

SPECIFICATIONS



Model	OPA 705RKTBG-PZ ECO
Configuration	Downward Supply c/w Economiser
Item No. (Standard / Opposite Hand)	867-071-723 / 867-071-732
Cooling capacity (net) to AS/NZS 3823 T1	67.9 kW
Heating capacity H1	67.5 kW
Electrical input - cooling	20 kW
Electrical input - heating	18 kW
EER / AEER (cooling)	3.30 / 3.28
COP / ACOP (heating)	3.75 / 3.73
Unit Controller	UC8 (x2)
Refrigerant	R410A
Refrigerant Charge	14 kg/sys.
Compressor oil type	POE 32-3MAF (or equivalent)
Compressor type	digital + fixed scroll
Power supply	3 ph. 400V ac 50Hz
Compressor (3ph.) run amps at rating cond.	16 A/ph. (x2)
Compressor overload setting	22 A (x2)
Compressor circuit breaker	40 A (x2)
Indoor fan motor size	EC Plug 500 dia. 2.65kW (x2)
Nominal air flow at rating conditions	3700 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)	33 / 40 / 34 A
Max. running amps (total system)	46 / 54 / 47 A
Net weight	1193 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

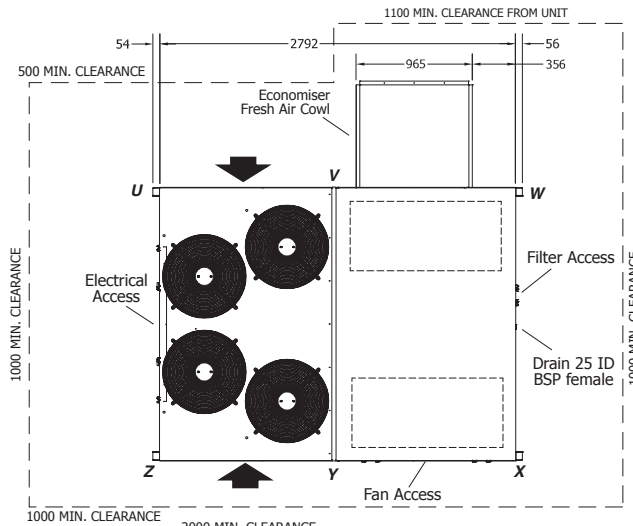
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DIMENSIONS (mm)

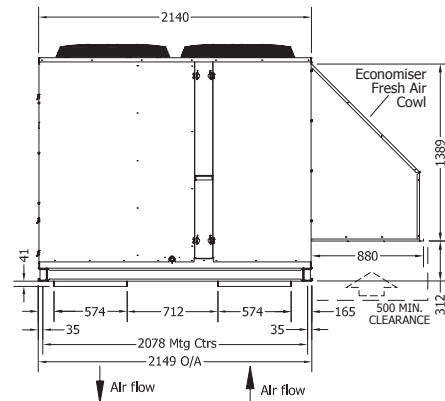
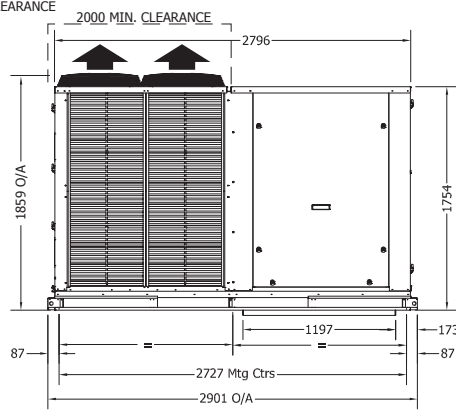


OPA 705RKTBG23-PZ Standard Hand

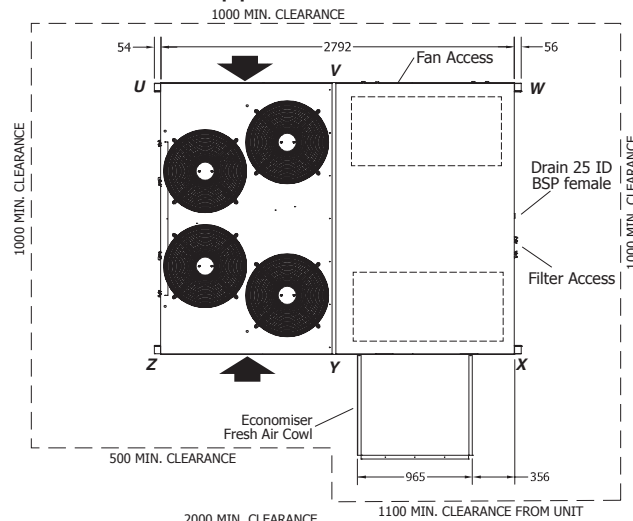
Not to Scale



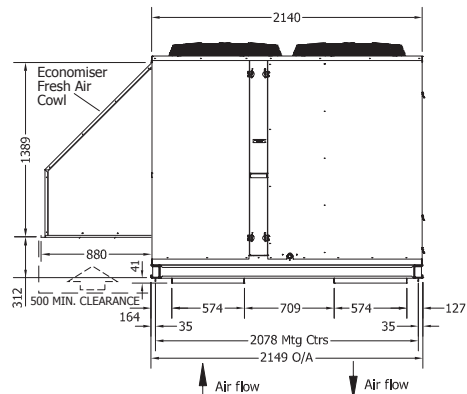
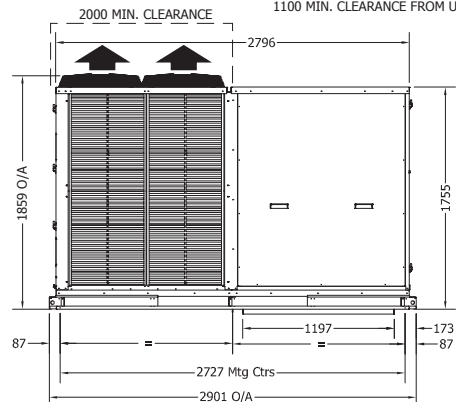
POINT LOADS (kg)					
U	V	W	X	Y	Z
237	196	181	185	193	201



OPA 705RKTBG32-PZ Opposite Hand

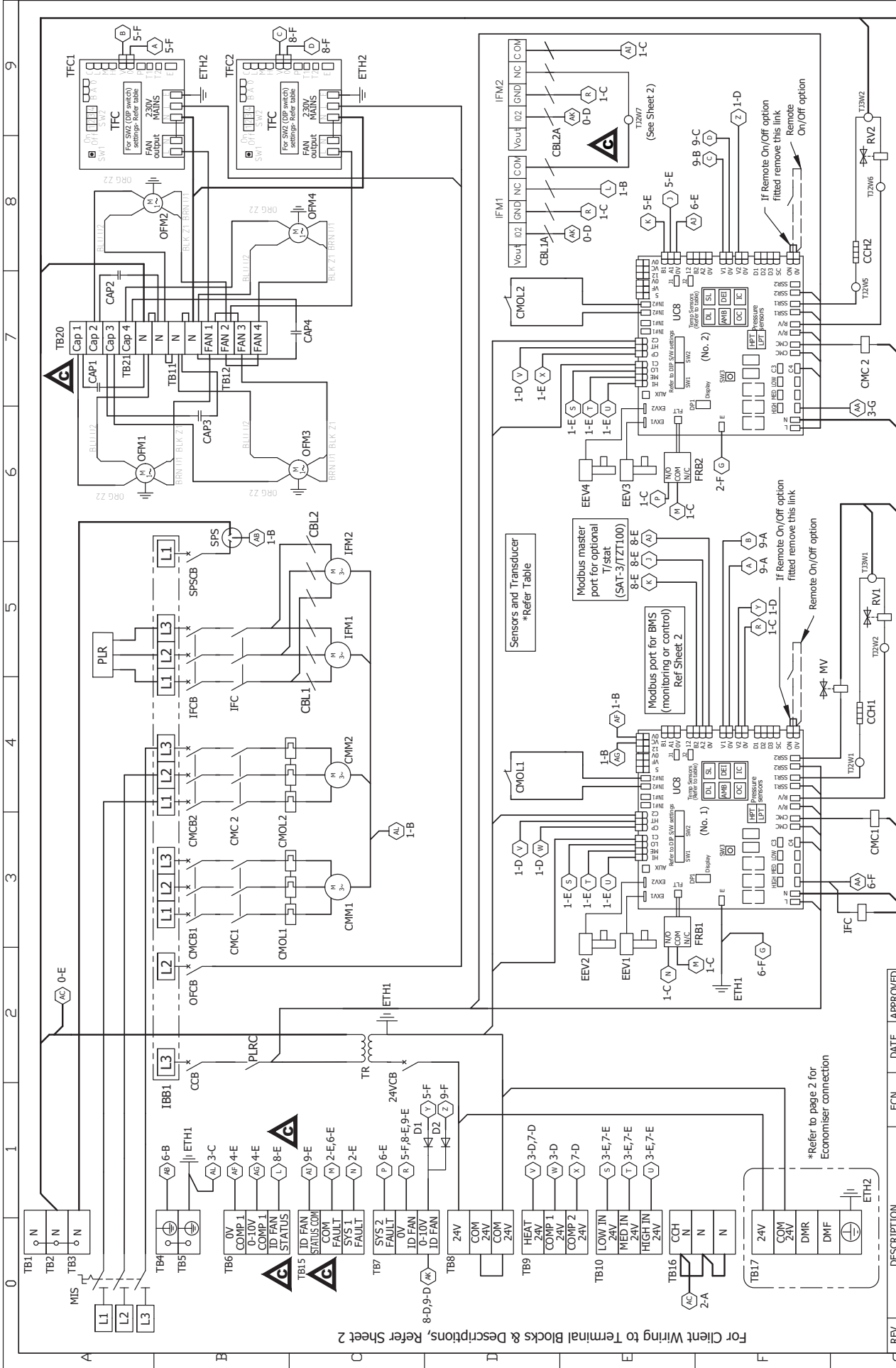


POINT LOADS (kg)					
U	V	W	X	Y	Z
201	193	185	181	196	237



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

REV	DESCRIPTION	ECN	DATE	APPROVED
C	IFM to gen3 EBM&OPM capacitor changed	N4324	10-02-21	R. P.B.

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 DO NOT SCALE - ASK
 Client Wiring

Drawn: S.D.H. Date: 09-11-16
 Approved: P.J.L. P.C.L.

Title: OPA 705RKTBG-PZ UC8 cw Economiser
 Wiring Schematic

Drawing No: 291-002-154
 SHEET 1 OF 2



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Important Notes:

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

2) Compressor Note
Compressors fitted are directional. If rotation incorrect, compressor/s will not pump, be noisy, and draw minimal current. To correct rotation, reverse two phases.

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

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	↑	On/Off	↓
1,2,4,6,7,10	On			
All Others Off	Off			

UC8 DIP switch settings (No.2)

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

TFC DIP switch settings

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

Client Wiring

Client Protection and Isolator Switch

Remote option

If Remote On/Off option fitted remove this link

Remote On/Off option

BMS Control

MODBUS port for BMS

Connection to control stat by client

Warning

IFM1 COM Brown

IFM2 NC Grey

TJ2W7 Connector/Joiner (To be placed in E-Box)

Legend

24VCB	24 VOLT CIRCUIT BREAKER
CAP	CAPACITOR
CBL	CABLE
CCB	CONTROL CIRCUIT BREAKER
CCH	CRANKCASE HEATER
CMC	COMPRESSOR CONTACTOR
CMCB	COMPRESSOR CIRCUIT BREAKER
CM	COMPRESSOR MOTOR
CMOL	COMPRESSOR OVERLOAD
DMF	DAMPER MOTOR FRESH AIR
DMR	DAMPER MOTOR RETURN AIR
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
OFMR	OUTDOOR FAN MOTOR RELAY
PLR	PHASE LOSS RELAY
PLRC	PHASE LOSS RELAY CONTACT
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
UC8	UNIT CONTROLLER 8

REV	DESCRIPTION	ECN	DATE	APPROVED
A	Initial Release		04-05-16	
B	PLR Contacts moved & PLRC Added To Table	M4041	21-02-18	M.A.K.
C	IFM1 to gen3 EB8&OFM capacitor changed	M4324	10-02-21	R.P.B.

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SHEET 2 OF 2

Rev: C