



# TECHNICAL DATA SHEET

| MODEL NUMBER      |                                                  | P012AHC3SA-C-S  | P015AHC3SA-C-S                                             | P018AHC3SA-C-S         | P020AHC3SA-C-S         | P023AHC3SA-C-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                  |
|                   | 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                                |                 | 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                                             |                 | TWIN DECK                                                  | TWIN DECK              | TWIN DECK              | TWIN DECK              | TWIN DECK              |
|                   | 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         |
|                   | HEAT EXCHANGER                                   |                 |                                                            |                        |                        |                        |                        |
|                   | TYPE                                             |                 | ALU / CU COIL                                              | ALU / CU COIL          | ALU / CU COIL          | ALU / CU COIL          | ALU / CU COIL          |
|                   | NOM. AIRFLOW l/s                                 |                 | 625                                                        | 835                    | 875                    | 990                    | 1120                   |
|                   | EXT STATIC pa                                    |                 | 100                                                        |                        |                        |                        |                        |
| 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                               |                 | 8.6                                                        | 11.5                   | 13.3                   | 15.2                   | 17.9                   |
|                   | MAX. F.L.A. (TOTAL SYSTEM)                       |                 | 14.1                                                       | 16.4                   | 17.1                   | 23.3                   | 23.3                   |
|                   | 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 (OVERALL)                             |                 |                                                            |                        |                        |                        |                        |
|                   | H X W X D (mm)                                   |                 | 1213 x 1450 x 1300                                         |                        |                        | 1314 x 1630 x 1465     |                        |
|                   | WEIGHT                                           |                 |                                                            |                        |                        |                        |                        |
|                   | OPERATING KG                                     |                 | 215                                                        | 231                    | 237                    | 295                    | 295                    |
|                   | SHIPPING KG                                      |                 | 265                                                        | 281                    | 287                    | 335                    | 335                    |
|                   | NOISE LEVELS (Based on outdoor 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 based on current drawn at nominal conditions  
F.L.A - Full Load Amps based on the overload settings [Max Current] of all Compressor and Fan Motor(s).

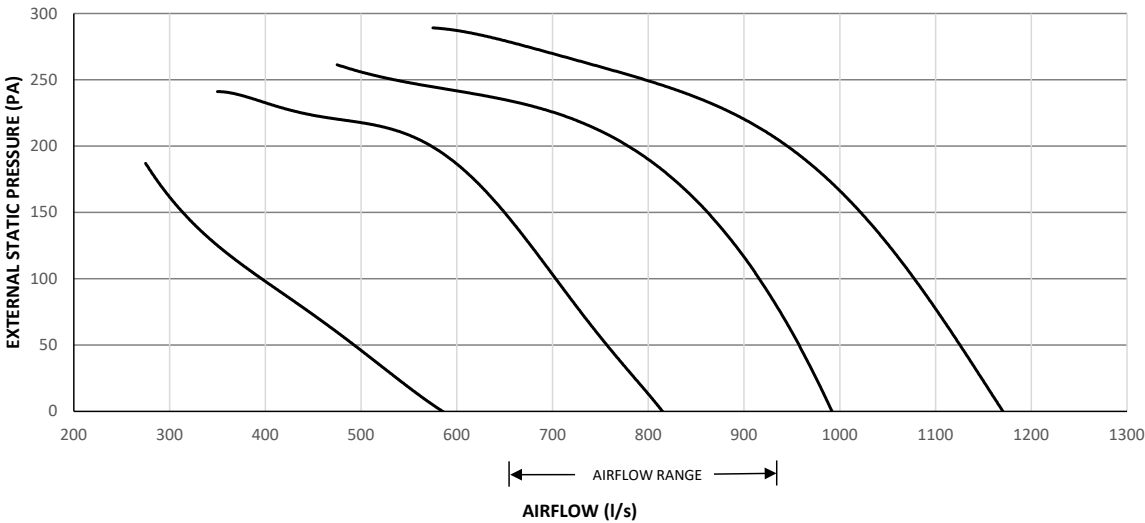
| Date     | Document # | Approved By | Revision |
|----------|------------|-------------|----------|
| 17/12/21 | TDS000505  | AY          | B        |

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



FAN PERFORMANCE DATA

P015AHR(C)3SA-C-S



Note:

| Date    | Document # | Approved By | Revision |
|---------|------------|-------------|----------|
| 30/9/21 | FPD000367  | CM          | A        |

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

## SOUND DATA TABLE

**MODEL NUMBER**

**P015AHR(C)3SA-C-S**

### Outdoor Fan

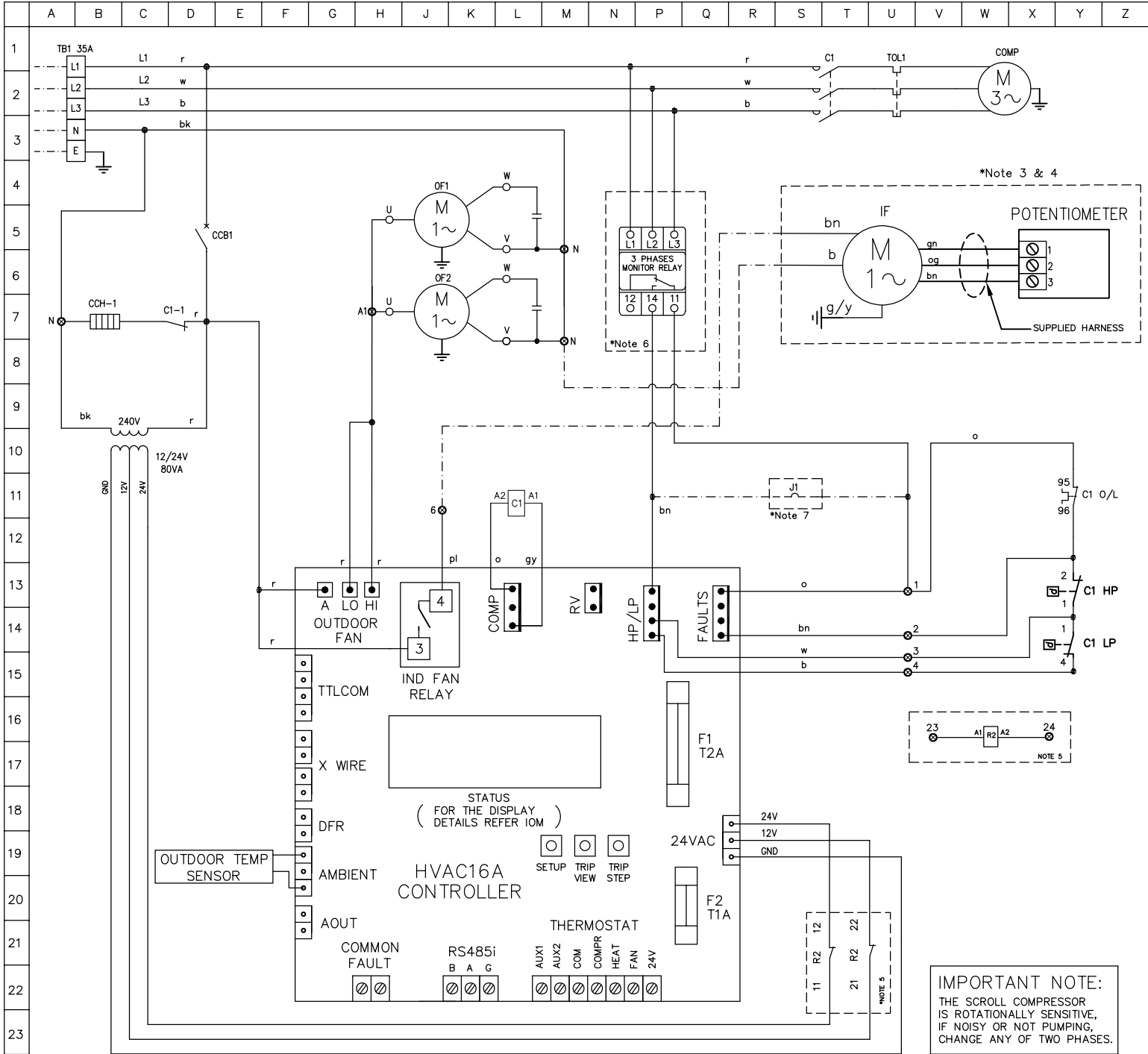
| Sound Power Level dB(A) | Octave band Centre Frequency (Hz), dB |      |      |      |    |      |      |
|-------------------------|---------------------------------------|------|------|------|----|------|------|
|                         | 125                                   | 250  | 500  | 1k   | 2k | 4k   | 8k   |
| 61.7                    | 66.4                                  | 58.6 | 54.6 | 56.6 | 56 | 50.5 | 41.9 |

### Indoor Fan

| Sound Power Level dB(A) | Air Flow (l/s) | Octave band Centre Frequency (Hz), dB |      |      |      |      |      |      |
|-------------------------|----------------|---------------------------------------|------|------|------|------|------|------|
|                         |                | 125                                   | 250  | 500  | 1k   | 2k   | 4k   | 8k   |
| 74.6                    | 800            | 72.2                                  | 73.2 | 72.3 | 69.6 | 65.5 | 62.4 | 57.4 |

| Date    | Document # | Approved By | Revision |
|---------|------------|-------------|----------|
| 30/9/21 | SDT000372  | 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.

| Model                   | CCB1 |
|-------------------------|------|
| P012-018AHC/S012-018OVC | 10A  |
| P020-023AHC/S020-023OVC | 16A  |

- 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 CONTRACOTOR AND MUST COMPLY WITH AS/NZS 3000 AND LOCAL RULES.
  - 3A. FOR PACKAGE SYSTEMS, THE WIRING FOR INDOOR FAN TO INDOOR FAN RELAY WILL BE FACTORY FITTED TO TERMINALS 6 AND N.
  - 3B. FOR SPLIT SYSTEMS, OTHERS TO INSTALL ISOLATOR AND FIELD WIRING FOR INDOOR FAN TO TERMINAL TO TERMINALS 6 AND N.
  4. ISOLATOR FOR ELECTRICAL PROTECTION TO BE SUPPLIED BY THE INSTALLER.
  5. OPTIONAL FIRE ALARM RELAY.
  6. OPTIONAL PHASE MONITORING RELAY (PFR)
  7. JUMPER WIRE J1 AS BELOW TABLE

| REV | ECN    | DESCRIPTION                         | DATE       |
|-----|--------|-------------------------------------|------------|
| E   | K10400 | UPDATE TO NOVACO FAN                | 21/04/2026 |
| D   | K10378 | REPLACE YELLOW WIRE WITH ORANGE     | 06/10/2025 |
| C   | K10317 | REVISED BOARD TO HVAC16A            | 16/04/2024 |
| B   | K10298 | THERMAL OVERLOAD AS STANDARD SUPPLY | 16/10/2023 |
| A   |        | FIRST RELEASE                       | 8/12/2021  |

| NO | MODEL                              | COMPRESSOR |       |       | OD FAN |      | ID FAN |      |
|----|------------------------------------|------------|-------|-------|--------|------|--------|------|
|    |                                    | kW         | FLA   | O/L   | kW     | FLA  | kW     | FLA  |
| 1  | P012AHC3SA-C-S/S0120VC3SA-ILR3SA-S | 2.83       | 8.00  | 8.80  | 0.19   | 0.86 | 0.63   | 4.40 |
| 2  | P015AHC3SA-C-S/S0150VC3SA-ILR3SA-S | 3.59       | 10.30 | 11.50 | 0.19   | 0.86 | 0.63   | 4.40 |
| 3  | P018AHC3SA-C-S/S0180VC3SA-ILR3SA-S | 4.15       | 11.80 | 13.00 | 0.19   | 0.86 | 0.63   | 4.40 |
| 4  | P020AHC3SA-C-S/S0200VC3SA-ILR3SA-S | 4.86       | 15.00 | 16.50 | 0.27   | 1.18 | 0.96   | 6.80 |
| 5  | P023AHC3SA-C-S/S0230VC3SA-ILR3SA-S | 5.52       | 15.00 | 16.50 | 0.27   | 1.18 | 0.96   | 6.80 |

| OPTION | JUMPER |
|--------|--------|
| PFR    | J1     |
| NO     | YES    |
| YES    | NO     |

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

UNIT MUST BE SWITCHED OFF BEFORE CHANGING THE JUMPER SELECTION

| LEGEND  |                           |
|---------|---------------------------|
| COMP C1 | COMPRESSOR 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   |
| J       | JUMPER WIRE               |

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

| COLOUR CODE |        |
|-------------|--------|
| r           | RED    |
| w           | WHITE  |
| b           | BLUE   |
| bk          | BLACK  |
| bn          | BROWN  |
| o           | ORANGE |
| p           | PINK   |
| pl          | PURPLE |
| gy          | GREY   |
| ye          | YELLOW |

| TYPE: 5-S (CO) |             |
|----------------|-------------|
| REF            | DESCRIPTION |
| A              | STANDARD    |

**apac**

|         |               |
|---------|---------------|
| DATE    | 6/10/2025     |
| DWN     | OoiWL APPD CM |
| REV     | E             |
| DWG No. | EWS000394     |