



# CASCADE 2

Climate control with the flexibility





# ActronAir. Because Australia needs Australian air conditioning.

The year 1984 saw Advance Australia Fair become our National Anthem, the 1 dollar coin come into circulation and a small family air conditioning business open its doors. Today, ActronAir is a proud Australian company recognised for making world-class air conditioners. Well, it stands to reason. The team at ActronAir experience the harsh Australian conditions first hand, and our climate places demands on air conditioning not found in other parts of the world.

And that's why ActronAir's engineers have developed the most advanced air conditioning systems specifically for the unique and harsh Australian environment.

Engineered with a superior operating range from -20°C to 50°C, and a host of innovative features, ActronAir's Cascade cassette system is engineered to withstand the most extreme conditions Australia can throw at it.

#### The Cascade cassette system – style that's through the roof

A perfect fit for suspended or 'floating' ceilings, the ceiling mounted Cascade cassette system covers a wide range of applications, such as residential, retail and commercial spaces.

The Cascade has many state-of-the-art features, including 360° airflow, which delivers air from not only all four sides but from all four corners as well. It's also stylishly attractive, with a discrete design that complements any surrounding.



## A superior operating range suited for Australia

Most overseas air conditioners are only designed with a maximum temperature range of 43°C to 46°C. The Cascade cassette system operates up to 50°C. Big deal? Well yes.

The temperature around the outdoor unit can reach far higher than what they're saying on the weather report due to direct sun or heat radiating off the ground. They're often located against a wall or fence where there's low air circulation.



Nothing beats performing under extremes. Engineered for Australia, you can trust ActronAir to be there when you need it most.

Mark 'Frosty' Winterbottom

V8 Supercars Champion & ActronAir Brand Ambassador

CASCADE 2 **Better Features** 

## Pick up where you left off



#### **Auto-restart**

Blackout? No problem. Cascade's auto-restart function means it restarts automatically in its last programmed setting once power is restored, which means you don't have to spend unnecessary time reprogramming your system.

#### Strikingly simple



Digital display and external on/off button
With an external digital display, temperature settings and error codes can be read with ease. The Cascade cassette system also features an easy to access on/off switch, for added convenience.

## Stylish, space saving convenience



#### Strength with subtlety

Aesthetically pleasing and unobtrusive, Cascade sits well out of the way, providing maximum comfort without attracting attention.

# **Installation Flexibility**



#### Air range capability

Cascade Series 2 broadens the application range with its capability of being applied to high ceiling applications (up to 4m), along with having the ability to have up to 5m horizontal air distribution, making it an ideal solution for office fit outs, commercial tenancies or large common areas.



# Here for the long haul



#### Protect your investment

ActronAir now uses gold fin epoxy coated protection on both indoor and outdoor coils as standard. This is to further reduce corrosion from the harsh Australian conditions, as well as assisting the defrosting process, thus improving heating efficiency.

#### Comfort the way you want it



#### Comfort from every angle

Cascade delivers 360° airflow from not only its four sides, but also from its four corners. Encompassing independent vane control, cascade cassette 2 provides you greater flexibility to set different angles in each direction thus allowing you to customise airflow depending on where you need it the most.

#### All-encompassing efficiency



#### The centre of comfort

The Cascade cassette system is well suited to a centralised home or workspace, where it effectively heats or cools a large common area.

## Maintenance made easy



#### The extras count

- Built-in drain pump with impressive 1000mm lift
- New innovative Windtrack design incorporated allowing for quick water pump maintenance
- Pump positioned outside the air channel allowing for easier access

# **Better Control**



#### Better control on the wall...

The Cascade cassette system is designed for ultimate ease of operation, with a wall mounted wired controller as standard that delivers precise temperature control.



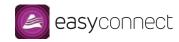
#### ... and the remote possibilities

With the added convenience of an optional remote control, Cascade gives you the ultimate in control and convenience.



## Set your comfort remotely

The optional EasyConnect upgrade allows you to control your Cascade cassette system wirelessly via your smart device. Start the day in comfort, turn on your office air conditioning system before you leave home for work, it's all in the palm of your hand.









# **Better Comfort**

#### **Multiple choice solutions**

Even when you have limited roof access, the Cascade cassette system delivers maximum comfort and control throughout a large area and allows you multiple choices for setting and maintaining your ideal temperature. The unit can automatically switch between heating and cooling modes, and also gradually dehumidifies the room (in cooling mode) to create even greater comfort.

#### Follow me for a more attuned temperature

In most air conditioners, the temperature sensor is in the indoor unit. With Cascade, we have put additional sensors inside the remote controller and wired wall controller. With the remote controller, when you press the Follow Me button you'll have the temperature you want, wherever you are in the room. When it comes to the wired wall controller, you'll have more precise temperature control and comfort at its location.



# **Extended Comfort**

Even in spaces with high ceilings, a comfortable airflow is carried down to the floor level. When all round flow is selected, ceilings of up to 4.0m in height can be accommodated.

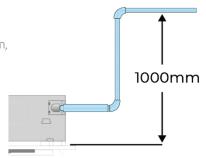




## Better Flexibility & Maintenance

Cascade cassette II is equipped with a built-in drain pump with a pressure lift of up to 1000mm, increasing flexibility and installation speed.

A NEW "Windtrack" design has also been incorporated allowing quicker water pump maintenance. The water pump is positioned outside the air channel which allows for easy access and reducing maintenance time.



 $^{6}$ 

# **Better Engineered**

## AC vs DC for rockin' efficiency and performance

The Cascade cassette system uses ultra-energy-efficient DC, or direct current inverter technology in its inverter compressor, indoor fan and outdoor fans. Some companies use less efficient AC technology, or combinations of both. This can make a significant difference to your electricity bill.

With an impressive 25 frequency stages, our inverter compressor is up to 35% more efficient than AC technology, while our upgraded DC outdoor fan with five speed settings is up to 40% more efficient. The result is improved efficiencies overall, as well as optimal cooling performance.







# Better Design

#### It looks as good as it feels

The ActronAir Cascade blends in perfectly with your interior design like part of the furniture. In fact you'll notice it no more than a stylish

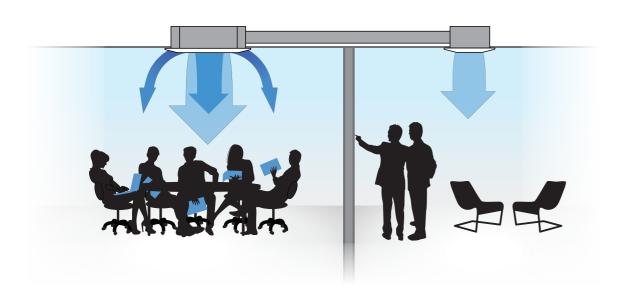




## Engineered with you in mind

#### Flexible Installation

When it comes to installation, Cascade 2 gives you multiple options to suit a wide range of room layouts. Some of these features include optional supply duct outlets, outside air intake, independent vane control.



# **Better Service**

#### Local service you can count on

Our National Service Network has service staff on the ground and parts on the shelves. They're friendly, reliable and prompt. Furthermore, ActronAir's 5 year warranty will keep



# **Technical Specifications**

#### Cassette System Series 2 10.95-13.95kW (Single Phase)

OUTDOOR MODEL  INDOOR MODEL  Nett (Rated) Capacity (kW) (AS/NZS3823.1.1)  Input Power (kW) (AS/NZS3823.1.1)  TEER Rated (AS/NZS3823.1.1)	Cooling (min - max) Heating (min - max) Cooling Rated Heating Rated	CRC-100CS CRE-100CS 10.95 (3.60 - 16.00) 11.95 (2.75 - 17.30) 2.58	URC-125CS CRE-125CS 12.30 (3.60 - 16.00) 13.50 (2.75 - 17.30)	URC-140CS CRE-140CS 13.95 (3.60 - 16.00)	
Nett (Rated) Capacity (kW) (AS/NZS3823.1.1) Input Power (kW) (AS/NZS3823.1.1)	Heating (min - max) Cooling Rated Heating Rated	10.95 (3.60 - 16.00) 11.95 (2.75 - 17.30)	12.30 (3.60 - 16.00)		
(AS/NZS3823.1.1) Input Power (kW) (AS/NZS3823.1.1)	Heating (min - max) Cooling Rated Heating Rated	11.95 (2.75 - 17.30)		13.95 (3.60 - 16.00)	
(AS/NZS3823.1.1) Input Power (kW) (AS/NZS3823.1.1)	Cooling Rated Heating Rated		13.50 (2.75 - 17.30)		
(AS/NZS3823.1.1)	Heating Rated	2 58	10.00 (2.70 17.00)	14.50 (2.75 - 17.30)	
		2.50	3.25	4.08	
<sup>1</sup> EER Rated (AS/NZS3823.1.1)		2.84	3.46	4.41	
	Cooling	4.24	3.78	3.37	
<sup>2</sup> COP Rated (AS/NZS3823.1.1)	Heating	4.21	3.90	3.47	
C: D:: (AC(N7C000011)	Cooling	5★/4★/4.5★	4.5★/4★/4★	4★/3.5★/4★	
Star Rating (AS/NZS3823.1.1)	Heating	3.5★/3★/2.5★	3.5★/2.5★/2★	3★/2.5★/2★	
Seasonal Performance Factor Residential	TCSPF (Hot / Mixed / Cold)	6.76 / 5.92 / 6.10	6.31 / 5.57 / 5.80	5.94 / 5.36 / 5.66	
Seasonal Performance Factor Residential	HSPF (Hot / Mixed / Cold)	5.34 / 4.62 / 4.15	5.25 / 4.24 / 3.88	4.95 / 4.26 / 3.77	
Power Supply - (V / Ph / Hz)	Outdoor	220 - 240 V / 1PH+N / 50Hz			
D-4-414 A (AC /A)7C2022311)	Cooling	11.7	14.8	18.0	
Rated Load Amps (AS/NZS3823.1.1)	Heating	12.2	15.0	16.7	
Full Load Amps (AS/NZS3823.1.1)		31.0	31.0	31.0	
Circuit Breaker Amps		32.0	32.0	32.0	
<sup>3</sup> Suggested Minimum Mains Cable Size		6.0mm²	6.0mm²	6.0mm <sup>2</sup>	
<sup>3</sup> Suggested Minimum Indoor to Outdoor Power Cable Size & Type		1.0mm² 2 Core + Earth	1.0mm² 2 Core + Earth	1.0mm² 2 Core + Earth	
	Outdoor	IPX4			
IP Rating	Indoor	IPXO			
Compressor Type		Inverter Twin-Rotary			
Refrigerant		R-32			
	High	505	505	505	
Airflow Range Indoor (I/s)	Medium	459	459	459	
	Low	350	350	350	
	Depth	415	415	415	
Outdoor Dimensions (mm)	Height	1333	1333	1333	
	Width	952	952	952	
	Depth	830	830	830	
Indoor Dimensions (mm)	Height	287	287	287	
	Width	830	830	830	
	Depth	950	950	950	
Indoor Panel Dimensions (mm)	Height	55	55	55	
	Width	950	950	950	
4 Naminal Weight (less)	Outdoor	95.1	95.1	95.1	
<sup>4</sup> Nominal Weight (kgs)	Indoor	35.3	35.3	35.3	
Indoor Sound Pressure Level (dBA) (Low / Med / High)		54 / 49 / 46	54 / 49 / 46	54 / 49 / 46	
<sup>5</sup> Outdoor Sound Pressure Level (dBA) 1m		59.9	59.9	59.9	
<sup>6</sup> Outdoor Sound Power Level (dBA)		71	71	71	
Outdoor Operating Pages (%C)	Cooling	0°C to 50°C			
Outdoor Operating Range (°C)	Heating	-20°C to 24°C			
MEPS Compliant		Yes	Yes	Yes	

#### Foot Notes 1-

- 1. EER Rated = Energy Efficiency Ratio (Rated Capacity Cooling, Rated Input Power Cooling)
- 2. COP Rated = Coefficient of Performance (Rated Capacity Heating, Rated Power Heating)
- 3. Refer to AS/NZS 3000 'Australian/New Zealand Wiring Rules' for more details.
- **4.** Refer to Catalogue Unit Weight Distribution Guide section for details of weight points.
- 5. Sound Pressure Level at 1m distance is determined as the measured sound pressure at 1m perpendicular to the coil side of the condenser.
- **6.** Determination of Sound Power Levels of Noise Sources, AS1217.2 Precision Methods for Broad-Band Sources in Reverberation Rooms.
- 7. When Demand Response capability option is chosen, the air conditioner will be fully compliant with AS4755.3 in the following modes: DRM 1, 2, 3

#### Important Note

- 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

Features Features						
OUTDOOR MODEL		CRC-100CS	URC-125CS	URC-140CS		
INDOOR MODEL		CRE-100CS	CRE-125CS	CRE-140CS		
Wired Controller		WC-02	WC-02	WC-02		
Remote Controller - Optional		RC-03	RC-03	RC-03		
Easy Connect Wi-Fi App		Optional	Optional	Optional		
Follow Me Function		Yes	Yes	Yes		
Sleep		Yes	Yes	Yes		
Turbo		Yes	Yes	Yes		
Self Clean Operation		Yes	Yes	Yes		
Auto Defrost Function		Yes	Yes	Yes		
Timer On/Off		Yes	Yes	Yes		
7-Day Scheduler / Weekly timer		Yes	Yes	Yes		
Dehumidification		Yes	Yes	Yes		
Drain Pump		Yes	Yes	Yes		
Hanging Brackets		Yes	Yes	Yes		
Elevating Grill - Up to 4m		No	No	No		
360° Airflow		Yes	Yes	Yes		
Independent Louvre Control		Yes	Yes	Yes		
Supply Duct Outlet		Optional	Optional	Optional		
Outside Air Intake		Optional	Optional	Optional		
Hydrophilic Aluminium Coil Protection	Indoor	Yes	Yes	Yes		
	Outdoor	Yes	Yes	Yes		
Louvre Memory		Yes	Yes	Yes		
Demand Response		Ready	Ready	Ready		
Indoor Fan Speed		5-Speed	5-Speed	5-Speed		
Outdoor Fan Speed		5-Speed	5-Speed	5-Speed		
Auto Restart Function		Yes	Yes	Yes		
Fault Alarm Output Port		Yes	Yes	Yes		
Remote On/Off		Yes	Yes	Yes		

Field Piping and Connections						
Refrigerant	Factory Charge - (g)	3600	3600	3600		
	Pre-Charge Length - (m)	5	5	5		
	Additional Refrigerant Charge - (g/m)	24	24	24		
Minimum Field Pipe Length - (m)		3	3	3		
Maximum Field Pipe Length - (m)		75	75	75		
Maximum Vertical Height Differential (m) included in max length		30	30	30		
Field Pipe Size	Liquid Pipe - mm (inch)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)		
	Gas Pipe - mm (inch)	15.9 (5/8)	15.9 (5/8)	15.9 (5/8)		
Outdoor Unit	Liquid Pipe - mm (inch)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)		
	Gas Pipe - mm (inch)	15.9 (5/8)	15.9 (5/8)	15.9 (5/8)		
Indoor Unit	Liquid Pipe - mm (inch)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)		
	Gas Pipe - mm (inch)	15.9 (5/8)	15.9 (5/8)	15.9 (5/8)		
Wiring Method		Hardwire to Outdoor				
Interconnect Cables		2 Core + Earth				















actronair.com.au 1300 522 722