

SPECIFICATIONS



Model)	OPA 960RKTBG-PZ ECO
Configuration	Horizontal Supply Air c/w Economiser
Item No. (Standard / Opposite Hand)	867-096-701 / 867-096-710
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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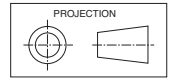
Refer to temperzone for other options.

Tested in accordance with AS/NZS 3823

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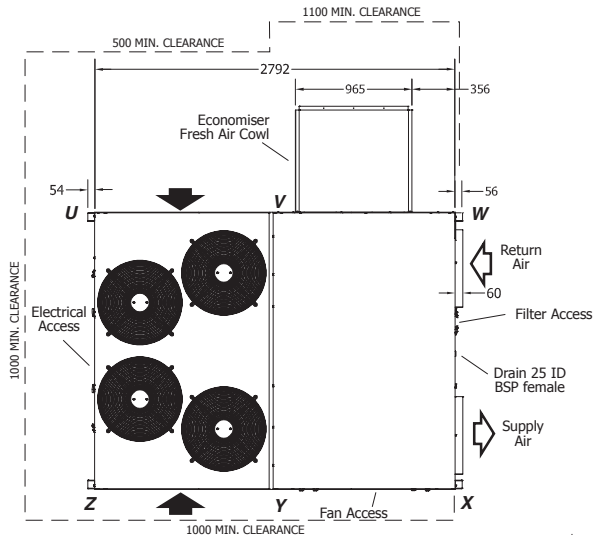


DIMENSIONS (mm)

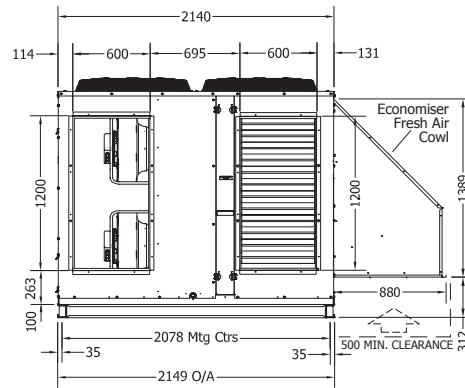
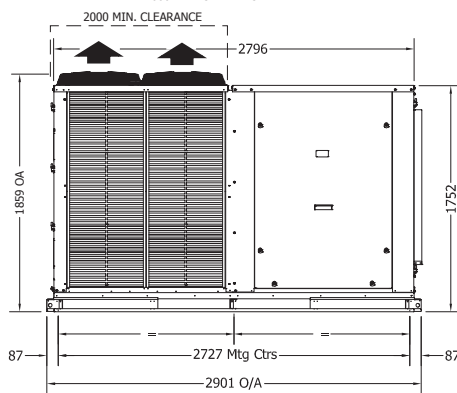


OPA 960RKTBG01-PZ Standard Hand

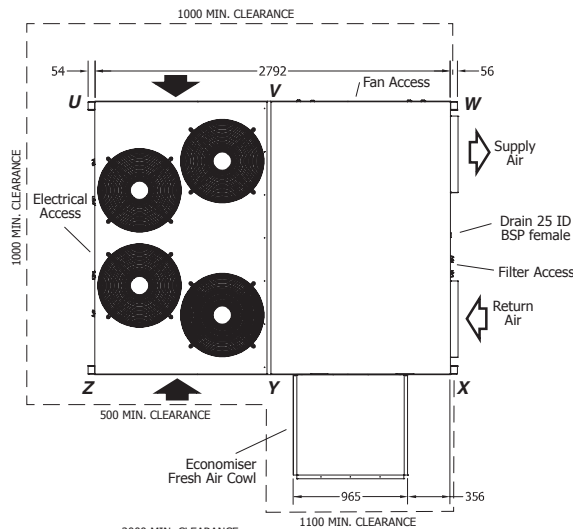
Not to Scale



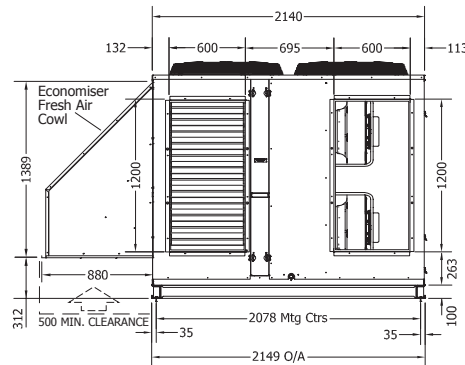
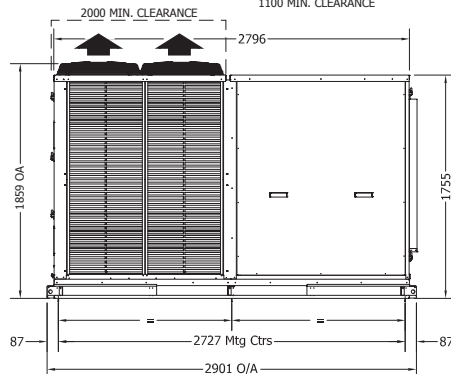
POINT LOADS (kg)					
U	V	W	X	Y	Z
244	209	174	179	191	204



OPA 960RKTBG10-PZ Opposite Hand

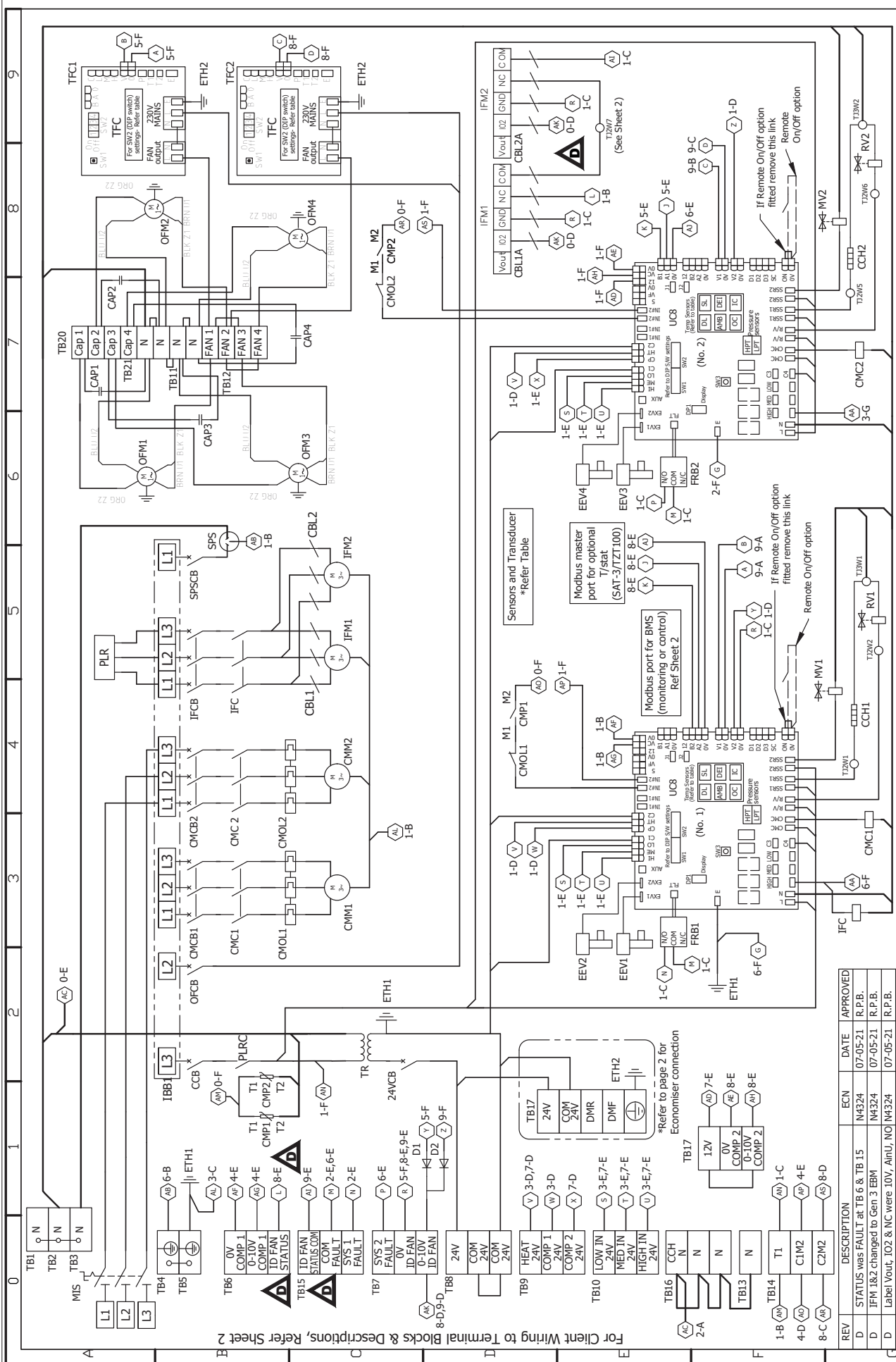


POINT LOADS (kg)					
U	V	W	X	Y	Z
204	191	179	174	209	244



NOTE

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



REV	DESCRIPTION	ECN	DATE	APPROVED
D	STATUS was FAULT at TB 6 & TB 15	N4324	07-05-21	R.P.B.
D	IFM 182 changed to Gen 3 EBM	N4324	07-05-21	R.P.B.
D	Label Vout, TO2 & NC were 10V, AinU, 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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Client Wiring
 DO NOT SCALE - ASK

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

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

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

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

*Refer to page 2 for Economiser connection

Sensors and Transducer *Refer Table

Modbus master port for optional T/stat (SAT-3/7T100)

Modbus port for BMS (monitoring or control) Ref Sheet 2

If Remote On/Off option fitted remove this link

Remote On/Off option

If Remote On/Off option fitted remove this link

Remote On/Off option

0123456789

Important Notes:

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

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

4) 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
CCB	CONTROL CIRCUIT BREAKER
CCH	CRANKCASE HEATER
GMC	COMPRESSOR CONTACTOR
CMCB	COMPRESSOR CIRCUIT BREAKER
CMM	COMPRESSOR MOTOR
CMOL	COMPRESSOR OVERLOAD
CMF	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
OFCB	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	RED
SL	Suction Temp	WHITE
AMB	Ambient Temp	BLACK
DEI	De-ice Temp	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 Wiring

Remote option

BMS Control

Connection to control tstat by client

Client Wiring

DO NOT SCALE - ASK

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Rev: D

Drawing No: 291-002-363

SHEET 2 OF 2