



Commercial

# CASCADE

Powerful 360° performance,  
discrete design.



*That's better. That's Actron.*



# ActronAir. Because Australia needs Australian air conditioning.

CASCADE

The year 1984 saw Advanced 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 -25°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.



  
**More than  
a quarter of a  
million Aussies  
take comfort in  
ActronAir**



## 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**  
2015 V8 Supercars Champion

## 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.

## Comfy in a hurry



### Turbo mode

If you're in a rush to get comfortable, Turbo mode allows Cascade to run over-capacity for a short period to reach your desired temperature fast.\*

## 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.

## Here for the long haul



### Coated coil protection

ActronAir uses blue fin epoxy coated protection on all its indoor and outdoor coils. It reduces corrosion from the harsh Australian conditions, as well as assisting the defrosting process, thus improving heating efficiency.

## Stylish, space saving convenience



### Strength with subtlety

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

## All round airflow



### Comfort from every angle

For complete coverage Cascade delivers 360° airflow from not only its four sides, but also from its four corners.

## Comfort the way you want it



### Customised air control

Independent vane control gives you the flexibility to set different angles in each direction allowing you to customise airflow depending on where you need it most.



## 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.

## Easy upkeep



### Elevated access

Cleaning the filter is a breeze thanks to Cascade's ingenious elevating grille, which at the press of a button on the wall controller, can be lowered up to 4 metres for easy access.\*

## More included



### The extras count

- Remote on/off and fault alarm ports
- Drain pump
- Supply air and outside air connections

\*Cascade can only maintain Turbo mode for a maximum of 20 minutes.

\*NOTE: Elevated grille function ONLY available with wired wall controller, not available with remote controller.



## Better control on the wall...

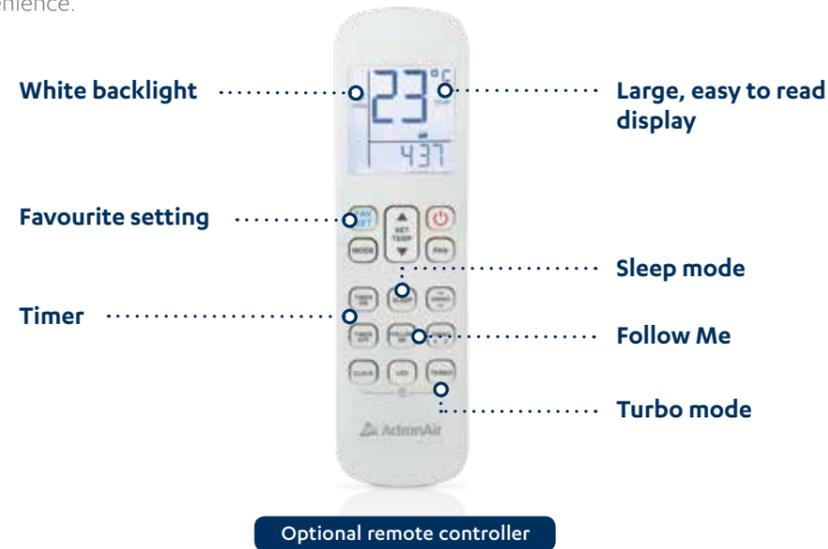
The Cascade cassette system is designed for ultimate ease of operation, with a wall mounted wired controller as standard that delivers precise temperature control.



Wired wall controller

## ...and the remote possibilities

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



Optional remote controller

\*NOTE: Elevated grille function ONLY available with wired wall controller, not available with remote controller.

# 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.



## Twin system for double the comfort

The Cascade cassette system has an additional feature, ideal for especially long rooms, or two adjacent areas of the same size.

Intelligent engineering allows you to connect two smaller indoor units to the one outdoor unit. In a format that is essentially a 'master and slave' connection between the two indoor heads, it means the single Cascade system is able to condition more than the single space.



# 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.



## Engineered with you in mind

### Easy care

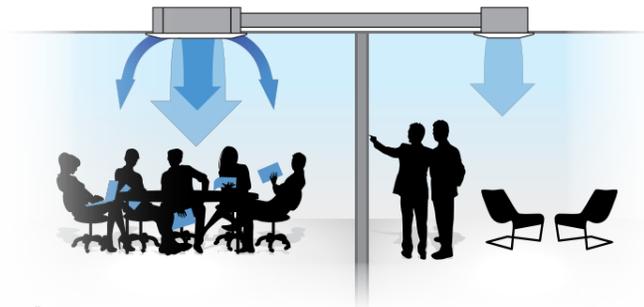
Cascade comes with two fascia options your standard drop down grille (C4-P2) and an auto elevation grille (C4-P1), which at the press of a button on the wired wall controller, can be lowered up to 4m for simple access when cleaning the air filter.\* This comes in especially handy when the system is installed in a high ceiling.



C4-P1



C4-P2



### Flexible installation

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

\*NOTE: Elevated grille function ONLY available with wired wall controller, not available with remote controller.

# 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 light fitting.



# 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 you comfortable with absolute peace of mind.



## Cassette System 5.30-13.75kW (Single Phase)

Technical Information						
OUTDOOR MODEL		URC-053AS	URC-071AS	URC-100AS	URC-125AS	URC-140AS
INDOOR MODEL		CRE-053AS	CRE-071AS	CRE-100AS	CRE-125AS	CRE-140AS
Nett (Rated) Capacity (kW) (AS/NZS3823.1.1)	Cooling (min - max)	5.30 (2.10 - 6.36)	7.10 (2.80 - 8.40)	10.50 (4.20 - 12.60)	12.50 (5.00 - 15.00)	13.75 (5.60 - 16.80)
	Heating (min - max)	5.95 (2.32 - 6.96)	7.85 (3.00 - 9.00)	10.70 (4.32 - 12.95)	14.50 (5.20 - 15.60)	15.30 (5.80 - 17.50)
Input Power (kW) (AS/NZS3823.1.1)	Cooling Rated	1.44	2.11	3.11	3.70	4.08
	Heating Rated	1.63	2.25	2.88	4.03	4.41
<sup>1</sup> EER Rated (AS/NZS3823.1.1)	Cooling	3.68	3.36	3.38	3.38	3.37
<sup>2</sup> COP Rated (AS/NZS3823.1.1)	Heating	3.65	3.49	3.72	3.60	3.47
Star Rating (AS/NZS3823.1.1)	Cooling	2.5 ★	2.0 ★	2.0 ★	2.0 ★	2.0 ★
	Heating	2.5 ★	2.0 ★	2.5 ★	2.0 ★	2.0 ★
Power Supply - (V / Ph / Hz)	Outdoor	220 - 240 V / 1Ph+N / 50Hz				
Rated Load Amps (AS/NZS3823.1.1)	Cooling	6.4	9.4	13.7	16.1	17.8
	Heating	7.3	10.0	12.7	17.7	19.2
Full Load Amps (AS/NZS3823.1.1)		15.5	17.5	21.5	26.5	26.5
Circuit Breaker Amps		20.0	20.0	25.0	32.0	32.0
<sup>3</sup> Suggested Minimum Mains Cable Size		2.5mm <sup>2</sup>	2.5mm <sup>2</sup>	4.0mm <sup>2</sup>	6.0mm <sup>2</sup>	6.0mm <sup>2</sup>
<sup>3</sup> Suggested Minimum Indoor to Outdoor Power Cable Size & Type		1.0mm <sup>2</sup> 2 Core + Earth				
IP Rating	Outdoor	IP24				
	Indoor	IP20				
Moisture Removal (L/hr)		1.4	1.5	1.7	3.0	4.0
Compressor Type		Inverter Twin-Rotary				
Refrigerant		R410A				
Airflow Range Indoor (l/s)	High	269	369	444	511	511
	Medium	248	322	408	467	467
	Low	219	386	361	414	414
Outdoor Dimensions (mm)	Depth	363	410	410	415	415
	Height	702	810	810	1333	1333
	Width	845	946	946	952	952
Indoor Dimensions (mm)	Depth	840	840	840	840	840
	Height	205	245	287	287	287
	Width	840	840	840	840	840
Indoor Panel Dimensions (mm)	Depth	950	950	950	950	950
	Height	55	55	55	55	55
	Width	950	950	950	950	950
<sup>4</sup> Nominal Weight (kgs)	Outdoor	42	61	69	98.5	101
	Indoor	28	31	36	36	36
Indoor Sound Pressure Level (dBA) (Low / Med / High)		37 / 41 / 45	40 / 44 / 47	44 / 48 / 51	47 / 50 / 53	47 / 50 / 53
<sup>5</sup> Outdoor Sound Pressure Level (dBA) 1m		61	61	62	63	63
<sup>6</sup> Outdoor Sound Power Level (dBA)		69	69	70	71	71
Outdoor Operating Range (°C)	Cooling	-15°C to 50°C				
	Heating	-25°C to 30°C				
MEPS Compliant		Yes	Yes	Yes	Yes	Yes
<sup>7</sup> Demand Response Capability (AS4755.3)		Capable				

### Foot Notes 1-7

- EER Rated = Energy Efficiency Ratio (Rated Capacity Cooling, Rated Input Power Cooling)
- COP Rated = Coefficient of Performance (Rated Capacity Heating, Rated Power 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 1m distance is determined as the measured sound pressure at 1m perpendicular to the coil side of the condenser.
- Determination of Sound Power Levels of Noise Sources, AS1217.2 - Precision Methods for Broad-Band Sources in Reverberation Rooms.
- 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 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](http://www.actronair.com.au)

Features						
OUTDOOR MODEL		URC-053AS	URC-071AS	URC-100AS	URC-125AS	URC-140AS
INDOOR MODEL		CRE-053AS	CRE-071AS	CRE-100AS	CRE-125AS	CRE-140AS
Wired Wall Controller		WC-02	WC-02	WC-02	WC-02	WC-02
Remote Controller - Optional		RC-01	RC-01	RC-01	RC-01	RC-01
Follow Me Function		Yes	Yes	Yes	Yes	Yes
Sleep		Yes	Yes	Yes	Yes	Yes
Turbo		Yes	Yes	Yes	Yes	Yes
Auto Defrost Function		Yes	Yes	Yes	Yes	Yes
Timer On/Off		Yes	Yes	Yes	Yes	Yes
7-Day Scheduler / Weekly timer		Yes	Yes	Yes	Yes	Yes
Dehumidification		Yes	Yes	Yes	Yes	Yes
Drain Pump		Yes	Yes	Yes	Yes	Yes
Hanging Brackets		Yes	Yes	Yes	Yes	Yes
Elevating Grill - Up to 4m (Function only available with WC-02 wired wall controller)		Yes	Yes	Yes	Yes	Yes
360° Airflow		Yes	Yes	Yes	Yes	Yes
Independent Louvre Control		Yes	Yes	Yes	Yes	Yes
Twin System Operation		N/A	N/A	Optional	N/A	Optional
Supply Duct Outlet		Optional	Optional	Optional	Optional	Optional
Outside Air Intake		Optional	Optional	Optional	Optional	Optional
Hydrophilic Aluminium Coil Protection	Indoor	Yes	Yes	Yes	Yes	Yes
	Outdoor	Yes	Yes	Yes	Yes	Yes
Louvre Memory		Yes	Yes	Yes	Yes	Yes
Indoor Fan Speed		4	4	4	4	4
Outdoor Fan Speed		5 Grades				
Auto Restart Function		Yes	Yes	Yes	Yes	Yes
Fault Alarm Output Port		Yes	Yes	Yes	Yes	Yes
Remote On/Off		Yes	Yes	Yes	Yes	Yes

Field Piping and Connections						
Refrigerant	Factory Charge - (g)	1850	2900	3800	4500	4900
	Pre-Charge Length - (m)	15	15	15	15	15
	Additional Refrigerant Charge - (g/m)	15	30	30	30	30
	Minimum Field Pipe Length - (m)	5	5	5	5	5
	Maximum Field Pipe Length - (m)	30	50	65	65	65
	Maximum Vertical Height Differential (m) included in max length	20	25	30	30	30
Field Pipe Size	Liquid Pipe - mm (inch)	6.35 (1/4)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)
	Gas Pipe - mm (inch)	12.7 (1/2)	15.9 (5/8)	15.9 (5/8)	19.05 (3/4)	19.05 (3/4)
Outdoor Unit	Liquid Pipe - mm (inch)	6.35 (1/4)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)
	Gas Pipe - mm (inch)	12.7 (1/2)	15.9 (5/8)	15.9 (5/8)	19.05 (3/4)	19.05 (3/4)
Indoor Unit	Gas Pipe - mm (inch)	6.35 (1/4)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)
	Liquid Pipe - mm (inch)	12.7 (1/2)	15.9 (5/8)	15.9 (5/8)	19.05 (3/4)	19.05 (3/4)
Wiring Method		Hardwire to Outdoor				
Interconnect Data Cable		2 Core 14/0.20 (0.44m <sup>2</sup> ) Shielded				
Interconnect Power Cable		2 Core + Earth				

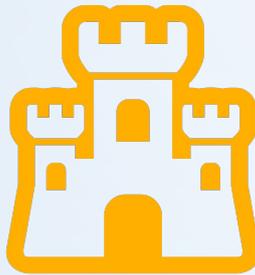




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