

INDIRECT EVAPORATIVE COOLING



INDEC Indirect Evaporative Cooling Unit

INDEC12000P3 Technical Data

Technical Specifications

Nominal Airflow

Supply Air (l/sec)	12000
Exhaust Air (l/sec)	6000
Total Intake Fresh Air (l/sec)	18000

Supply Fan

Fan Type	EC Plug
Fan Motor	EC Motor
Motor Power (Watts)	4500
External Static (Pa)	250
Fan Diameter	450
Number of Fans	6

Electrical

*Cable sized to maximum FLA.
Data presented for airflow at
18000 L/s

Volt/Phase	415V/3ph
Operating Supply Fan (A)	31.3 - 31.3 - 31.3
Operating Water Pump (A)	1.0
Operating Run Current (A)	32.3 - 31.3 - 31.3
Maximum Full Load (A)	41.8 - 40.8 - 40.8

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	6
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	6
Nominal Water Usage (LPM)	72
Inlet Pipe Size (mm)	19
UV-C Water Filter	Included
Automatic Drain Valve	Included
Drain Outlet (mm)	40
Secondary Overflow Drain (mm)	25

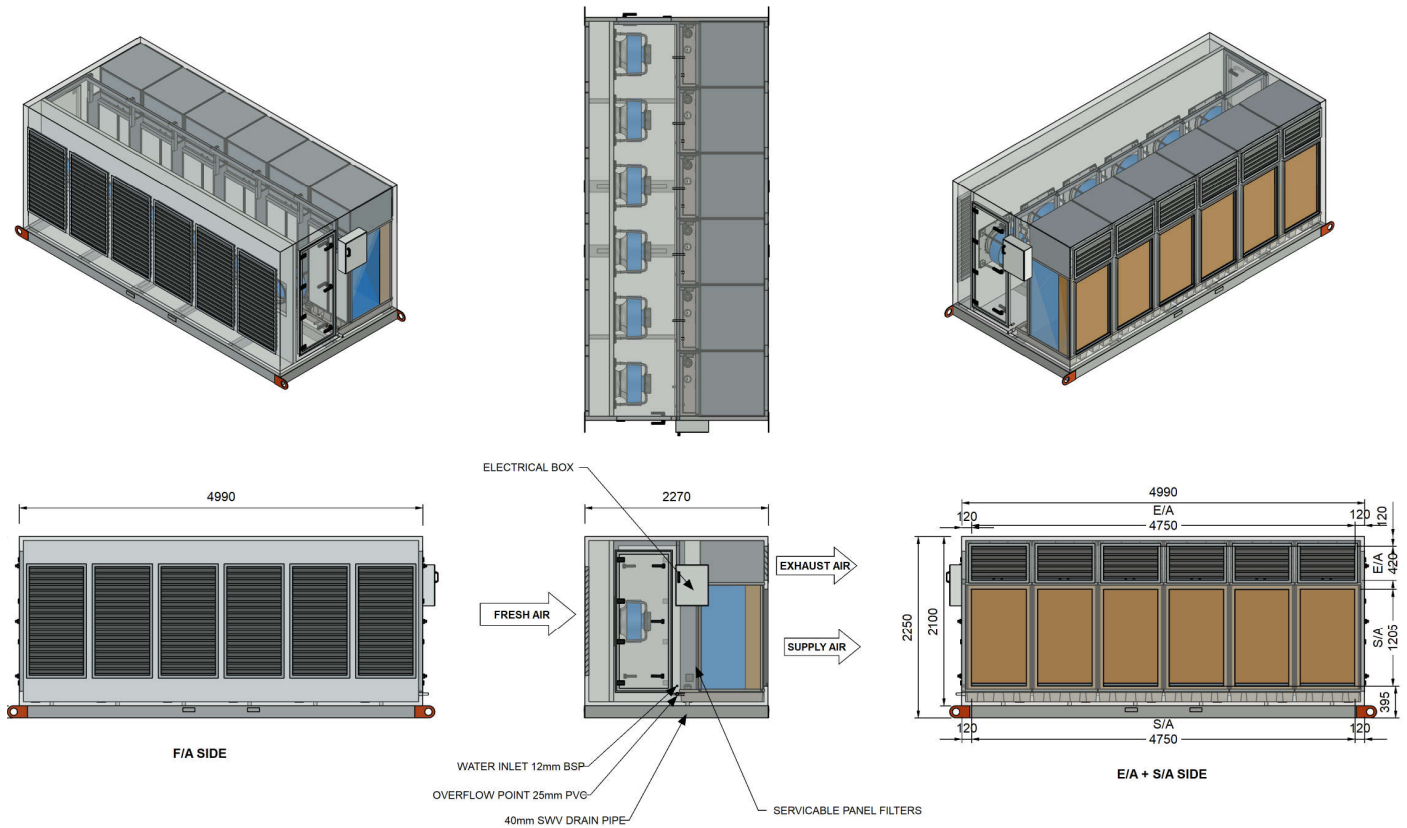
Air Filters

Filters	Included
Filter Type	G4
Filter Thickness	50
Filter Size	12 x 390 x 1330

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Technical Drawings – INDEC12000P3 Standard Cooling Unit



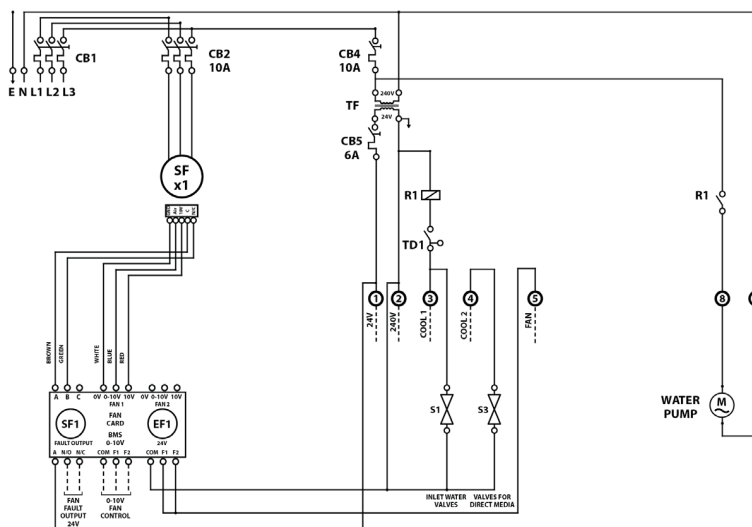
Dimensions

Height (mm)	2250
Width (mm)	4990
Length (mm)	2270
Weight (kg)	2250
Access Clearance (mm)	1200 (Fan Access One Side)

Duct Sizes

Supply Air (mm)	4750 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

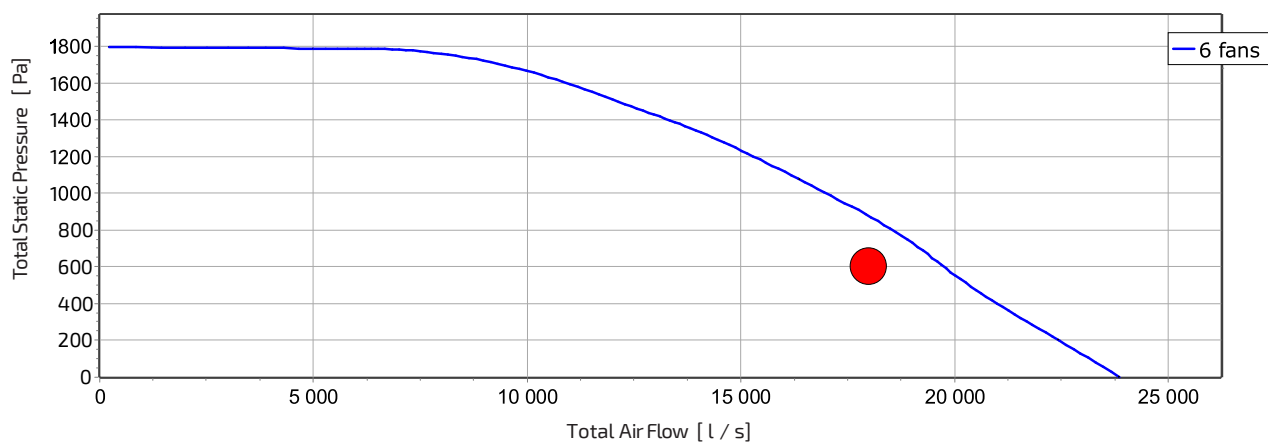
WIRING LEGEND

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 18000 L/s Total Air Volume

Inlet Rating dB		Outlet Rating dB	
63 Hz	54.4	63 Hz	58.8
125 Hz	71.2	125 Hz	72.2
250 Hz	83.7	250 Hz	83.7
500 Hz	87.9	500 Hz	90.5
1 K Hz	86.4	1K Hz	94.9
2K Hz	88.6	2K Hz	95.8
4K Hz	88.1	4K Hz	91.6
8K Hz	92.8	8K Hz	92.2
LwA	96.6	LwA	100.5