

Performance and efficiencies through smart engineering.

ActronAir's unique Tri-Capacity technology is designed and engineered in-house in our Sydney headquarters specifically for Australian conditions. Ideal for medium to large sized applications such as restaurants, banks, conference spaces, two-storey offices and cinemas, our Tri-Capacity delivers demonstrable benefits in energy efficiency, performance and ease of installation.



Guaranteed to perform up to 50°C

Three stages of cooling/heating for more savings

Up to 32 combinations of supply and return air connections

AWARDS

2012 AIRAH Award Finalist for Excellence in Innovation

2013 AIRAH Award Finalist for Excellence in Sustainability

Nett (Rated) Capacity - Cooling - Three Phase

49.10 kW
PKY500T

60.80 kW
PKY620T

70.30 kW
PKY700T

80.04 kW
PKY820T

97.00 kW
PKY960T



That's better. That's Actron.

Features

- » Vertical Discharge
- » High efficiency EC fan technology
- » Axial outdoor fan
- » BMS Option
- » In-built controls solution
- » Dual control capability for enhanced user access
- » R410A refrigerant
- » Filter notification output
- » Filter cavity with in-built filter slides
- » Separate run outputs
- » Fault notification output
- » Multiple Handing Options
- » Individual motor protection
- » Circuit breaker and thermal overload
- » DRED enabled (AS4755)
- » Large indoor heat exchangers
- » Large outdoor heat exchangers
- » TX valves for improved efficiency
- » Foil face polyethylene insulation
- » Two speed condenser fans
- » Inbuilt economy control logic

Compressor

- » Compliant Scroll

Power

- » Three phase – 400 - 415V / 3Ph + N / 50Hz

Controller Options

- » CP05 – Supplied with unit – Factory fitted
- » CL01
- » CP10
- » Group Control

Connectivity & Sensor Options

- » BMS Compatible – BACNET and MODBUS
- » Humidity Sensor – Duct Mount or Surface Mount
- » Temperature Sensor – Bead or Surface Mount
- » CO2 Sensor

Additional Options

- » Economy Cycle Kit
- » +5°C low ambient cooling operation
- » 3 Phase Soft Starter
- » Phase Sequence Protection Relay
- » Coil Coat Indoor & Outdoor
- » High static condenser fan
- » Manual or Auto – Outside air option

*Requires Group Control

That's better. That's Actron.

Technical Specifications - Package Unit Tri-Capacity 49-100kW

| Technical Information | | | | | | |
|--|------------------------|--|---------|---------------|---------------|---------------|
| | | Three Phase | | | | |
| PACKAGE MODEL | | PKY500T | PKY620T | PKY700T | PKY820T | PKY960T |
| ¹ Total (Gross) Capacity (kW) (AS/NZS3823.1.2) | Cooling | 50.50 | 63.00 | 73.13 | 82.50 | 100.00 |
| | Heating | 50.60 | 60.00 | 68.80 | 80.00 | 94.10 |
| Nett (Rated) Capacity (kW) (AS/NZS3823.1.2) | Cooling | 49.10 | 60.80 | 70.30 | 80.04 | 97.00 |
| | Heating | 51.80 | 62.47 | 72.00 | 82.75 | 97.50 |
| Input Power (kW) (AS/NZS3823.1.2) | Cooling | 15.34 | 20.50 | 24.16 | 27.21 | 32.51 |
| | Heating | 15.36 | 20.15 | 22.40 | 24.55 | 27.26 |
| ² EER Rated (AS/NZS3823.1.2) | Cooling | 3.20 | 2.97 | 2.91 | 2.94 | 2.98 |
| ³ COP Rated (AS/NZS3823.1.2) | Heating | 3.37 | 3.10 | 3.21 | 3.37 | 3.58 |
| Power Supply (V / Ph / Hz) | | 400 - 415V / 3Ph + N / 50Hz | | | | |
| Rated Load Amps (AS/NZS3823.1.2) | | 30.0 | 39.2 | 45.1 | 50.6 | 60.0 |
| Full Load Amps (AS/NZS3823.1.2) | | 41.7 | 52.1 | 58.7 | 67 | 79.9 |
| ⁴ Circuit Breaker Amps | | 50.0 | 63.0 | 80.0 | 80.0 | 100.0 |
| IP Rating | | IP44 | | | | |
| Compressor | Type / No. per Unit | Compliant Scroll / 2 (500-700 Models), 3 (820-960 Models) | | | | |
| | Starting Method | D.O.L. | | | | |
| No. Refrigeration Circuits/No. Capacity Stages (Capacity range) | | 2 (500-700 Models, 3 (820-960 Models) / Tri-Capacity (~33% 66% 100%) All Models | | | | |
| Refrigerant | | R410A | | | | |
| Fans (Type x Number per unit) | Outdoor | Axial Low Noise / 6 Pole External Rotor / Direct Drive x 3 | | | | |
| | Indoor | Variable Speed ECM Direct Drive Backward Curve Plug Fan x 1 (500-700 Models), 2 (820 and 960 Models) | | | | |
| Airflow Range Indoor (l/s) | Maximum | 3100 | 3900 | 4100 | 4800 | 6000 |
| | Nominal | 2600 | 3200 | 3600 | 4000 | 5000 |
| | Minimum | 2000 | 2500 | 2800 | 3200 | 4000 |
| External Static Pressure (Pa) at: | Maximum Airflow | 303 | 155 | 75 | 410 | 100 |
| | Nominal Airflow | 385 | 410 | 270 | 500 | 365 |
| Nominal Unit Dimensions (mm) | Depth | 2365 | | | 2920 | |
| | Height | 1465 | 1695 | | 2155 | |
| | Width | 2305 | | | 2250 | |
| ⁵ Nominal Weight (kgs) | | 853 | 937 | 964 | 1263 | 1350 |
| ⁶ Sound Pressure Level (dBA) | Outdoor (low/high fan) | 59 / 64 | | 60 / 65 | | 61 / 66 |
| ⁷ Sound Power Level (dBA) | Outdoor (low/high fan) | 76 / 81 | | 77 / 82 | | 78 / 83 |
| MEPS Compliant | | Yes | Yes | BCA Compliant | BCA Compliant | BCA Compliant |

Foot Notes 1-8

- Based on unit rating excluding indoor fan kW.
- EER Rated = Energy Efficiency Ratio (Rated Capacity Cooling / Rated Input Cooling).
- COP Rated = Coefficient of Performance (Rated Capacity Heating / Rated Input Heating).
- Refer to AS/NZS 3000 "Australian/New Zealand Wiring Rules" for more details.
- Refer to Catalogue Unit Weight Distribution Guide section for details of weight points.
- Sound Pressure Level at 3m distance is determined as the measured sound pressure at 3m perpendicular to the coil side of the condenser.
- Determination of Sound Power Levels of Noise Sources, AS12172 - Precision Methods for Broad-Band Sources in Reverberation Rooms.
- When Demand Response capability is chosen, the air conditioner will fully comply with AS4755.3 in the following modes: DRM 1, 2, 3.

Important Notes:

- The Local Electricity Supply Authority may require limits on - starting current, running current and voltage drop, please check prior to purchase.
- When the outdoor temperature exceeds the rated conditions, the cooling/heating capacities may decrease the rated nett values.
- Specifications subject to change without notice.

Rated Conditions:

Cooling: 35°C DB Outdoor / Air Entering Indoor 27°C DB, 19°C WB
 Heating: 7°C DB, 6°C WB Outdoor / Air Entering Indoor 20°C DB

Warranty:

For full terms and conditions of ActronAir warranty, please refer to warranty terms document - www.actronair.com.au

Technical Specifications

| Unit Features | | | | | |
|--|----------|----------|----------|----------|----------|
| | PKY500T | PKY620T | PKY700T | PKY820T | PKY960T |
| Tri-Capacity 33% 66% 100% Capacity | Standard | Standard | Standard | Standard | Standard |
| Full Factory Charged with R410A Refrigerant | Standard | Standard | Standard | Standard | Standard |
| Louvered Outdoor Coil Guard | Standard | Standard | Standard | Standard | Standard |
| External Stainless Steel Screws (Outdoor Unit Only) | Standard | Standard | Standard | Standard | Standard |
| Blue Epoxy Coated Coil Fin Protection (Indoor & Outdoor Coils) | Standard | Standard | Standard | Standard | Standard |
| 25mm Foil Faced Polyethylene Insulation - Indoor Unit | Standard | Standard | Standard | Standard | Standard |
| Indoor Unit Integral Fan Coil Safety Tray - Included | Standard | Standard | Standard | Standard | Standard |
| Return Air Filter Rails Fitted | Standard | Standard | Standard | Standard | Standard |
| *Demand Response Capability (AS4755.3) | Standard | Standard | Standard | Standard | Standard |
| Low Ambient / High Static EC Outdoor Fans (V-Option) | Optional | Optional | Optional | Optional | Optional |

| Air Handling Configurations | | | | | |
|-----------------------------|----------|----------|----------|----------|----------|
| F- Front Discharge | Standard | Standard | Standard | Standard | Standard |
| T- Top Discharge | Optional | Optional | Optional | Optional | Optional |
| S- Side Discharge | Optional | Optional | Optional | Optional | Optional |
| D- Down Discharge | Optional | Optional | Optional | Optional | Optional |
| Reverse Air Handling | Optional | Optional | Optional | Optional | Optional |

| Control Options and Features | | | | | |
|--|----------|----------|----------|----------|----------|
| CP05 Control Interface with LCD Display for System Operation | Standard | Standard | Standard | Standard | Standard |
| Automatic / Manual Operation | Standard | Standard | Standard | Standard | Standard |
| 7 Day Programmable Time-Clock | Standard | Standard | Standard | Standard | Standard |
| 365 Day Time-Clock With 12 Special Days | Standard | Standard | Standard | Standard | Standard |
| Compressor Discharge Temperature Control | Standard | Standard | Standard | Standard | Standard |
| Adjustable Indoor Fan Airflow Setpoint | Standard | Standard | Standard | Standard | Standard |
| Indoor Coil Anti-Freeze Protection | Standard | Standard | Standard | Standard | Standard |
| Return Air Offset | Standard | Standard | Standard | Standard | Standard |
| High and Low Pressure Protection | Standard | Standard | Standard | Standard | Standard |
| Alarm Fault Data Logger | Standard | Standard | Standard | Standard | Standard |
| BMS Compatibility | Optional | Optional | Optional | Optional | Optional |
| CP05 / CP10 Control Interface (Available as Dual Control Option) | Optional | Optional | Optional | Optional | Optional |
| CL01 7-Day Programmable Control Interface (BCA Compliant) | Optional | Optional | Optional | Optional | Optional |
| CO ₂ Sensor for economy cycle (accessory) | Optional | Optional | Optional | Optional | Optional |
| Humidity Sensor for economy cycle (accessory) | Optional | Optional | Optional | Optional | Optional |
| Group Control Interface and Controller (accessory) | Optional | Optional | Optional | Optional | Optional |

Technical Specifications

| Variations | | | | | |
|--|----------|----------|----------|----------|----------|
| | PKY500T | PKY620T | PKY700T | PKY820T | PKY960T |
| E- ⁸ Economy Starter Kit* | Optional | Optional | Optional | Optional | Optional |
| F - Dedicated Input for Remote Stop / Start | Optional | Optional | Optional | Optional | Optional |
| G- ⁸ Auto Outside Air Kit | Optional | Optional | Optional | Optional | Optional |
| H- ⁸ Manual Outside Air Kit | Optional | Optional | Optional | Optional | Optional |
| K- Additional Full Coil Coat Protection (Outdoor Coil) | Optional | Optional | Optional | Optional | Optional |
| L- Additional Full Coil Coat Protection (Indoor Coil) | Optional | Optional | Optional | Optional | Optional |
| U- Low Ambient +5°C | Optional | Optional | Optional | Optional | Optional |
| V- EC Motor Low Ambient/High Static Condenser Fans - Up to 150Pa | Optional | Optional | Optional | Optional | Optional |
| W- Three-Phase Sequence Protection Relay | Optional | Optional | Optional | Optional | Optional |
| Z- Compressor 3-Phase Soft Starter (Outdoor Unit Only) | Optional | Optional | Optional | Optional | Optional |

| Field Information | | | | | |
|--|--------------------------|----------------------------------|----------------|--------------------------------------|---------------|
| Refrigerant Factory Charge -(g) For 6Q1 Models - (Crt #1 & Crt #2), For 3Q1 Models (each Compressor) | 8,075 & 13,430 | 7,200 & 12,700 | 8,300 & 12,800 | 8,300 (each) | 11,000 (each) |
| Condensate Drain Connection - Size/Type | Indoor Section | 25.4 mm (1") Ø BSP Female Thread | | 31.8 mm (1-1/4") Ø BSP Female Thread | |
| | Outdoor Section | 25.4 mm (1") Ø BSP Socket | | 31.8 mm (1-1/4") Ø BSP Socket | |
| Air Duct | Supply Duct H x W - (mm) | 650 x 580 | | 1200 x 600 | |
| | Return Duct H x W - (mm) | 900 x 700 | | 1200 x 600 | |

* Outside Air Damper available on the LHS or RHS only. Return Air Damper available on the front LHS or RHS only.