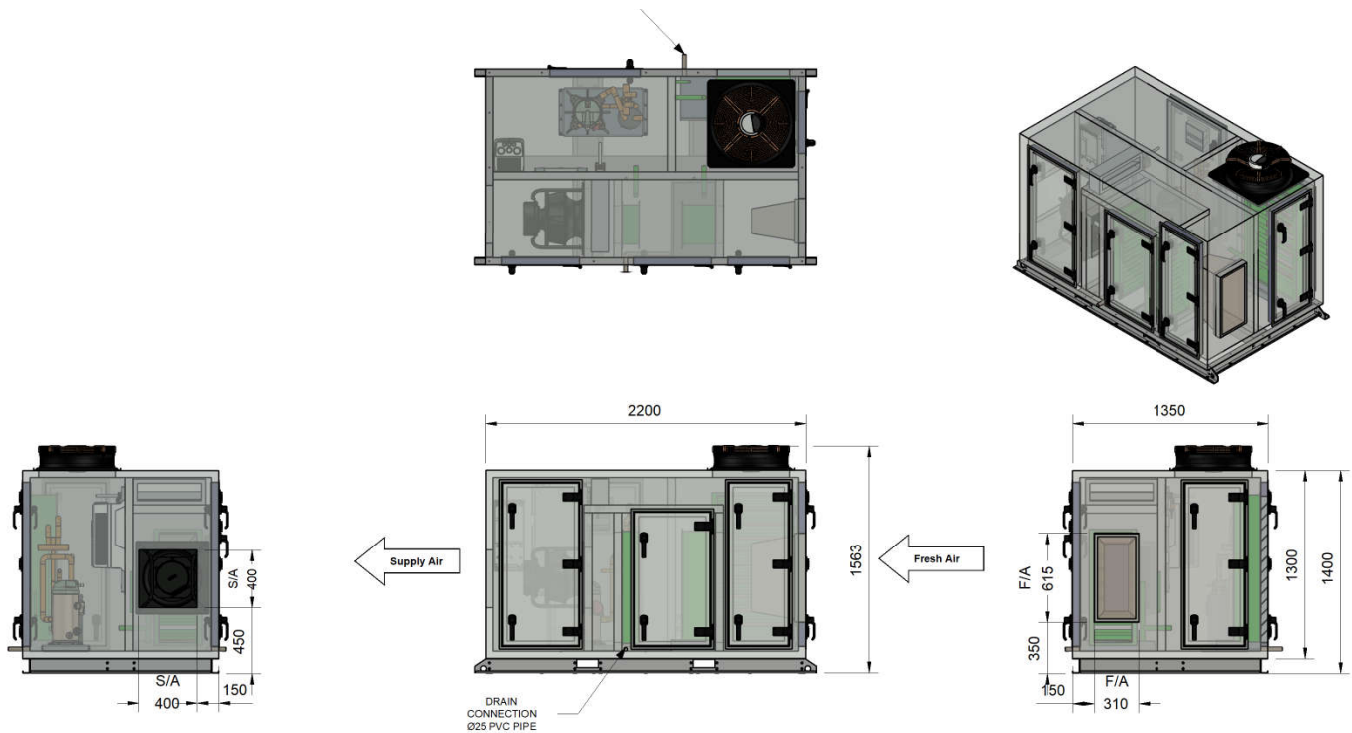
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Technical Drawings – HTC400-20P3



Dimension	
Height (mm)	1400
Width (mm)	1350
Length (mm)	2200
Weight (Kg)	870

Duct Sizes	
Fresh Air (mm)	310 x 615
Supply Air (mm)	400 x 400

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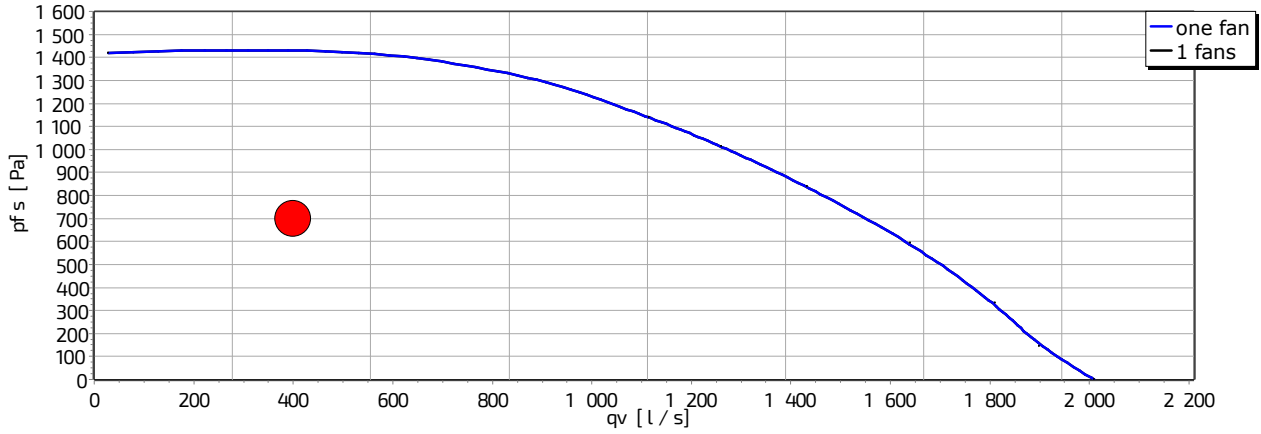
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Supply Fan Performance Data

*Duty point - 400 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 400 L/s Total Air Volume

Inlet Rating dB		Outlet Rating dB	
63 Hz	48.2	63 Hz	49.7
125 Hz	67.8	125 Hz	68.4
250 Hz	70.0	250 Hz	69.4
500 Hz	73.1	500 Hz	74.9
1K Hz	69.3	1K Hz	78.0
2K Hz	70.0	2K Hz	75.1
4K Hz	66.2	4K Hz	71.5
8K Hz	59.5	8K Hz	63.8
LwA	77.8	LwA	82.0

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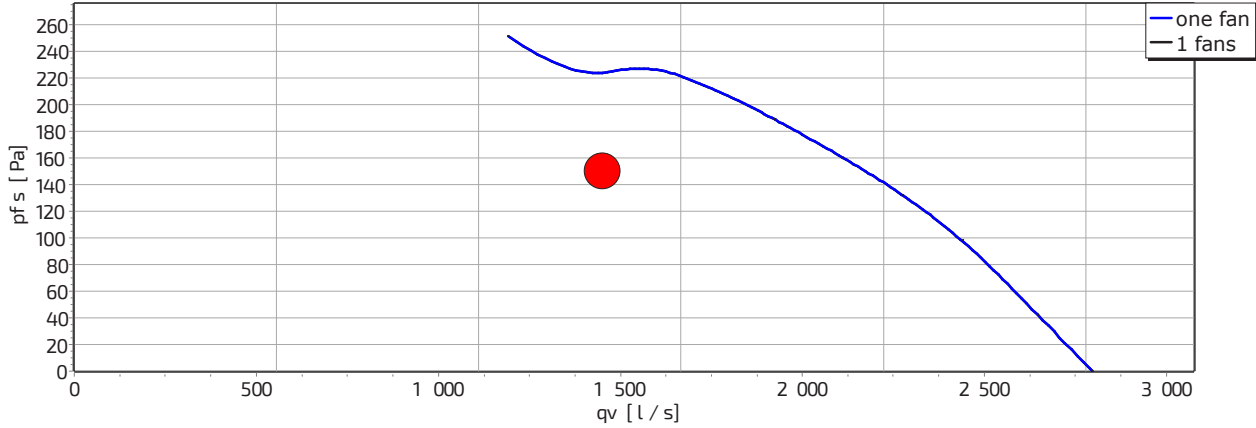
HTC Humidity Temperature Control Unit –

HTC400-20P3 Technical Data



Condenser Fan Performance Data

*Duty point - 1450 L/s at 150 Pa Total Static Pressure



Sound Power Levels

*Sound power levels at 1450 L/s Total Air Volume and 150 Pa Total Static Pressure

Inlet Rating dB		Outlet Rating dB	
63 Hz	54.4	63 Hz	53.5
125 Hz	59.7	125 Hz	59.8
250 Hz	61.1	250 Hz	59.0
500 Hz	66.7	500 Hz	67.1
1K Hz	71.6	1K Hz	74.5
2K Hz	69.6	2K Hz	72.6
4K Hz	65.7	4K Hz	67.5
8K Hz	55.6	8K Hz	57.1
LwA	75.4	LwA	77.7



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