# VR-II 3 pipe vrf



The Fujitsu VR-II 3-Pipe VRF system is truly adaptable air conditioning technology. Outdoor unit capacities range from 22.4kW nominal cooling to 135.0kW with up to 150% connected capacity possible. This Fujitsu VRF range combines performance and reliability with complete flexibility of design. System efficiency is guaranteed by using DC inverter compressor technology providing precise and effective speed control. The use of this DC control technology provides extremely high efficiency ratios in both cooling and heating mode. State-of-the-art controls, including a new Touch Panel LCD Wired Controller, allow individual or group operation with BMS interfacing options.

- Smart and cutting edge design
- System for large offices and hotels
- High static pressure of 80Pa
- Connectable up to 64 indoor units
- Total pipe length 1,000m max.



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#### **Features**

#### Energy saving technology that boosts operation efficiency



# Powerful large propeller fan

By using CFD<sup>\*1</sup> technology, a newly designed fan achieves high performance and low noise operation. \*1. CFD = Computational Fluid Dynamics



## 3 phase DC fan motor Efficiency is substantially improved by high efficient

motor with sophisticated driver control. In addition, low noise is realised by DC fan motor.



Subcool heat exchanger High Heat Exchange efficiency is achieved by using an internal projection shape double pipe construction.



Sine-wave DC inverter control High efficiency is realised by adoption of reduced switching loss IPM.



## High efficient compressor Large capacity DC inverter compressor

Large capacity high efficient DC twin rotary compressor with excellent intermediate capability.



#### 4-face heat exchanger

Heat exchange efficiency is significantly improved by the introduction of a new 4-face heat exchanger that increases effective surface area.



## Front intake port (corner cut air inlet design)

In multiple outdoor unit installations, the unique front intake design improves airflow into the Heat Exchanger.

#### Ideal heat exchanger path control

Heat exchanger is split into top and bottom. Heat exchange efficiency is improved by optimum heat exchanger path refrigerant control. More refrigerant is distributed at the top side heat exchanger with a large intake airflow.



## Sophisticated operation control

When multiple outdoor units are connected, sophisticated operation is performed by each compressor. Efficiency is improved by all compressors at part load and distributing refrigerant to all of the heat exchangers rather than to one compressor.



#### Inefficient operation



Compressor Load leve

## Features

## **Design Flexibility**

**High capacity connection** 

## AIRSTAGE<sup>™</sup> VR-II series Heat Recovery type Connectable indoor unit capacity range 50% to 150%<sup>-1</sup> Connectable indoor unit number Up to 64

\*1. Conditions of maximum connectable indoor unit capacity ratio is as the chart below.

Outdoor unit	Maximum connectable indoor capacity ratio	
capacity	Without 1.1 kW models	With1.1 kW models *2
8HP-48HP	150%	130%

\*2. In the case of connectable indoor units, 1.1 kW models and Cassette and/or Duct type of 9.0 kW class or more, maximum connectable indoor unit capacity ratio is 110%.

## **Design for Easy Maintenance**



**Easy to read 7-segment LED:** Confirm detailed operational and error status without using any specific equipment.



7-segment LED

- Operation mode status
- Discharge temperature / Pressure status
- Compressor operation indication
- Address / type / number of outdoor unit

Moveable PCB panel Easier for maintenance work behind the PCB





• Error status can be checked easily by outdoor unit display

## Wide operating range

Installation in extreme temperature conditions is possible due to an increase in operational range.

Airstage<sup>™</sup> VR-II series Heat Recovery type



Error status can be checked easily via the indoor unit wired controller An error code is displayed on a liquid crystal screen.

## Wired Remote Controller



#### Simple Remote Controller



## Wired Remote Controller (Touch panel)



## Features

## Comprehensive range of indoor units

The VR-II 3 Pipe VRF system can serve up to 64 indoor units with 50-150% connectable indoor unit capacity, providing simultaneous heating and cooling in different rooms within the building. There are 12 different types of indoor unit available with over 55 models ranging from 1.1 to 25kW.



## Smart and user-friendly controller

There is a full range of easy-to-use controllers available for all systems, from wireless remote controls to a PC-based control software. The installation can also be linked to a building management system.

The touch panel LCD wired controller has a large clear screen for ease of use and allows service engineers to interrogate indoor and outdoor units to diagnose the system.





Remote Controller



Group Remote Controller



Simple Remote Controller



Central Remote Controller



Wired Remote Controller



Touch Panel Controller



Wired Remote Controller (Touch Panel)



System Controller System Controller Lite (Software)

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All prices shown exclude VAT.



Fujitsu air conditioning products are available from FG Eurofred and local distributors.



Cooling & Heating capacities are based on the following conditions: **Cooling:** Indoor Temp.: 27°C DB/19°C WB, Outdoor Temp.: 35°C DB/24°C WB **Heating:** Indoor Temp.: 20°C DB, Outdoor Temp.: 7°C DB **Note:** Fuse ratings shown are only for information. Any fuses or MCB's installed on-site should be sized in accordance with IFE regulations

For full installation details contact FG Eurofred or your local distributor.

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