FUJITSU Hi-Wall

JULY 2008

INVERTER

NEW ZEALAND'S FAVOURITE AIR™

FUJITSU

INVERTER

Hi-Wall Premier

All inverter Hi-Wall models are Energy Star qualified. They offer whisper quiet comfort with additional special filtration options, latest features and technology. As you would expect from Fujitsu, the inverter system has the capacity to heat the room quickly, then automatically adjusts capacity to maintain the set temperature.

Moisture · Up/Down · Auto Louvers · Auto Shut Louvers · Adjust · Restart · Auto Changeover · Sleep · Program · Wash · Ion · AF

ENERGY STAR
THE GLOBAL MARK OF ENERGY EFFICIENCY

Infra red
remote control

For ASTA9/12

ASTA09L

PAM · TOP ENERGY SAVER AWARD · ENERGY ENDORSEMENT · WINNER 2006

Hi-EER: 3.963 (W/W)
Hi-COP: 4.261 (W/W)

C 2.60kW / 8,900BTU/h
H 3.60kW / 12,300BTU/h

ASTA12L

PAM · TOP ENERGY SAVER AWARD · ENERGY ENDORSEMENT · WINNER 2006

Hi-EER: 3.801(W/W)
Hi-COP: 3.869 (W/W)

C 3.50kW / 11,900BTU/h
H 4.80kW / 16,400BTU/h

ASTA18L

ALL DC · PAM

Hi-EER: 3.022 (W/W)
Hi-COP: 3.61 (W/W)

C 5.20kW/ 17,700BTU/h
H 6.25kW/ 21,300BTU/h

Moisture · Up/Down · Left/Right · Double · Auto Louvers · Auto Shut Louvers · Adjust · Restart · Auto Changeover · Sleep · Program · Wash · Ion · AF

For ASTA18/24

ASTA24L

ALL DC · PAM

Hi-EER: 3.011 (W/W)
Hi-COP: 3.516 (W/W)

C 7.40kW/25,300BTU/h
H 8.50kW/29,000BTU/h

ASTA30L

ALL DC · PAM

Hi-EER: 2.989 (W/W)
Hi-COP: 3.385 (W/W)

C 8.00kW/27,300BTU/h
H 9.00kW/30,700BTU/h

ENERGY STAR
THE GLOBAL MARK OF ENERGY EFFICIENCY

For ASTA30

ENERGY STAR
THE GLOBAL MARK OF ENERGY EFFICIENCY

ASTB24LD ALL DC V PAM

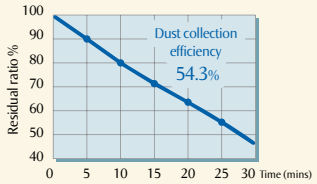
Hi-COP:3.5 (W/W)

C 7.4kW / 25,200BTU/h

H 8.5kW / 29,000BTU/h

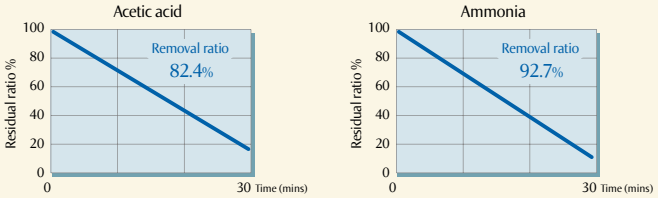
Moisture | Up/Down | Left/Right | Double | Auto Louver | Auto Shut Louver | Adjust | Restart | Auto Changeover | Sleep | Program | On-Off | Wash

Dust Collection Performance



Test method: JEM 1417 Test room:
30m³, sealed room
Measurement conditions: Cigarette smoke
(5 cigarettes burned simultaneously)

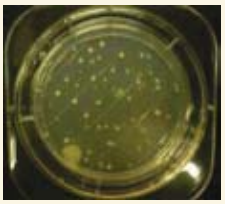
Deodorising Performance



Test method: JEM1467 Test room : 1m³, acryl sealed box Measurement method: Cigarette smoke
(5 cigarettes burned simultaneously)

Sterilisation effect by Polypenol ceraglaze. You can see the difference!

Tested by KITAZATO environment science centre Experiment bacteria:
Staphylococcus Aures/Escherichia coil
Test NO. :15-0253 Test condition: at 20 degrees C/24 hour action
The undiluted solution of the specimen has made the specimen fluid and suspensoid 0.1ml (approximately 107CFU/ml) of the test bacteria was inoculated.

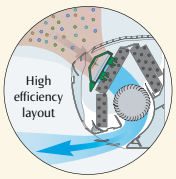


Fujitsu's plasma air cleaning unit effectively cleans the air passing through it.

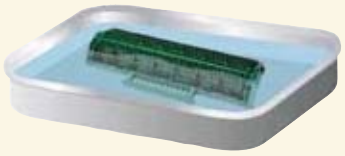
Plasma unit

Minute dust particles are thoroughly collected by an electrostatic filter and odour is suppressed using negatively charged ions. This improved filter is highly effective in collecting dust whilst maintaining clean, odourless air.

Plasma air filter mechanism



Washable Filter



Restored to the same performance as new, each time it is washed.

Plasma air cleaner quickly removes small dust particles and odours.

Collects dirt such as...

House dust / Pet fur and dander /
Cigarette smoke / Mite carcass /
Mould spore / Pollen.

Absorbs odours such as...

Smell of cigarette smoke / Pet odour /
Kitchen garbage smell / Perspiration
and body odour.

INVERTER

Hi-Wall Plasma

These brilliant models have most of the features and technology of the Premier range with the added bonus of the plasma filter. The plasma filter collects minute dust particles, even mite carcasses, as it absorbs odours to give you clean fresh smelling air. This very effective model heats your room quickly and efficiently, and cools & dehumidifies in summer.

Moisture | Up/Down | Auto Louver | Auto Shut Louver | Adjust | Restart | Auto Changeover | Sleep | Program | On-Off | Wash

ENERGY STAR
THE GLOBAL MARK OF ENERGY EFFICIENCY

Infra red remote control

For ASTB09/12

For ASTB18/24

ASTB09LD ALL DC | PAM | TOP ENERGY SAVER AWARD ENERGY ENDORSEMENT WINNER 2006
Hi-COP:4.44 (W/W)
C 2.60kW / 8,900BTU/h
H 3.60kW / 12,300BTU/h

ASTB12LD ALL DC | V PAM | TOP ENERGY SAVER AWARD ENERGY ENDORSEMENT WINNER 2006
Hi-COP:3.93 (W/W)
C 3.50kW / 11,900BTU/h
H 4.80kW / 16,400BTU/h

ASTB18LD ALL DC | V PAM
Hi-COP:3.6 (W/W)
C 5.20kW / 17,800BTU/h
H 6.25kW / 21,300BTU/h

Air Conditioner Filter Features

Apple-Catechin Filter

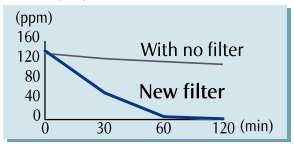
Fine dust, invisible mould spores, and harmful micro organisms are absorbed onto the filter by static electricity, and further growth is inhibited and deactivated by the polypenol ingredient extracted from apples.

Long-life* Ion Deodorisation Filter

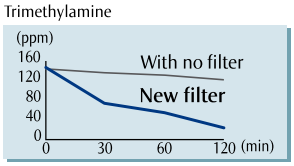
The filter deodorises by powerfully decomposing absorbed odours using the oxidizing filter and reducing effects of ions generated by the ultra-fine-particle ceramic. (*The filter can be used for approximately 3 years if it is washed under water to restore its surface action when it is dirty.)

Deodorising Performance (Odour Reduction Rate)

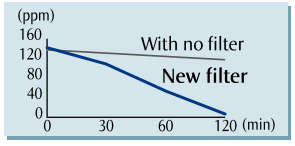
Ammonia



Trimethylamine



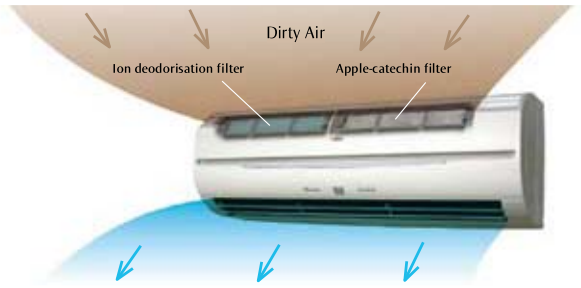
Hydrogen sulfate



Testing organisation: Environmental Sanitary Inspection Centre Test Method: Deodorisation Test

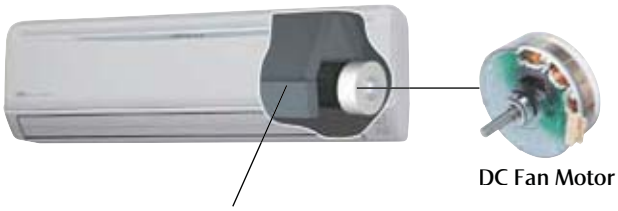
Easy Maintenance

Easy maintenance and always clean. Troublesome maintenance has been made easy. Since the front panel is easy to remove, maintenance is also easy.



Selected features of the Hi-Wall range

All DC

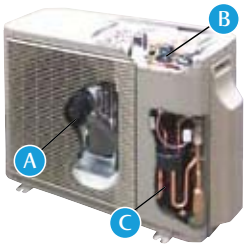


Heat exchange capacities 20% up compared to previous models

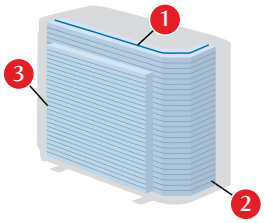
A DC Fan Motor

B V-PAM control
V-PAM technology makes a compressor more powerful.

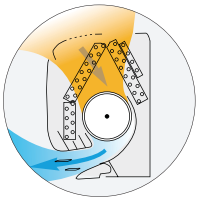
C DC compressor
More compact and quieter than a conventional motor.



New 3-row heat exchange system

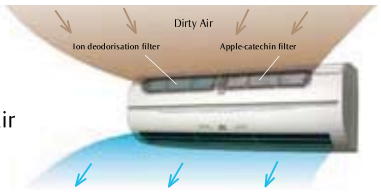


High efficiency
Large air flow and quiet operation by new air flow path



Easy Maintenance

Easy to remove front panel eliminates troublesome maintenance for cleaning, and provides access to the air filters and special filtration filters.

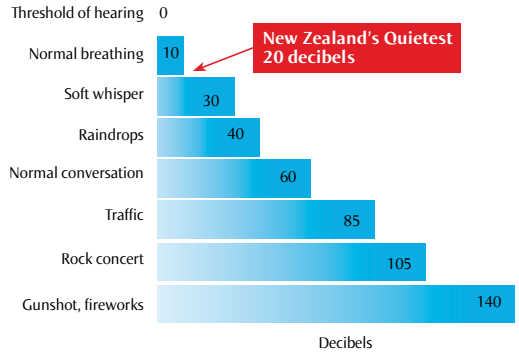


Super Efficient

Blue Energy Star ratings are awarded to selected elite heat pumps that meet a higher level of energy efficiency. At Fujitsu we pride ourselves on value for money and strive to achieve the best, ensuring our models are ranked amongst the best of the best is peace of mind we pass on to you.

Super Quiet

Fujitsu gives you unbeatable quietness from just 20 decibels, while still maintaining the desired temperature.

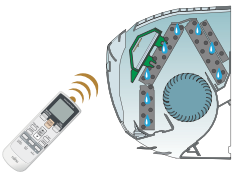


Inner Coil Drying Operation

These models are equipped with an inner drying function, by pressing the coil dry button on the remote control. This prevents the growth of mould and bacteria inside the heat pump.

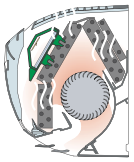
Covered with beading. (drips)
Bacteria can grow in the beading, causing bad odours. To prevent this you only need to press the COIL DRY button, which starts the 30 minute (approx) dry operation.

During dew condensation



Approx. 30 mins Drying

Removes moisture.



"Inner drying operation" and "ozone sterilizing operation" keep the inside of the heat pump clean. That's why air from the heat pump is cleaner and more efficient.

EXPLANATION OF FEATURES (MODEL DEPENDENT)

Moisture Removal
The computer effectively dehumidifies the air.

Up/Down Swing Louvers
The up/down louvers automatically swing to up and down.

Right/Left Swing Louvers
The right/left louvers automatically swing in either direction.

Double Swing Automatic
Complex swing action of louvers enables automatically to swing both horizontal and vertical directions.

Automatic Louvers
The position of the louvers is set automatically to match the operating mode. It is also possible to adjust the louvers using the remote control.

Auto Shut Louvers
The auto shut louvers close or open automatically when the unit stops or starts.

Automatic Air Flow Adjustment
The micro-computer automatically adjusts the air flow effectively to follow the changes of room temperature.

Auto Restart
In the event of a temporary power failure, the air conditioner will automatically restart in the same operating mode as before, once the power supply is restored.

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

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 of one of four options.
ON, OFF, ON –> OFF, or OFF –> ON, once in a 24 hour period.

ON-OFF Timer
ON-OFF timer can be set to operate once in a 24 hour period.

Washable Panel

Long-life Ion deodorisation filter

Apple-catechin filter

i PAM
High output and high efficiency performance.

V-PAM
V-Pam Inverter technology increases the maximum output of the compressor significantly.

Top Energy Saver Award
For the most energy efficient Star Rated Products.

C Cooling **H** Heating

SPECIFICATIONS

			HI WALL PREMIER					HI WALL PLASMA			
Type			INVERTER	INVERTER	INVERTER	INVERTER	INVERTER	INVERTER	INVERTER	INVERTER	INVERTER
Model No.	Indoor Unit		ASTA09LCC	ASTA12LCC	ASTA18LCC	ASTA24LCC	ASTA30LCC	ASTB09LDC	ASTB12LDC	ASTB18LDC	ASTB24LDC
	Outdoor Unit		AOTR09LCC	AOTR12LCC	AOTR18LCC	AOTR24LCC	AOTR30LCT	AOTS09LDC	AOTS12LDC	AOTS18LDC	AOTS24LDC
Reverse Cycle			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cooling Capacities		Watts	2,600	3,500	5,200	7,400	8,000	2,600	3,500	5,200	7,400
		BTU/Hr	8,900	11,900	17,700	25,300	27,300	8,900	11,900	17,700	25,300
Cooling Range		Watts	500 - 3,600	900 - 4,300	900 - 5,700	900 - 8,000	2,900 - 9,000	500 - 3,700	900 - 4,300	900 - 5,700	900 - 8,000
		BTU/Hr	1,700 - 12,300	3,100 - 14,700	3,100 - 19,400	3,100 - 27,300	9,900 - 30,700	1,700 - 12,600	3,100 - 14,700	3,100 - 19,400	3,100 - 27,300
Heating Capacities		Watts	3,600	4,800	6,250	8,500	9,000	3,600	4,800	6,250	8,500
		BTU/Hr	12,300	16,400	21,300	29,000	30,700	12,300	16,400	21,300	29,000
Heating Range		Watts	500 - 5,300	900 - 6,700	900 - 9,100	900 - 10,600	2,200 - 11,000	500 - 6,100	900 - 6,700	900 - 9,100	900 - 10,600
		BTU/Hr	1,700 - 18,100	3,100 - 22,900	3,100 - 31,000	3,100 - 36,200	7,500 - 37,500	1,700 - 20,800	3,100 - 22,900	3,100 - 31,000	3,100 - 36,200
Energy Star Rating	Cool		6	6	4	4	4	6	6	4	4
	Heat		6	6	5	5	4.5	6	6	5	5
E.E.R Cool		W/W	3.963	3.801	3.022	3.011	2.989	4.2	3.8	3	3
C.O.P Heat		W/W	4.261	3.869	3.61	3.516	3.385	4.4	3.9	3.6	3.5
Running Current	Cool	Amps	3 (6 Max)	4.1 (7 Max)	7.3 (9 Max)	10.4 (12 Max)	11.7 (17 Max)	2.8 (6 Max)	4.1 (7 Max)	7.3 (9 Max)	10.4 (12 Max)
	Heat	Amps	3.9 (8.5 Max)	5.4 (10 Max)	7.1 (13.5 Max)	10.2 (17.5 Max)	11.6 (19 Max)	3.7 (8.5 Max)	5.3 (10 Max)	7.4 (13.5 Max)	10.2 (17.5 Max)
Input Power	Cool	Watts	655 (250 - 1,180)	920 (250 - 1,610)	1,720 (90 - 2,000)	2,460 (110 - 2,620)	2,660 (580 - 3,600)	610 (250 - 1,380)	910 (250 - 1,610)	1,720 (90 - 2,000)	2,460 (110 - 2,620)
	Heat	Watts	845 (250 - 1,960)	1,240 (250 - 2,300)	1,730 (90 - 2,660)	2,420 (110 - 3,680)	2,640 (500 - 4,300)	810 (250 - 1,960)	1,220 (250 - 2,300)	1,730 (90 - 2,660)	2,420 (110 - 3,680)
Moisture Removal		L/Hr	1.3	1.8	2.8	3	3.4	1.3	1.8	2.8	3
Fan Speeds			4	4	4	4	4	4	4	4	4
Air Circulation		l/s	165	176	194	305	305	165	176	194	305
Indoor Sound Pressure Level	Quiet	Dba at 1m	21	21	27	32	32	20	20	25	33
	Low	Dba at 1m	30	29	32	36	36	29	29	33	38
	Med	Dba at 1m	36	36	37	41	41	35	35	39	43
	High	Dba at 1m	41	42	42	47	47	40	41	45	49
Outdoor Sound Pressure Level		Dba at 1m	48	49	50	52	53	48	49	50	52
Outdoor Sound Power Level		Dba	65	67	68	68	69	65	67	68	68
Dimensions and Weights	I.U Height	mm	275	275	275	320	320	283	283	283	320
	I.U Width	mm	790	790	790	998	998	790	790	790	998
	I.U Depth	mm	215	215	215	228	228	230	230	230	228
	I.U Net Weight	kg	9	9	9	14	14	9.5	9.5	9.5	14
	O.U Height	mm	540	540	578	578	830	540	540	578	578
	O.U Width	mm	660	790	790	790	900	790	790	790	790
	O.U Depth	mm	290	290	300	315	330	290	290	300	315
	O.U Net Weight	kg	32	37	40	44	62	34	36	40	44
Compressor Type			Rotary	Rotary	Rotary	Scroll	Rotary	Rotary	Rotary	Rotary	Scroll
Interconnect cables - size		Qty - mm2	4 - 2.5	4 - 2.5	4 - 2.5	4 - 2.5	4 - 2.5	4 - 2.5	4 - 2.5	4 - 2.5	4 - 2.5
Recommended Min. Power Cable		mm2	2.5	2.5	2.5	4	4	2.5	2.5	2.5	4
Phase - Frequency		Ph - Hz	1-50	1-50	1-50	1-50	1-50	1-50	1-50	1-50	1-50
Power Supply Attachment			Indoor	Indoor	Indoor	Outdoor	Outdoor	Indoor	Indoor	Indoor	Outdoor
Power Supply		Volts	230	230	230	230	230	230	230	230	230
Plug Size (if applicable)			10	10	15	N/A	N/A	10	15	15	N/A
Refrigerant Type			R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a
Connection Pipe Sizes	Gas	mm	9.52	9.52	12.7	15.88	15.88	9.52	9.52	12.7	15.88
	Liquid	mm	6.35	6.35	6.35	6.35	9.52	6.35	6.35	6.35	6.35
Minimum Pipe Length		Metre	3	3	3	5	5	3	3	3	5
Maximum Pipe Length		Metre	20	20	20	30	50	20	20	20	30
Maximum Pipe Height		Metre	15	15	15	20	30	15	15	15	20
Pre Charged Length		Metre	15	15	15	15	20	15	15	15	15
Pipe Connection Method			Flare	Flare	Flare	Flare	Flare	Flare	Flare	Flare	Flare
Outdoor Operating Temp	Cool	Degree C	-10 to 43	-10 to 43	-10 to 43	-10 to 43	-10 to 43	-10 to 43	-10 to 43	-10 to 43	-10 to 43
	Heat	Degree C	-15 to 24	-15 to 24	-15 to 24	-15 to 24	-15 to 24	-15 to 24	-15 to 24	-15 to 24	-15 to 24

EXPLANATION OF TERMS

COP: Stands for coefficient of performance or (more simply!), the relationship between energy used and heat delivered.
For example with a heating COP of 4.11 – you will get 4.11kW of heat for every 1kW of energy used.

Energy Star Rating: your quick guide to energy efficiency – more stars means more efficient.

Indoor Sound – measured in decibels, this is the sound level of your indoor unit at selected fan speeds. For example 20-30 decibels is less than the sound of a human whisper.

Heating Range – with our Kiwi winter, your heat pump needs to be able to supply heat indoors, even when its -15˚C outside!

Products depicted in this brochure contain high operating pressure R410a refrigerant. It is illegal to vent that refrigerant to the atmosphere. Only persons qualified and experienced in the installation, service and repair of these products are authorised to undertake such work.

Fujitsu General Accredited Installers have shown they have the necessary equipment and have accepted responsibility for their installations and the requirements of any statutes or laws.

Due to ongoing Research and Development specifications and designs are subject to improvement without notice therefore relevant manuals must be consulted before any action is taken to install or service these products

Heating/Cooling capacities and run current tests are based on the requirements of AS/NZS3283, that standard tests at the temperature below.

COOLING: Indoor Temp: 27˚C DB / 19˚C WB
Outdoor Temp: 35˚C DB

HEATING: Indoor Temp: 20˚C DB
Outdoor Temp: 7˚C DB / 6˚C WB

As actual temperature ranges in New Zealand vary considerably only competent people should provide advice as to size and placement of units.

Recommended cable sizes are based in AS/NZS3000 and AS/NZS3008.

Fujitsu General New Zealand Ltd warrants the equipment against any defects in materials and factory workmanship for a period of five years from the date of installation, or for 6 years if installed by an Accredited Installer.

This warranty does not cover defects or failures which are attributable to; incorrect or improper installation; environmental damage; airflow restriction; inadequate electrical supply; getting access to the product.

FUJITSU HEAT PUMPS

NEW ZEALAND'S FAVOURITE AIR™

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

FULL PARTS & LABOUR WARRANTY 5 YEARS
FULL PARTS & LABOUR EXTENDED WARRANTY 6 YEARS
FUJITSU ACCREDITED INSTALLER COMFORT WARRANTY

5 Year full parts and labour warranty. 6 years (an extra full year's warranty) when you use a Fujitsu Accredited installer.

FG006_JULY 08