

Model	OPA 450RLTFPQ-Z-S2
Configuration Item No. (Standard / Opposite Hand)	Horizontal Supply Air + Economiser 877-045-701 / 877-045-710
Configuration Item No. (Standard / Opposite Hand)	Downward Supply Air + Economiser 877-045-723 / 877-045-732
Cooling capacity (net) ¹	43.3 kW
Cooling capacity range (gross)	18.2 ~ 52.4 kW
Heating capacity ¹	44.4 kW
Heating capacity range	16.5 ~ 54.5 kW
Electrical input - cooling	14.5 kW
Electrical input - heating	14.2 kW
EER / AEER (cooling) ¹	2.99 / 2.98
COP / ACOP (heating) ¹	3.14 / 3.13
Unit Controller	UC8
Refrigerant	R32
Refrigerant Charge Minimum floor area (@2.4m below ceiling diffuser)	10.5 kg 58.6 m ²
Compressor oil type	POE-46 (NXG5020 or equivalent)
Compressor type	inverter scroll
Power supply ²	3 ph. 400 V ac 50 Hz + N + E
Compressor (3ph.) run amps ¹	19.5 A/ph.
Compressor + VSD circuit breaker	50 A
Indoor fan motor size	EC plug 500 dia. 3.58kW
Nominal air flow ¹	2 200 l/s
Indoor fan motor (3ph.) - full load	5.5 A/ph.
Outdoor fan motor (3ph.) - full load	5.2 A/ph.
Outdoor fan capacitor size	n/a
Outdoor fan max. static pressure @ 5 500 l/s	125 Pa
Control circuit breaker (internal)	2 A
Auxiliary power outlet (1ph.) overload setting	10 A
Running amps (total system) ¹	24 / 22 / 24 A
Max. running amps (total system)	40 A/ph.
RCD type recommended	type B, 30mA, 3 pole
Net weight c/w Economiser	697 kg
Shipping Weight c/w Economiser	762 kg

Accessories:

Filters - rated EU4/G4 disposable	019-400-004 500x500x50 (x4) ³
Filters - rated EU4/G4 washable	019-000-033 500x500x50 (x4) ³
Drain tundish (set of 2)	060-000-653

Refer to temperzone for other options.

¹ Tested in accordance with AS/NZS 3823

² Voltage range: 380–440V

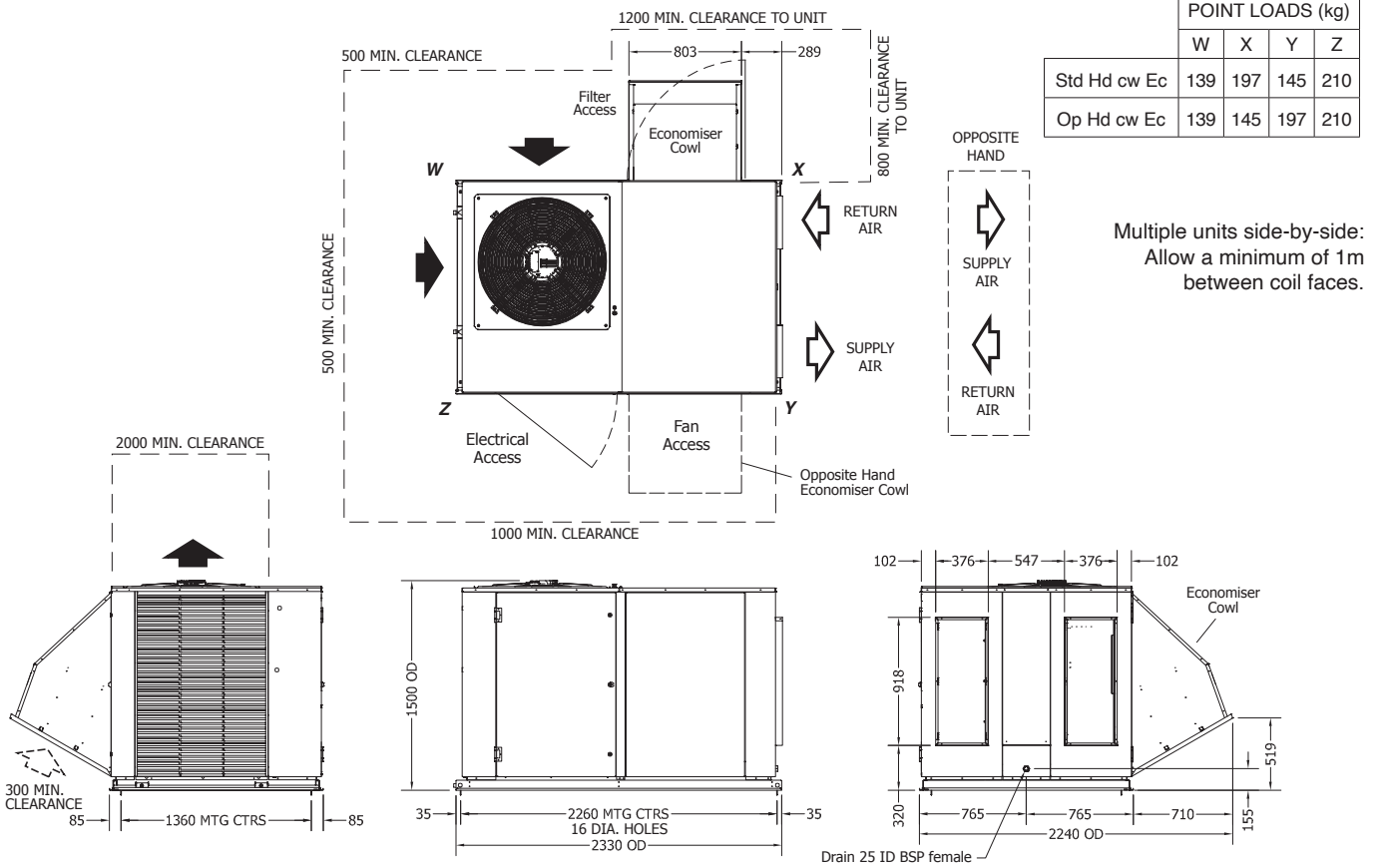
³ Filter sizes are nominal; refer to Temperzone for actual measurements.

DIMENSIONS (mm)



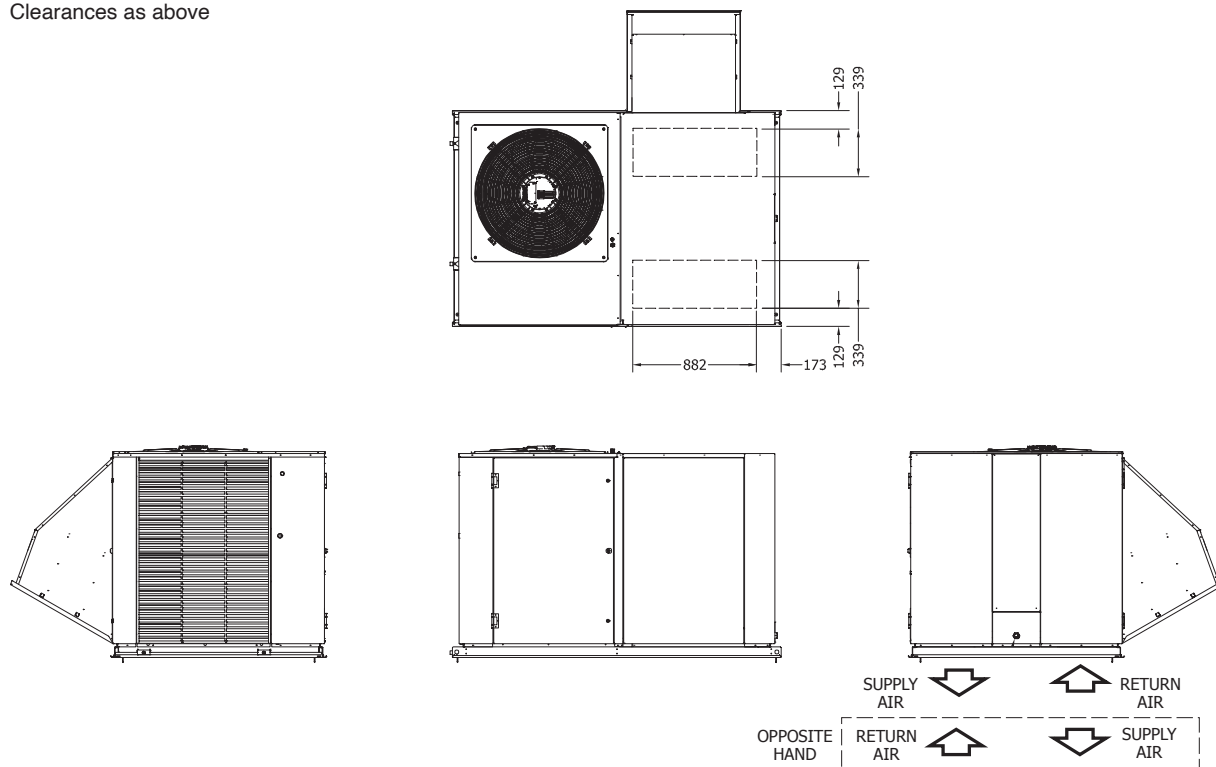
Not to Scale

OPA 450RLTFP01-Z-S2 Standard Hand, Horizontal Supply



OPA 450RLTFP23-Z-S2 Standard Hand, Downward Supply

Clearances as above



NOTE

Specifications are subject to change without notice due to the manufacturer's ongoing research and development programme.

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A	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">Client Wiring</p> <p style="text-align: center;">Client External Protection and Isolator Switch</p> </div>		<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">Customer BMS Input</p> <p style="text-align: center;">Connect cable screen to 'EARTH' terminal</p> </div>		<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">Ferrites</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Part Number</th> <th>Frequency Type</th> <th>Number of Turns</th> </tr> <tr> <td>A 012-001-074</td> <td>High</td> <td>1</td> </tr> <tr> <td>B 012-001-094</td> <td>Low</td> <td>1</td> </tr> </table> <p style="text-align: center;">Important Note: Ferrite 'A' on OD Fan circuit breaker for OPA 450 and 560 only.</p> </div>		Part Number	Frequency Type	Number of Turns	A 012-001-074	High	1	B 012-001-094	Low	1	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>24VCB</td> <td>24 Volt Circuit Breaker</td> </tr> <tr> <td>CCB</td> <td>Control Circuit Breaker</td> </tr> <tr> <td>CCH</td> <td>Crankcase Heater</td> </tr> <tr> <td>CM</td> <td>Compressor Motor</td> </tr> <tr> <td>DMF</td> <td>Damper Motor Fresh Air</td> </tr> <tr> <td>DMR</td> <td>Damper Motor Return Air</td> </tr> <tr> <td>EEV</td> <td>Electronic Expansion Valve</td> </tr> <tr> <td>EMIFB</td> <td>EMI Filter Board</td> </tr> <tr> <td>ETH</td> <td>Earth</td> </tr> <tr> <td>FRB</td> <td>Fault Relay Board</td> </tr> <tr> <td>IFCB</td> <td>Indoor Fan Circuit Breaker</td> </tr> <tr> <td>IFM</td> <td>Indoor Fan Motor</td> </tr> <tr> <td>IBB</td> <td>Insulated Bus Bar</td> </tr> <tr> <td>MIS</td> <td>Main Isolator Switch</td> </tr> <tr> <td>OFCB</td> <td>Outdoor Fan Circuit Breaker</td> </tr> <tr> <td>OFM</td> <td>Outdoor Fan Motor</td> </tr> <tr> <td>PCLP</td> <td>P Clip</td> </tr> <tr> <td>RV</td> <td>Reversing Valve</td> </tr> <tr> <td>SCB</td> <td>Socket Circuit Breaker</td> </tr> <tr> <td>SPS</td> <td>Single Phase Socket</td> </tr> <tr> <td>TB</td> <td>Terminal Block</td> </tr> <tr> <td>TR</td> <td>Transformer</td> </tr> <tr> <td>UC8</td> <td>Unit Controller 8</td> </tr> <tr> <td>VSD</td> <td>Variable Speed Drive</td> </tr> <tr> <td>VSDCB</td> <td>Variable Speed Drive Circuit Breaker</td> </tr> <tr> <td>W</td> <td>Cable Marker</td> </tr> </table>		24VCB	24 Volt Circuit Breaker	CCB	Control Circuit Breaker	CCH	Crankcase Heater	CM	Compressor Motor	DMF	Damper Motor Fresh Air	DMR	Damper Motor Return Air	EEV	Electronic Expansion Valve	EMIFB	EMI Filter Board	ETH	Earth	FRB	Fault Relay Board	IFCB	Indoor Fan Circuit Breaker	IFM	Indoor Fan Motor	IBB	Insulated Bus Bar	MIS	Main Isolator Switch	OFCB	Outdoor Fan Circuit Breaker	OFM	Outdoor Fan Motor	PCLP	P Clip	RV	Reversing Valve	SCB	Socket Circuit Breaker	SPS	Single Phase Socket	TB	Terminal Block	TR	Transformer	UC8	Unit Controller 8	VSD	Variable Speed Drive	VSDCB	Variable Speed Drive Circuit Breaker	W	Cable Marker	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">Economiser Option</p> </div>		<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">Important Note! Unit requires 24 hour power supply for control circuit and crankcase heaters</p> </div>	
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REV	DESCRIPTION	ECN	DATE	APPROVED
A	Initial Release			
B	Economiser wiring modified for OPA003.	5033	22-07-22	A.W.G
C	Different IFM options shown	5047	16-09-22	R.K.

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Client Wiring	-----
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Drawn: A.W.G	Date: 13-05-20
Appvd: BK	PJL

Title: OPA 250/350/450/560 RLTFPQ(-Z) UC8
Wiring Schematic

Drawing No: 291-003-263 SHEET 2 OF 2	Rev: C
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UC8 DIP switch settings		PSD DIP switch settings	
DIP switch	↑ On/Off ↓	DIP switch	↑ On/Off ↓
1,2,4,6,7,10,14	On	1, 4	On
All Others Off	Off	2, 3	Off

SAT-3 & TZT100 connection to UC8 terminals	
UC8 terminals	SAT-3
12	12V
B2	B
A2	A
0V	GND
Shield to 0V	24C

Sensors (S) / Transducers (T)		
DL	Name	Type
SL	Discharge Temp	S
AMB	Suction Temp	S
DEI	Ambient Temp	S
IC	De-ice Temp	S
LPT	De-ice Temp	S
HPT	Suction Pressure	T
	High Pressure	T