

Model	OPA 250RLTFPQ-S2
Configuration	Horizontal Supply Air
Item No. (Standard / Opposite Hand)	876-025-701 / 876-025-710
Unit c/w Fresh Air Cowl (OPA 250RLTFPQ-C)	878-025-701 / 878-025-710
Configuration	Downward Supply Air
Item No. (Standard / Opposite Hand)	876-025-723 / 876-025-732
Unit c/w Fresh Air Cowl (OPA 250RLTFPQ-C)	878-025-723 / 878-025-732
Cooling capacity (net) ¹	24.6 kW
Cooling capacity range (gross)	10.1 ~ 29.1 kW
Heating capacity ¹	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) ¹	3.20 / 3.18
COP / ACOP (heating) ¹	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 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	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) ¹	12.5 / 11.5 / 13 A
Max. running amps (total system)	24 A/ph.
RCD type recommended	type B, 30mA, 3 pole
Net weight	511 kg
Shipping weight	567 kg
Net Weight c/w Fresh Air Cowl option	519 kg

Accessories:

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

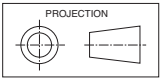
Optional Controls:

TZT-100 Room temperature controller	201-000-350
-------------------------------------	-------------

Refer to temperzone for other options.

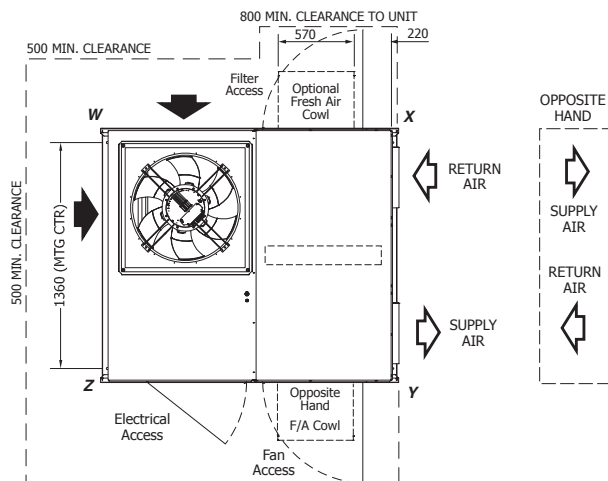
¹ Tested in accordance with AS/NZS 3823² Voltage range: 380-440V³ Filter sizes are nominal; refer to Temperzone for actual measurements.

DIMENSIONS (mm)



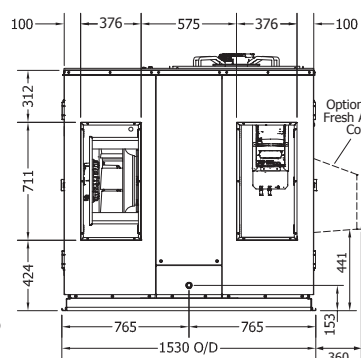
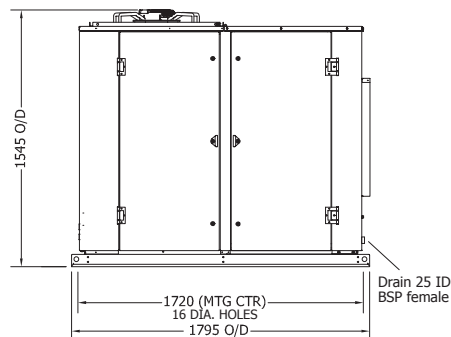
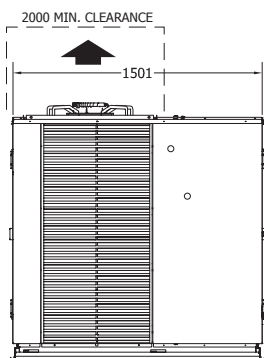
OPA 250RLTFP01(-C) Standard Hand, Horizontal Supply

Not to Scale

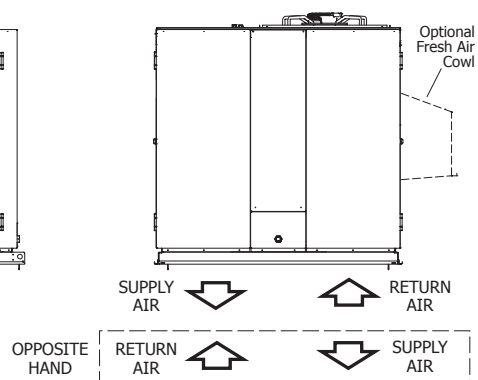
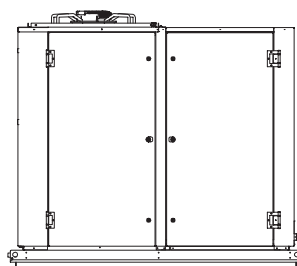
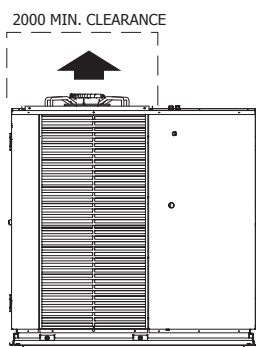
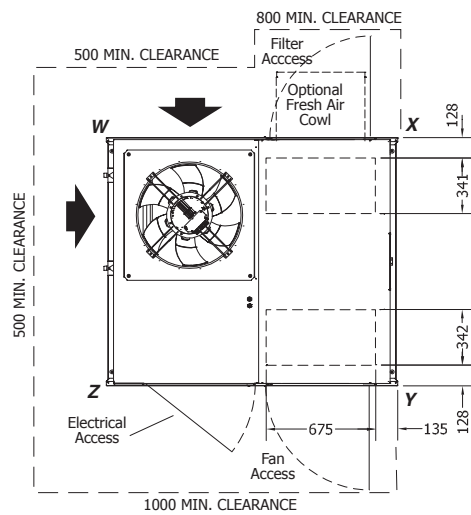


		POINT LOADS (kg)			
		W	X	Y	Z
Std Hd	no F/A	104	149	100	158
	cw F/A	105	153	102	159
Op Hd	no F/A	121	155	91	144

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

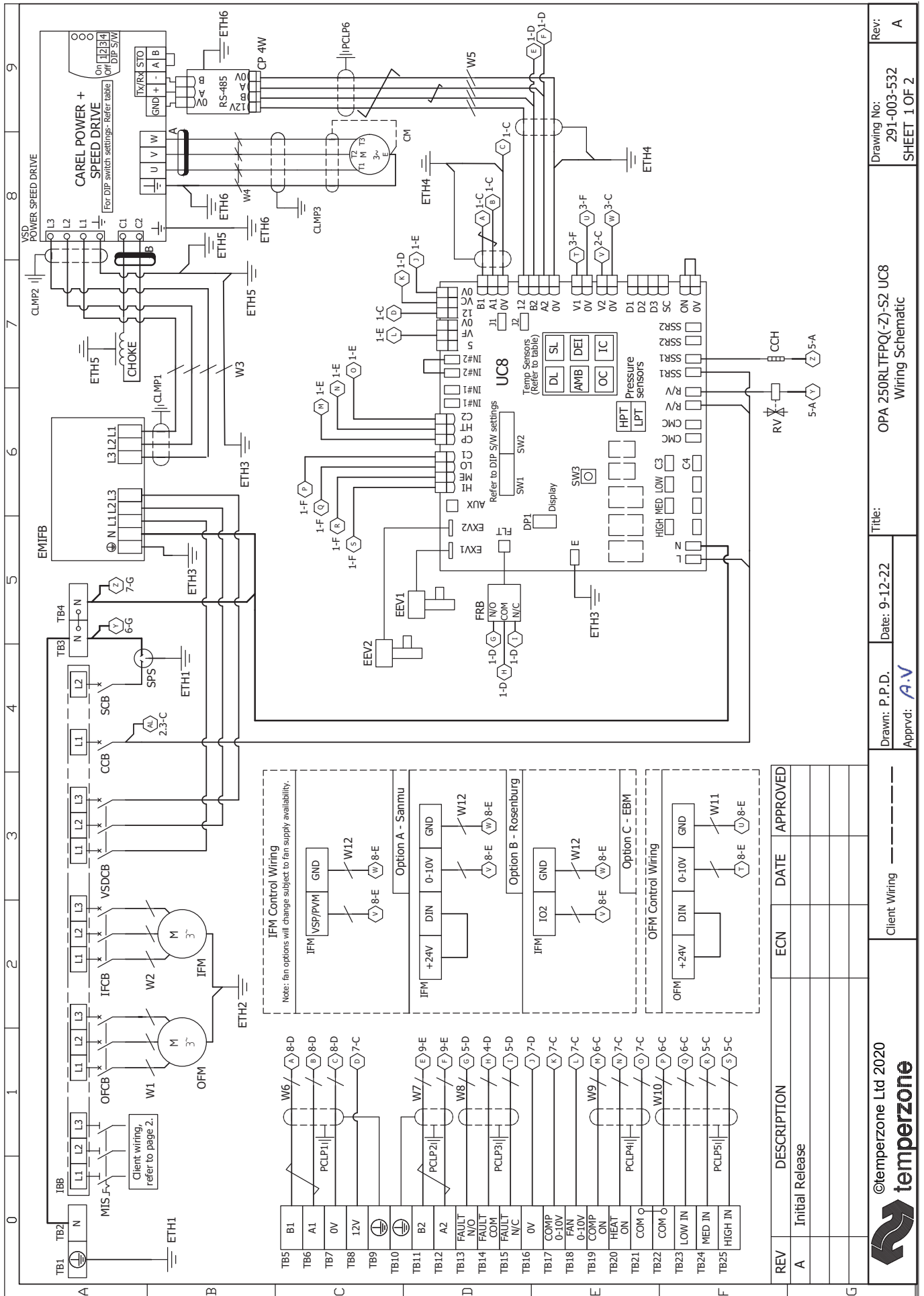


OPA 250RLTFP23(-C) Standard Hand, Downward Supply



NOTE

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



0	1	2	3	4	5	6	7	8	9																																																																																														
Client Wiring	<p>Client External Protection and Isolator Switch</p>		<p>Customer BMS Input</p>		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">Ferrites</th> </tr> <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>		Ferrites			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;"> <tbody> <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> </tbody> </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>Economy Option</p>		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">Sensors (S) / Transducers (T)</th> </tr> <tr> <th>Name</th> <th>Type</th> <th>Colour</th> </tr> </thead> <tbody> <tr><td>DL</td><td>Discharge Temp</td><td>S</td></tr> <tr><td>SL</td><td>Suction Temp</td><td>S</td></tr> <tr><td>AMB</td><td>Ambient Temp</td><td>S</td></tr> <tr><td>DEI</td><td>De-ice Temp</td><td>S</td></tr> <tr><td>IC</td><td>De-ice Temp</td><td>S</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>		Sensors (S) / Transducers (T)			Name	Type	Colour	DL	Discharge Temp	S	SL	Suction Temp	S	AMB	Ambient Temp	S	DEI	De-ice Temp	S	IC	De-ice Temp	S	LPT	Suction Pressure	T	HPT	High Pressure	T
Ferrites																																																																																																							
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																																																																																																						
Sensors (S) / Transducers (T)																																																																																																							
Name	Type	Colour																																																																																																					
DL	Discharge Temp	S																																																																																																					
SL	Suction Temp	S																																																																																																					
AMB	Ambient Temp	S																																																																																																					
DEI	De-ice Temp	S																																																																																																					
IC	De-ice Temp	S																																																																																																					
LPT	Suction Pressure	T																																																																																																					
HPT	High Pressure	T																																																																																																					
<p>Important Note! Unit requires 24 hour power supply for control circuit and crankcase heaters</p>																																																																																																							
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">SAT-3 & TZT100 connection to UC8 terminals</th> </tr> <tr> <th>UC8 terminals</th> <th>SAT-3</th> <th>TZT100 Terminals</th> </tr> </thead> <tbody> <tr><td>12</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 colspan="3">Shield to 0V</td></tr> </tbody> </table>										SAT-3 & TZT100 connection to UC8 terminals			UC8 terminals	SAT-3	TZT100 Terminals	12	12V	24	B2	B	B	A2	A	A	0V	GND	24C	Shield to 0V																																																																											
SAT-3 & TZT100 connection to UC8 terminals																																																																																																							
UC8 terminals	SAT-3	TZT100 Terminals																																																																																																					
12	12V	24																																																																																																					
B2	B	B																																																																																																					
A2	A	A																																																																																																					
0V	GND	24C																																																																																																					
Shield to 0V																																																																																																							
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">UC8 DIP switch settings</th> <th colspan="2">PSD DIP switch settings</th> </tr> <tr> <th>DIP switch</th> <th>↑ On/Off ↓</th> <th>DIP switch</th> <th>↑ On/Off ↓</th> </tr> </thead> <tbody> <tr> <td>1,2,4,6,7,10,14</td> <td>On</td> <td>1, 4</td> <td>On</td> </tr> <tr> <td>All Others Off</td> <td>Off</td> <td>2, 3</td> <td>Off</td> </tr> </tbody> </table>										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																																																																														
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																																																																																																				
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Drawing No:</th> <th colspan="2">Rev:</th> </tr> </thead> <tbody> <tr> <td colspan="2">OPA 250RLTFPQ(-Z)-S2 UC8</td> <td colspan="2">291-003-532</td> </tr> <tr> <td colspan="2">Wiring Schematic</td> <td colspan="2">SHEET 2 OF 2</td> </tr> </tbody> </table>										Drawing No:		Rev:		OPA 250RLTFPQ(-Z)-S2 UC8		291-003-532		Wiring Schematic		SHEET 2 OF 2																																																																																			
Drawing No:		Rev:																																																																																																					
OPA 250RLTFPQ(-Z)-S2 UC8		291-003-532																																																																																																					
Wiring Schematic		SHEET 2 OF 2																																																																																																					
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>ECN</th> <th>DATE</th> <th>APPROVED</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Initial Release</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>										REV	DESCRIPTION	ECN	DATE	APPROVED	A	Initial Release																																																																																							
REV	DESCRIPTION	ECN	DATE	APPROVED																																																																																																			
A	Initial Release																																																																																																						
<div style="display: flex; justify-content: space-between; align-items: center;"> <div> <p>©temperzone Ltd 2020</p> </div> <div> <p>Client Wiring</p> </div> <div> <p>Drawn: P.P.D. _____</p> <p>Appvd: A.V</p> </div> <div> <p>Date: 09-12-22</p> </div> <div> <p>Title: OPA 250RLTFPQ(-Z)-S2 UC8 Wiring Schematic</p> </div> </div>																																																																																																							