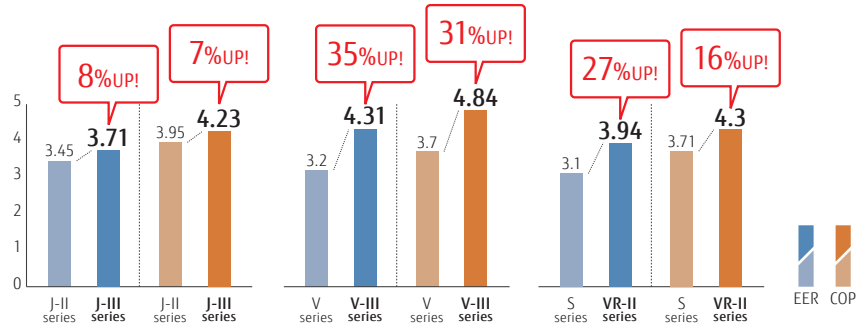


CORE TECHNOLOGY

for AIRSTAGE™ J-Series & V-Series

High Energy Efficiency

Efficiency is improved significantly by using DC twin rotary compressor, inverter technology, and large heat exchanger



Heat Pump (6 HP)



Heat Pump (8 HP)



Heat Recovery (10 HP)

High Efficiency Technology

AIRSTAGE™ J-III L



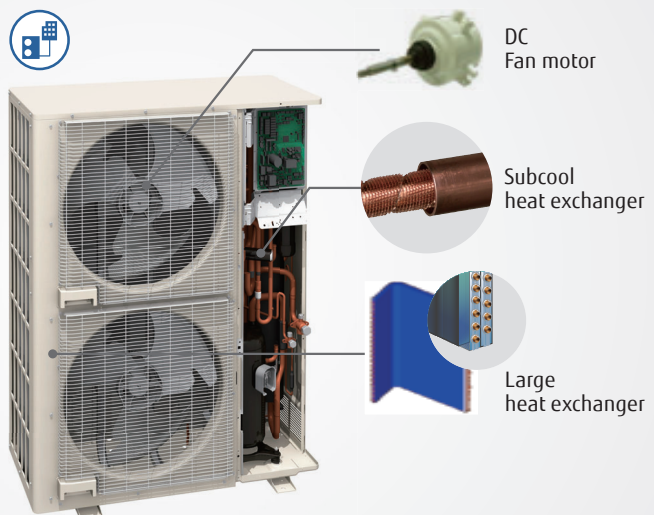
High efficiency design with top class SEER/SCOP

All small VRF series including new J-III L series have DC technology to realize the high efficiency operation. This enhances the durability and reliability of small VRF series.



Low ambient operation

Refrigeration cycle technology allows cooling operation even at -15°C.





Energy Saving Function



Economy operation

Economy operation can be set by remote controller. The temperature setting is offset automatically over a certain period of time.



Room temperature set point limitation

The minimum and maximum temperature ranges can be limited, which provide further energy saving while maintaining the comfort of the occupants.



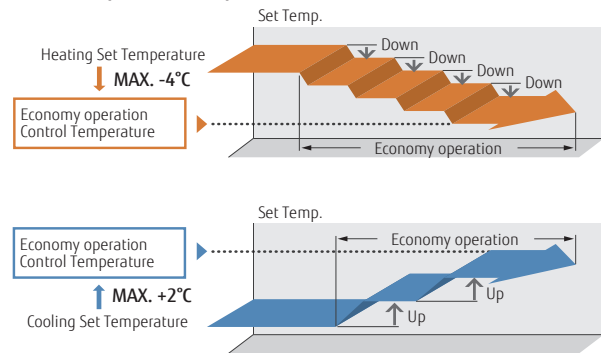
Auto-off timer

- The indoor unit automatically is turned off when it reaches to the preset operating time frame.
- The time frame of the "Auto off timer" can be flexibly scheduled.

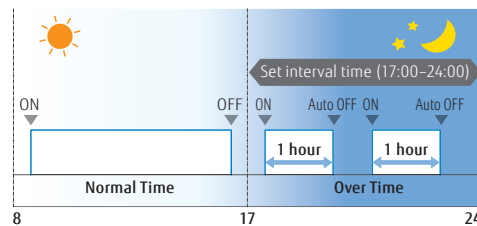
Capacity save operation

Operation capacity can be set in 5 steps for rated capability. The power consumption at peak is cut down and the maximum load is suppressed.

Room temperature set point limitation



Auto-off timer



More Comfort

Precision refrigerant flow control

Precise and smooth refrigerant flow control is achieved by using a DC Inverter control in conjunction with individual indoor unit electronic expansion valve control. This allows high precision comfortable temperature control of $\pm 0.5^{\circ}\text{C}$.



Auto changeover function

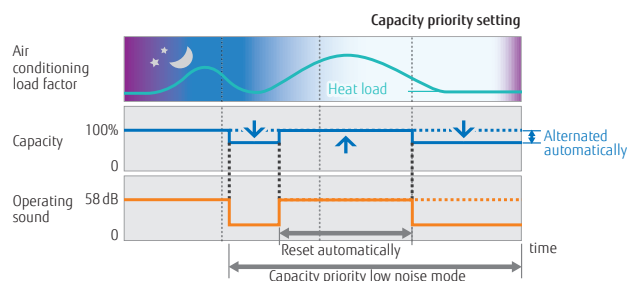
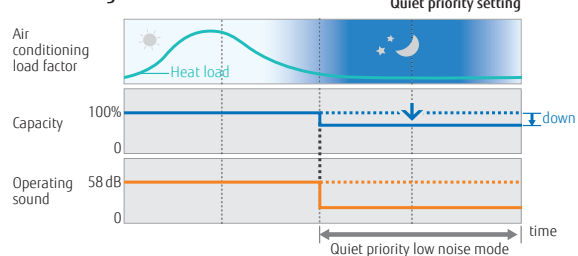
At Auto setting, the cooling/heating mode is automatically switched according to the set temperature and room temperature.



Quiet operation

Two low noise modes can be selected automatically by quiet priority setting and capacity priority setting depending on the indoor environment and outside temperature load. This feature can be controlled via outdoor unit external input and/or system controller.

Auto changeover



Design Flexibility

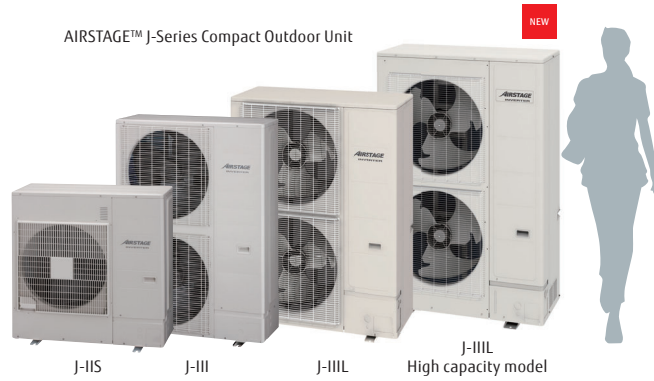


Top class Compact design

Compact outdoor unit can be attained at the top class in the industry by optimal airflow structure design. (Up to 16 HP)

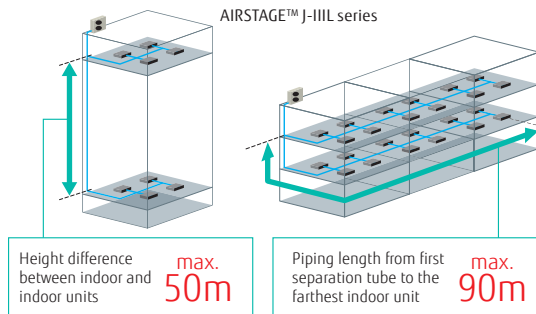


AIRSTAGE™ J-Series Compact Outdoor Unit



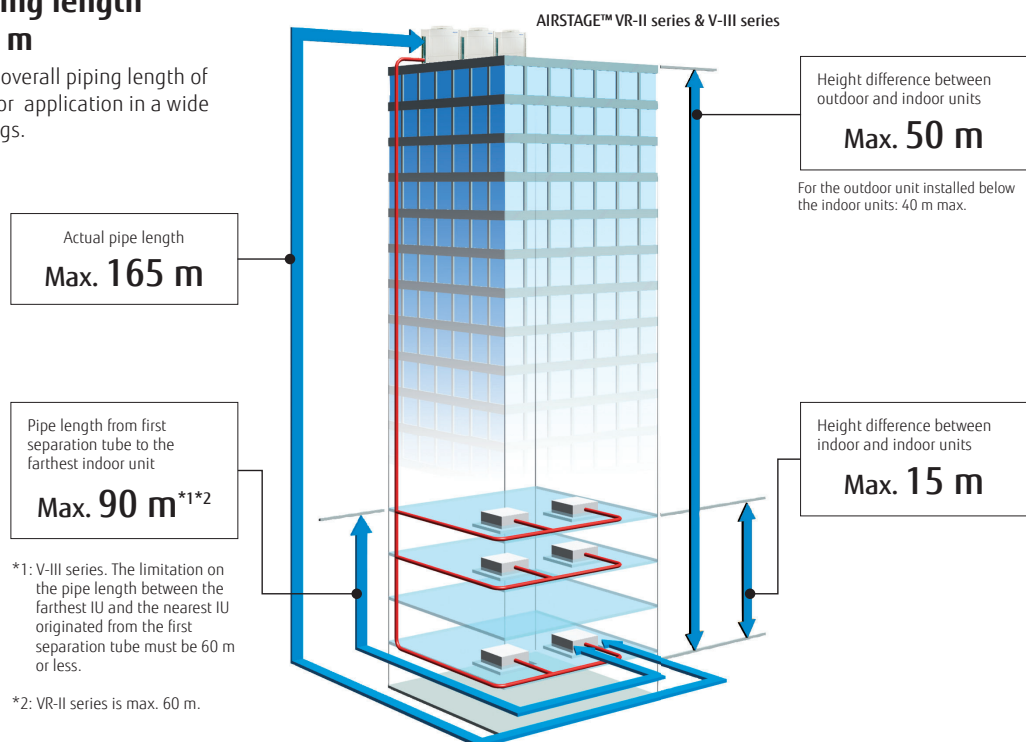
Long piping design

Piping design suitable for long, narrow office buildings with a difference in height and low-rise shops with depth (AIRSTAGE™ J-IIIL series)



Overall piping length Max. 1,000 m

World's top class overall piping length of 1,000 m allows for application in a wide variety of buildings.





High capacity connection

Series	Connectable indoor unit capacity range	Connectable indoor unit number
AIRSTAGE™ J-III series 14/16 HP Heat Pump type	50% to 150%* ³	up to 40
AIRSTAGE™ J-III series 8/10/12 HP Heat Pump type	50% to 150%* ³	up to 30
AIRSTAGE™ J-III series Heat Pump type	50% to 150%* ³	up to 13
AIRSTAGE™ J-IIS series Heat Pump type	50%* ⁴ to 130%* ³	up to 8
AIRSTAGE™ VR-II series Heat Recovery Modular type	50% to 150%* ³	up to 64
AIRSTAGE™ V-III series Heat Pump Modular type	50% to 150%* ⁵	up to 64

*3: Conditions of maximum connectable indoor unit capacity ratio is as the chart above.

*4: Only 4 HP is 46%

*5: Max. capacities in the combinations including the 18 HP outdoor unit fall below 150%.



Designed for low refrigerant charge

Optimal design of indoor unit and outdoor unit reduces the refrigerant volume and special support is not required even when installing in a small room of about 15 m².



Various optional parts

- Intake fresh air with our Fresh Air Intake kit
- Comfortable temperature control with a remote sensor
- Operation by linking up to ventilation equipment and air handling unit with the DX-Kit



Fresh Air Intake kit



EEV unit



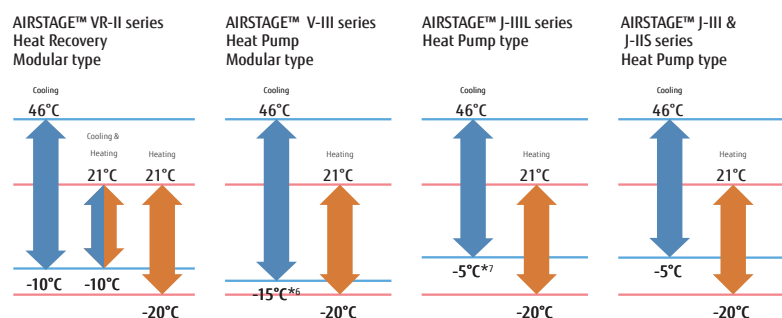
Control unit

Wide operating range

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

*6: Note: When a multiple outdoor unit connection is used, operating range is from -5°C to 46°C in cooling.

*7: Only when all indoor units are 5.6 kW or more in the system, the operation range is -15 to 46°C.



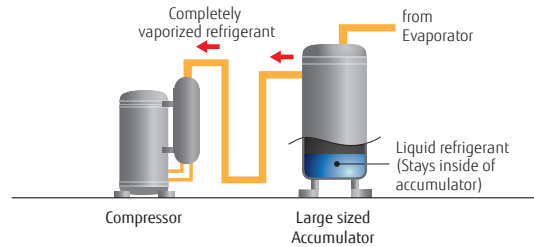
High Reliability



Liquid flow back protection

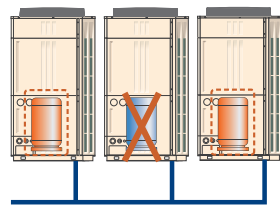
By adopting a large sized accumulator, not completely vapourised refrigerant stays inside of the accumulator to ensure no liquid refrigerant is being fed into the compressor.

Liquid flow back protection



Backup operation*1

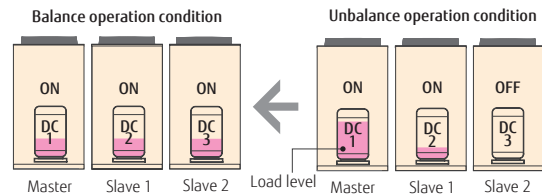
If one compressor fails, backup operation will be performed by the remaining compressors.*2



*1: Not available for AIRSTAGE™ J-III and J-IIS series *2: Note: Backup operation may not be possible depending on the trouble state.

Advanced refrigerant control*1

Innovative compressor control logic has been introduced in order to balance the refrigerant mass flow rate of each outdoor unit by controlling the inverter speed.

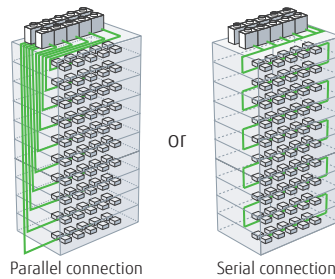


Easy Installation



Simple wiring work

Installation of the wiring systems is made easier as the communication wiring can be installed continuously between the indoor, outdoor and RB units.

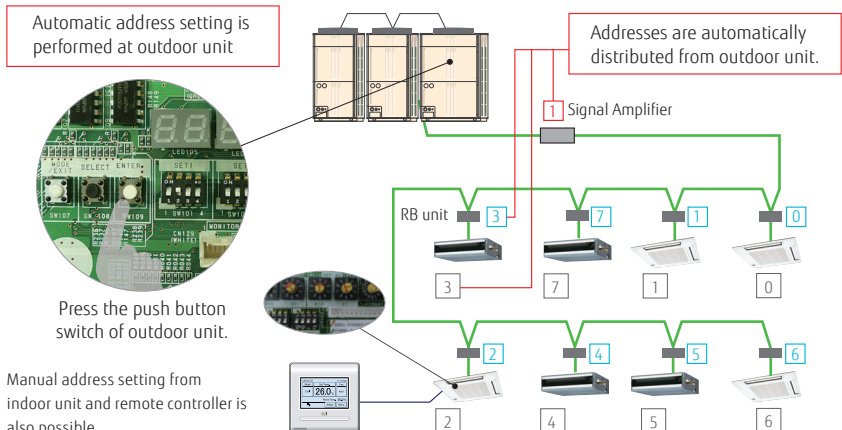


Up to maximum length
3,600 m

Note: Serial connection can't use the automatic address setting in a multiple refrigerant system.

Automatic address setting

The address of the indoor unit, RB unit and signal amplifier through the automatic function setting on the outdoor unit PCB.



Manual address setting from indoor unit and remote controller is also possible.



Easy Service & Maintenance

Design for easy maintenance

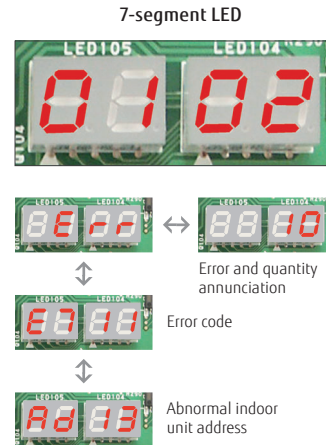
Easy to read 7-segment LED :

Confirm detailed operational and error status without using any specific equipment.

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

Movable PCB panel:

Easier for maintenance work behind the PCB

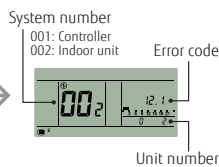


- Error status can be checked easily by outdoor unit display

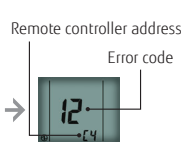
Error status can be checked easily via the indoor unit wired controller

An error code is displayed on a liquid crystal screen.

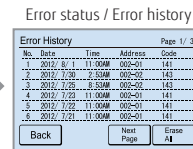
Wired Remote Controller



Simple Remote Controller



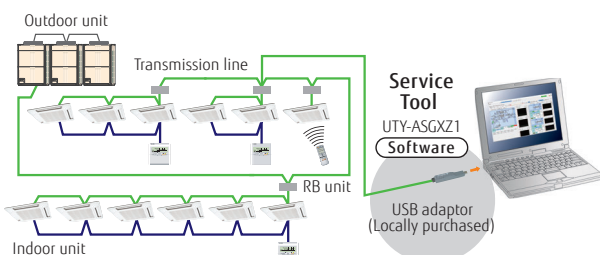
Wired Remote Controller (Touch panel)



Error diagnosis by Service Tool

Connection to Service Tool

- Detail operation status and recent error history can be checked and analyzed by using the Service Tool.
- Last 5 min. operation memory can be also be recorded.



Remote monitoring

The Web Monitoring system allows you to view system operation anytime over the internet, ensuring issue free operation.

The operating VRF network system in the building can be monitored real time over the Internet.

