FUJITSU Ducted JULY 2011







Come HOME to a WARM WELCOME

NEW ZEALAND'S FAVOURITE HOME IMPROVEMENT

Fujitsu adds ultimate comfort to your home. Fast, effective heating keeps you warm as toast in winter (even when it's -15°C outside) and the reverse-cycle delivers a cool dehumidifying environment in summer - at the touch of a button.

EFFORTLESS PERFORMANCE

Fujitsu's inverter technology, coupled with high capacity and compact DC engineering can handle greater temperature extremes than conventional heat pumps. This makes them more economical and able to reach your desired temperature faster.

THE SLEEP PUMP®

This ducted system is ideal for a 3 bedroom home as well as other similar sized three room instances. The Sleep Pump® is

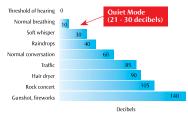


slim-line and will fit easily into narrow ceiling spaces. The design of the Sleep Pump® is such that it performs effortlessly and quietly so that everyone will have a good night's sleep. The bedrooms can be warmed to your ideal sleeping temperature in winter and cooled and dehumidified in summer. A genuine lifestyle improvement that is convenient and luxurious but an affordable investment.

QUIETLY DOES IT

Brilliant fan technology and whisper quiet design means that

noise is never an issue with Fujitsu. See the back of this brochure for our decibel levels at different fan speeds.



INVISIBLE COMFORT

Our ducted systems are the ultimate in comfort, creating perfect and even temperature throughout your home at the touch of a button.



They enhance your home lifestyle and because the indoor unit is totally concealed, usually within a ceiling void, they deliver heating and cooling that's a beautiful experience, and yet virtually invisible to the eye.

THE IMPORTANCE OF INSTALLATION

Fujitsu have the only heat pump accredited installer scheme in New Zealand. This means that when you choose an installer who has achieved Fujitsu Accreditation, you can be assured of a professional installation (plus you will also get a full 6-year parts and labour warranty - New Zealand's longest).



PROFESSIONAL DUCTED INSTALLER

Installation of a ducted system in your home needs an experienced specialist to ensure years of trouble free, effective and discreet comfort.



The companies who offer this specialist skill can be identified by the ducted logo (above) on the Fujitsu website. These installers have attended training in airflow and ductwork, and have access to Fujitsu's Ductcalc program, which assists in the selection and application of a ducted system to provide the best possible comfort and efficiency for your unique home.

Check our website for FAQ's, detailed information on how heat pumps work and our full range of models.



OUR DUCTED RANGE

Fujitsu supply a very wide range of ducted models to suit Kiwi homes and conditions throughout New Zealand. Just ask your Fujitsu ducted specialist to explain which will best suit you and your pocket. We also have a tailored ducted system to meet your bedroom requirements - like the Sleep Pump®. Whichever system you choose, the luxury of Fujitsu's ducted systems adds a new level of comfort to your lifestyle, as well as adding real value to your home.

Bulkhead Type - compact design allows them to be installed into the cavity of your ceiling, at floor level or in a wall. Typically for a single room application.



ARTF18LALU

(1) 6.0kW C 5.2kW

Hi-COP: 3.61 (W/W)

Hi-EER: 3.21 (W/W)

Quiet Mode - just 27dB



FOR ARTF18LALU

These slimline models are ideal for narrow ceiling spaces - delivering high efficiency quickly and effectively.



Single Phase - relatively compact chassis size and lightweight makes these Hi Static models easy to install, without compromising performance. Because of the excellent static pressures they are best used for long duct runs or many





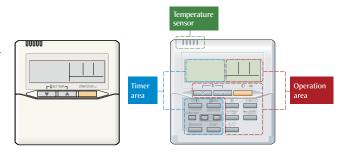
Simple and Easy to Control

The controller allows you to set your desired temperature, choose energy saving and other modes, and set timers for the system to start and stop automatically at the times you choose.

The Wall Controller has been designed to make operation and timer setting easy.

The left side of the controller and LCD display is for setting up timer options, the right side is how to set the ducted system to operate.

The handy green LED above the Start/Stop button clearly indicates that the system is On (when the LED is lit) or Off (when the LED is not lit).



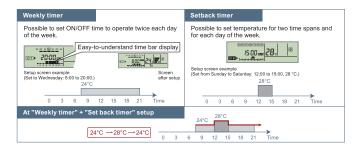
Program Timer Options

Once the clock has been set up on the controller it is then possible to set up selectable timer program options.

- ON Timer This is a countdown timer to turn the heat pump on when the time has elapsed
- OFF Timer This is a countdown timer to turn the heat pump off when the time has elapsed
- Weekly Timer A simple 5 step process which allows easy set up for each day of the week, with the ability to select 2 on and off settings per day
- Temperature Set-Back Timer Used in conjunction with other timer settings, this allows for the temperature to be changed during the On time period.



Press the timer mode button to select the ON timer or OFF timer.



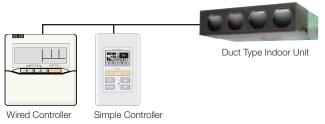
Optional Controllers

Room Temperature Sensor Selection

- Remote controller has remote sensor included
- User can select between remote controller sensor and / or return sensor (option).



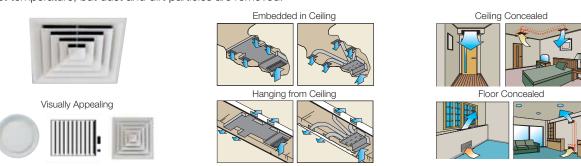
Dual Remote Controller



A second controller can make it easier to operate the ducted system from two different locations in your home. The second controller provides all the operation functions of the main controller except for timer settings.

Examples of Concealed Installation

Ducted systems are surely the ultimate in comfort. Placement of furniture is not a problem with a ducted system as the indoor unit is typically installed in the ceiling void and discreet ceiling diffusers deliver cool or warm air throughout your home quietly and efficiently. The return air grille contains a washable filter that filters the circulated air passing through it which means that not only is your room the perfect temperature, but dust and dirt particles are removed.



ADDITIONAL FEATURES AND BENEFITS

Latest Technology

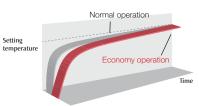
Fujitsu ducted systems deliver super-quiet, effective and very efficient heating and cooling to your whole home. Latest inverter technology and advanced scroll compressors deliver



optimum performance while maintaining very high efficiency, so you will enjoy the luxury of a completely comfortable home all year round.

Economy Operation

Limits the maximum operation current, cutting power consumption and suppressing the maximum load.

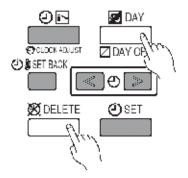


Auto Restart and Memory Back-Up

In the event of a power failure all Fujitsu Inverter ducted models will restart themselves from the last settings of the wall controller. The programmes and timer settings are kept in memory. (This needs to be set up on the wall controller by the installer).

Child Lock Function

Simply pressing a sequence of buttons on the wired remote controller locks and unlocks the keypad, stopping accidental and unauthorised use.



Group Control (typical of commercial applications)

One remote control can regulate up to 16 heat pumps.

All of the heat pumps will be operated with the same settings.



Energy Recovery Kits

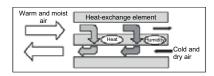
Energy Recovery Ventilation systems provide a controlled way of ventilating a home while minimising energy loss. When connected to the Fujitsu ducted system these recovery kits provide clean, fresh tempered outside air into your home and simultaneously exhaust the old stale air back outside, whilst retaining the warmth inside in winter or keeping the inside temperature cool in summer.



Adopts a highly efficient counter-flow heat exchange element.

Heat Exchange Ventilation

In winter the cold outside air enters the recovery heat exchanger and absorbs the heat from the exhausted air of the room. This recovered energy would normally be wasted, but by tempering the incoming fresh air close to the existing room temperature you get a ducted heat pump system that is significantly more efficient. This results in a potential 20% in energy saving. During summer the same process occurs but the incoming air can be cooled rather than heated.



Features of the Heat Exchange Material Component

The ducted system load is reduced by approximately 20% resulting in significant energy savings due to the counter flow heat exchange design. Between 70% and 80% of heat in the outgoing air is recovered to achieve these remarkable efficiencies.





Other (Cross-flow element) Fujitsu

Fujitsu element (Counter-flow element)

With the cross-flow material, air moves in a straight line across the surface. With the counter-flow material, air flows through the surface areas for a longer time (and longer distance), so the heat-exchange effect remains unchanged.

EXPLANATION OF FEATURES (MODEL DEPENDENT)



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.



ON-OFF Timer

ON-OFF timer can be set to operate once.



Weekly Timer

The ability to set up two On and Off operations for each day.



Weekly + Setback Timer

Allows for a temperature change during the On time period.



Connectable Distributing Duct Conditioned air can be distributed by means of a distribution duct.



Connectable Fresh Air Duct

Duct connection port hole opening. Fresh air can be introduced through this opening.



Fresh Air Intake

Fresh air can be taken in by a fan which can be connected using UTD-ECS5A (optional parts).



Cobalt Blue Heat Exchanger Outdoor unit fins are coated with a blue corrosion resistant material to enhance durability and extend the performance life of your heat pump.

ich Cooling







Control Port

External inputs and outputs contained within the product allow on/off control, fresh air interlock connection and heater bank element connection.

SPECIFICATIONS

11.2 - 28.0

10.8 - 23.5 12.0 - 26.5

22.6 3.25 3.60

18.0 2.82

6.4 - 20.0

6.2 - 18.0

5.1 - 14.0

5.0 - 12.1

4.2 - 16.2

0.4 - 14.0

0.9 - 9.1

11.2 3.21

10.0

8.0

0.9

2.8 - 9.8 2.7 - 11.2 3.21 3.66

3.21

3.11

3.21

W/W W/W

Heating Range Cooling Range

E.E.R Cool

3.61

3.61

3.10 3.68

3.30

16.0 3.00 3.60

14.0

12.1

11.2 3.33

14.0

5.7 - 14.0 6.0 - 16.0

4.7 - 10.0

3.20 3.40

Hi Profile

Low Profile

Low Profile

Low Profile

Low Profile Low Profile

AOTA30LFTL

AOTA24LALL

Outdoor Unit

Cooling Capacities Heating Capacities

Indoor Unit

MODEL No.

AOTD60LATT

AOTG36LATL

AOTG30LATL

9.0

6.25 (10.1 Max) 7.82 (12.5 Max) 6.27 (10.1 Max) 8.24 (12.5 Max)

3 1190

Α

9.3 (22.8 Max) 9.3 (22.8 Max)

7.5 (12.5 Max) 7.5 (12.5 Max) 5.32 (7.4 Max) 5.28 (7.4 Max)

16.9 (22.5 Max) 19.5 (23.5 Max) 16.0 (22.5 Max) 18.6 (23.5 Max)

11.4 (18.1 Max) 13.4 (19.6 Max) 12.4 (18.1 Max) 13.9 (20.1 Max)

16.3 (20 Max) 16.1 (20 Max)

11.1 (17.0 Max) 2.65 (4.04 Max) 11.2 (17.0 Max)

9.6 (12.5 Max) 9.3 (14 Max)

6.8 (9.5 Max) 7.0 (13.0 Max)

Amps Amps

3.80

2.95 (4.30 Max) 3.30 (4.80 Max) 3.80 (5.38 Max) 4.44 (5.63 Max) 2.70 (4.30 Max) 3.18 (4.67 Max) 4.03 (5.38 Max) 4.66 (5.63 Max)

2.68 (4.04 Max) 3.02 (4.54 Max) 3.83 (4.78 Max)

4 583

3.11 (4.54 Max) 3.89 (4.78 Max)

2.28 (2.97 Max) 2.21 (3.33 Max)

.62 (2.26 Max) 1.66 (3.09 Max)

Cool Cool Heat

Running Current

C.O.P Heat

₹ ₹ 1

Moisture Removal

Input Power

Air Circulation

Fan Speeds

2.5

12.7 (19 Max) 13 (19 Max)

6 3 N/A 43 46 49 59 50 50 700 110 930

41 47 57 450

3 N/A 36 40 45 56 425 11250 490 54 1290 9000

3 3 N/A 40 43 47 58 400 1050

3 900 N/A 35 39 43 55 55

1.5 3 700 N/A 36 36 41 41 54



Fujitsu General proud sponsors of:

Fujitsu Supports









Pressure Level





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

1251 x 370

862 X 324 851 X 295 100 - 250 4 - 1.5

1062 X 351

862 X 324

862 X 324 851 X 295 60 - 210 4 - 1.5

1015 X 240 30 - 150 4 X 205 dia

1015 X 240 4 X 205 dia

1015 X 240 4 X 205 dia

30 - 150

30 - 150

30 - 150

4 - 1.5 1 - 50 Outdoor

4 - 1.5 1 - 50

4 - 1.5 06 - 0

2ty - mm2

86

61

315

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Width Depth

 $\overset{\mathsf{k}}{\mathfrak{g}}$

Net Weight

⊇:

Dimensions

and Weights

Height

4 X 205 dia 1015 X 240

600 X150 Bulkhead

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 $^{\rm kg}$

Net Weight

Supply

Ductwork Plenum size

Ра

4 - 1.5

60 - 210 851 X 295

4 - 1.5

921 X 304 60 - 260 4 - 1.5 1 - 50 Outdoor 15.88

60 - 260

1200 x 350

765

1690

54 1290

39

006 330

006 330 98

40 1290 900 330

006 330

40

40 900 330

200

490

1050

3 3 700 NN/A 36 38 38 53 53 500 11290 9900 86

4 28 32 38 38 42 56 270 700

514 26 31 36 40 55 270 1135

29 32 37 42 55 270

4 305 25 27 29 31 53 53 700 38 578 578

2 4 4 4 4 4 2 227 227 229 23 33 33 25595 23 23 23 3300 3300 40

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Height Width Depth

Dba at 1.0m Dba at 1.0m

Low Med High Max

Indoor Sound Level

Dba at 1.0m Dba at 1.0m Dba at 1.0m

<u>/</u>

46 1290 900 330 107

100 930 765 50 - 250

50 - 250

4 - 1.5 3 - 50

4 - 1.5 3 - 50

9

9

9

9

9

9

4

4

1 - 50 Outdoor

4

mm2

Recommended Min. Power Cable

Interconnect cables - size

Ex Static Pressure

Power Supply Attachment

Power Supply

Phase - Frequency

Outdoor

Outdoor

Outdoor 3 x 2.5 3 - 50

> Outdoor 1 - 50

> > Outdoor

Outdoor 230

Outdoor 1 - 50

Outdoor 1 - 50

Outdoor

1 - 50

1 - 50

25.4

15 to 46

5 75 30 20 20

5 30 30

50 30 20

50 30 20

50 50 20 20

50 50 20 20

50 50 20 20

5 30 20 15

5 25 15

Maximum Pipe Length Minimum Pipe Length Maximum Pipe Height

Pre Charged Length Outdoor Operating

-15 to 24

-15 to 46

15 to 46

10 to 46

-15 to 24

Degree C Metre Degree C

Cool

-15 to 24

415 12.7

415 12.7

415 15.88

15.88

15.88

15.88

230 9.52

15.88

230 9.52

230

230 12.7 6.35

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Gas Liquid

Connection Pipe Sizes

6.35

230 9.52

230

230

9.52

9.52 230

9.52

9.52

9.52

EXPLANATION OF TERMS

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

speeds. For example 20-30 decibels is less than the Indoor Sound - measured in decibels, this is the Energy Star Rating - your quick guide to energy sound level of your indoor unit at selected fan efficiency - more stars means more efficient. 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!



HEAT PUMPS

NEW ZEALAND'S FAVOURITE AIR"

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

Products depicted in this brochure contain high operating pressure R410 ar efficient. It is lifegal to veril that refingent to it lifegal to work that refingent the the almosphere. Only persons qualified and experienced in the installation, service and repair of these products are authorised. to undertake such work.

Fujisu 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

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

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/NZS3823, that standard tests at the temperature below.

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 autitulable to; increed or improper installation; environmental damage; airflow restriction; inadequate electrical supply; getting access to the product.