

A

B

C

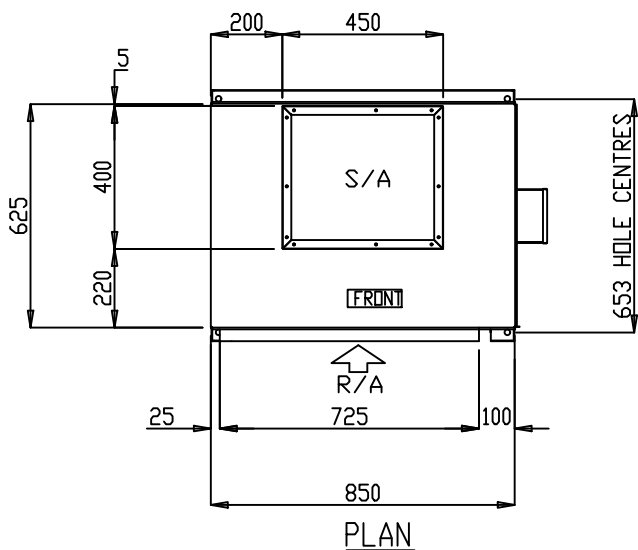
D

A

B

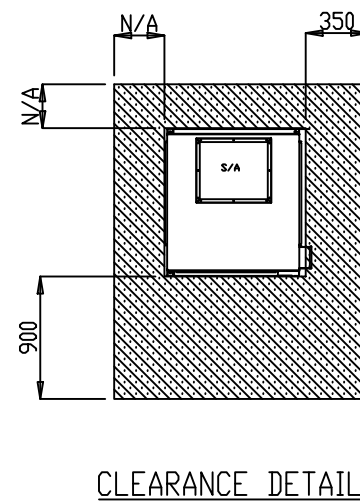
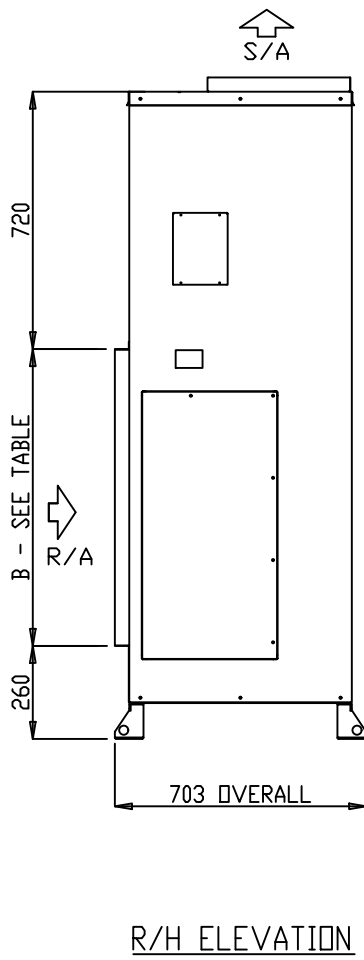
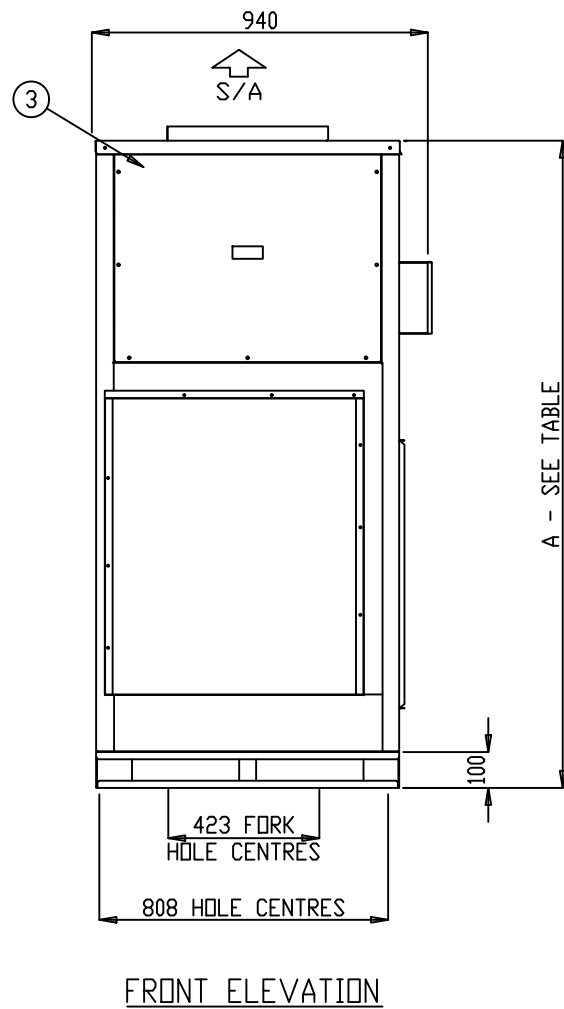
C

D



- NOTES:
1. GENERAL ARRANGEMENT OF A SPLIT DUCTED INDOOR VERTICAL UNIT
 2. POWER AND FIELD CABLE ENTRIES, 1 × 32Ø AND 2 × 25Ø (RIGHT HAND SIDE)
 3. FIELD PIPE CONNECTIONS (RIGHT HAND SIDE)
 4. CONDENSATE OUTLET 25Ø
 5. UNIT BASE 4 × 16Ø FIXING POINTS
 6. UNIT CONFIGURATION IS TOP SUPPLY, FRONT RETURN

DIMENSION	S012-018	S020-023
A	1580	1810
B	600	830



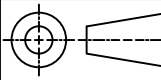
- ALL DIMENSIONS IN mm.
- GENERAL TOLERANCE ±1mm.
- DO NOT SCALE DRAWING.
- MASTER DRAWINGS ARE HELD ELECTRONICALLY. ANY COPY IS DEEMED UNCONTROLLED AND THEREFORE NOT NECESSARILY THE LATEST REVISION.
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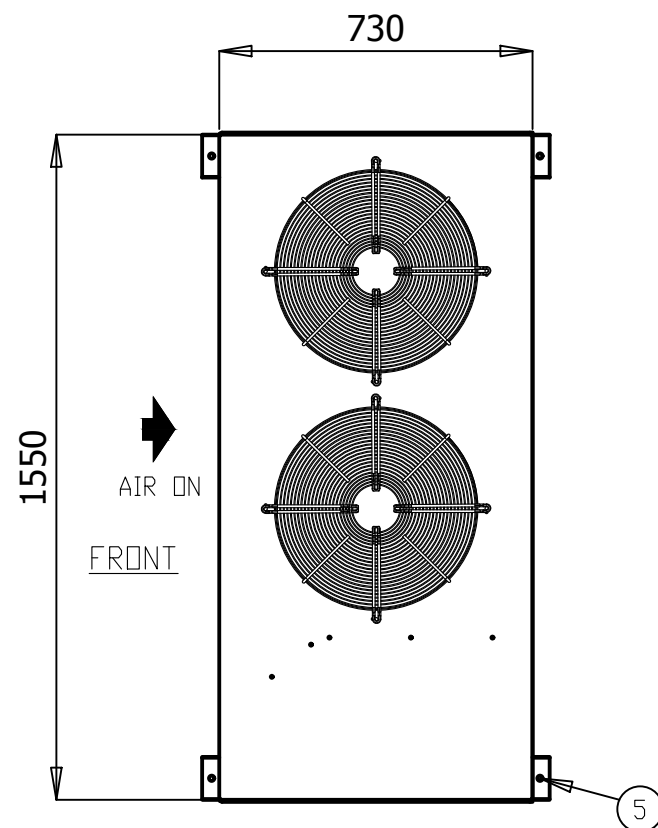
GENERAL ARRANGEMENT

S012IVR3SA- S015IVR3SA- S018IVR3SA- S020IVR3SA- S023IVR3SA-

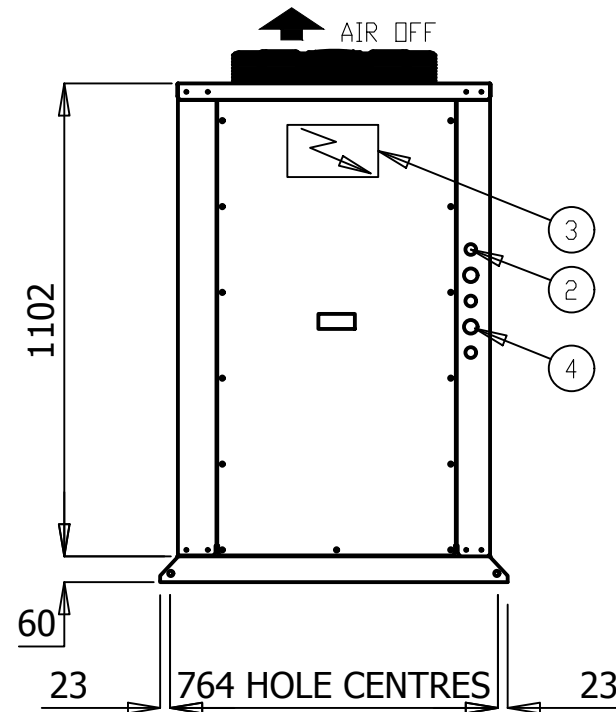
www.apacair.com.au

ABN: 74 005 138 769

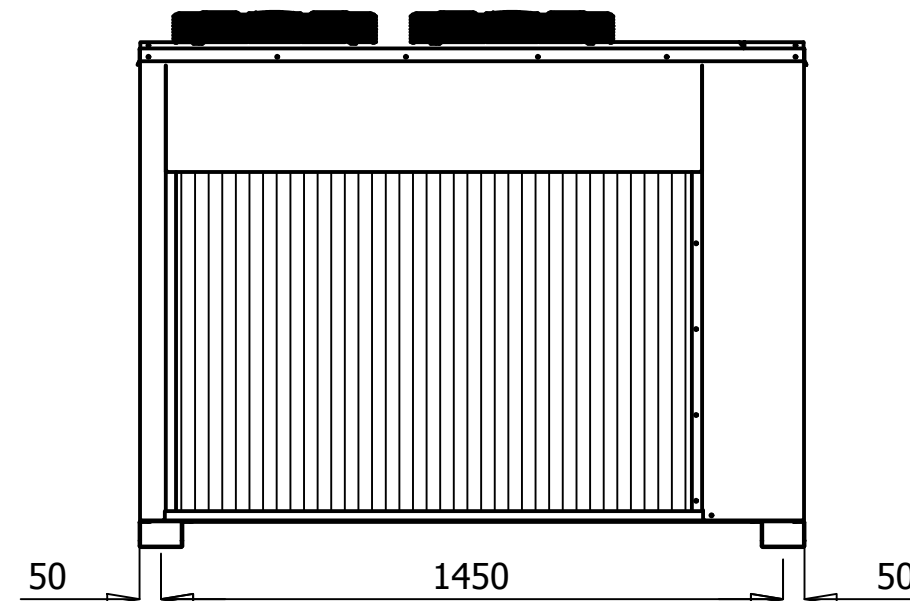
REVISION		REVISED NAMEPLATE WITH APAC DETAILS				
		DRAWN	MT	DRAWING No.		A4
		DATE	30.09.16	GAD0068		
		SCALE	N.T.S.			
		CHECKED	HA	APP'D.	CM	REV. B



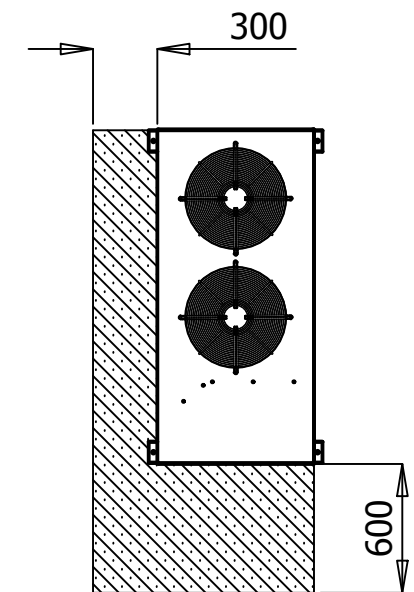
PLAN VIEW



RH ELEVATION



FRONT VIEW



NOTES:

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

- ALL DIMENSIONS IN mm.
- GENERAL TOLERANCE $\pm 1\text{mm}$.
- 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

S0120VR3SA- S0150VR3SA- S0180VR3SA- S0200VR3SA- S0230VR3SA-

www.apacair.com.au

ABN: 74 005 138 769

REVISION		REVISED NAMEPLATE WITH APAC DETAILS						
 apac by Rinnai		DRAWN	MT	DRAWING No.			A4	
		DATE	19.07.14	GAD0025				
		SCALE	N.T.S.					
	ATLANTIC DR. KEYSBOROUGH VIC 3173 1300 555 545		CHECKED	HA	APP'D.	CM	REV.	B

ATLANTIC DR.
KEYSBOROUGH
VIC 3173
1300 555 545

TECHNICAL DATA SHEET

MODEL NUMBER		Indoor	S012IVR3SA-	S015IVR3SA-	S018IVR3SA-	S020IVR3SA-	S023IVR3SA-	
		Outdoor	S012OVR3SA-	S015OVR3SA-	S018OVR3SA-	S020OVR3SA-	S023OVR3SA-	
MEPS REGISTRATION NUMBER			-	-	-	-	-	
OUTDOOR SECTION	CAPACITY							
	Cooling	kW TOTAL*	12.30	15.50	17.50	20.00	22.80	
		kW SENSIBLE*	9.42	12.50	13.50	15.30	17.50	
		EER (kW / ikW)*	3.52	3.60	3.43	3.39	3.28	
	Heating	kW TOTAL	11.90	14.70	16.70	20.60	22.50	
		COP	3.66	3.87	3.71	3.81	3.63	
	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, MOTOR OVERLOAD'S					
	ALL COMPRESSORS HAVE		CRANKCASE HEATER					
	FAN							
	TYPE		AXIAL	AXIAL	AXIAL	AXIAL	AXIAL	
	ikW (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		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		1	1	1	1	1	
	REFRIGERANT CONTROL		TXV					
	ALL SYSTEMS INCLUDE		DRIERS & SIGHT GLASSES					
	DIMENSIONS							
	H X W X D (mm)		1162 x 730 x 1550					
	WEIGHT							
	OPERATING KG		211	214	217	220	223	
	SHIPPING KG		216	219	222	225	228	
	ELECTRICAL							
	POWER SUPPLY		415v / 3Ø / 50hz					
FLA / RLA (Amps)		9.7 / 6.5	12 / 7.5	13.5 / 9.1	17.4 / 9.4	17.4 / 10.3		
INDOOR SECTION	FAN							
	TYPE	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL		
	ikW (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	VARIABLE SPEED		
	HEAT EXCHANGER							
	TYPE	PLATE FIN COIL	PLATE FIN COIL	PLATE FIN COIL	PLATE FIN COIL	PLATE FIN COIL		
	NOM. AIRFLOW l/s	625	835	875	990	1120		
	EXT STATIC pa	100						
	DIMENSIONS							
	H X W X D (mm)	1580 x 850 x 625			1810 x 850 x 625			
	WEIGHT							
	OPERATING KG	127	131	131	147	147		
	SHIPPING KG	130	134	134	150	150		
	ELECTRICAL							
	POWER SUPPLY	415v / 3Ø / 50hz						
	FLA / RLA (Amps)	2.6 / 0.5	2.6 / 0.9	2.6 / 0.9	2.6 / 1.0	2.6 / 1.3		
	COMBINED SECTIONS	ELECTRICAL						
		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)		7.0	8.3	10.0	10.4	11.6		
MAX. F.L.A. (TOTAL SYSTEM)		12.3	14.6	16.1	20.0	20.0		
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 [Based on condenser fan's sound data]								
SOUND POWER db(A)		61.7	61.7	61.7	66.6	66.6		

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).

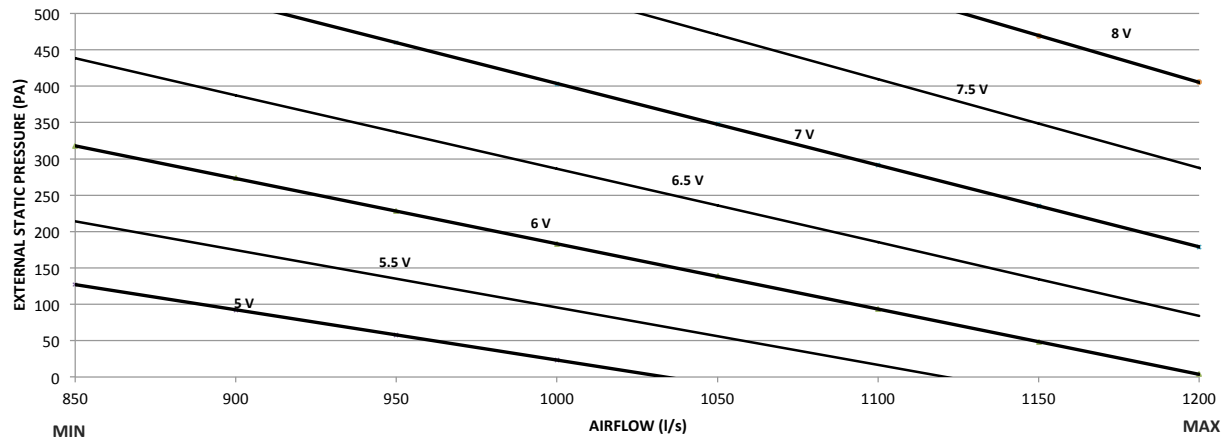
Date	Document #	Approved By	Revision
1/6/18	TDS0047	CM	B

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

FAN PERFORMANCE CURVE

S020IVR3SA-

FAN PERFORMANCE CURVE S020IVR3SA-



Note:

1. 5V, 5.5V, 6V, 6.5V, 7V, 7.5V and 8V 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
30.05.18	FPC0079	CM	B

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



**HIGH EFFICIENCY
SPLIT DUCTED INDOOR VERTICAL
R410A REFRIGERANT**

SOUND DATA

MODEL NUMBER

S020IVR3SA- / S020OVR3SA-

Outdoor Fan

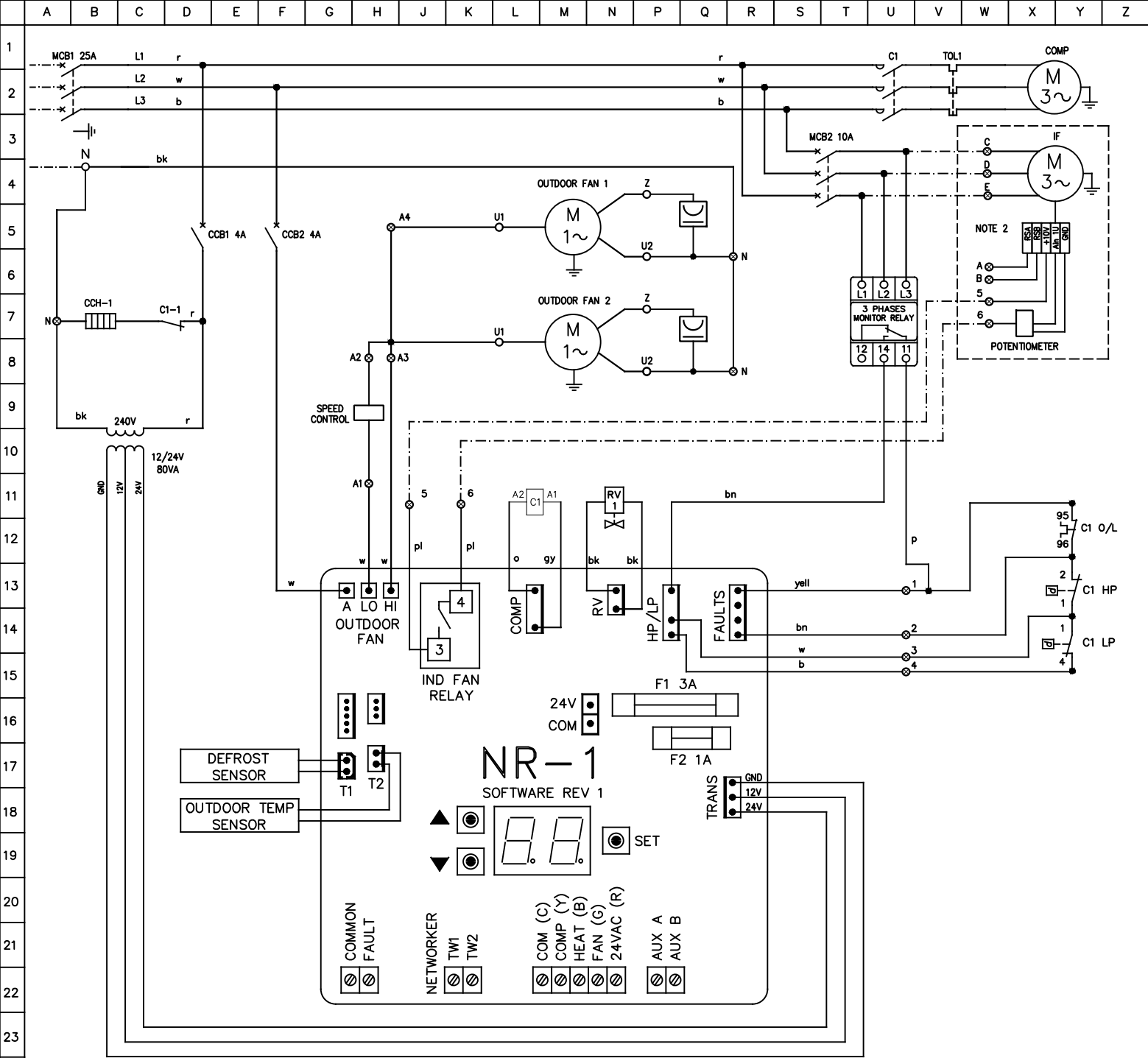
Sound Power Level dB(A)	Octave band Centre Frequency (Hz), dB						
	125	250	500	1k	2k	4k	8k
66.9	74.1	61	62.1	61.3	59.5	57	52.8

Indoor Fan

Sound Power Level dB(A)	Air Flow (l/s)	Octave band Centre Frequency (Hz), dB						
		125	250	500	1k	2k	4k	8k
79.7	990	61.8	68.8	72	75.4	72.6	71.4	70.4

Date	Document #	Approved By	Revision
07.06.18	SD0075	CM	B

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



INDOOR FAN OPERATION DURING DEFROST PARAMETER SETTING		TYPE	ID	SETTING	UPON COMPLETION OF SETTING THE PARAMETERS, SYSTEM (SAFETY SWITCHES, OVERLOADS, LOCKOUT) MUST BE TESTED TO ENSURE CORRECT OPERATION.
FAULT INPUT PARAMETER SETTING		INSTALLER	5	1	
			11	1	
			12	0	
			13	0	
		SERVICE	14	1	

- NOTES: 1. THERMAL OVERLOAD RELAYS, HP SWITCH AND LP SWITCH ARE AUTO RESET, UNLESS OTHERWISE STATED.
2. FOR SPLIT SYSTEMS, OTHERS TO INSTALL ISOLATOR AND FIELD WIRING FOR INDOOR FAN TO INDOOR FAN MOTOR RELAY IN OUTDOOR SECTION.
3. ALL FIELD WIRING IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR, AND MUST COMPLY WITH AS/NZS 3000 AND LOCAL RULES.

WARNING: THE SOFTWARE OF THE NR-1 CONTROLLER IS NOT DESIGNED TO FUNCTION AS A PRIMARY PERSONAL SAFETY DEVICE, AS CONNECTED EQUIPMENT CAN START AUTOMATICALLY WITHOUT WARNING. ALSO OPENING THERMOSTAT CONTACTS OR SWITCHING OFF ON THE NC4 NETWORKER MAY NOT CAUSE THE EQUIPMENT TO STOP. THE ELECTRONIC CONTROLLER HAS A BUILT IN AUTOMATIC RESET FAULT LOCKOUT FUNCTION AND MAY RESTART THE SYSTEM AUTOMATICALLY WITHOUT WARNING.
OUTDOOR FAN MOTORS HAVE INTERNAL OVERLOADS AND MAY RESTART AUTOMATICALLY.

IMPORTANT NOTE: THE SCROLL COMPRESSOR IS ROTATIONALLY SENSITIVE, IF NOISY OR NOT PUMPING, CHANGE ANY OF TWO PHASES.

LEGEND		LEGEND		COLOUR CODE		COMPRESSOR (EACH)		MODEL: S0200VR3SA-V	
COMP	COMPRESSOR CONTACTOR	---	FIELD WIRING	r	RED	kW	4.86	OPTIONS	
O/L	THERMAL OVERLOAD	---	MAINS/CONTROL WIRING	w	WHITE	RATED CURRENT	15.00	REF	DESCRIPTION
TOL	CRANK CASE HEATER	---	CONTROL PARAMETER	b	BLUE	O/L SETTING	16.50	A	STANDARD
CCH	REVERSING VALVE	---	SWITCHBOARD TERMINAL	bk	BLACK	FANS (EACH)	kW		
RV1	HIGH PRESSURE SWITCH	---		bn	BROWN	OUTDOOR	0.27		
HP	LOW PRESSURE SWITCH	---		o	ORANGE	INDOOR	1.70		
LP	MINIATURE CIRCUIT BREAKER	---		p	PINK		1.18		
MCB	CONTROL CIRCUIT BREAKER	---		pl	PURPLE		2.60		
CCB		---		gy	GREY				
		---		yell	YELLOW				



by Kinnari

DATE	17/06/2018		
DWN	S.P	APPD	ENG
REV	A	GRID	B207
DWG No.	EWS02185		