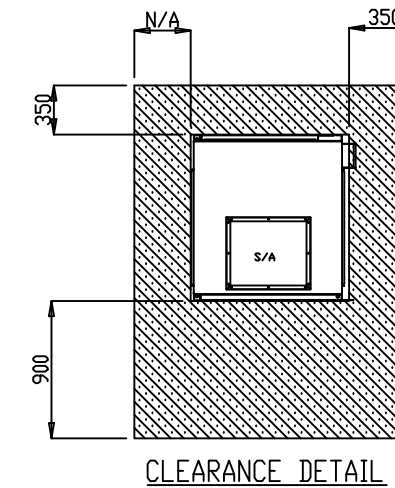
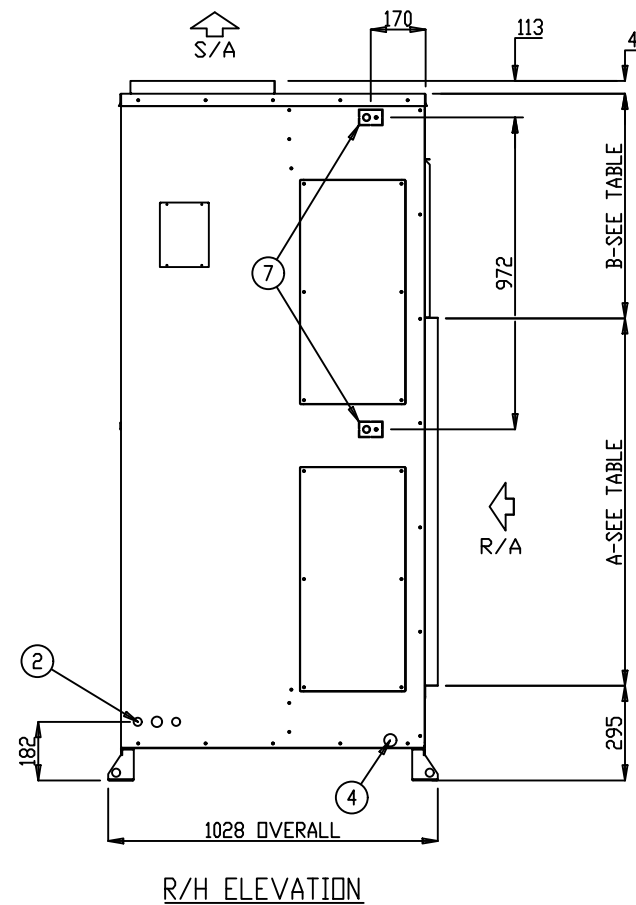
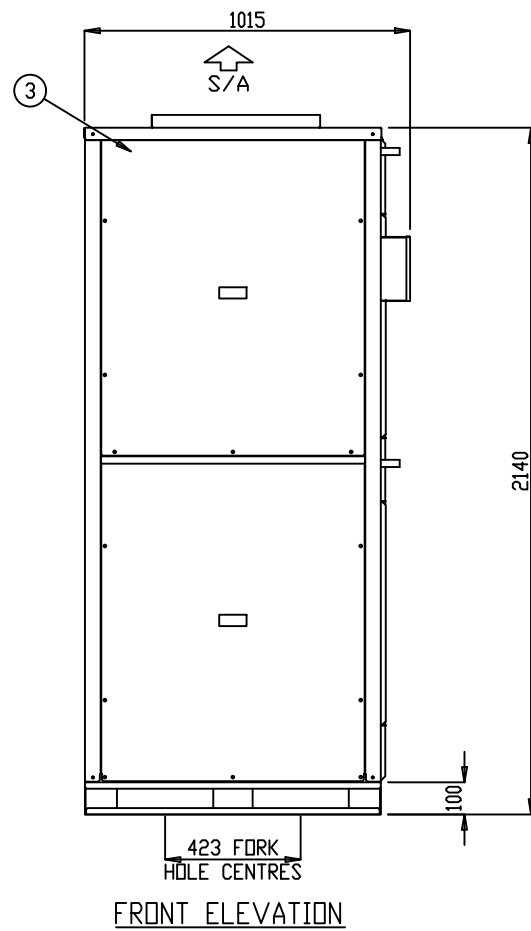


DIMENSION	S024-035	S040-045
A	1145	1600
B	700	245

NOTES:

1. GENERAL ARRANGEMENT OF A VERTICAL AIR COOLED PACKED UNIT
2. POWER AND FIELD CABLE ENTRIES, 1 x 32 ϕ AND 2 x 25 ϕ (BOTH SIDES)
3. ELECTRICAL PANEL LOCATED BEHIND SERVICE ACCESS
4. CONDENSATE OUTLET 25 ϕ
5. UNIT BASE 4 x 16 ϕ FIXING POINTS
6. UNIT CONFIGURATION IS TOP SUPPLY, REAR RETURN
7. REFRIGERANT PIPE CONNECTIONS



- ALL DIMENSIONS IN mm.
- GENERAL TOLERANCE ± 1 mm.
- 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.

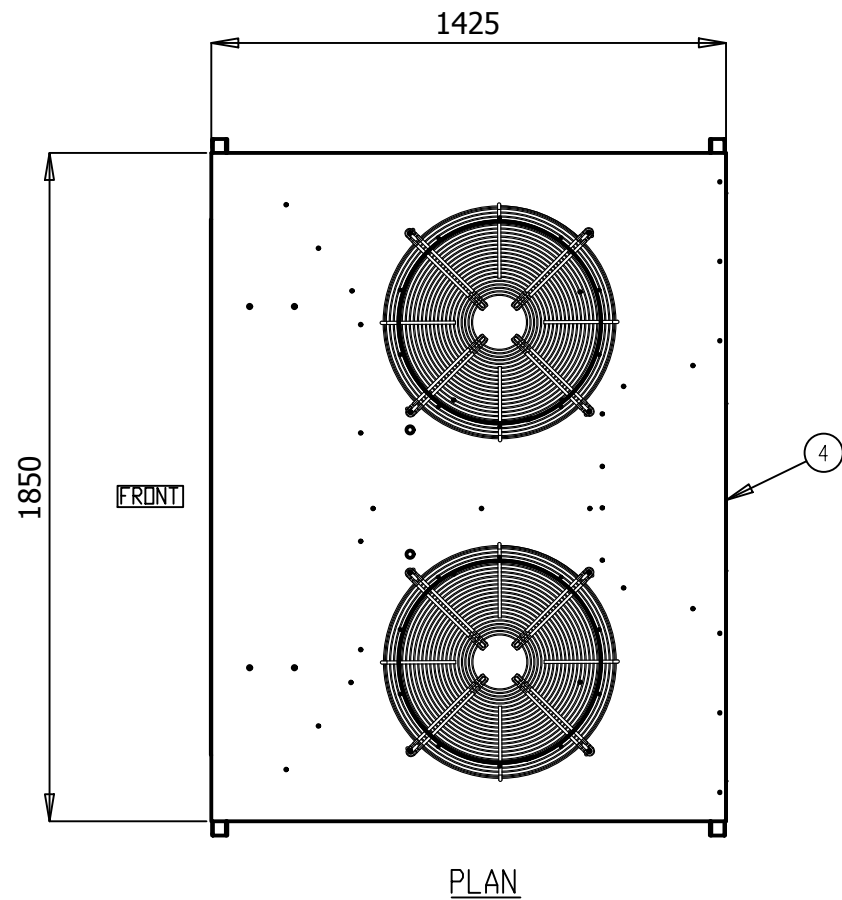
GENERAL ARRANGEMENT

S024IVR3SA- S030IVR3SA- S035IVR3SA- S040IVR3SA- S045IVR3SA-

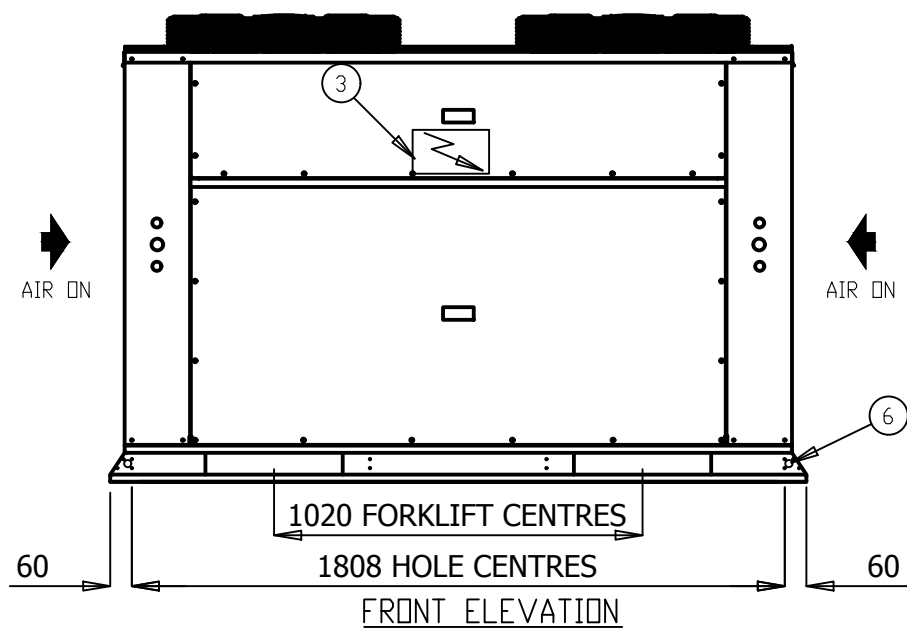
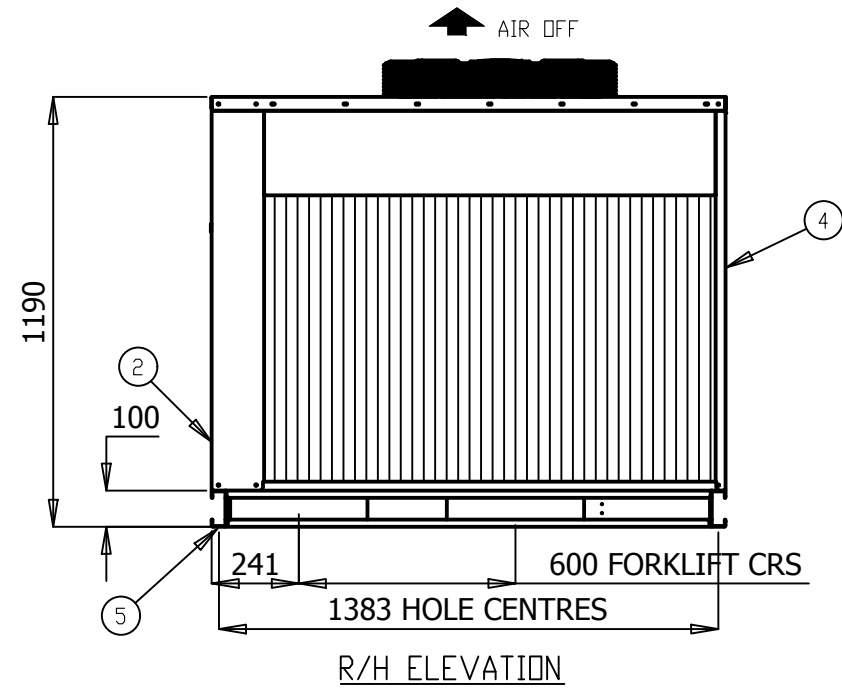
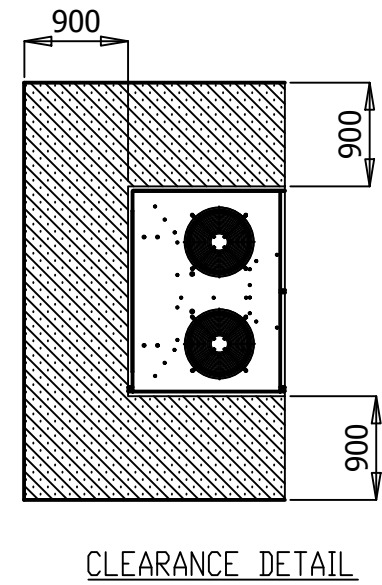
www.apacair.com.au

ABN: 74 005 138 769

REVISION	PIPE CONNECTIONS DIMENSIONED, QTY DOOR FASTENERS CORRECTED			
 ATLANTIC DR. KEYSBOROUGH VIC 3173 1300 555 545	DRAWN	HA	DRAWING No. A4	
	DATE	08.07.19	GAD0024	
	SCALE	N.T.S.		
	CHECKED	HA	APP'D. NJ	REV. E



- NOTES:
1. GENERAL ARRANGEMENT OF A OUTDOOR SPLIT AIR COOLED VERTICAL UNIT
 2. POWER AND FIELD CABLE ENTRIES, 1 x 32 ϕ AND 2 x 25 ϕ
 3. ELECTRICAL PANEL LOCATED BEHIND SERVICE ACCESS
 4. FIELD PIPE CONNECTIONS
 5. UNIT BASE 4 x 16 ϕ FIXING POINTS
 6. UNIT HAS 4 x 20 ϕ LIFTING POINTS
 7. REFER TO INSTALLATION AND OPERATIONAL MANUAL FOR PIPE SIZING



- ALL DIMENSIONS IN mm.
- GENERAL TOLERANCE ± 1 mm.
- 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

S0240VR3SA- S0300VR3SA- S0350VR3SA- S0400VR3SA- S0450VR3SA-

www.apacair.com.au

ABN: 74 005 138 769

	REVISION					REVISED NAMEPLATE WITH APAC DETAILS						
	DRAWN		MT	DRAWING No.		DATE		24.08.14	A4			
	SCALE		N.T.S.	GAD0028		CHECKED		HA	APP'D.	CM	REV.	D
	ATLANTIC DR. KEYSBOROUGH VIC 3173 1300 555 545											

TECHNICAL DATA SHEET

MODEL NUMBER	Indoor	S024IVR3SA-	S030IVR3SA-	S035IVR3SA-	S040IVR3SA-	S045IVR3SA-		
	Outdoor	S024OVR3SA-	S030OVR3SA-	S035OVR3SA-	S040OVR3SA-	S045OVR3SA-		
MEPS REGISTRATION NUMBER		AAC3261	AAC3275	AAC3260	AAC3251	AAC3259		
OUTDOOR SECTION	CAPACITY							
	Cooling	kW TOTAL*	25.15	31.02	34.13	39.78	45.27	
		kW SENSIBLE*	19.39	25.97	28.12	32.42	36.62	
		EER (kW / ikW)*	3.59	3.60	3.44	3.40	3.27	
	Heating	kW TOTAL	23.80	30.20	33.60	40.10	43.50	
		COP	3.66	3.60	3.78	3.61	3.71	
		CAPACITY STEPS (%)	50/100	50/100	50/100	50/100	50/100	
	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		2	2	2	2	2	
	PROTECTION DEVICES		HP SWITCH, LP SWITCH, MOTOR OVERLOAD'S					
	ALL COMPRESSORS HAVE		CRANKCASE HEATER					
	FAN							
	TYPE		AXIAL	AXIAL	AXIAL	AXIAL	AXIAL	
	ikW (MAX INPUT)		0.39	0.39	0.39	0.60	0.60	
	PHASE		1Ø	1Ø	1Ø	1Ø	1Ø	
	No. OFF		2	2	2	2	2	
	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		R410A					
	FACTORY CHARGE PER CIRCUIT (KG)		3.95	5.3	5.7	7.3	6.8	
	No. OF CIRCUITS		2	2	2	2	2	
	REFRIGERANT CONTROL		TXV					
	ALL SYSTEMS INCLUDE		DRIERS & SIGHT GLASSES					
	DIMENSIONS							
	H X W X D (mm)		1190 x 1850 x 1425					
	WEIGHT							
	OPERATING KG		362	382	389	414	414	
	SHIPPING KG		366	386	393	418	418	
	ELECTRICAL							
	POWER SUPPLY		415v / 3Ø / 50hz					
	FLA / RLA (Amps)		19.6 / 12.8	24.2 / 14.7	27.2 / 18	35.2 / 19.2	35.2 / 20.9	
	INDOOR SECTION	FAN						
		TYPE		CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	
		ikW (MAX INPUT)		2.73	2.73	2.73	1.7	1.7
		PHASE		3Ø	3Ø	3Ø	3Ø	3Ø
		No. OFF		1	1	1	2	2
		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			1250	1670	1750	1985	2235	
EXT STATIC pa			100					
DIMENSIONS								
H X W X D (mm)			2140 x 925 x 950					
WEIGHT								
OPERATING KG			192	200	200	225	225	
SHIPPING KG			195	211	203	228	228	
ELECTRICAL								
POWER SUPPLY			415v / 3Ø / 50hz					
FLA / RLA (Amps)			4.2 / 1.1	4.2 / 1.4	4.2 / 1.8	5.3 / 2	5.3 / 2.6	
COMBINED SECTIONS		ELECTRICAL						
		H.P. CUT OUT / IN kPa		4500 / 3450	4500 / 3450	4500 / 3450	4500 / 3450	
	L.P. CUT OUT / IN kPa		175 / 345	175 / 345	175 / 345	175 / 345		
	NOM. R.L.A. (TOTAL SYSTEM)		13.6	15.9	19.2	20.6	22.6	
	MAX. F.L.A. (TOTAL SYSTEM)		23.8	28.4	31.4	40.5	40.5	
	GENERAL							
	CABINET		GALVANISED SHEET STEEL					
	INSULATION		ALUMINIUM FOIL FACED POLYETHYLENE ACOUSTIC INSULATION					
	EXTERNAL FINISH		POLYESTER POWDER COAT - COLOUR LIGHT GREY AS STANDARD - OPTIONS AVAILABLE					
	INDOOR AND OUTDOOR PIPE CONNECTION							
LIQUID mm (inch)		9.5 (3/8")	9.5 (3/8")	9.5 (3/8")	9.5 (3/8")	9.5 (3/8")		
GAS mm (inch)		15.9 (5/8")	19.1 (3/4")	19.1 (3/4")	22.2 (7/8")	22.2 (7/8")		
ADDITIONAL REFRIGERATION CHARGE AND FIELD PIPING CONNECTIONS								
REFER TO INSTALLATION AND OPERATION MANUAL								
NOISE LEVELS <small>[Based on condenser fan's sound data]</small>								
SOUND POWER db(A)		66.5	66.5	66.5	68.7	68.7		

Note:

*Performance excludes ikW of evaporator fan motor.

R.L.A - Run Load Amps are based on current drawn at nominal conditions

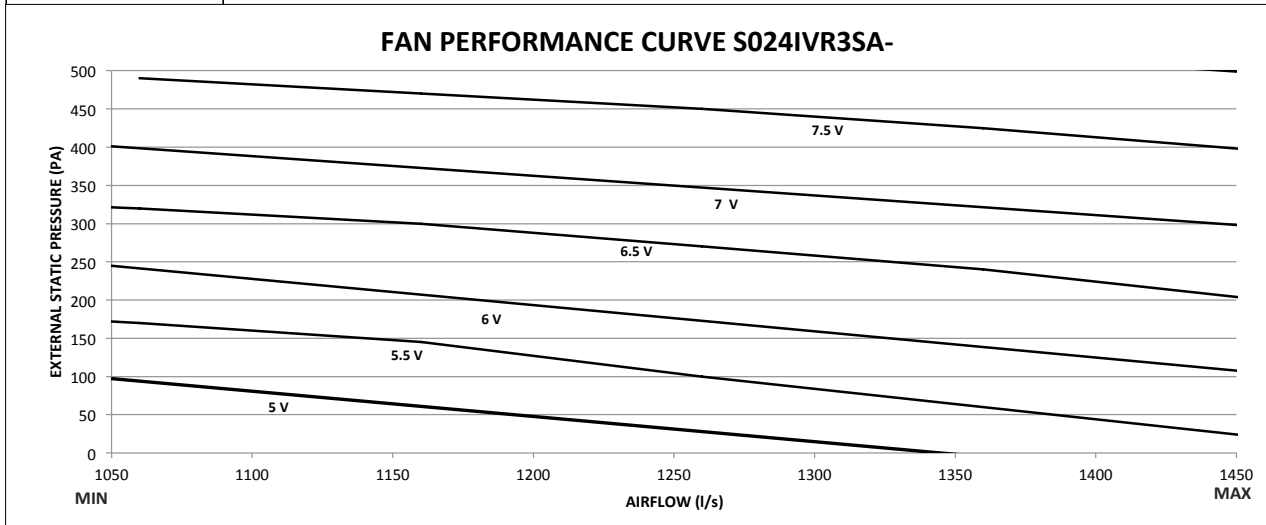
F.L.A - Full Load Amps are based on the overload settings [Max Current] of all Compressor and Fan Motor(s).

Date	Document #	Approved By	Revision
1/6/18	TDS0044	CM	B

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

FAN PERFORMANCE CURVE

S024IVR3SA-



Note:

1. 5V, 5.5V, 6V, 6.5V, 7V and 7.5V 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
29.05.18	FPC0043	CM	B

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



SOUND DATA

MODEL NUMBER

S024IVR3SA- / S024OVR3SA-

Outdoor Fan

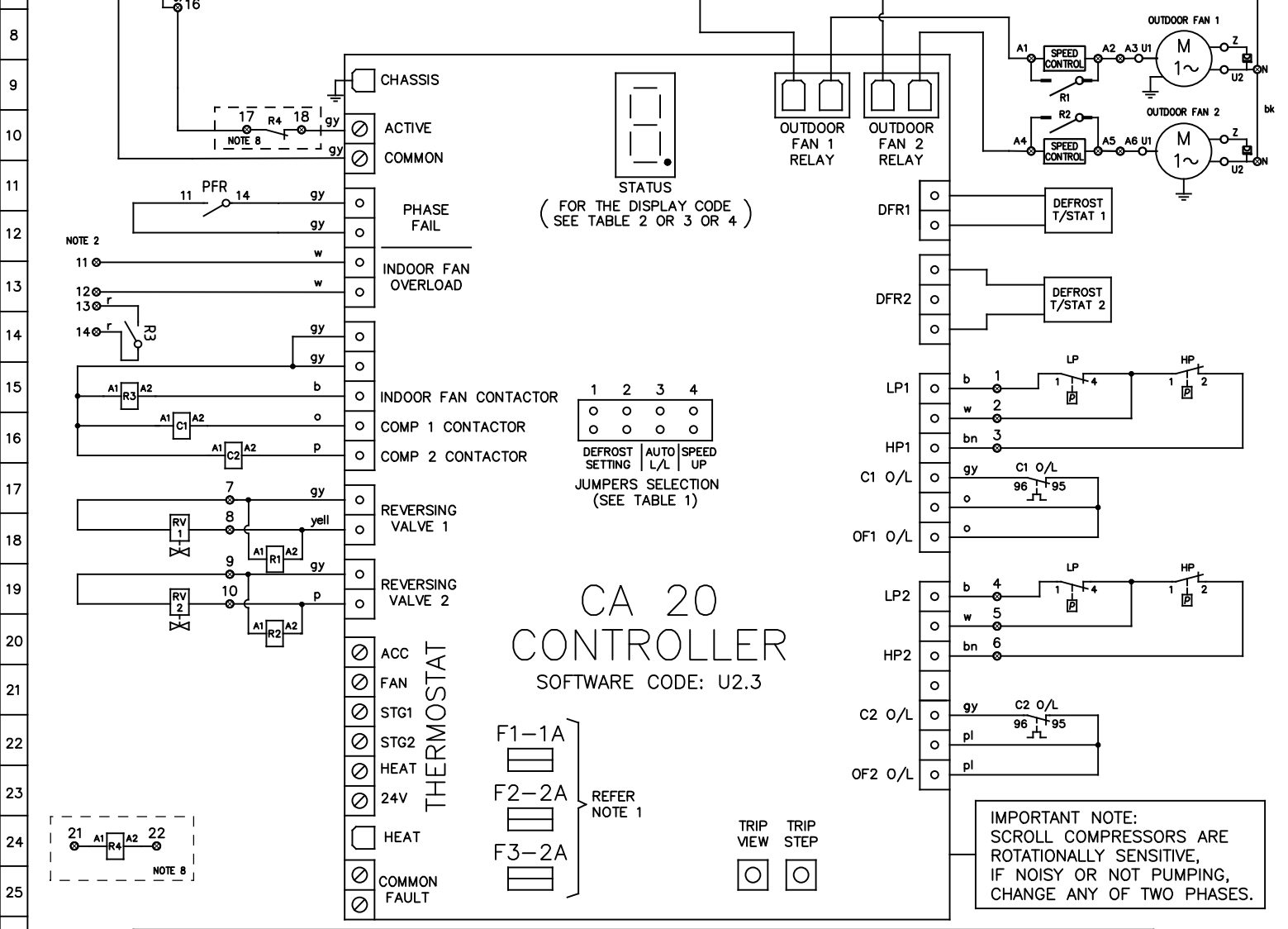
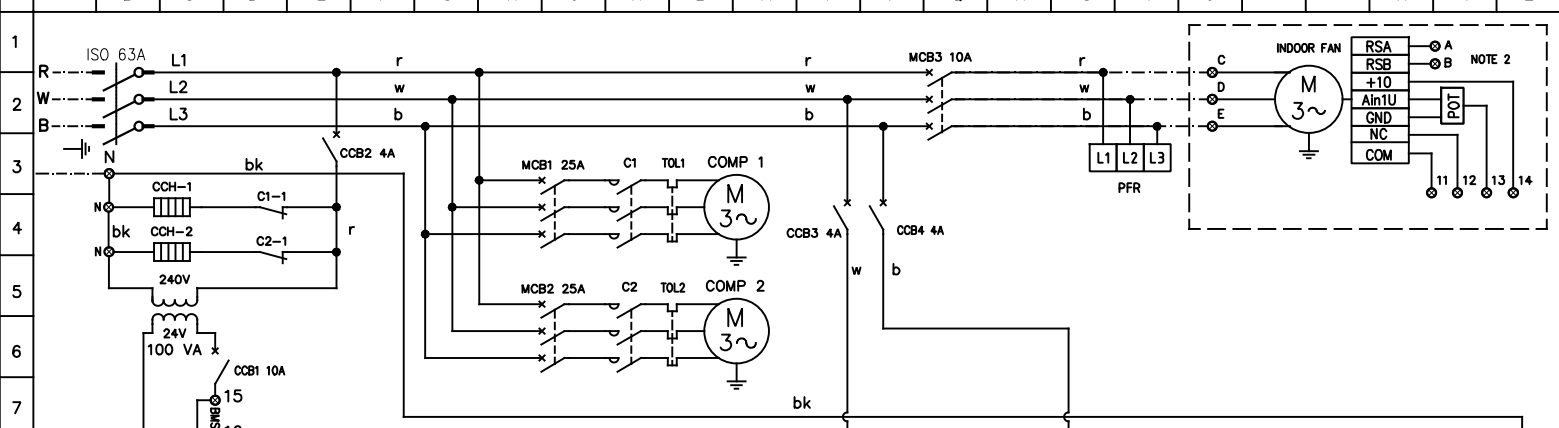
Sound Power Level dB(A)	Octave band Centre Frequency (Hz), dB						
	125	250	500	1k	2k	4k	8k
66.5	72.2	61.6	61.9	61.8	59.8	52.9	50.1

Indoor Fan

Sound Power Level dB(A)	Air Flow (l/s)	Octave band Centre Frequency (Hz), dB						
		125	250	500	1k	2k	4k	8k
76.3	1250	59.2	68.4	72.1	72.4	68.3	66.1	64.4

Date	Document #	Approved By	Revision
03.06.18	SD0057	CM	B

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



CA 20 CONTROLLER

SOFTWARE CODE: U2.3

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


WARNING! THE SOFTWARE OF THE CA20 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 OVERLOADS AND MAY RESTART AUTOMATICALLY.

- NOTES:
- 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.
 - FOR SPLIT SYSTEMS. OTHERS TO INSTALL ISOLATOR AND FIELD WIRING
 - HP CUT OUT & LP CUT OUT - AUTO RESET.
 - THERMAL OVERLOAD RELAYS - AUTO RESET, UNLESS OTHERWISE STATED.
 - DO NOT CONNECT ANY ADDITIONAL EQUIPMENT TO THE CONTROL TRANSFORMER OTHER THAN THE EQUIPMENT SHOWN ON THE ELECTRICAL DRAWING.
 - ALL FIELD WIRING IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR AND MUST COMPLY WITH AS/NZS 3000 AND LOCAL RULES.
 - SOFTWARE CODE MUST BE CHECKED AFTER REPLACEMENT OF THE CA-20 CONTROLLER BY CHECKING THE DISPLAY CODE ON THE 7 SEGMENT DISPLAY AFTER THE CONTROLLER IS ACTIVATED.
 - OPTIONAL FIRE ALARM RELAY

JUMPERS SELECTION	DEFROST INTERVAL TIME SETTING	JUMPERS SELECTION	AUTO LEAD/LAG	JUMPERS SELECTION	SPEED UP										
<table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>○</td><td>○</td></tr> <tr><td>○</td><td>○</td></tr> </table>	1	2	○	○	○	○	15 min	<table border="1"> <tr><td>3</td></tr> <tr><td>○</td></tr> </table>	3	○	OFF	<table border="1"> <tr><td>4</td></tr> <tr><td>○</td></tr> </table>	4	○	OFF
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○	○														
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<table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>■</td><td>○</td></tr> </table>	1	2	■	○	FACTORY SETTING 30 min	3	ON	4	ON						
1	2														
■	○														
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1	2														
■	■														

UNIT MUST BE SWITCHED OFF BEFORE CHANGING THE JUMPER SELECTION

LEGEND		LEGEND		COLOUR CODE		COMPRESSOR (EACH)		MODEL: S0240VR3SA-V	
○	TERMINAL SWITCHBOARD	TOL	THERMAL OVERLOAD RELAY	r	RED	KW		2.83	
⊗	TERMINAL	R	CONTACTOR	w	WHITE	RATED CURRENT		8.00	
- - -	FIELD WIRING	C	OUTDOOR FAN ISOLATOR SWITCH	b	BLUE	O/L SETTING		8.80	
- - -	CONTROL PARAMETER	COMP	COMPRESSOR	bn	BROWN	FANS (EACH)	KW	FLA	
- - -	MAINS/CONTROL WIRING	ISO	ISOLATOR SWITCH	o	ORANGE	OUTDOOR	0.39	1.78	
CCH	CRANK CASE HEATER	MCB	MINIATURE CIRCUIT BREAKER	p	PINK	INDOOR	2.73	4.20	
PFR	PHASE FAILURE RELAY	CCB	CONTROL CIRCUIT BREAKER	pl	PURPLE				
RV	REVERSING VALVE	CCB	CONTROL CIRCUIT BREAKER	gy	GREY				
HP	HIGH PRESSURE SWITCH	O/L	OVERLOAD	yell	YELLOW				
LP	LOW PRESSURE SWITCH	POT	POTENTIOMETER						



apac
by Rinnai

DATE	17/06/2018		
DWN	S.P	APPD	ENG
REV	A	GRID	B215
DWG No.	EWS02193		