# Fujirsu Nocria® Ceiling Wall



JULY 2008



INVERTER Ceiling Wall

Nocria®

The revolutionary NOCRIA ceiling wall models have vastly improved heating and cooling efficiency and energy saving. These elegant units are designed to sit very high on the wall, just 40mm below the ceiling and remain very unobtrusive. The automatic self cleaning filter system ensures highly efficient operation and the UV filter disinfects and deodorises the air.



### Our unique technology that achieved top energy efficiency in the industry.

### (A) Energy saving by automatic filter cleaning function.

This function allows an energy saving of more than 25% a year and maintains a smooth air flow by preventing the filters from being clogged with dust. **WORLD FIRST** 

## (B) Computer-designed fan provides a larger air flow than conventional models.

New air trunk, which provides a smooth air flow & gap fan motor increase the maximum air flow by10% over that of conventional models. CAE: Computer aided engineering

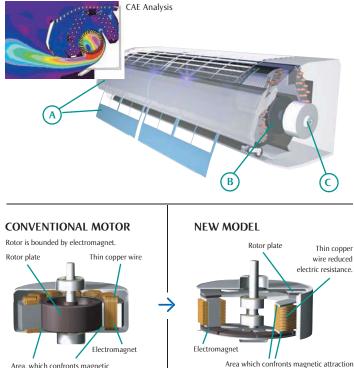
# C Axial gap fan motor enables non-conventional high power and high efficiency. WORLD FIRST!

#### Axial gap method

Rotor plates are installed above & below electromagnets.

Features (Compared to conventional models)

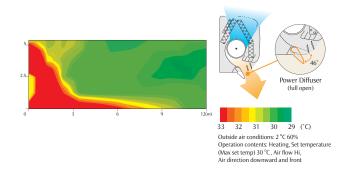
- Compact size with 1.5 more power output.
- Self-driven method increases rotating efficiency by10%.
- Our electromagnetic field simulation technology enables low vibration and low noise.



is very wide and generates high power.

Area, which confronts magnetic attraction, is very narrow

### Strong vertical air flow provides powerful floor level heating.



### Automatic filter clean world first!

Entire filter is cleaned automatically in approximately 2 minutes. Since the filter is cleaned automatically, energy saving capability is

displayed without regard to the load on the air conditioner.

### Energy saving.

If the energy saving effect is maintained, filter cleaning once every two weeks is effective.

#### Three exhaustive sterilizing and deodorizing counter measures keep the air in the room clean.

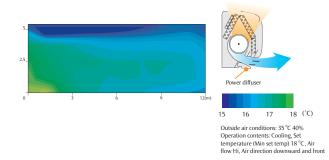
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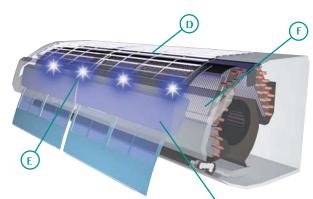
### STERILIZING COUNTER MEASURE

#### Dirt and dust are thoroughly sterilized by titan (D) apatite filter\*

\*Displays double the effect of a conventional optical medium & retains its property for a long time to suck in and remove approximately 99.99% of cigarette odours and bacteria, etc.

Healthy horizontal air flow does not blow cool air directly at the occupants in the room.





Antibacterial dust box

Removes dirt and dust by double brushes. Dust collection is approximately twice that in the past. Maintenance: Only throwing into a trash bin once every two years

Drives away bacteria and refreshes the air by UV (E) (ultraviolet rays) illumination.

WORLD FIRST!

### (F) The heat exchanger also uses titan apatite.

Titan apatite attracts bacteria and mould spores that passed through the filter and suppresses the growth of bacteria.



Frequently used parts are clearly

mode can be directly selected.

visible at the centre. The operation

### Inner drying operation prevents growth of mould, fungus and bad odour.

This model is equipped with an inner drying function. By pushing the "Coil Dry" button on the remote control, the drying operation starts inside the air conditioner.

#### **Covered** in Beading

Bacteria grows in beading and causes bad odour.

After operation ends, by pressing the COIL DRY button a 30 minute speed cleaning operation will commence.

### **Removes Moisture**

Drying operation takes approx. 15 minutes.

### Sterilisation

UV sterilisation operation takes approx. 15 minutes.

"Inner drying operation" and "UV sterilising operation" keep the inside of the air conditioner clean at all times. That's why air from the air conditioner is always clean and high efficiency is achieved.







### **SPECIFICATIONS**

| Туре                                |     |              |                | NOCRIA             | NOCRIA         |
|-------------------------------------|-----|--------------|----------------|--------------------|----------------|
|                                     |     | ndoor Unit   | AWZ18LBC       | AWTZ24LBC          |                |
| Nodel No. Ot                        |     | Outdoor Unit | AOTZ18LBC      | AOTZ24LBC          |                |
| Reverse Cycle                       |     |              |                | Yes                | Yes            |
| Cooling Conoction                   |     | Watts        | 5,200          | 7,400              |                |
| Cooling Capacties                   |     |              | BTU/Hr         | 17,700             | 25,200         |
| Cooling Range                       |     |              | Watts          | 900 - 5,900        | 900 - 8,000    |
|                                     |     |              | BTU/Hr         | 3,100 - 20,100     | 3,100 - 27,230 |
| Heating Capacities                  |     |              | Watts          | 6,700              | 8,500          |
|                                     |     |              | BTU/Hr         | 22,900             | 29,000         |
| Heating Range                       |     |              | Watts          | 900 - 9,700        | 900 - 10,600   |
|                                     |     | BTU/Hr       | 3,100 - 33,100 | 3,100 - 36,200     |                |
| Energy Star Rating                  |     | Cool         |                | 5                  | 4              |
|                                     |     | Heat         |                | 6                  | 5              |
| E.E.R Cool                          |     |              | W/W            | 3.29               | 3.023          |
| C.O.P Heat                          |     |              | W/W            | 4.11               | 3.613          |
| Running Current                     |     | Cool         | Amps           | 6.6 (8.5 Max)      | 10.4           |
|                                     |     | Heat         | Amps           | 6.9 (14 Max)       | 9.9            |
| Input Power                         |     | Cool         | Watts          | 1,580 (90 - 2,000) | 5,460          |
|                                     |     | Heat         | Watts          | 1,630 (90 - 3,200) | 2,350          |
| Moisture Removal                    |     |              | L/Hr           | 2.8                | 3              |
| Fan Speeds                          |     |              |                | 5                  | 5              |
| Air Circulation                     |     |              | l/s            | 236                | 244            |
| Indoor Sound<br>Pressure Level      |     | S-Quiet      | Dba at 1m      | 24                 | 32             |
|                                     |     | Quiet        | Dba at 1m      | 29                 | 36             |
|                                     |     | Low          | Dba at 1m      | 35                 | 40             |
|                                     |     | Med          | Dba at 1m      | 43                 | 43             |
|                                     |     | High         | Dba at 1m      | 46                 | 47             |
| Outdoor Sound Pressure Level        |     |              | Dba at 1m      | 47                 | 53             |
| Outdoor Sound Power Level           |     |              | Dba            | 65                 | 68             |
| Dimensions<br>and Weights           | I.U | Height       | mm             | 250                | 250            |
|                                     |     | Width        | mm             | 899                | 899            |
|                                     |     | Depth        | mm             | 298                | 298            |
|                                     |     | Net Weigh    | t kg           | 13.5               | 13.5           |
|                                     | O.U | Height       | mm             | 578                | 830            |
|                                     |     | Width        | mm             | 790                | 900            |
|                                     |     | Depth        | mm             | 315                | 330            |
|                                     |     | Net Weigh    | t kg           | 39                 | 62             |
| Compressor Type                     |     |              |                | Rotary             | Rotary         |
| Interconnect cables - size          |     |              | Oty - mm2      | 4 - 2.5            | 4 - 2.5        |
| Recommended Min. Power Cable        |     |              | mm2            | 2.5                | 4              |
| Phase - Frequency                   |     |              | Ph - Hz        | 1 - 50             | 1 - 50         |
| Power Supply Attachment             |     |              |                | Indoor             | Outdoor        |
| Power Supply                        |     |              | Volts          | 230                | 230            |
| Plug Size (if applicable)           |     |              |                | 15 Amp             | N/A            |
| Refrigerant Type                    |     |              |                | R410a              | R410a          |
| Connection Pipe Sizes Gas<br>Liquid |     |              | mm             | 12.7               | 15.88          |
|                                     |     | mm           | 6.35           | 6.35               |                |
| Mininum Pipe Length                 |     |              | Metre          | 3                  | 5              |
| Maximum Pipe Length                 |     |              | Metre          | 20                 | 30             |
| Maximum Pipe Height                 |     |              | Metre          | 15                 | 15             |
| Pre Charged Length                  |     |              | Metre          | 15                 | 15             |
| Pipe Connection Method              |     |              |                | Flare              | Flare          |
| Outdoor Operating Temp              |     | Degree C     | -10 to 43      | -10 to 43          |                |
| Heat                                |     |              | Degree C       | -15 to 24          | -15 to 24      |

### **EXPLANATION OF TERMS**

Capacity: the higher the capacity, the more area and faster the heat pump will heat (and cool) the room.

1

COP: Stands for coefficient of performance or (more simply!), the relationship between energy used and heat delivered. For example with a heating

Automatic Louvers

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!

The position of the louvers is set

automatically to match the operating

mode. It is also possible to adjust the flaps

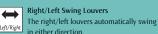
### EXPLANATION OF FEATURES



1

The computer effectively dehumidifies the air. Up/Down Swing Louvers

The up/down louvers automatically swing to up and down.



in either direction. **Double Swing Automatic** ÷

Complex swing action of louvers enables uble automatically to swing both horizontal and vertical directions.

Printed with 100% vegetable based inks. 4 STAR rated on environmentally friendly paper







Certified number: JQA-2005 Certified number: EC98J1137 Hamamatsu Fujitsu General Ltd.











#### **NEW ZEALAND'S FAVOURITE AIR**<sup>™</sup>

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

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.

the air conditioner will automatically one of four options. restart in the same operating mode as ON, OFF, ON → OFF, or OFF → ON before, once the power supply is restored. **ON-OFF** Timer ON-OFF timer can be set to On-Off

Wash

C

 $(\Lambda)$ 

Program

operate once.

Program Timer

This digital timer allows selection of

Washable Panel



B Heating Cooling



5 Year full parts and labour warranty. 6 years (an extra full year's warranty) when you use a Fujitsu Accredited installer. G9038

Adjust

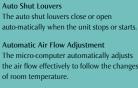
Automatic Air Flow Adjustment



# $\sum_{Auto}$ of room temperature.

using the remote control.







The micro-computer automatically adjusts the air flow effectively to follow the changes

### Sleep Timer

Auto Restart

Auto-Changeover

R

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

In the event of a temporary power failure,

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