

INDIRECT EVAPORATIVE COOLING



INDEC Indirect Evaporative Cooling Unit

INDEC4000P3 Technical Data

Technical Specifications

Nominal Airflow

Supply Air (l/sec)	4000
Exhaust Air (l/sec)	2000
Total Intake Fresh Air (l/sec)	6000

Supply Fan

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

Electrical

*Cable sized to maximum FLA.
Data presented for airflow at
6000 L/s

Volt/Phase	415V/3ph
Operating Supply Fan (A)	10.4 - 10.4 - 10.4
Operating Water Pump (A)	1.0
Operating Run Current (A)	11.4 - 10.4 - 10.4
Maximum Full Load (A)	14.6 - 13.6 - 13.6

Controls

24V AC Control Relays	Included
Pump Relay	Included
Water Valve Relay	Included
BMS Capability	Included
Wall Controller	Available
BMS Fan Control 0-10V (DC)	Included
Circuit Breakers	Included
External Electrical Box	Included

Heat Exchanger

*Rated at standard conditions
of 35.5° db/24.0° wb

INDEC Core	2
Supply Air Pressure Drop (Pa)	260
Exhaust Air Pressure Drop (Pa)	300
Face Velocity (m/sec)	2.5

Cabinet Construction

Casing	50mm Colourbond Panel
Side Access Panels	Included
Weatherproof Intake Grill	Included
Exhaust Air Grille	Included
Exhaust Balancing Damper	Included
Galvanized Base w/ Crane Hooks	Included

Water Management

Water Pump	2
Nominal Water Usage (LPM)	24
Inlet Pipe Size (mm)	19
UV-C Water Filter	Included
Automatic Drain Valve	Included
Drain Outlet (mm)	40
Secondary Overflow Drain (mm)	25

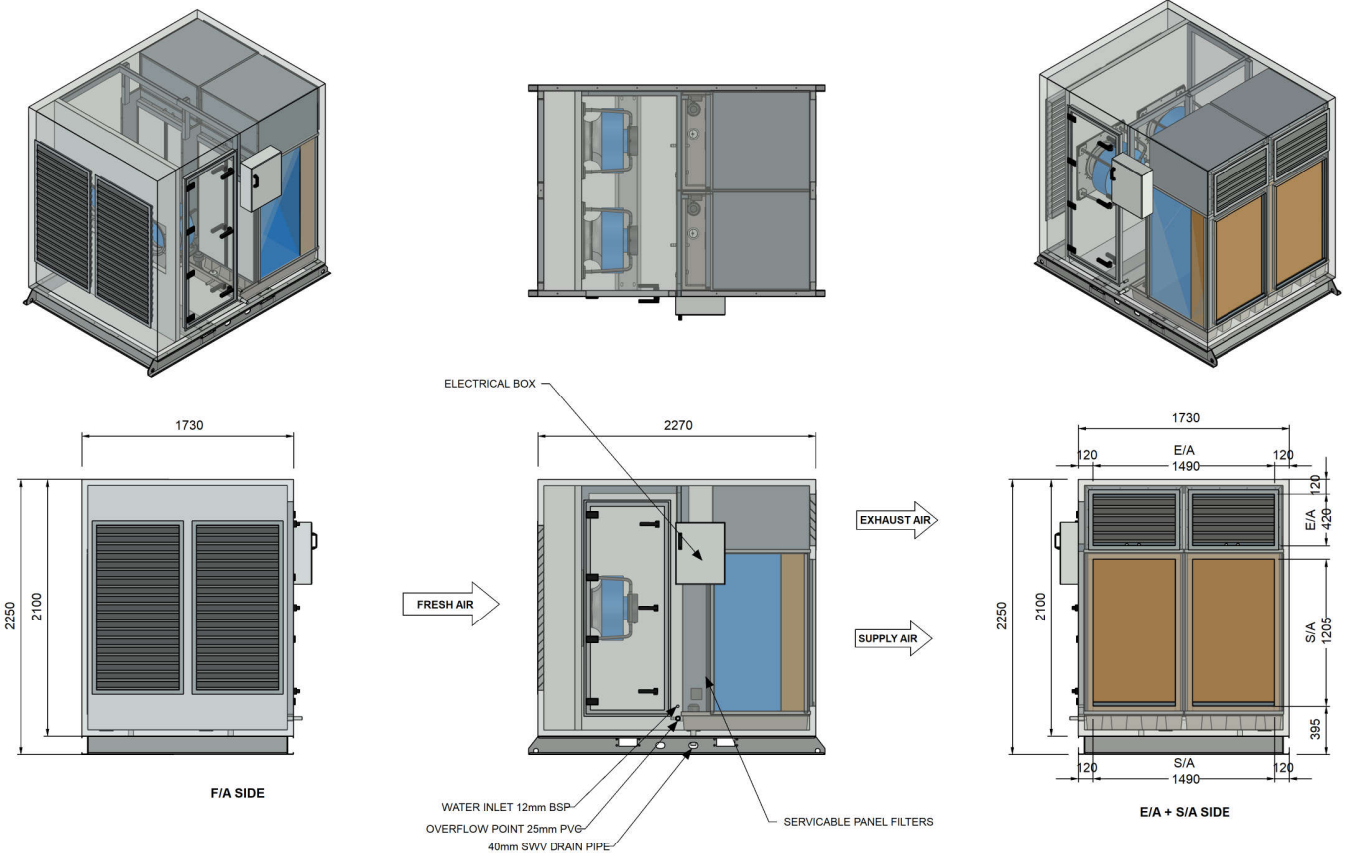
Air Filters

Filters	Included
Filter Type	G4
Filter Thickness	50
Filter Size	4 x 390 x 1330

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Technical Drawings – INDEC4000P3 Standard Cooling Unit



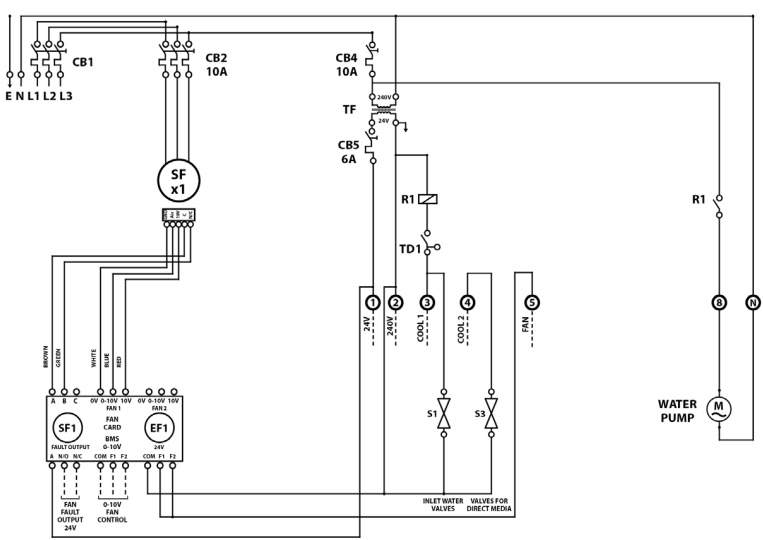
Dimensions

Height (mm)	2250
Width (mm)	1730
Length (mm)	2270
Weight (kg)	900
Access Clearance (mm)	1200 (Fan Access One Side)

Duct Sizes

Supply Air (mm)	1490 x 1205
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Wiring Diagram



FAN CONTROLLER

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

STANDARD INCLUSIONS

- CB CIRCUIT BREAKERS
- R1 PUMP RELAY
- SF SUPPLY FAN

FIELD WIRING CONNECTIONS

- 1 24V Active
- 2 24V Common
- 3 Cool 1 - Indirect Cooling
- 4 Cool 2 - Direct Cooling
- 5 Fan Enable

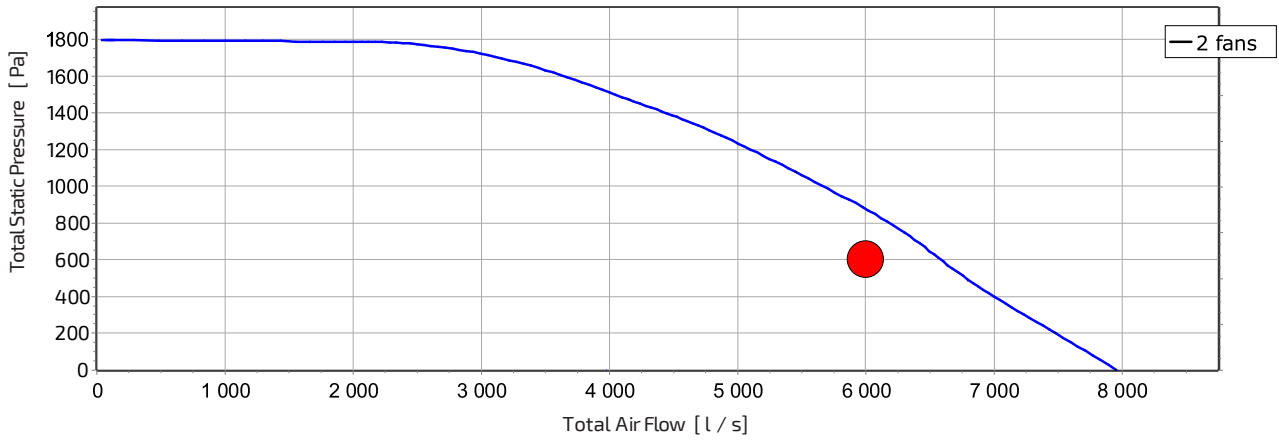
WIRING LEGEND

- SF Supply Fans
- WP Water Pumps
- TF Transformer
- S1 Indirect Water Valve
- S3 Direct Water Valve

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Fan Performance Data



Sound Power Levels *Sound power levels at 600 Pa Total Static Pressure and 6000 L/s Total Air Volume

Inlet Rating dB		Outlet Rating dB	
63 Hz	49.6	63 Hz	54
125 Hz	66.4	125 Hz	67.4
250 Hz	78.9	250 Hz	78.9
500 Hz	83.1	500 Hz	85.7
1 K Hz	81.6	1K Hz	90.1
2K Hz	83.8	2K Hz	91
4K Hz	83.3	4K Hz	86.8
8K Hz	88	8K Hz	87.4
LwA	91.8	LwA	95.7

