



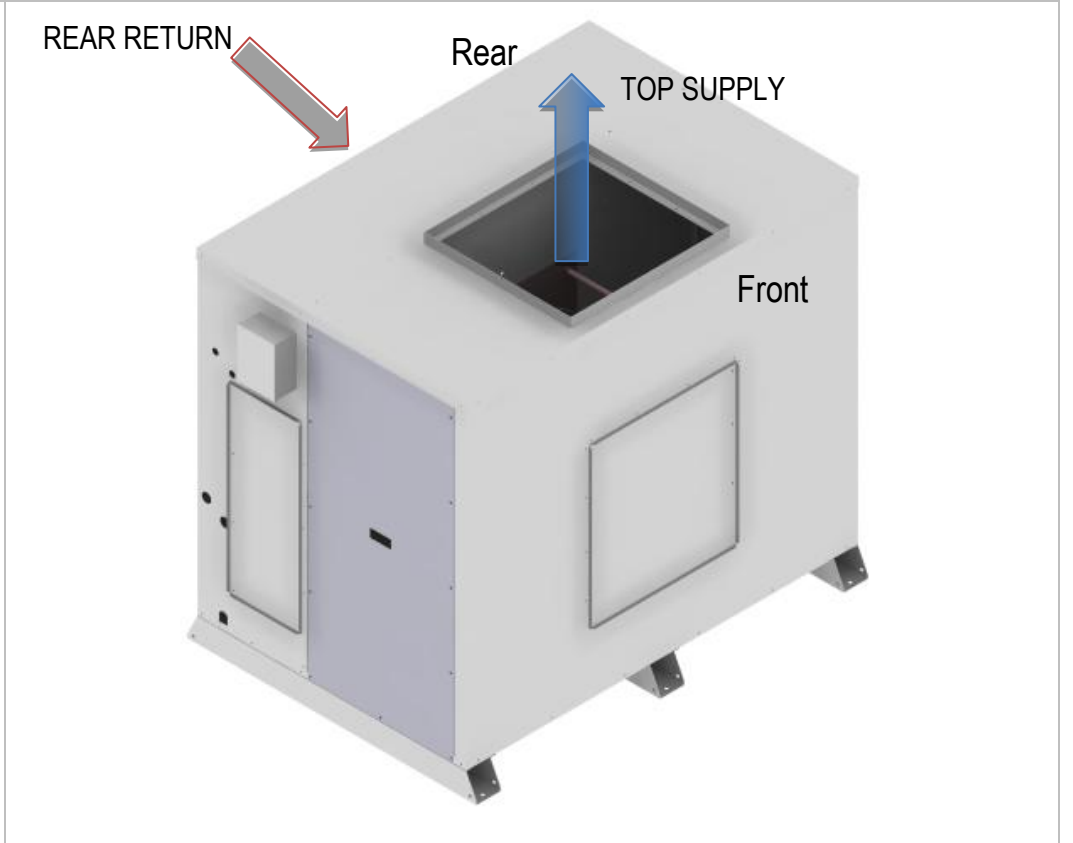
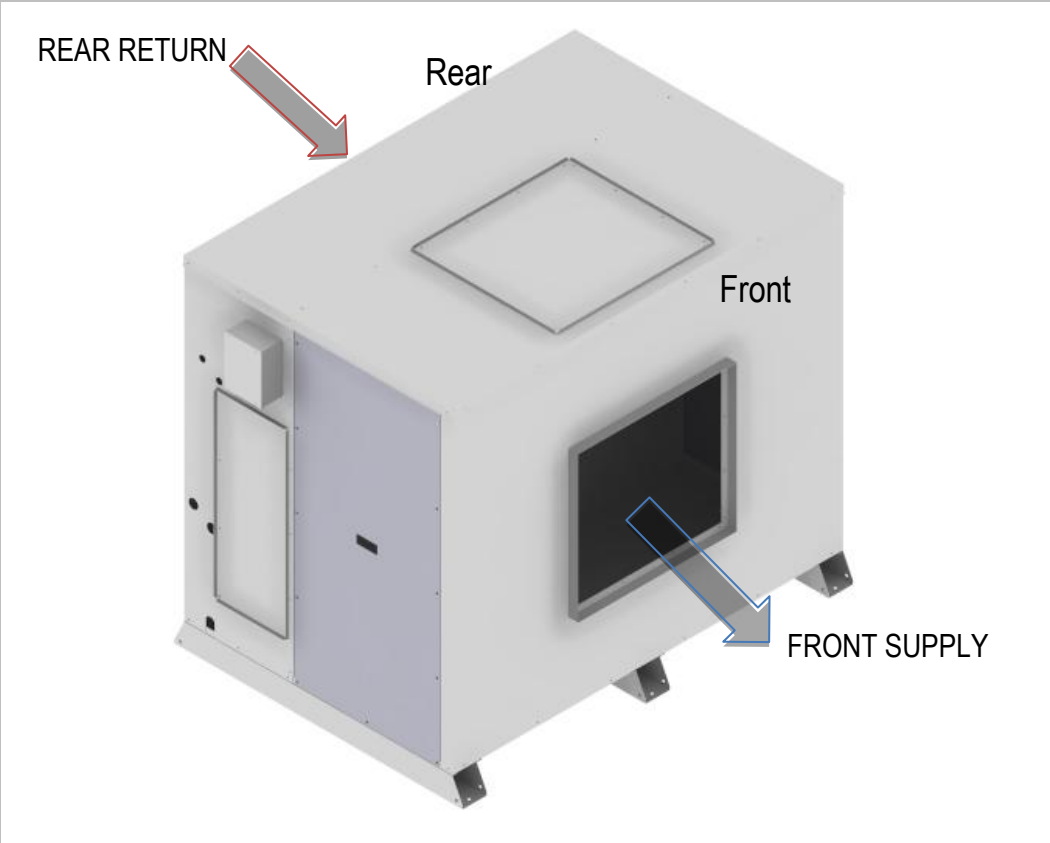
SDU HORIZONTAL HANDING CONFIRMATION

| | | | |
|------------------------------------|--|------------------------------------|--|
| SO NUMBER (INTERNAL USE) | | WO NUMBER (INTERNAL USE) | |
|------------------------------------|--|------------------------------------|--|

SPLIT DUCTED UNITS (SDU IDH)

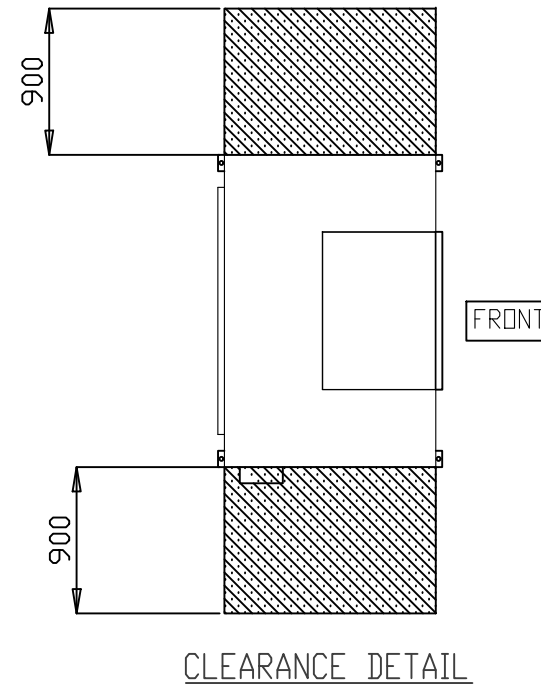
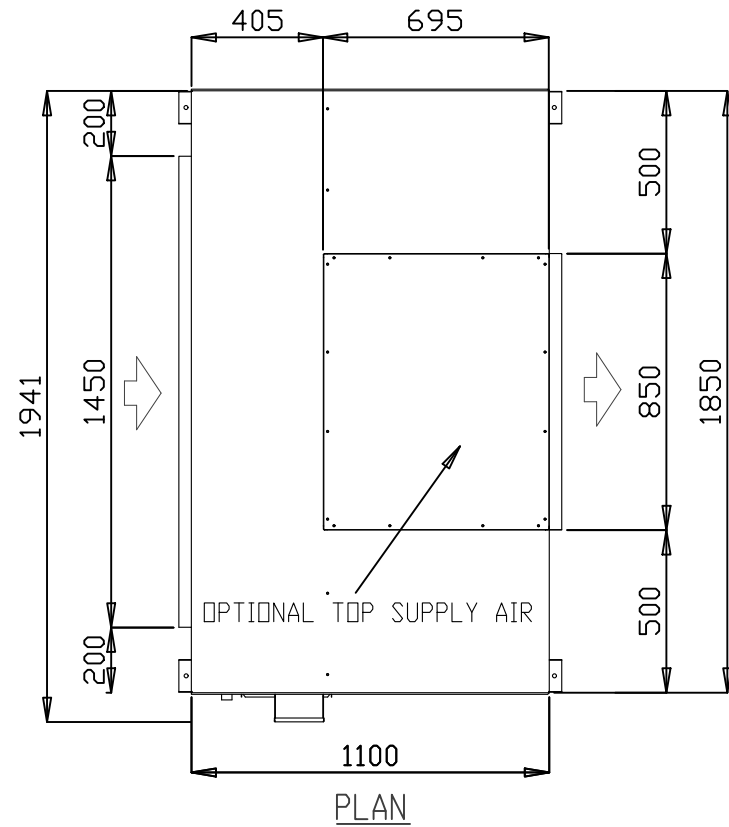
| | |
|---------------------------------|---|
| MODELS | S024-095IHR3SA- |
| GENERAL | This document details the airside configurations available on 024-095 models. |
| SOURCING | Standard configuration is Front Supply /Rear Return. Optional airside configurations to be specified at time of order. |
| HOW TO USE THIS DOCUMENT | <ol style="list-style-type: none"> 1. Circle the required supply air outlet. 2. Complete the information at the bottom of this document and return to your APAC representative. |

| | |
|---|---|
| FS/RR – FRONT SUPPLY / REAR RETURN | TS/RR – TOP SUPPLY / REAR RETURN |
|---|---|

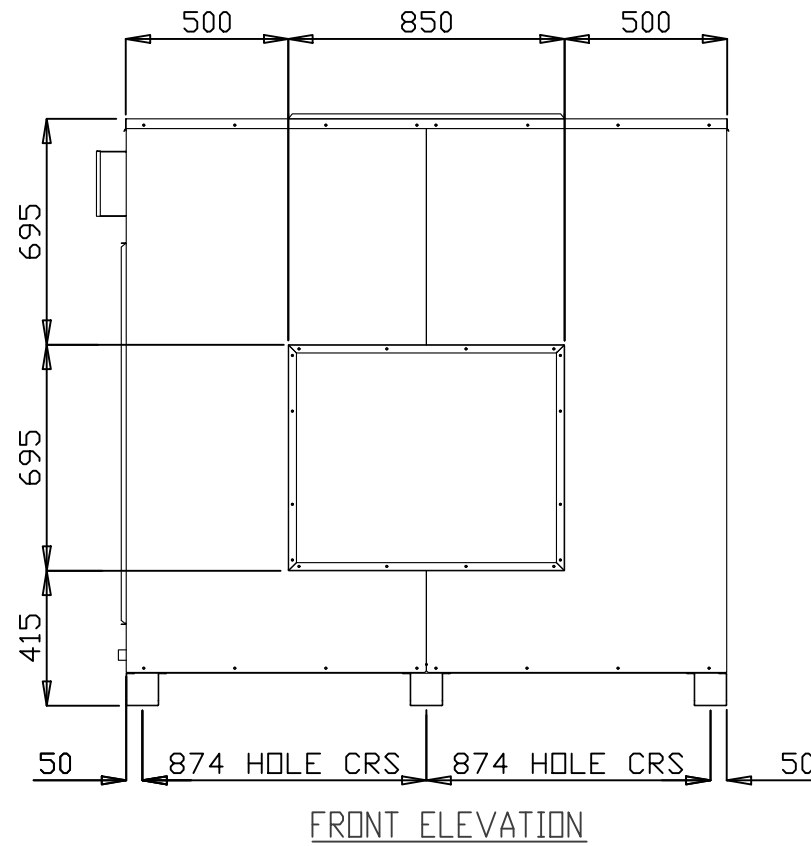
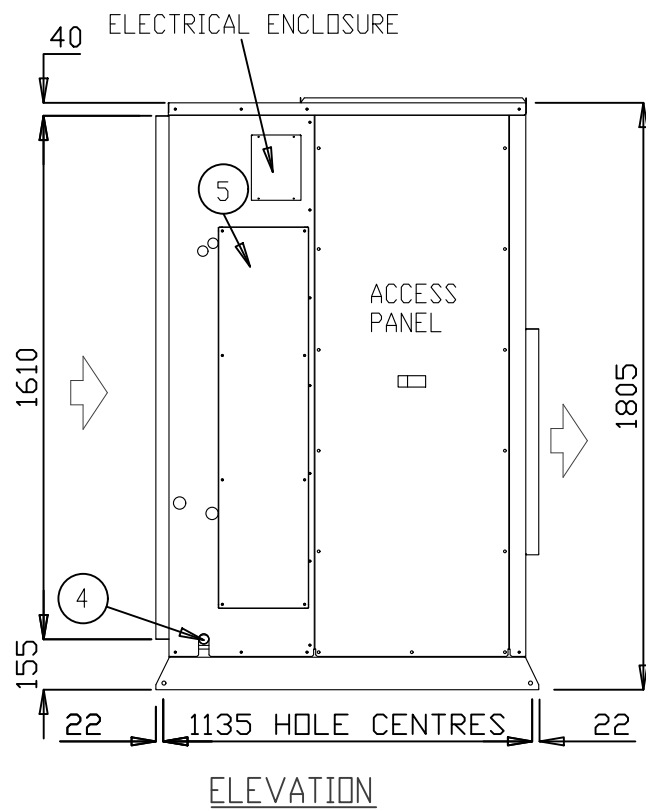


CUSTOMER TO COMPLETE AND RETURN

| CUSTOMER | PROJECT | UNIT REF | NAME / SIGN | DATE |
|----------|---------|----------|-------------|------|
| | | | | |



- NOTES :
1. DRAWING REFLECTS A HORIZONTAL FAN COIL UNIT
 2. GAS, DRAIN & ELECTRICAL CONNECTIONS ON SAME SIDE
 3. ELECTRICAL CABLE ENTRY 25mm ϕ .
 4. CONDENSATE DRAIN OUTLET 32mm ϕ
 5. ACCESS DOORS ON BOTH SIDES
 6. OPTIONAL TOP SUPPLY CONFIGURABLE ON SITE
 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.

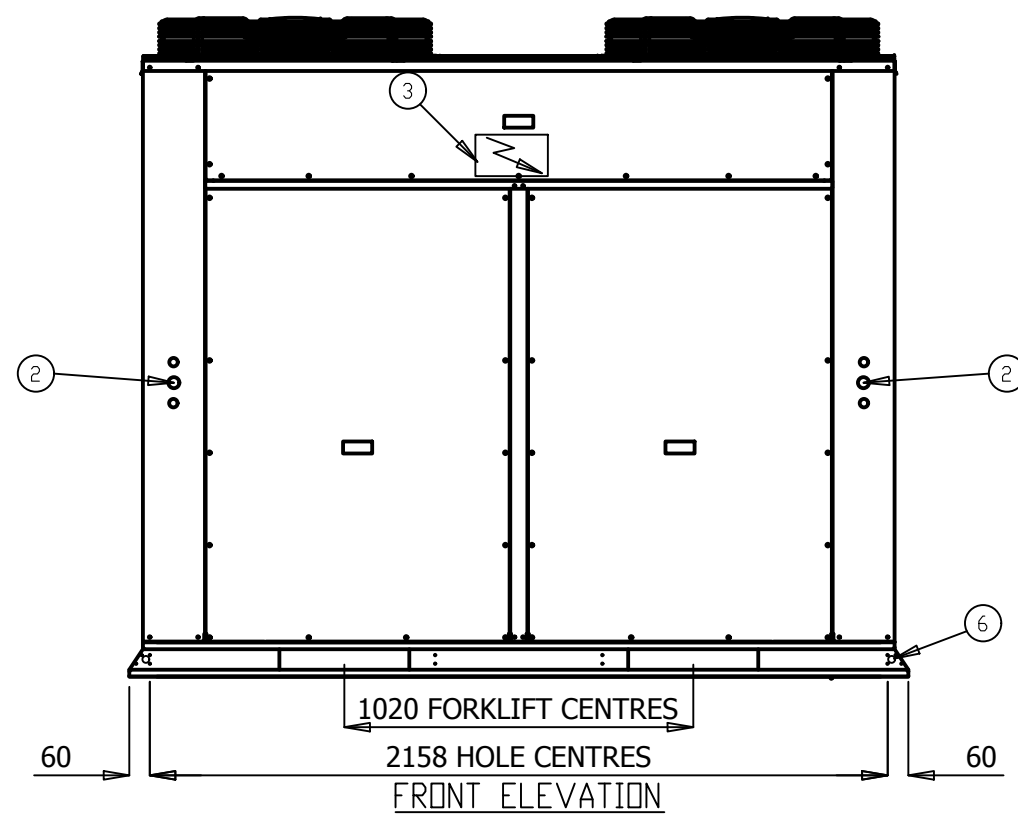
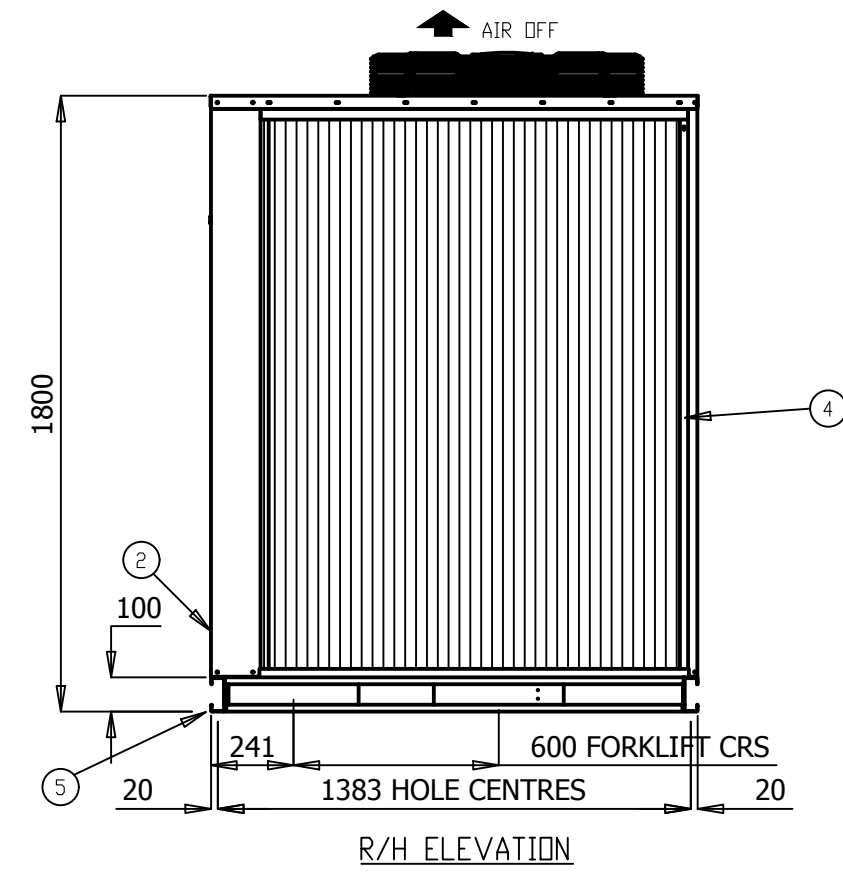
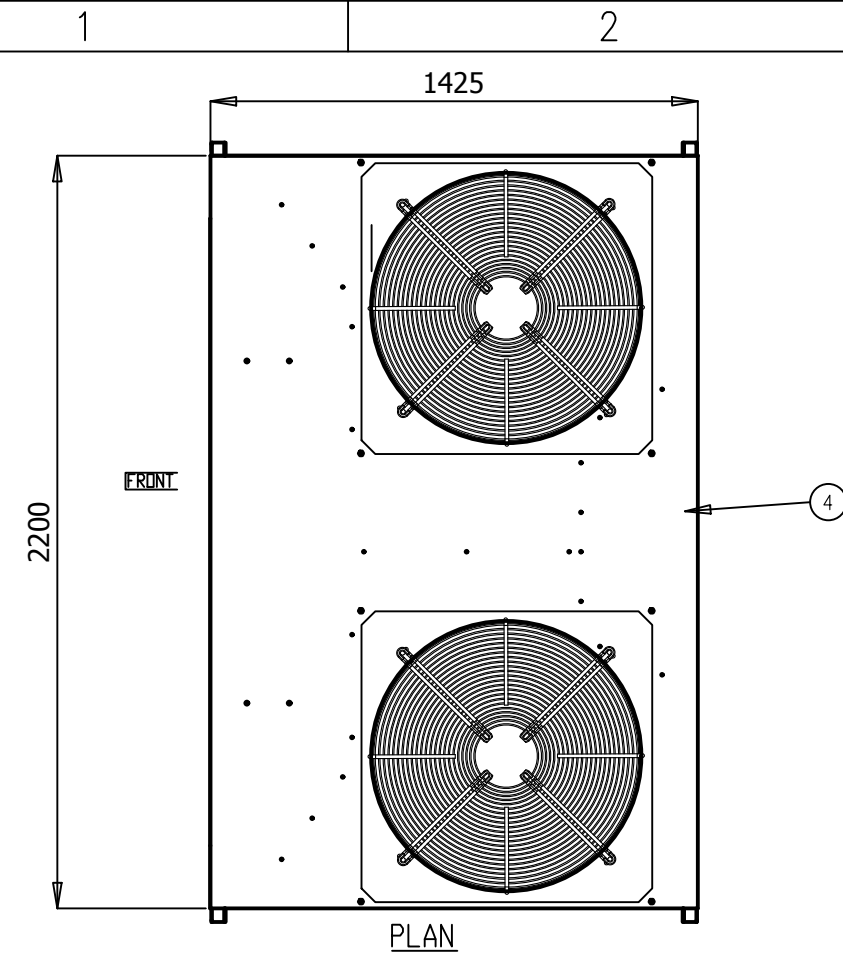
GENERAL ARRANGEMENT

S085IHR3SA- S095IHR3SA-

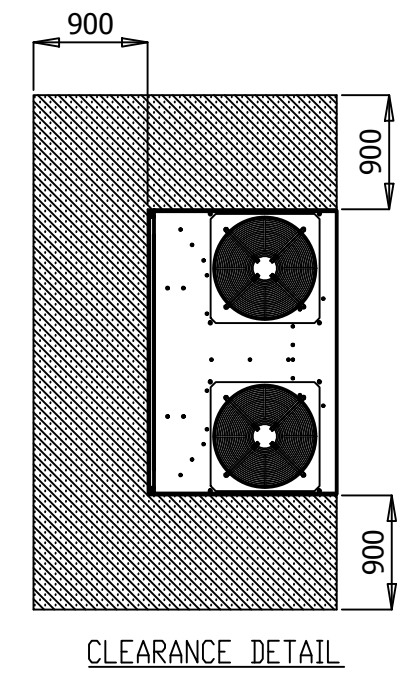
www.apacair.com.au

ABN: 74 005 138 769

| | | | | | | | | | | |
|---------|----------|--------|----------|------------------|---|-------------------------------------|--|--|--|--|
| | REVISION | | | | | REVISED NAMEPLATE WITH APAC DETAILS | | | | |
| | | DRAWN | MT | DRAWING No. | | A4 | | | | |
| | | DATE | 24.03.14 | <h1>GAD0018</h1> | | | | | | |
| | | SCALE | N.T.S. | | | | | | | |
| CHECKED | HA | APP'D. | CM | 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


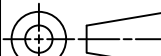


- ALL DIMENSIONS IN mm.
- GENERAL TOLERANCE ± 1 mm.
- DO NOT SCALE DRAWING.
- MASTER DRAWINGS ARE HELD ELECTRONICALLY. ANY COPY IS DEEMED UNCONTROLLED AND THEREFORE NOT NECESSARILY THE LATEST REVISION.
- ALL INFORMATION REMAINS THE PROPERTY OF THE COMPANY.

GENERAL ARRANGEMENT

S0850VR3SA- S0950VR3SA-

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| | | | | | |
|---|---|---------|----------|----------------|----|
| REVISION | REVISED NAMEPLATE WITH APAC DETAILS | | | | |
|  |  | DRAWN | MT | DRAWING No. | A4 |
| | ATLANTIC DR. KEYSBOROUGH VIC 3173 1300 555 545 | DATE | 16.04.14 | GAD0032 | |
| | | SCALE | N.T.S. | | |
| | | CHECKED | HA | APP'D. | CM |

TECHNICAL DATA SHEET

| MODEL NUMBER | Indoor | S055IHR3SA- | S065IHR3SA- | S075IHR3SA- | S085IHR3SA- | S095IHR3SA- | |
|--|--|--------------------|---|------------------------|------------------------|------------------------|------------------------|
| | Outdoor | S055OVR3SA- | S065OVR3SA- | S075OVR3SA- | S085OVR3SA- | S095OVR3SA- | |
| MEPS REGISTRATION NUMBER | | AAC3221 | AAC3233 | N/A | N/A | N/A | |
| OUTDOOR SECTION | CAPACITY | | | | | | |
| | Cooling | kW TOTAL* | 52.90 | 63.88 | 72.95 | 83.74 | 94.04 |
| | | kW SENSIBLE* | 44.01 | 54.50 | 58.50 | 69.34 | 77.49 |
| | | EER (kW / ikW)* | 3.07 | 3.28 | 3.49 | 3.47 | 3.24 |
| | Heating | kW TOTAL | 54.30 | 65.00 | 73.40 | 84.30 | 96.10 |
| | | COP | 3.39 | 3.61 | 3.59 | 3.60 | 3.60 |
| | 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 SUMP HEATER | | | | | | |
| | FAN | | | | | | |
| | TYPE | | EC AXIAL | EC AXIAL | EC AXIAL | EC AXIAL | EC AXIAL |
| | ikW (MAX INPUT) | | 0.97 | 0.93 | 0.93 | 0.93 | 0.93 |
| | PHASE | | 3Ø | 3Ø | 3Ø | 3Ø | 3Ø |
| | 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) | | 5.75 | 6.75 | 9.5 | 11 | 10.8 | |
| No. OF CIRCUITS | | 2 | 2 | 2 | 2 | 2 | |
| REFRIGERANT CONTROL | | TXV | | | | | |
| ALL SYSTEMS INCLUDE FILTER DRIERS | | | | | | | |
| DIMENSIONS | | | | | | | |
| H X W X D (mm) | | 1390 x 1850 x 1426 | 1595 x 2200 x 1425 | 1800 x 2200 x 1425 | | | |
| WEIGHT | | | | | | | |
| OPERATING KG | | 510 | 600 | 610 | 761 | 783 | |
| SHIPPING KG | | 515 | 605 | 615 | 766 | 788 | |
| ELECTRICAL | | | | | | | |
| POWER SUPPLY | | 415v / 3Ø / 50hz | | | | | |
| RLA / FLA (Amps) | | 28.6/45.2 | 32.7/47 | 35.3/53 | 40.2/65 | 52.2/71 | |
| INDOOR SECTION | FAN | | | | | | |
| | TYPE | | EC PLUG | EC PLUG | EC PLUG | EC PLUG | EC PLUG |
| | ikW (MAX INPUT) | | 3 | 2.73 | 2.73 | 2.82 | 2.82 |
| | PHASE | | 3Ø | 3Ø | 3Ø | 3Ø | 3Ø |
| | No. OFF | | 1 | 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 | | 2880 | 3550 | 3750 | 4400 | 4930 |
| | EXT STATIC pa | | 100 | | | | |
| | DIMENSIONS | | | | | | |
| | H X W X D (mm) | | 1400 x 1600 x 1100 | 1605 x 1600 x 1100 | 1805 x 1850 x 1100 | | |
| | WEIGHT | | | | | | |
| | OPERATING KG | | 290 | 340 | 340 | 461 | 461 |
| | SHIPPING KG | | 295 | 345 | 345 | 466 | 466 |
| ELECTRICAL | | | | | | | |
| POWER SUPPLY | | 415v / 3Ø / 50hz | | | | | |
| RLA / FLA (Amps) | | 2.5/4.6 | 2.2/8.4 | 2.8/8.4 | 3.3/8.6 | 4.1/8.6 | |
| 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) | | 31.1 | 34.9 | 38.1 | 43.5 | 56.3 |
| | MAX. F.L.A. (TOTAL SYSTEM) | | 49.8 | 55.4 | 61.4 | 73.6 | 79.6 |
| | 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) | | 12.7 (1/2") | 12.7 (1/2") | 12.7 (1/2") | 15.9 (5/8") | 15.9 (5/8") | |
| GAS mm (inch) | | 28.6 (1-1/8") | 28.6 (1-1/8") | 28.6 (1-1/8") | 28.6 (1-1/8") | 28.6 (1-1/8") | |
| 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) | | 70.9 | 71.5 | 71.5 | 71.5 | 71.5 | |

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).

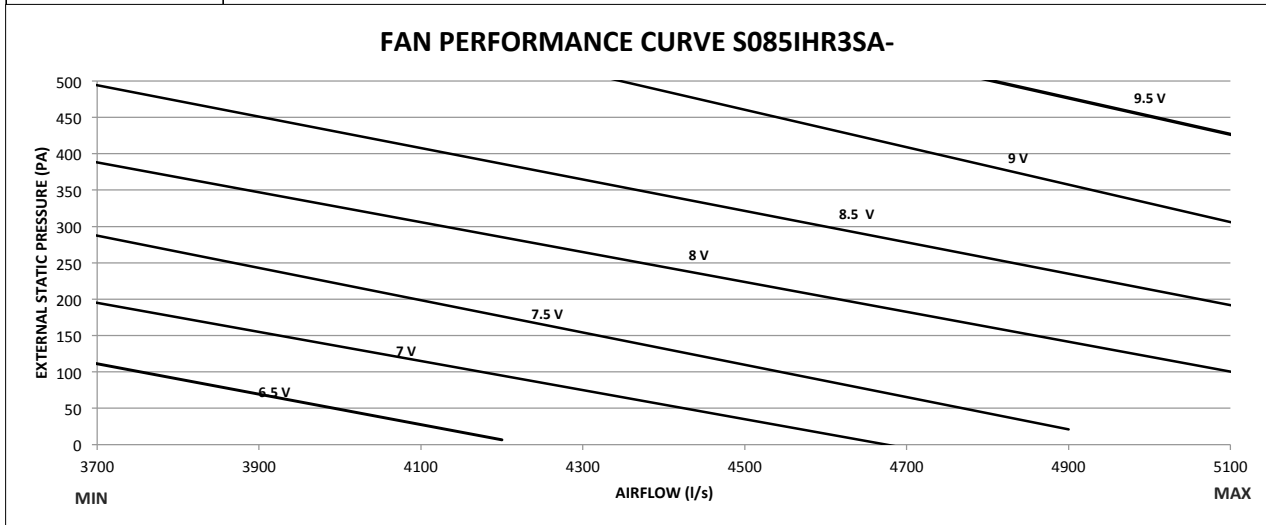
This TDS is also applicable to models: ASCE055HA3A-ASCC055VA3A; ASCE065HA3A-ASCC065VA3A; ASCE075HA3A-ASCC075VA3A; ASCE085HA3A-ASCC085VA3A; ASCE095HA3A-ASCC095VA3A.

| Date | Document # | Approved By | Revision |
|--------|------------|-------------|----------|
| 1/6/18 | TDS0023 | CM | D |

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

FAN PERFORMANCE CURVE

S085IHR3SA-



Note:

1. 6.5 V, 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 between 0 to 10V.

| Date | Document # | Approved By | Revision |
|----------|------------|-------------|----------|
| 29.05.18 | FPC0027 | CM | D |

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



SOUND DATA

MODEL NUMBER

S085IHR3SA- / S085OVR3SA-

Outdoor Fan

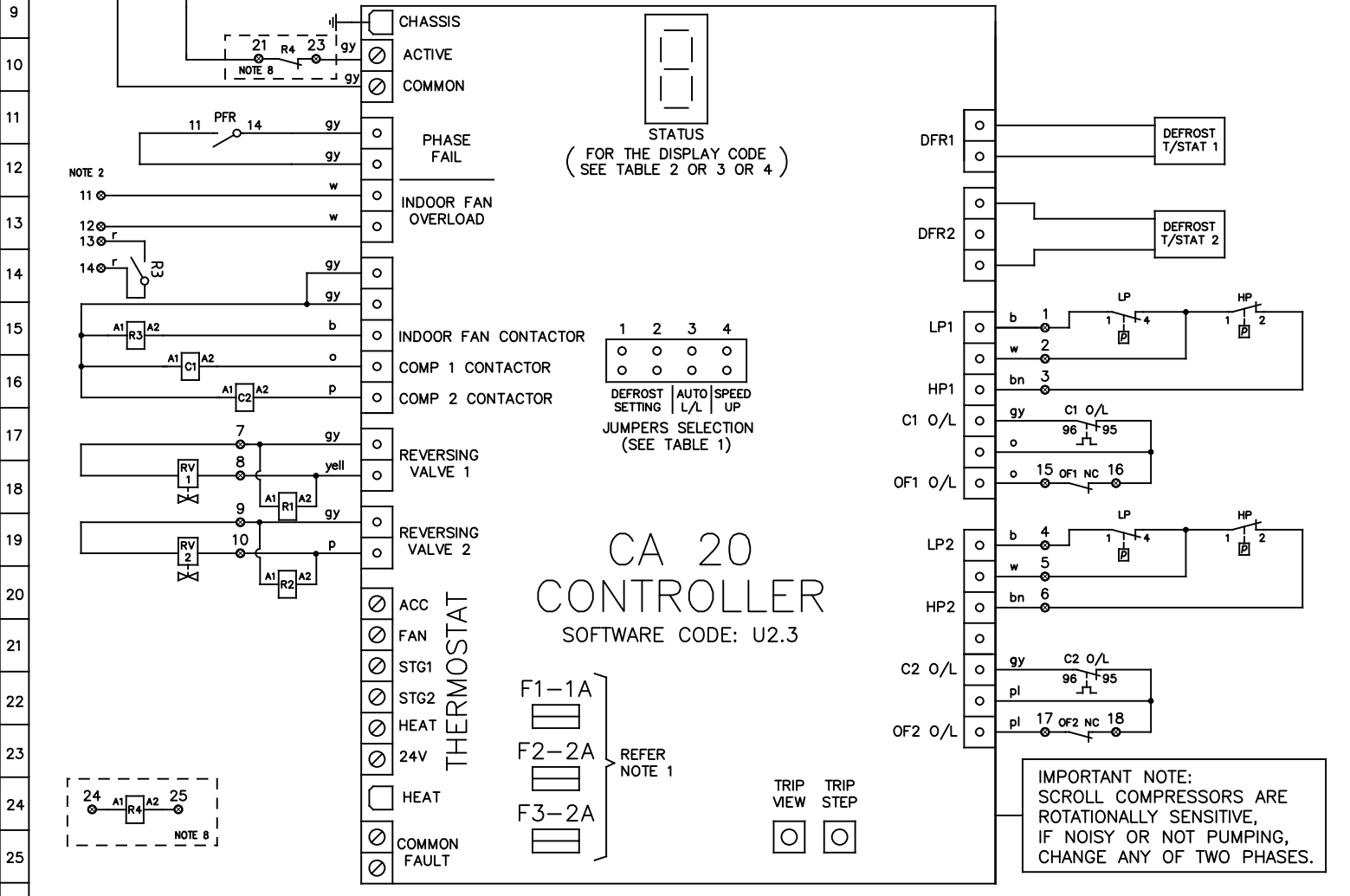
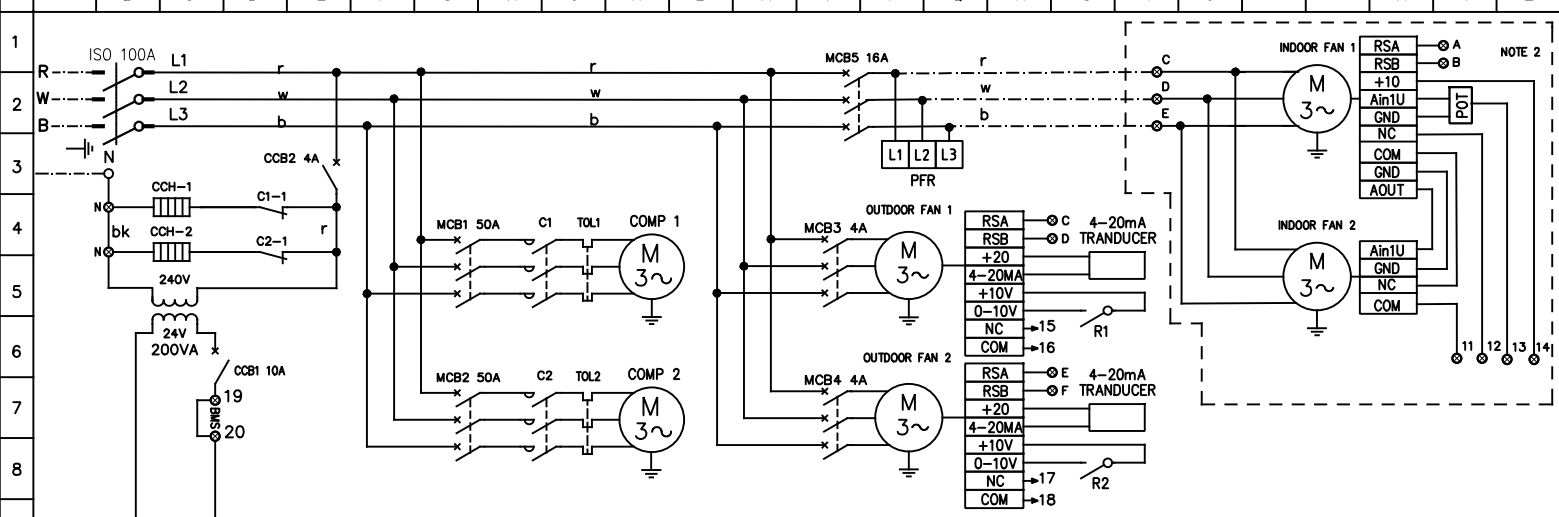
| Sound Power Level dB(A) | Octave band Centre Frequency (Hz), dB | | | | | | |
|----------------------------|---------------------------------------|------|------|------|------|----|------|
| | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 71.5 | 73.9 | 68.9 | 66.5 | 64.6 | 65.7 | 62 | 58.4 |

Indoor Fan

| Sound Power Level dB(A) | Air Flow (l/s) | Octave band Centre Frequency (Hz), dB | | | | | | |
|----------------------------|----------------|---------------------------------------|------|------|------|------|------|------|
| | | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 86.2 | 4400 | 70.9 | 77.2 | 80.7 | 80.6 | 79.2 | 79.2 | 73.9 |

| Date | Document # | Approved By | Revision |
|----------|------------|-------------|----------|
| 01.06.18 | SD0027 | 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 |
|-------------------|-------------------------------|-------------------|---------------|-------------------|----------|
| 1 2 ○ ○ | 15 min | 3 ○ | OFF | 4 ○ | OFF |
| 1 2 ● ○ | FACTORY SETTING 30 min | 3 ○ | ON | 4 ● | ON |
| 1 2 ● ● | 45 min | 3 ● | ON | 4 ● | ON |

UNIT MUST BE SWITCHED OFF BEFORE CHANGING THE JUMPER SELECTION

| LEGEND | | LEGEND | | COLOUR CODE | | COMPRESSOR (EACH) | | MODEL: S0850VR3SA-H | |
|--------|----------------------|--------|---------------------------|-------------|--------|-------------------|--|---------------------|--|
| ○ | TERMINAL SWITCHBOARD | TOL R | THERMAL OVERLOAD RELAY | r | RED | KW | | OPTIONS | |
| ⊗ | TERMINAL | C | CONTACTOR | w | WHITE | 9.88 | | DESCRIPTION | |
| --- | FIELD WIRING | COMP | COMPRESSOR | b | BLUE | RATED CURRENT | | STANDARD | |
| --- | CONTROL PARAMETER | ISO | ISOLATOR SWITCH | bk | BLACK | 31.00 | | A | |
| --- | MAINS/CONTROL WIRING | MCB | MINIATURE CIRCUIT BREAKER | bn | BROWN | O/L SETTING | | | |
| CCH | CRANK CASE HEATER | CCB | CONTROL CIRCUIT BREAKER | o | ORANGE | 34.10 | | | |
| PFR | PHASE FAILURE RELAY | POT | POTENTIOMETER | p | PINK | FANS (EACH) KW | | | |
| RV | REVERSING VALVE | | | pl | PURPLE | FLA | | | |
| HP | HIGH PRESSURE SWITCH | | | gy | GREY | OUTDOOR 0.93 1.50 | | | |
| LP | LOW PRESSURE SWITCH | | | yell | YELLOW | INDOOR 2.82 4.30 | | | |



apac
by Rianni

| | | | |
|---------|------------|------|------|
| DATE | 24/06/2018 | | |
| DWN | S.P | APPD | ENG |
| REV | A | GRID | B184 |
| DWG No. | EWS02165 | | |