

SPECIFICATIONS



Model)	OPA 960RKTBG-PZ ECO
Configuration	Downward Supply Air c/w Economiser
Item No. (Standard / Opposite Hand)	867-096-723 / 867-096-732
Cooling capacity (net) to AS/NZS 3823 T1	87.9 kW
Heating capacity H1	90.0 kW
Electrical input - cooling	29.4 kW
Electrical input - heating	26.5 kW
EER / AEER (cooling)	2.99 / 2.98
COP / ACOP (heating)	3.40 / 3.39
Unit Controller	UC8 (x2)
Refrigerant	R410A
Refrigerant Charge	15 kg/sys.
Compressor oil type	POE 32-3MAF (or equivalent)
Compressor type	digital scroll (x2)
Power supply	3 ph. 400V ac 50Hz
Compressor (3ph.) run amps at rating cond.	27.5 A/ph. (x2)
Compressor overload setting	32 A (x2)
Compressor circuit breaker	63 A (x2)
Indoor fan motor size	EC Plug 500 dia. 2.65kW (x2)
Nominal air flow at rating conditions	4750 l/s
Indoor fan motor (3ph.)	4.5 A/ph. (x2)
Outdoor fan motor (1ph.) - full load	1.7 A (x4)
Outdoor fan capacitor size	8 μ fd (x4)
Control circuit breaker (internal)	4 A
Single phase socket circuit breaker	10 A
Running amps (total system)	58 / 66 / 57 A
Max. running amps (total system)	68 / 77 / 67 A
Net weight	1201 kg

Accessories:

Filters - rated EU4/G4 disposable	019-400-008 500x450x50 (x9)
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Optional Controls:

Viking controller	201-000-191
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Refer to temperzone for other options.

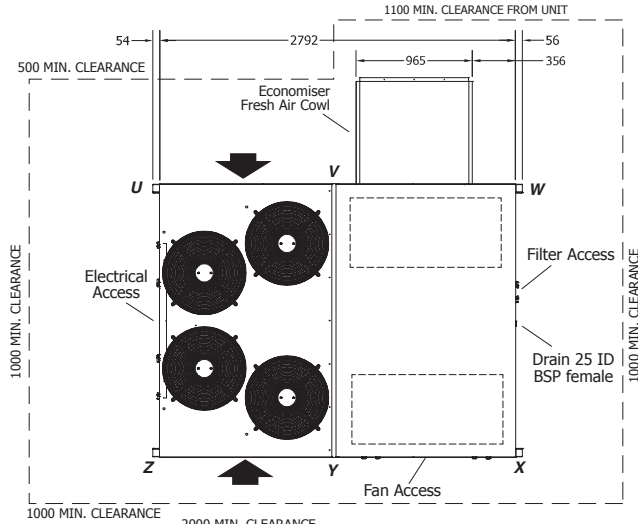
Tested in accordance with AS/NZS 3823

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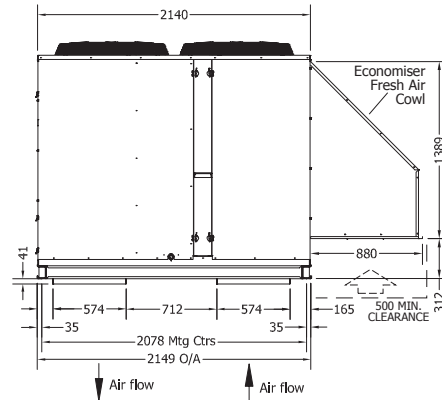
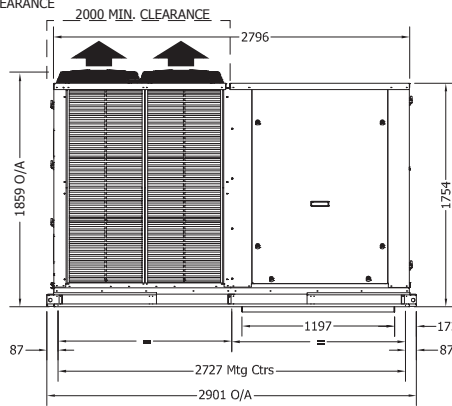


OPA 960RKTG23-PZ Standard Hand

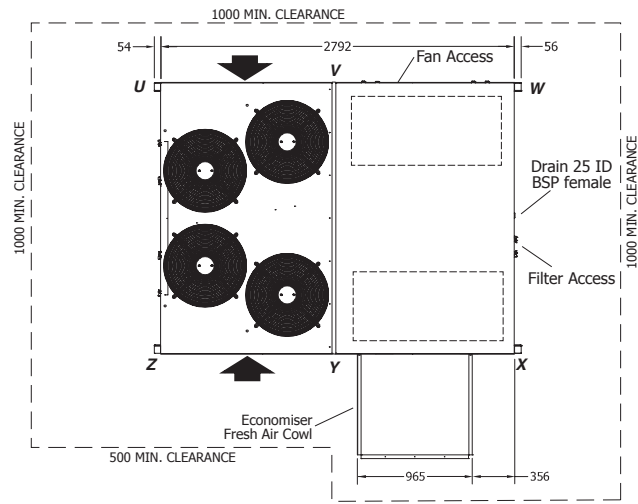
Not to Scale



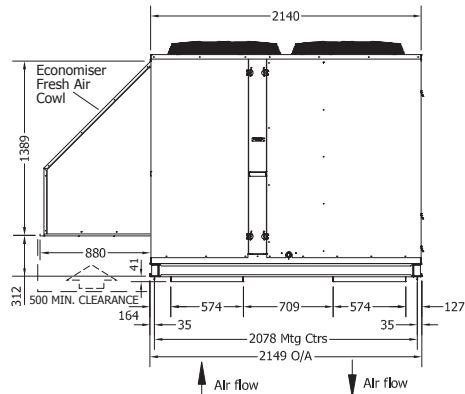
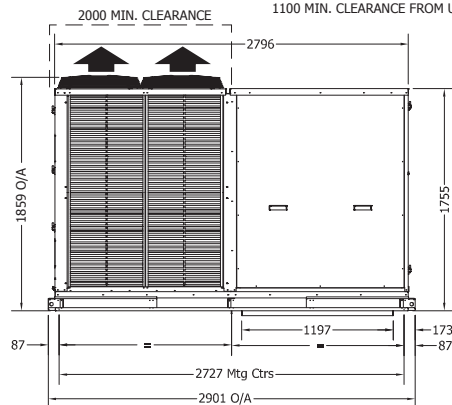
POINT LOADS (kg)					
U	V	W	X	Y	Z
244	211	178	184	193	204



OPA 960RKTG32-PZ Opposite Hand



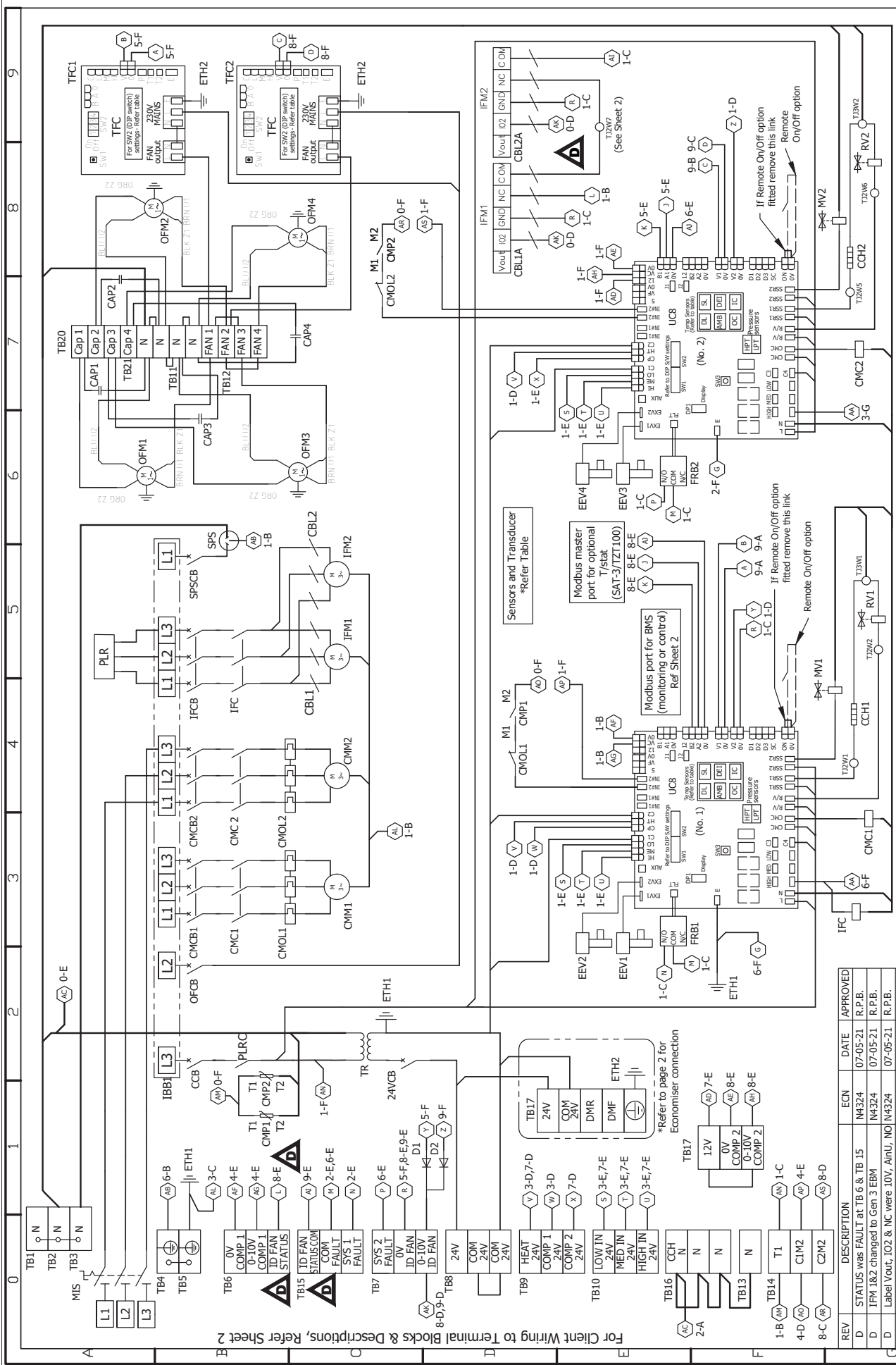
POINT LOADS (kg)					
U	V	W	X	Y	Z
204	193	184	178	211	244



NOTE

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





For Client Wiring to Terminal Blocks & Descriptions, Refer Sheet 2

*Refer to page 2 for Economiser connection

REV	DESCRIPTION	ECN	DATE	APPROVED
D	STATUS was FAULT at TB 6 & TB 15	N4324	07-05-21	R.P.B.
D	IFM 1&2 changed to Gen 3 EBM	N4324	07-05-21	R.P.B.
D	Label Volt, IO2 & NC were 10V, AnIn, NO	N4324	07-05-21	R.P.B.
D	Added T12W7 AT IFM1&2.	N4324	07-05-21	R.P.B.



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DO NOT SCALE - ASK

Client Wiring

Drawn: S.D.H. Date: 21-06-17
 Approved: P.J.L. PCL

Title: OPA 960RKTBG-P7 UC8 c/w Economiser
 Wiring Schematic

Drawing No: 291-002-363
 SHEET 1 OF 2
 Rev: D

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Important Notes:

1) Crankcase Heater Note
24 Hour power required for control circuit and crankcase heaters

2) SAT-3 and TZT 100 Note
To connect TZT100 to unit use 2 pair twisted cable - screen grounded. (F/UTP 24G (0.2mm²) or thicker recommended)

3) Master-slave note
When the unit is controlled with a TZT-100 or SAT-3 wall thermostat then the two UC8 controllers must be linked and configured as master and slave.
Master DIP switch settings: 11 OFF 12 OFF
Slave DIP switch settings: 11 ON 12 OFF

24VCB	24 VOLT CIRCUIT BREAKER
CAP	CAPACITOR
CBL	CABLE
CCH	CONTROL CIRCUIT BREAKER
CCH	CRANKCASE HEATER
CMC	COMPRESSOR CONTACTOR
CMCB	COMPRESSOR CIRCUIT BREAKER
CMM	COMPRESSOR MOTOR
CMOL	COMPRESSOR OVERLOAD
CMPT	COMPRESSOR MOTOR PROTECTION
C1M2	COMPRESSOR 1 TERMINAL M2
C2M2	COMPRESSOR 2 TERMINAL M2
EEV	ELECTRONIC EXPANSION VALVE
ETH	EARTH
FRB	FAULT RELAY BOARD
IFC	INDOOR FAN CONTACTOR
IFCB	INDOOR FAN CIRCUIT BREAKER
IFM	INDOOR FAN MOTOR
IBB	INSULATED BUS BAR
MIS	MAIN ISOLATOR SWITCH
MV	MODULATING VALVE
OFGB	OUTDOOR FAN CIRCUIT BREAKER
OFM	OUTDOOR FAN MOTOR
PLRC	PHASE LOSS RELAY CONTACT
PLR	PHASE LOSS RELAY
RV	REVERSING VALVE
SPS	SINGLE PHASE SOCKET
SPSCB	SINGLE PHASE SOCKET CIRCUIT BREAKER
TB	TERMINAL BLOCK
TFC	TRIAC FAN CONTROLLER
TJ	TERMINAL JOINER
TR	TRANSFORMER
T1	COMPRESSOR TERMINAL T1
UC8	UNIT CONTROLLER 8

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

SAT-3 & TZT100 connection to UC8 terminals

UC8 terminals(No.1)	SAT-3	TZT100 Terminals
12	12V	24
B2	B	B
A2	A	A
0V	GND	24C
Screen to 0V		

UC8 DIP switch settings (No.1)

DIP switch	On/Off
1,2,4,6,7,10	On
All Others Off	Off

UC8 DIP switch settings (No.2)

DIP switch	On/Off
1,2,4,6,7,10	On
All Others Off	Off

TFC DIP switch settings

DIP switch	On/Off
1, 2, 3, 4	Off

Client Protection and Isolator Switch

Remote option

BMS Control

Connection to control stat by client

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Client Wiring

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Drawn: S.D.H. Date: 21-06-17

Approved: *PJL*

Title: OPA 960RKTBG-PZ UC8 c/w Economiser Wiring Schematic

Drawing No: 291-002-363 SHEET 2 OF 2

Rev: D