

<b>Model</b>	<b>OPA 250RLTFPQ-Z-S3</b>
Configuration Item No. (Standard / Opposite Hand)	Horizontal Supply Air + Economiser 877-025-701 / 877-025-710
Configuration Item No. (Standard / Opposite Hand)	Downward Supply Air + Economiser 877-025-723 / 877-025-732
Cooling capacity (net) <sup>1</sup>	24.6 kW
Cooling capacity range (gross)	10.1 ~ 29.1 kW
Heating capacity <sup>1</sup>	26.9 kW
Heating capacity range	6.5 ~ 29.3 kW
Electrical input - cooling	7.7 kW
Electrical input - heating	8.1 kW
EER / AEER (cooling) <sup>1</sup>	3.20 / 3.18
COP / ACOP (heating) <sup>1</sup>	3.33 / 3.31
Unit Controller	UC8
Refrigerant	R32
Refrigerant Charge	8.0 kg
Minimum floor area (@2.4m below ceiling diffuser)	34.0 m <sup>2</sup>
Compressor oil type	POE-46 (NXG5020 or equivalent)
Compressor type	inverter scroll
Power supply <sup>2</sup>	3 ph. 400 V ac 50 Hz + N + E
Compressor (3ph.) run amps <sup>1</sup>	9.5 A/ph
Compressor + VSD circuit breaker	40 A
Indoor fan motor size	EC plug 450 dia. 3.94kW
Nominal air flow at rating conditions	1250 l/s
Indoor fan motor (3ph.) - full load	6 A/ph.
Outdoor fan motor (3ph.) - full load	4.6 A/ph.
Outdoor fan capacitor size	n/a
Outdoor fan max. static pressure@ 3000 l/s	125 Pa
Control circuit breaker (internal)	2 A
Auxiliary power outlet (1ph.) overload setting	10 A
Running amps (total system) <sup>1</sup>	12.5 / 11.5 / 13 A
Max. running amps (total system)	24 A/ph.
RCD type recommended	type B, 30mA, 3 pole
Net weight c/w Economiser	556 kg
Shipping weight c/w Economiser	612 kg

**Accessories:**

Filters - rated EU4/G4 disposable	019-400-005 600x500x50 (x2) <sup>3</sup>
Filters - rated EU4/G4 washable	019-000-034 600x500x50 (x2) <sup>3</sup>
Drain tundish (set of 2)	060-000-653

Refer to temperzone for other options.

<sup>1</sup> Tested in accordance with AS/NZS 3823

<sup>2</sup> Voltage range: 380–440V

<sup>3</sup> Filter sizes are nominal; refer to Temperzone for actual measurements.

# DIMENSIONS (mm)

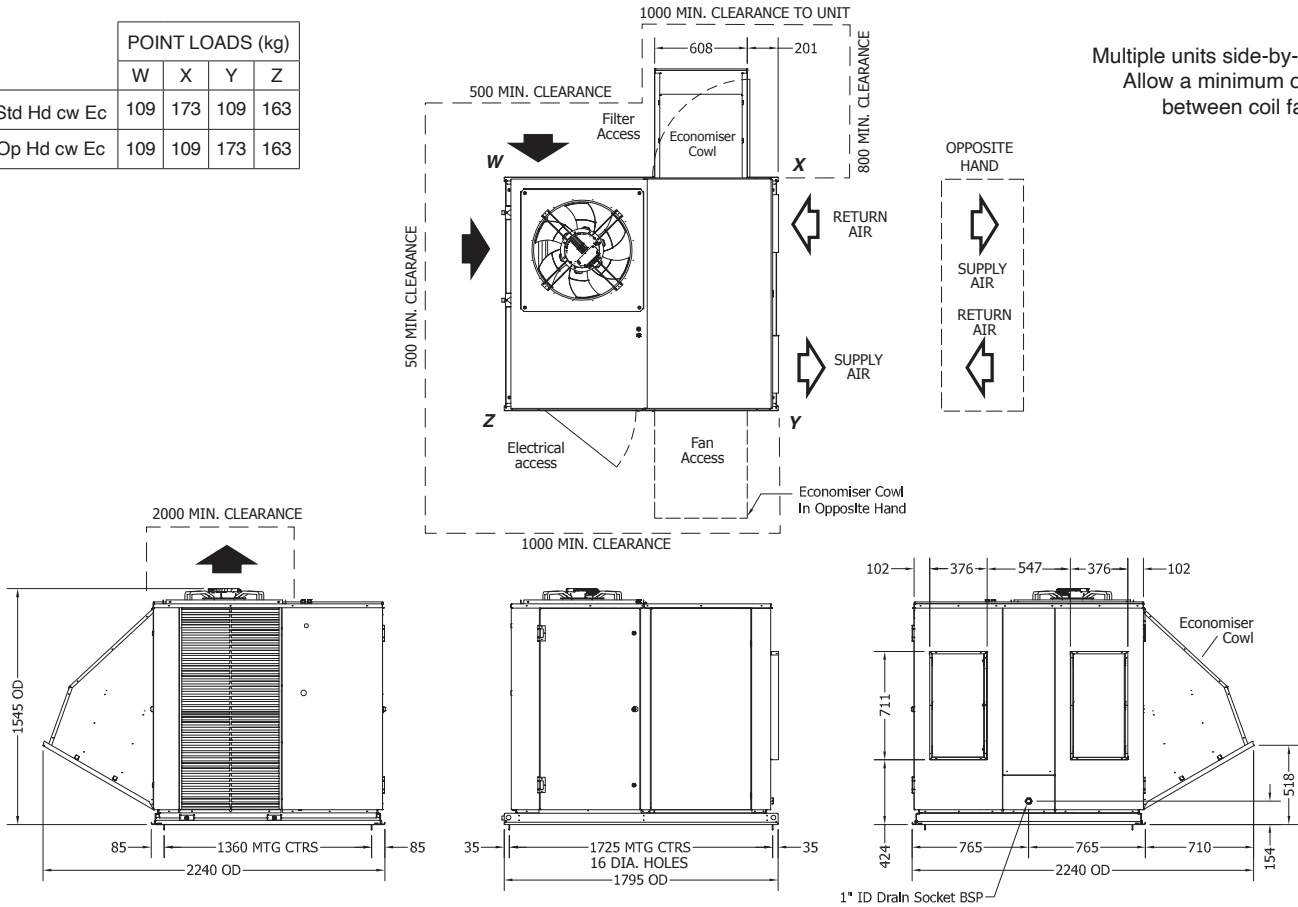


## OPA 250RLTFP01-Z-S3 Standard Hand, Horizontal Supply

Not to Scale

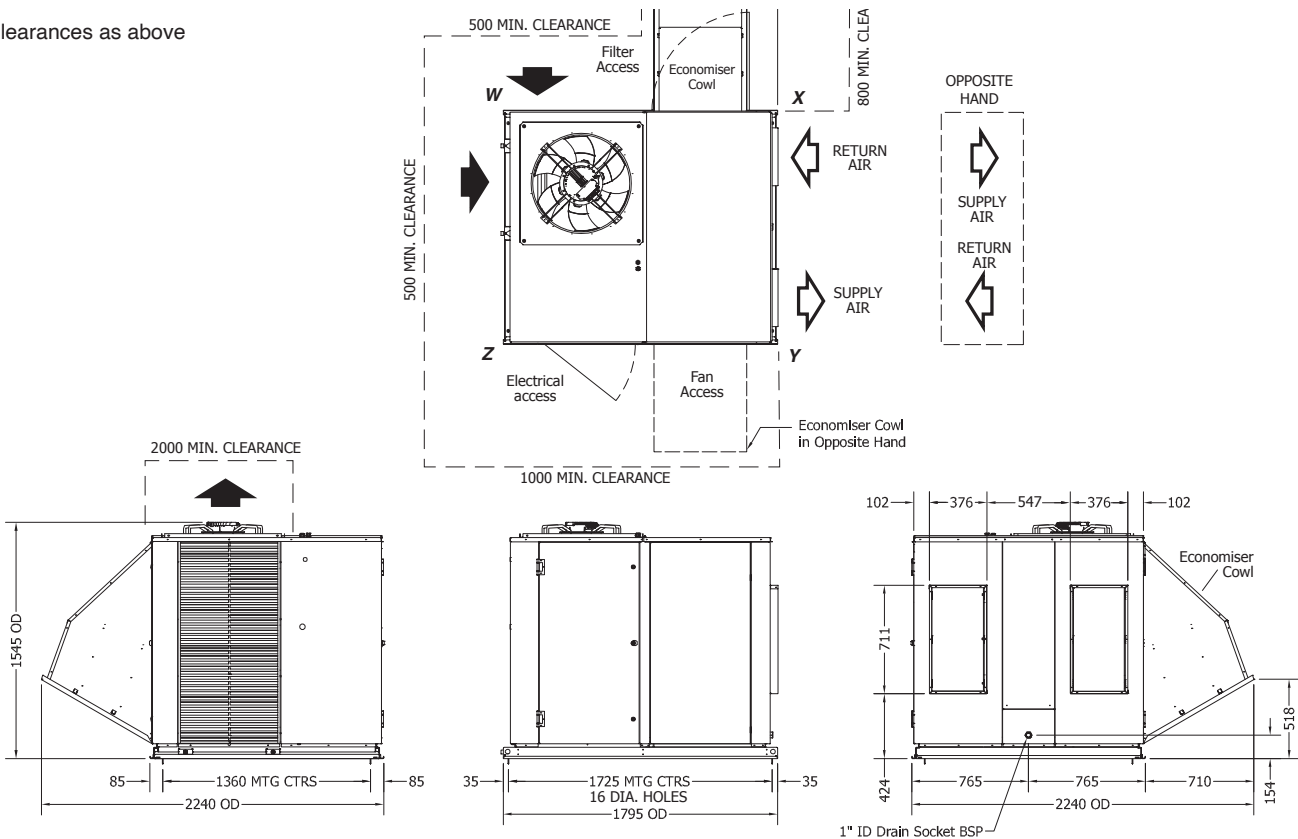
Multiple units side-by-side:  
Allow a minimum of 1m  
between coil faces.

	POINT LOADS (kg)			
	W	X	Y	Z
Std Hd cw Ec	109	173	109	163
Op Hd cw Ec	109	109	173	163



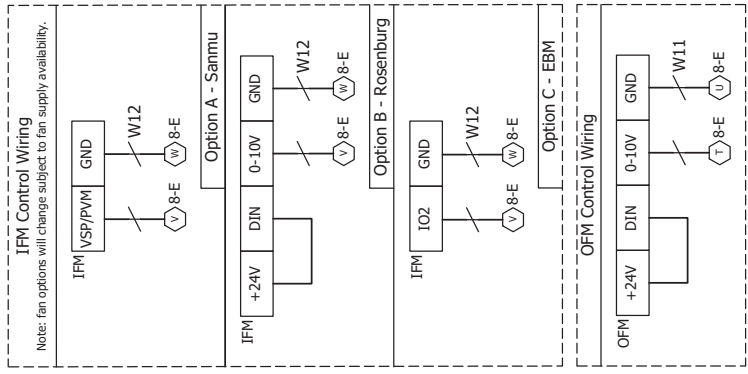
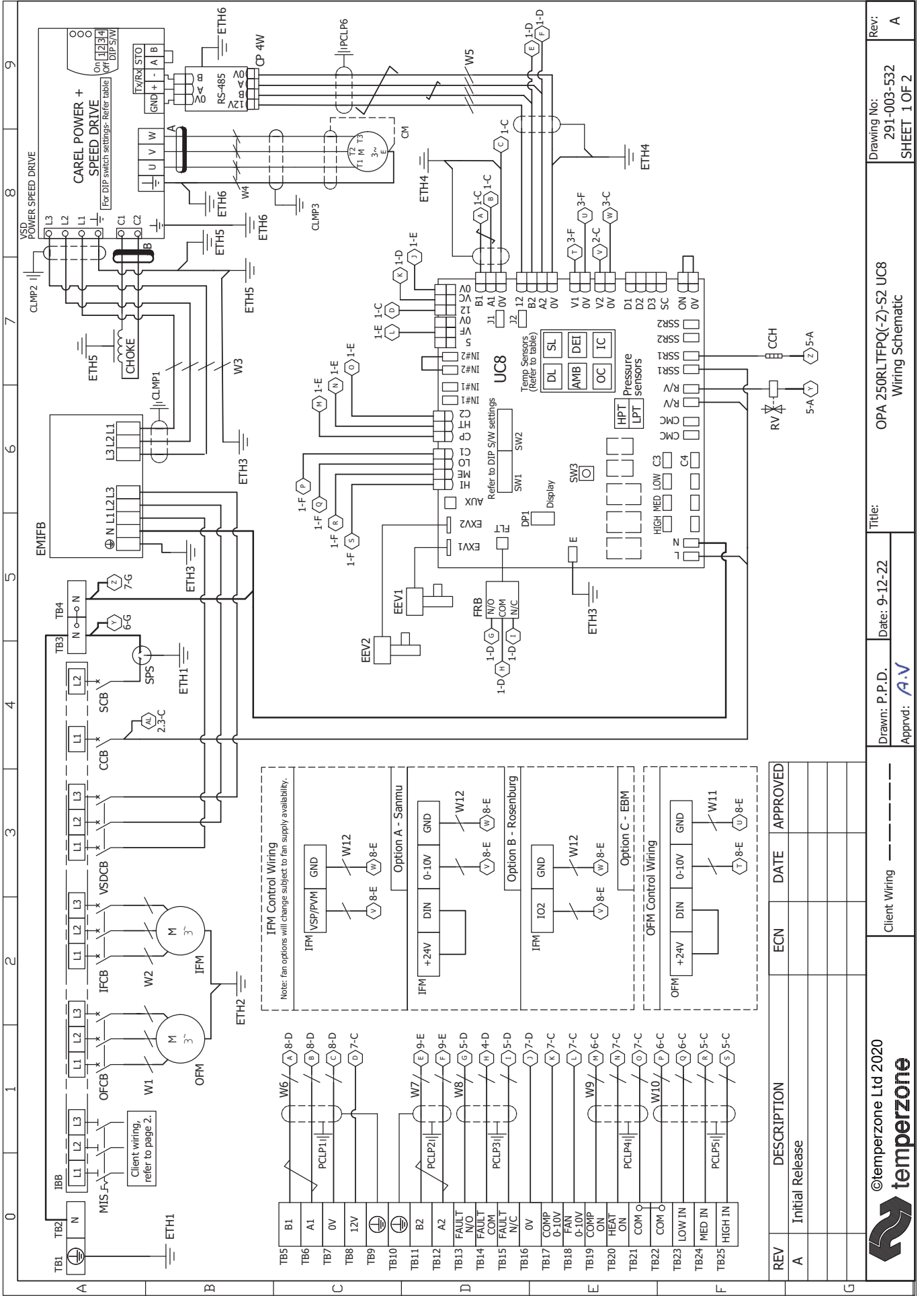
## OPA 250RLTFP23-Z-S3 Standard Hand, Downward Supply

Clearances as above



### NOTE

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



REV	DESCRIPTION	ECN	DATE	APPROVED
A	Initial Release			

Client Wiring -----

©temperzone Ltd 2020  
**temperzone**

Drawn: P.P.D. Date: 9-12-22 Title: OPA 250RLTFPQ(-Z)-S2 UC8 Wiring Schematic  
 Rev: 291-003-532 SHEET 1 OF 2  
 Apprvd: A.V

0	1	2	3	4	5	6	7	8	9																																																																																																																									
<p><b>Client Wiring</b></p> <p>Client External Protection and Isolator Switch</p>	<p><b>Customer BMS Input</b></p> <p>Connect cable screen to 'EARTH' terminal</p>	<p><b>Ferrites</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Part Number</th> <th>Frequency Type</th> <th>Number of Turns</th> </tr> </thead> <tbody> <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> </tbody> </table>	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	<p><b>Important Note!</b> Unit requires 24 hour power supply for control circuit and crankcase heaters</p>	<p><b>Economiser Option</b></p>	<p><b>Sensors (S) / Transducers (T)</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Name</th> <th>Type</th> <th>Colour</th> </tr> </thead> <tbody> <tr><td>DL</td><td>Discharge Temp</td><td>GREY</td></tr> <tr><td>SL</td><td>Suction Temp</td><td>WHITE</td></tr> <tr><td>AMB</td><td>Ambient Temp</td><td>YELLOW</td></tr> <tr><td>DEI</td><td>De-ice Temp</td><td>BLUE</td></tr> <tr><td>IC</td><td>De-ice Temp</td><td>BLUE</td></tr> <tr><td>LPT</td><td>Suction Pressure</td><td>T</td></tr> <tr><td>HPT</td><td>High Pressure</td><td>T</td></tr> </tbody> </table>	Name	Type	Colour	DL	Discharge Temp	GREY	SL	Suction Temp	WHITE	AMB	Ambient Temp	YELLOW	DEI	De-ice Temp	BLUE	IC	De-ice Temp	BLUE	LPT	Suction Pressure	T	HPT	High Pressure	T	<p>SAT-3 &amp; TZT100 connection to UC8 terminals</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>UC8 terminals</th> <th>SAT-3</th> <th>TZT100 Terminals</th> </tr> </thead> <tbody> <tr><td>I2</td><td>12V</td><td>24</td></tr> <tr><td>B2</td><td>B</td><td>B</td></tr> <tr><td>A2</td><td>A</td><td>A</td></tr> <tr><td>0V</td><td>GND</td><td>24C</td></tr> <tr><td>Shield to 0V</td><td></td><td></td></tr> </tbody> </table>	UC8 terminals	SAT-3	TZT100 Terminals	I2	12V	24	B2	B	B	A2	A	A	0V	GND	24C	Shield to 0V			<p><b>UC8 DIP switch settings</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>DIP switch</th> <th>↑ On/Off</th> <th>↓</th> </tr> </thead> <tbody> <tr><td>1,2,4,6,7,10,14</td><td>On</td><td>On</td></tr> <tr><td>All Others Off</td><td>Off</td><td>Off</td></tr> </tbody> </table>	DIP switch	↑ On/Off	↓	1,2,4,6,7,10,14	On	On	All Others Off	Off	Off	<p><b>PSD DIP switch settings</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>DIP switch</th> <th>↑ On/Off</th> <th>↓</th> </tr> </thead> <tbody> <tr><td>1, 4</td><td>On</td><td>On</td></tr> <tr><td>2, 3</td><td>Off</td><td>Off</td></tr> </tbody> </table>	DIP switch	↑ On/Off	↓	1, 4	On	On	2, 3	Off	Off
Part Number	Frequency Type	Number of Turns																																																																																																																																
A 012-001-074	High	1																																																																																																																																
B 012-001-094	Low	1																																																																																																																																
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																																																																																																																																	
Name	Type	Colour																																																																																																																																
DL	Discharge Temp	GREY																																																																																																																																
SL	Suction Temp	WHITE																																																																																																																																
AMB	Ambient Temp	YELLOW																																																																																																																																
DEI	De-ice Temp	BLUE																																																																																																																																
IC	De-ice Temp	BLUE																																																																																																																																
LPT	Suction Pressure	T																																																																																																																																
HPT	High Pressure	T																																																																																																																																
UC8 terminals	SAT-3	TZT100 Terminals																																																																																																																																
I2	12V	24																																																																																																																																
B2	B	B																																																																																																																																
A2	A	A																																																																																																																																
0V	GND	24C																																																																																																																																
Shield to 0V																																																																																																																																		
DIP switch	↑ On/Off	↓																																																																																																																																
1,2,4,6,7,10,14	On	On																																																																																																																																
All Others Off	Off	Off																																																																																																																																
DIP switch	↑ On/Off	↓																																																																																																																																
1, 4	On	On																																																																																																																																
2, 3	Off	Off																																																																																																																																
A	B	C	D	E	F	G																																																																																																																												



©temperzone Ltd 2020

Client Wiring

Drawn: P.P.D.    Date: 09-12-22    Title: OPA 250RLTFPQ(-Z)-S2 UC8 Wiring Schematic

Rev: A

Drawing No: 291-003-532 SHEET 2 OF 2