

## Fujitsu re-invents the heat pump

hilm

# The all-new e3series

- el : efficiency
- e2 : environment
- e3 : economy

THE HOME COMFORT SPECIALISTS



**NEW ZEALAND'S FAVOURITE AIR**<sup>®</sup>



# New levels of energy efficiency in heating

The Fujitsu e3 series uses a totally new thermodynamic system to heat or cool your home environment. This system will deliver more heat for your dollar than ever before. Even better, it is a significant environmental improvement on previous heat pump systems with zero ozone depletion as well as reduced global warming potential.





## More comfort and energy saving features

- Human sensor control
- Power diffuser for faster, more comfortable airflow





## More user friendly control

• Comfort and energy saving control with a one-touch 7-day 'set-and-forget' timer



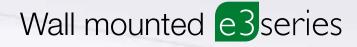
- The Fujitsu features and engineering you expect
- Highest quality Healthy Air Filters
- Very quiet operation
- Slim, compact and elegant design







# FUJITSU





#### ASTG09KMCA

Heating capacity: 3.2kW Heating efficiency: COP 4.92 Cooling capacity: 2.5kW Cooling efficiency: EER 4.90

#### ASTG12KMCA

Heating capacity: 3.7kW Heating efficiency: COP 4.57 Cooling capacity: 3.5kW Cooling efficiency: EER 4.07



#### ASTG18KMCA

Heating capacity: 6.0kW Heating efficiency: COP 4.23 Cooling capacity: 5.0kW Cooling efficiency: EER 4.10

#### ASTG24KMCA

Heating capacity: 8.0kW Heating efficiency: COP 3.77 Cooling capacity: 7.1kW Cooling efficiency: EER 3.53

#### ASTG22KMCA

Heating capacity: 7.2kW Heating efficiency: COP 4.07 Cooling capacity: 6.0kW Cooling efficiency: EER 3.77

Feature summary																		
	1 <i>i-pam</i>	DEMAND CONTROL	Human Sensor		Adjust	Restart	Changeover	10°C HEAT	Economy	POWERFUL	())) Low noise	(V) Sleep	<b>Program</b>	<b>Weekly</b>	Filter	000 Ion	(ÁF)	Wash
ASTG09/12KMCA																		
ASTG18/22/24KMCA																		



High density heat exchanger

## Power diffuser

The diffuser operates automatically to match the heating or cooling mode. The result is faster comfort, more efficiently.



Heating

During heating, vertical airflow provides comfortable floor level heating quickly and effectively.



During cooling, long-reach is delivered by horizontal airflow, to quickly reach the temperature you want in every corner of the room.

Cooling





## Brilliant energy efficiency

High energy saving is achieved with DC rotary compressors, All DC inverter control, efficient and highdensity heat exchanger technology and the new efficient R32 thermodynamic system.

The ASTG09KMCA has achieved a "STAR RATING" of 5.0 for both heating and cooling and delivers 4.92kW of heat for every 1kW of power used.

Other models have also achieve top class high energy efficiency.

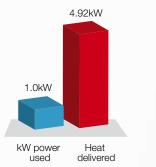
## Energy saving control

## Human sensor control

The human sensor infrared technology senses human presence (and not just movement). So it will switch to saving operation 20 minutes after people leave the room. This will reduce the temperature by a maximum of 4°C when in heating mode, until someone returns to the room - when the heat pump will return to the original settings.

## Human sensor's coverage

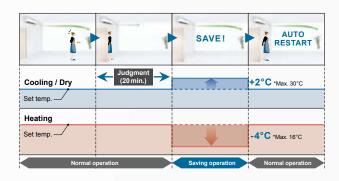
Human presence is detected in the room accurately by pyroelectric infrared sensor, which has a range of 6 metres, between 90 degrees vertically and 100 degrees horizontally.

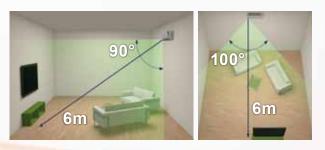






Heating efficiency varies by kW capacity of model, Example shown is for ASTG09KMCA





## Our advanced technology

## High density heat exchanger

Heat exchange efficiency is substantially improved by the high-density slim, 5mm diametre tube heat exchanger.







## ALL All DC inverter technology

Power consumption is substantially reduced DC Inverter Fan motors and DC Rotary Compressors.







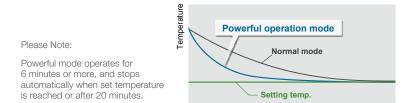
## More comfort, more friendly



Instant comfort with just one touch

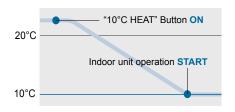
## Powerful operation

20 minutes continuous 'extra power' boost. Rapid heating and cooling is achieved with one button - to provide 20 minutes of maximum air flow and maximum compressor speed.



#### 10°C HEAT operation

The room temperature can be set to go no lower than 10°C, thus ensuring that the room does not get too cold when not occupied



Please Note:

•When the room temperature is higher than 10°C, "10°C HEAT" operation does not start. Operation starts and maintains the room temperature at 10°C when the temperature drops below 10°C.

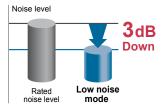
Time

•When "10°C HEAT" operation stops, the room set temperature quickly returns to the preset temperature.



#### Low noise mode for outdoor unit

Low noise mode of outdoor unit can be selected by wireless remote controller.

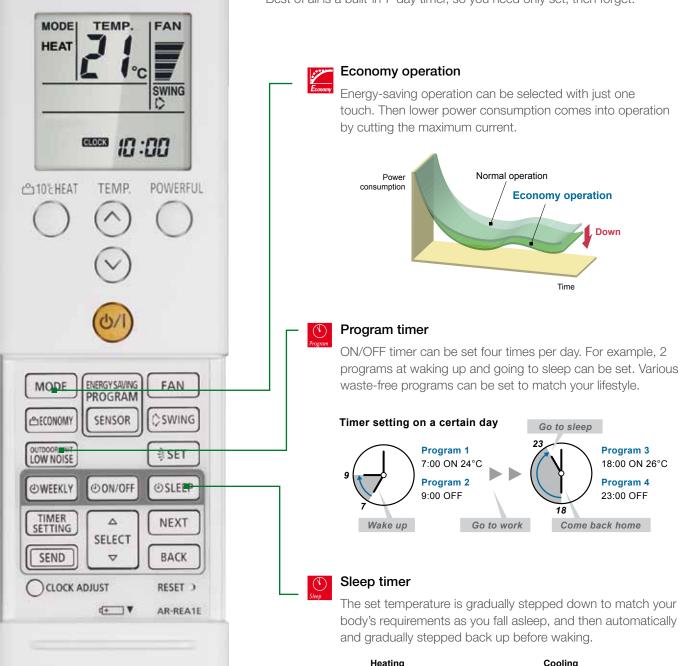


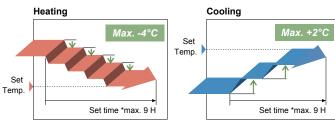


This smart, very thin remote has a large, easy-to-view LCD display with a one-touch button.

## Slim and easy-to-use design

Best of all is a built-in 7-day timer, so you need only set, then forget.





\*Sleep timer setting : 0.5, 1, 2, 3, 5, 7, 9 H

# Why choose Fujitsu?

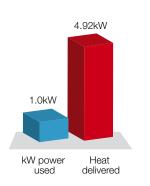




Fujitsu General has specialised in designing and producing Heat Pumps for well over 40 years.

Our advanced models are engineered to fit seamlessly into your home lifestyle, starting with a comprehensive range that will suit all Kiwi homes. You will find compact designs, healthy air features, leading energy savings and whisper quiet operation. In fact, you'll hardly notice your new heat pump is there – except for a warmer (or cooler), healthier and more comfortable home environment.





Heating efficiency varies by kW capacity of model. Example shown is for e3-series (ASTG09KMCA).

## More ENERGY STAR® heat pumps

Fujitsu's range is totally comprehensive – in fact we have more ENERGY STAR® qualified heat pumps than any other brand. That means we have the right energy efficient model for your home, wherever you live in New Zealand.

## Better heat efficiency

With the increasing cost of power it's becoming more and more important to reduce energy consumption in the home. You already know that heat pumps are the most energy efficient form of heating, but it's also good to know that Fujitsu leads the way with unique energy saving features ensuring you will receive the best possible economy across a wider range of models – often delivering almost 5 times the heat for the amount of energy used.

## Lower running costs

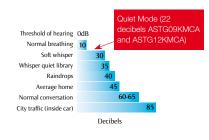
Fujitsu's DC and Inverter technologies have more power savings than ever before.

The savings on heating are significant, and in addition, Fujitsu has extra power saving features, for even more economical running. That's why we have more ENERGY STAR® qualified heat pumps than any other brand.





Only Fujitsu heat pumps are recommended by Asthma New Zealand







## A fresher healthier home

We are leaders in air purifying and deodorising filters that absorb minute dust particles, invisible mould spores, pollen and other harmful micro organisms, to provide a warmer, dryer, heathier environment for the whole family.

## Just quietly

Brilliant fan technology plus 'quiet mode' means noise is never an issue with Fujitsu. Compare our decibel levels, and you'll see that even our larger models are whisper quiet. Quietness is a Fujitsu fact – not just an advertising claim.

## Compact outside units with blue fin heat exchanger

Fujitsu's outside units are compact, with low operating noise from the efficient airflow structure.

Importantly, Fujitsu's outside unit heat exchanger fins are also specially coated with Cobalt Blue – to help protect against corrosion and enhance the durability as well as extend the performance life of your Fujitsu heat pump.

## Accredited consultants

Fujitsu is the only company in New Zealand that runs the respected Accreditation Programme for independent heat pump consultants and installers.

To achieve Accreditation, the tradesman must satisfy Fujitsu that they have the experience, skill and equipment to recommend and install your new heat pump in accordance with the manufacturer requirements, applying sound, professional trade practices.

This means that when you use an installer who has achieved our accreditation standards to install a Fujitsu heat pump, you will have the services of a real professional, and we will also give you a 6 year full parts and labour warranty – New Zealand's longest.

## NOVEMBER 2013

## Specifications

Model No.	Indoor Unit		ASTG09KMCA	ASTG12KMCA	ASTG18KMCA	ASTG22KMCA	KMCA ASTG24KMCA					
	Outdoor Unit		AOTG09KMCA	AOTG12KMCA	AOTG18KMCA	AOTG22KMCA	AOTG24KMCA					
CAPACITY (RANGE)	HEAT	kW	3.2 (0.90 - 5.30)	3.7 (0.90 - 5.60)	6.0 (1.05 - 8.30)	7.20 (1.10 - 9.70)	8.0 (1.10 - 10.60)					
	COOL	kW	2.5 (0.90 - 3.60)	3.5 (0.90 - 4.10)	5.0 (1.00 - 6.50)	6.0 (1.10 - 7.50)	7.10 (1.10 - 8.30					
INPUT POWER	HEAT/COOL	kW	0.65 / 0.51	0.81 / 0.86	1.42 / 1.22	1.77 / 1.59	2.12 / 2.01					
COP	HEAT	kW	4.92	4.57	4.23	4.07	3.77					
EER	COOL	kW	4.90	4.07	4.10	3.77	3.53					
STAR RATING	HEAT		5.0	4.5	3.5	3.5	3.0					
	COOL		5.0	3.5	3.5	3.0	2.5					
RUN CURRENT	HEAT/COOL	А	3.3 / 2.7	4.0 / 4.2	6.0 / 5.2	7.5 / 6.7	9.0 / 8.5					
MOISTURE REMOVAL		L/Hr	1.3	1.8	2.6	2.7	2.7					
Noise Indoor Q/L/M/H	COOL	dB(A)	21/31/36/40	21/32/37/42	29/35/40/46	32/37/42/48	32/37/42/49					
NOISE OUTDOOR			47	49	47	49	52					
AIR CIRCULATION	CIRCULATION INDOOR		194	200	258	278	311					
DIMENSIONS AND WEIGHTS	INDOOR	mm	268 x 84	40 x 203	295 x 940 x 270							
	INDOON	kg	8	5	14							
	OUTDOOR	mm	540 x 79	90 x 290	620 x 790 x 290							
	OUIDOON	kg	3	4	40							
PIPE CONNECTIONS mi		mm	6.35	9.52	6.35 / 12.70							
Maximum Pipe Length (Precharged)		m	20	(20)	30 (20)							
Max PIPE Height		m	15 20									
OPERATION	HEAT		-15 to 24									
RANGE	COOL	degrees	10 to 46									
REFRIGERANT			R32									

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB. Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

## Explanation of Features



i-PAM control models: i-PAM inverter control is a technology which reduces loss by adjusting the

current waveform to a better sine waveform.



Demand Control: Restrict the operation of air conditioner base on the demand of energy provider in order to cut the peak load.



Human sensor: Human sensor catches movements of people in a room.



Up / down swing flaps: The up/down flaps automatically swing up and down.

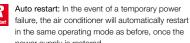
Double swing automatic: Complex swing action

of flaps enables automatically to swing both

horizontal and vertical directions.



Automatic air flow adjustment: The micro-computer automatically adjusts the air flow effectively to follow the changes of room

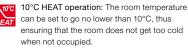


temperature.

power supply is restored.

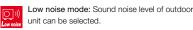


Auto-changeover: The unit automatically switches between heating and cooling modes based on your temperature setting and the room temperature.



Economy mode: Limits the maximum operation current, and performs operation with the power consumption suppressed.

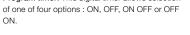
Powerful mode: Operation at maximum air flow and compressor speed, and quickly makes the room comfortable.



Sleep timer: The micro-computer gradually changes the room temperature automatically to afford a comfortable night's sleep.



Program timer: This digital timer allows selection



Fujitsu General proud sponsors of:







**NEW ZEALAND'S FAVOURITE AIR®** 



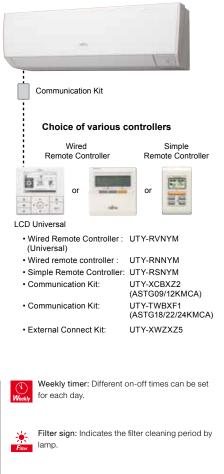
6 years full parts and labour warranty (New Zealand's longest) when you use a Heat Pump consultant accredited by Fujitsu

## FUITSU **HEAT PUMPS**

## **NEW ZEALAND'S FAVOURITE AIR®**

Fujitsu General New Zealand Limited www.fujitsugeneral.co.nz

#### **Optional parts**





Long-life ion deodorisation filter: The filter deodorises by powerfully decomposing absorbed odors using the oxidising and reducing effects of ions generated by the ultra-fine-particle ceramic.



Apple-catechin filter: Fine dust, invisible mold spores, and harmful microorganisms are absorbed onto the filter by static electricity, and further growth is inhibited and deactivated by the polyphenol extracted from apples.

Washable panel

