ActronAir
Australian for air conditioning

ultimate climate control and advanced energy efficiency

THE ESP SERIES

ESP

Energy Smart Performance™

designed & built in australia
for australian conditions

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air conditioning with
energy smart performance™

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ActronAir®
Australian for air conditioning™

ESP
Energy Smart Performance™

advanced air flow control

brings even more savings

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ESP PLUS

individual comfort control

anywhere in your home

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ESP ULTIMA

ActronAir®
Australian for air conditioning™

designed & built in australia
for australian conditions

AUSTRALIAN MADE
AUSTRALIAN OWNED

Australian made for Australian conditions

It takes an all-Australian company to understand and meet the challenges of our unique climate and love of wide-open spaces. That's why there's no better air conditioning for the Australian way of life than ActronAir.

ActronAir leads the way with a highly sophisticated and intelligent approach to air conditioning design. Our many ground-breaking innovations have led to some of the world's most advanced air conditioning solutions.

Our obsession with innovation, quality and performance also has an important environmental focus – we are continually developing energy efficient solutions for today and the future.

The ActronAir advantage

At ActronAir we design and manufacture all our own system components including electronics and microprocessors, so they are able to 'speak' and respond to each other more efficiently. That way, we can ensure that all our systems provide optimum functioning while using minimal power.

ActronAir air conditioning quietly delivers air flow exactly where and when you need it, keeping your home cool in the extreme Australian heat and warm and cosy in winter – it's the ultimate in comfort and efficiency.

Durable powder coating and unique louvre grille protect the outdoor unit from the elements and hard knocks, ensuring longer life and reduced maintenance. Extra large heat exchangers increase efficiency and reduce running costs.

ESP = Energy Smart Performance™

ActronAir has combined their superior design capability with digital technology to create the next generation of air conditioning systems for the modern home.

ESP represents a quantum leap in system efficiency. It's a seamless, integrated system that monitors and controls every facet of your air conditioning system.

By constantly analysing and interpreting data from temperature sensors in your home, it stays one step ahead of requirements – delivering just the right amount of heating and cooling, while using minimal energy.

These intelligent functions deliver better temperature control, better humidity control, and better zoning control. When you choose an ActronAir system with ESP, you can sit back and relax in total comfort.

Choose the system that's right for you

ESP Energy Smart Performance™	ESP PLUS	ESP ULTIMA
Sophisticated micro-technology achieves faster, more precise temperature control and energy savings.	ESP Plus's Indoor Smart Fan Upgrade gives you advanced air flow control and can save up to 85% on indoor fan power consumption.	ESP Ultima's Individual Zone Control lets you create temperature* settings in up to 8 different areas of your home.

FEATURES	ESP	ESP PLUS	ESP ULTIMA
Energy efficient digital variable capacity compressor	✓	✓	✓
Precise temperature control at sensor location	✓	✓	✓
Advanced humidity reduction	✓	✓	✓
Sound Reduction System (SRS) to minimise sound levels	✓	✓	✓
Fully integrated 8-zone control for all new ESP R-410A models	✓	✓	✓
Easy to operate 7-day programmable controller with 24-hour timer	✓	✓	✓
Zone control – on/off function	✓	✓	✓
Electronically Commutated Motor (ECM) for improved efficiency		✓	✓
Variable Air Flow technology to improve efficiency		✓	✓
Quiet start indoor smart fan system		✓	✓
ESP Ultima module for advanced air control			✓
Individual zone control to set up to 8 different temperatures for up to 8 zones*			✓
Optional secondary sensors for large, open plan rooms and sensor only zones#			✓

* As an operational default ESP Ultima has a factory preset max. span of 4°C between individual zones and a preset max. span of ±2°C between the master controller and an individual zone. This aims to maximise energy efficiency of the system.

ESP Ultima, zone control and zone sensors are purchased separately.

Energy Smart Performance™

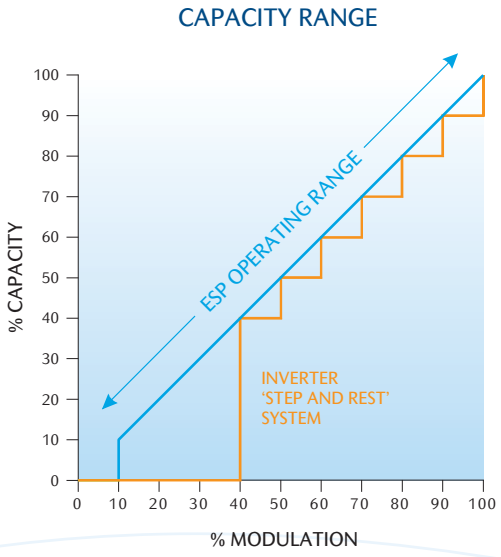
air conditioning with energy smart performance™

ESP = Energy Smart Performance™

ActronAir with ESP – Energy Smart Performance™ combines superior levels of comfort with outstanding energy efficiency. Advanced micro-technology controls your air conditioning system using minimal power to reach and maintain comfort levels.

Acts fast so you can relax

At the heart of this revolutionary technology is a sophisticated digital variable capacity compressor. Unlike inverter technology that must 'step and rest' its way to a target temperature, the new digital compressor has a continuous spectrum capacity that can seamlessly adjust between 10–100% capacity. This means that any target temperature set can be achieved more quickly than other variable capacity technology. You just switch on and relax!

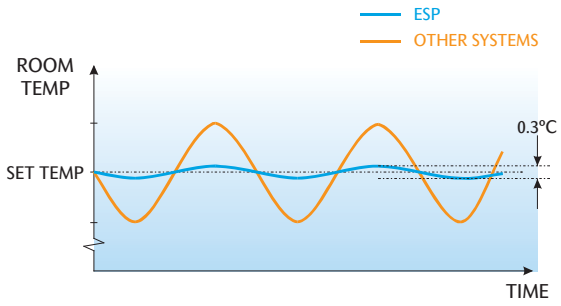


ESP can seamlessly access anywhere between its 10–100% capacity range within seconds. Some inverter systems only operate at 40–100% capacity and must slowly 'step and rest' through its limited range.

Precise climate control

ESP aims to maintain comfort levels at the sensor location to within 0.3°C, reducing the large temperature swings experienced with conventional air conditioning systems. Once a target has been reached ESP uses micro-processors to sense temperature changes, so it can add the exact amount of heating and cooling – nothing more, nothing less – saving energy by using minimal power.

TEMPERATURE VARIATION



ESP aims to maintain temperature to within 0.3°C at sensor location while other systems may have larger temperature fluctuations.

Advanced humidity reduction

Another feature of ESP is advanced humidity control. ESP's variable capacity digital compressor is always running at a more consistent evaporating temperature, reducing uncomfortable humidity for a fresher environment in every room.

ESP delivers precise climate control reducing large temperature swings

Sound reduction

ActronAir with ESP's unique Sound Reduction System™ (SRS)™ incorporates many innovative noise suppressing techniques to keep sound levels to a minimum.

So advanced its simple

ActronAir with ESP is so easy to use, just touch its clearly labelled keypad and you're in total control! You can turn on or off up to 8 zones in your home with the fully integrated control unit.

- Easy to operate 7-day programmable controller
- Fully integrated 8-zone controller for all new ESP R-410A models
- In-built temperature sensor
- 3-speed fan
- Auto/Heat/Cool changeover
- 24-hour timer
- Compatible with home automation interface for remote on/off control
- Optional secondary control capability (incorporating Mimic Logic)
- Optional secondary temperature sensor

Fully integrated zoning control

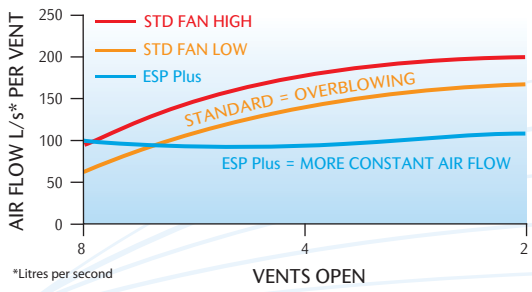
(8-zone controller for all ESP R-410A models, 4-zone controller for all ESP R-22 models)

advanced air flow control
brings even more savings

ESP Plus means added intelligence

Australian homes typically have large, individual living areas requiring multiple air conditioning zones. Zones are frequently shut down when only certain parts of a home require air conditioning. Traditional air conditioning and inverter systems continue to produce large amounts of air flow when zones are switched off, wasting energy and causing excess air noise to be produced. ESP Plus™ with it's proprietary Variable Air Flow technology reduces these problems delivering an even more comfortable, energy efficient solution.

AIR FLOW COMPARISON



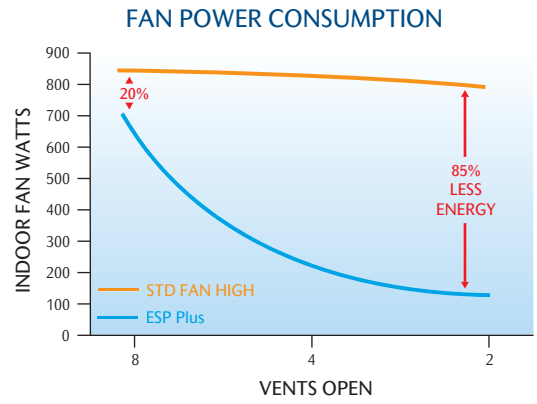
ESP Plus™ eliminates excess air velocity and reduces associated noise

Quietly energy efficient

ESP Plus includes a highly efficient indoor 'smart' fan to produce the right amount of air to match the zoning requirement. ESP Plus automatically senses when zones are switched on or off and intuitively adjusts air flow to maintain better air flow control. The Variable Air Flow technology delivers the right amount of conditioned air required for zone usage so there is no excess air velocity and associated noise. Quietly saving energy while keeping you comfortable.

Control the zones and watch the savings

When running at full capacity the smart fan is highly energy efficient but it is when zones are shut down that the real savings start to add up. Fan power consumption is dramatically reduced with tests showing energy savings of up to 85% when running on minimal zones.



ESP Plus has many fan modes to choose from. For maximum comfort, you can also change the fan setting to suit climate conditions.

The investment in an ESP Plus system translates to energy cost savings throughout its lifetime.

Energy efficient right down to one zone

The ESP Plus system is so intelligent it allows you to run your air conditioning down to only one zone. Ideal for those hot summer nights where you only want to keep your bedroom comfortable without air conditioning the rest of your home.

individual comfort control

anywhere in your home

Relax in your own comfort zone

Now the whole family can relax in their own individual comfort zones with ESP Ultima. Air conditioning so intelligent it can control 8 different temperature zones within your home.

While you are enjoying television in the lounge room at one temperature, a child can be sleeping peacefully in another room at a different comfort setting. At the same time a rumpus room may be full with guests and require a cooler comfort setting.

* As an operational default ESP Ultima has a factory preset max. span of 4°C between individual zones and a preset max. span of ±2°C between the master controller and an individual zone. This aims to maximise energy efficiency of the system.

Ultimate control is at your fingertips

ESP Ultima combines all the features and components of the ESP Series with individual zone temperature controls so custom comfort is always at hand.

The Individual Zone Controls allow individual temperatures* to be set between independent zones enabling you to create the ideal environment in your home. Zones can even be switched on or off from the independent areas.

In large rooms or open plan living areas where temperatures may fluctuate within the room, additional sensors can be added to the room to create a more accurate average temperature.

ultimate climate control and advanced energy efficiency

MASTER CONTROLLER

- Controls system operation, fan speeds, timers and sets master temperature limits for the home
- A second master controller can be added for 2 storey homes or main bedroom control

INDIVIDUAL ZONE CONTROLLER

- Optional accessory
- Allows individual zone comfort settings to be made
- Easy to read blue backlit LCD display
- Easy to use on/off and temperature control for the zone

ZONE SENSOR

- Optional accessory
- Used in conjunction with master controller to improve temperature control
- Ideal for large open plan rooms or for use as a lower cost alternative to individual zone control

Configure the system to suit your needs

DOUBLE-STOREY SAMPLE CONFIGURATION

Custom comfort in up to 8 different zones

With ESP Ultima you have the flexibility to configure and create a custom solution to match your homes individual needs. You can run different temperature settings in key rooms and maintain a consistent temperature in others. The choice is yours. If part of your house is shaded and the other part bathed in sunlight you can set different comfort settings to accommodate.

Every home is different and your ActronAir specialist will advise you on the best configuration to save energy and create the perfect environment for your home.

Advanced zoning options put you in control of energy savings

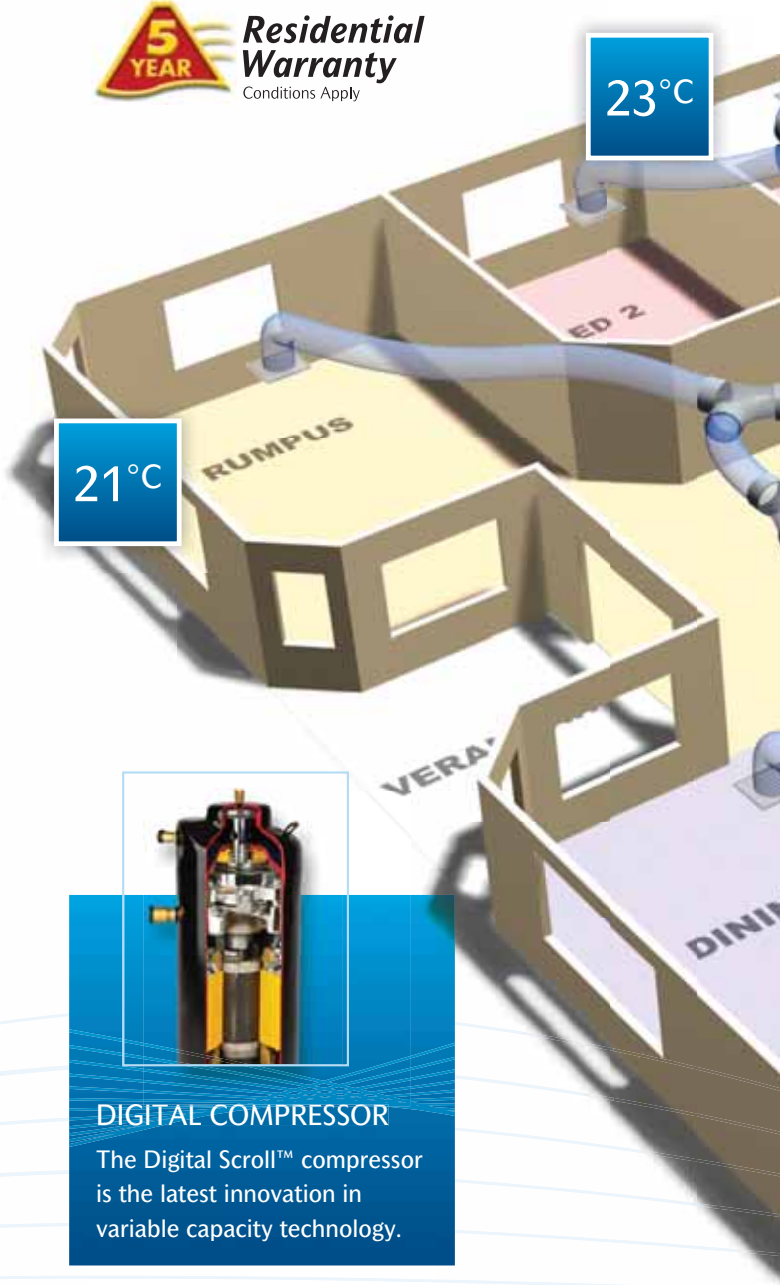
Highly sophisticated variable air flow technology allows you to run minimal zones without compromising on energy efficiency. Like the ESP Plus system, an indoor 'smart' fan responds to individual zone requests to deliver only the exact amount of conditioned air required. For example, at night the system can be set to run quietly in bedrooms only. Temperatures can be the same in each room, or varied depending on how you like to sleep. Perfect for newborn babies or children with sleeping difficulties.

Technology you can depend on

The beauty of ESP Ultima is its simplicity. All components are fully integrated into one seamless system with all features available at the touch of a button. The system is completely plug 'n' play eliminating complicated and expensive wiring and is easy to maintain.

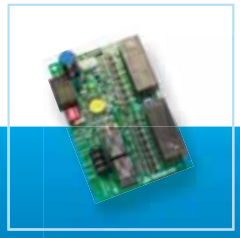
You will never have to look far if you need product support as ESP Ultima ducted air conditioning is designed, tested and built right here in Australiaby ActronAir. And to make you even more comfortable all system components are backed by an unbeatable ActronAir 5 year residential and 2 year commercial warranty.

5 YEAR **Residential Warranty**
Conditions Apply



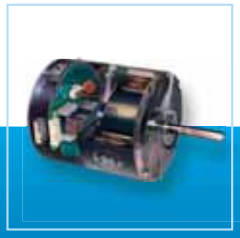
DIGITAL COMPRESSOR

The Digital Scroll™ compressor is the latest innovation in variable capacity technology.



ESP ULTIMA MODULE

ESP Ultima module listens to the individual zones and instructs the system on precisely how much conditioned air needs to be generated.

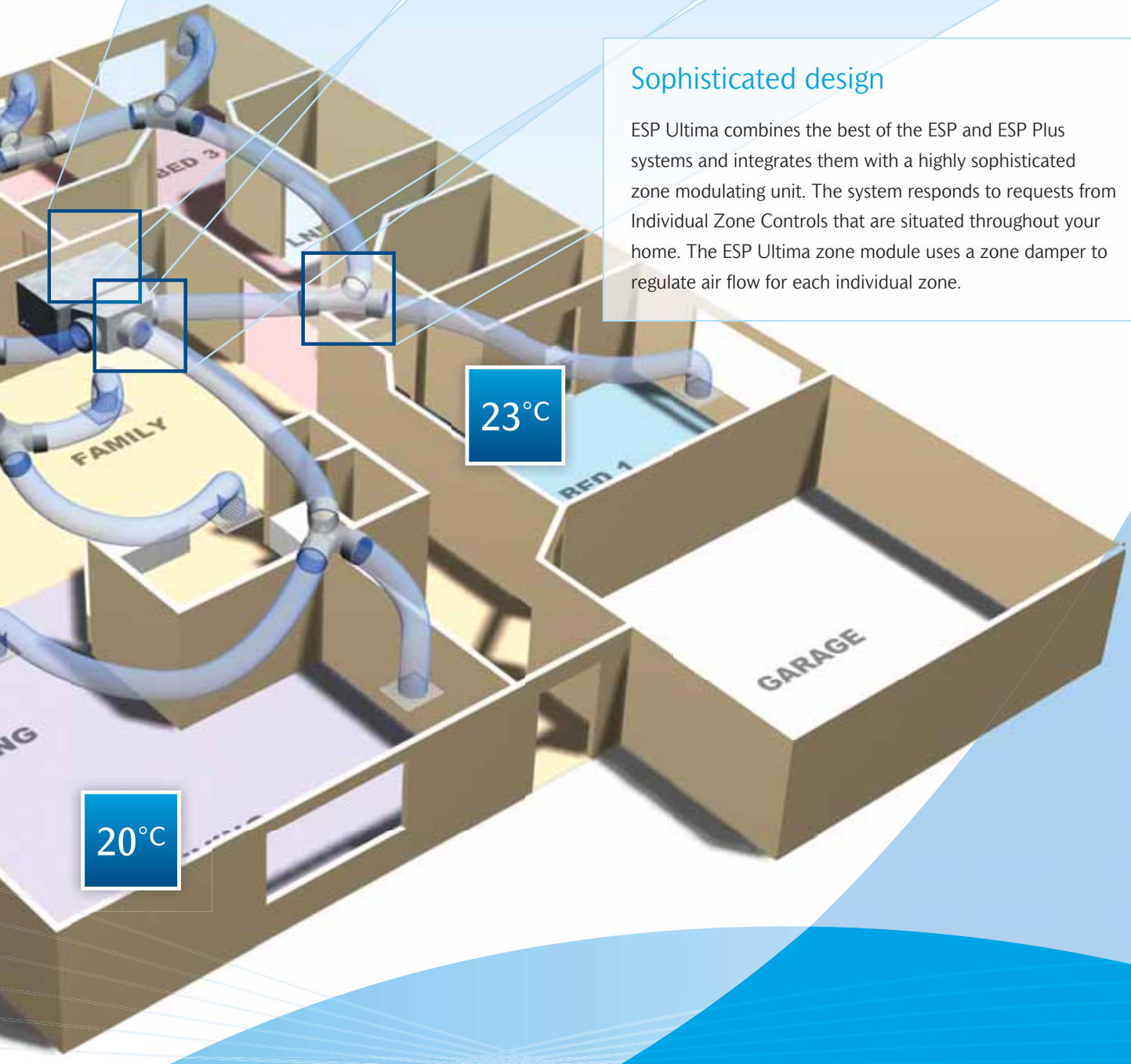


ECM MOTOR

The energy efficient Electronically Commutated Motor (ECM) drives the internal 'smart' fan quietly ramping up or down to match zone requests.

ZONE DAMPERS

Zone Damper blades open and close to allow a precise amount of air flow into the zones maintaining temperature control.



Sophisticated design

ESP Ultima combines the best of the ESP and ESP Plus systems and integrates them with a highly sophisticated zone modulating unit. The system responds to requests from Individual Zone Controls that are situated throughout your home. The ESP Ultima zone module uses a zone damper to regulate air flow for each individual zone.

ActronAir Digital Unit Specification

OUTDOOR MODEL		SRD13C		SRD15C	
INDOOR MODEL		SRD13E	SRV13E	SRD15E	SRV15E
TYPE		ESP	ESP PLUS	ESP	ESP PLUS
Nett (Rated) Capacity (kW)	Cooling (min-max)	11.85 (1.19-11.85)	12.14 (1.21-12.14)	15.00 (1.50-15.00)	15.35 (1.54-15.35)
(AS/NZS3823.1.2)	Heating (min-max)	12.82 (2.44-12.82)	12.53 (2.13-12.53)	15.90 (3.02-15.90)	15.55 (2.64-15.55)
Input Power (kW)	Cooling	4.27	3.98	5.25	4.90
(AS/NZS3823.1.2)	Heating	3.91	3.62	4.74	4.39
(1) EER Rated (AS/NZS3823.1.2)	Cooling	2.77	3.05	2.86	3.13
(2) COP Rated (AS/NZS3823.1.2)	Heating	3.28	3.46	3.35	3.54
Star Rating	Cooling	★★★½	★★★★½	★★★½	★★★★½
	Heating	★★★★	★★★★½	★★★★½	★★★★★
Power Supply – 50Hz	Outdoor	240V x 1Ph		240V x 1Ph	
	Indoor	240V x 1Ph		240V x 1Ph	
Rated Amps (AS3823.1.2)		21.6	20.4	26.1	24.6
(3) Circuit Breaker Amps		32.0		32.0	
Compressor Type		Digital Scroll		Digital Scroll	
Refrigerant		R-22		R-22	
Indoor Fan Type		3 Speed	ECM Variable Speed	3 Speed	ECM Variable Speed
Air Flow Indoor (l/s)	Maximum	760	760	920	920
	Nominal	650	650	800	800
	Minimum	560	130	700	160
Outdoor Dimensions (mm)	Depth	495		580	
	Height	895		990	
	Width	1190		1320	
Indoor Dimensions (mm)	Depth	615		615	
	Height	412		412	
	Width	1090		1190	
Nominal Weight (kg)	Outdoor	120		153	
	Indoor	53	54	55	56
(4) Sound Pressure Level (dBA)	Outdoor (low/high fan)	47 / 50		49 / 52	
(5) Sound Power Level (dBA)	Outdoor (low/high fan)	64 / 67		66 / 69	
FEATURES					
M Series (AM7) 7-Day Programmable Time Clock		Yes (4 zone)	Yes (4 zone)	Yes (4 zone)	Yes (4 zone)
(6) Maximum No. of Zones		8	8	8	8
Individual Temperature Control – 1 to 8 Zones		No	No	No	No
Home Automation ON/OFF Capability		Yes	Yes	Yes	Yes
Quiet Starting Indoor Fan		–	Yes	–	Yes
Better Humidity Control		Yes	Yes	Yes	Yes
Compressor Soft Start		Yes		Yes	
(7) Operate 1 Room Only		No	Yes	No	Yes
MEPS Certified		Yes		Yes	
(8) QLD Development Code MP4.1 Compliant		No	Yes	No	Yes
(9) EER Tested (AS/NZS3823.1.2)		2.78	3.04	2.86	3.25

Important – The Local Electricity Supply Authority may require limits on – starting current, running current and voltage drop, please check prior purchase.

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.

Operating Range:
Cooling: 15°C DB to 50°C DB Outdoor / Air Entering Indoor 29°C DB.
Heating: -5°C DB (R410A Heating -10°C DB) to 21°C DB Outdoor / Air Entering Indoor 21°C DB.

(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) Recommended circuit breaker size. This should be used as a guide only, refer to AS/NZS 3000 "Australian/New Zealand Wiring Rules" for more details.

(4) Sound Pressure Level at 3m distance is determined as the measured sound pressure at 3m perpendicular to the coil side of the condenser. Results are based on outdoor conditions over a hard reflecting surface for the ground plane only. Two values provided: one at low speed outdoor fan and one at high speed outdoor fan. Sound pressure levels may vary in different locations and surroundings.

(5) Sound Power Levels are measured in accordance with the requirements of the Department of Environment and Conservation (NSW) under the Australian Environment Council 'Technical Basis for the Regulation of Noise Labelling of New Air conditioners in Australia'. The measurement procedures contained in this regulation are equivalent to Australian Standard AS1217.2 - Determination of Sound Power Levels of Noise Sources Part 2 - Precision Methods for Broad-Band Sources in Reverberation Rooms'.

(6) Maximum number of zones using an 8 zone controller. This may need to be purchased separately.

(7) The unit capacity and duct work must be sized correctly to match the room.

(8) Complies with QLD Development Code MP4.1 minimum tested EER of 2.9 for Class 1 and Class 2 buildings from 1st July 2009. See www.dip.qld.gov.au.

(9) EER Tested = (Tested Capacity Cooling ÷ Tested Input Power Cooling). For more information refer to www.energyrating.gov.au.

When the outdoor temperature exceeds the rated conditions, the cooling/heating capacities may decrease below the rated nett values.

Specifications subject to change without notice.

5 year residential warranty - refer to Terms of Warranty document for full details.

2 year commercial warranty - refer to Terms of Warranty document for full details.



SRD175C			SRD190C			SRD230C	
SRD175E	SRV175E	SRM175E	SRD190E	SRV190E	SRM190E	SRV230E	SRM230E
ESP	ESP PLUS	ESP ULTIMA	ESP	ESP PLUS	ESP ULTIMA	ESP PLUS	ESP ULTIMA
17.40 (1.74-17.40)	17.70 (1.77-17.70)		18.60 (1.86-18.60)	18.90 (1.89-18.90)		23.16 (2.32-23.16)	
18.30 (3.48-18.30)	18.00 (3.42-18.00)		19.60 (3.72-19.60)	19.30 (3.67-19.30)		23.50 (4.00-23.50)	
6.07	5.77		6.20	5.90		7.08	
5.44	5.14		5.89	5.62		6.29	
2.87	3.07		3.00	3.20		3.27	
3.37	3.50		3.33	3.44		3.74	
★★★½	★★★★½		★★★★	★★★★★		★★★★★	
★★★★½	★★★★★		★★★★	★★★★½		★★★★★½	
240V x 1Ph			415V x 3Ph			415V x 3Ph	
240V x 1Ph			240V x 1Ph			240V x 1Ph	
25.1	25.1		13.0	12.5		15.0	
40.0			20.0			25.0	
Digital Scroll			Digital Scroll			Digital Scroll	
R-410A			R-410A			R-410A	
3 Speed	ECM Variable Speed		3 Speed	ECM Variable Speed		ECM Variable Speed	
1100	1100		1150	1150		1440	
920	920		950	950		1200	
740	185		760	200		240	
580						685	
1040						1125	
1460						1685	
680						695	
435						485	
1420						1470	
180			185			220	
75	76		75	76		90	
52 / 54			52 / 54			54 / 59	
69 / 71			69 / 71			70 / 75	
Yes (8 zone)	Yes (8 zone)	Yes (8 zone)	Yes (8 zone)	Yes (8 zone)	Yes (8 zone)	Yes (8 zone)	Yes (8 zone)
8	8	8	8	8	8	8	8
No	No	Yes	No	No	Yes	No	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
–	Yes	Yes	–	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes			Optional			Optional	
No	Yes	Yes	No	Yes	Yes	Yes	Yes
Yes			Yes			Yes	
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2.93	3.12	3.12	3.07	3.23	3.23	3.33	3.33

MEPS CERTIFIED

N2018

All systems specified in this brochure pass or exceed minimum government efficiency levels when tested to AS/NZS3823.2-2005 Amdt 3-2008. at rated capacity.

5 YEAR Residential Warranty
Conditions Apply

2 YEAR Commercial Warranty
Conditions Apply

Quality System
Quality Endorsed Company
ISO9001: Lic. 22925
SAI Global

ActronAir®

Australian for air conditioning™

1300 522 722

actronair.com.au

Your Accredited ActronAir Dealer:

6090-69-0609