

TECHNICAL DATA SHEET

MODEL NUMBER		P012AHC3SA-L/R	P015AHC3SA-L/R	P018AHC3SA-L/R	P020AHC3SA-L/R	P023AHC3SA-L/R	
		S	S	S	S	S	
OUTDOOR SECTION	CAPACITY						
	Cooling	kW TOTAL*	11.38	16.01	18.74	20.53	22.40
		kW SENSIBLE*	9.33	12.51	14.78	15.88	18.24
		EER (kW / ikW)*	3.45	3.84	3.79	3.60	3.33
	CAPACITY STEPS (%)		0/100	0/100	0/100	0/100	0/100
	COMPRESSOR						
	TYPE	SCROLL	SCROLL	SCROLL	SCROLL	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	3Ø	3Ø	3Ø	3Ø	3Ø	
	No. OFF	1	1	1	1	1	
	PROTECTION DEVICES		HP SWITCH, LP SWITCH, INTERNAL THERMAL CUTOUT				
	ALL COMPRESSORS HAVE		SUMP HEATER				
	FAN						
	TYPE	AXIAL	AXIAL	AXIAL	AXIAL	AXIAL	
	i kW (MAX INPUT)	0.19	0.19	0.19	0.27	0.27	
	PHASE	1Ø	1Ø	1Ø	1Ø	1Ø	
	No. OFF	2	2	2	2	2	
	FAN SPEED CONTROL		2 SPEED VIA CAPACITOR	2 SPEED VIA CAPACITOR	2 SPEED VIA CAPACITOR	2 SPEED VIA CAPACITOR	2 SPEED VIA CAPACITOR
	HEAT EXCHANGER						
	TYPE	ALU / CU COIL	ALU / CU COIL	ALU / CU COIL	ALU / CU COIL	ALU / CU COIL	
	NOM. AIRFLOW l/s	-	-	-	-	-	
REFRIGERANT SYSTEM							
TYPE	R410A						
CHARGE PER CIRCUIT (KG)	3.95	5.30	5.70	7.30	6.80		
No. OF CIRCUITS	1	1	1	1	1		
REFRIGERANT CONTROL		TXV					
INDOOR SECTION	FAN						
	TYPE	EC PLUG	EC PLUG	EC PLUG	EC PLUG	EC PLUG	
	i kW (MAX INPUT)	1.7	1.7	1.7	1.7	1.7	
	PHASE	3Ø	3Ø	3Ø	3Ø	3Ø	
	No. OFF	1	1	1	1	1	
	FAN SPEED CONTROL		VARIABLE SPEED	VARIABLE SPEED	VARIABLE SPEED	VARIABLE SPEED	
	HEAT EXCHANGER						
	TYPE	ALU / CU COIL	ALU / CU COIL	ALU / CU COIL	ALU / CU COIL	ALU / CU COIL	
	NOM. AIRFLOW l/s	625	800	890	1040	1190	
	EXT STATIC pa		100 (ALL FANS ARE HIGH STATIC FANS. REFER TO FAN CURVES.)				
COMBINED SECTIONS	ELECTRICAL						
	MAINS POWER	415v / 3Ø / 50hz	415v / 3Ø / 50hz	415v / 3Ø / 50hz	415v / 3Ø / 50hz	415v / 3Ø / 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)	5.5	6.8	8.1	11.9	10.8	
	MAX. F.L.A. (TOTAL SYSTEM)	11.4	13.7	14.4	19.1	19.5	
	GENERAL						
	CABINET	GALVANISED SHEET STEEL					
	INSULATION	25MM ALUMINIUM FOIL FACED POLYETHYLENE ACOUSTIC INSULATION					
	EXTERNAL FINISH	POLYESTER POWDER COAT - RAL 7035 LIGHT GREY AS STANDARD					
	DIMENSIONS						
	H X W X D (mm)	1213 X 1450 X 1300			1384 X 1630 X 1465		
	WEIGHT						
	OPERATING KG	228	244	251	307	308	
	SHIPPING KG	278	294	301	348	349	
	NOISE LEVELS [Based on condenser fan's sound data]						
Sound Power db(A)	61.7	61.7	61.7	66.6	66.6		

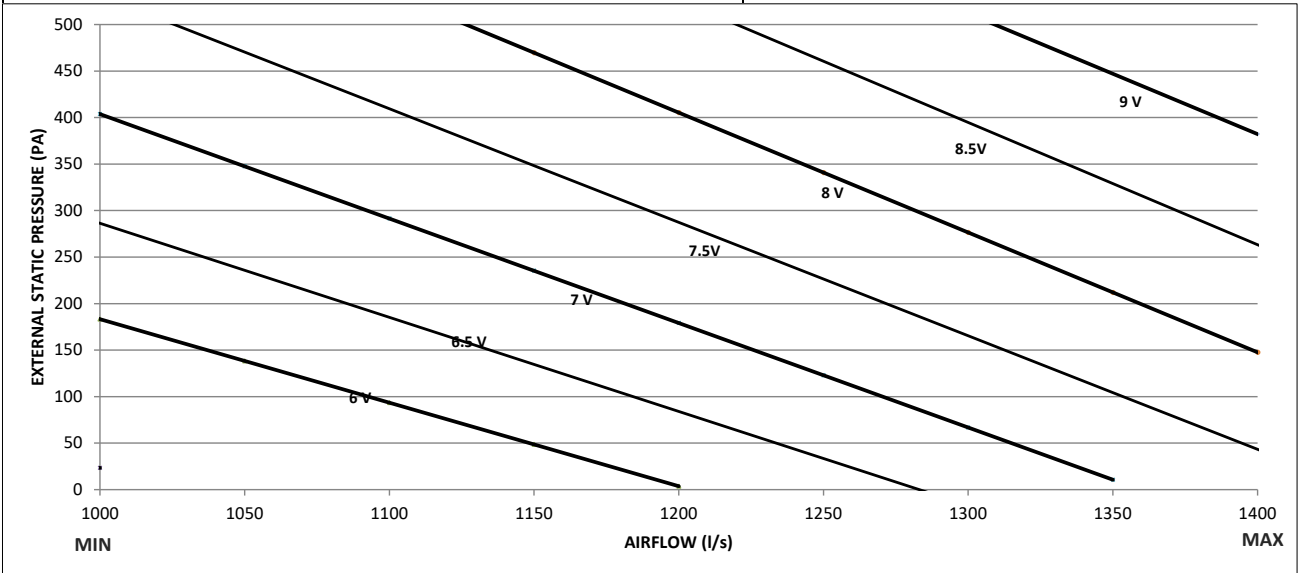
Note: Rated in accordance with AHRI 210/240 or 340/360
Performance excludes ikW of indoor fan motor
R.L.A - Run Load Amps are based on current drawn at nominal conditions
F.L.A - Full Load Amps are based on the overload settings [Max Current] of all Compressor and Fan Motor(s)

Date	Document #	Approved By	Revision
22/12/23	TDS000542	AY	B

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

FAN PERFORMANCE DATA

P023AHR(C)3SA-L/R-S



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

Date	Document #	Approved By	Revision
30/1/23	FPD000479	CM	A

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

SOUND DATA TABLE

MODEL NUMBER	P023AHR(C)3SA-L/R-S
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Outdoor Fan

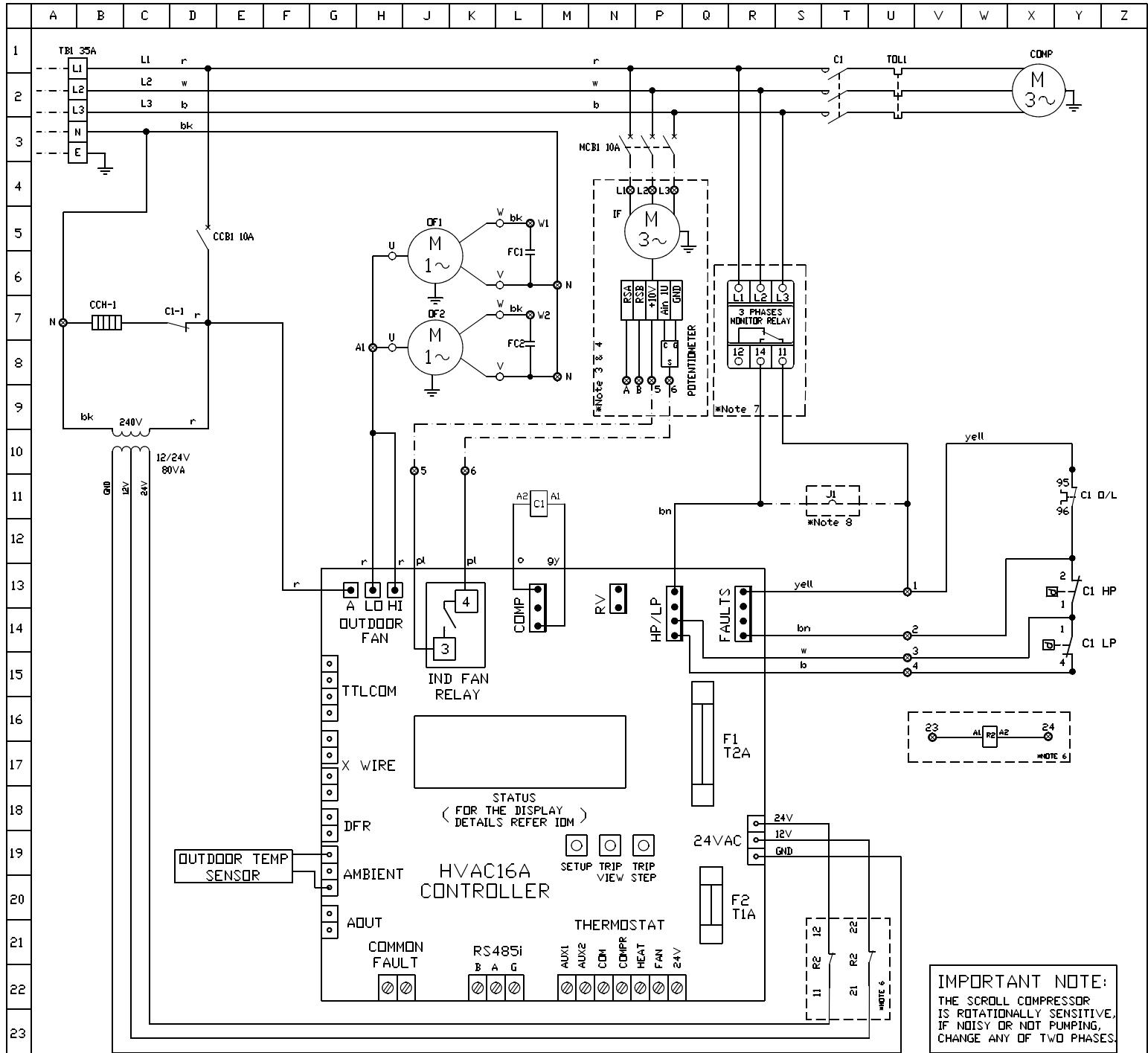
Sound Power Level dB(A)	Octave band Centre Frequency (hz), dB						
	125	250	500	1k	2k	4k	8k
66.6	76.7	62.2	57.1	58.7	60.9	57	47.7

Indoor Fan

Sound Power Level dB(A)	Air Flow (l/s)	Octave band Centre Frequency (hz), dB						
		125	250	500	1k	2k	4k	8k
84.4	1190	65.3	73.5	76.2	79.6	77	77.3	75.9

Date	Document #	Approved By	Revision
31/1/23	SDT000484	CM	A

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



WARNING: THE SOFTWARE OF THE HVAC16A CONTROLLER IS NOT DESIGNED TO FUNCTION AS A PRIMARY PERSONAL SAFETY DEVICE AS CONNECTED EQUIPMENT CAN START AUTOMATICALLY WITHOUT WARNING. ALSO OPENING THE THERMOSTAT CONTACTS MAY NOT CAUSE THE EQUIPMENT TO STOP. OUTDOOR FAN MOTORS HAVE INTERNAL OVERLOADS AND MAY RESTART AUTOMATICALLY.

- NOTES:
1. THERMAL OVERLOAD RELAYS ARE MANUAL RESET. HP SWITCH AND LP SWITCH ARE AUTO RESET, UNLESS OTHERWISE STATED.
 2. ALL FIELD WIRING IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR AND MUST COMPLY WITH AS/NZS 3000 AND LOCAL RULES.
 3. FOR SPLIT SYSTEMS, OTHERS TO INSTALL ISOLATOR AND FIELD WIRING FOR INDOOR FAN TO TERMINATE TO TERMINALS 5 & 6.
 4. FOR PACKAGE SYSTEMS THE WIRING FOR INDOOR FAN TO INDOOR FAN RELAY WILL BE FACTORY FITTED TO TERMINALS 5 & 6.
 5. ISOLATOR FOR ELECTRICAL PROTECTION TO BE SUPPLIED BY THE INSTALLER.
 6. OPTIONAL FIRE ALARM RELAY.
 7. OPTIONAL PHASE MONITORING RELAY (PFR).
 8. JUMPER WIRE J1 AS BELOW TABLE.

OPTION	JUMPER
PFR	J1
NO	YES
YES	NO

REV	ECN	DESCRIPTION	DATE
C	K10317	REVISED BOARD TO HVAC16A	16/04/2024
B	K10298	THERMAL OVERLOAD AS STANDARD SUPPLY	16/10/2023
A		FIRST RELEASE	01/12/2021

NO	MODEL	COMPRESSOR			OD FAN		ID FAN	
		kW	FLA	Q/L	kW	FLA	kW	FLA
1	P012AHC3SA-L-S/S012DVC3SA-S-IVR3SA	2.83	8.00	8.80	0.19	0.86	1.70	2.60
2	P015AHC3SA-L-S/S015DVC3SA-S-IVR3SA	3.59	10.30	11.50	0.19	0.86	1.70	2.60
3	P018AHC3SA-L-S/S018DVC3SA-S-IVR3SA	4.15	11.80	13.00	0.19	0.86	1.70	2.60
4	P020AHC3SA-L-S/S020DVC3SA-S-IVR3SA	4.86	15.00	16.50	0.27	1.18	1.70	2.60
5	P023AHC3SA-L-S/S023DVC3SA-S-ILR3SA	5.52	15.00	16.50	0.27	1.18	1.70	2.60

TABLE 1			
JUMPERS SELECTION	DEFROST INTERVAL TIME SETTING	JUMPERS SELECTION	SPEED UP
	15 min		OFF
	FACTORY SETTING 30 min		ON
	45 min		ON

LEGEND	
COMP	COMPRESSOR
C1	CONTACTOR
O/L	OVERLOAD
TOL	THERMAL OVERLOAD
CCH	CRANK CASE HEATER
RV1	REVERSING VALVE
HP	HIGH PRESSURE SWITCH
LP	LOW PRESSURE SWITCH
MCB	MINIATURE CIRCUIT BREAKER
CCB	CONTROL CIRCUIT BREAKER
J1	JUMPER WIRE

LEGEND	
---	FIELD WIRING
---	MAINS/CONTROL WIRING
---	OPTION WIRING
---	SWITCHBOARD TB2
---	TERMINAL

COLOUR CODE	
r	RED
w	WHITE
bk	BLACK
brn	BROWN
o	ORANGE
p	PINK
pl	PURPLE
gy	GREY
yell	YELLOW

TYPE: 1-S (CD)	
REF	DESCRIPTION
A	STANDARD

apac

DATE	01/12/2021
DWN	DOIWL APPD CM
REV	C
DWG No.	EW S000410