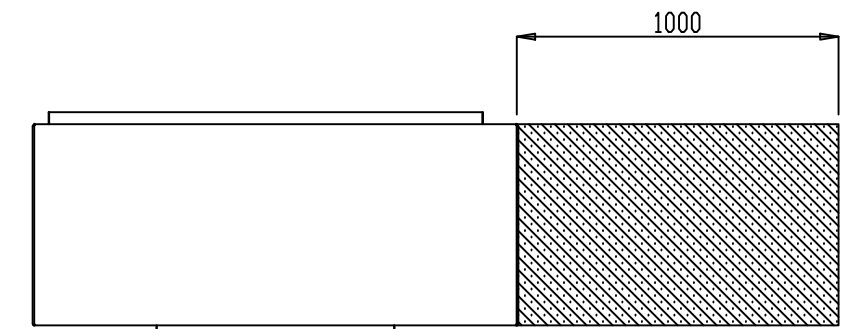
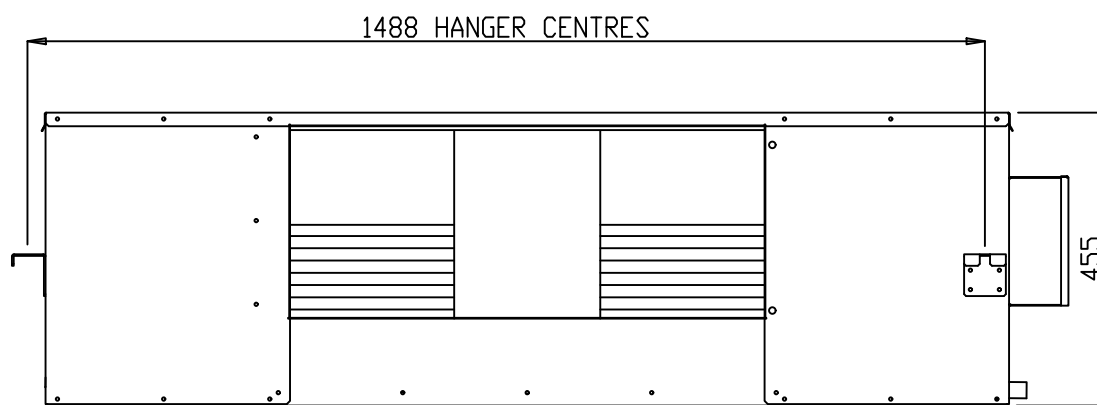


**NOTES:**

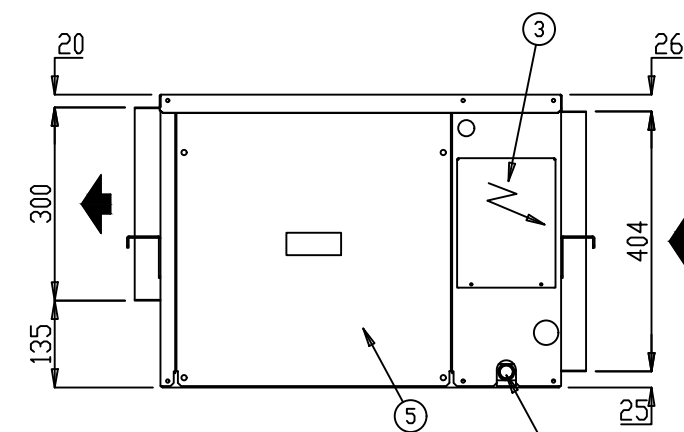
1. GENERAL ARRANGEMENT OF A HORIZONTAL SINGLE STAGE INDOOR UNIT
2. POWER AND FIELD CABLE ENTRIES, 1 x 20 $\phi$
3. ELECTRICAL PANEL
4. CONDENSATE OUTLET 25 $\phi$
5. ACCESS PANEL
6. REFER TO INSTALLATION AND OPERATIONAL MANUAL FOR PIPE SIZING



CLEARANCE DETAIL



FRONT ELEVATION



R/H ELEVATION

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

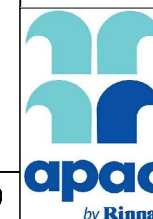
GENERAL ARRANGEMENT

S020ILR1SA- S023ILR1SA-

www.apacair.com.au

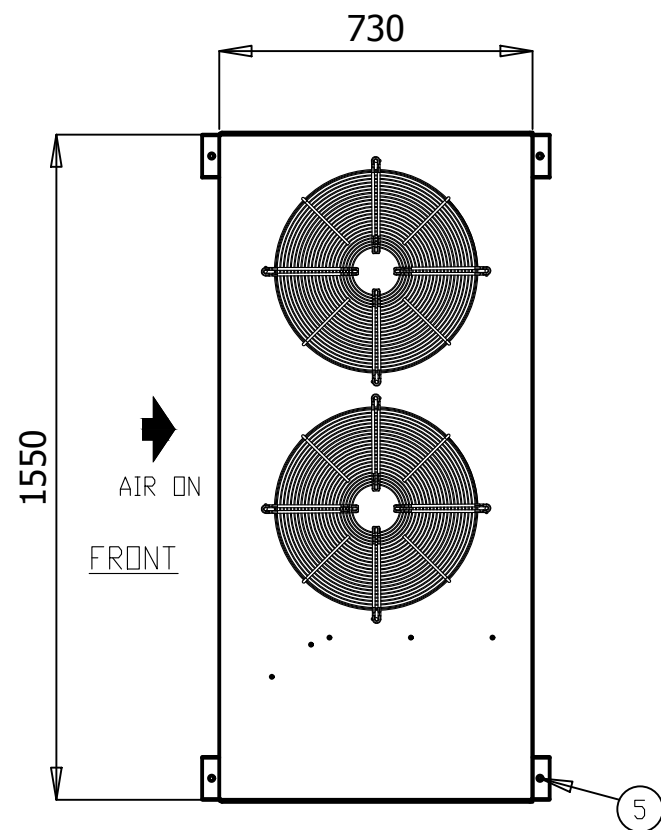
ABN: 74 005 138 769

REVISION

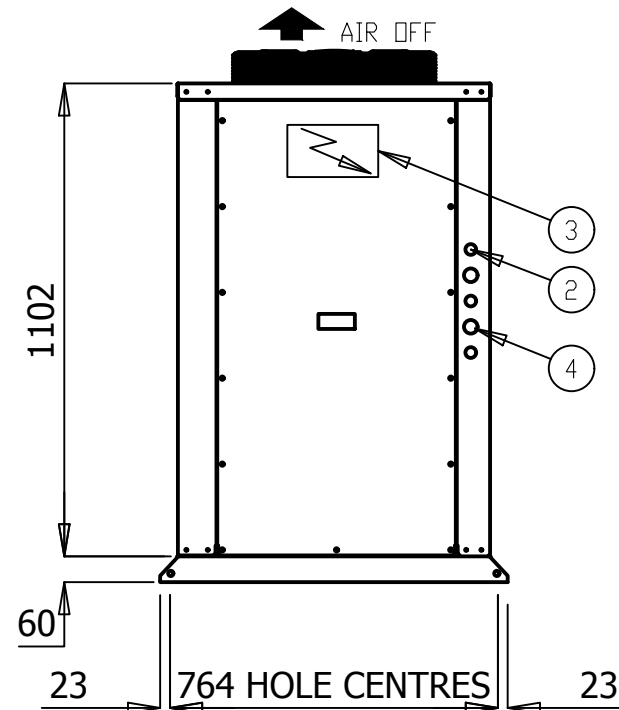


REVISED NAMEPLATE WITH APAC DETAILS

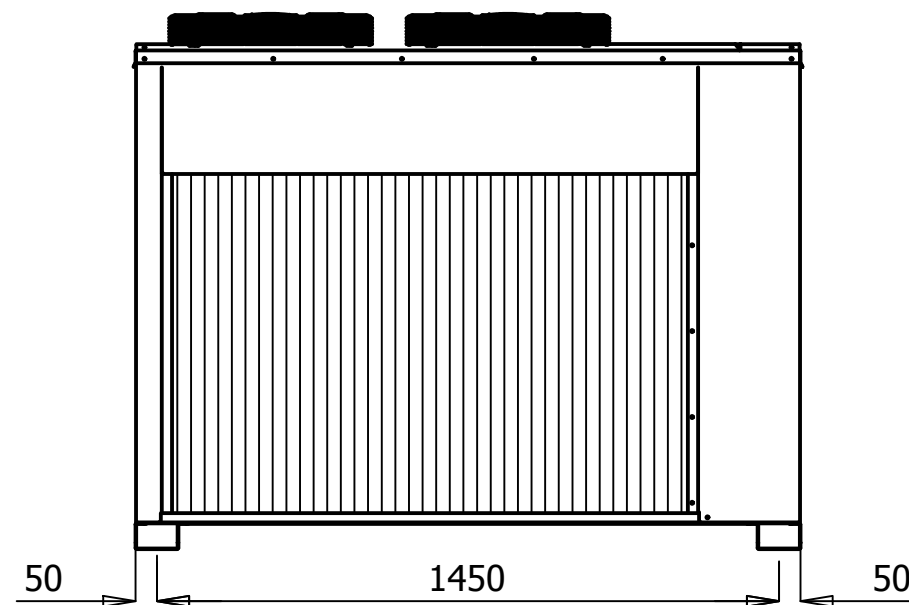
 ATLANTIC DR. KEYSBOROUGH VIC 3173 1300 555 545	DRAWN	MT	DRAWING No.	A4	
	DATE	22.08.14	<b>GAD0027</b>		
	SCALE	N.T.S.			
	CHECKED	HA	APP'D.	CM	REV.



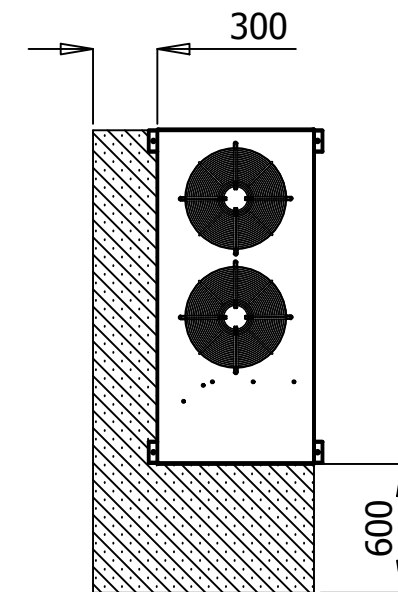
PLAN VIEW



RH ELEVATION



FRONT VIEW



NOTES:

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

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

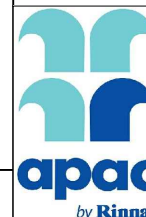
GENERAL ARRANGEMENT

S0120VR3SA- S0150VR3SA- S0180VR3SA- S0200VR3SA- S0230VR3SA-

www.apacair.com.au

ABN: 74 005 138 769

REVISION



REVISED NAMEPLATE WITH APAC DETAILS

 ATLANTIC DR. KEYSBOROUGH VIC 3173 1300 555 545	DRAWN	MT	DRAWING No.	A4	
	DATE	19.07.14	<b>GAD0025</b>		
	SCALE	N.T.S.			
	CHECKED	HA	APP'D.	CM	REV.

# TECHNICAL DATA SHEET

MODEL NUMBER	Indoor	S012ILR1SA-	S015ILR1SA-	S018ILR1SA-	S020ILR1SA-	S023ILR1SA-		
	Outdoor	S012OVR3SA-	S015OVR3SA-	S018OVR3SA-	S020OVR3SA-	S023OVR3SA-		
MEPS REGISTRATION NUMBER		AAC3201	AAC3237	AAC3203	AAC3236	AAC3204		
<b>OUTDOOR SECTION</b>	<b>CAPACITY</b>							
	<b>Cooling</b>	kW TOTAL*	12.57	15.54	17.43	20.53	22.89	
		kW SENSIBLE*	9.70	12.13	13.45	15.88	18.17	
		EER (kW / ikW)*	3.50	3.70	3.49	3.60	3.32	
	<b>Heating</b>	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	
	<b>COMPRESSOR</b>							
	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							
	<b>FAN</b>							
	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	
	<b>HEAT EXCHANGER</b>							
	TYPE		PLATE FIN COIL	PLATE FIN COIL	PLATE FIN COIL	PLATE FIN COIL	PLATE FIN COIL	
	NOM. AIRFLOW l/s		-	-	-	-	-	
	<b>REFRIGERANT SYSTEM</b>							
	TYPE		<b>R410A</b>					
	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							
	<b>DIMENSIONS</b>							
	H X W X D (mm)		1162 x 730 x 1550					
	<b>WEIGHT</b>							
	OPERATING KG		211	214	217	220	223	
	SHIPPING KG		216	219	222	225	228	
	<b>ELECTRICAL</b>							
	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	
	<b>INDOOR SECTION</b>	<b>FAN</b>						
		TYPE		CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL
		ikW (MAX INPUT)		0.63	0.63	0.63	0.96	0.96
		PHASE		1Ø	1Ø	1Ø	1Ø	1Ø
		No. OFF		1	1	1	1	1
		FAN SPEED CONTROL		VARIABLE SPEED	VARIABLE SPEED	VARIABLE SPEED	VARIABLE SPEED	VARIABLE SPEED
		<b>HEAT EXCHANGER</b>						
		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						
<b>DIMENSIONS</b>								
H X W X D (mm)		444 x 1225 x 655			455 x 1500 x 625			
<b>WEIGHT</b>								
OPERATING KG		70			74			
SHIPPING KG		73			77			
<b>ELECTRICAL</b>								
POWER SUPPLY		230v / 1Ø / 50hz						
FLA / RLA (Amps)		4.4 / 2.1	4.4 / 3.8	4.4 / 4.0	5.9 / 4.2	5.9 / 4.8		
<b>COMBINED SECTIONS</b>	<b>ELECTRICAL</b>							
	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)		8.6	11.3	13.1	13.6	15.1	
	MAX. F.L.A. (TOTAL SYSTEM)		14.1	16.4	17.9	23.3	23.3	
	<b>GENERAL</b>							
	CABINET GALVANISED SHEET STEEL							
	INSULATION ALUMINIUM FOIL FACED POLYETHYLENE ACOUSTIC INSULATION							
	EXTERNAL FINISH POLYESTER POWDER COAT - COLOUR LIGHT GREY AS STANDARD - OPTIONS AVAILABLE							
	<b>INDOOR AND OUTDOOR PIPE CONNECTION</b>							
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")		
<b>ADDITIONAL REFRIGERATION CHARGE AND FIELD PIPING CONNECTIONS</b>								
REFER TO INSTALLATION AND OPERATION MANUAL								
<b>NOISE LEVELS</b> [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

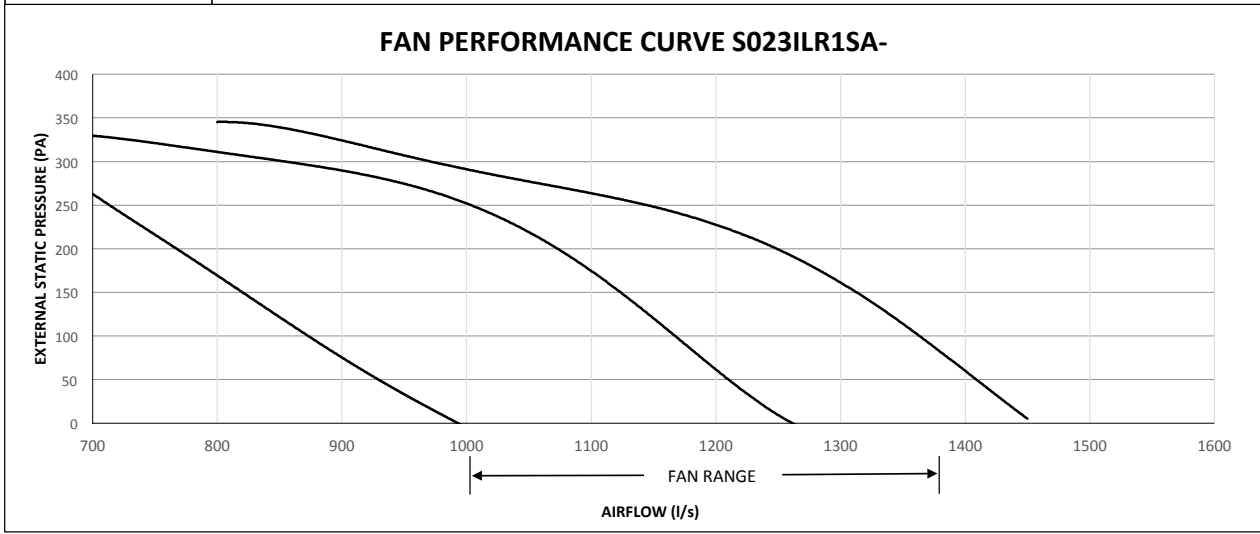
F.L.A - Full Load Amps are based on the overload settings [Max Current] of all Compressor and Fan Motor(s).

Date	Document #	Approved By	Revision
1/6/18	TDS0022	CM	H

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

## FAN PERFORMANCE CURVE

**S023ILR1SA-**



Date	Document #	Approved By	Revision
29.05.18	FPC0031	CM	B

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



## SOUND DATA

**MODEL NUMBER**

**S023ILR1SA- / S023OVR3SA-**

**Outdoor Fan**

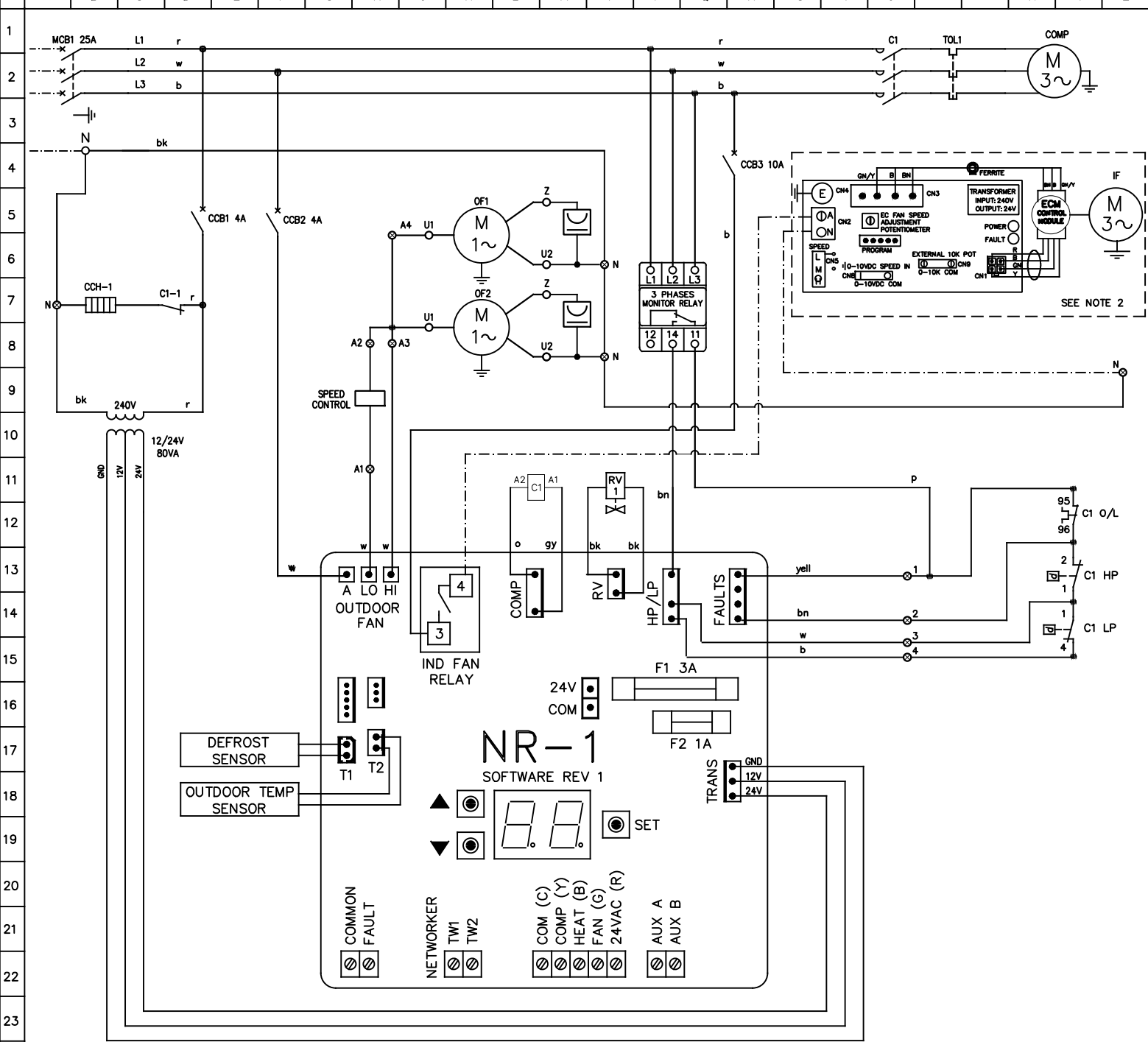
Sound Power Level dB(A)	Octave band Centre Frequency (Hz), dB						
	125	250	500	1k	2k	4k	8k
66.6	76.7	62.2	57.1	58.7	60.9	57	47.7

**Indoor Fan**

Sound Power Level dB(A)	Air Flow (l/s)	Octave band Centre Frequency Hz), dB						
		125	250	500	1k	2k	4k	8k
77.1	1190	74.9	75.6	74.6	72.1	68.6	64.6	59.6

Date	Document #	Approved By	Revision
01.06.18	SD0038	CM	B

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



	TYPE	ID	SETTING	
INDOOR FAN OPERATION DURING DEFROST PARAMETER SETTING	INSTALLER	5	1	UPON COMPLETION OF SETTING THE PARAMETERS, SYSTEM (SAFETY SWITCHES, OVERLOADS, LOCKOUT) MUST BE TESTED TO ENSURE CORRECT OPERATION.
FAULT INPUT PARAMETER SETTING	SERVICE	11	1	
		12	0	
		13	0	
		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: S0230VR3SA-L	
COMP	COMPRESSOR CONTACTOR	---	FIELD WIRING	r	RED	kW	5.52
O/L	THERMAL OVERLOAD	---	MAINS/CONTROL WIRING	w	WHITE	RATED CURRENT	15.00
TOL	THERMAL OVERLOAD	---	CONTROL PARAMETER	b	BLUE	O/L SETTING	16.50
CCH	CRANK CASE HEATER	⊗	SWITCHBOARD TERMINAL	bk	BLACK	FANS (EACH)	kW
RV1	REVERSING VALVE	○	TERMINAL	bn	BROWN	INDOOR	0.96
HP	HIGH PRESSURE SWITCH			o	ORANGE	OUTDOOR	0.27
LP	LOW PRESSURE SWITCH			p	PINK	FLA	1.18
MCB	MINIATURE CIRCUIT BREAKER			pl	PURPLE		6.80
CCB	CONTROL CIRCUIT BREAKER			gy	GREY		
				yell	YELLOW		

**apac**  
by Rimini

DATE	24/06/2018		
DWN	S.P	APPD	ENG
REV	A	GRID	B254
DWG No.	EWS02229		