	APPLICATION DATA	AD0004F
	HPU HANDING CONFIRMATION	

SO NUMBER (INTERNAL USE)		WO NUMBER (INTERNAL USE)	

ROOF TOP PACKAGED UNITS (RTU)	
GENERAL	This document details the airside configurations available on HPU models.
SOURCING	Standard configuration is detailed in the unit general arrangement drawings. Optional airside configurations to be specified at time of order.
HOW TO USE THIS DOCUMENT	1. Choose if the supply air position is required on the left, on the right, or centred. 2. Circle the required supply air outlet. 3. Circle the required return air inlet. 4. Complete the information at the bottom of this document and return to your APAC representative.

LEFT HAND SUPPLY AIR — APPLICABLE MODELS – P012-095AHR3SA

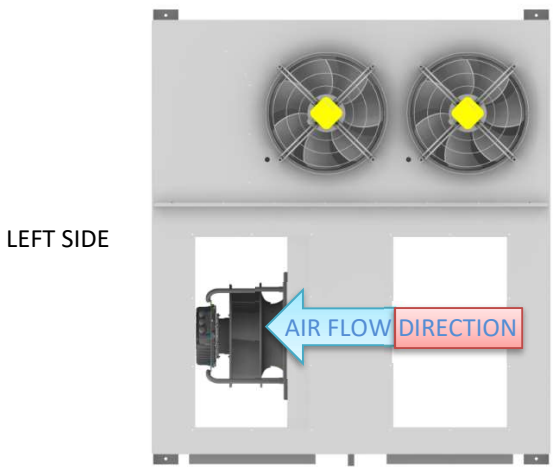


Fig1. Left hand unit top view

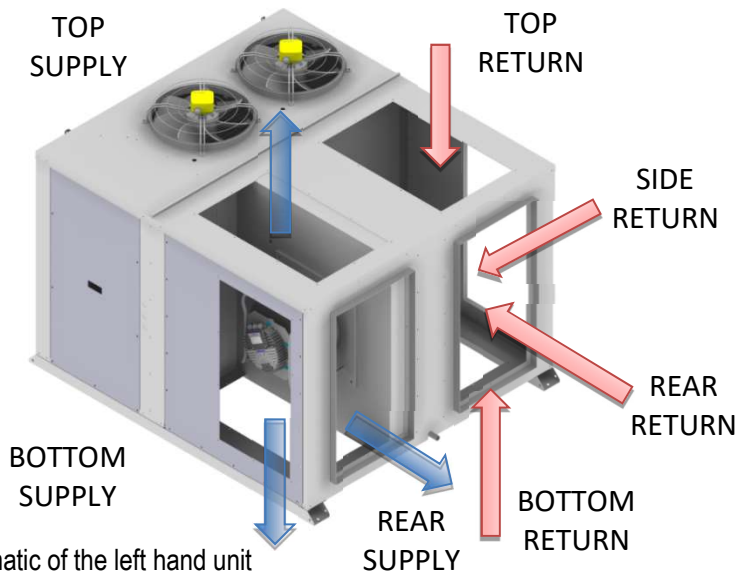


Fig2. Air flow schematic of the left hand unit

RIGHT HAND SUPPLY AIR — APPLICABLE MODELS – P012-095AHR3SA

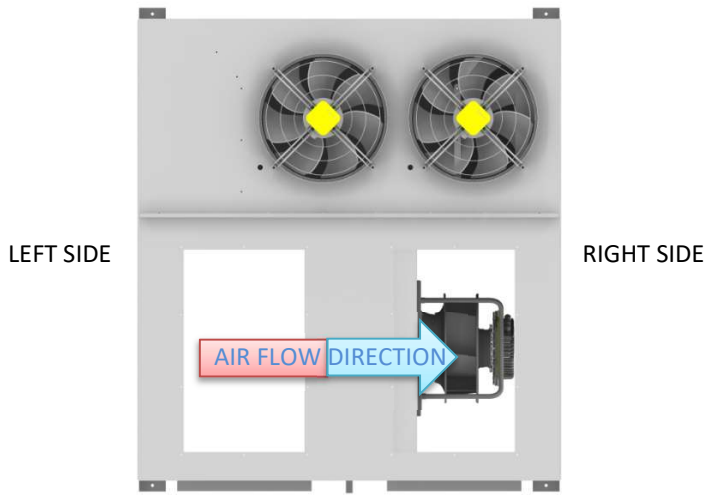


Fig3. Right hand unit top view

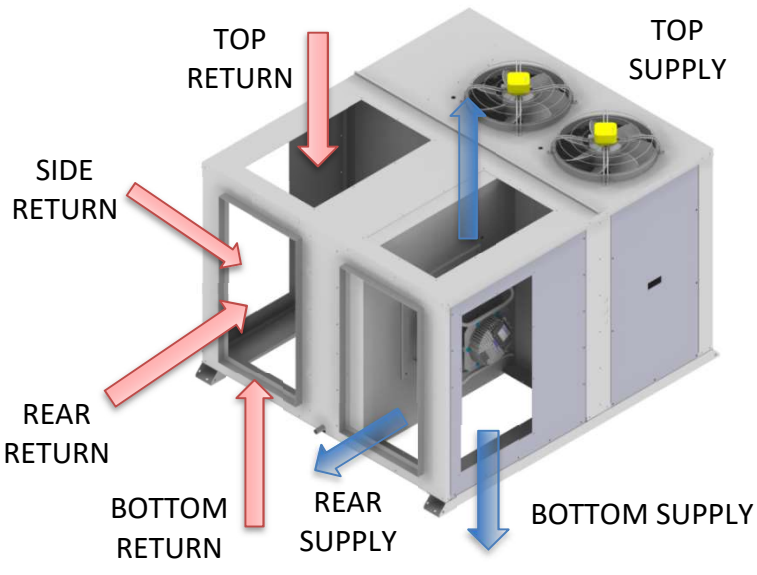


Fig 4. Air flow schematic of the right hand unit

CENTRED SUPPLY AIR — APPLICABLE MODELS – P085-095AHR3SA OPTION – P115-170AHR3SA STANDARD

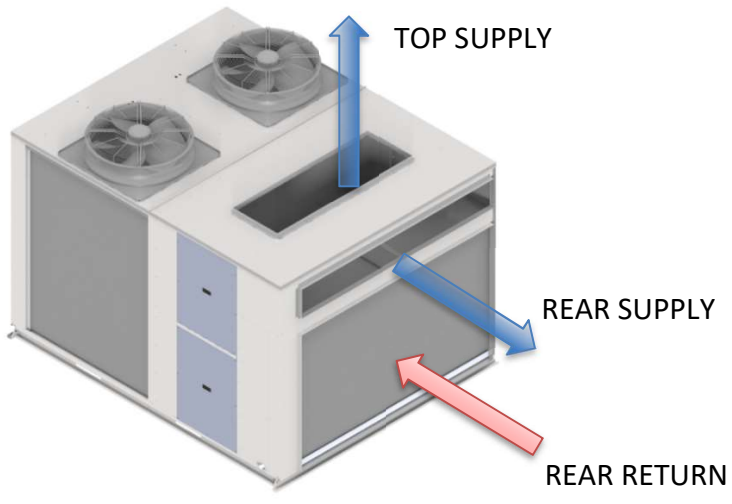


Fig5. Air flow schematic of the centred unit from above

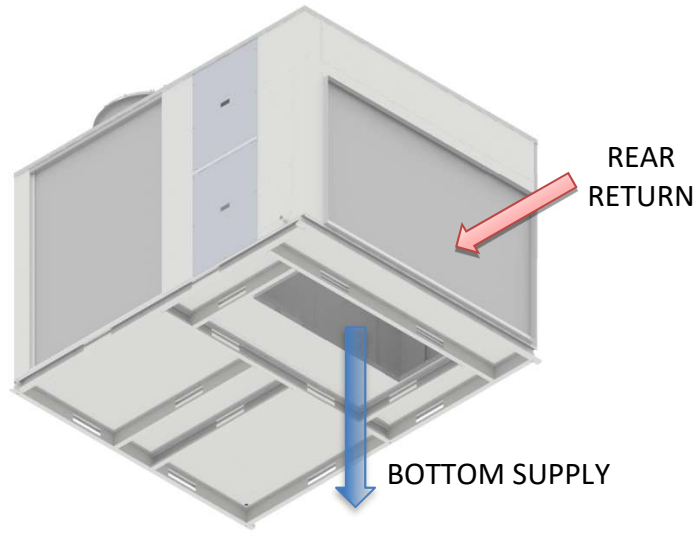
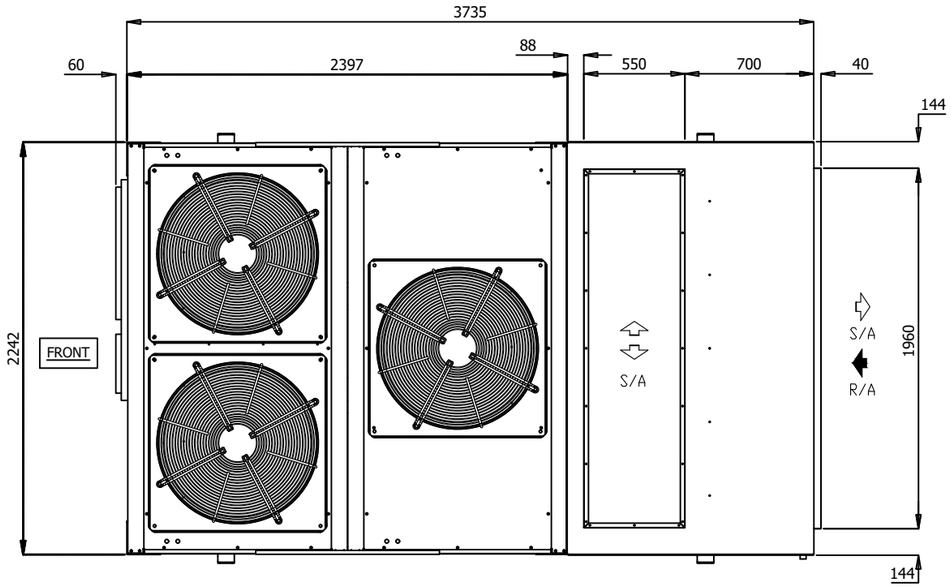


Fig6. Air flow schematic of the centred unit from below

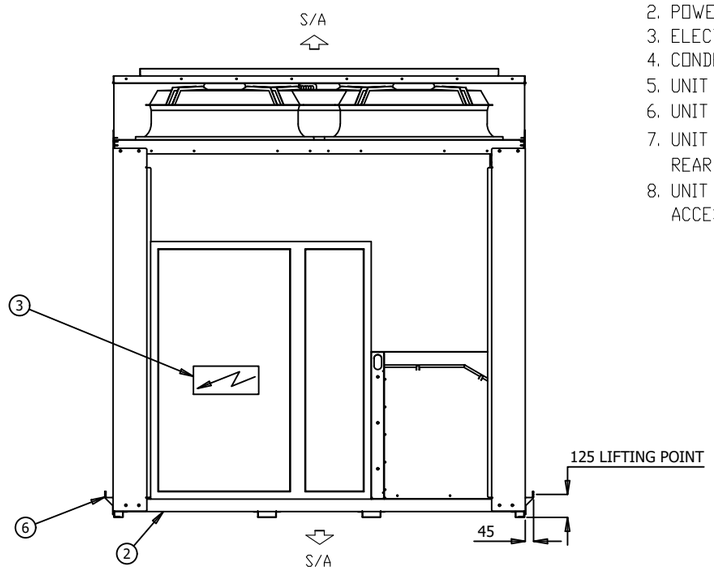
CUSTOMER TO COMPLETE AND RETURN

CUSTOMER	PROJECT	UNIT REF	NAME / SIGN	DATE

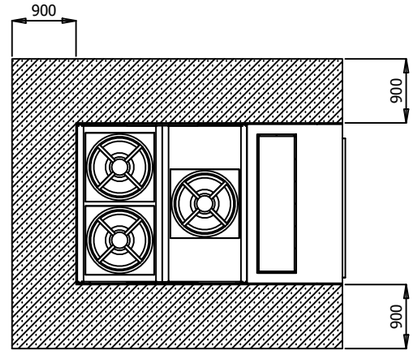
1. GENERAL ARRANGEMENT OF A HORIZONTAL AIR COOLED PACKAGED UNIT
2. POWER AND FIELD CABLE ENTRIES, THROUGH GLAND PLATE
3. ELECTRICAL ENCLOSURE AT FRONT OF MACHINE
4. CONDENSATE OUTLETS 32ø ON SIDES OF ENCLOSURE
5. UNIT BASE HAS 12 x 16ø FIXING POINTS
6. UNIT HAS 4 x 20ø LIFTING POINTS
7. UNIT CONFIGURATION AS STANDARD IS REAR SUPPLY, REAR RETURN, OTHER CONFIGURATIONS AVAILABLE.
8. UNIT CONFIGURATION CAN BE CONVERTED IN FIELD WITH OPTIONAL ACCESSORIES.



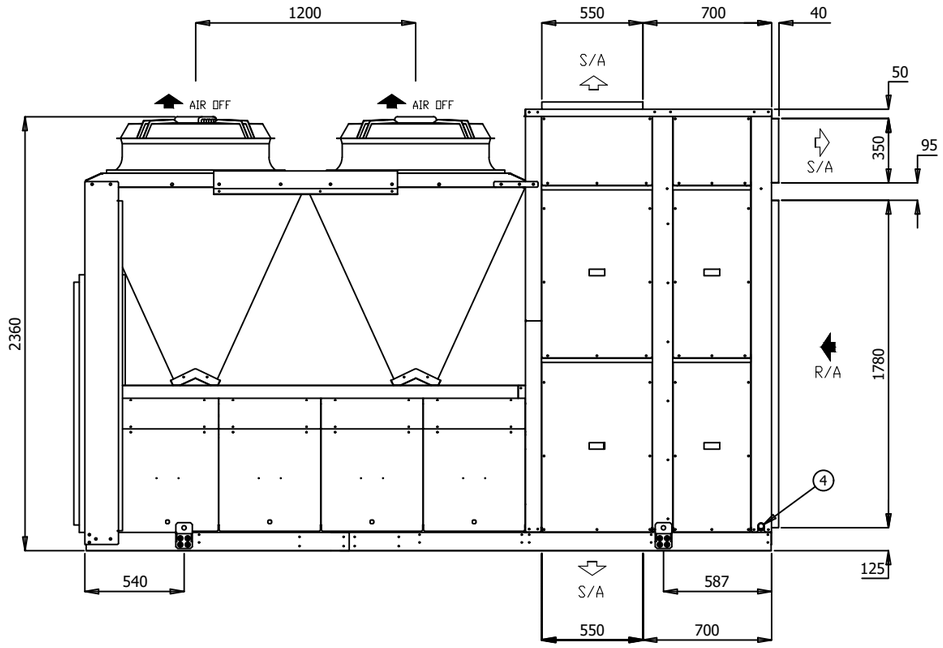
PLAN VIEW



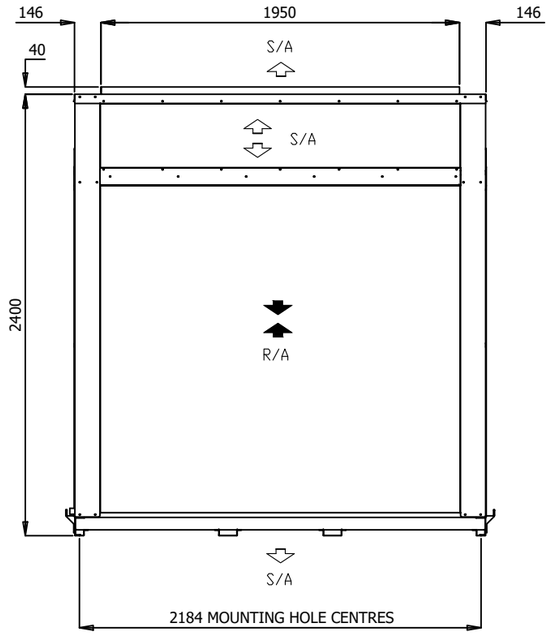
FRONT VIEW



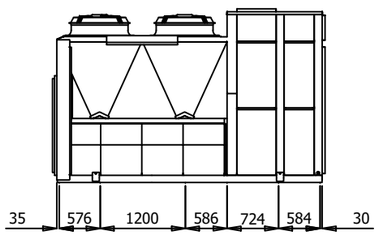
CLEARANCE DETAIL



RIGHT HAND ELEVATION



REAR VIEW



FIXING DETAIL

- ALL DIMENSIONS IN mm.
- GENERAL TOLERANCE ±1mm.
- DO NOT SCALE DRAWING.
- MASTER DRAWINGS ARE HELD ELECTRONICALLY. ANY COPY IS DEEMED UNCONTROLLED AND THEREFORE NOT NECESSARILY THE LATEST REVISION.
- ALL INFORMATION REMAINS THE PROPERTY OF THE COMPANY.

GENERAL ARRANGEMENT

P150AHR3SA- P170AHR3SA-

www.apacair.com.au ABN: 74 005 138 769

REVISION	ADDED P170AHR3SA, TOP/BOTTOM SA MOVED 50mm			
apac by Rinnai	ATLANTIC DR. KEYSBOROUGH VIC 3173 1300 555 545	DRAWN	HA	DRAWING No. A4
		DATE	23.11.18	GAD0110
		SCALE	N.T.S.	
		CHECKED	NJ	APP'D. PC REV. B

HIGH EFFICIENCY
AIR COOLED PACKAGED UNITS
R410A REFRIGERANT

TECHNICAL DATA SHEET

MODEL NUMBER			**P115AHR3SA-**	**P150AHR3SA-**	**P170AHR3SA-**	**P200AHR3SA-**	**P230AHR3SA-**
CONDENSER SECTION	**CAPACITY**						
	Cooling	kW TOTAL*	111.44	149.51	167.17	199.35	222.89
		kW SENSIBLE*	91.16	121.25	136.74	161.67	182.32
		EER (kW / ikW)*	3.27	3.47	3.27	3.47	3.27
	Heating	kW TOTAL	109.10	144.28	163.64	192.37	218.19
		COP	4.00	4.01	4.00	4.01	4.00
	CAPACITY STEPS (%)		0/25/50/75/100	0/16.66/33.33/50/66.66/83.33/100	0/16.66/33.33/50/66.66/83.33/100	0/12.5/25/37.5/50/62.5/75/87.5/100	0/12.5/25/37.5/50/62.5/75/87.5/100
	CAPACITY STEPS (Qty)		4	6	6	8	8
	COMPRESSOR						
	TYPE		TANDEM SCROLL	TANDEM SCROLL	TANDEM SCROLL	TANDEM SCROLL	TANDEM SCROLL
	STARTER TYPE		D.O.L (Opt Soft/Start)	D.O.L (Opt Soft/Start)	D.O.L (Opt Soft/Start)	D.O.L (Opt Soft/Start)	D.O.L (Opt Soft/Start)
	PHASE		3∅	3∅	3∅	3∅	3∅
	No. OFF		2	3	3	4	4
	PROTECTION DEVICES						
	ALL COMPRESSORS HAVE						
	FAN						
	TYPE		EC AXIAL	EC AXIAL	EC AXIAL	EC AXIAL	EC AXIAL
	ikW (MAX INPUT)		1.95	1.95	1.95	1.95	1.95
	PHASE		3∅	3∅	3∅	3∅	3∅
	No. OFF		2	3	3	4	4
	FAN SPEED CONTROL		VARIABLE SPEED	VARIABLE SPEED	VARIABLE SPEED	VARIABLE SPEED	VARIABLE SPEED
	HEAT EXCHANGER						
	TYPE		PLATE FIN COIL	PLATE FIN COIL	PLATE FIN COIL	PLATE FIN COIL	PLATE FIN COIL
	NOM. AIRFLOW l/s		-	-	-	-	-
	REFRIGERANT SYSTEM						
	TYPE						
	CHARGE PER CIRCUIT (KG)		13.7	13.7	13.7	13.7	13.7
	No. OF CIRCUITS		2	3	3	4	4
	REFRIGERANT CONTROL				TXV		
	ALL SYSTEMS INCLUDE						
EVAPORATOR SECTION	**FAN**						
	TYPE		EC PLUG	EC PLUG	EC PLUG	EC PLUG	EC PLUG
	ikW (MAX INPUT)		3.45	3.45	3.45	3.45	3.45
	PHASE		3∅	3∅	3∅	3∅	3∅
	No. OFF		2	3	3	4	4
	FAN SPEED CONTROL		VARIABLE SPEED	VARIABLE SPEED	VARIABLE SPEED	VARIABLE SPEED	VARIABLE SPEED
	HEAT EXCHANGER						
	TYPE		PLATE FIN COIL	PLATE FIN COIL	PLATE FIN COIL	PLATE FIN COIL	PLATE FIN COIL
	NOM. AIRFLOW l/s		5750	7500	8625	10000	11500
	EXT STATIC pa						
COMBINED SECTIONS	**ELECTRICAL**						
	MAINS POWER		415v / 3∅ / 50hz	415v / 3∅ / 50hz	415v / 3∅ / 50hz	415v / 3∅ / 50hz	415v / 3∅ / 50hz
	H.P. CUT OUT / IN kPa		4500 / 3450	4500 / 3450	4500 / 3450	4500 / 3450	4500 / 3450
	L.P. CUT OUT / IN kPa		175 / 345	175 / 345	175 / 345	175 / 345	175 / 345
	NOM. R.L.A. (TOTAL SYSTEM)		59.4	79.9	89.2	106.5	117.8
	MAX. F.L.A. (TOTAL SYSTEM)		100.4	127.8	150.6	170.4	200.8
	GENERAL						
	CABINET		GALVANISED SHEET STEEL				
	INSULATION		ALUMINIUM FOIL FACED POLYETHYLENE ACOUSTIC INSULATION				
	EXTERNAL FINISH		POLYESTER POWDER COAT - COLOUR LIGHT GREY AS STANDARD - OPTIONS AVAILABLE				
	DIMENSIONS						
	H X W X D (mm)		2354 x 2242 x 2400	2400 x 2242 x 3735		2400 x 2242 x 4085	
	WEIGHT						
	OPERATING KG		1600	1800	2000	2200	2400
	SHIPPING KG		1610	1810	2010	2210	2410
	NOISE LEVELS [Based on condenser fan's sound data]						
	Sound Power db(A)		75.6	77.4	77.4	78.6	78.6

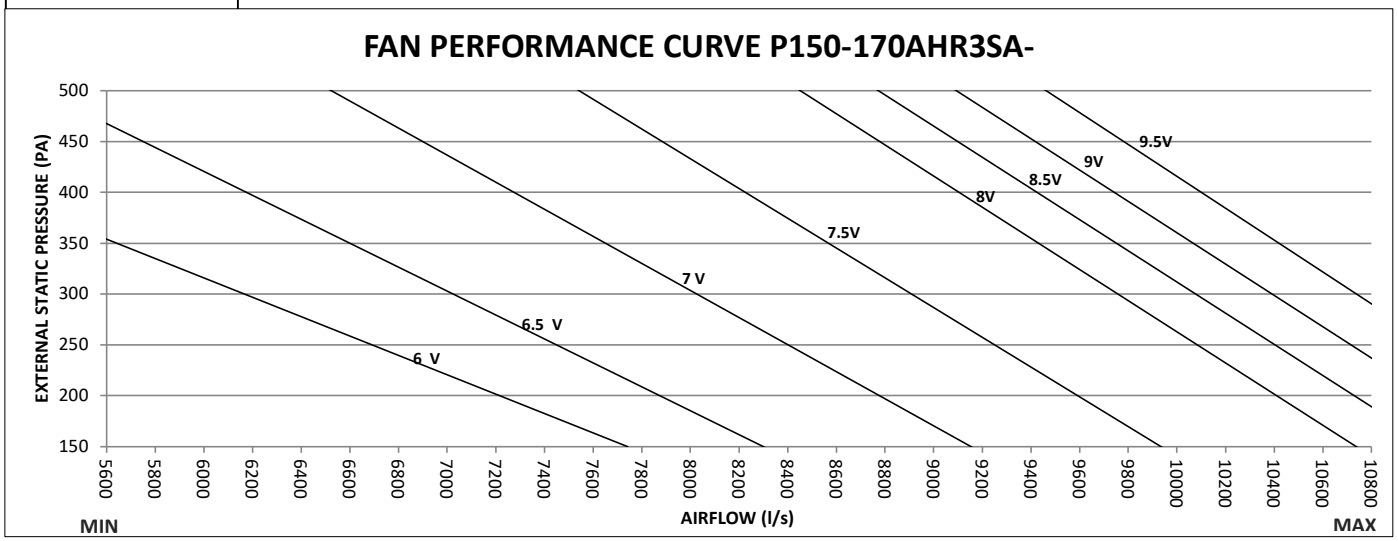
Note: **Rated in accordance with Australian standard AS/NZS 3823.1:2012**
Performance excludes ikW of evaporator fan motor.
R.L.A - Run Load Amps are based on current drawn at nominal conditions
F.L.A - Full Load Amps are based on the overload settings [Max Current] of all Compressor and Fan Motor(s).

Date	Document #	Approved By	Revision
2/4/20	TDS0035	PC	G

NOTE: Due to continuous improvement Rinnai Australia Pty Ltd reserve the right to change details without notice.

FAN PERFORMANCE CURVE

P150-170AHR3SA-



Note:

1. 6V,6.5V, 7V, 7.5V, 8V, 8.5V, 9V and 9.5V represents potentiometer voltage. Potentiometer can be adjusted to achieve desired flowrates.
2. Potentiometer voltage can be varied infinitely beween 0 to 10V.

Date	Document #	Approved By	Revision
01.07.21	FPC0059	PC	C

SOUND DATA

MODEL NUMBER	P150AHR3SA-

Outdoor Fan

Sound Power Level dB(A)	Octave band Centre Frequency (hz), dB						
	125	250	500	1k	2k	4k	8k
77.5	71.5	68.3	73.3	74.2	69.7	66	62

Indoor Fan

Sound Power Level dB(A)	Air Flow (l/s)	Octave band Centre Frequency (hz), dB						
		125	250	500	1k	2k	4k	8k
91.5	7500	81.8	78.7	80.8	80.6	81.6	89.1	68.6

MODEL NUMBER	P170AHR3SA-

Outdoor Fan

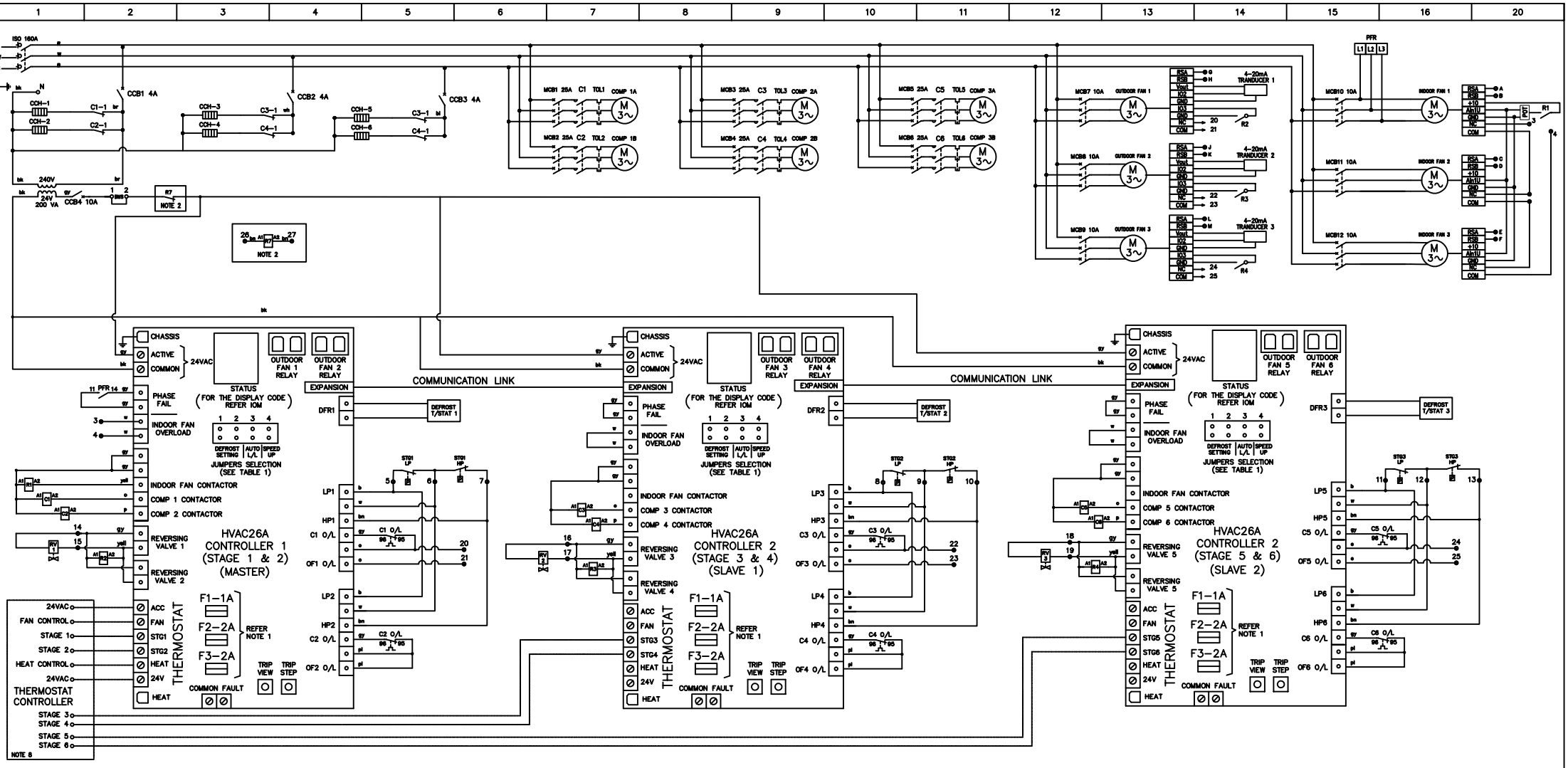
Sound Power Level dB(A)	Octave band Centre Frequency (hz), dB						
	125	250	500	1k	2k	4k	8k
77.5	71.5	68.3	73.3	74.2	69.7	66	62

Indoor Fan

Sound Power Level dB(A)	Air Flow (l/s)	Octave band Centre Frequency (hz), dB						
		125	250	500	1k	2k	4k	8k
94.6	8625	83.7	81.2	84	83.9	82.6	92.6	72.5

Date	Document #	Approved By	Revision
01.07.21	SD0055	PC	C

NOTE: Due to continuous improvement Rinnai Australia Pty Ltd reserve the right to change details



NOTES:
1. TIME DELAY GLASS FUSES ON THE PCB CONTROLLER ARE THE FOLLOWING:
   – F1 PROTECTS THE THERMOSTAT CIRCUIT.
   – F2 PROTECTS THE REVERSING VALVE CIRCUITS AND THE "HEAT" OUTPUT. THIS FUSE F2 ALSO SUPPLIES FUSE F1.
   – F3 PROTECTS BOTH COMPRESSOR CONTACTOR CIRCUITS AND THE INDOOR FAN CONTACTOR CIRCUIT.
2. FIRE ALARM RELAY
3. HP CUT OUT – AUTO RESET, LP CUT OUT – AUTO RESET.
4. THERMAL OVERLOAD RELAYS – MANUAL RESET, UNLESS OTHERWISE STATED.
5. DO NOT CONNECT ANY ADDITIONAL EQUIPMENT TO THE CONTROL TRANSFORMER OTHER THAN THE EQUIPMENT SHOWN ON THE ELECTRICAL DRAWING.
6. SOFTWARE CODE MUST BE CHECKED AFTER REPLACEMENT OF THE HVAC26A CONTROLLER BY CHECHKING THE DISPLAY CODE ON THE LCD DISPLAY AFTER THE CONTROLLER IS ACTIVATED.
7. ALL FIELD WIRING IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR AND MUST COMPLY WITH AS/NZS 3000 AND LOCAL RULES.
8. INSTALLER TO CONNECT THE THERMOSTAT AND THERMOSTAT WIRING.

IMPORTANT NOTE:
SCROLL COMPRESSORS ARE ROTATIONALLY SENSITIVE, IF NOISY OR NOT PUMPING, CHANGE ANY OF TWO PHASES.

TABLE 1

JUMPERS SELECTION	DEFROST INTERVAL TIME SETTING	JUMPERS SELECTION	AUTO LEAD/LAG	JUMPERS SELECTION	SPEED UP
1 2	15 min	3	OFF	4	OFF
1 2	FACTORY SETTING 30 min	3	ON	4	ON
1 2	45 min				

UNIT MUST BE SWITCHED OFF BEFORE CHANGING THE JUMPER SELECTION
JUMPER SELECTION FOR ALL THE CONTROLLERS SHOULD BE SAME

WARNING! THE SOFTWARE OF THE HVAC26A CONTROLLER IS NOT DESIGNED TO FUNCTION AS A PRIMARY PERSONAL SAFETY DEVICE, AS CONNECTED EQUIPMENT CAN START AUTOMATICALLY WITHOUT WARNING.
ALSO, OPENING THERMOSTAT CONTACTS MAY NOT CAUSE THE EQUIPMENT TO STOP.
OUTDOOR FAN MOTORS HAVE INTERNAL THERMAL PROTECTION AND MAY RESET AUTOMATICALLY.

LEGEND		LEGEND		COLOUR CODE		COMPRESSOR (EACH)		MODEL: P150AHR3SA
○	TERMINAL	TOL	THERMAL OVERLOAD	r	RED	KW	5.52	OPTIONS
⊘	SWITCHBOARD TERMINAL	R	RELAY	w	WHITE	RATED CURRENT	15.00	REF / DESCRIPTION
	FIELD WIRING	C	CONTACTOR	b	BLUE	O/L SETTING	16.50	A / STANDARD
	CONTROL PARAMETER	OF	OUTDOOR FAN	bk	BLACK			
	MAINS/CONTROL WIRING	COMP	COMPRESSOR	br	BROWN			
CCH	CRANK CASE HEATER	ISO	ISOLATOR SWITCH	o	ORANGE	FANS (EACH)	KW / FLA	
PFR	PHASE FAILURE RELAY	MCB	MINIATURE CIRCUIT BREAKER	p	PINK	OUTDOOR	2.56 / 3.9	
RV	REVERSING VALVE	CCB	CONTROL CIRCUIT BREAKER	pl	PURPLE	INDOOR	3.45 / 5.3	
HP	HIGH PRESSURE SWITCH	O/L	OVERLOAD	gy	GREY			
LP	LOW PRESSURE SWITCH	POT	POTENTIOMETER	yell	YELLOW			

apac by Mitsubishi

DATE	10/12/2020
DWN	H.A / APPD N.J
REV	B / GRID
DRG No.	EWS02284