FUJITSU
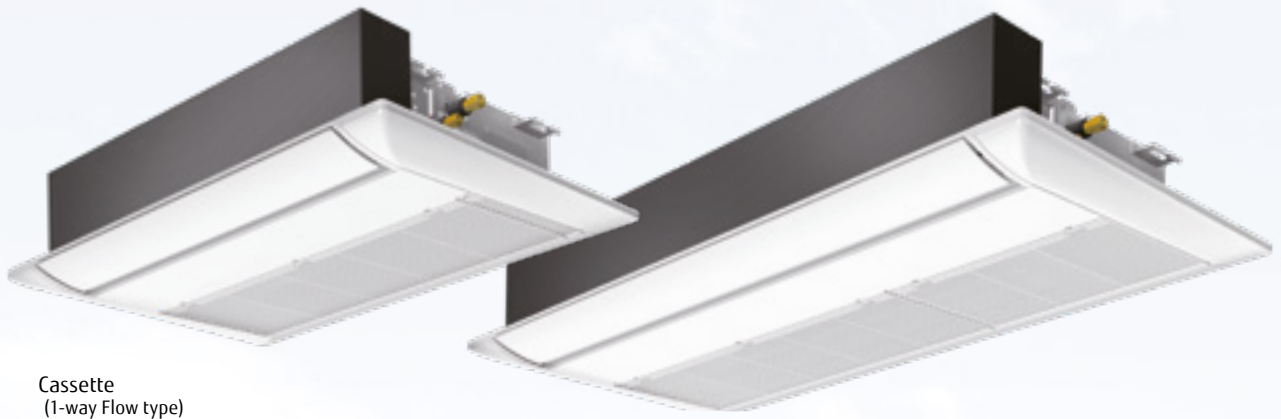
Variable Refrigerant Flow System

AIRSTAGE

HEAT PUMP & HEAT RECOVERY
VRF CATALOGUE

FUJITSU GENERAL NEW ZEALAND

Cassette
(1-way Flow type)

DESIGNED for COMFORT

AIRSTAGE™ VR-IV
8 HP model

AIRSTAGE™ J-IVL
14 / 16 HP model

The AIRSTAGE™ Series provides high energy savings, comfort, and reliability to the end user.

Design, installation, and servicing are highly flexible and simple. We offer an abundant VRF System lineup to match regional and local customer needs with a range of combinations from low to high capacity.

For **Residential & Light Commercial**

AIRSTAGE *J-IVL*

Heat Pump type
8 HP - 12 HP 3 Models / 3 phase
14 HP - 16 HP 2 Models / 3 phase

AIRSTAGE *J-IV*

Heat Pump type
4 HP - 6 HP 3 Models / Single phase

AIRSTAGE *J-IVS*

Heat Pump type
4 HP - 6 HP 3 Models / Single phase

For **Commercial**

AIRSTAGE *VR-IV*

Heat Recovery Modular type
for simultaneous heating and cooling operation
8HP - 48HP 33 models
• Space saving combinations: 8 HP to 48HP / 21 models
• Energy efficiency combinations: 16HP to 42HP / 12 models

AIRSTAGE *V-III*

Heat Pump Modular type
8HP - 48HP 33 models
• Space saving combinations:
  8 HP to 48HP / 21 models
• Energy efficiency combinations:
  16HP to 42HP / 12 models

Contents

FLEXIBLE SOLUTIONS

Fujitsu General has been developing and manufacturing high quality and energy efficient products for more than 35 years. Using the latest Japanese technology and state of the art expertise, our products have been designed in accordance with our aim of creating the most comfortable environment possible, regardless of the project type or design.

AIRSTAGE™ Series

THE TOTAL SOLUTION

- Consistent Reliability
- Comfort Maximised
- Easy Installation, Service and Maintenance
- Design Flexibility
- High Energy Efficiency

Property Suitability

RESIDENTIAL & LIGHT COMMERCIAL

Fujitsu General offers a diverse range of air conditioning systems focused on residential and small sized buildings.

COMMERCIAL

Fujitsu General provides single and modular type VRF systems with efficient operation, comfort, design flexibility, easy installation and consistent reliability.

AIRSTAGE

SMALL OFFICES

Fujitsu General provides a wide range of solutions designed to meet the needs of a small building. With energy saving features, low noise design and centralised control, this range is sure to meet your light commercial projects requirements.

AIRSTAGE J-IVL

Energy saving solutions suitable for meeting rooms and business private offices

Energy saving features can be utilised with the human sensor feature and external input / output kit. This means unecessary power consumption will be prevented when no movement is detected in the room.

Compact outdoor unit with low noise

This compact outdoor unit achieves significant space saving, meaning you can install it on a rooftop or in a plant area. Low noise operation is possible at night by utilising low noise mode.
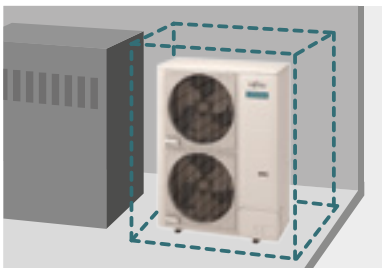
J-IVL Series

Up to 16 HP using the compact outdoor unit

The J-IVL Series is suitable for the buildings with multiple small rooms. Maximum 30 indoor units can be connected.

Even airflow throughout your space

The Circular Airflow Cassette creates a consistent and even temperature via multi-directional airflow functionality.
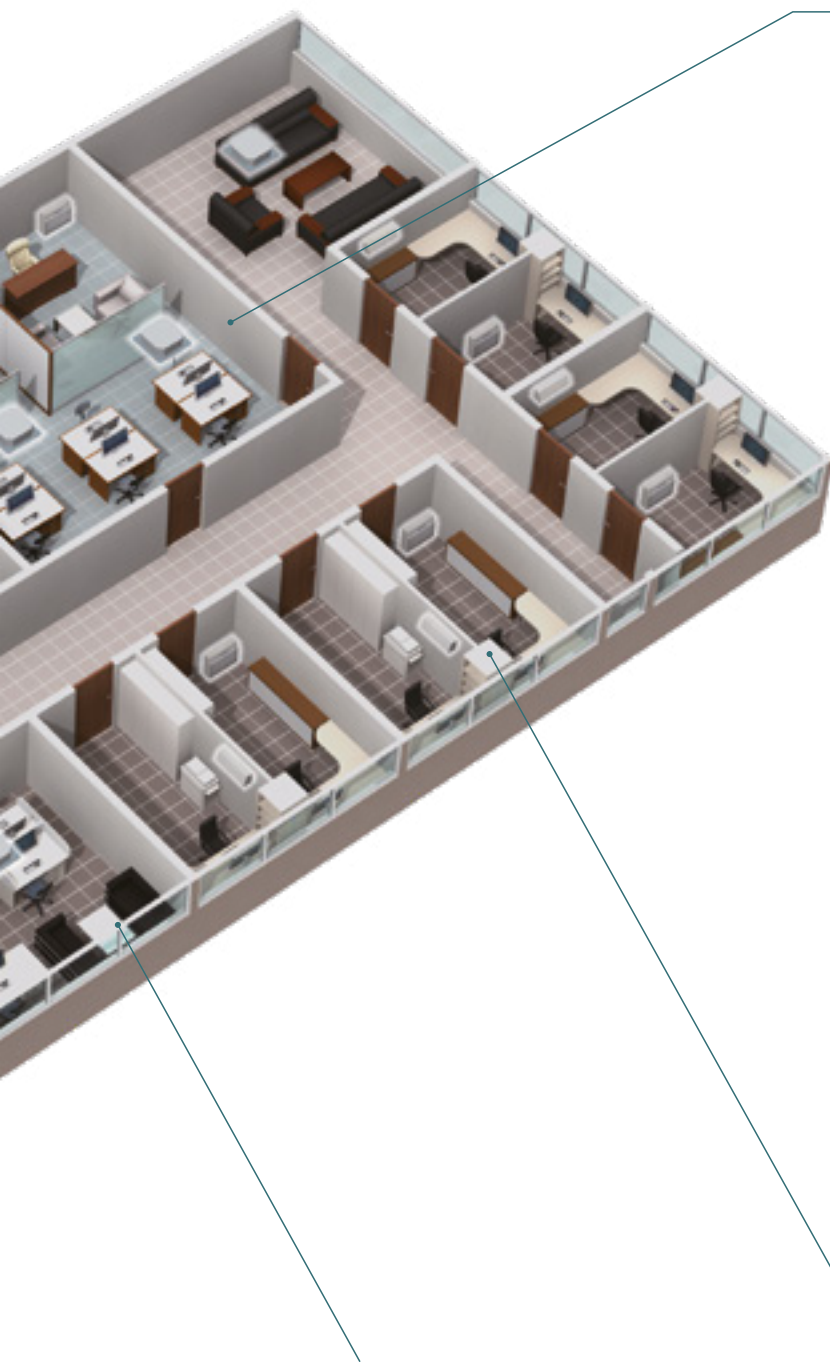

Each louvre can be set individually by the controller* to prevent people from being exposed to direct airflow.

Energy saving operation commences when there are no occupants by linking up with the human sensor option. The unit will adjust its operation depending on the presence of occupants within a given room. The human sensor detects movement and activates or deactivates energy saving modes accordingly.

3.2m

8.8m
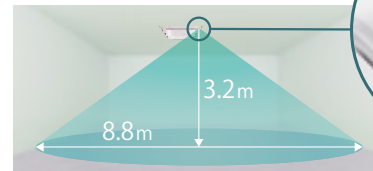
Human sensor
(option)

Indoor units

Extensive range of low capacity indoor units to suit small rooms or spaces.

Centralised control of both air conditioning and third party equipment

It is possible to perform centralised control of third party equipment in addition to air conditioners. This is useful in allowing whole building energy saving management and control.

System Controller UTY-APGXZ1

*Touch panel wired RC (UTY-RNRYT5) and
 Central remote controller(UTY-DCGYZ2) only

VRF indoor units			
Wall Mounted	Floor	Duct	Cassette

Third party equipment		
Lightning	Ventilation	Energy Recovery Ventilator

AIRSTAGE

SHOPS, RESTAURANTS
& MIXED USE DEVELOPMENTS

J-IVS Series

Purpose built and tenant friendly solutions for small commercial complexes.
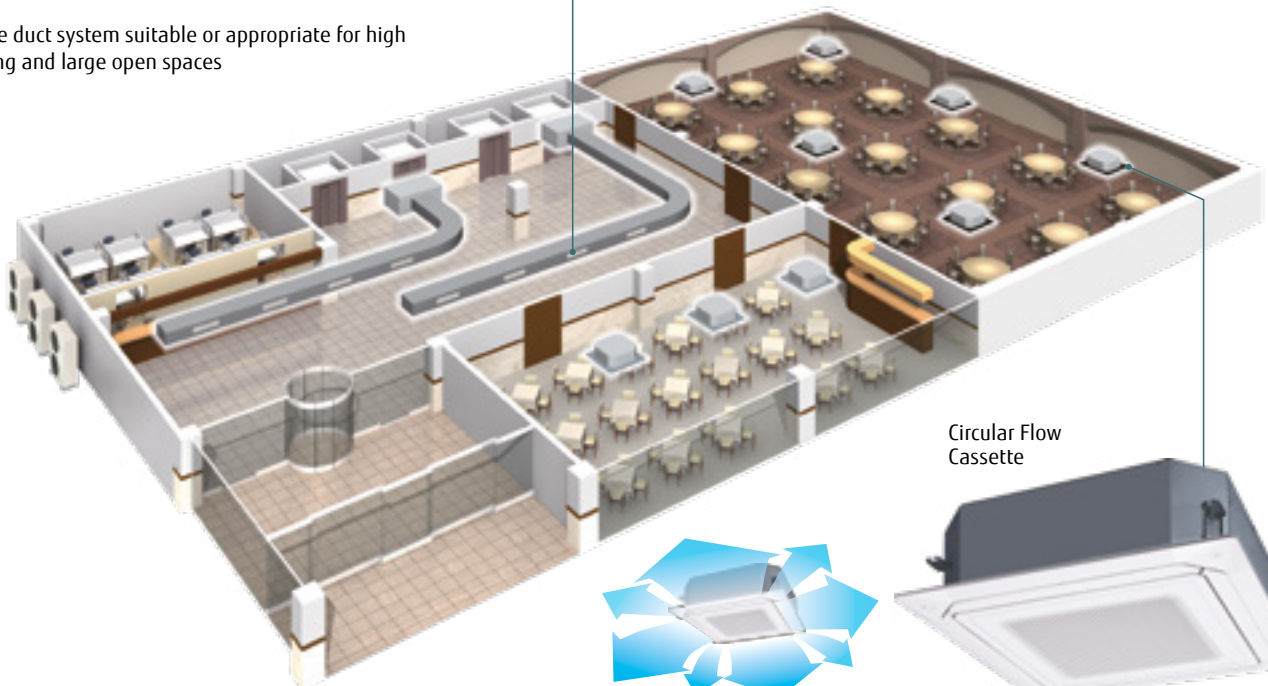
High Static Pressure Duct

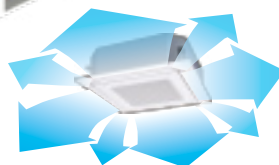## Air conditioning options for open areas

Large duct system suitable or appropriate for high ceiling and large open spaces

AIRSTAGE

Circular Flow Cassette

RESTAURANT

Uniform air distribution for large areas

Air distribution design allows for circular airflow to spread to every corner of the room.

COMPLEX BUILDING

Centralised control

Temperature management of each room and one week operation control management / settings are supported easily. This controller makes energy saving management possible with upper / lower temperature limit settings and operation prohibited settings.

Central Remote Controller
UTY-DCGYZ2

LAN

PC

Wireless LAN

Fixed IP, IP forwarding and open Port required

INTERNET

Router

Tablet PC

Smart phone

Control and monitoring

The controller allows high visibility and easy operation as all settings are accessible from the main screen. The controller can be monitored remotely using a tablet or smart phone through a web browser to show detailed information of an error status and the ability to view key sensor values for troubleshooting.
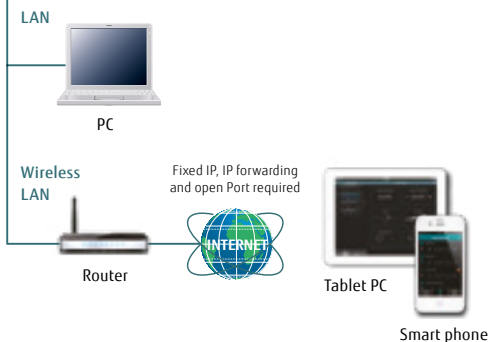
SHOPS

Capable of cooling in low ambient conditions

Low outside air temperature cooling operation is necessary in winter in stores with a lot of heat inside. Our air conditioning systems allow flexibility supporting cooling operation at -15°C.

0-150 Pa

Medium Static Pressure Duct

AIRSTAGE

HOTELS & APARTMENTS

Fujitsu General provides energy saving air conditioning systems offering flexible installation and cutting edge design solutions for hotels and apartments that also take into account comfort, efficiency, external appearance, and system safety features.

AIRSTAGE VR-IV

Simultaneous cooling and heating

The VR-IV heat recovery series functionality allows simultaneous cooling and heating operation, with a maximum outdoor capacity of 48HP.

Smart and cutting edge design. Extensive lineup from 8 HP to 48 HP in 2 HP increments. Connectable indoor unit capacity ratio of 50 to 150%.

8HP-48HP 33 models
• Space saving combinations: 8HP to 48HP / 21 models
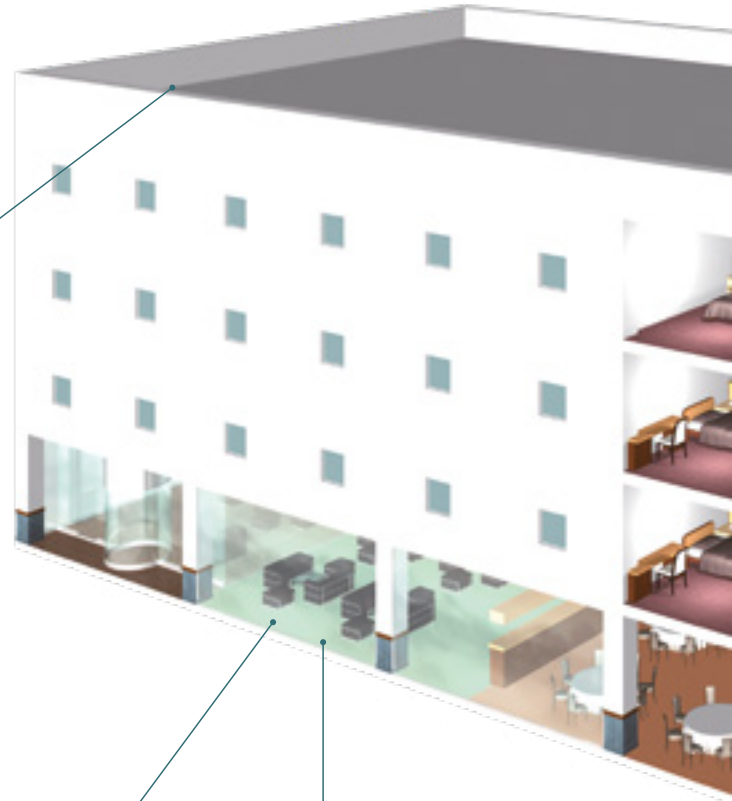• Energy efficiency combinations: 16HP to 42HP / 12 models

Large area air conditioning for reception and lobby areas

High Static Pressure Duct suitable for large spaces with high ceilings

High Static
Pressure Duct

Ventilation support

Outdoor-air Processing Units connect with the VRF System to meet ventilation requirements.
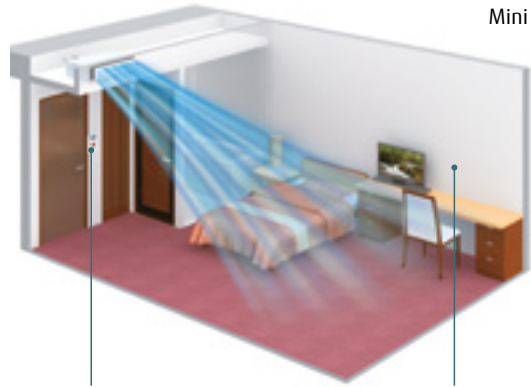
Outdoor-air
Processing Unit

FUJITSU

Guest room air conditioning delivering excellent comfort, energy efficiency and easy installation

Space saving

Mini duct type with 198mm height and 450mm depth. This can be installed in narrow ceiling spaces.
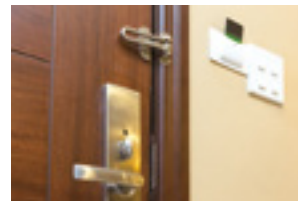
Mini Duct

Room card switch

Using the room card prevents guests from forgetting to switch off the air conditioner when departing their room.

Use of an external connection kit and a third party supplied room card switch.

Comfortable airflow

The optional Auto Louvre Grille Kit achieves comfortable airflow by adjusting the direction of airflow.

Simple Remote Controller with sophisticated design

Centralised control

Air conditioning in shared spaces such as waiting areas and hallways can be controlled centrally. Temperature and operating conditions can be managed without manual adjustment by guests.

System Controller

Cassette
(1-way Flow type)
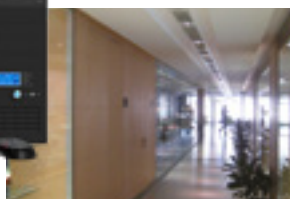
Compact chassis size and Low noise operation

Their compact sizes make it easy to install them in a variety of commercial locations and environments. They produce little noise during operation, which makes them an ideal choice for use in hotel rooms.

AIRSTAGE

LARGE BUILDINGS

Fujitsu General provides modular VRF systems that are highly efficient, reliable and offer flexible installation for large or high rise buildings.

AIRSTAGE V-III

Diverse lineup suitable to match your operating environment

The VRF V-III Series lineup is designed to meet various needs with energy efficient models. These units are compatible with high outdoor air ambient temperatures.

Heat Pump Modular type for heating or cooling operation

8 HP - 48 HP 33 Models
• Space saving combinations: 8 HP to 48 HP / 21 models
• Energy efficiency combinations: 16 HP to 42 HP / 12 models

Difference in height Up to 110 m

The height difference between the outdoor unit and the indoor unit is usually 50 m for the V-III Series, but by installing the pressure sensor kit it is possible to expand it to 110 m.

(*This product can only be used connected to the V-III Series.)

Pressure Sensor Kit

### Centralised control of both air conditioning and lighting*

It is possible to centrally control lighting and ventilation equipment in addition to air conditioners. This is useful in allowing whole building energy saving management and control.

System Controller
(UTY-APGXZ1)

System Controller Lite
(UTY-ALGXZ1 & UTY-PLGXX2)

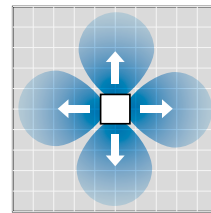*Requires a third party MODBUS DIDO device.
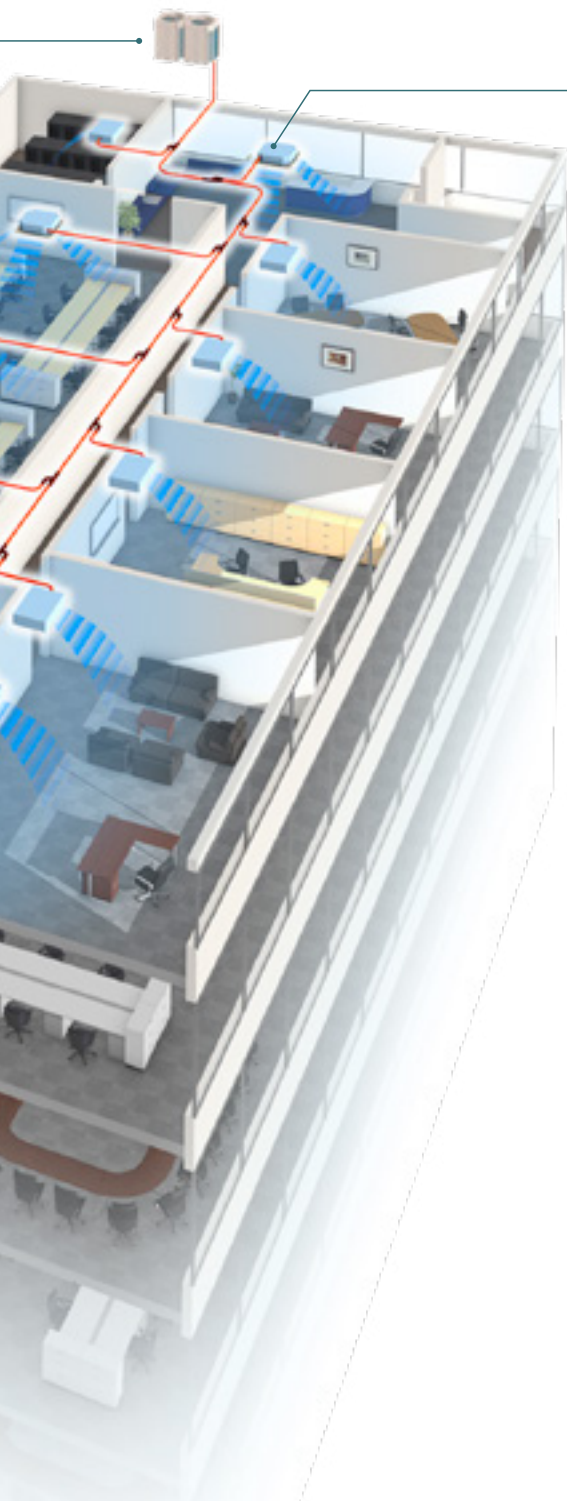
4-way Flow Cassette

Improved airflow distribution

The unique design of the louvres and added space between the chassis and ceiling maximises airflow distribution within the room.

Bottom view

Front part   Ceiling

Rear part
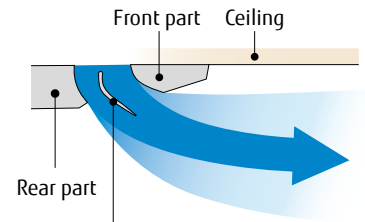
Round louvre

High ceiling mode

This cassette can be installed up to a ceiling height of 4.2m (36/45/54).

1m

2m

Standard mode
3.2m

3m

High ceiling mode
4.2m

4m
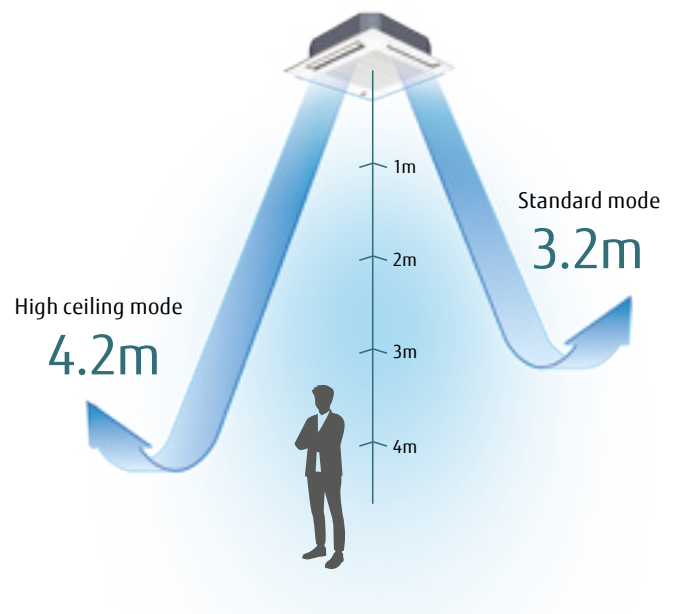
BMS integration

Major protocols including Modbus, BACnet, KNX and LonWorks are supported allowing Fujitsu AIRSTAGE™ equipment to be easily integrated using one of our gateway options.

KNX®   LONWORKS®

Modbus   BACnet
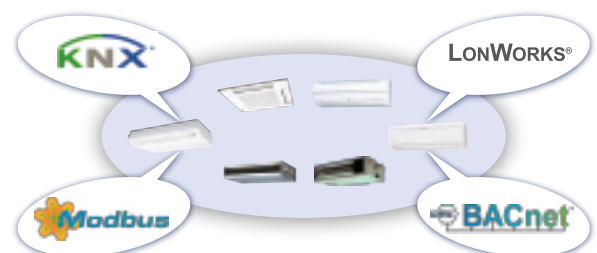
VRF indoor units		
Under Ceiling	Cassette	Duct

Facilities		
Lightning	Ventilation	Energy Recovery Ventilator

AIRSTAGE

AIRSTAGE™
CORE TECHNOLOGY

HIGH ENERGY EFFICIENCY

MAXIMISED COMFORT

CONSISTENT RELIABILITY

DESIGN FLEXIBILITY

EASY INSTALLATION

EASY SERVICE & MAINTENANCE

AIRSTAGE

HIGH ENERGY EFFICIENCY

Energy Efficiency Comparison

Operational efficiency has improved significantly through the new DC twin rotary compressor, inverter technology and large heat exchanger.

New model
Previous model
EER   COP

+12%
2.98 3.35
+19%
3.15 3.82

Heat Recovery (10HP)
VR-IV Series

+35%
3.2 4.31
+31%
3.7 4.84

Heat Pump (8HP)
V-III Series

+8%
3.45 3.71
+7%
3.95 4.23

Heat Pump (6HP)
J-IV Series

FUJITSU
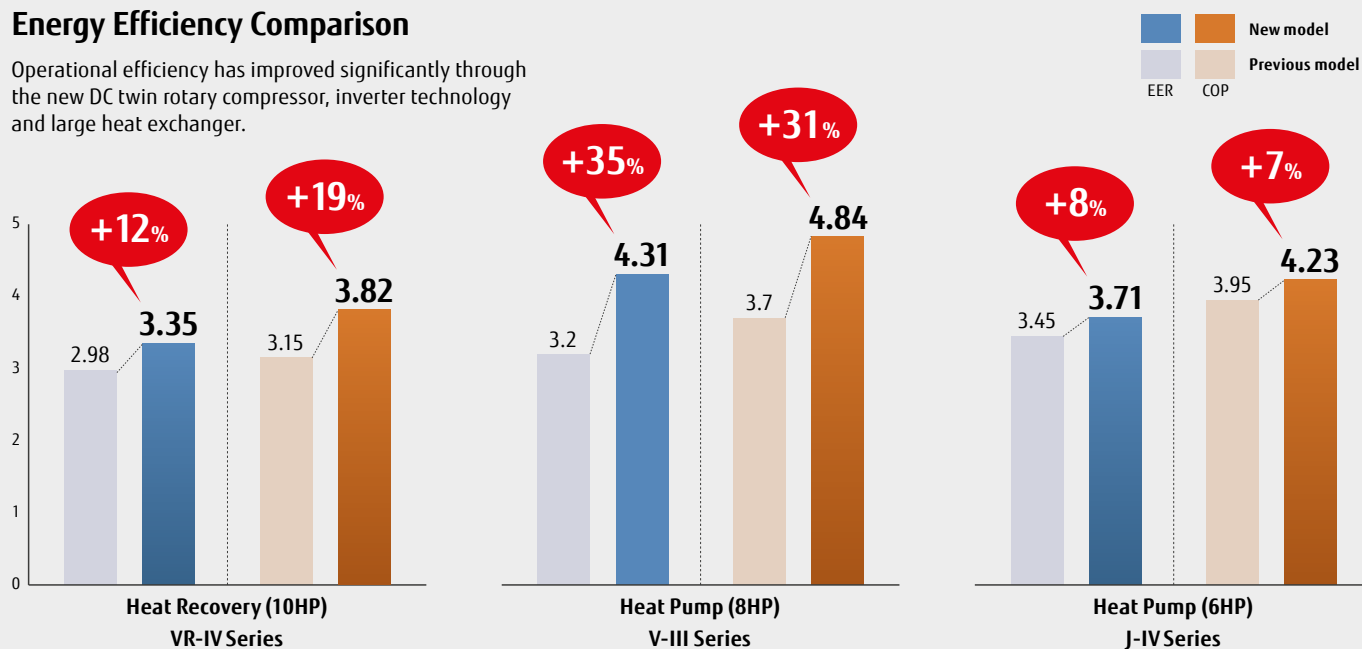
Performance and Control

Room temperature set point limitation

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

Auto-off timer

The new wired remote controller is equipped with an OFF timer function that automatically stops the units operation when a fixed time has elapsed from the start of operation. The schedule for the auto off timer can be programmed.
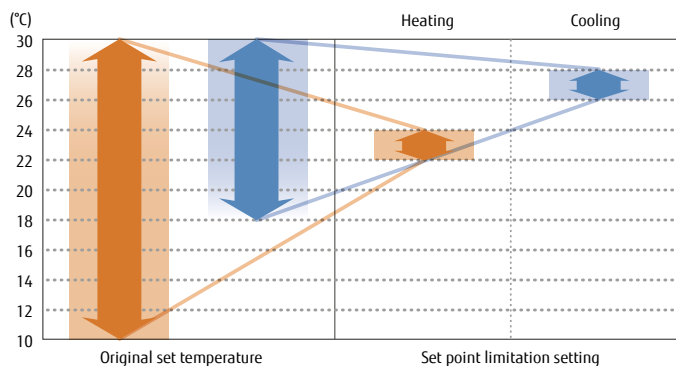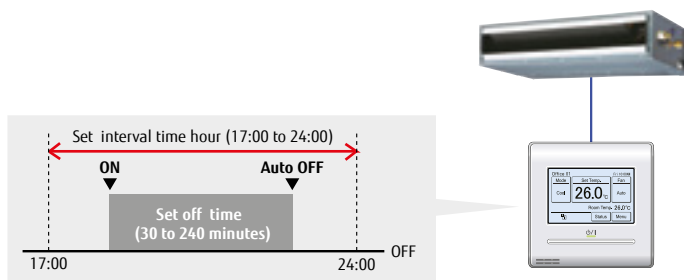

Energy saving management

A variety of energy saving operations can be set and managed depending on the season, weather and time period using the System Controller and a third party watt hour meter.

Energy management software(Option)

System Controller
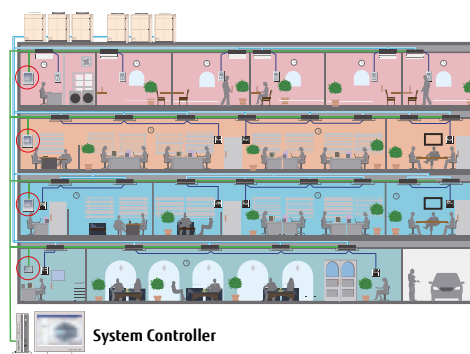
Operational capacity

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

AIRSTAGE

MAXIMISED COMFORT

New intelligent refrigerant control*

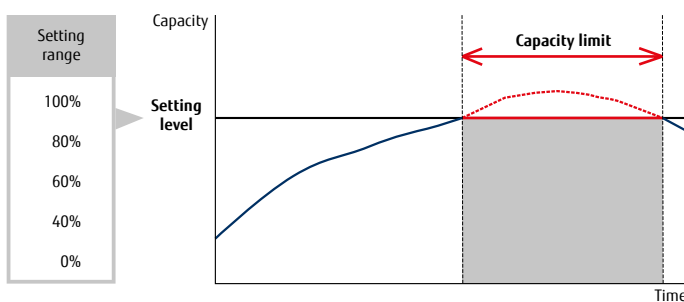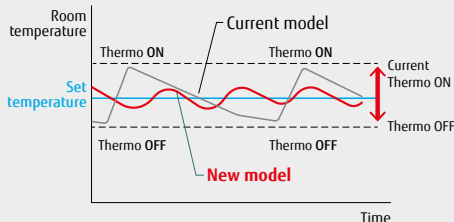Fujitsu General proposes new outdoor unit which includes new refrigerant control. New refrigerant control can be operated with suitable control corresponding to heat load of the room and can offer a more comfortable space. New refrigerant control can also provide more energy savings.

Room temperature

Current model

Thermo **ON**   Thermo **ON**

Set temperature

Current Thermo ON

Thermo **OFF**   Thermo **OFF**

Thermo OFF

New model

Time

Current refrigerant control

Thermostat-ON/OFF occurs frequently.
→ The comfort is not good since room temperature often changes. Energy saving is not good since compressor is repeated starting and stopping frequently.

New refrigerant control

Room temperature is maintained as thermostat ON/OFF is reduced achieving improved refrigerant control. Energy saving is improved as the compressor continues operation for a longer time than Current control.
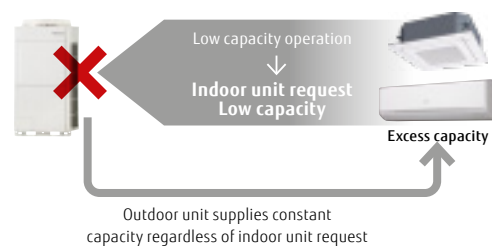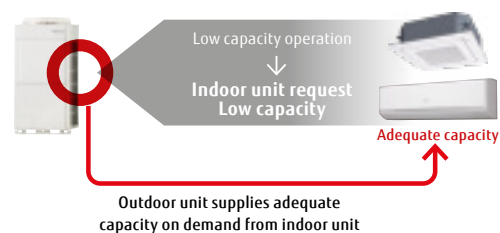
* Available for AIRSTAGE VR-IV, J-IVL, J-IV and J-IVS

Current model

Low capacity operation
↓
**Indoor unit request
Low capacity**

Excess capacity

Outdoor unit supplies constant capacity regardless of indoor unit request

New model

Low capacity operation
↓
**Indoor unit request
Low capacity**

Adequate capacity

Outdoor unit supplies adequate capacity on demand from indoor unit

* The improvement by the control and the actual sine wave varies by the combination of the indoor unit and system operating condition.

FUJITSU

Precise refrigerant flow control

Precise and smooth refrigerant flow control is achieved by using the DC Inverter control in conjunction with an individual indoor unit electronic expansion valve. This allows the set temperature to be controlled ±0.5℃.

High
Set temp.
Hot
Hot
Cold
Low
± 0.5℃

Reach the set temperature quickly

Thermal room temperature changes
*Simulation in heating operation.

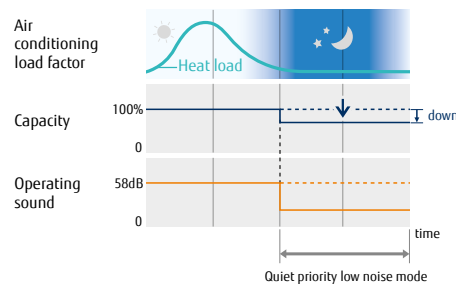Comfortable operation is achieved due to a small variation in room temperature.
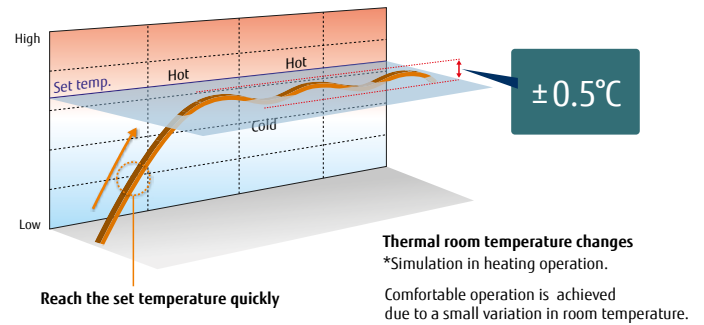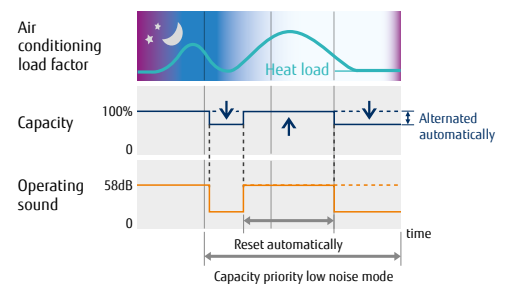
Quiet operation

Low noise mode

Two low noise modes can be selected automatically through the 'quiet priority setting' and 'capacity priority setting' depending on the noise or capacity requirements. This feature can be controlled via an outdoor unit external input and / or System Controller.
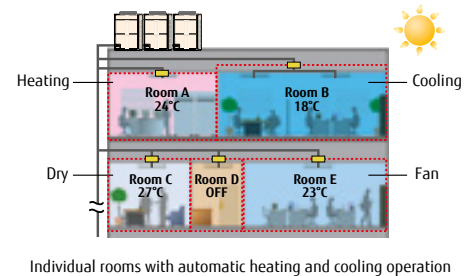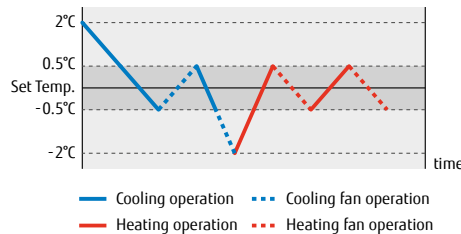
Quiet priority setting

Air conditioning load factor
Heat load
Capacity 100% 0 down
Operating sound 58dB 0
time
Quiet priority low noise mode

Capacity priority setting

Air conditioning load factor
Heat load
Capacity 100% 0 Alternated automatically
Operating sound 58dB 0
Reset automatically
time
Capacity priority low noise mode

Auto change over function

When the auto setting is selected, the unit automatically switches between cooling and heating modes according to the set temperature and room temperature.

2℃
0.5℃
Set Temp.
-0.5℃
-2℃
time

—— Cooling operation   ---- Cooling fan operation
—— Heating operation   ---- Heating fan operation

Heating   Cooling
Room A 24℃   Room B 18℃
Dry   Fan
Room C 27℃   Room D OFF   Room E 23℃

Individual rooms with automatic heating and cooling operation

The auto change over setting allows for the product to easily switch between cooling and heating modes regardless of the operation mode of the other indoor units. This can be done via a specific indoor unit with a wired remote controller. This ensures comfortable operation all year round.

*: Only available on VR-IV

26.0

Switching to cooling and heating mode with a specific remote controller in the main room, etc.
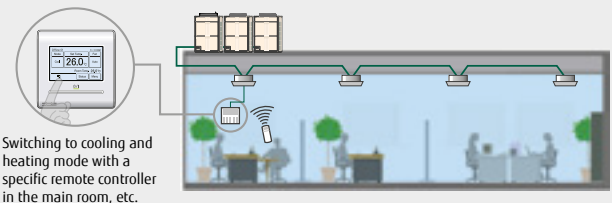
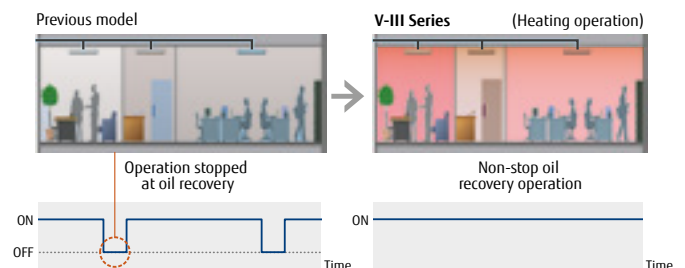## Non-stop oil recovery operation

A comfortable room temperature is maintained during the oil recovery mode as the unit continues to operate without stopping the cooling or heating operation.

*: Not available on the AIRSTAGE VR-IV

Previous model

Operation stopped at oil recovery
ON
OFF
Time

V-III Series   (Heating operation)
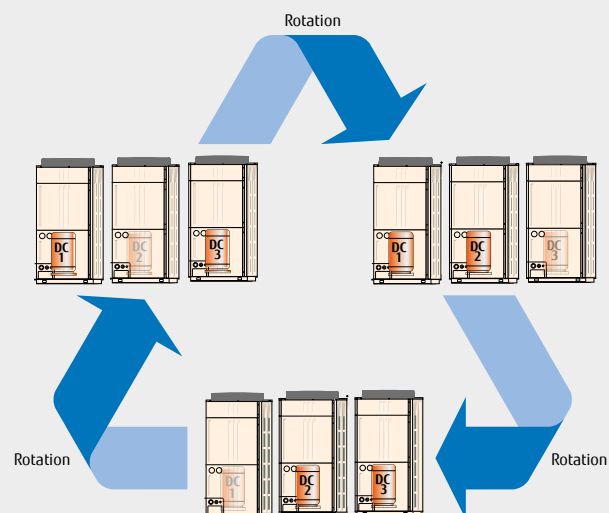
Non-stop oil recovery operation
ON
Time

AIRSTAGE

CONSISTENT RELIABILITY

Outdoor unit rotational operation

The compressor starting order is rotated so that the running time is shared.
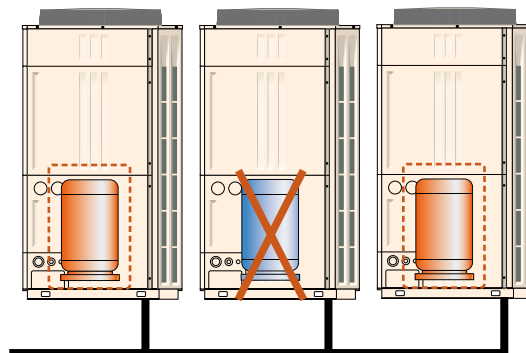
Rotation

Rotation

Rotation

Note: Rotational operation is alternated by the start / stop timing of the compressor.
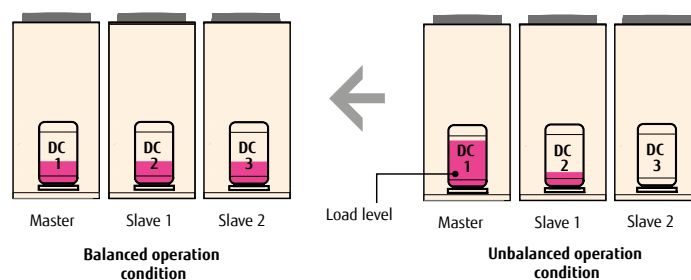
Backup operation

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

* Note: Backup operation may not be possible depending on the system error.

Advanced refrigerant control

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.

DC 1	DC 2	DC 3		DC 1	DC 2	DC 3
Master	Slave 1	Slave 2	Load level	Master	Slave 1	Slave 2

Balanced operation condition

Unbalanced operation condition

Liquid flow back protection

Through a larger accumulator, the non vapourised refrigerant stays within the accumulator to ensure no liquid refrigerant is being fed into the compressor.

Vapourised refrigerant

From evaporator

Compressor

Large sized accumulator

Liquid refrigerant (stays inside accumulator)
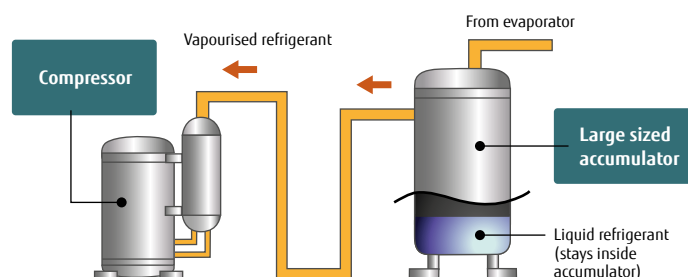
Adoption of blue fin heat exchanger

The corrosion resistance of the outdoor heat exchanger has been improved by the introduction of blue fin treatment.

Blue fin heat exchanger

Cobalt Blue protection

Standard chromate protection

Aluminium base material

Hydrophilic coating

AIRSTAGE
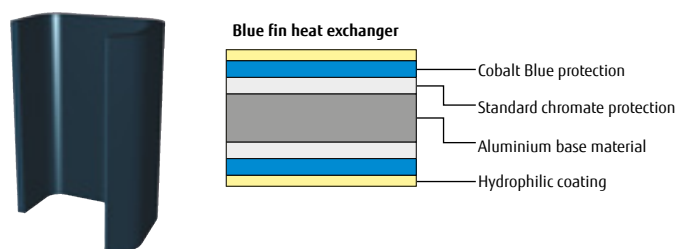
DESIGN FLEXIBILITY

Overall piping length 1,000m

Total pipe length
1,000m maximum

Actual pipe length
**165m**
(VR-IV, V-III)

Pipe length from first separation tube to the farthest indoor unit
60m maximum
(VR-IV)
90m* maximum
(V-III)

* The limitation on the pipe length between the farthest indoor unit and the nearest indoor unit originated from the first separation tube must be 60m or less.

Height difference between outdoor and indoor units
50m maximum

For the outdoor unit installed below the indoor units: 40m max. (VR-IV and V-III)

Height difference
110m* maximum

* It is only when using the optional Pressure sensor kit.
This product can be connected only to V-III Series.

Height difference between indoor units
15m maximum
(VR-IV and V-III)
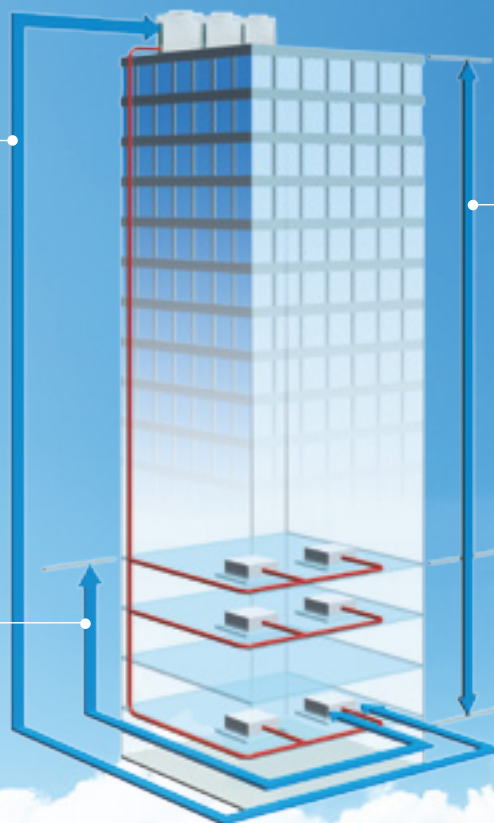
High static pressure

The outdoor unit can have a condenser hood easily connected with a static pressure up to 82Pa.
This allows outdoor units to be installed within plant rooms in high rise buildings.

**Powerful discharge
of air prevents a short-circuit.**
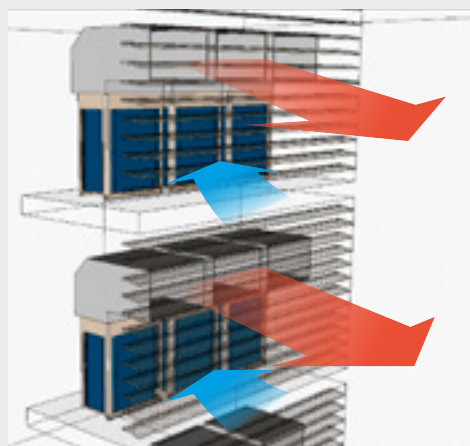
80 Pa (VR-IV)
82 Pa (V-III)

Previous model
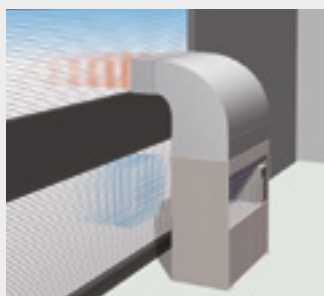
VR-IV, V-III

Large diameter fan and DC motor has been utilised allowing an external static pressure up to 82Pa. This is approximately 2.6 times greater than the previous model.

FUJITSU

High capacity connection

AIRSTAGE™ J-IVL Series
Heat Pump type

14HP-16HP

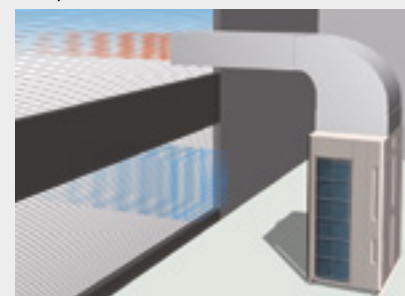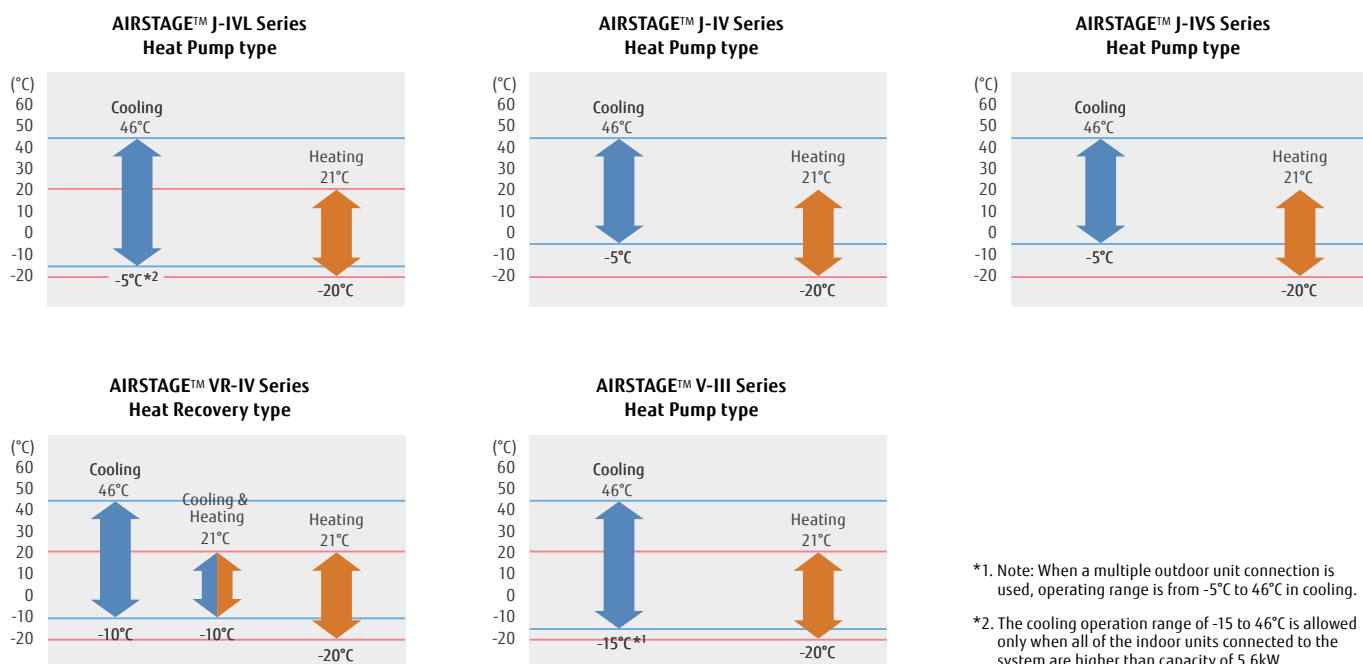| Connectable indoor unit capacity range |
|---|
| **50% to 150%** |

Connectable indoor unit number
up to 30

AIRSTAGE™ J-IVL Series
Heat Pump type

8HP-12HP

Connectable indoor unit capacity range
50% to 150%

Connectable indoor unit number
up to 22

AIRSTAGE™ J-IV Series
Heat Pump type

4HP-6HP

Connectable indoor unit capacity range
50% to 150%

Connectable indoor unit number
up to 10

AIRSTAGE™ J-IVS Series
Heat Pump type

4HP-6HP

Connectable indoor unit capacity range
50% to 130%

Connectable indoor unit number
up to 8

AIRSTAGE™ VR-IV Series
Heat Recovery type

8HP-48HP

Connectable indoor unit capacity range
50% to 150%

Connectable indoor unit number
up to 64

AIRSTAGE™ V-III Series
Heat Pump type

8HP-48HP

Connectable indoor unit capacity range
50% to 150%

Connectable indoor unit number
up to 64

Wide operating range

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

AIRSTAGE™ J-IVL Series
Heat Pump type

(°C)
Cooling 46°C
Heating 21°C
-5°C*2
-20°C

AIRSTAGE™ J-IV Series
Heat Pump type

(°C)
Cooling 46°C
Heating 21°C
-5°C
-20°C

AIRSTAGE™ J-IVS Series
Heat Pump type

(°C)
Cooling 46°C
Heating 21°C
-5°C
-20°C

AIRSTAGE™ VR-IV Series
Heat Recovery type

(°C)
Cooling 46°C
Cooling & Heating 21°C
Heating 21°C
-10°C
-10°C
-20°C

AIRSTAGE™ V-III Series
Heat Pump type

(°C)
Cooling 46°C
Heating 21°C
-15°C*1
-20°C

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

*2. The cooling operation range of -15 to 46°C is allowed only when all of the indoor units connected to the system are higher than capacity of 5.6kW.
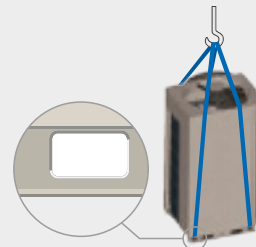
AIRSTAGE

EASY INSTALLATION

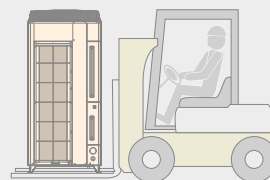## Easily transported

Easily craned using lifting belt hooks

Design of outdoor unit allows for lifting straps to be used.

Transporting by forklift
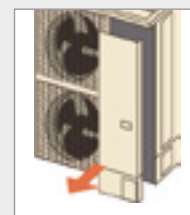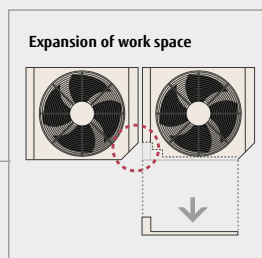
Transport with forklift is possible.

Can be transported in a small elevator

Easy access

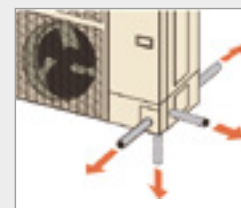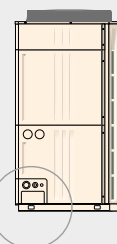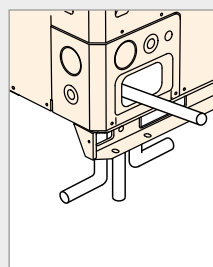By adopting an L-Shape front panel that can be removed, the work space for installation and service has been significantly improved by this new design.

Expansion of work space

Removable front panel allows easy installation

Flexible piping connection

Piping and wiring are available to the front, rear, bottom and side.

Flexible installation by 4 way pipe direction (J-IVL is 3 way pipe direction.)

Simple wiring

Installation of the wiring is made easier as the communication wiring can be installed in a series or parallel configuration between the indoor, outdoor and RB units.

Parallel connection
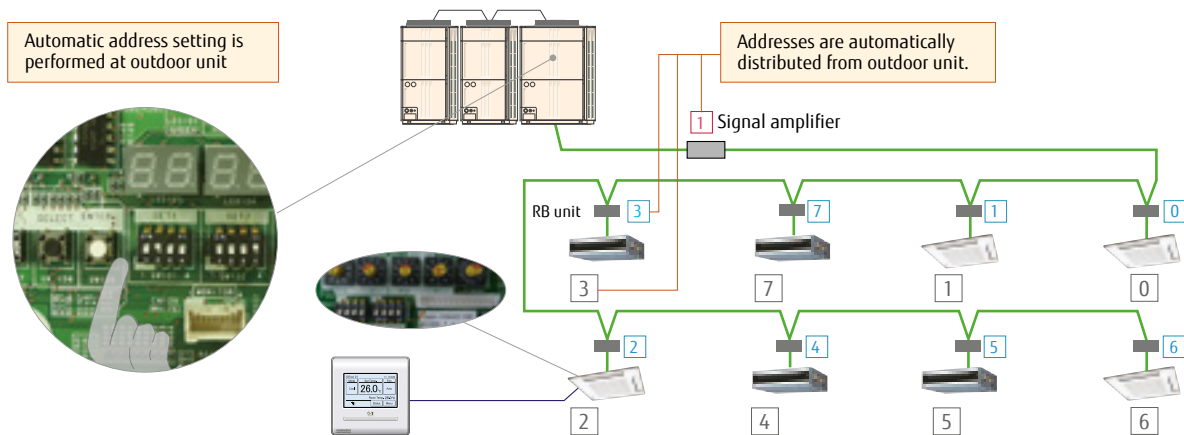
Serial connection
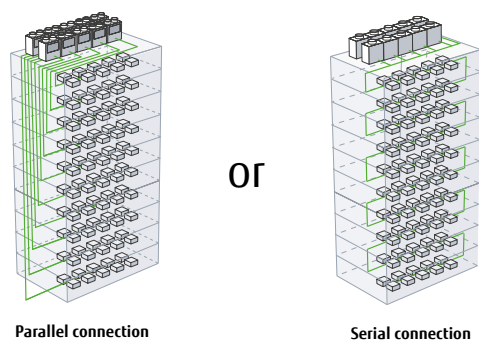
Easy evacuation using vacuum mode function

The vacuum mode function enables all expansion valves of the indoor units to be fully opened, making it easy to evacuate all the air inside pipe lines and indoor units.

← Air   ← Air

Outdoor unit   Air →   Vacuum pump
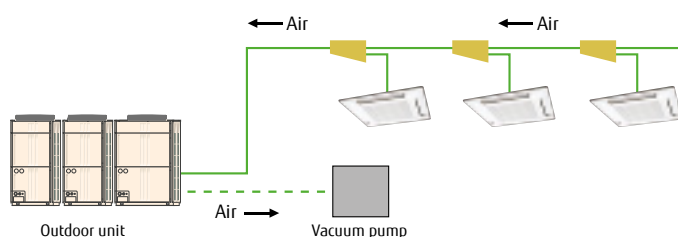
Automatic address setting*

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

Automatic address setting is performed at outdoor unit

Addresses are automatically distributed from outdoor unit.

1 Signal amplifier

RB unit   3   7   1   0

3   7   1   0

2   4   5   6

26.0

2   4   5   6

*Specific wiring method is required.

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

Easy commissioning using the Service Tool

The service tool can be used to check system characteristics including the refrigerant temperature, pressure and the operating status of the electronic expansion valves, making it easy to determine whether the units are functioning correctly.

AIRSTAGE

EASY SERVICE & MAINTENANCE

Easy maintenance design

Self diagnosis can be performed using the LED display which makes it easy to check function setting status, refrigerant temperature, pressure, compressor operation time and other factors.
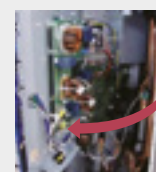
Easy to read 7 segment LED : Provides detailed operational and error status without using any specific equipment.
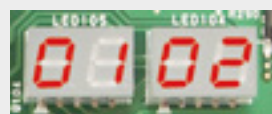
7 segment LED

- Operation mode status
- Discharge temperature / pressure status
- Compressor operation indication
- Address / type / number of outdoor units

Movable PCB panel
Easier for maintenance work behind the PCB

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
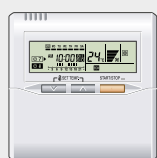
Faulty unit number
(Remote controller address)

Error code

Simple Remote Controller

Remote controller address

Error code

Wired Remote Controller (Touch panel)

Error status / Error history

Error status can be cheked easily by outdoor unit display

Error information

Error code

Abnormal indoor unit address

FUJITSU
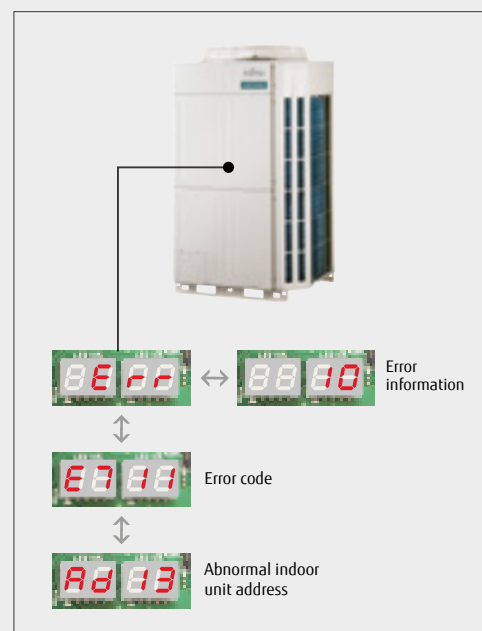
Error diagnosis using the Service Tool

- Detail operation status and recent error history can be checked and analysed by using the Service Tool.

Outdoor unit

Transmission line

Indoor unit

Service Tool
UTY-ASGXZ1
Software

USB adaptor
(Locally purchased)
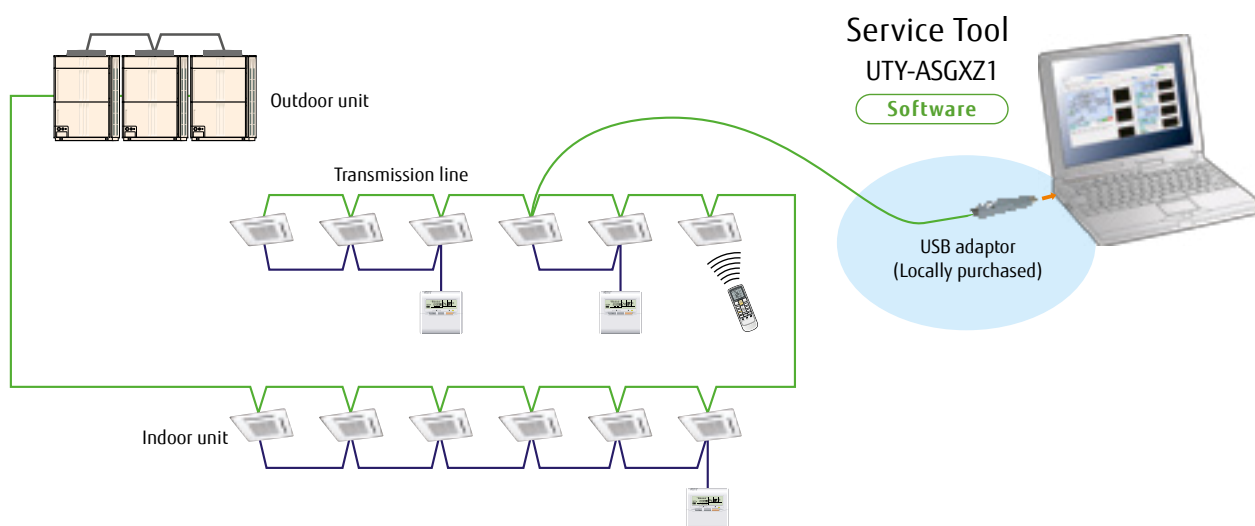
Remote monitoring

The Web Monitoring system allows you to view system operation anytime over the internet in real time.

Monitoring side
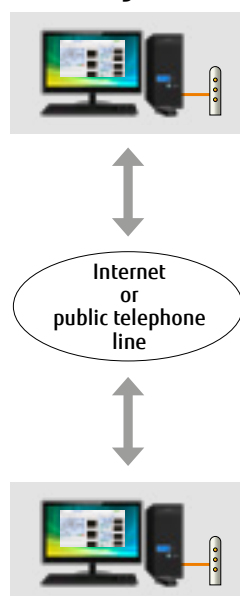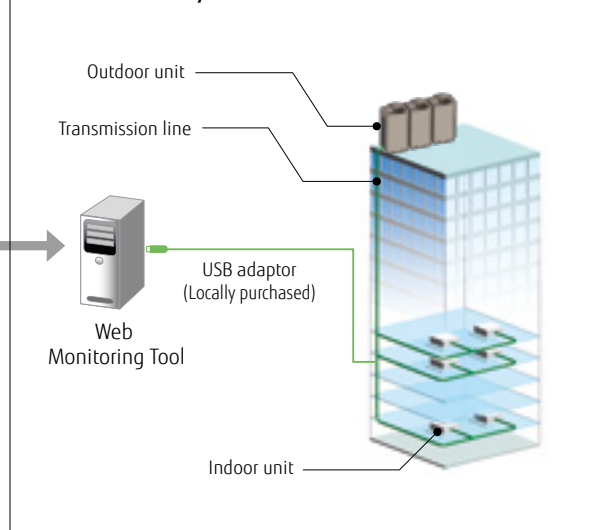
Internet
or
public telephone
line

VRF Network system side

Outdoor unit

Transmission line

Web
Monitoring Tool

USB adaptor
(Locally purchased)

Indoor unit

AIRSTAGE

AIRSTAGE™
SERIES

The 5 series of the AIRSTAGE™ range has a total of 78 outdoor models to meet the project scope or building size requirements

The AIRSTAGE™ Series outdoor units have been developed with structural designs and advanced inverter technology to provide higher efficiency. High durability technology has also been incorporated to ensure long-term use.

AIRSTAGE™ LINEUP

HEAT PUMP TYPE AIRSTAGE™ J-IVS

HEAT PUMP TYPE AIRSTAGE™ J-IV

HEAT PUMP TYPE AIRSTAGE™ J-IVL

HEAT PUMP TYPE AIRSTAGE™ V-III

HEAT RECOVERY TYPE AIRSTAGE™ VR-IV

AIRSTAGE

AIRSTAGE™ LINEUP

Fujitsu General's range of AIRSTAGE™ products allows installation flexibility to meet the unique size and application needs of your project.

Outdoor units range

HP			4	5	6	8	10	12	14	16	18	20
kW class			12.1	14.0	15.5	22.4	28.0	33.5	40.0	45.0	50.4	55.9
AIRSTAGE J-IVS Heat Pump			AJT040LCLBH	AJT045LCLBH	AJT054LCLBH							
AIRSTAGE J-IV Heat Pump			AJY040LBLBH	AJY045LBLBH	AJY054LBLBH							
AIRSTAGE J-IVL Heat Pump						AJY072LELBH	AJY090LELBH	AJY108LELBH	AJY126LELBH	AJY144LELBH		
AIRSTAGE V-III Heat Pump	Space saving					AJY072LALBH	AJY090LALBH	AJY108LALBH	AJY126LALBH	AJY144LALBH	AJY162LALBH	AJY180LALBH
	High efficiency									AJY144LALBHH		AJY180LALBHH
AIRSTAGE VR-IV Heat Recovery	Space saving					AJT072GALCH	AJT090GALCH	AJT108GALCH	AJT126GALCH	AJT144GALCH	AJT162GALCH	AJT180GALCH
	High efficiency									AJT144GALCHH		

Fujitsu

22	24	26	28	30	32	34	36	38	40	42	44	46	48
61.5	67.0	73.5	78.5	85.0	90.0	95.0	100.5	107.0	112.0	118.5	123.0	128.0	135.0
AJY198LALBH	AJY216LALBH	AJY234LALBH	AJY252LALBH	AJY270LALBH	AJY288LALBH	AJY306LALBH	AJY324LALBH	AJY342LALBH	AJY360LALBH	AJY378LALBH	AJY396LALBH	AJY414LALBH	AJY432LALBH
	AJY216LALBHH	AJY234LALBHH	AJY252LALBHH	AJY270LALBHH	AJY288LALBHH	AJY306LALBHH	AJY324LALBHH	AJY342LALBHH	AJY360LALBHH	AJY378LALBHH			
AJT198GALCH	AJT216GALCH	AJT234GALCH	AJT252GALCH	AJT270GALCH	AJT288GALCH	AJT306GALCH	AJT324GALCH	AJT342GALCH	AJT360GALCH	AJT378GALCH	AJT396GALCH	AJT414GALCH	AJT432GALCH
AJT198GALCHH	AJT216GALCHH	AJT234GALCHH	AJT252GALCHH	AJT270GALCHH	AJT288GALCHH	AJT306GALCHH	AJT324GALCHH	AJT342GALCHH	AJT360GALCHH	AJT378GALCHH	AJT396GALCHH		

AIRSTAGE

Heat Pump

for Small Capacity Type

AIRSTAGE J-IVS

System configuration example

- This system is used for small and medium-sized buildings. 1 refrigerant system is used for each outdoor unit.
- Connection of multiple indoor units using separation tubes and headers.

Outdoor unit
Separation tube　　　**Header**

Indoor unit

Liquid pipe
Gas pipe

Indoor unit

FUJITSU

New intelligent refrigerant control

Fujitsu general proposes New outdoor unit which includes New refrigerant control.
New refrigerant control can be operated with suitable control corresponding to heat load of the room and can offer a more comfortable space. New refrigerant control can also provide more energy savings.

Previous model (J-IIS)

Low capacity operation
↓
**Indoor unit request
Low capacity**

Excess capacity

Outdoor unit supplies constant capacity
regardless of indoor unit request

New model (J-IVS)

Low capacity operation
↓
**Indoor unit request
Low capacity**

Adequate capacity

**Outdoor unit supplies adequate
capacity on demand from indoor unit**

* The improvement by the control and the actual sine wave varies by the combination of the indoor unit and system operating condition.

External static pressure

External static pressure is available up to 25Pa for 4/5/6HP.

25Pa

Advanced high efficiency technology

DC inverter control
Efficiency is improved through the new active filter module.

Large propeller fan
High performance and low noise realised by the large propeller and angle optimisation.

Low noise rubber

High efficiency compressor motor

Optimised refrigerant flow design

High precision parts

DC fan motor
The outdoor unit utilises a miniaturised, high efficiency, multi-stage DC fan motor.

Compact and high performance DC twin rotary compressor

Efficiency is delivered in all load regions particularly when at low to medium load requirements.

Large heat exchanger
Heat exchange performance is substantially improved by the use of a 3-row large heat exchanger.

High heat transfer copper tube (improved lead angle)

Smooth airflow grille
The aerodynamic design enhances efficiency with little blow loss.

High

Compressor efficiency

Compressor capacity   **100%**   High

AIRSTAGE

Easy transportation and flexible installation

Current model / 6HP class
Height:1334 mm
Weight:119 kg

Model / 6HP class

Height difference
998mm
▲25%

Light weight
87kg

Small and light weight outdoor unit

This model is much more compact than conventional 6HP comparable outdoor units. Even when installed on the balcony, it can fit within the height of the railing. The compact size, with a height of less than 1m, allows it to be installed in tight spaces.
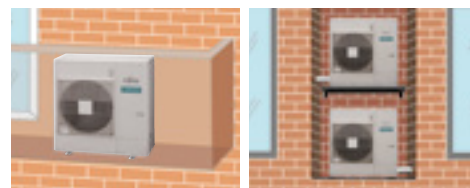
Low sound level design

Significantly low sound level is improved by using DC twin rotary compressor, inverter technology, and advanced airflow structure design.

Long piping capability

Our advanced refrigerant control technology allows us to achieve a total refrigerant piping length of 80 m. This opens up possibilities in system design.

Total pipe length

Maximum **80** m

Height difference between outdoor and indoor units
30 m maximum

Up to 13 units* can be connected

The combination of the smallest but adequate capacity indoor unit and a new outdoor unit with the optimum heat exchanger structure has realized the industry's top class connection of 13 units.
*: 6 HP model

Model	Previous model (J-IIS)			New model (J-IVS)		
Rating Capacity range (HP)	4	5	6	4	5	6
Maximum Connectable indoor unit	1-7	1-8	1-8	1-11	1-12	1-13

Actual piping length
50 m maximum

Piping length from first separation tube to the furthest indoor unit
40 m maximum

Height difference between indoor and indoor units
15 m maximum

Nonstop oil recovery operation

A comfortable room condition is maintained during oil recovery mode because the product continues to operate without stopping the cooling or heating operation.

Previous oil recovery operation

J-IVS Series

Operation stopped at oil recovery

Non-stop oil recovery operation

ON
OFF
Time

ON
Time

Easier Installation

With the connection check function it is possible to confirm whether the wiring connection and address settings are correct.

• Display connected indoor unit numbers
• Duplicate set address numbers of indoor unit can be identified

Models
4HP : AJT040LCLBH
5HP : AJT045LCLBH
6HP : AJT054LCLBH

Specifications

Rating capacity range		HP	4	5	6
Model name			AJT040LCLBH	AJT045LCLBH	AJT054LCLBH
Maximum connectable indoor unit			7	8	8
Power source			Single phase, ~230V, 50Hz		
Capacity	Cooling	kW	12.1	14.0	15.1
	Nominal heating		12.1	14.0	15.1
	Max. heating		13.6	16.0	16.5
Input power	Cooling	kW	3.44	4.23	4.65
	Nominal heating		2.55	3.18	3.57
	Max. heating		3.09	3.93	4.11
EER	Cooling	W/W	3.52	3.31	3.25
COP	Nominal heating		4.74	4.40	4.23
	Max. heating		4.40	4.07	4.01
Air flow rate	Cooling	m³/h (l/s)	4,040 (1,122)	4,200 (1,167)	4,540 (1,261)
	Heating		4,040 (1,122)	4,200 (1,167)	4,200 (1,167)
Sound pressure level / Power level	Cooling	dB (A)	53 / 67	54 / 69	56 / 70
	Heating		54 / 68	55 / 69	56 / 70
Heat exchanger fin			Blue fin	Blue fin	Blue fin
Dimensions	Height	mm	998	998	998
	Width		970	970	970
	Depth		370	370	370
Weight		kg	86	86	87
Refrigerant	Type		R410A	R410A	R410A
	Charge	kg	4.0	4.0	4.0
Connection pipe diameter	Liquid	mm	9.52	9.52	9.52
	Gas		15.88	15.88	15.88
Total pipe length		m	80	80	80
Max. height difference			30 / 30 (Outdoor unit: upper / lower)		
Operating range	Cooling	°C	-5 to 46	-5 to 46	-5 to 46
	Heating		-20 to 21	-20 to 21	-20 to 21

Note: Specifications are based on the following conditions:
Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length: 7.5m; height difference between outdoor unit and indoor unit: 0m.

These are the measured values in the manufacturer's anechoic chamber.
Because of the surrounding sound environment, the sound levels measured in actual installation conditions might be higher than the specified values here.

Dimensions

(Unit: mm)

Top view

Front view

Side view

Rear view

Bottom view

Detail A

AIRSTAGE

Heat Pump

for Small Capacity Type

AIRSTAGE J-IV

System configuration example

- This system is typically used for small and medium-sized buildings
- This example shows the connection of multiple indoor units using separation tubes and headers

Outdoor unit
Separation tube
Header
Liquid pipe
Gas pipe
Indoor unit
Indoor unit

New intelligent refrigerant control

Fujitsu general proposes New outdoor unit which includes New refrigerant control.
New refrigerant control can be operated with suitable control corresponding to heat load of the room and
can offer a more comfortable space. New refrigerant control can also provide more energy savings.

Previous model (J-III)

Low capacity operation
↓
**Indoor unit request
Low capacity**

Excess capacity

Outdoor unit supplies constant capacity
regardless of indoor unit request

New model (J-IV)

Low capacity operation
↓
**Indoor unit request
Low capacity**

Adequate capacity

**Outdoor unit supplies adequate
capacity on demand from indoor unit**

* The improvement by the control and the actual sine wave varies by the
combination of the indoor unit and system operating condition.

External static pressure

External static pressure is available up to 30Pa for 4/5/6HP.

30Pa

Advanced high efficiency technology

Large propeller fan
High performance and low noise is
realised by the large propeller and
angle optimisation.

DC fan motor
The outdoor unit utilises a
miniaturised, high efficiency,
multi-stage DC fan motor.

Large heat exchanger
Heat exchange performance is
substantially improved by the
inclusion of a 3-row large heat
exchanger.

DC inverter control
Efficiency is improved through the new
active filter module.

Subcool heat exchanger
Cooling performance is improved from the
dual tube heat exchanger.

Pressure

effect

Cooling performance improved

Enthalpy

High efficiency compressor motor

Optimised refrigerant flow design

High precision parts

**DC twin rotary
compressor**
Efficiency in all load
regions is consistent,
especially when
meeting low to
medium load
requirements.

High

Compressor efficiency

DC Twin Rotary compressor

Compressor capacity   High

AIRSTAGE

Efficiency during operation

The high COP is achieved for all models through a large heat exchanger, highly efficient DC twin compressor and our own technologies.

High EER / COP

EER / COP

Single phase
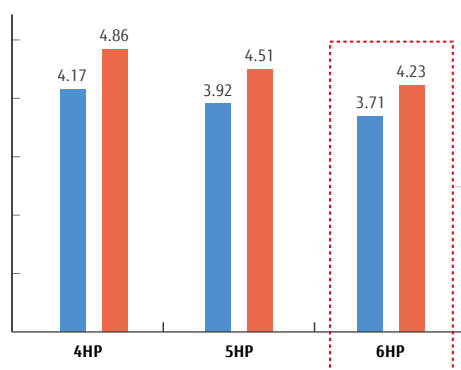
4HP: 4.17 / 4.86
5HP: 3.92 / 4.51
6HP: 3.71 / 4.23

6HP class

J-II: 3.45 → J-IV: 3.71 (8% UP)
J-II: 3.95 → J-IV: 4.23 (7% UP)

Long piping capability

Our advanced refrigerant control technology allows us to achieve a total refrigerant piping length of 180m, opening up new possibilities in system design.

Total pipe length

Maximum **180 m**

Height difference between outdoor and indoor units
50 m maximum
For the outdoor unit installed below the indoor units: 40 m maximum

Up to 10 units* can be connected

Up to 10 units* can be connected The combination of the smallest but adequate capacity indoor unit and a new outdoor unit with the optimum heat exchanger structure has realized the industry's top class connection of 10 units.
*: 6 HP model
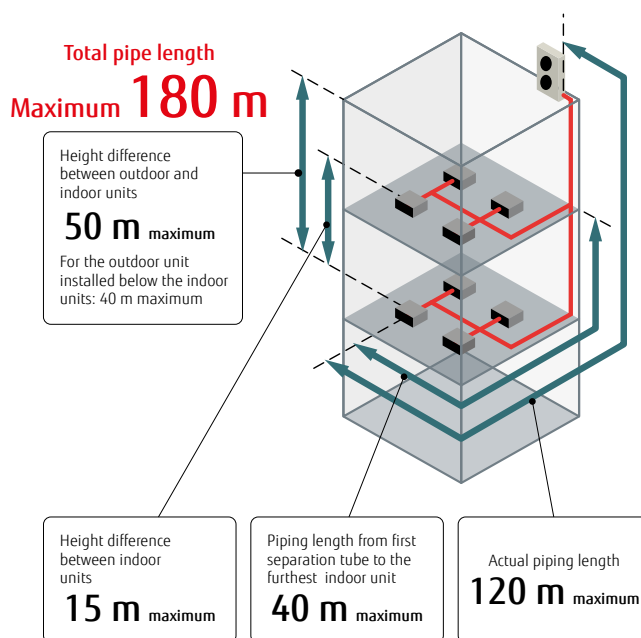
Height difference between indoor units
15 m maximum

Piping length from first separation tube to the furthest indoor unit
40 m maximum

Actual piping length
120 m maximum

Nonstop oil recovery operation

A comfortable room condition is maintained during oil recovery mode because the product continues to operate without stopping the cooling or heating operation.

Previous oil recovery operation

Operation stopped at oil recovery
ON
OFF
Time

J-IV Series

Non-stop oil recovery operation
ON
Time

Easier Installation

With the connection check function it is possible to confirm whether the wiring connection and address settings are correct.

• Connected unit indoor numbers are displayed
• Duplicate address numbers of indoor unit can be identified

FUJITSU
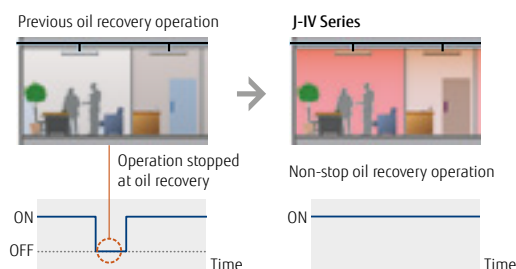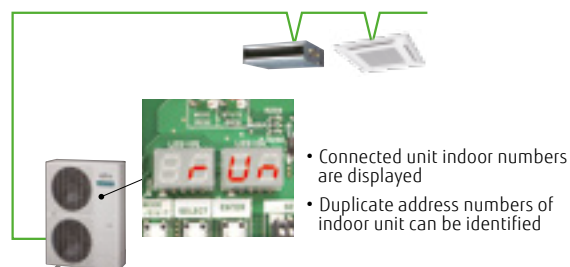
Models
4HP : AJY040LBLBH
5HP : AJY045LBLBH
6HP : AJY054LBLBH

Specifications

Rating capacity range		HP	4	5	6
Model name			AJY040LBLBH	AJY045LBLBH	AJY054LBLBH
Maximum connectable indoor unit			1-8	1-9	1-10
Power source			Single phase, ~230V, 50Hz		
Capacity	Cooling	kW	12.1	14.0	15.5
	Nominal heating		12.1	14.0	15.5
	Max. heating		13.6	16.0	18.0
Input power	Cooling	kW	2.90	3.57	4.18
	Nominal heating		2.39	2.97	3.50
	Max. heating		2.80	3.55	4.26
EER	Cooling	W/W	4.17	3.92	3.71
COP	Nominal heating		5.06	4.71	4.43
	Max. heating		4.86	4.51	4.23
Air flow rate	Cooling	m³/h (l/s)	6,200 (1,722)	6,400 (1,778)	6,900 (1,916)
	Heating		6,200 (1,722)	6,400 (1,778)	6,900 (1,916)
Sound pressure level / Power level	Cooling	dB (A)	50 / 65	51 / 65	53 / 66
	Heating		52 / 67	55 / 69	56 / 69
Heat exchanger fin			Blue fin	Blue fin	Blue fin
Dimensions	Height	mm	1,334	1,334	1,334
	Width		970	970	970
	Depth		370	370	370
Weight		kg	117	117	119
Refrigerant	Type		R410A	R410A	R410A
	Charge	kg	4.8	5.3	5.3
Connection pipe diameter	Liquid	mm	9.52	9.52	9.52
	Gas		15.88	15.88	19.05
Max. total pipe length		m	180	180	180
Max. height difference			50 / 40 (Outdoor unit: upper / lower)		
Operating range	Cooling	°C	-5 to 46	-5 to 46	-5 to 46
	Heating		-20 to 21	-20 to 21	-20 to 21

Note: Specifications are based on the following conditions:
Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length: 7.5m; height difference between outdoor unit and indoor unit: 0m.

The protective function may not work when using it outside the operating range.

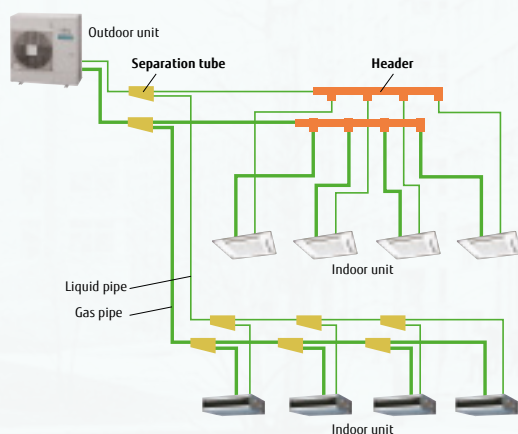## Dimensions
(Unit: mm)
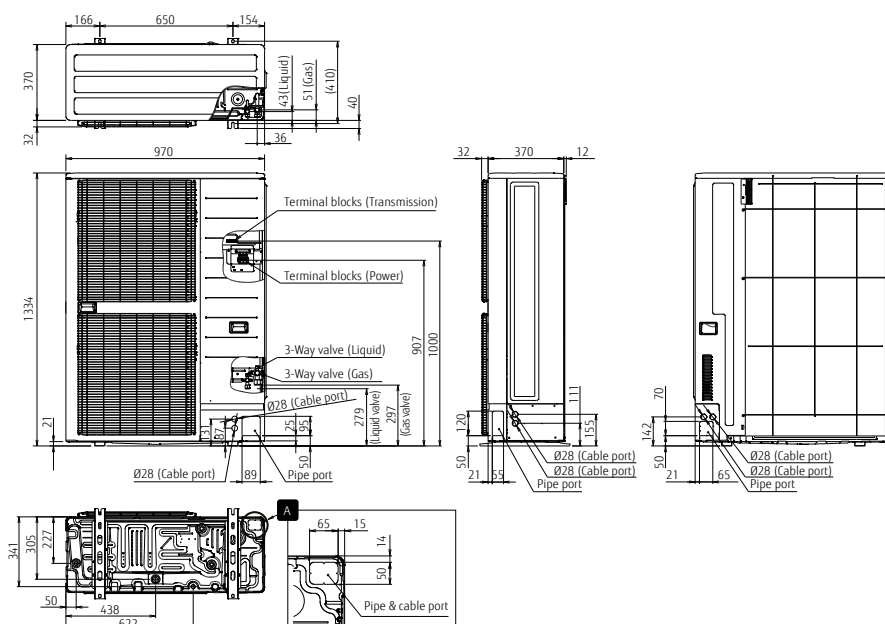
AIRSTAGE

Heat Pump

for Small Capacity Type

AIRSTAGE J-IVL

System configuration example

- This system is typically used for small and medium-sized buildings
- This example shows the connection of multiple indoor units using separation tubes and headers

Outdoor unit

Separation tube

Header

Indoor unit

Liquid pipe

Gas pipe

Indoor unit

FUJITSU

New intelligent refrigerant control

Fujitsu general proposes New outdoor unit which includes New refrigerant control.
New refrigerant control can be operated with suitable control corresponding to heat load of the room and can offer a more comfortable space. New refrigerant control can also provide more energy savings.

Previous model (J-IIIL)

Low capacity operation
↓
Indoor unit request Low capacity

Excess capacity

Outdoor unit supplies constant capacity regardless of indoor unit request

New model (J-IVL)

Low capacity operation
↓
Indoor unit request Low capacity

Adequate capacity

Outdoor unit supplies adequate capacity on demand from indoor unit

* The improvement by the control and the actual sine wave varies by the combination of the indoor unit and system operating condition.

External static pressure

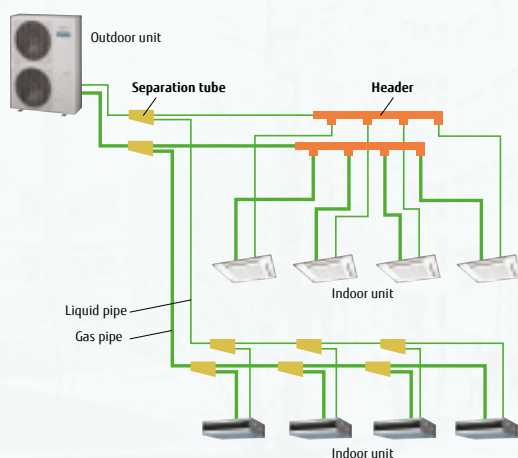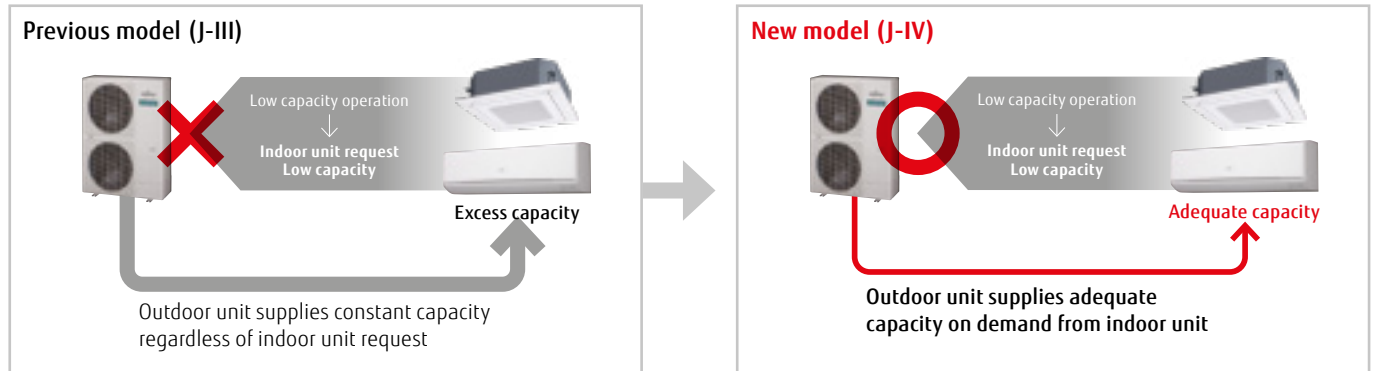External static pressure is available up to 60Pa for 14/16HP.
(30Pa for 8/10HP, 40Pa for 12HP)
* Capacities are slightly decreased for rated values during high static pressure operation.

60Pa

Advanced high efficiency technology

∅570 mm

Large propeller fan

High efficiency and low sound operation is achieved by the reduction of draft loss due to Fujitsu General's blade design and large diameter propeller fan.

DC fan motor

The outdoor unit utilises a miniaturised, high efficiency, multi-stage DC fan motor.

Large heat exchanger

Heat exchange performance is substantially improved by mounting a 2-row large heat exchanger.

15-120 rps

DC inverter control

Efficiency is improved by the use of a new active filter module.

Subcool heat exchanger

Cooling performance is improved by utilising a dual tube heat exchanger.

Pressure

effect

Cooling performance improved

Enthalpy

Scroll compressor

The scroll compressor has a wide range of rotational frequencies from 15 to 120 rps. Fujitsu General's unique sensorless sine wave control method enables smooth control of the input power into the motor improving the energy efficiency operating characteristics and the low sound operation.

AIRSTAGE

Fujitsu General provides perfect total air conditioning systems that take into account energy saving, low noise, comfortable airflow, small room application and centralized control for small-sized office buildings with many small rooms.

AIRSTAGE *J-IVL*

Image: 8/10/12 HP models

Slim & Compact Design

AIRSTAGE *J-IVL*
14/16 HP models

Current model
AIRSTAGE™ V Series
outdoor unit
14/16/18 HP models

765 mm

480 mm

Depth difference
-285 mm
J-IVL all models
Compared with current all models

Space requirement
-45% !
Compared with
current 14/16 HP models

Height difference
-262 mm
Compared with current 8 HP model

AIRSTAGE *J-IVL*
8/10/12 HP models

1,690 mm

1,428 mm

Current model
AIRSTAGE™ V Series
outdoor unit
8/10 HP models

Space requirement
-26% !
Compared with
current 8/10 HP models

Various Installation

AIRSTAGE™ V Series outdoor unit
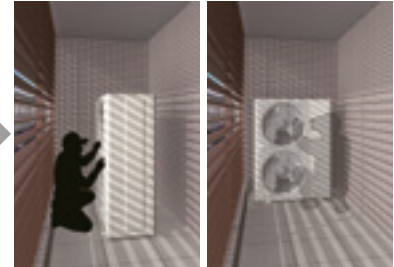
AIRSTAGE™ J Series outdoor unit

In house installation
Low noise in consideration for the nearby residents

This model is front air discharge type and about 1000 mm wide, so flexible installation is possible even at narrow in house space.

AIRSTAGE™ V Series outdoor unit

AIRSTAGE™ J Series outdoor unit

Narrow space behind building
Space saving

Due to compact and thin model, direct ground installation or wall mounted installation is possible even at narrow off-street.

AIRSTAGE™ V Series outdoor unit

AIRSTAGE™ J Series outdoor unit

Installation at back street of building
Flexible installation

This model is front air discharge type and slim & low body, so installation space is compact. Building windows are not blocked and space saving multiple units installation is possible.

AIRSTAGE

Efficiency in actual operation

Top class high EER / COP is achieved for all models by large heat exchanger, highly efficient DC twin compressor, and our own technologies.

High EER / COP ■ EER / ■ COP (Max.Heating)
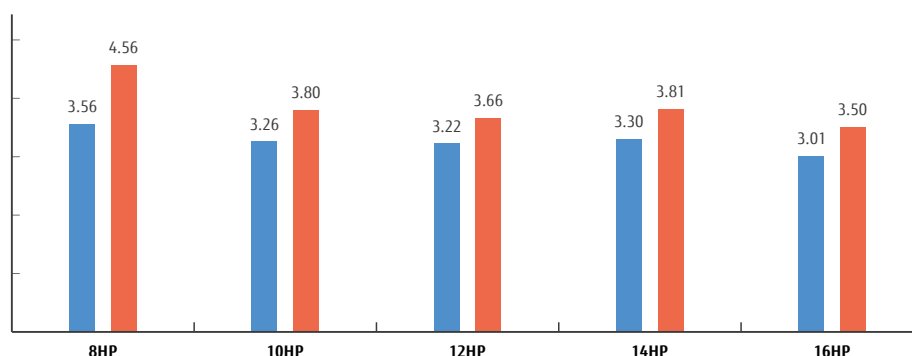
	8HP	10HP	12HP	14HP	16HP
EER	3.56	3.26	3.22	3.30	3.01
COP (Max.Heating)	4.56	3.80	3.66	3.81	3.50

Long piping capability

Our advanced refrigerant control technology allows us to achieve a total refrigerant piping length of 400m.

Up to 30 indoor units* can be connected

The combination of the smallest but adequate capacity indoor unit and a new outdoor unit with the optimum heat exchanger structure has realized the industry's top class connection of 30 units. *: 16 HP model

Total pipe length

Maximum **400 m**

Height difference between outdoor and indoor units
50 m maximum
For the outdoor unit installed below the indoor units: 40 m maximum

Actual piping length
120 m maximum

Piping length from first separation tube to the furthest indoor unit
90 m maximum

Height difference between indoor units*
50 m maximum

*Only for new indoor units, check technical manual to confirm.

Low noise characteristics

Low operating sound makes this unit highly suitable to densely populated areas.

Sound Power Level

66 dB(A)

77 dB(A)

−11 dB(A) difference

J-IVL (8 HP)

Current model (8 HP)

Models
8HP : AJY072LELBH
10HP : AJY090LELBH
12HP : AJY108LELBH
14HP : AJY126LELBH
16HP : AJY144LELBH

8, 10, 12 HP   14, 16HP

Specifications

Rating capacity range		HP	8	10	12	14	16
Model name			AJY072LELBH	AJY090LELBH	AJY108LELBH	AJY126LELBH	AJY144LELBH
Maximum connectable indoor unit			1-15	1-19	1-22	1-27	1-30
Power source			3 phase, ~400V, 50Hz				
Capacity	Cooling	kW	22.4	28.0	33.5	40.0	45.0
	Nominal heating	kW	22.4	28.0	33.5	40.0	45.0
	Max. heating		25.0	31.5	37.5	45.0	50.0
Input power	Cooling	kW	6.30	8.59	10.42	12.12	14.96
	Nominal heating	kW	4.65	6.61	8.18	9.71	11.81
	Max. heating		5.45	8.29	10.25	11.81	14.29
EER	Cooling	W/W	3.56	3.26	3.22	3.30	3.01
COP	Nominal heating		4.82	4.24	4.10	4.12	3.81
	Max. heating		4.56	3.80	3.66	3.81	3.50
Air flow rate		m³/h(l/s)	8,400 (2,334)	9,000 (2,500)	11,000 (3,056)	13,000 (3,611)	14,000 (3,889)
External static pressure (max.)		Pa	20	30	30	60	60
Sound pressure level / Power level	Cooling	dB (A)	52 / 66	54 / 69	59 / 73	62 / 75	64 / 77
	Heating		54 / 66	57 / 70	61 / 75	63 / 76	65 / 78
Dimensions	Height	mm	1,428	1,428	1,428	1,638	1,638
	Width		1,080	1,080	1,080	1,080	1,080
	Depth		480	480	480	480	480
Weight		kg	170	177	178	213	213
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A
	Charge	kg	7.0	7.5	7.5	11.0	11.0
Connection pipe diameter	Liquid	mm	9.52	9.52	12.70	12.70	12.70
	Gas		19.05	22.22	28.58	28.58	28.58
Max. total pipe length		m	400	400	400	400	400
Max. height difference			50 / 40 (Outdoor unit: upper / lower)				
Operating range	Cooling	°C	-5 to 46*	-5 to 46*	-5 to 46*	-5 to 46*	-5 to 46*
	Heating		-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

Note: Specifications are based on the following conditions:
Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length: 7.5m; height difference between outdoor unit and indoor unit: 0m.

* The cooling operating range of -15 to 46°C is allowed only when all of the indoor units connected to the system are higher than capacity of 5.6kW.

Dimensions

(Unit: mm)

Models:
AJY072LELBH
AJY090LELBH
AJY108LELBH

196 688 196
(515.5)
40.5
Top view
39
1,080   Terminal blocks (Power)
Terminal blocks (Transmission)
40 480 12
1,428
1,017
1,102
23.5
Front view   Side view
447
479
Bottom view
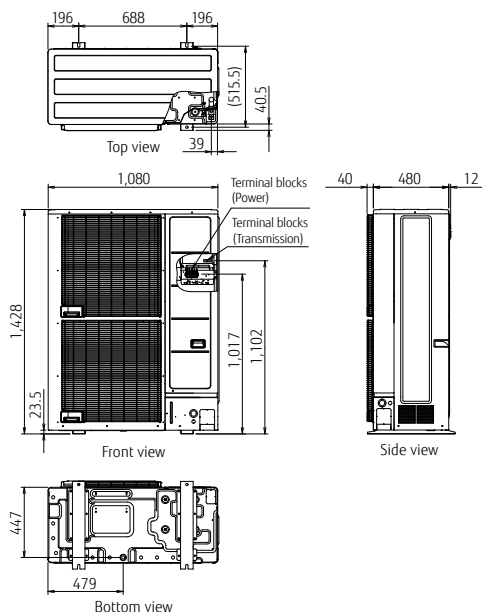
Models:
AJY126LELBH
AJY144LELBH

196 688 196
(515.5)
40.5
Top view
1,080
40 480
1,638
Front view   Side view
Bottom view
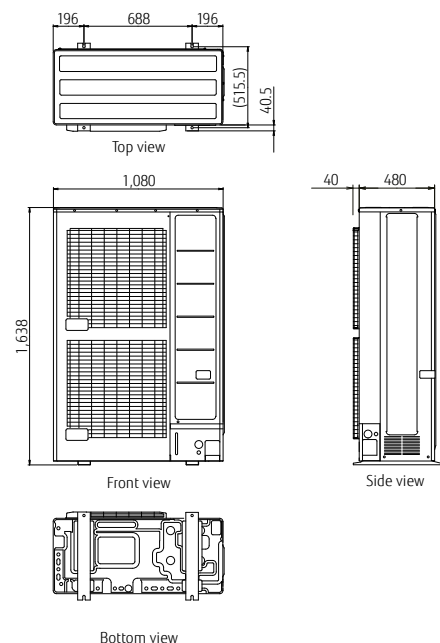
AIRSTAGE

Heat Pump

Modular Type

AIRSTAGE *V-III*

System configuration example

- This system is used for medium and large sized buildings. Connecting a combination of outdoor units makes it possible to create a high-capacity system.
- This example shows the connection of multiple indoor units using separation tubes and headers.

Outdoor unit

Separation tube   Header

Indoor unit

Liquid pipe
Gas pipe

Indoor unit
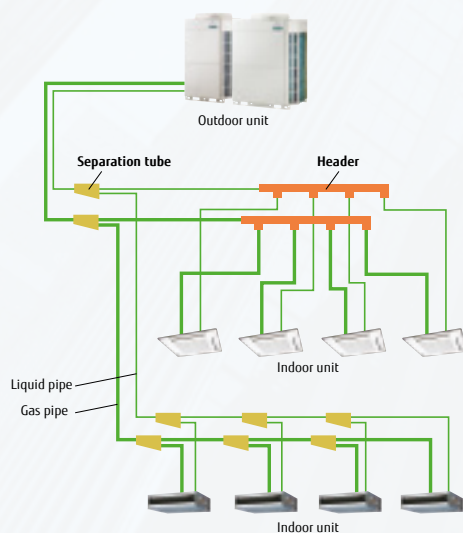
FUJITSU

New intelligent refrigerant control

Fujitsu General is proposing outdoor units equipped with refrigerant control function.
The refrigerant control operates with subtle control corresponding to the heat load of the room and offers a more comfortable environment. The refrigerant control can also provide increased energy savings.

Current model (V-II)

Low capacity operation
↓
Indoor unit request
Low capacity

Excess capacity

The outdoor unit supplies constant capacity regardless of the demand of the indoor unit.

New model (V-III)

Low capacity operation
↓
Indoor unit request
Low capacity

Adequate capacity

The outdoor unit provides sufficient capacity to meet the demands of the indoor unit.

* The improvements due to the control and the actual sine wave vary depending on the combination of the indoor unit and system operating conditions.

*Intelligent Refrigerant Control available for V-III series outdoor with serial number that starts with R4.

Efficiency during operation

A high COP is realised for all combinations by our unique heat exchanger structure, highly efficient DC twin compressor and additional proprietary technologies.

Space saving combination

(COP)

HP	COP
8	4.84
10	4.35
12	4.34
14	4.03
16	3.67
18	4.55
20	4.34
22	4.28
24	4.15
26	3.90
28	4.03
30	3.83
32	3.67
34	4.21
36	4.02
38	4.11
40	3.95
42	3.81
44	3.89
46	3.77
48	3.67

Energy efficiency combination

(COP)

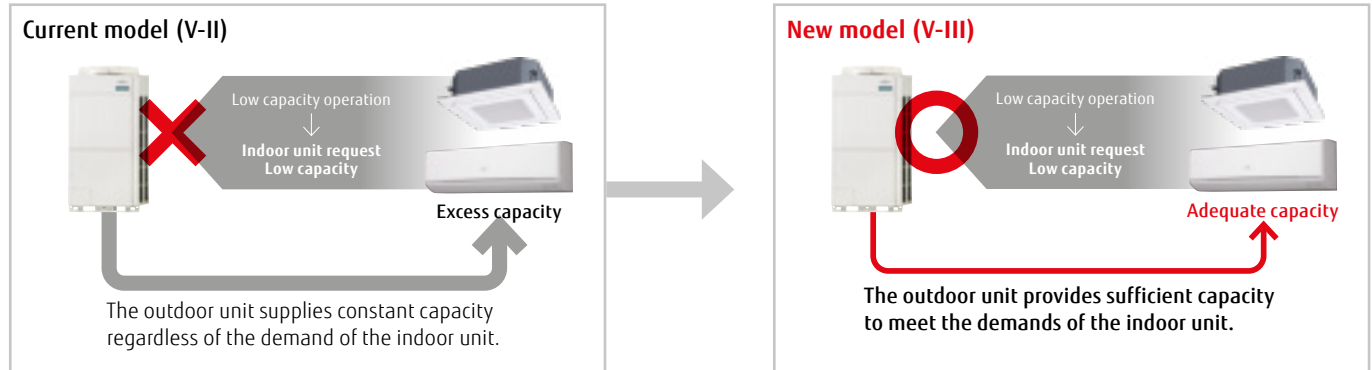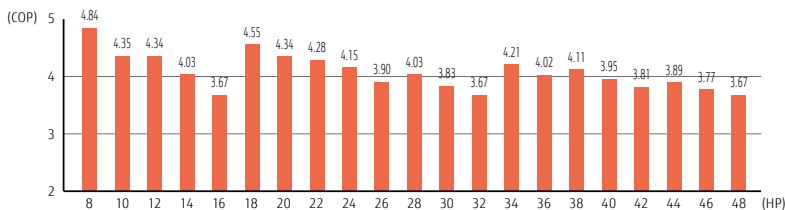| HP	COP
16	4.84
20	4.52
24	4.84
26	4.63
28	4.61
30	4.42
32	4.45
34	4.30
36	4.34
38	4.21
40	4.11
42	4.03
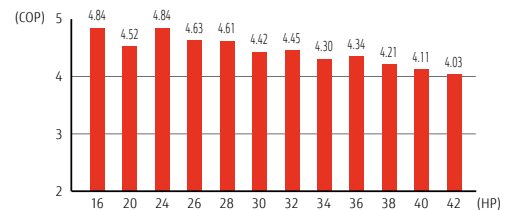
* These specifications are determined by Cassette combination.

Energy saving technology that enhances operational efficiency

Powerful large propeller fan
By using CFD*[1] technology, the newly designed fan achieves high performance and low noise operation.
*1. CFD = Computational Fluid Dynamics

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

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

Large capacity ALL DC inverter compressor
The large capacity highly efficient DC twin rotary compressor with 0.1Hz steps compressor speed control

3 phase DC fan motor
Efficiency is improved with the highly efficient motor with sophisticated drive control. Additionally, the DC fan motor exhibits a low noise output.

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

Front intake port
(corner cut air inhaling structure)

Capacity
0.1Hz
Inverter frequency

AIRSTAGE

Outdoor units lineup

• Combinations other than those specified are not supported.

Space saving combinations

22.4kW (8HP)	28.0kW (10HP)	33.5kW (12HP)	40.0kW (14HP)	45.0kW (16HP)
AJY072LALBH UNIT: AJY072LALBH	**AJY090LALBH** UNIT: AJY090LALBH	**AJY108LALBH** UNIT: AJY108LALBH	**AJY126LALBH** UNIT: AJY126LALBH	**AJY144LALBH** UNIT: AJY144LALBH
50.4kW (18HP)	56.0W (20HP)	62.4kW (22HP)	68.0kW (24HP)	73.0kW (26HP)
AJY162LALBH UNIT: AJY090 / 072LALBH	**AJY180LALBH** UNIT: AJY090 / 090LALBH	**AJY198LALBH** UNIT: AJY126 / 072LALBH	**AJY216LALBH** UNIT: AJY126 / 090LALBH	**AJY234LALBH** UNIT: AJY144 / 090LALBH
80.0kW (28HP)	85.0kW (30HP)	90.0kW (32HP)	96.0kW (34HP)	101.0kW (36HP)
AJY252LALBH UNIT: AJY126 / 126LALBH	**AJY270LALBH** UNIT: AJY144 / 126LALBH	**AJY288LALBH** UNIT: AJY144 / 144LALBH	**AJY306LALBH** UNIT: AJY126 / 090 / 090LALBH	**AJY324LALBH** UNIT: AJY144 / 090 / 090LALBH
108.0kW (38HP)	113.0kW (40HP)	118.0kW (42HP)	125.0kW (44HP)	130.0kW (46HP)
AJY342LALBH UNIT: AJY126 / 126 / 090LALBH	**AJY360LALBH** UNIT: AJY144 / 126 / 090LALBH	**AJY378LALBH** UNIT: AJY144 / 144 / 090LALBH	**AJY396LALBH** UNIT: AJY144 / 126 / 126LALBH	**AJY414LALBH** UNIT: AJY144 / 144 / 126LALBH
135.0kW (48HP)				
AJY432LALBH UNIT: AJY144 / 144 / 144LALBH				

Energy efficiency combinations

44.8kW (16HP)	55.9kW (20HP)	67.2kW (24HP)	72.8kW (26HP)	78.3kW (28HP)
AJY144LALBHH UNIT: AJY072 / 072LALBH	**AJY180LALBHH** UNIT: AJY108 / 072LALBH	**AJY216LALBHH** UNIT: AJY072 / 072 / 072LALBH	**AJY234LALBHH** UNIT: AJY090 / 072 / 072LALBH	**AJY252LALBHH** UNIT: AJY108 / 072 / 072LALBH
84.8kW (30HP)	89.4kW (32HP)	95.9kW (34HP)	100.5kW (36HP)	107.0kW (38HP)
AJY270LALBHH UNIT: AJY126 / 072 / 072LALBH	**AJY288LALBHH** UNIT: AJY108 / 108 / 072LALBH	**AJY306LALBHH** UNIT: AJY126 / 108 / 072LALBH	**AJY324LALBHH** UNIT: AJY108 / 108 / 108LALBH	**AJY342LALBHH** UNIT: AJY126 / 108 / 108LALBH
113.5kW (40HP)	120.0kW (42HP)			
AJY360LALBHH UNIT: AJY126 / 126 / 108LALBH	**AJY378LALBHH** UNIT: AJY126 / 126 / 126LALBH			

Models

8HP : AJY072LALBH
10HP : AJY090LALBH
12HP : AJY108LALBH
14HP : AJY126LALBH
16HP : AJY144LALBH
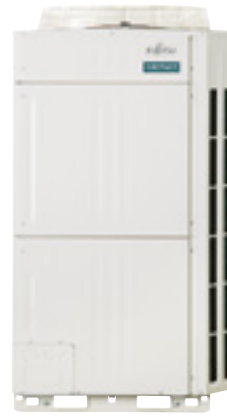
8, 10 HP   12, 14, 16 HP

Dimensions

(Unit: mm)

8 / 10HP:

AJY072LALBH
AJY090LALBH

690 (Bolt pitch)
80 530 (Bolt pitch)
8-12 × 17 (Hole)
732 (Bolt pitch)

765   930
1576   1690   1339

B   A C

A Front side knockout position

73
43
Ø 34.5 Power supply cable port
Ø 43.7 Power supply cable port
Ø 50 Power supply cable port
Ø 22.2 Transmission cable port
Ø 22.2 Transmission cable port
Pipe port
95 75 10 100
125 199

B Left side knockout position

Ø 50 Power supply cable port
Ø 34.5 Power supply cable port
Ø 43.7 Power supply cable port
Ø 22.2 Transmission cable port
Ø 22.2 Transmission cable port

12 / 14 / 16HP:

AJY108LALBH
AJY126LALBH
AJY144LALBH

1000 (Bolt pitch)
80 840 (Bolt pitch)
8-12×7 (Hole)
732 (Bolt pitch)

765   1240
1690

B   A C

C Bottom side knockout position

Top view   Pipe port
82 80
42 197

AIRSTAGE

Space saving combinations

Rating capacity range		HP	8	10	12	14	16	18	20	22	24
Model name			AJY072LALBH	AJY090LALBH	AJY108LALBH	AJY126LALBH	AJY144LALBH	AJY162LALBH	AJY180LALBH	AJY198LALBH	AJY216LALBH
Unit 1 Unit 2 Unit 3			AJY072LALBH	AJY090LALBH	AJY108LALBH	AJY126LALBH	AJY144LALBH	AJY090LALBH AJY072LALBH	AJY090LALBH AJY090LALBH	AJY126LALBH AJY072LALBH	AJY126LALBH AJY090LALBH
Maximum connectible indoor unit*1			15	16	17	21	24	27	30	33	36
Indoor unit connectible capacity	Cooling	kW	11.2 to 33.6	14.0 to 42.0	16.8 to 50.2	20.0 to 60.0	22.5 to 67.5	25.2 to 75.6	28.0 to 84.0	31.2 to 93.6	34.0 to 102.0
Power source							3 phase 4 wire, 400 V, 50Hz					
Capacity	Cooling	kW	22.4	28.0	33.5	40.0	45.0	50.4	56.0	62.4	68.0
	Heating	kW	25.0	31.5	37.5	45.0	50.0	56.5	63.0	70.0	76.5
Input power	Cooling	kW	5.20	7.28	8.96	10.96	13.01	12.48	14.56	16.16	18.24
	Heating	kW	5.17	7.25	8.65	11.17	13.63	12.42	14.50	16.34	18.42
EER	Cooling	W/W	4.31	3.85	3.74	3.65	3.46	4.04	3.85	3.86	3.73
COP	Heating	W/W	4.84	4.35	4.34	4.03	3.67	4.55	4.34	4.28	4.15
Air flow rate	High	m^3/h (l/s)	11,100 (3,084)	11,100 (3,084)	13,000 (3,611)	13,000 (3,611)	13,700 (3,806)	11,100×2 (3,084×2)	11,100×2 (3,084×2)	13,000+11,100 (3,611+3,084)	13,000+11,100 (3,611+3,084)
Sound pressure level*2	Cooling	dB (A)	56	58	57	60	62	60	61	61	62
	Heating	dB (A)	58	59	60	62	64	62	62	63	64
Maximum external static pressure		Pa	82	82	82	82	82	82	82	82	82
Compressor motor output		kW	7.5	7.5	11.0	11.0	11.0	7.5×2	7.5×2	11.0+7.5	11.0+7.5
Heat exchanger fin			Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
Dimensions	Height	mm	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
	Width	mm	930	930	1,240	1,240	1,240	930×2	930×2	1,240+930	1,240+930
	Depth	mm	765	765	765	765	765	765	765	765	765
Weight		kg	252	252	275	275	275	252×2	252×2	275+252	275+252
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charge	kg	11.7	11.7	11.8	11.8	11.8	11.7×2	11.7×2	11.8+11.7	11.8+11.7
Connection pipe diameter	Liquid	mm	12.70	12.70	12.70	12.70	12.70	15.88	15.88	15.88	15.88
	Suction gas	mm	22.22	22.22	28.58	28.58	28.58	28.58	28.58	34.92	34.92
Operating range	Cooling	°C	-15 to 46	-15 to 46	-15 to 46	-15 to 46	-15 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
	Heating	°C	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

Energy efficiency combinations

Rating capacity range		HP	16	22	24	26	28	30	32	34	36
Model name			AJY144LALBHH	AJY180LALBHH	AJY216LALBHH	AJY234LALBHH	AJY252LALBHH	AJY270LALBHH	AJY288LALBHH	AJY306LALBHH	AJY324LALBHH
Unit 1 Unit 2 Unit 3			AJY072LALBH AJY072LALBH	AJY108LALBH AJY072LALBH	AJY072LALBH AJY072LALBH AJY072LALBH	AJY090LALBH AJY072LALBH AJY072LALBH	AJY108LALBH AJY072LALBH AJY072LALBH	AJY126LALBH AJY072LALBH AJY072LALBH	AJY108LALBH AJY108LALBH AJY072LALBH	AJY126LALBH AJY108LALBH AJY072LALBH	AJY108LALBH AJY108LALBH AJY108LALBH
Maximum connectible indoor unit*1			24	29	36	39	41	45	47	51	53
Indoor unit connectible capacity	Cooling	kW	22.4 to 67.2	28.0 to 83.8	33.6 to 100.8	36.4 to 109.2	39.2 to 117.4	42.4 to 127.2	44.7 to 134.1	48.0 to 143.8	50.3 to 150.7
Power source							3 phase 4 wire, 400 V, 50Hz					
Capacity	Cooling	kW	44.8	55.9	67.2	72.8	78.3	84.8	89.4	95.9	100.5
	Heating	kW	50.0	62.5	75.0	81.5	87.5	95.0	100.0	107.5	112.5
Input power	Cooling	kW	10.40	14.16	15.60	17.68	19.36	21.36	23.12	25.12	26.88
	Heating	kW	10.34	13.82	15.51	17.59	18.99	21.51	22.47	24.99	25.95
EER	Cooling	W/W	4.31	3.95	4.31	4.12	4.04	3.97	3.87	3.82	3.74
COP	Heating	W/W	4.84	4.52	4.84	4.63	4.61	4.42	4.45	4.30	4.34
Air flow rate	High	m^3/h (l/s)	11,100×2 (3,084×2)	13,000+11,100 (3,611+3,084)	11,100×3 (3,084×3)	11,100×3 (3,084×3)	13,000+11,100×2 (3,611+3,084×2)	13,000+11,100×2 (3,611+3,084×2)	13,000×2+11,100 (3,611×2+3,084)	13,000×2+11,100 (3,611×2+3,084)	13,000×3 (3,611×3)
Sound pressure level*2	Cooling	dB (A)	59	60	61	62	61	63	61	63	64
	Heating	dB (A)	61	62	63	63	64	65	64	65	66
Maximum external static pressure		Pa	82	82	82	82	82	82	82	82	82
Compressor motor output		kW	7.5×2	11.0+7.5	7.5×3	7.5×2	11.0+7.5×2	11.0+7.5×2	11.0×2+7.5	11.0×2+7.5	11.0×3
Heat exchanger fin			Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
Dimensions	Height	mm	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
	Width	mm	930×2	1,240+930	930×3	930×3	1,240+930×2	1,240+930×2	1,240×2+930	1,240×2+930	1,240×3
	Depth	mm	765	765	765	765	765	765	765	765	765
Weight		kg	252×2	275+252	252×3	252×3	275+252×2	275+252×2	275×2+252	275×2+252	275×3
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charge	kg	11.7×2	11.8+11.7	11.7×3	11.7×3	11.8+11.7×2	11.8+11.7×2	11.8×2+11.7	11.8×2+11.7	11.8×3
Connection pipe diameter	Liquid	mm	12.70	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05
	Suction gas	mm	28.58	28.58	34.92	34.92	34.92	34.92	34.92	34.92	41.27
Operating range	Cooling	°C	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
	Heating	°C	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

26	28	30	32	34	36	38	40	42	44	46	48
AJY234LALBH	AJY252LALBH	AJY270LALBH	AJY288LALBH	AJY306LALBH	AJY324LALBH	AJY342LALBH	AJY360LALBH	AJY378LALBH	AJY396LALBH	AJY414LALBH	AJY432LALBH
AJY144LALBH AJY090LALBH	AJY126LALBH AJY126LALBH	AJY144LALBH AJY126LALBH	AJY144LALBH AJY144LALBH	AJY126LALBH AJY090LALBH AJY090LALBH	AJY144LALBH AJY090LALBH AJY090LALBH	AJY126LALBH AJY126LALBH AJY090LALBH	AJY144LALBH AJY126LALBH AJY090LALBH	AJY144LALBH AJY144LALBH AJY090LALBH	AJY144LALBH AJY144LALBH AJY126LALBH	AJY144LALBH AJY144LALBH AJY126LALBH	AJY144LALBH AJY144LALBH AJY144LALBH
39	42	45	48	51	54	57	60	63	64	64	64
36.5 to 109.5	40.0 to 120.0	42.5 to 127.5	45.0 to 135.0	48.0 to 144.0	50.5 to 151.5	54.0 to 162.0	56.5 to 169.5	59.0 to 177.0	62.5 to 187.5	65.0 to 195.0	67.5 to 202.5
3 phase 4 wire, 400 V, 50Hz											
73.0	80.0	85.0	90.0	96.0	101.0	108.0	113.0	118.0	125.0	130.0	135.0
81.5	90.0	95.0	100.0	108.0	113.0	121.5	126.5	131.5	140.0	145.0	150.0
20.29	21.92	23.97	26.02	25.52	27.57	29.20	31.25	33.30	34.93	36.98	39.03
20.88	22.34	24.80	27.26	25.67	28.13	29.59	32.05	34.51	35.97	38.43	40.89
3.60	3.65	3.55	3.46	3.76	3.66	3.70	3.62	3.54	3.58	3.52	3.46
3.90	4.03	3.83	3.67	4.21	4.02	4.11	3.95	3.81	3.89	3.77	3.67
13,700+11,100 (3,806+3,084)	13,000×2 (3,611×2)	13,700+13,000 (3,806+3,611)	13,700×2 (3,806×2)	13,000+11,100×2 (3,611+3,084×2)	13,700+11,100×2 (3,806+3,084×2)	13,000×2+11,100 (3,611×2+3,084)	13,700+13,000+11,100 (3,806+3,611+3,084)	13,700×2+11,100 (3,806×2+3,084)	13,700+13,000×2 (3,806+3,611×2)	13,700×2+13,000 (3,806×2+3,611)	13,700×3 (3,806×3)
63	63	64	65	64	65	64	65	66	66	66	67
65	65	66	67	65	66	66	67	68	68	68	69
82	82	82	82	82	82	82	82	82	82	82	82
11.0+7.5	11.0×2	11.0×2	11.0×2	11.0+7.5×2	11.0+7.5×2	11.0×2+7.5	11.0×2+7.5	11.0×2+7.5	11.0×3	11.0×3	11.0×3
Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
1,240+930	1,240×2	1,240×2	1,240×2	1,240+930×2	1,240+930×2	1,240×2+930	1,240×2+930	1,240×2+930	1,240×3	1,240×3	1,240×3
765	765	765	765	765	765	765	765	765	765	765	765
275+252	275×2	275×2	275×2	275+252×2	275+252×2	275×2+252	275×2+252	275×2+252	275×3	275×3	275×3
R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
11.8+11.7	11.8×2	11.8×2	11.8×2	11.8+11.7×2	11.8+11.7×2	11.8×2+11.7	11.8×2+11.7	11.8×2+11.7	11.8×3	11.8×3	11.8×3
15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
34.92	34.92	34.92	34.92	34.92	41.27	41.27	41.27	41.27	41.27	41.27	41.27
-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

38	40	42
AJY342LALBHH	AJY360LALBHH	AJY378LALBHH
AJY126LALBH AJY108LALBH AJY108LALBH	AJY126LALBH AJY126LALBH AJY108LALBH	AJY126LALBH AJY126LALBH AJY126LALBH
57	60	64
53.5 to 160.5	56.8 to 170.2	60.0 to 180.0
3 phase 4 wire, 400 V, 50Hz		
107.0	113.5	120.0
120.0	127.5	135.0
28.88	30.88	32.88
28.47	30.99	33.51
3.70	3.68	3.65
4.21	4.11	4.03
13,000×3 (3,611×3)	13,000×3 (3,611×3)	13,000×3 (3,611×3)
64	64	65
66	66	67
82	82	82
11.0×3	11.0×3	11.0×3
Blue fin	Blue fin	Blue fin
1,690	1,690	1,690
1,240×3	1,240×3	1,240×3
765	765	765
275×3	275×3	275×3
R410A	R410A	R410A
11.8×3	11.8×3	11.8×3
19.05	19.05	19.05
41.27	41.27	41.27
-5 to 46	-5 to 46	-5 to 46
-20 to 21	-20 to 21	-20 to 21

Note: Specifications are based on the following conditions:
Cooling: Indoor temperature of 27℃DB / 19℃CWB, and outdoor temperature of 35℃DB / 24℃CWB.
Heating: Indoor temperature of 20℃CDB / (15℃CWB), and outdoor temperature of 7℃CDB / 6℃CWB.
Pipe length: 7.5m; height difference between outdoor unit and indoor unit: 0m.

*1: Minimum connectible indoor unit number is 2.
 However ARXC72 and ARXC90 can be used to signal connection.
*2: The noise value is the value when measured in an anechoic room.
 When measured in the actual installed state, surrounding noise and reflections are
 received, and the measured value is usually larger than the indicated value.

AIRSTAGE

Heat Recovery

Modular Type

AIRSTAGE VR-IV

High Operating Energy Efficiency

Our Heat recovery systems achieve high operating energy efficiency by drawing heat from the room to be cooled and transferring it as energy for rooms that are to be heated.

- Heat exchanger
- 4 way valve
- Compressor
- Outdoor unit

High pressure liquid
Low pressure gas
High pressure gas

- RB unit
- Heat exchanger
- Indoor unit
- EEV
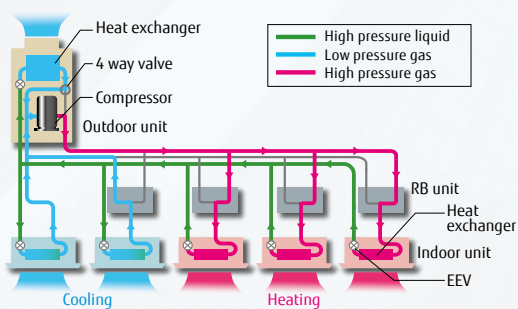
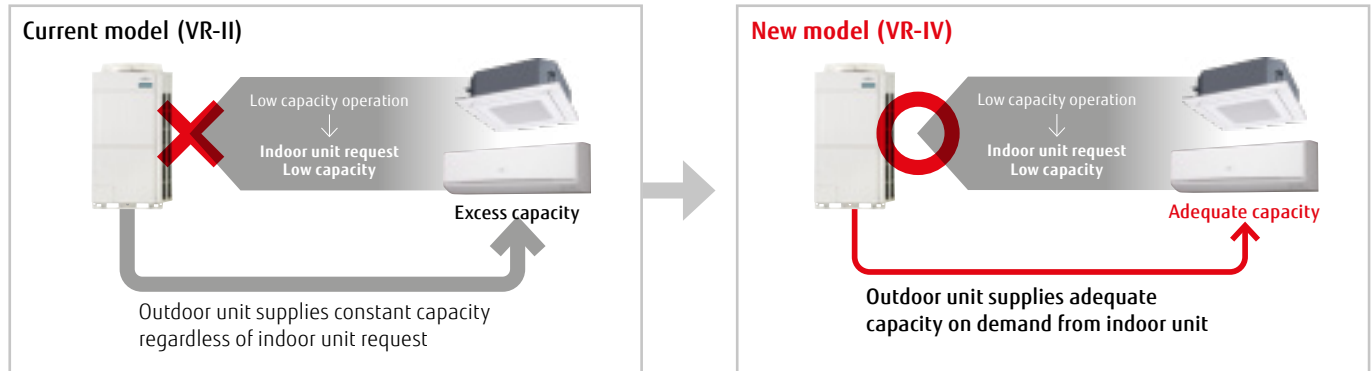Cooling   Heating

Our heat recovery systems can achieve high operating energy efficiency by drawing heat from the room to be cooled and transferring it as energy for rooms to be heated.
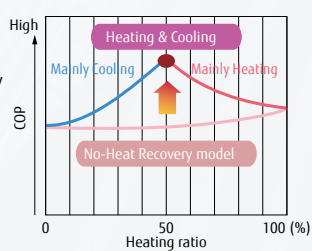
High

COP

Heating & Cooling

Mainly Cooling   Mainly Heating

No-Heat Recovery model

0   50   100 (%)
Heating ratio

FUJITSU

New intelligent refrigerant control

Fujitsu general proposes New outdoor unit which includes New refrigerant control.
New refrigerant control can be operated with suitable control corresponding to heat load of the room and can offer a more comfortable space. New refrigerant control can also provide more energy savings.

Current model (VR-II)

Low capacity operation
↓
**Indoor unit request
Low capacity**

Excess capacity

Outdoor unit supplies constant capacity regardless of indoor unit request

New model (VR-IV)

Low capacity operation
↓
**Indoor unit request
Low capacity**

Adequate capacity

Outdoor unit supplies adequate capacity on demand from indoor unit

* The improvement by the control and the actual sine wave varies by the combination of the indoor unit and system operating condition.

Energy saving technology that enhances operational efficiency

Powerful large propeller fan
By using CFD*[1] technology, the newly designed fan achieves high performance and low noise operation.
*1. CFD = computational fluid dynamics

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

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

Large capacity DC inverter compressor
Large capacity highly efficient DC twin rotary compressor with excellent part load capability.

3 phase DC fan motor
Efficiency is improved with the highly efficient motor with sophisticated drive control. Additionally, the DC fan motor exhibits low noise output.

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

Front intake port
(corner cut air inhaling structure)
In multiple outdoor unit installations, the unique front intake design improves airflow into the heat exchanger.

All inverter compressor

**Large capacity
DC inverter compressor**

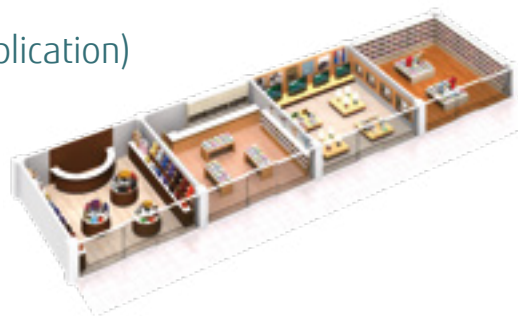Large capacity highly efficient DC twin rotary compressor with excellent intermediate capability.

High efficiency compressor speed control

Comfortable space with small room temperature changes and minimum energy loss is created by 0.1Hz steps for compressor speed control.

0.1Hz

Capacity

Inverter frequency

AIRSTAGE
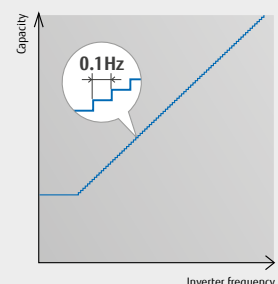
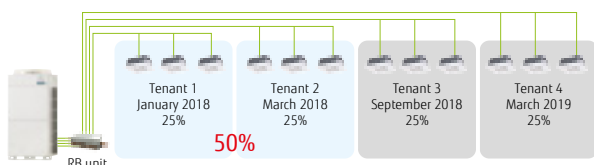# Extended connection ratio (for Multi-tenant application)

This function is effective when staging occurs during a buildings construction program where air conditioning to additional tenants can be added later in the project

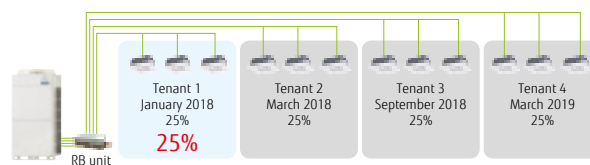## Stand-alone

Current model (VR-II)
Example) for 12HP: 6HP operations for 50% are required.

| Tenant 1 January 2018 25% | Tenant 2 March 2018 25% | Tenant 3 September 2018 25% | Tenant 4 March 2019 25% |

RB unit

50%

Construction work is required even at the tenant which is not yet open.

New model (VR-IV)
Example) for 12HP: 3HP operations for 25% are enabled.

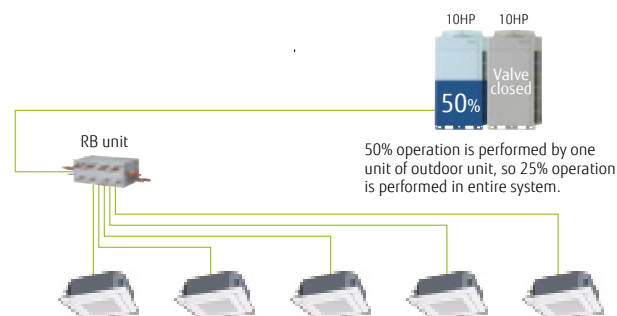| Tenant 1 January 2018 25% | Tenant 2 March 2018 25% | Tenant 3 September 2018 25% | Tenant 4 March 2019 25% |

RB unit

25%

Installation and commissioning can be added flexibly according to the opening date of other tenants.

Modular type

One outdoor unit operates effectively for the connectable indoor unit capacity in the entire system. (25% operation by multiple units is not available.)

Example) for 25% operation (5HP) of 20HP (10HP x 2 units)
5HP operation by 50% of one 10HP outdoor unit is performed.
→25% operation by 2 units is not performed.

10HP 10HP

50% Valve closed

RB unit

50% operation is performed by one unit of outdoor unit, so 25% operation is performed in entire system.

Additional installation without changing the main pipe

Installation work can be performed from the beginning by the main pipe diameter used in the final system.
Unlike current model, changing the main pipe is not necessary, so duplication of work is resolved.

50% installation

Final system: 150% installation

Current model (VR-II)

Closed
Main pipe
Gas: Ø22.22, 15.88
Liquid: Ø12.7
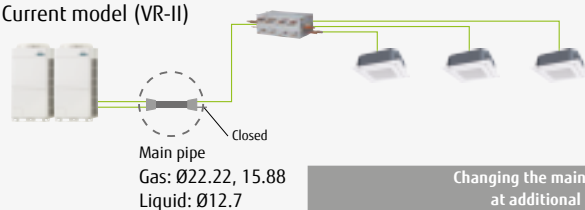
Changing the main pipe is necessary at additional installation.

Gas: Ø34.92, 28.58
Liquid: Ø15.88

New model (VR-IV)

Closed
Main pipe
Gas: Ø34.92, 28.58
Liquid: Ø15.88
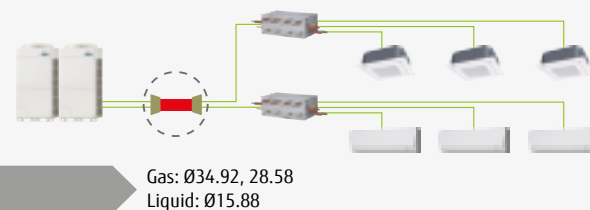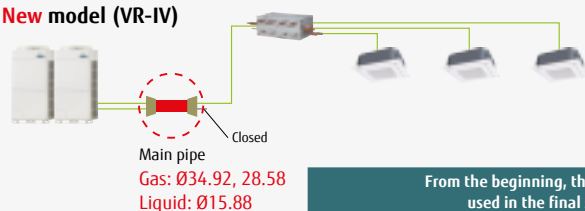
From the beginning, the main pipe diameter used in the final system is used.
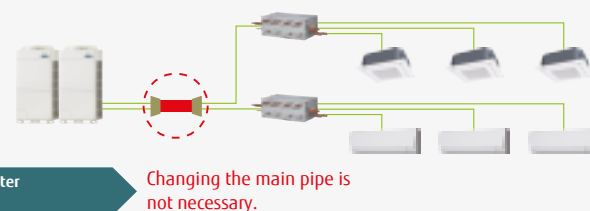
Changing the main pipe is not necessary.

New Individual Defrost Operation

"Individual Defrost Operation" is a function to maintain the indoor comfort while under defrost operation.

Current product (VR-II)
Outdoor temperature 2°C or less

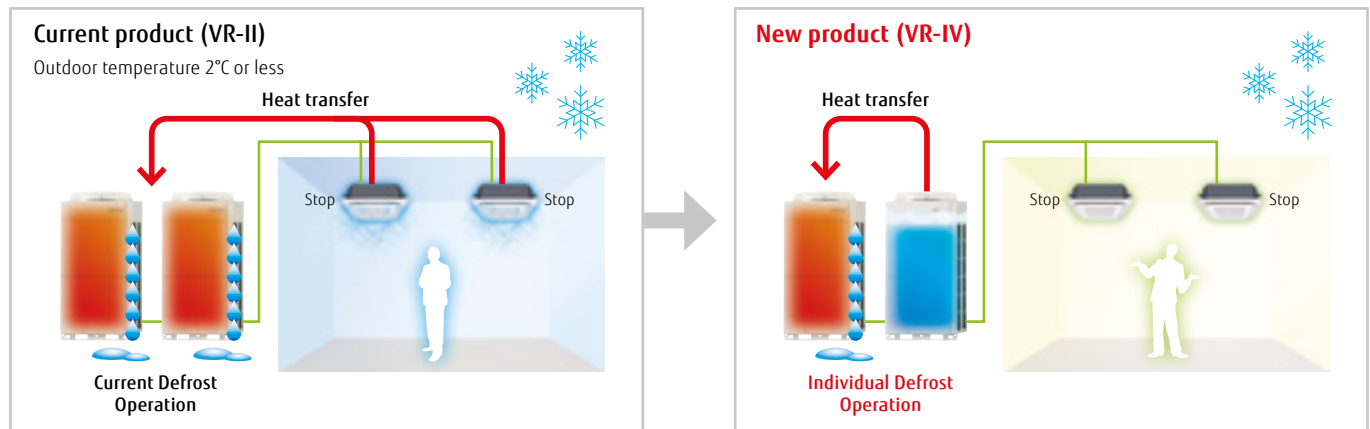Heat transfer

Stop   Stop

Current Defrost
Operation

New product (VR-IV)

Heat transfer

Stop   Stop

Individual Defrost
Operation

When under the defrost operation, the heat is absorbed from the indoor dropping the room temperature.

With the "Individual Defrost operation", the heat is absorbed from the other outdoor module to avoid excessive room temperature drop.

In the case of individual defrost operation, indoor unit returns to its original state quickly after defrost operation.

Defrost Operation

Stop

Stop Defrost Operation
Start Normal operation

Operation

Normal operation

Operation

The room temperature returns to its original state faster.

Individual Defrost Operation

Conventional defrost operation

Room Temperature

Time

—— Individual Defrost Operation
—— Conventional defrost operation

Indoor comfort is maintained during defrosting operation by preventing the room temperature decrease.

Improvement varies by the system combination, installation condition, and operating environment.

Efficiency during operation

A high COP is achieved for all combinations through our unique heat exchanger structure, highly efficient DC twin compressor and our own proprietary technologies.

Space saving combination

(COP)

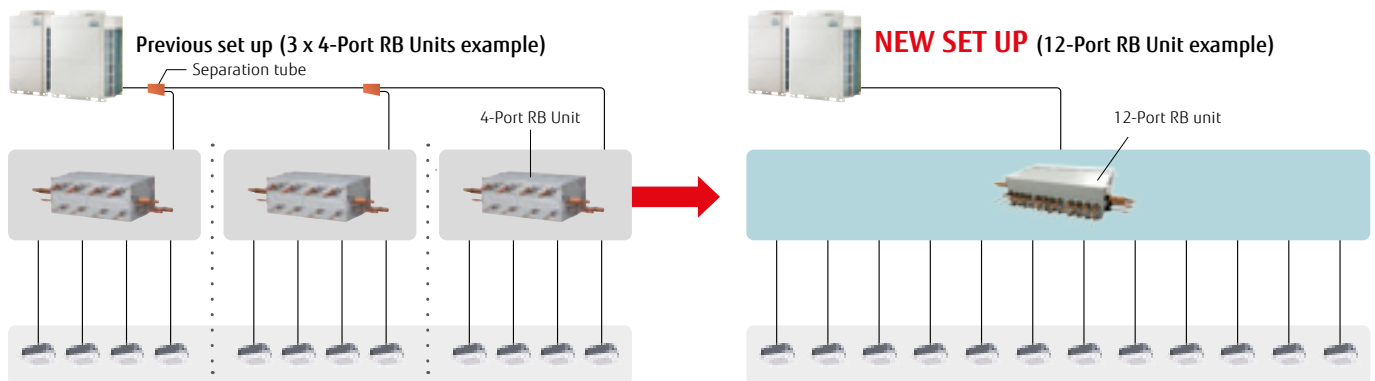| (HP)	8	10	12	14	16	18	20	22	24*	26	28	30	32	34	36	38	40	42	44	46	48
COP	4.39	3.82	3.90	3.81	3.45	4.29	4.28	4.09	4.10	4.07	3.83	3.83	3.65	4.09	4.10	4.07	3.91	3.90	3.77	3.77	3.65

Energy efficient combination

(COP)

(HP)	16	22	24*	26	28	30	32	34	36	38	40	42	44
COP	4.59	4.22	4.59	4.38	4.36	4.31	4.08	4.18	4.15	3.97	4.06	4.04	3.90

For 24HP combination

Space saving → Energy efficiency

COP 12% UP
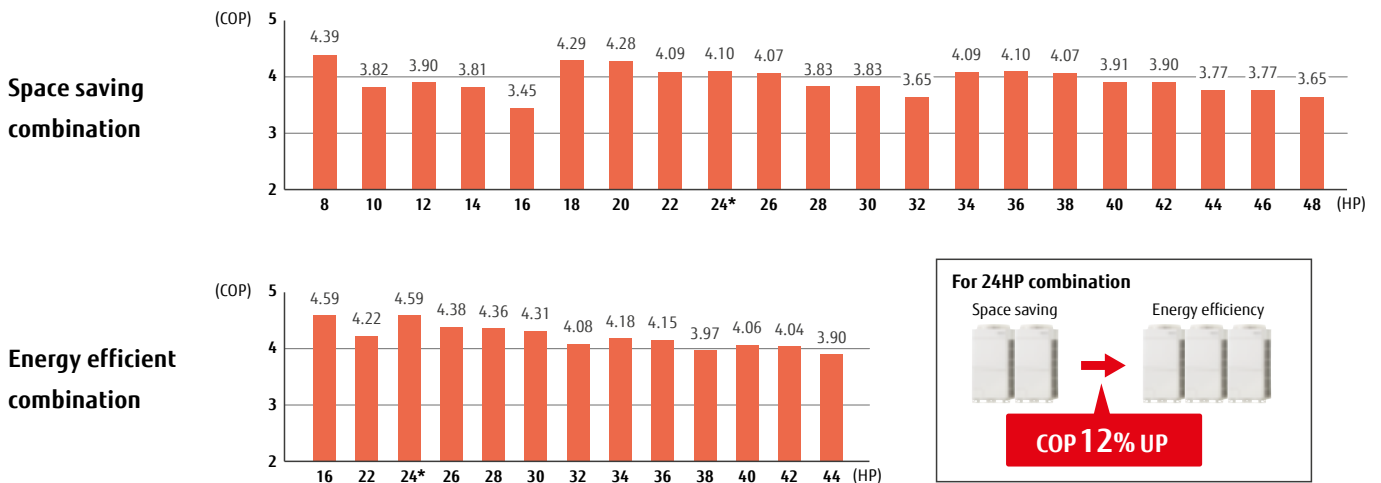
8 & 12 RB unit

The 8 and 12 branch RB units allow for greater flexibility with refrigerant piping work for various floor layouts and building structures.

Previous set up (3 x 4-Port RB Units example)
Separation tube
4-Port RB Unit

NEW SET UP (12-Port RB Unit example)
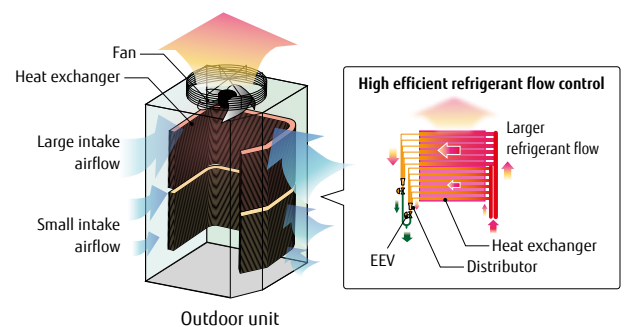12-Port RB unit

Multiple outdoor operation control

When multiple outdoor units are connected, a sophisticated operation is performed by each compressor. Rather than running one compressor at full load and distributing refrigerant to one heat exchanger, this control method operates all compressors at part load and distributes refrigerant to all of the heat exchangers allowing for the overall system efficiency to be improved.

Compressor Load level

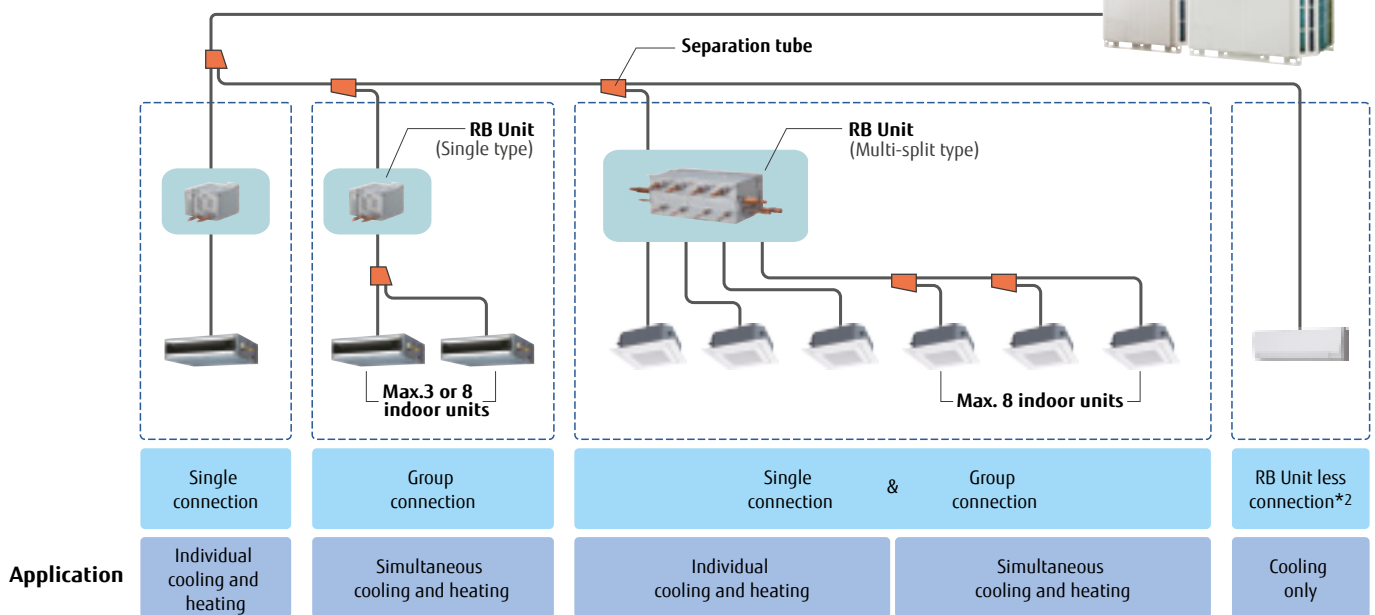High efficient operation   Inefficient operation
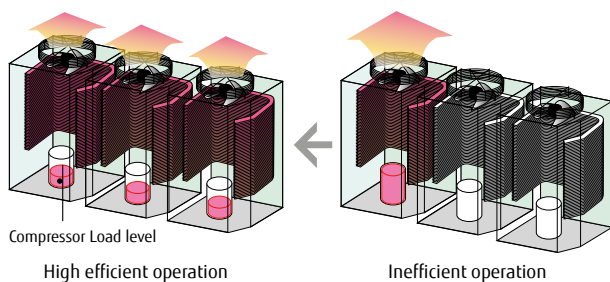
Heat exchanger refrigerant control

The heat exchanger in the outdoor unit is split into two parts (Top and Bottom). The efficiency of the heat exchanger has been improved by adopting an optimum refrigerant path control where the refrigerant is distributed more into the top heat exchanger as this is where there is a greater air flow intake.

Fan
Heat exchanger
Large intake airflow
Small intake airflow
Outdoor unit

High efficient refrigerant flow control
Larger refrigerant flow
Heat exchanger
EEV
Distributor

Flexible piping connection

Flexible refrigerant pipe work is possible through the use of various piping and RB Unit connections to match the floor layout and building structure.

Separation tube

RB Unit
(Single type)

RB Unit
(Multi-split type)

Max.3 or 8 indoor units

Max. 8 indoor units

	Single connection	Group connection	Single connection & Group connection		RB Unit less connection*2
Application	Individual cooling and heating	Simultaneous cooling and heating	Individual cooling and heating	Simultaneous cooling and heating	Cooling only

• The RB unit can be freely positioned between the first branch and the indoor unit.
• The maximum height difference between RB units is 15 m.
*2 RB Unit is not necessary for cooling only use Capacity limitations apply. See technical manual

Flexible installation of RB unit

RB unit
(Multi-split type/8-branch)

RB unit
(Multi-split type/12-branch)
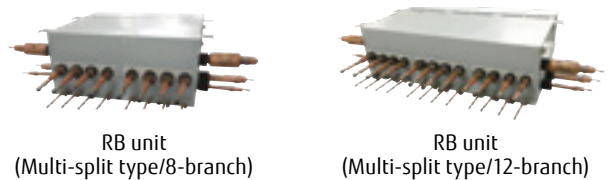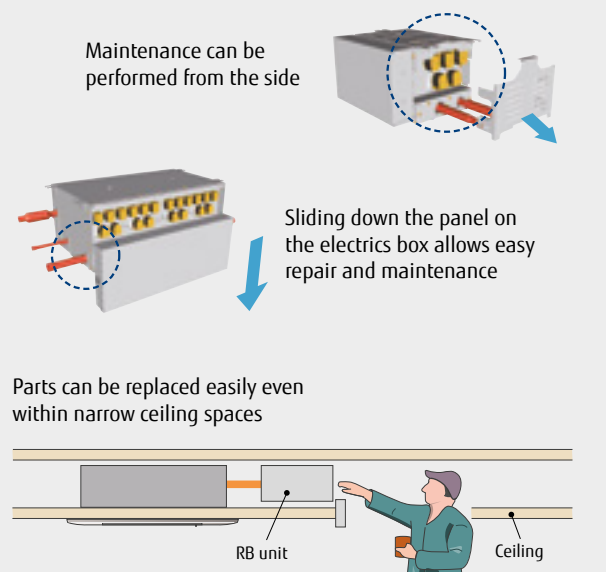
Small & slim design saves space. Height 198 mm!

• Compact and slim design saves space
• Drain pipe not required
• The control box position can be changed to meet installation conditions

Installation is possible from either side due to the interchangeable positioning of the control box

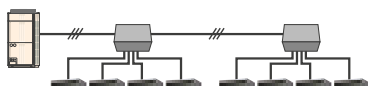Installation of the control box is possible on the upper side to enable use in narrow spaces

• 2-way connection

• Up to 2 multi-split type RB units can be connected in series

Easy maintenance in narrow spaces

Maintenance can be performed from the side

Sliding down the panel on the electrics box allows easy repair and maintenance

Parts can be replaced easily even within narrow ceiling spaces

RB unit

Ceiling

AIRSTAGE

Outdoor units lineup

• Combinations other than those specified are not supported.

Space saving combinations

| 22.4kW (8HP)	28.0kW (10HP)	33.5kW (12HP)	40.0kW (14HP)	45.0kW (16HP)
AJT072GALCH UNIT: AJT072GALCH	AJT090GALCH UNIT: AJT090GALCH	AJT108GALCH UNIT: AJT108GALCH	AJT126GALCH UNIT: AJT126GALCH	AJT144GBLCH UNIT: AJT144GBLCH
50.4kW (18HP)	55.9W (20HP)	61.5kW (22HP)	67.0kW (24HP)	73.5kW (26HP)
AJT162GALCH UNIT: AJT090 / 072GALCH	AJT180GALCH UNIT: AJT108 / 072GALCH	AJT198GALCH UNIT: AJT108 / 090GALCH	AJT216GALCH UNIT: AJT108 / 108GALCH	AJT234GALCH UNIT: AJT126 / 108GALCH
78.5kW (28HP)	85.0kW (30HP)	90.0kW (32HP)	95.0kW (34HP)	100.5kW (36HP)
AJT252GALCH UNIT: AJT144 / 108GALCH	AJT270GALCH UNIT: AJT144 / 126GALCH	AJT288GALCH UNIT: AJT144 / 144GALCH	AJT306GALCH UNIT: AJT108 / 108 / 090GALCH	AJT324GALCH UNIT: AJT108 / 108 / 108GALCH
107.0kW (38HP)	112.0kW (40HP)	118.5kW (42HP)	123.5kW (44HP)	130.0kW (46HP)
AJT342GALCH UNIT: AJT126 / 108 / 108GALCH	AJT360GALCH UNIT: AJT144 / 108 / 108GALCH	AJT378GALCH UNIT: AJT144 / 126 / 108GALCH	AJT396GALCH UNIT: AJT144 / 144 / 108GALCH	AJT414GALCH UNIT: AJT144 / 144 / 126GALCH
135.0kW (48HP)				
AJT432GALCH UNIT: AJT144 / 144 / 144GALCH				

Energy efficiency combinations

44.8kW (16HP)	62.4kW (22HP)	67.2kW (24HP)	72.8kW (26HP)	78.3kW (28HP)
AJT144GALCHH UNIT: AJT072 / 072GALCH	AJT198GALCHH UNIT: AJT126 / 072GALCH	AJT216GALCHH UNIT: AJT072 / 072 / 072GALCH	AJT234GALCHH UNIT: AJT090 / 072 / 072GALCH	AJT252GALCHH UNIT: AJT108 / 072 / 072GALCH
84.8kW (30HP)	89.8kW (32HP)	95.9kW (34HP)	102.4kW (36HP)	107.4kW (38HP)
AJT270GALCHH UNIT: AJT126 / 072 / 072GALCH	AJT288GALCHH UNIT: AJT144 / 072 / 072GALCH	AJT306GALCHH UNIT: AJT126 / 108 / 072GALCH	AJT324GALCHH UNIT: AJT126 / 126 / 072GALCH	AJT342GALCHH UNIT: AJT144 / 126 / 072GALCH
113.5kW (40HP)	120.0kW (42HP)	125.0kW (44HP)		
AJT360GALCHH UNIT: AJT126 / 126 / 072GALCH	AJT378GALCHH UNIT: AJT126 / 126 / 126GALCH	AJT396GALCHH UNIT: AJT144 / 126 / 126GALCH		

Models
8HP : AJT072GALCH
10HP : AJT090GALCH
12HP : AJT108GALCH
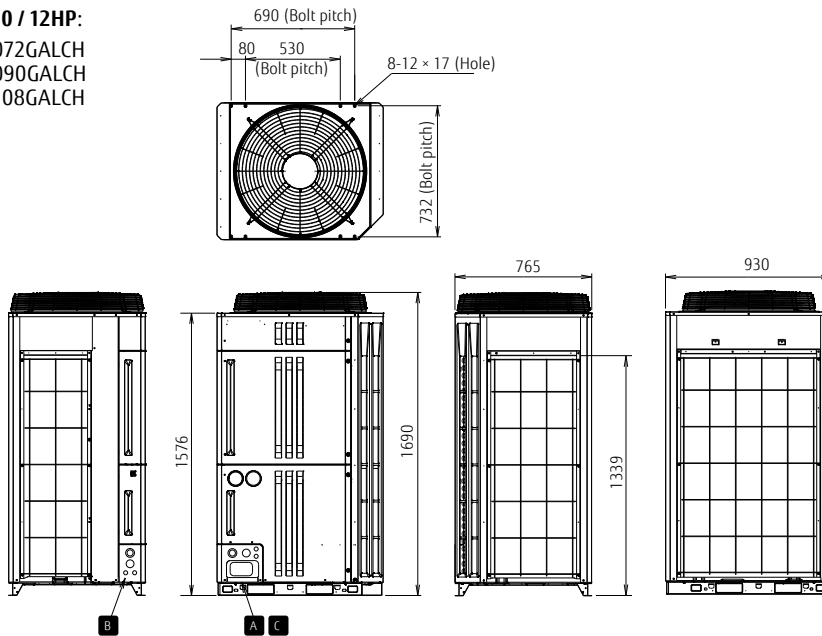**14HP : AJT126GALCH**
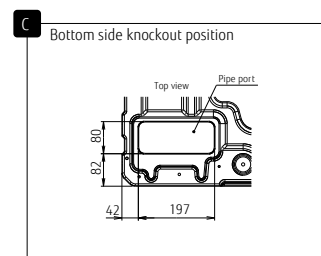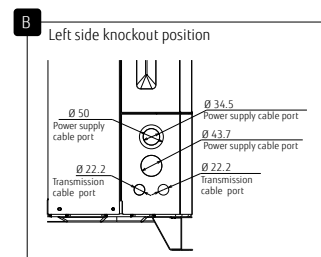**16HP : AJT144GALCH**
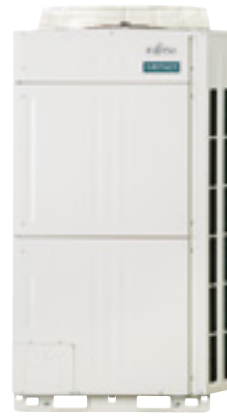
8, 10, 12 HP   14, 16 HP

Dimensions

(Unit: mm)

8 / 10 / 12HP:
AJT072GALCH
AJT090GALCH
AJT108GALCH

690 (Bolt pitch)
80   530 (Bolt pitch)
8-12 × 17 (Hole)
732 (Bolt pitch)

765   930

1576   1690   1339

B   A C

14 / 16HP:
AJT126GALCH
AJT144GALCH

1000 (Bolt pitch)
80   840 (Bolt pitch)
8-12×7 (Hole)
732 (Bolt pitch)

765   1240

1690

B   A C

A Front side knockout position

73
43
Ø 34.5
Power supply cable port
Ø 43.7
Power supply cable port
Ø 50
Power supply cable port
Ø 22.2
Transmission cable port
Ø 22.2
Transmission cable port
95
75
Pipe port
10
100
125
199

B Left side knockout position

Ø 50
Power supply cable port
Ø 34.5
Power supply cable port
Ø 43.7
Power supply cable port
Ø 22.2
Transmission cable port
Ø 22.2
Transmission cable port

C Bottom side knockout position

Top view   Pipe port
80
82
42   197

AIRSTAGE

Space saving combinations

		8	10	12	14	16	18	20	22	24
Rating capacity range	HP	8	10	12	14	16	18	20	22	24
Model name		AJT072GALCH	AJT090GALCH	AJT108GALCH	AJT126GALCH	AJT144GALCH	AJT162GALCH	AJT180GALCH	AJT198GALCH	AJT216GALCH
Unit 1 Unit 2 Unit 3		AJT072GALCH	AJT090GALCH	AJT108GALCH	AJT126GALCH	AJT144GALCH	AJT090GALCH AJT072GALCH	AJT108GALCH AJT072GALCH	AJT108GALCH AJT090GALCH	AJT108GALCH AJT108GALCH
Maximum connectible indoor unit*1		15	19	22	27	30	34	38	41	45
Indoor unit connectible capacity	Cooling	kW	5.6 to 33.6	7.0 to 42.0	8.4-50.3	10.0-60.0	11.3-67.5	12.6-75.6	14.0-83.9	15.4-92.3	16.8-100.5

(note: column headers above — "Indoor unit connectible capacity" has sub-column "Cooling" and unit "kW")

			8	10	12	14	16	18	20	22	24
Power source			3 phase 4 wire, 400 V, 50Hz								
Capacity	Cooling	kW	22.4	28.0	33.5	40.0	45.0	50.4	55.9	61.5	67.0
	Heating	kW	22.4	28.0	33.5	40.0	42.0	50.4	55.9	61.5	67.0
Input power	Cooling	kW	5.59	8.35	10.12	12.36	14.48	13.94	15.71	18.47	20.24
	Heating	kW	4.88	6.86	8.18	9.90	11.51	11.74	13.06	15.04	16.36
EER	Cooling	W/W	4.01	3.35	3.31	3.24	3.11	3.62	3.56	3.33	3.31
COP	Heating	W/W	4.39	3.82	3.90	3.81	3.45	4.29	4.28	4.09	4.10
Air flow rate	High	m³/h (l/s)	11,100 (3,083)	11,100 (3,083)	11,100 (3,083)	13,000 (3,611)	13,000 (3,611)	11,100×2 (3,084×2)	11,100×2 (3,084×2)	11,100×2 (3,084×2)	11,100×2 (3,084×2)
Sound pressure level*2	Cooling	dB (A)	56	58	59	60	61	60	61	62	62
	Heating	dB (A)	58	59	62	62	62	62	63	64	65
Maximum external static pressure		Pa	80	80	80	80	80	80	80	80	80
Compressor motor output		kW	7.5	7.5	7.5	11.0	11.0	7.5×2	7.5×2	7.5×2	7.5×2
Heat exchanger fin			Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
Dimensions	Height	mm	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
	Width	mm	930	930	930	1,240	1,240	930×2	930×2	930×2	930×2
	Depth	mm	765	765	765	765	765	765	765	765	765
Weight		kg	262	262	286	286	286	262×2	262×2	262×2	262×2
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charge	kg	11.8	11.8	11.8	11.8	11.8	11.8×2	11.8×2	11.8×2	11.8×2
Connection pipe diameter	Liquid	mm	12.70	12.70	12.70	12.70	12.70	15.88	15.88	15.88	15.88
	Discharge gas	mm	15.88	19.05	19.05	22.22	22.22	22.22	22.22	28.58	28.58
	Suction gas	mm	22.22	22.22	28.58	28.58	28.58	28.58	28.58	34.92	34.92
Operating range	Cooling	°C	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46
	Heating	°C	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21
	Cooling/Heating	°C	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21

Energy efficiency combinations

		16	22	24	26	28	30	32	34	36
Rating capacity range	HP	16	22	24	26	28	30	32	34	36
Model name		AJT144GALCHH	AJT198GALCHH	AJT216GALCHH	AJT234GALCHH	AJT252GALCHH	AJT270GALCHH	AJT288GALCHH	AJT306GALCHH	AJT324GALCHH
Unit 1 Unit 2 Unit 3		AJT072GALCH AJT072GALCH	AJT126GALCH AJT072GALCH	AJT072GALCH AJT072GALCH AJT072GALCH	AJT090GALCH AJT072GALCH AJT072GALCH	AJT108GALCH AJT072GALCH AJT072GALCH	AJT126GALCH AJT072GALCH AJT072GALCH	AJT144GALCH AJT072GALCH AJT072GALCH	AJT126GALCH AJT108GALCH AJT072GALCH	AJT126GALCH AJT126GALCH AJT072GALCH
Maximum connectible indoor unit*1		30	41	45	50	53	57	61	64	64
Indoor unit connectible capacity	Cooling	kW	11.2-67.2	15.6-93.6	16.8-100.8	18.2-109.2	19.6-117.5	21.2-127.2	22.5-134.7	24.0-143.9	25.6-153.6

			16	22	24	26	28	30	32	34	36
Power source			3 phase 4 wire, 400 V, 50Hz								
Capacity	Cooling	kW	44.8	62.4	67.2	72.8	78.3	84.8	89.8	95.9	102.4
	Heating	kW	44.8	62.4	67.2	72.8	78.3	84.8	86.8	95.9	102.4
Input power	Cooling	kW	11.18	17.95	16.77	19.53	21.30	23.54	25.66	28.07	30.31
	Heating	kW	9.76	14.78	14.64	16.62	17.94	19.66	21.27	22.96	24.68
EER	Cooling	W/W	4.01	3.48	4.01	3.73	3.68	3.60	3.5	3.42	3.38
COP	Heating	W/W	4.59	4.22	4.59	4.38	4.36	4.31	4.08	4.18	4.15
Air flow rate	High	m³/h (l/s)	11,100×2 (3,084×2)	13,000+11,100 (3,611+3,084)	11,100×3 (3,084×3)	11,100×3 (3,084×3)	11,100×3 (3,084×3)	13,000+11,100×2 (3,611+3,084×2)	13,000+11,100×2 (3,611+3,084×2)	13,000+11,100×2 (3,611+3,084×2)	13,000×2+11,100 (3,611×2+3,084)
Sound pressure level*2	Cooling	dB (A)	59	61	61	62	62	63	63	63	64
	Heating	dB (A)	61	63	63	63	65	65	65	66	66
Maximum external static pressure		Pa	80	80	80	80	80	80	80	80	80
Compressor motor output		kW	7.5×2	11.0+7.5	7.5×3	7.5×3	7.5×3	11.0+7.5×2	11.0+7.5×2	11.0+7.5×2	11.0×2+7.5
Heat exchanger fin			Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
Dimensions	Height	mm	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
	Width	mm	930×2	1,240+930	930×3	930×3	930×3	1,240+930×2	1,240+930×2	1,240+930×2	1,240×2+930
	Depth	mm	765	765	765	765	765	765	765	765	765
Weight		kg	262×2	286+262	262×3	262×3	262×3	286+262×2	286+262×2	286+262×2	286×2+262
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charge	kg	11.8×2	11.8×2	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3
Connection pipe diameter	Liquid	mm	12.70	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05
	Discharge gas	mm	22.22	22.22	28.58	28.58	28.58	28.58	28.58	28.58	28.58
	Suction gas	mm	28.58	28.58	34.92	34.92	34.92	34.92	34.92	34.92	41.27
Operating range	Cooling	°C	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46
	Heating	°C	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21
	Cooling/Heating	°C	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21

FUJITSU

26	28	30	32	34	36	38	40	42	44	46	48
AJT234GALCH	AJT252GALCH	AJT270GALCH	AJT288GALCH	AJT306GALCH	AJT324GALCH	AJT342GALCH	AJT360GALCH	AJT378GALCH	AJT396GALCH	AJT414GALCH	AJT432GALCH
AJT126GALCH AJT108GALCH	AJT144GALCH AJT108GALCH	AJT144GALCH AJT126GALCH	AJT144GALCH AJT144GALCH	AJT108GALCH AJT108GALCH AJT090GALCH	AJT108GALCH AJT108GALCH AJT108GALCH	AJT126GALCH AJT108GALCH AJT108GALCH	AJT144GALCH AJT108GALCH AJT108GALCH	AJT144GALCH AJT126GALCH AJT108GALCH	AJT144GALCH AJT144GALCH AJT108GALCH	AJT144GALCH AJT144GALCH AJT126GALCH	AJT144GALCH AJT144GALCH AJT144GALCH
50	53	57	61	64	64	64	64	64	64	64	64
18.4-110.3	19.6-117.8	21.3-127.5	22.5-135.0	23.8-142.5	25.1-150.8	26.8-160.5	28.0-168.0	29.6-177.8	30.9-185.3	32.5-195.0	33.8-202.5
3 phase 4 wire, 400 V, 50Hz											
73.5	78.5	85.0	90.0	95.0	100.5	107.0	112.0	118.5	123.5	130.0	135.0
73.5	75.5	82.0	84.0	95.0	100.5	107.0	109.0	115.5	117.5	124.0	126.0
22.48	24.60	26.84	28.96	28.59	30.36	32.60	34.72	36.96	39.08	41.32	43.44
18.08	19.69	21.41	23.02	23.22	24.54	26.26	27.87	29.59	31.20	32.92	34.53
3.27	3.19	3.17	3.11	3.32	3.31	3.28	3.23	3.21	3.16	3.15	3.11
4.07	3.83	3.83	3.65	4.09	4.10	4.07	3.91	3.90	3.77	3.77	3.65
13,000+11,100 (3,611+3,084)	13,000+11,100 (3,611+3,084)	13,000×2 (3,611×2)	13,000×2 (3,611×2)	11,000×3 (3,084x3)	11,000×3 (3,084x3)	13,000+11,100×2 (3,611+3,084x2)	13,000+11,100×2 (3,611+3,084x2)	13,000×2+11,100 (3,611×2+3,084)	13,000×2+11,100 (3,611×2+3,084)	13,000×3 (3,611×3)	13,000×3 (3,611×3)
63	63	64	64	63	64	64	65	65	65	65	66
65	65	65	65	66	67	67	67	67	67	67	67
80	80	80	80	80	80	80	80	80	80	80	80
11.0+7.5	11.0+7.5	11.0×2	11.0×2	7.5×3	7.5×3	11.0+7.5×2	11.0+7.5×2	11.0×2+7.5	11.0×2+7.5	11.0×3	11.0×3
Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
1,240+930	1,240+930	1,240×2	1,240×2	930×3	930×3	1,240+930×2	1,240+930×2	1,240×2+930	1,240×2+930	1,240×3	1,240×3
765	765	765	765	765	765	765	765	765	765	765	765
286+262	286+262	286×2	286×2	262×3	262×3	286+262×2	286+262×2	286×2+262	286×2+262	286×3	286×3
R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
11.8×2	11.8×2	11.8×2	11.8×2	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3
15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
28.58	28.58	28.58	28.58	28.58	28.58	34.92	34.92	34.92	34.92	34.92	34.92
34.92	34.92	34.92	34.92	34.92	41.27	41.27	41.27	41.27	41.27	41.27	41.27
-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46
-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21
-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21

38	40	42	44
AJT342GALCHH	AJT360GALCHH	AJT378GALCHH	AJT396GALCHH
AJT144GALCH AJT126GALCH AJT072GALCH	AJT126GALCH AJT126GALCH AJT108GALCH	AJT126GALCH AJT126GALCH AJT126GALCH	AJT144GALCH AJT126GALCH AJT126GALCH
64	64	64	64
26.9-161.1	28.4-170.3	30.0-180.0	31.3-187.5
3 phase 4 wire, 400 V, 50Hz			
107.4	113.5	120.0	125.0
104.4	113.5	120.0	122.0
32.43	34.84	37.08	39.20
26.29	27.98	29.70	31.31
3.31	3.26	3.24	3.19
3.97	4.06	4.04	3.90
13,000×2+11,100 (3,611×2+3,084)	13,000×2+11,100 (3,611×2+3,084)	13,000×3 (3,611×3)	13,000×3 (3,611×3)
64	64	65	65
66	67	67	67
80	80	80	80
11.0×2+7.5	11.0×2+7.5	11.0×3	11.0×3
Blue fin	Blue fin	Blue fin	Blue fin
1,690	1,690	1,690	1,690
1,240×2+930	1,240×2+930	1,240×3	1,240×3
765	765	765	765
286×2+262	286×2+262	286×3	286×3
R410A	R410A	R410A	R410A
11.8×3	11.8×3	11.8×3	11.8×3
19.05	19.05	19.05	19.05
34.92	34.92	34.92	34.92
41.27	41.27	41.27	41.27
-10 to 46	-10 to 46	-10 to 46	-10 to 46
-20 to 21	-20 to 21	-20 to 21	-20 to 21
-10 to 21	-10 to 21	-10 to 21	-10 to 21

Note: Specifications are based on the following conditions:
Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length: 7.5m; height difference between outdoor unit and indoor unit: 0m.

*1: Minimum connectible indoor unit number is 2.
*2: These are the measured values in the manufacturer's anechoic chamber.
Because of the surrounding sound environment, the sound levels measured in actual installation conditions might be higher than the specified values here.

AIRSTAGE

AIRSTAGE™ INDOOR UNITS

17 types and 112 models available to meet the requirements of almost any building design.

The AIRSTAGE™ indoor units were developed to be highly efficient, compact, low noise producing with user friendly operation. With a variety of indoor units and capacities available, Fujitsu General has a unit that's easy to install and maintain and matches almost any requirement.

INDOOR UNITS LINEUP

Cassette (1-way Flow type)

4-way Flow Compact Cassette

Circular Flow Cassette

Mini Duct

Slim Duct / Slim Concealed Floor

Medium Static Pressure Duct

High Static Pressure Duct

Floor (compact)

Floor / Ceiling

Ceiling

Wall Mounted (EEV Internal / External)

AIRSTAGE

INDOOR UNITS LINEUP

Comprehensive range of indoor units with various design and capacity ranges to suit most air conditioning needs.
17 types and 112 models, with a capacity range from 2.2kW to 28.0kW.

Indoor units range

Model code			7	9	12	14	18
Capacity range (kW)			2.2	2.8	3.6	4.5	5.6
Cassette	1-way Flow		AUXV007GLEH	AUXV009GLEH	AUXV012GLEH	AUXV014GLEH	AUXV018GLEH
	4-way Flow Compact		AUXB007GLEH AUXB07GALH	AUXB009GLEH AUXB09GALH	AUXB012GLEH AUXB12GALH	AUXB014GLEH AUXB14GALH	AUXB018GLEH AUXB18GALH
	Circular Flow	(Slim type)		AUXN009GLAH	AUXN012GLAH	AUXN014GLAH	AUXM018GLEH AUXM018GLAH
		(Large type)					AUXK018GLEH AUXK018GLAH
Duct	Mini Duct (With drain pump)		ARXK007GLGH	ARXK009GLGH	ARXK012GLGH	ARXK014GLGH	ARXK018GLGH
	Slim Duct (With drain pump)		ARXD007GLEH	ARXD009GLEH	ARXD012GLEH	ARXD014GLEH	ARXD018GLEH
	Medium Static Pressure Duct						
	High Static Pressure Duct						
Floor	Floor (Same as Ceiling models)				ABYA012GTEH	ABYA014GTEH	ABYA018GTEH
	Slim Concealed Floor (Same as Slim Duct models)		ARXD007GLEH	ARXD009GLEH	ARXD012GLEH	ARXD014GLEH	ARXD018GLEH
	Floor (compact)		AGYA007GCGH	AGYA009GCGH	AGYA012GCGH	AGYA014GCGH	
	Floor (compact) (EEV external)		AGYE007GCEH	AGYE009GCEH	AGYE012GCEH	AGYE014GCEH	With this model, connection of EV kit is necessary.
Ceiling	Ceiling				ABYA012GTEH	ABYA014GTEH	ABYA018GTEH
Wall Mounted	Wall Mounted		ASYA007GCGH	ASYA009GCGH	ASYA012GCGH	ASYA014GCGH	NEW ASYA018GCEH ASYA18GBCH
	Wall Mounted (EEV external)		ASYE007GCEH	ASYE009GCEH	ASYE012GCEH	ASYE014GCEH	With this model, connection of EV kit is necessary.

24	30	34	36	45	54	60	72	90	96
7.1	9.0	10.0	11.2	12.5	14.0	18.0	22.4	25.0	28.0
AUXV024GLEH									
AUXB024GLEH AUXB24GALH									
AUXM024GLEH AUXM024GLAH	AUXM030GLEH AUXM030GLAH								
AUXK024GLEH AUXK024GLAH	AUXK030GLEH AUXK030GLAH	AUXK034GLEH AUXK034GLAH	AUXK036GLEH AUXK036GLAH	AUXK045GLEH AUXK045GLAH	AUXK054GLEH AUXK054GLAH				
ARXK024GLGH									
ARXD024GLEH									
ARXA024GLEH	ARXA030GLEH		ARXA036GLEH	ARXA045GLEH					
			ARXC036GTEH ARXC36GATH	ARXC045GTEH ARXC45GATH		ARXC060GTEH ARXC60GATH*1	ARXC072GTEH*1	ARXC090GTEH*1	ARXC096GTEH*1
ABYA024GTEH									
ARXD024GLEH									
ABYA024GTEH	ABYA030GTEH		ABYA036GTEH	ABYA045GTEH	ABYA054GTEH				
NEW ASYA024GCEH ASYA24GBCH	ASYA030GTEH	ASYA034GTEH							

*1: ARXC60 / 072 / 090 / 096G cannot be connected to J-IIS Series and J-III Series.

AIRSTAGE

Cassette (1-way Flow type)

Models (Slim type)
AUXV007GLEH / AUXV009GLEH / AUXV012GLEH
AUXV014GLEH / AUXV018GLEH / AUXV024GLEH

AUXV007 AUXV009 AUXV012   AUXV014 AUXV018 AUXV024

DC FAN
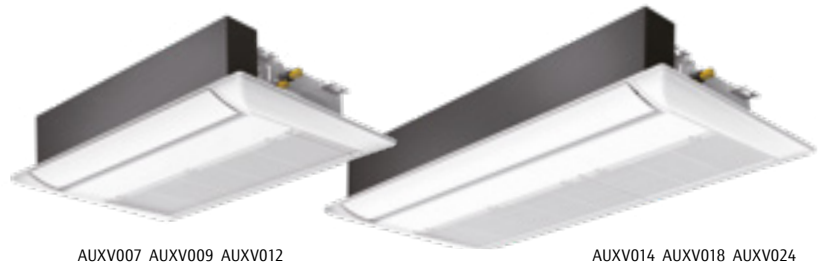
Features

Compact chassis size

Their compact sizes make it easy to install them in a variety of commercial locations and environments.
• The chassis is less than 200 mm high in every model.
• All 4 to 12kBtu models are less than 1,000 mm wide.
• The chassis depth is 570 mm, which fits nicely into a grid-type ceiling.

Dimensions (Panel size)   (Unit : mm)

	7	9	12	14	18	24
H	198 (43)			198 (43)		
W	785 (950)			1,190 (1,360)		
D	570 (620)			570 (620)		

Compact depth fits the grid ceiling

Wide airflow range

The large flap with triangularly arrayed louvers has a wider movable range and directs an airflow to the furthest corners of the room.

Triangle design

In cooling mode, the horizontal airflow reaches the furthest corners of the room and avoids hitting human bodies directly in order to provide comfortable air conditioning.

In heating mode, the warm air is directed downward toward the floor to warm the occupants' feet and lower bodies while keeping their heads relatively cool.
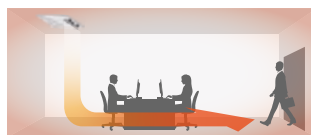
Note: This is a conceptual drawing. Air conditioning performance may vary depending on installation, room size, and the distance from the wall.

Low noise operation

They produce little noise during operation, which makes them an ideal choice for use in hotel rooms.

Flexible Installation

By using new L-type piping kit, more flexible installation is possible. Built-in drain pump as standard accessory, which enable to have maximum 700m piping height difference from the ceiling.

Ceiling panel

Maximum
700mm
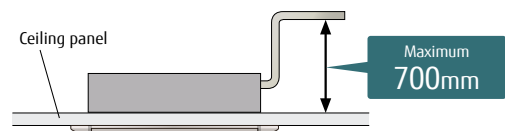
Optional parts

IR Receiver Unit:	UTY-TRHX
Cassette Grille:	UTG-UNYA-W / UTG-UNYB-W
External Power Supply Unit:	UTZ-GXXC

Specifications

Model name			AUXV007GLEH	AUXV009GLEH	AUXV012GLEH	AUXV014GLEH	AUXV018GLEH	AUXV024GLEH
Power source			Single phase - phase, ~230V, 50Hz					
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating		2.8	3.2	4.0	5.0	6.3	8.0
Input power		W	42/42	42/42	60/60	38/38	56/56	99/99
Airflow rate	High	m3/h (l/s)	550	550	670	720	890	1,150
	Med-High		440	440	520	660	840	1,020
	Med		420	420	480	630	770	940
	Med-Low		400	400	450	600	710	790
	Low		380	380	410	580	660	700
	Quiet		360	360	360	550	580	610
Sound pressure level	High	dB (A)	42	42	45	37	44	49
	Med-High		37	37	41	36	43	47
	Med		36	36	39	35	40	45
	Med-Low		35	35	38	34	38	42
	Low		33	33	36	33	36	39
	Quiet		32	32	32	32	34	36
Dimensions (H × W × D)		mm	198 × 785 × 570	198 × 785 × 570	198 × 785 × 570	198 × 1,190 × 570	198 × 1,190 × 570	198 × 1,190 × 570
Weight		kg	19 (42)	19 (42)	19 (42)	26 (57)	26 (57)	27 ( )
Connection pipe diameter	Liquid (flare)	mm	6.35	6.35	6.35	6.35	6.35	9.52
	Gas (flare)		9.52	9.52	12.70	12.70	12.70	15.88
Drain hose diameter (I.D./O.D.)			25 / 32					
Cassette grille	Model name		UTG-UNYA-W			UTG-UNYB-W		
	Dimensions (H×W×D)	mm	43 × 950× 620			43 × 1,360 × 620		
	Weight	kg	6.5 (14.5)			8.5 (18.0)		

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating : Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

Dimensions (Unit: mm)
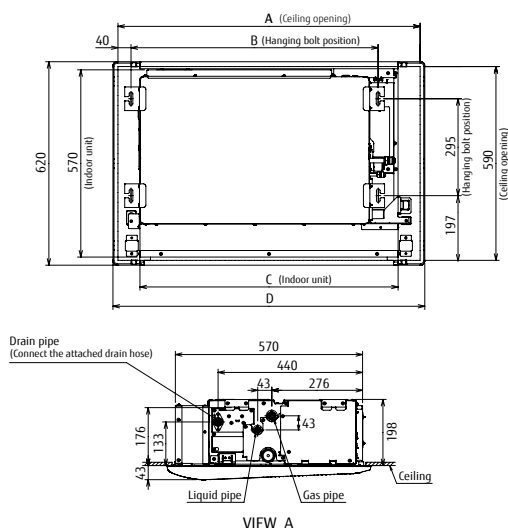
	AUXV007-012	AUXV014-024
A	920	1,330
B	752	1,152
C	785	1,190
D	950	1,360

VIEW A

AIRSTAGE

4-way Flow Compact Cassette

Models (Slim type)
AUXB007GLEH / AUXB009GLEH / AUXB012GLEH
AUXB014GLEH / AUXB018GLEH / AUXB024GLEH

AUXB07GALH / AUXB09GALH / AUXB12GALH
AUXB14GALH / AUXB18GALH / AUXB24GALH

DC FAN

Features

2-stage turbo fan

High efficiency design through 2-stage structure

Air distribution is evenly spread across the heat exchanger due to the new 2-stage turbo fan which produces two separate airflow streams.

1-stage
+
2-stage
=
2-stage turbo fan

Heat exchange efficiency
20%UP

Wind velocity
Fast
Slow
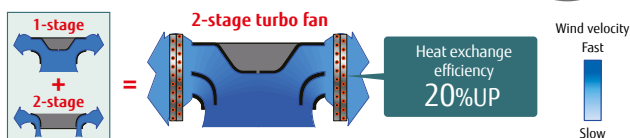
Previous turbo fan
In the case of a previous fan, the air outlet range was narrow as the airflow moved to the motor side which meant the velocity of air passing through the heat exchanger was uneven.

Quiet operation

Optimised wing form (laminar wing type) and wing number (7 blades each)
Designed by CFD-analysis (fluid) simulations

Adoption of laminar wing

Quiet

Spin direction
Airflow direction
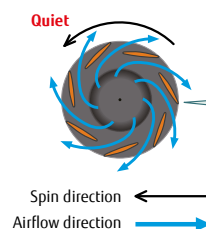
Laminar wing
Airflow runs through smoothly along the laminar wing

Quiet
No airflow separation

Improvement of the airflow distribution

❶
A
B
C
D
❸
❷
Grille cover
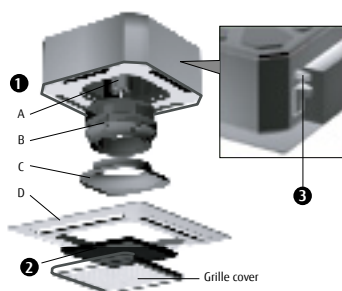
❶ **Maintenance of fan motor and fan**

Maintenance of the fan motor and fan can be done easily after taking off the panel as the bell mouth of the fan can be removed easily.

A: Fan motor   B: 2-stage turbo fan
C :Bell-mouth   D: Panel

❷ **Air filter**: standard equipment

❸ **Adaptation of transparent drainage parts**

During installation, maintenance and operation, the drain pump and kit can be checked easily.

High ceiling mode

The compact cassette can be installed up to a height of 3.0m (12 / 14 / 18 / 24).

Model code	The maximum height from floor to ceiling (m)	
	Standard mode	High ceiling mode
7	2.7	–
9	2.7	–
12	2.7	3.0
14	2.7	3.0
18	2.7	3.0
24	2.7	3.0

FUJITSU

Compact design

The world's first 24,000Btu model in the compact cassette category.
(Easily installed by taking off ceiling panel of 600 x 600 size)

570mm
570mm

High lift drain pump

Ceiling panel

Maximum
700mm
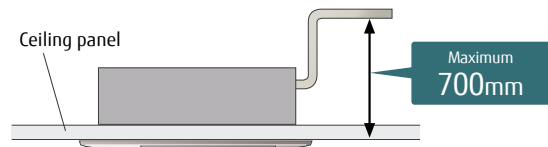
Optional parts

Air outlet shutter plate:	UTR-YDZB
Insulation kit for high humidity:	UTZ-KXGC
Fresh air intake kit:	UTZ-VXAA
External power supply unit:	UTZ-GXXC (AUXB***GLEH)
Cassette Grille:	UTG-UFYC-W

Specifications

Model name			AUXB007GLEH AUXB07GALH	AUXB009GLEH AUXB09GALH	AUXB012GLEH AUXB12GALH	AUXB014GLEH AUXB14GALH	AUXB018GLEH AUXB18GALH	AUXB024GLEH AUXB24GALH
Power source			Single phase, ~230V, 50Hz					
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating		2.8	3.2	4.1	5.0	6.3	8.0
Input power		W	25	25	29	35	36	84
Airflow rate	High	m³/h (l/s)	540 (150)	550 (153)	600 (167)	680 (189)	710 (197)	1,030 (286)
	Med-High*		500(138)	520 (144)	560 (156)	620 (172)	660 (183)	910 (253)
	Med		460 (127)	480 (133)	520 (144)	560 (156)	590 (164)	790 (231)
	Med-Low*		420 (116)	440 (122)	480 (133)	500 (139)	520 (144)	680 (189)
	Low		390 (108)	400 (111)	430 (119)	440 (122)	460 (128)	560 (156)
	Quiet*		350 (97)	350 (97)	390 (108)	390 (108)	400 (111)	450 (125)
Sound pressure level	High	dB (A)	34	35	37	38	41	50
	Med-High*		32	33	34	37	39	46
	Med		30	31	33	34	36	43
	Med-Low*		28	29	31	32	33	39
	Low		27	27	29	30	30	35
	Quiet*		25	25	27	27	27	30
Dimensions (H × W × D)		mm	245 × 570 × 570	245 × 570 × 570	245 × 570 × 570	245 × 570 × 570	245 × 570 × 570	245 × 570 × 570
Weight		kg	15	15	15	15	17	17
Connection pipe diameter	Liquid (flare)	mm	6.35	6.35	6.35	6.35	9.52(GALH) / 6.35(GLEH)	9.52
	Gas (flare)		12.70(GALH) / 9.52(GLEH)	12.70(GALH) / 9.52(GLEH)	12.70	12.70	15.88(GALH) / 12.70(GLEH)	15.88
Drain hose diameter (I.D./O.D.)			25 / 32					
Cassette grille	Model name		UTG-UFYC-W					
	Dimensions (H×W×D)	mm	49 × 700 × 700					
	Weight	kg	2.6					

Note: Specifications are based on the following conditions: * AUXB***GLEH only
Cooling: Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating: Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length: 7.5m; height difference between outdoor unit and indoor unit: 0m. Voltage: 230V.

Dimensions (Unit: mm)

700
700
Bottom view
30
49
Side view

530 (Bolt pitch)
540 (Bolt pitch)
□570 (Indoor unit)
75
135
250
Top view

580-660 (Ceiling openings)

135   250
40   99
102
245
146
40
108
30
Control box
Liquid pipe   Gas pipe
Side view

116
222
262
Ceiling
58
124
Side view

AIRSTAGE

Circular Flow Cassette (Slim type)

Models

AUXM018GLEH / AUXM024GLEH / AUXM030GLEH
AUXM018GLAH / AUXM024GLAH / AUXM030GLAH
AUXN009GLAH / AUXN012GLAH / AUXN014GLAH

DC
FAN

Features

Unique Circular Flow design

The new cassette type creates a consistent and even temperature via multi-directional 360° airflow functionality. This is achieved by mounting a high performance DC fan motor, new turbo fan and unique seamless airflow louvre design.

Ø7mm high density heat exchanger
New DC fan motor
Highly efficient turbo fan
Seamless airflow louvre

Uniform temperature air conditioning

Achieve a consistent and even temperature in the room with circular flow and wide vertical airflow spreading conditioned air to every corner of the room.

Comfortable!

Individual louvre control

Each louvre can be set individually with the touch panel wired remote control, allowing different directional airflows according to various room layouts.
* Touch Panel Wired RC (UTY-RNRYT5) and Central remote controller(UTY-DCGYZ2) only

Comfortable air conditioning by preventing direct blowing of cold air and by providing swinging airflow simultaneously.

Efficient air conditioning based on the room layout

Human sensor increases energy saving operation

Energy saving operation starts automatically by detecting the motion of a person. The human sensor detects movement and activates or deactivates energy saving mode accordingly. Two modes can be selected: save operation and stop mode.
* Touch Panel Wired RC (UTY-RNRYT5) and Central remote controller(UTY-DCGYZ2) only

2 modes can be selected

Auto saving

Power is saved while people are away.

Auto OFF

Operation stops after people go out.

Optional parts

IR receiver unit:	UTY-LBHXD
Human sensor kit:	UTY-SHZXC
Air outlet shutter plate:	UTR-YDZK
Panel spacer:	UTG-BKXA-W
Wide panel:	UTG-AKXA-W
Insulation kit for high humidity:	UTZ-KXRA
Fresh air intake kit:	UTZ-VXRA
External power supply unit:	UTZ-GXXC (AUXM***GLEH)
Cassette grille:	UTG-UKYC-W

Specifications

Model name			AUXN009GLAH	AUXN012GLAH	AUXN014GLAH	AUXM018GLEH AUXM018GLAH	AUXM024GLEH AUXM024GLAH	AUXM030GLEH AUXM030GLAH
Power source			Single phase, ~230V, 50Hz					
Capacity	Cooling	kW	2.8	3.6	4.5	5.6	7.1	9.0
	Heating		3.2	4.0	5.0	6.3	8.0	10.0
Input power		W	20	20	20	20	25	49
Airflow rate	High	m³/h (l/s)	1,050 (292)	1,050 (292)	1,050 (292)	1,050(292)	1,120(311)	1,470(408)
	Med-High		930 (258)	930 (258)	930 (258)	930(258)	1,050(292)	1,160(322)
	Med		900 (250)	900 (250)	900 (250)	900(250)	930(258)	1,070(297)
	Med-Low		870 (242)	870 (242)	870 (242)	870(242)	900(250)	930(258)
	Low		810 (225)	810 (225)	810 (225)	810(225)	870(242)	900(250)
	Quiet		780 (217)	780 (217)	780 (217)	780(217)	780(217)	780(217)
Sound pressure level	High	dB (A)	33	33	33	33	35	40
	Med-High		32	32	32	32	33	36
	Med		31	31	31	31	32	34
	Med-Low		30	30	30	30	31	32
	Low		29	29	29	29	30	31
	Quiet		28	28	28	28	28	28
Dimensions (H × W × D)		mm	246 × 840 × 840	246 × 840 × 840	246 × 840 × 840	246 × 840 × 840	246 × 840 × 840	246 × 840 × 840
Weight		kg	24.5 (54)	24.5 (54)	24.5 (54)	24.0	24.5	24.5
Connection pipe diameter	Liquid (flare)	mm	6.35	6.35	6.35	6.35	9.52	9.52
	Gas (flare)		12.70	12.70	12.70	12.70	15.88	15.88
Drain hose diameter (I.D./O.D.)			25 / 32					
Cassette grille	Model name		UTG-UKYC-W					
	Dimensions (H×W×D)	mm	53×950×950					
	Weight	kg	6.0					

Note: Specifications are based on the following conditions:
Cooling: Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating: Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length: 7.5m; height difference between outdoor unit and indoor unit: 0m. Voltage: 230V.

When AUXM018GLAH, GLEH is connected to the outdoor unit other than J-IIIL, pipe diameter should be Ø9.52 / Ø15.88 (Liq / Gas)

Dimensions (Unit: mm)

AIRSTAGE
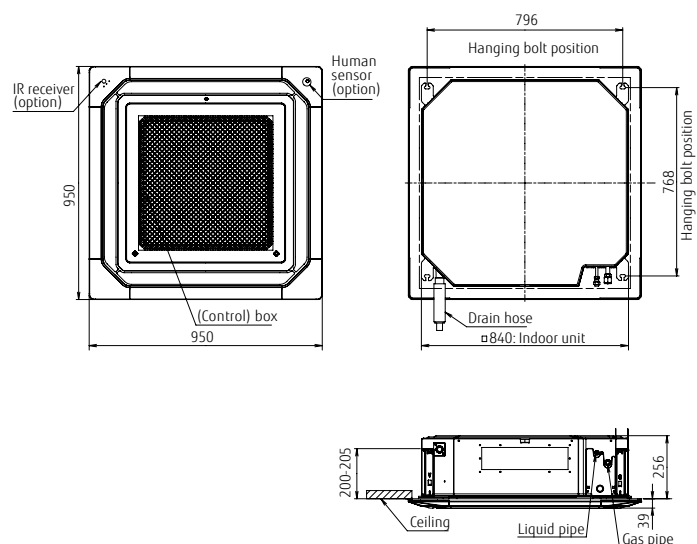
Circular Flow Cassette (Large type)

Models
**AUXK018GLEH / AUXK024GLEH / AUXK030GLEH
AUXK034GLEH / AUXK036GLEH / AUXK045GLEH
AUXK054GLEH**

**AUXK018GLAH / AUXK024GLAH / AUXK030GLAH
AUXK034GLAH / AUXK036GLAH / AUXK045GLAH
AUXK054GLAH**

| DC |
| FAN |

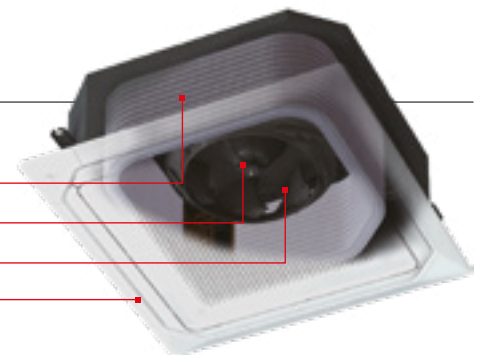## Features

Unique Circular Flow design

The new cassette type creates a consistent and even temperature via multi-directional 360° airflow functionality. This is achieved by mounting a high performance DC fan motor, new turbo fan and unique seamless airflow louvre design.

Ø7mm high density heat exchanger

New DC fan motor

Highly efficient turbo fan

Seamless airflow louvre

Uniform temperature air conditioning

Achieve a consistent and even temperature in the room with circular flow and wide vertical airflow spreading conditioned air to every corner of the room.

Comfortable!

Individual louvre control

Each louvre can be set individually with the touch panel wired remote control, allowing different directional airflows according to various room layouts.
* Touch Panel Wired RC (UTY-RNRYT5) and Central remote controller(UTY-DCGYZ2) only

Comfortable air conditioning by preventing direct blowing of cold air and by providing swinging airflow simultaneously.

Efficient air conditioning based on the room layout

Human sensor increases energy saving operation

Energy saving operation starts automatically by detecting the motion of a person. The human sensor detects movement and activates or deactivates energy saving mode accordingly. Two modes can be selected: save operation and stop mode.
* Touch Panel Wired RC (UTY-RNRYT5) and Central remote controller(UTY-DCGYZ2) only

2 modes can be selected

Auto saving

Power is saved while people are away.

Auto OFF

Operation stops after people go out.

Optional parts

IR receiver unit:	UTY-LBHXD
Human sensor kit:	UTY-SHZXC
Air outlet shutter plate:	UTR-YDZK
Panel spacer:	UTG-BKXA-W
Wide panel:	UTG-AKXA-W
Insulation kit for high humidity:	UTZ-KXRA
Fresh air intake kit:	UTZ-VXRA
External power supply unit:	UTZ-GXXC (AUXK✱✱✱GLEH)
Cassette grille:	UTG-UKYC-W

Specifications

Model name			AUXK018GLEH AUXK018GLAH	AUXK024GLEH AUXK024GLAH	AUXK030GLEH AUXK030GLAH	AUXK034GLEH AUXK034GLAH	AUXK036GLEH AUXK036GLAH	AUXK045GLEH AUXK045GLAH	AUXK054GLEH AUXK054GLAH
Power source			Single phase, ~230V, 50Hz						
Capacity	Cooling	kW	5.6	7.1	9.0	10.0	11.2	12.5	14.0
	Heating		6.3	8.0	10.0	11.2	12.5	14.0	16.0
Input power		W	40	40	47	47	61	89	116
Airflow rate	High	m³/h (l/s)	1,420(394)	1,420(394)	1,440(400)	1,440(400)	1,620(450)	1,820(506)	2,040(567)
	Med-High		1,360(378)	1,360(378)	1,400(389)	1,400(389)	1,500(417)	1,590(442)	1,800(500)
	Med		1,300(361)	1,300(361)	1,340(372)	1,340(372)	1,400(389)	1,500(417)	1,590(442)
	Med-Low		1,270(353)	1,270(353)	1,300(361)	1,300(361)	1,340(372)	1,400(389)	1,440(400)
	Low		1,200(333)	1,200(333)	1,280(356)	1,280(356)	1,280(356)	1,300(361)	1,300(361)
	Quiet		1,150(319)	1,150(319)	1,150(319)	1,150(319)	1,150(319)	1,150(319)	1,150(319)
Sound pressure level	High	dB (A)	38	38	39	39	41	44	47
	Med-High		37	37	38	38	40	42	45
	Med		36	36	37	37	38	40	42
	Med-Low		35	35	36	36	37	38	39
	Low		34	34	35	35	36	36	36
	Quiet		33	33	33	33	33	33	33
Dimensions (H × W × D)		mm	288×840×840	288×840×840	288×840×840	288×840×840	288×840×840	288×840×840	288×840×840
Weight		kg	26.5	26.5	29.5	29.5	29.5	29.5	29.5
Connection pipe diameter	Liquid (flare)	mm	6.35	9.52	9.52	9.52	9.52	9.52	9.52
	Gas (flare)		12.70	15.88	15.88	15.88	15.88	15.88	15.88
Drain hose diameter (I.D./O.D.)			25 / 32						
Cassette grille	Model name		UTG-UKYC-W						
	Dimensions (H×W×D)	mm	53×950×950						
	Weight	kg	6.0						

Note: Specifications are based on the following conditions:
Cooling: Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating: Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length: 7.5m; height difference between outdoor unit and indoor unit: 0m. Voltage: 230V.

When AUXK018GLAH, GLEH is connected to the outdoor unit other than J-IIIL, pipe diameter should be Ø9.52 / Ø15.88 (Liq / Gas)
When AUXK036GLAH, GLEH, AUXK045GLAH, GLEH, and AUXK054GLAH, GLEH are connected to the outdoor unit other than J-IIIL, gas pipe diameter should be Ø19.05.

Dimensions (Unit: mm)

AIRSTAGE

Mini Duct

Models (with drain pump)
**ARXK007GLGH / ARXK009GLGH / ARXK012GLGH
ARXK014GLGH / ARXK018GLGH / ARXK024GLGH**

ARXK007 ARXK009 ARXK012 ARXK014

ARXK018

ARXK024

DC FAN

Features

Compatible with the requirements of the installation space

• The compact design allows for the installation space to be reduced down to a minimum depth of 450mm and height of 198mm
• Lightweight: 16kg, 10% down

(Unit: mm)

450

198

225*

600*

* Minimum installation dimension
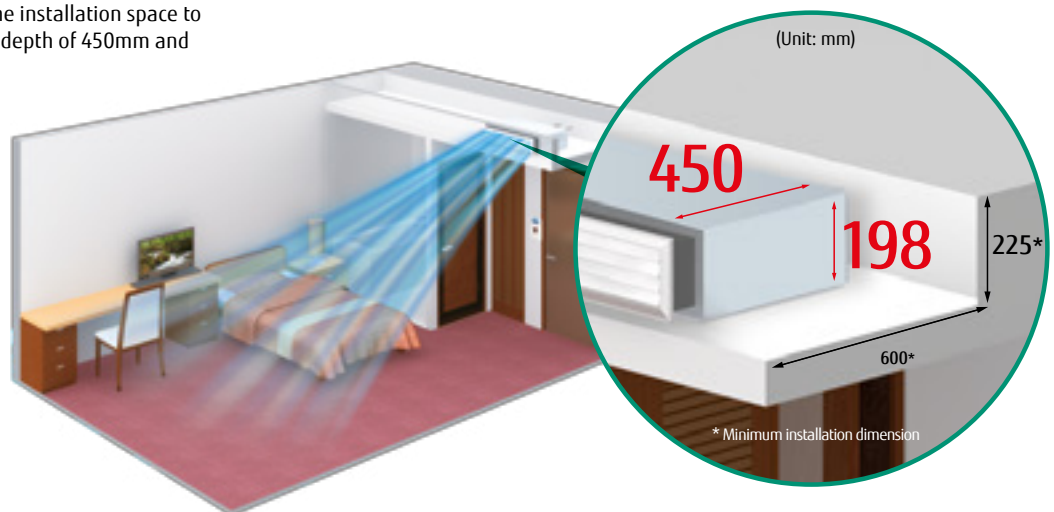
Optimum airflow path and low noise operation

Low noise is realised drastically with the stabilised airflow design

Air Stabiliser

Highly efficient DC fan motor
Lower power consumption

V-shape heat exchanger
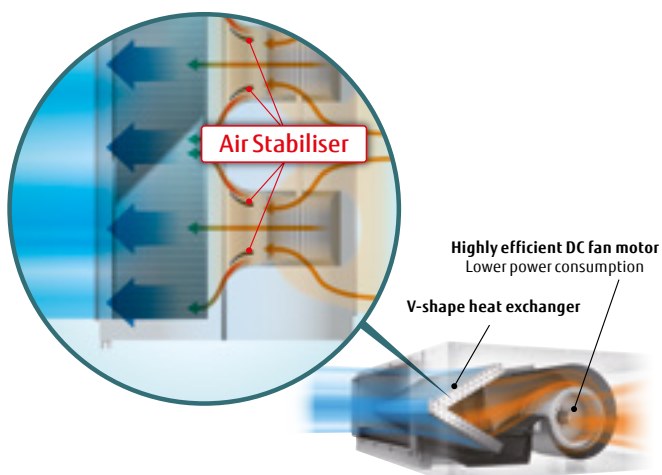
Easy design and maintenance for drainage

By using the DC fan motor, it is possible to change the static pressure range from 0 to 50 Pa*.
The change of static pressure range is possible by the remote controller.
* 0 to 30 Pa. (012 model)

Built-in drain pump as standard:
Maintenance is easy
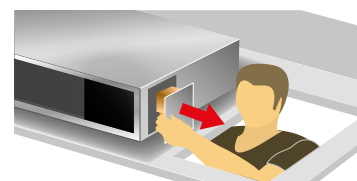
Parts can be replaced from the side of the body where maintenance is easier

6-speed control*

Multistep airflow speed control allows this model to be installed in quiet areas.

Low noise
21 dB(A)

at 007 / 009 models

6-step speed

| High |
| Med-High |
| Med |
| Med-Low |
| Low |
| Quiet |
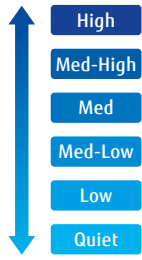
* Compatible remote controllers:
UTY-RNRYT5 / UTY-RSRY / UTY-RHRY / UTY-DCGYZ2 / UTY-DTGYZ1 / UTY-ALGXZ1 / UTY-APGXZ1

Auto louvre grille kit (option)

- Thin design provides a comfortable living environment over a wide area
- Automatic louvre grille provides comfortable air conditioning from floor to ceiling (option)

Optional parts

Remote sensor unit:	UTY-XSZX
IR receiver unit:	UTY-TRHX
Auto louvre grille kit:	UTD-GXTA-W (for ARXK007 / 009 / 012 / 014)
	UTD-GXTB-W (for ARXK018)
	UTD-GXTC-W (for ARXK024)
External power supply unit:	UTZ-GXXC

Specifications

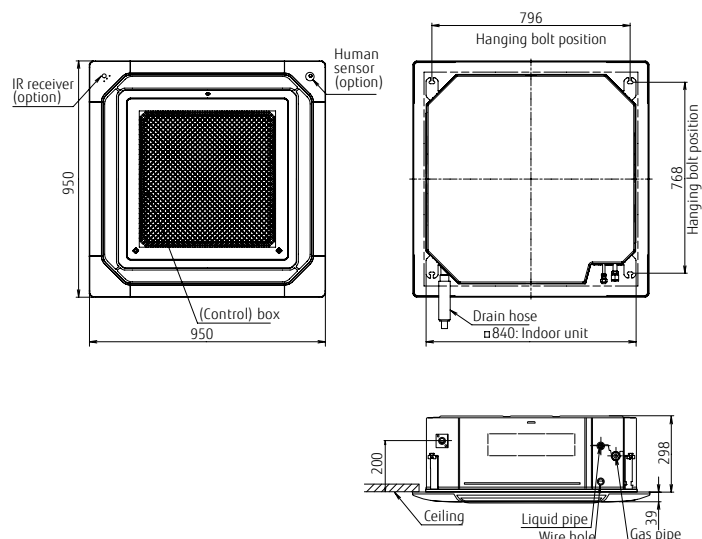| Model name			ARXK007GLGH	ARXK009GLGH	ARXK012GLGH	ARXK014GLGH	ARXK018GLGH	ARXK024GLGH
Power source			Single phase, ~230V, 50Hz					
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating		2.8	3.2	4.0	5.0	6.3	8.0
Input power		W	28	28	35	66	73	80
Airflow rate	High	m³/h (l/s)	460(128)	460(128)	550(153)	760(211)	930(258)	1,160(322)
	Med-High		440(122)	440(122)	520(144)	660(183)	840(233)	1,060(294)
	Med		420(117)	420(117)	480(133)	560(156)	740(206)	960(267)
	Med-Low		400(111)	400(111)	450(125)	490(136)	640(178)	860(239)
	Low		370(103)	370(103)	410(114)	410(114)	540(150)	750(208)
	Quiet		340(94)	340(94)	340(94)	340(94)	470(131)	610(169)
Static pressure range		Pa	0 to 30	0 to 30	0 to 30	0 to 50	0 to 50	0 to 50
Standard static pressure			10	10	10	15	15	15
Sound pressure level	High	dB (A)	26	26	29	34	33	32
	Med-High		25	25	27	31	30	30
	Med		24	24	26	28	28	28
	Med-Low		23	23	25	26	26	27
	Low		22	22	24	24	24	25
	Quiet		21	21	22	22	22	22
Dimensions (H × W × D)		mm	198 × 700 × 450	198 × 700 × 450	198 × 700 × 450	198 × 700 × 450	198 × 900 × 450	198 × 1,100 × 450
Weight		kg	15.5	15.5	16.0	16.0	19.0	22.5
Connection pipe diameter	Liquid (flare)	mm	6.35	6.35	6.35	6.35	6.35	9.52
	Gas (flare)		9.52	9.52	12.70	12.70	12.70	15.88
Drain hose diameter (I.D./O.D.)			25 / 32					

Note: Specifications are based on the following conditions:
Cooling: Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating: Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length: 7.5m; height difference between outdoor unit and indoor unit: 0m. Voltage: 230V.

Dimensions (Unit: mm)

Rear view
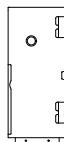
View A
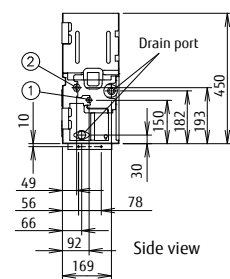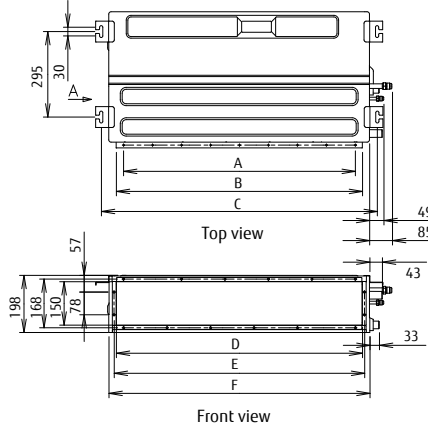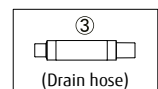
Top view

Front view

Side view

① Refrigerant pipe flare connection (liquid)
② Refrigerant pipe flare connection (gas)
③ Drain hose connection

③ (Drain hose)

	ARXK007-014	ARXK018	ARXK024
A	P100×6=600	P100×8=800	P100×10=1,000
B	650	850	1,050
C	752	952	1,152
D	650	850	1,050
E	665	864	1,064
F	700	900	1,100

AIRSTAGE

Slim Duct / Slim Concealed Floor

Models (with drain pump)
ARXD007GLEH / ARXD009GLEH / ARXD012GLEH
ARXD014GLEH / ARXD018GLEH / ARXD024GLEH

ARXD007 ARXD009 ARXD012 ARXD014

ARXD018

ARXD024
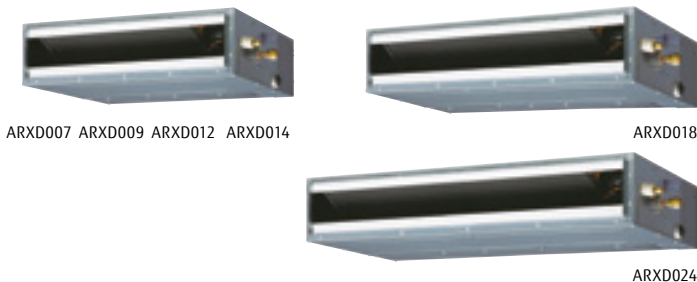
Slim Concealed Floor

DC FAN

Features

Slim design

With a slim design, this indoor unit can be installed in narrow ceiling spaces.

Drain port

Height
198mm

Drain pump built-in

Drain pump
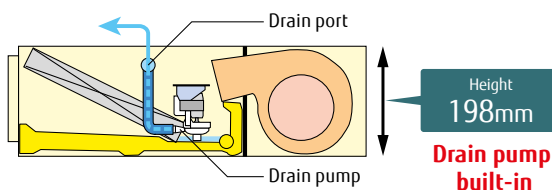
Selectable static pressure

By using DC fan motor, it is possible to change the static pressure range from 0 to 90Pa.
The static pressure range is configurable through the remote controller.

Static pressure range
0 to **90**Pa

*024 model is 0 to 50Pa

Air intake

Air intake direction can be selected to match the installation site.

Bottom side   **Back side**

High lift drain pump

Maximum
850mm

Drain hose (standard accessory)
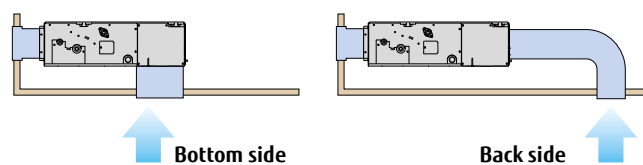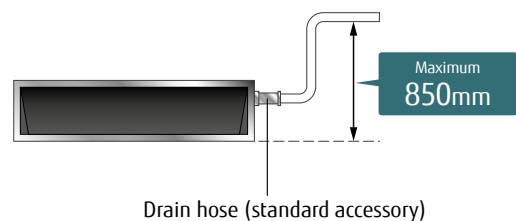
Flexible installation

Ceiling concealed
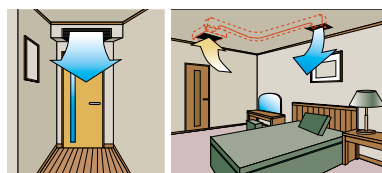
Floor concealed
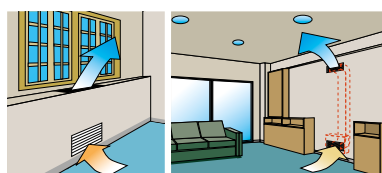
Filter (accessory)

ARXD007 / 009 / 012 / 014 / 018   ARXD024

(2pcs.)   (3pcs.)

FUJITSU
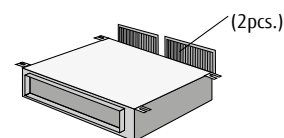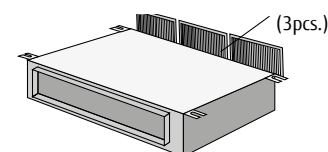
Auto louvre grille kit (option)

Simple flat auto louvre will provide comfortable airflow and complement luxury interiors.
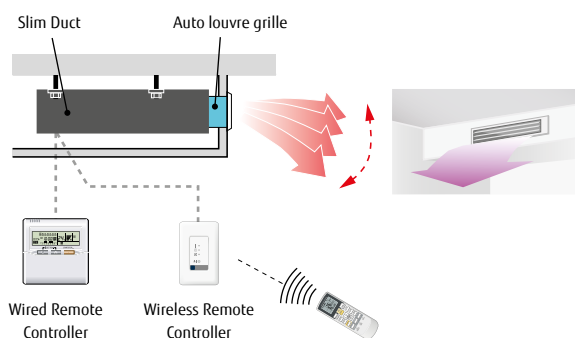
Slim Duct **Auto louvre grille**

Wired Remote Controller   Wireless Remote Controller

Optional parts

Remote sensor unit: UTY-XSZX
IR receiver unit: UTY-TRHX
Auto louvre grille kit: UTD-GXTA-W (for ARXD007 / 009 / 012 / 014)
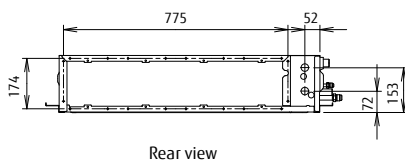UTD-GXTB-W (for ARXD018)
UTD-GXTC-W (for ARXD024)
External power supply unit: UTZ-GXXC

Specifications

Model name			ARXD007GLEH	ARXD009GLEH	ARXD012GLEH	ARXD014GLEH	ARXD018GLEH	ARXD024GLEH
Power source			Single phase, ~230V, 50Hz					
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating		2.8	3.2	4.0	5.0	6.3	8.0
Input power		W	44	50	54	92	83	122
Airflow rate	High	m³/h (l/s)	550 (153)	600 (167)	600 (167)	800 (222)	940 (261)	1,330 (369)
	Med-High		520 (144)	510 (142)	530 (147)	680 (189)	820 (228)	1,140 (317)
	Med		480 (133)	460 (127)	490 (136)	600 (167)	730 (203)	1,020 (283)
	Med-Low		410 (114)	420 (116)	450 (125)	520 (144)	630 (175)	900 (250)
	Low		370 (103)	370 (103)	410 (114)	440 (122)	540 (150)	780 (217)
	Quiet		320 (89)	320 (89)	340 (94)	340 (94)	470 (131)	610 (169)
Static pressure range		Pa	0 to 90	0 to 90	0 to 90	0 to 90	0 to 90	0 to 50
Standard static pressure			25	25	25	25	25	25
Sound pressure level	High	dB (A)	28	29	30	34	34	35
	Med-High		26	27	28	32	31	31
	Med		25	25	27	30	29	29
	Med-Low		24	24	26	28	27	27
	Low		22	22	24	25	25	24
	Quiet		21	21	22	22	23	21
Dimensions (H × W × D)		mm	198 × 700 × 620	198 × 700 × 620	198 × 700 × 620	198 × 700 × 620	198 × 900 × 620	198 × 1,100 × 620
Weight		kg	17	17	18	18	22	26
Connection pipe diameter	Liquid (flare)	mm	6.35	6.35	6.35	6.35	6.35	9.52
	Gas (flare)		9.52	9.52	12.70	12.70	12.70	15.88
Drain hose diameter (I.D./O.D.)			25 / 32					

Note: Specifications are based on the following conditions:
Cooling: Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating: Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length: 7.5m; height difference between outdoor unit and indoor unit: 0m. Voltage: 230V.

Dimensions (Unit: mm)

*Service accessibility must be allowed for when installing the product.
Please consult the installation manual for the necessary service access size.

	ARXD007-014	ARXD018	ARXD024
A	700	900	1,100
B	650	850	1,050
C	734	934	1,134
D	650	850	1,050
E	P100x6=600	P100x8=800	P100x10=1,000
F	18xØ5	22xØ5	26xØ5
G	574	774	974

AIRSTAGE

Medium Static Pressure Duct

Models
ARXA024GLEH / ARXA030GLEH
ARXA036GLEH / ARXA045GLEH

DC
FAN

Features

Slim and compact design

In the case of bottom return air connection, not only does the indoor unit design allow for installation in a narrow ceiling space of up to 270mm, further space savings have been achieved by mounting the electrical control box internally inside the chassis.

1,200 → 1,135mm

270mm

Control box is now included as part of the main chassis

One touch operating and easy to install long life filter (optional parts)
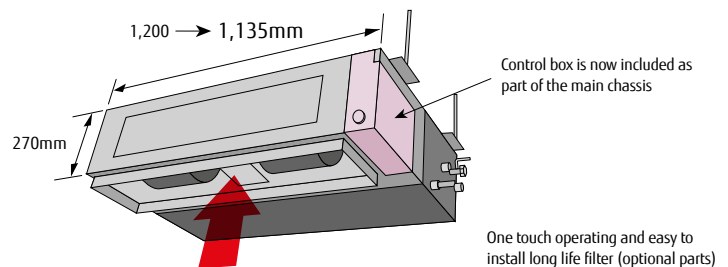
Low energy consumption through the high efficiency DC fan motor

Improved motor efficiency compared to the previous model.

024 model

030 / 036 / 045 model
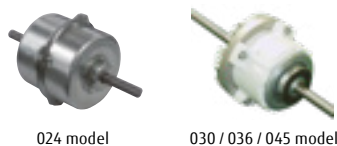
Can be installed in various locations

This unit can be installed in a range of locations such as high rise apartments through low static pressure design.
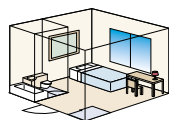
It can also be installed in open spaces when higher static pressure is required, such as offices.

Selectable with a wide range of static pressure

It is possible to change the static pressure range from 0 to 150Pa.

Static pressure range
0 to 150Pa

Easy maintenance

See below for the case of rear suction type

Previous model

Large bottom panel: 1 piece

New model

1. Control box
2. Fan casing
3. Fan
4. Motor
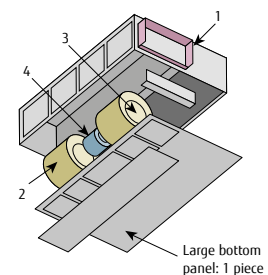
Bottom panel: 2 pieces
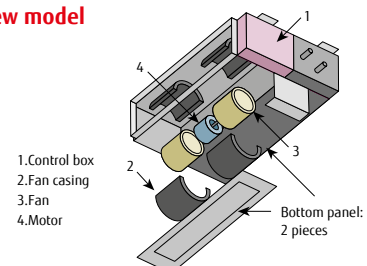
Structural improvement is attained by making the bottom panel two pieces, front and rear. The internal fan casing is also manufactured in two pieces, namely upper and lower. The maintenance of the motor and fan can be easily carried out by removing the rear panel and the lower part of the casing while leaving the main chassis installed.

Two direction drain piping

Duct indoor unit
Two direction drain piping

Installation styles

Embedded in ceiling

Hanging from ceiling

Static pressure setting via the remote controller

Changing the static pressure range is possible with the remote controller

Optional parts

Remote sensor unit:	UTY-XSZX	Flange (round):	UTD-RF204
Long life filter:	UTD-LF25NA	IR receiver unit:	UTY-TRHX
Flange (square):	UTD-SF045T	Drain pump unit:	UTZ-PX1NBA
External power supply unit: UTZ-GXXC			

Specifications

Model name			ARXA024GLEH	ARXA030GLEH	ARXA036GLEH	ARXA045GLEH
Power source			Single phase, ~230V, 50Hz			
Capacity	Cooling	kW	7.1	9.0	11.2	12.5
	Heating		8.0	10.0	12.5	14.0
Input power		W	94	108	194	240
Airflow rate	High	m³/h (l/s)	1,280 (356)	1,410 (392)	1,840 (511)	1,970 (547)
	Med-High		1,180 (328)	1,350 (375)	1,750 (486)	1,910 (530)
	Med		1,090 (303)	1,280 (356)	1,660 (461)	1,860 (517)
	Med-Low		1,000 (278)	1,240 (344)	1,600 (444)	1,780 (494)
	Low		920 (256)	1,190 (331)	1,530 (425)	1,710 (475)
	Quiet		840 (233)	1,150 (319)	1,470 (408)	1,640 (456)
Static pressure range		Pa	0 to 150	0 to 150	0 to 150	0 to 150
Standard static pressure			40	50	50	60
Sound pressure level	High	dB (A)	36	34	37	41
	Med-High		33	33	36	40
	Med		31	32	35	38
	Med-Low		29	31	35	38
	Low		28	30	34	37
	Quiet		26	29	33	36
Dimensions (H × W × D)		mm	270 × 1,135 × 700	270 × 1,135 × 700	270 × 1,135 × 700	270 × 1,135 × 700
Weight		kg	36	40	40	40
Connection pipe diameter	Liquid (flare)	mm	9.52	9.52	9.52	9.52
	Gas (flare)		15.88	15.88	15.88	15.88
Drain hose diameter (I.D./O.D.)			25 / 32			

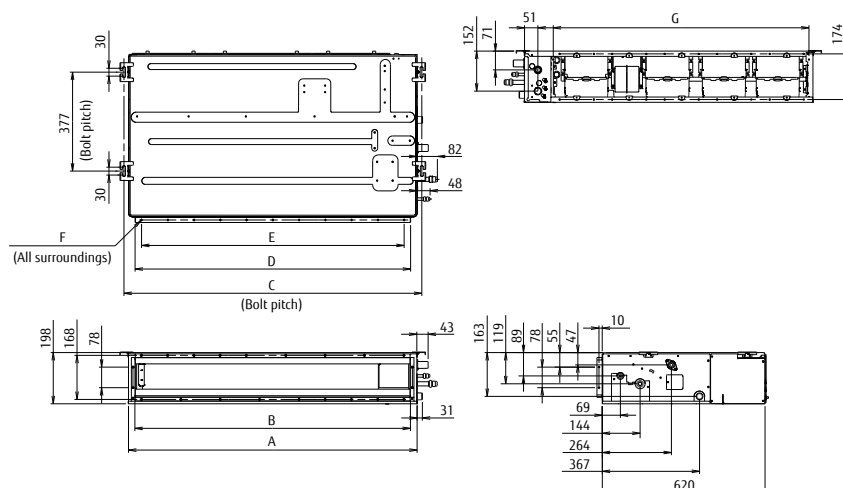Note: Specifications are based on the following conditions:
Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length: 7.5m; height difference between outdoor unit and indoor unit: 0m. Voltage: 230V.

Dimensions (Unit: mm)

*Service accessibility must be allowed for when installing the product.
 Please consult the installation manual for the necessary service access size.

Front view

Side view (L)

Top view

Side view (R)

Rear view

① Refrigerant piping flare connection (liquid)
② Refrigerant piping flare connection (gas)
③ Drain piping connection (drain pipe)

AIRSTAGE

High Static Pressure Duct

Models
ARXC036GTEH / ARXC045GTEH / ARXC060GTEH
ARXC36GATH / ARXC45GATH / ARXC60GATH

Models
ARXC072GTEH / ARXC090GTEH

Models
ARXC096GTEH

ARXC036 ARXC045 ARXC060
ARXC36 ARXC45 ARXC60

ARXC072 ARXC090

ARXC096

Features

Static pressure selection

By using DC fan motor, it is possible to change the static pressure range from
0 to 200Pa (36 / 45 / 60GATH) / 250Pa (045 / 060GTEH) / 300Pa (072 / 090 / 096GTEH).
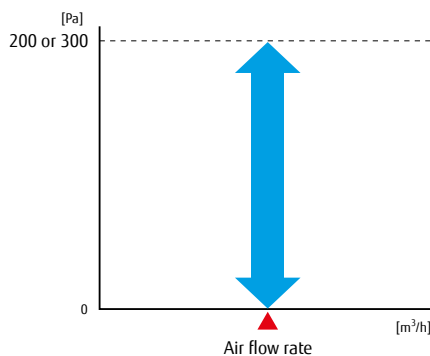
Maximum
250Pa
(045 / 060GTEH)

Maximum
300Pa
(072 / 090GTEH)

Maximum
300Pa
(096GTEH)

Maximum
200Pa
(36 / 45 / 60GATH)

[Pa]
200 or 300

0

Air flow rate   [m³/h]

Low noise

Models: 36 / 45 / 60GATH, 036 / 045 / 060GTEH

Cutting off the corners of the
conventional indoor unit front
panel and fan casing has enabled
less turbulent airflow. Low noise is
realised by adopting a plastic case
and a plastic fan.
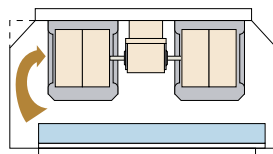
Low energy consumption with high efficiency DC fan motor

Improved motor efficiency
from previous model.

36 / 45 / 60GATH
036 / 045 / 060GTEH

072 / 090 / 096GTEH

ARXC036GTEH : Plastic fan [42dB(A)]

* Model: material
(At 100Pa: actual noise
measurement value)

500mm
Heat exchanger
Plastic fan
Ø 225mm
Casing (plastic)
400mm
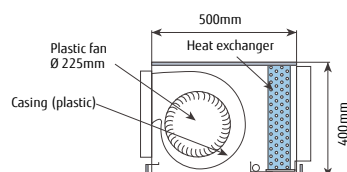
Easy installation (compact size and lightweight)

A compact size and lightweight indoor unit has been developed by reducing the basic chassis and the overall material weight.

(36 / 036 / 45 / 045 / 60 / 060 models)   (072 / 090 models)   (096 model)   (Unit: mm)

Optional parts

Long-life filter: UTD-LF60KA (For ARXC036 / 36 / 45 / 045 / 60 / 060)
IR receiver unit: UTB-TWC (For ARXC∗∗GATH)
UTY-TRHX (For ARXC∗∗∗GTEH)
Remote sensor unit: UTY-XSZX
External power supply unit: UTZ-GXXC (For ARXC036 / 072 / 090 / 096GTEH)

Specifications

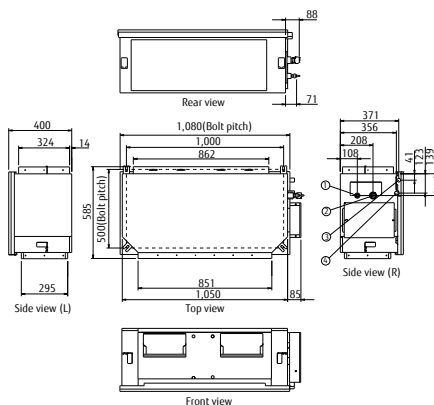| Model name			ARXC036GTEH	ARXC36GATH	ARXC045GTEH	ARXC45GATH	ARXC060GTEH*	ARXC60GATH*	ARXC072GTEH*	ARXC090GTEH*	ARXC096GTEH*
Power source			Single phase, ~230V, 50Hz								
Capacity	Cooling	kW	11.2	11.2	12.5	12.5	18.0	18.0	22.4	25.0	28.0
	Heating		12.5	12.5	14.0	14.0	20.0	20.0	25.0	28.0	31.5
Input power		W	207	405	715	715	730	730	1,110	1,250	838
Airflow rate	High	m³/h (l/s)	1,990 (552)	2,600 (722)	3,500 (972)	3,000 (833)	3,500 (972)	3,350 (931)	3,900 (1,083)	4,300 (1,195)	4,850 (1,347)
	Med		1,680 (466)	1,950 (542)	3,000 (833)	2,700 (750)	3,000 (833)	2,850 (792)	3,300 (917)	4,000 (1,111)	4,250 (1,181)
	Low		1,330 (369)	1,450 (403)	2,460 (683)	2,300 (639)	2,460 (683)	2,550 (708)	3,000 (833)	3,500 (972)	3,600 (1,000)
Static pressure range		Pa	0 to 200	100 to 200	100 to 250	100 to 250	100 to 250	100 to 250	50 to 300	100 to 300	0 to 300
Standard static pressure			100	100	100	100	100	100	260	250	150
Sound pressure level	High	dB (A)	42	45	49	47	49	48	47	48	48
	Med		36	38	45	43	45	44	43	46	45
	Low		32	32	42	40	42	41	40	44	42
Dimensions (H × W × D)		mm	400 × 1,050 × 500	400 × 1,050 × 500	400 × 1,050 × 500	400 × 1,050 × 500	400 × 1,050 × 500	400 × 1,050 × 500	450 × 1,550 × 700	450 × 1,550 × 700	550 × 1,587 × 700
Weight		kg	40	43	46	46	46	46	83	85	105
Connection pipe diameter	Liquid	mm	9.52 (Flare)	9.52 (Flare)	9.52 (Flare)	9.52 (Flare)	9.52 (Flare)	9.52 (Flare)	9.52(Flare)	9.52(Flare)	9.52 (Brazing)
	Gas		15.88 (Flare)	19.05 (Flare)	15.88 (Flare)	19.05 (Flare)	15.88 (Flare)	19.05 (Flare)	19.05(Flare)	19.05(Flare)	22.22 (Brazing)
Drain hose diameter (I.D./O.D.)			25 / 32								

Note: Specifications are based on the following conditions:
Cooling: Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating: Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length: 7.5m; height difference between outdoor unit and indoor unit: 0m. Voltage: 230V.

* ARXC60 / 060 / 072 / 090 / 096G cannot be connected to J-III Series.

Dimensions (Unit: mm)

Models: ARXC036 / ARXC045 / ARXC060 ARXC36 / ARXC45 / ARXC60   Models: ARXC072 / ARXC090   Models: ARXC096
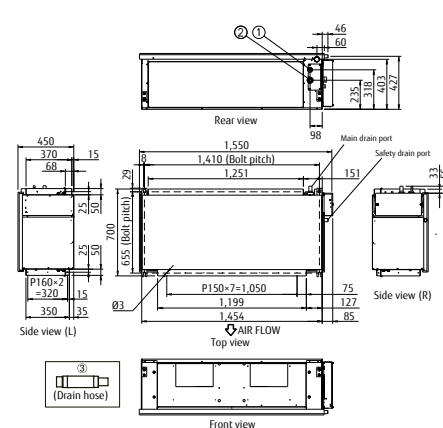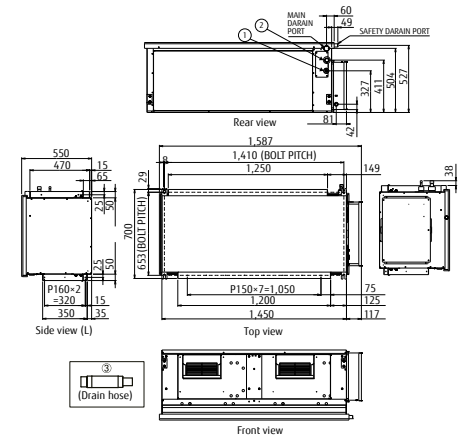
① Refrigerant piping flare connection (liquid)
② Refrigerant piping flare connection (gas)
③ Drain piping connection

① Refrigerant pipe flare connection (liquid)
② Refrigerant pipe flare connection (gas)
③ Drain hose

① Refrigerant pipe flare connection (liquid)
② Refrigerant pipe flare connection (gas)
③ Drain hose

AIRSTAGE

Floor (compact)

Models (EEV internal)
AGYA007GCGH / AGYA009GCGH
AGYA012GCGH / AGYA014GCGH

Models (EEV external)
AGYE007GCEH / AGYE009GCEH
AGYE012GCEH / AGYE014GCEH

DC
FAN

Features

2 fans and wide airflow
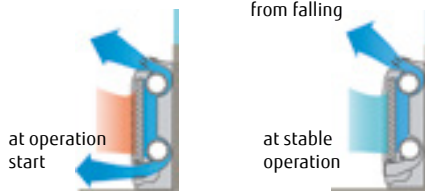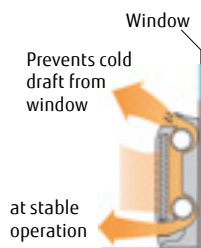
Individual vertical airflow by 2 fans can control the whole room comfortably.

Cooling

Prevents cold air from falling

at operation start

at stable operation

Heating

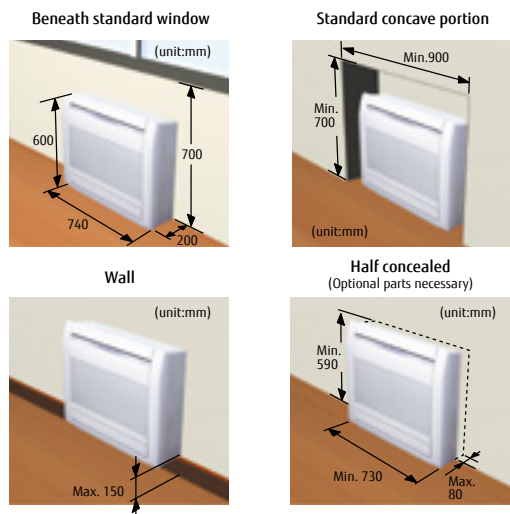Window

Prevents cold draft from window

at stable operation

Flexible and easy installation

Due to compact and flexible methods for installation including floor, concealed, half concealed, or wall mounted, installation approach can be modified to match the room layout.

Beneath standard window

(unit:mm)

600
700
740
200

Standard concave portion

Min.900
Min. 700

(unit:mm)

Wall

(unit:mm)

Max. 150

Half concealed
(Optional parts necessary)

(unit:mm)

Min. 590
Min. 730
Max. 80

Quiet operation

Quiet operation is realised by 6 fan speed control.
(via 2 wired controllers)

Low noise
22 dB(A)

at 007 / 009 models
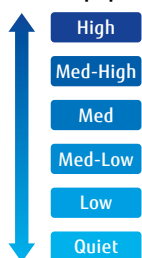
6-Step Speed

High
Med-High
Med
Med-Low
Low
Quiet

* Compatible remote controllers are as follows:
UTY-RNRYT5 / UTY-RSRY / UTY-RHRY / UTY-DCGYZ2 / UTY-DTGYZ1 / UTY-ALGXZ1 / UTY-APGXZ1

Flexible piping connection

Drain hose and piping can be drawn flexibly in the right, left, sideways, and down directions.

Back view

1
2
3
Drain hose
4
5
6
Piping

Optional parts

Half concealed kit: UTR-STA
External power supply unit: UTZ-GXXC

FUJITSU

Specifications

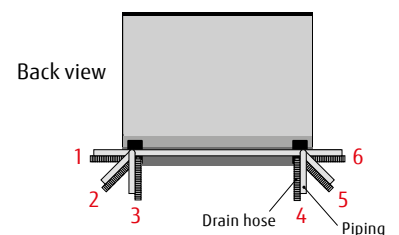| Model name			AGYA007GCGH	AGYA009GCGH	AGYA012GCGH	AGYA014GCGH	AGYE007GCEH	AGYE009GCEH	AGYE012GCEH	AGYE014GCEH
Power source			Single phase, ~230V, 50Hz							
Capacity	Cooling	kW	2.2	2.8	3.6	4.0	2.2	2.8	3.6	4.0
	Heating		2.8	3.2	4.0	4.5	2.8	3.2	4.0	4.5
Input power		W	16	17	22	29	16	17	22	29
Airflow rate	High	m³/h (l/s)	470(131)	500(139)	590(164)	670(186)	470(131)	500(139)	590(164)	670(186)
	Med-High		420(117)	450(125)	520(144)	590(164)	420(117)	450(125)	520(144)	590(164)
	Med		390(108)	400(111)	470(131)	520(144)	390(108)	400(111)	470(131)	520(144)
	Med-Low		360(100)	360(100)	420(117)	450(125)	360(100)	360(100)	420(117)	450(125)
	Low		330(92)	330(92)	390(108)	390(108)	330(92)	330(92)	390(108)	390(108)
	Quiet		270(75)	270(75)	340(94)	340(94)	270(75)	270(75)	340(94)	340(94)
Sound pressure level	High	dB (A)	37	38	42	46	37	38	42	46
	Med-High		35	36	39	42	35	36	39	42
	Med		33	34	37	39	33	34	37	39
	Med-Low		31	31	35	36	31	31	35	36
	Low		29	29	33	33	29	29	33	33
	Quiet		22	22	30	30	22	22	30	30
Dimensions (H × W × D)		mm	600×740×200	600×740×200	600×740×200	600×740×200	600×740×200	600×740×200	600×740×200	600×740×200
Weight		kg	15.0	15.0	15.0	15.0	14.5	14.5	14.5	14.5
Connection pipe diameter	Liquid (flare)	mm	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35
	Gas (flare)		9.52	9.52	12.70	12.70	9.52	9.52	12.70	12.70
Drain hose diameter (I.D./O.D.)			13.8 / 15.8 to 16.7							
EV Kit (option)			–	–	–	–	UTR-EV09XB	UTR-EV09XB	UTR-EV14XB	UTR-EV14XB

Note: Specifications are based on the following conditions:
Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
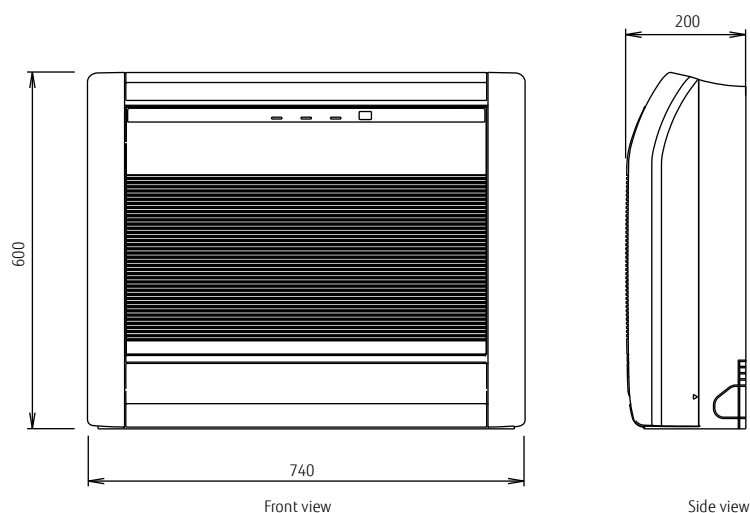Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length: 7.5m; height difference between outdoor unit and indoor unit: 0m. Voltage: 230V.

When AGY*007 and AGY*009 are connected to the outdoor unit other than J-IIIL, gas pipe diameter should be Ø12.70.

Dimensions (Unit: mm)

Front view

Side view

200

600

740

AIRSTAGE

Floor / Ceiling

Models
ABYA012GTEH / ABYA014GTEH
ABYA018GTEH / ABYA024GTEH

Floor standing

DC FAN

Features

Flexible installation

Example for floor installation

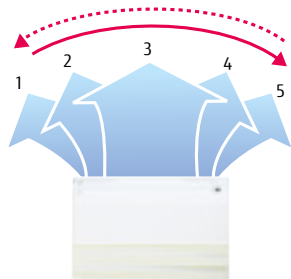Floor console

Example for ceiling installation
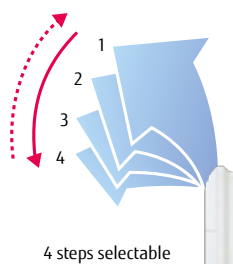
Under ceiling

Double auto swing

A combination of up / down and right / left directional swing allows three dimensional air direction control.

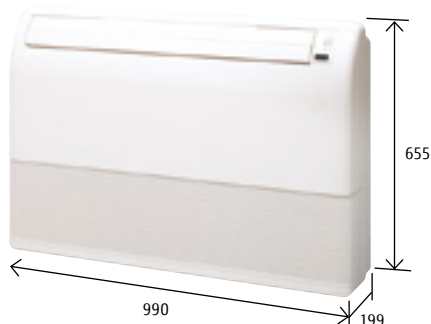Right and left swing

1 2 3 4 5

Up and down swing

1
2
3
4

4 steps selectable

High power DC fan motor

• High power
• Wide rotation range
• High efficiency

FUJITSU

Compact design

Symmetrical, slim and compact design.

(Unit: mm)

655

990

199

Auto-closing louvre

When operation is stopped, the louvres will automatically close.
(This function is available on all non-ducted models)

Super vane

Double Louvre super vane with newly developed special configuration boosts airflow sending cool air quickly to every corner of the room.

Optional parts

External power supply unit: UTZ-GXXC

Specifications

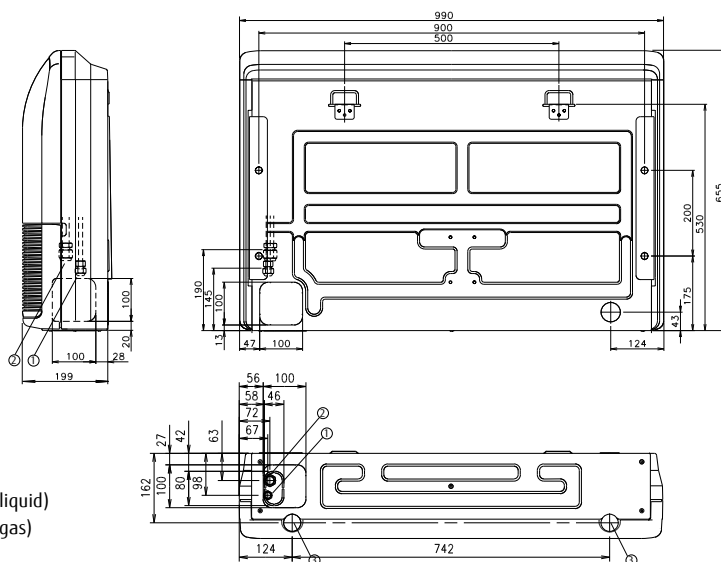| Model name			ABYA012GTEH	ABYA014GTEH	ABYA018GTEH	ABYA024GTEH
Power source				Single phase, ~230V, 50Hz		
Capacity	Cooling	kW	3.6	4.5	5.6	7.1
	Heating		4.0	5.0	6.3	8.0
Input power		W	30	42	74	99
Airflow rate	High	m3/h (l/s)	660 (183)	780 (216)	1,000 (277)	1,000 (277)
	Med-High		620 (172)	740 (206)	910 (253)	930 (258)
	Med		580 (161)	690 (192)	830 (231)	870 (242)
	Med-Low		550 (153)	640 (178)	750 (208)	800 (222)
	Low		520 (144)	600 (167)	660 (183)	740 (206)
	Quiet		490 (136)	550 (153)	580 (161)	680 (188)
Sound pressure level	High	dB (A)	36	40	46	47
	Med-High		34	39	44	45
	Med		33	38	42	43
	Med-Low		31	36	40	41
	Low		29	35	37	39
	Quiet		28	34	35	37
Dimensions (H × W × D)		mm	199 × 990 × 655	199 × 990 × 655	199 × 990 × 655	199 × 990 × 655
Weight		kg	25	26	26	27
Connection pipe diameter	Liquid (flare)	mm	6.35	6.35	6.35	9.52
	Gas (flare)		12.70	12.70	12.70	15.88
Drain hose diameter (I.D./O.D.)			25 / 32			

Note: Specifications are based on the following conditions:
Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length: 7.5m; height difference between outdoor unit and indoor unit: 0m. Voltage: 230V.

Dimensions (Unit: mm)

① Refrigerant piping flare connection (liquid)
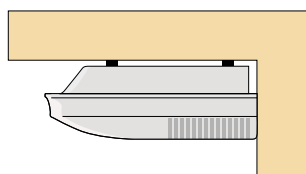② Refrigerant piping flare connection (gas)
③ Drain piping connection

AIRSTAGE

Ceiling

Models
ABYA030GTEH / ABYA036GTEH
ABYA045GTEH / ABYA054GTEH

DC
FAN

Features

Installation

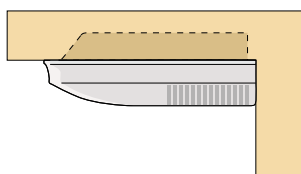| Open	Concealed	Wall mounted
		(Field supplied)
General installation pattern which suspends the indoor unit from the ceiling.	Installation pattern where part of the indoor unit is embedded into the ceiling.	Installation which fixes the indoor unit to the wall by the use of wall brackets (field supplied). This type of installation can be used when the ceiling space is insufficient.
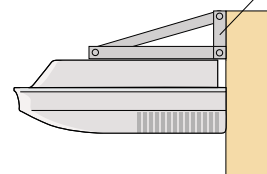
Double auto swing and wide airflow

Auto airflow direction and auto swing

Right and left
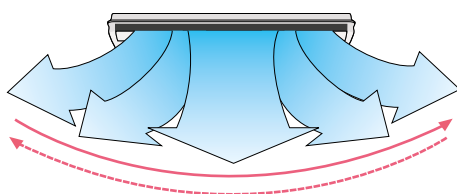
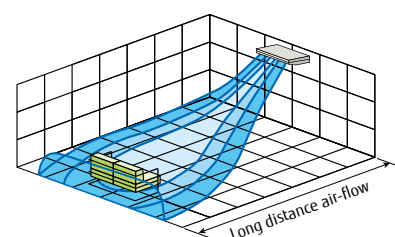5 steps selectable

Up and down

1
2
3
4
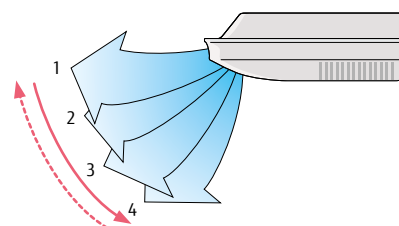
4 steps selectable

Long airflow

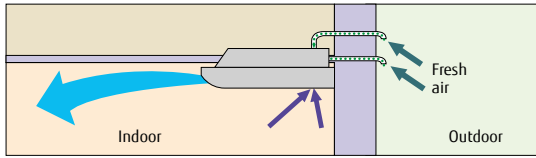Long airflow ensures comfort to every corner of a large room.

Long distance air-flow

High-powered DC fan motor

• High power • Wide rotation range • High efficiency

Fresh air intake

Indoor | Fresh air | Outdoor
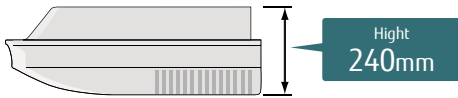
Slim and Compact design

Hight
240mm

High lift drain pump

Optional drain pump unit allows flexible installation design.

Maximum
500mm
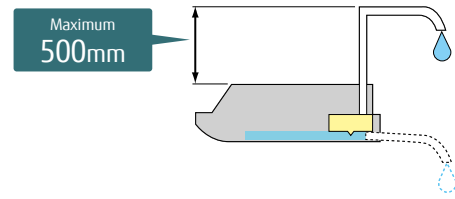
Optional parts

Drain Pump Unit: UTR-DPB24T
Flange: UTD-RF204
External Power Supply Unit: UTZ-GXXC

Specifications

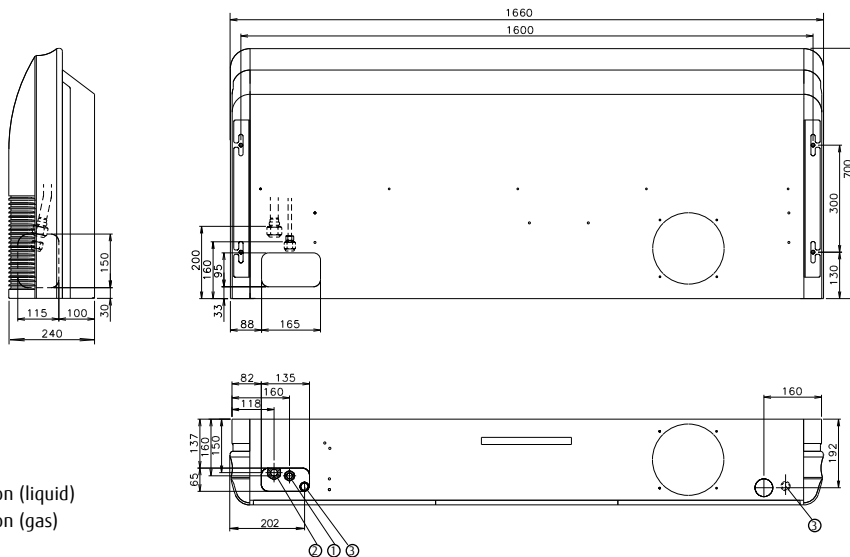| Model name			ABYA030GTEH	ABYA036GTEH	ABYA045GTEH	ABYA054GTEH
Power source			Single phase, ~230V, 50Hz			
Capacity	Cooling	kW	9.0	11.2	12.5	14.0
	Heating		10.0	12.5	14.0	16.0
Input power		W	66	85	131	180
Airflow rate	High	m3/h (l/s)	1,630 (452)	1,690 (469)	2,010 (558)	2,270 (629)
	Med-High		1,520 (422)	1,560 (433)	1,840 (511)	2,070 (575)
	Med		1,420 (394)	1,450 (403)	1,690 (469)	1,860 (517)
	Med-Low		1,320 (367)	1,360 (378)	1,530 (425)	1,660 (461)
	Low		1,220 (339)	1,270 (353)	1,380 (383)	1,470 (408)
	Quiet		1,140 (316)	1,170 (325)	1,230 (342)	1,280 (355)
Sound pressure level	High	dB (A)	42	45	48	51
	Med-High		40	41	46	49
	Med		39	39	45	46
	Med-Low		37	38	41	43
	Low		35	36	38	40
	Quiet		33	34	35	36
Dimensions (H × W × D)		mm	240 × 1,660 × 700	240 × 1,660 × 700	240 × 1,660 × 700	240 × 1,660 × 700
Weight		kg	46	48	48	48
Connection pipe diameter	Liquid (flare)	mm	9.52	9.52	9.52	9.52
	Gas (flare)		15.88	15.88	15.88	15.88
Drain hose diameter (I.D./O.D.)			25 / 32			

Note: Specifications are based on the following conditions:
Cooling: Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating: Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length: 7.5m; height difference between outdoor unit and indoor unit: 0m. Voltage: 230V.

Dimensions (Unit: mm)

① Refrigerant piping flare connection (liquid)
② Refrigerant piping flare connection (gas)
③ Drain piping connection

AIRSTAGE

Wall Mounted

Models (EEV internal)
ASYA007GCGH / ASYA009GCGH / ASYA012GCGH
**ASYA014GCGH**

Models (EEV external)
ASYE007GCEH / ASYE009GCEH / ASYE012GCEH
ASYE014GCEH

DC
FAN

Features

Highly efficient and compact design

Highly efficient compact design is realised by mounting a high density and large heat exchanger.
The compact body makes it possible to install discreetly even in a meeting room or office where comfortable air conditioning is provided.


High density heat exchanger

$\phi 5$
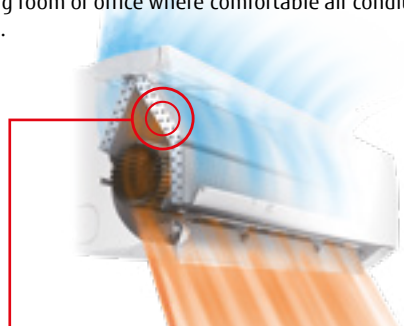
Making the tube thin: **7**mm → **5**mm

Increase of heat exchanger volume due to high density and adopting sub heat exchanger

Even temperature

↓

Improved heat exchanger effectiveness

The Occupancy sensor contributes to further energy savings

Energy saving operation starts automatically by detecting the motion of a person in the space. Two modes of save operation mode and stop mode can be selected.

* If you want to use the Occupancy sensor control' function, you need an operating device that can set the Occupancy sensor control' function. For example: Wired RC (Touch panel).

People go out

AUTO SAVE

AUTO OFF

People come back

AUTO RESET

OFF
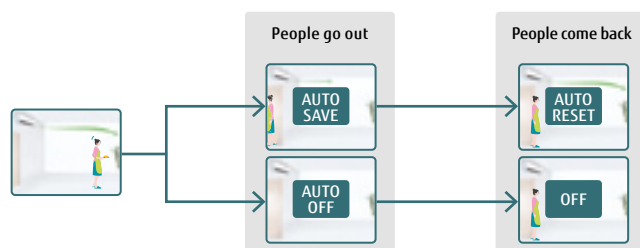
More comfortable airflow

Comfortable air conditioning is provided by mounting our unique power diffuser.

Heating   Vertical airflow provides powerful floor level heating.

Power diffuser

Cooling   Horizontal airflow does not blow cool air directly at the occupants in the room.
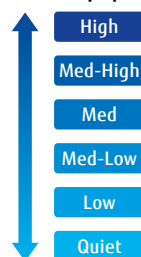
Power diffuser

6 fan speed control

Multistep airflow control is possible to suit the environment.

Fan speed
Quiet

Low noise
24 dB(A)

6-Step Speed

High

Med-High

Med

Med-Low

Low

Quiet

* Compatible remote controllers are as follows:
   UTY-RNRYT5 / UTY-RSRY / UTY-RHRY / UTY-DCGYZ2 / UTY-DTGYZ1 / UTY-ALGXZ1 / UTY-APGXZ1

Optional parts

External power supply unit: UTZ-GXXC

Specifications

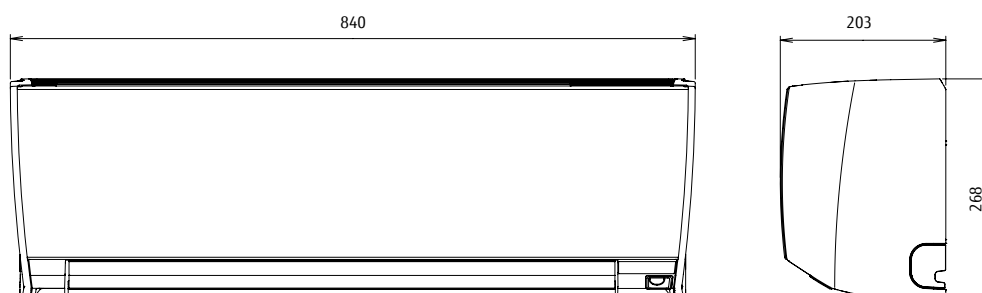| Model name			ASYA007GCGH	ASYA009GCGH	ASYA012GCGH	ASYA014GCGH	ASYE007GCEH	ASYE009GCEH	ASYE012GCEH	ASYE014GCEH
Power source			Single phase, ~230V, 50Hz							
Capacity	Cooling	kW	2.2	2.8	3.6	4.0	2.2	2.8	3.6	4.0
	Heating		2.8	3.2	4.0	4.5	2.8	3.2	4.0	4.5
Input power		W	19	34	25	36	19	34	25	36
Airflow rate	High	m³/h (l/s)	550(153)	720(200)	690(192)	800(222)	550(153)	720(200)	690(192)	800(222)
	Med-High		460(128)	570(158)	610(169)	740(206)	460(128)	570(158)	610(169)	740(206)
	Med		420(117)	500(139)	560(156)	680(189)	420(117)	500(139)	560(156)	680(189)
	Med-Low		390(108)	410(114)	530(147)	610(169)	390(108)	410(114)	530(147)	610(169)
	Low		360(100)	360(100)	470(131)	550(153)	360(100)	360(100)	470(131)	550(153)
	Quiet		330(92)	330(92)	330(92)	330(92)	330(92)	330(92)	330(92)	330(92)
Sound pressure level	High	dB (A)	35	43	40	44	35	43	40	44
	Med-High		32	38	37	42	32	38	37	42
	Med		30	34	35	40	30	34	35	40
	Med-Low		27	29	33	37	27	29	33	37
	Low		24	24	30	34	24	24	30	34
	Quiet		22	22	24	24	22	22	24	24
Dimensions (H × W × D)		mm	262×820×206	262×820×206	268 × 840 × 203	268 × 840 × 203	262×820×206	262×820×206	268 × 840 × 203	268 × 840 × 203
Weight		kg	7.5	7.5	8.5	8.5	7.0	7.0	8.5	8.5
Connection pipe diameter	Liquid (flare)	mm	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35
	Gas (flare)		9.52	9.52	12.70	12.70	9.52	9.52	12.70	12.70
Drain hose diameter (I.D./O.D.)			13.8 / 15.8 to 16.7							
EV Kit (option)			–	–	–	–	UTR-EV09XB	UTR-EV09XB	UTR-EV14XB	UTR-EV14XB

Note: Specifications are based on the following conditions:
Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length: 7.5m; height difference between outdoor unit and indoor unit: 0m. Voltage: 230V.

Dimensions (Unit: mm)

840

203

268

AIRSTAGE

Wall Mounted

Models
NEW **ASYA018GCEH** / NEW **ASYA024GCEH**
ASYA18GBCH / ASYA24GBCH

Models
ASYA030GTEH / ASYA034GTEH

DC FAN

ASYA018 ASYA024
ASYA18 ASYA24

ASYA030 ASYA034

Features

Powerful and comfortable airflow

Powerful airflow

(ASYA030GTEH)

Airflow
20% up!
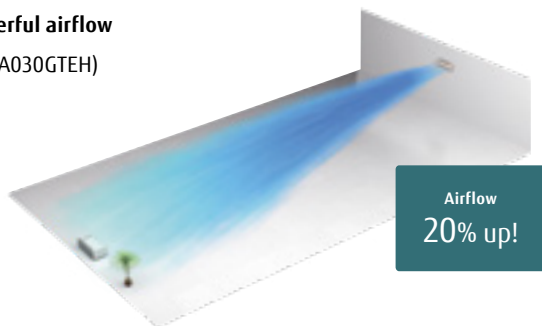
Power diffuser

(ASYA018 / 024GCEH) (ASYA18 / 24GBCH)

Vertical airflow
(24)

Horizontal airflow
(24)

33 32 31 30 29(°C)

15 16 17 18(°C)
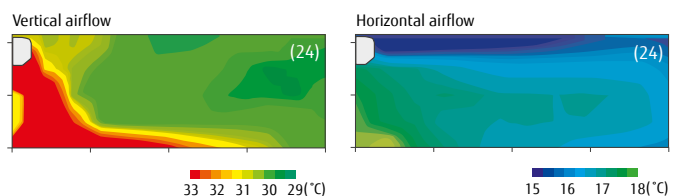
The Occupancy sensor contributes to further energy savings (ASYA030 / 034GTEH only)

Energy saving operation starts automatically by detecting the motion of a person in the space. Two modes of save operation mode and stop mode can be selected.

* If you want to use the Occupancy sensor control' function, you need an operating device that can set the Occupancy sensor control' function. For example: Wired RC (Touch panel).

SAVE

AUTO RESET

Quiet operation and 6 fan speed control

Noise level is drastically reduced through the new airflow structure. Additionally, multistep quiet operation is available by 6 step sound level settings.

35dB(A)

-2 dB(A)

33dB(A)

Current model   **New model**
(030 / 034class)

6-Step Speed

High
Med-High
Med
Med-Low
Low
Quiet

* Compatible remote controllers are as follows:
UTY-RNRYT5 / UTY-RSRY / UTY-RHRY / UTY-DCGYZ2 / UTY-DTGYZ1 / UTY-ALGXZ1 / UTY-APGXZ1

Optional parts

External power supply unit: UTZ-GXXC

Specifications

Model name			ASYA018GCEH	ASYA18GBCH	ASYA024GCEH	ASYA24GBCH	ASYA030GTEH	ASYA034GTEH
Power source			Single phase, ~230V, 50Hz					
Capacity	Cooling	kW	5.6	5.6	7.1	7.1	9.0	10.0
	Heating		6.3	6.3	8.0	8.0	10.0	11.2
Input power		W	32	32	60	60	74	103
Airflow rate	High	m3/h (l/s)	840	840(233)	1,100	1,100(306)	1,440(400)	1,620(450) / 1,520(422)
	Med-High		820	-	1,010	-	1,200(333)	1,300(361)
	Med		790	770(214)	930	910(253)	1,050(292)	1,120(311)
	Med-Low		760	-	850	-	940(261)	980(272)
	Low		720	690(192)	770	730(203)	890(247)	890(247)
	Quiet		690	-	730	-	700(194)	700(194)
Sound pressure level	High	dB (A)	41	41	48	48	53	55 / 54
	Med-High		40	-	46	-	49	51
	Med		39	39	43	43	45	47
	Med-Low		38	-	41	-	42	43
	Low		36	35	38	35	39	39
	Quiet		35	-	35	-	33	33
Dimensions (H × W × D)		mm	320 × 998 × 238	320 × 998 × 238	320 × 998 × 238	320 × 998 × 238	340 x 1,150 x 280	340 x 1,150 x 280
Weight		kg	15	15	15	15	18	18
Connection pipe diameter	Liquid (flare)	mm	6.35	6.35	9.52	9.52	9.52	9.52
	Gas (flare)		12.70	12.70	15.88	15.88	15.88	15.88
Drain hose diameter (I.D./O.D.)			12 / 16				13.8 / 15.8 to 16.7	

Note: Specifications are based on the following conditions:
Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length: 7.5m; height difference between outdoor unit and indoor unit: 0m. Voltage: 230V.
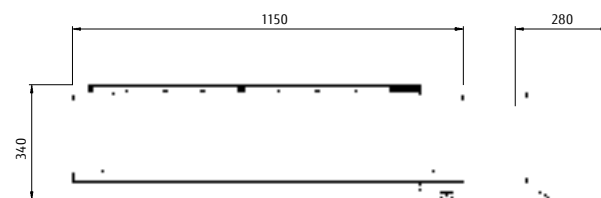
When ASYA18GBCH is connected to the outdoor unit other than J-IIIL, pipe diameter should be Ø9.52 / Ø15.88 (Liq / Gas).

Dimensions (Unit: mm)

Models: ASYA018 / ASYA024
ASYA18 / ASYA24
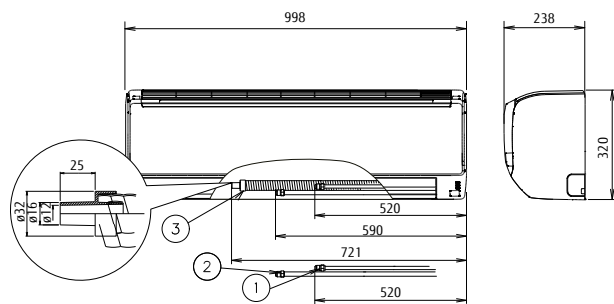
Models: ASYA030 / ASYA034

① Refrigerant piping flare connection (liquid)
② Refrigerant piping flare connection (gas)
③ Drain piping connection

AIRSTAGE

VENTILATION

SIMULTANEOUS FRESH AIR VENTILATION

High efficiency and low noise levels are achieved by using a highly efficient heat exchange process. A comfortable air conditioned space is achieved by conveniently selecting whether to use the heat exchange or normal ventilation setting according to the requirements of the space.

VENTILATION

Outdoor-air Processing Unit

AIRSTAGE

Outdoor-air Processing Unit
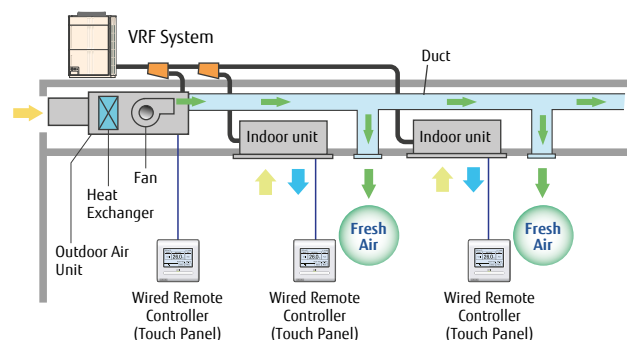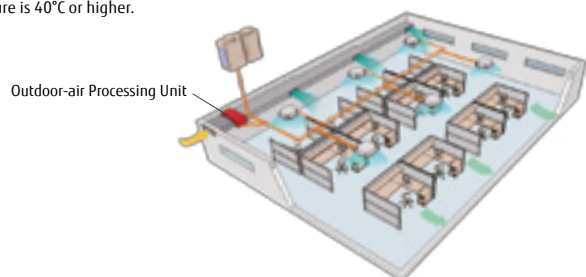
Models
ARXH054GTAH
ARXH072GTAH
ARXH096GTAH

ARXH054   ARXH072

ARXH096

Features

One VRF System can provide air conditioning and air supply at the same time

An Outdoor-air Processing Unit can be connected in the same VRF*1 System as the indoor units and can create fresh and comfortable air supply together using our highly advanced technology.

*1. Connectable VRF Series: J-IVS, J-IV, J-IVL, V-III and VR-IV
   OAU cannot be used where the ambient temperature is 40°C or higher.

Outdoor-air Processing Unit

VRF System

Duct

Indoor unit   Indoor unit

Heat
Exchanger   Fan

Outdoor Air
Unit

Fresh
Air   Fresh
Air

Wired Remote   Wired Remote   Wired Remote
Controller   Controller   Controller
(Touch Panel)   (Touch Panel)   (Touch Panel)

* Make sure the connected capacity is within the range of 50% to 100% of the Outdoor-air Processing Unit capacity. In addition, if there are mixed connections with indoor units, the Outdoor-air Processing Unit connection capacity becomes 30% or less of the outdoor unit capacity.

High energy savings and flexible duct design by using a DC motor

• Greatly reduces electricity consumption by adopting a permanent magnet compared to when using an AC motor

054 / 072 type   096 type

• Compared with an AC motor, changing the fan speed makes it possible to respond with flexibility to the external static pressure from 50 Pa to 240 Pa. Even when the damper equipment is not used, the static pressure can be adjusted and duct design is made easy

• Static pressure can be set easily using wired remote controller

50 to 240 Pa
(096 type)

(When external static pressure is low)   **(When external static pressure is high)**

DC
Motor   Low speed   High speed

AC
Motor   High speed
(Constant)   High speed
(Constant)

Damper opening small (Field supplied)   Damper opening large (Field supplied)

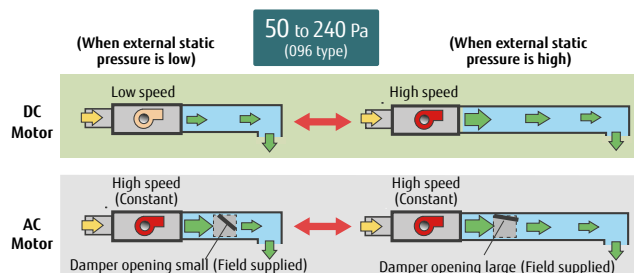### Compact design

• A lightweight compact design at just 425 mm in height and 55 kg in weight for ARXH072 type. This unit can be installed easily even within a narrow space.
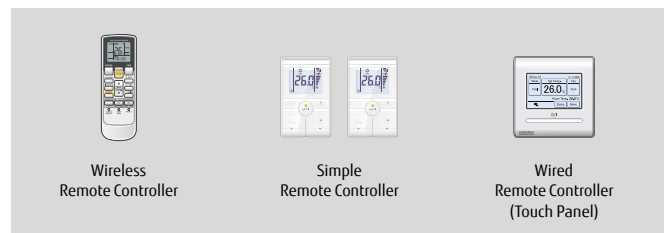
55 kg
(072 type)

1367 mm

425 mm
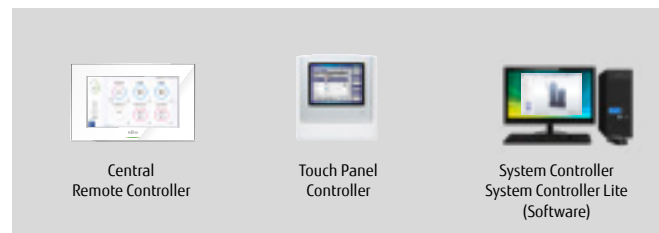
572 mm
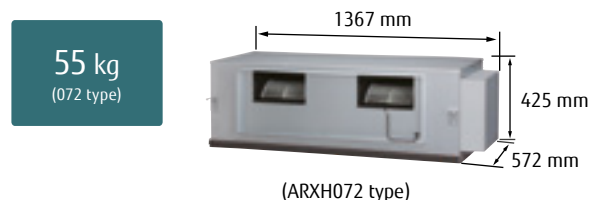
(ARXH072 type)

Various controllers

A variety of optional controllers are available, such as individual controllers, central controllers and building management controllers.

Individual controllers

Wireless Remote Controller	Simple Remote Controller	Wired Remote Controller (Touch Panel)

Central controllers

Central Remote Controller	Touch Panel Controller	System Controller System Controller Lite (Software)

* The temperature setting is discharged air temperature setting. The air volume is set to a constant speed.

Specifications

Rated flow rate			1,000 m³/h (278 l/s)	1,500 m³/h (417 l/s)	2,000 m³/h (556 l/s)
Model name			ARXH054GTAH	ARXH072GTAH	ARXH096GTAH
Power source		V/Ø/Hz	230 / 1 / 50		
Capacity	Cooling	kW	14.0	22.4	28.0
	Heating		8.9	13.9	17.4
Input power	Cooling	W	179	292	370
	Heating		179	292	370
Airflow rate		m³/h (l/s)	1,080 (300)	1,680 (467)	2,100 (583)
Static pressure	Standard (range)	Pa	185 (50-185)	200 (50-200)	200 (50-240)
Sound pressure level		dB(A)	42	44	47
Dimensions (H × W × D)		mm	425 × 1,367 × 572	425 × 1,367 × 572	450 × 1,583 × 700
Weight		kg	48	55	71
Connection pipe diameter	Small	mm	9.52 (Flare)	12.70 (Brazing)	12.70 (Brazing)
	Large		19.05 (Flare)	22.22 (Brazing)	22.22 (Brazing)
Operating range	Cooling	°CDB	5 to 43	5 to 43	5 to 43
	Heating		-7 to 21	-7 to 21	-7 to 21
Refrigerant			R410A	R410A	R410A

Note: Specifications are based on the following conditions.
Cooling: Outdoor temperature of 33°CDB / 28°CWB.
Heating: Outdoor temperature of 0°CDB / -2.9°CWB.
Pipe length: 7.5m   Voltage: 230 V.

Dimensions (Unit: mm)

Model: ARXH054

Side view (L)   Top view   Side view (R)

(Drain hose)   Front view

Model: ARXH072

Side view (L)   Top view   Side view (R)

(Drain hose)   Front view

Model: ARXH096

Side view (L)   Top view   Side view (R)

(Drain hose)   Front view
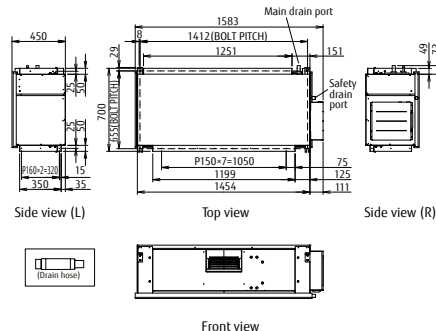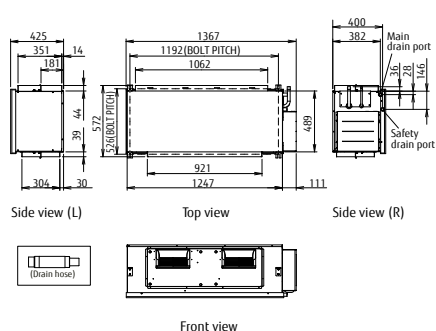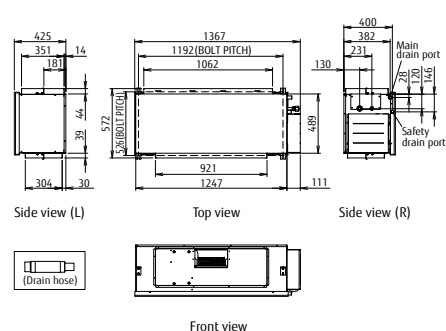
AIRSTAGE

AIRSTAGE™ CONTROL SYSTEMS

User friendly control system
provides individual and centralised control

The AIRSTAGE™ control system can control air conditioning of individual rooms, centralise control by floor or by building, or centralise energy saving air conditioning control for large buildings.
A variety of air conditioning management options are available to match the requirements of the application, including integrating with the building control system, connecting with single split models and various interfaces.

OPTIMISED CONTROL SOLUTIONS

CONTROL SYSTEM OVERVIEW

COMPARISON TABLE OF CONTROLLERS

INDIVIDUAL CONTROLLER

CENTRALISED CONTROLLER

CONVERTER / ADAPTOR

AIRSTAGE

OPTIMISED CONTROL SOLUTIONS

Fujitsu General provides a diverse range of flexible control solutions to suit a variety of applications.

SHOP

Type	Individual control	Centralised control			Integrating control (interface)		
	Wired Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller	Network Converter for LonWorks	MODBUS Converter	KNX® Convertor
	UTY-RNRYT5	UTY-DCGYZ2	UTY-DTGYZ1	UTY-APGXZ1, UTY-ALGXZ1	UTY-VLGX	UTY-VMGX	UTY-VKGX
Automatic control of A/C (schedule timer, weekly timer etc.)	●	●	●	●			
Customise the level of control for staff and end users (RC prohibition, room temp set point limitation etc.)		●	●	●	●	●	●
Group control		●	●	●			
Advanced energy saving (peak cut, indoor unit lead lag operation etc.)				●			
Remote management			●	●			
Manage multiple sites				●			
Energy charge apportionments		●		●			
Monitor energy consumption				●			
Control third party products				●			
Integrate FGL A/C into BMS					●	●	●

HOTEL

Type	Individual control			Centralised control			Integrating control (interface)			
	Wired Remote Controller	Simple Remote Controller	Wireless Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller	BACnet Gateway	Network Converter for LonWorks	MODBUS Converter	KNX® Convertor
	UTY-RNRYT5	UTY-RSRY, UTY-RHRY	UTY-LNHY	UTY-DCGYZ2	UTY-DTGYZ1	UTY-APGXZ1, UTY-ALGXZ1	UTY-ABGXZ1, UTY-VBGX	UTY-VLGX	UTY-VMGX	UTY-VKGX
Local control for hotel guest	●	●	●							
Centralised A/C control for common space				●	●	●	●	●	●	●
Limited control for hotel guests				●	●	●	●	●	●	●
Remote management				●	●	●				
Advanced energy saving (peak cut, indoor unit lead lag operation etc.)						●	●			
Monitor energy consumption						●				
Control third party products						●				
Integrate FGL A/C into BMS							●	●	●	●

Fujitsu

OFFICE

Type	Individual control			Centralised control			Integrating control (interface)			
	Wired Remote Controller	Simple Remote Controller	Wireless Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller	BACnet Gateway	Network Converter for LonWorks	MODBUS Converter	KNX® Convertor
	UTY-RNRYT5	UTY-RSRY, UTY-RHRY	UTY-LNHY	UTY-DCGYZ2	UTY-DTGYZ1	UTY-APGXZ1, UTY-ALGXZ1	UTY-ABGXZ1, UTY-VBGX	UTY-VLGX	UTY-VMGX	UTY-VKGX
Local control for office staff	●	●	●	●						
Automatic control of A/C (schedule timer, weekly timer etc.)	●		●	●	●	●	●			
Centralised A/C control for management				●	●	●	●	●	●	●
Customise the level of control for office staff (RC prohibition, room temp set point limitation etc.)				●	●	●	●	●	●	●
Advanced energy saving (peak cut, indoor unit lead lag operation etc.)						●	●			
Remote management				●	●	●				
Energy charge apportionment					●	●	●			
Monitor energy consumption						●				
Control third party products						●				
Integrate FGL A/C into BMS							●	●	●	●
Interlock with human sensor for meeting room				●						

AIRSTAGE

CONTROL SYSTEM OVERVIEW

User's needs are supported by offering a variety of controls, such as individual control,
central control and building management control options.

Air Conditioning
Individual Control

Wired Remote Controller
(touch panel)
UTY-RNRYT5

Simple Remote Controller
UTY-RSRY
UTY-RHRY Without operation mode

Wireless Remote Controller
UTY-LNHY

IR Receiver Unit
UTY-TRHX For Duct type
UTB-TWC For Duct type

IR Receiver Unit
UTY-LRHYB1 For Cassette type
UTY-LBHXD For Circular Flow Cassette

For Cassette   For Circular
Flow Cassette

Air Conditioning
Centralised Control

Internet

USB adapter *[1]
(Field supplied)

Remote /
monitoring side

System Controller (Software)
UTY-APGXZ1
UTY-ALGXZ1 (Lite edition)

Maximum controllable
1600*
indoor units

* Lite edition is maximum controllable 400 indoor units

Internet or LAN

Remote /
monitoring side

Touch Panel Controller
UTY-DTGYZ1

Maximum controllable
400
indoor units

Central Remote
Controller
UTY-DCGYZ2

Maximum controllable
100
indoor units

FUJITSU

For Light Commercial
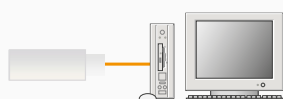• Small VRF

For Commercial
• Large VRF

Converter / Adaptor
For external devices

BACnet Gateway
UTY-ABGXZ1 Software

BACnet Gateway
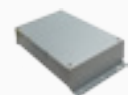UTY-VBGX Hardware

Network Converter
(BMS / LONWORKS)
UTY-VLGX

MODBUS Converter For VRF
UTY-VMGX

MODBUS Converter for indoor unit
UTY-VMSX

KNX® Convertor For VRF
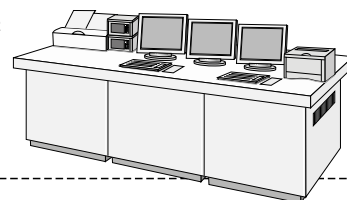UTY-VKGX
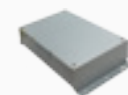
KNX® Convertor for indoor unit
UTY-VKSX

BMS / BAS *2

BMS, home automation system

or

*1. USB Adaptor: Echelon® U10 USB Network Interface
*2. BMS / BAS: Building Management System / Building Automation System

Converter / Adaptor
For system expansion

Network Converter
(DC power supply)
UTY-VTGX

Single split

Signal Amplifier
UTY-VSGXZ1

AIRSTAGE

COMPARISON TABLE OF CONTROLLERS

Type		Wired Remote Controller (touch panel)	Simple Remote Controller	Simple Remote Controller*1
Model name		UTY-RNRYT5	UTY-RSRY	UTY-RHRY
Max. controllable remote controller groups		1	1	1
Max. controllable indoor units		16	16	16
Max. controllable groups		–	–	–
Air conditioning control function	On / Off	●	●	●
	Operation mode setting	●	●	–
	Fan speed setting	●	●	●
	Room temp. setting	●	●	●
	Room temp. set point limitation	●	●	●
	Test operation	●	●	●
	Up / down air direction flap setting	●	●	●
	Right / left air direction flap setting	●	–	–
	Individual louvre control	●	–	–
	Group setting	–	–	–
	RC prohibition	–	–	–
	Anti freeze setting	●	–	–
	Set temp. auto return	●	–	–
	Economy mode setting	●	–	–
	Human sensor control	●	–	–
Display	Error	●	●	●
	Defrosting	●	●	●
	Current time	●	–	–
	Day of week	●	–	–
	R.C. prohibition	●	●	●
	Address display	●	●	●
	Room temp	●	●	●
	Multi-language	●	–	–
	Summer time	●	–	–
	Name registration	●	–	–
	Backlight	●	●	●
	2D floor layout / 3D building display	–	–	–
Timer	Schedule timer — Period	Week	–	–
	Schedule timer — On / Off, temp, mode, times per day	8	–	–
	On / Off timer	●	–	–
	Sleep timer	–	–	–
	Program timer	–	–	–
	Auto off timer	●	–	–
	Day off	●	–	–
	Min. unit of timer setting (minutes)	10 • 30	–	–
Control	Status monitoring system	–	–	–
	Electricity charge apportionment	–	–	–
	Error history	●	–	–
	Emergency stop	–	–	–
	Remote management	–	–	–
	Energy saving management	–	–	–
	E-mail notification for malfunction	–	–	–
	Key lock	● Child lock	–	–
	Low noise mode	–	–	–

FUJITSU

Wireless Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller Lite (Software)	System Controller (Software)
UTY-LNHY	UTY-DCGYZ2	UTY-DTGYZ1	UTY-ALGXZ1	UTY-APGXZ1
1	100	400	400	1600
16	100	400	400	1600
—	50	400	400	1600
●	●	●	●	●
●	●	●	●	●
●	●	●	●	●
●	●	●	●	●
—	●	●	●	●
●	—	●	—	—
●	●	●	●	●
●	●	●	●	●
—	●*3	●	—	—
—	●	●	●	●
—	●	●	●	●
—	●	●	●	●
—	—	●	—	—
●	●	●	●	●
—	●	●	●	●
—	●	●	●	●
—	●	●	●	●
●	●	●	●	●
—	●	●	●	●
—	●	●	●	●
—	—	●	●	●
—	●*4	●*4	●*4	●*4
—	●	●	●	●
—	●	●	●	●
—	●	●	●	●
—	●	●	—	—
—	—	—	—	●
—	Week	Year	Year	Year
—	20	20	144	144
●	—	—	—	—
●	—	—	—	—
●	—	—	—	—
—	●	●	—	—
—	●	●	●	●
5	10	10	10	10
—	●	●	●	●
—	—	○	○	●
—	●	●	●	●
—	●*2	●*2	—	—
—	●	●	○	●
—	—	—	○	○
—	●	●	●	●
—	● Password setting	● Password setting	● Password setting	● Password setting
—	—	●	●	●

*1 "Operation mode" setting is not available for this model.   *2 This function is available only through external input control.
*3 Only individual airflow group reset is mounted.   *4 This function is available only when using wired remote controller.
●: Supported   ○: Optional function   —: Not supported yet

AIRSTAGE

Wired Remote Controller (Touch Panel)

Maximum controllable
16
indoor units

UTY-RNRYT5

Easy operation with a high-definition large LCD touch panel screen

• Easy touch operation via the touchscreen LCD panel
• Built-in weekly / daily timer (ON / OFF, temp, mode)
• Backlight enables easy operation in a dark room
• Room temperature display
• Control up to 16 indoor units
• 12 different languages
  (English, Chinese, French, German, Spanish, Russian, Polish, Italian, Greek, Portuguese, Turkish and Dutch)
• 2-wire type
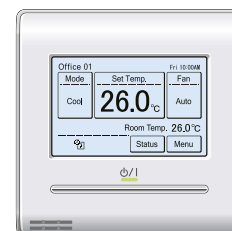
Functions

High performance and compact size

• In addition to the individual control, various energy saving controls can be utilised via the controller.

Individual control	+	Thermo sensor	+	Weekly timer	+	Auto off timer	→	
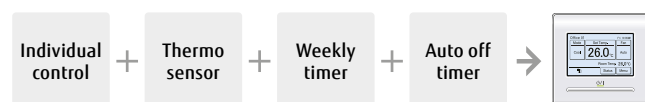
Accurate and comfortable control

• Indoor temperature can be detected accurately by the inclusion of a thermo sensor in the body of the wired controller.
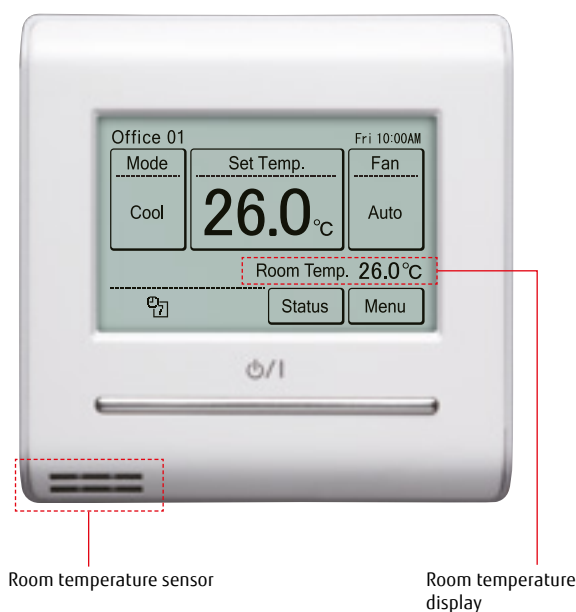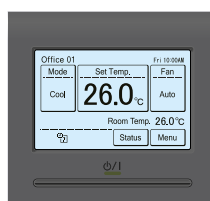
Room temperature sensor

Room temperature display

Backlight

• Backlight enables easy operation in a darkened room.
• The backlight setting can be adjusted for 30 or 60 seconds.
• Backlight activates while the controller is in use and turns off 30 or 60 seconds after the operation stops.

Various convenient functions

Displays setting status and limitations

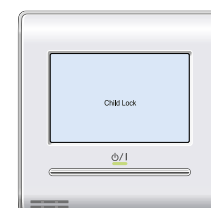• The remote controller settings can be easily checked.
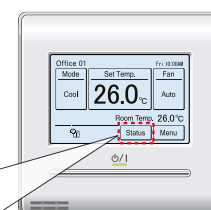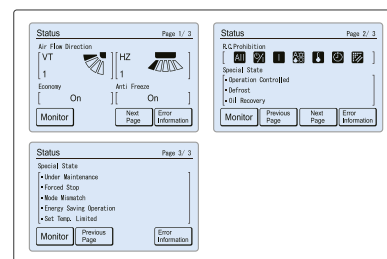
Summer time display

• This function can be set easily from the Menu screen.
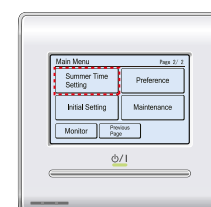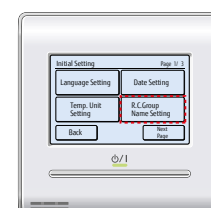
Child lock

• Lock / unlock method: push the ON / OFF button and the screen (4 seconds).

Name registration

• Remote controller names can be registered in the remote controller screen.This makes it easy to identify the indoor unit you want to control in the room.
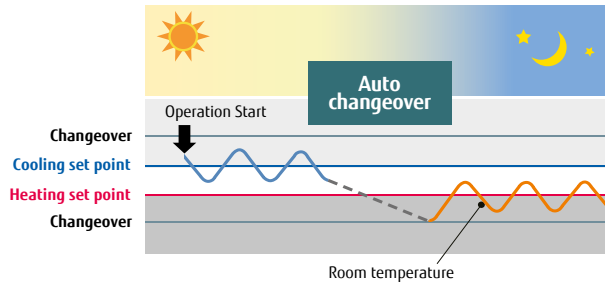
Fujitsu

Various energy saving controls

Custom Auto

- Maintains 2 separate set points for heating and cooling
- Automatically changes mode between heating and cooling

* This function is not available for some models.

Cooling set temp. 27℃, heating set temp. 26℃


Auto OFF timer

- The indoor unit is automatically turned off when it reaches the preset operating time frame
- The time frame of the "Auto off timer" allows flexibility for setting and scheduling
- Can be set to turn off in 30 to 240 minutes
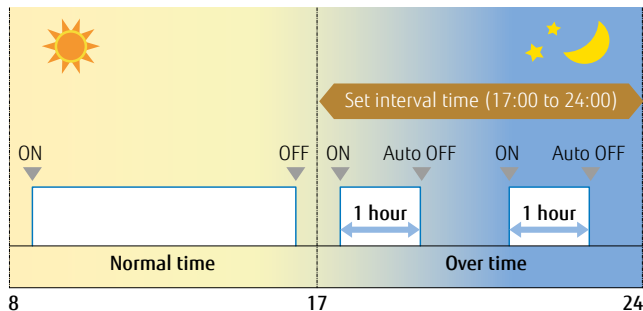
Ex.) a particular interval time hour (17:00 to 24:00) to prevent forgetting to turn off
Set off time: 1 hour

2 schedules weekly timer

- 2 schedules, for example summer and winter can be set
- 8 settings are changeable per day of week (setting items: On / Off, temperature, mode, time)
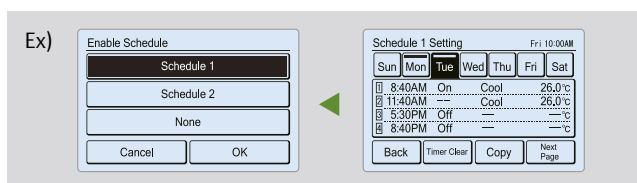
Set temperature auto return

- The setting temperature automatically returns to the previous temperature setting
- The time range in which the set temperature can be changed is 10 to 120 minutes

Set temperature upper and lower limit

- The set temperature range can be set for each operation mode (cooling / heating / auto)

Simplified installation

Uses non polar 2 wire type

- Incorrect wiring can be prevented by using non-polar 2-wire
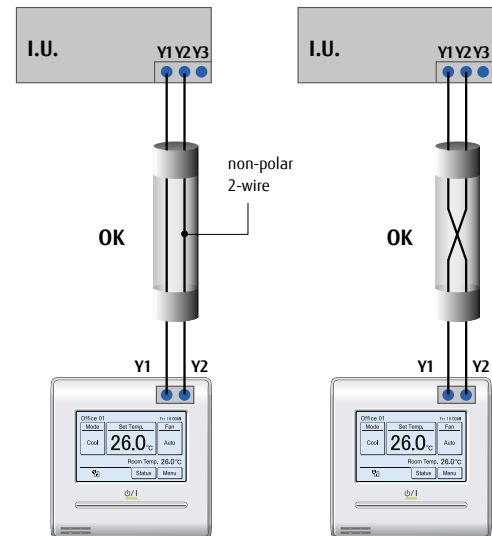
Auto address setting / setting position notification

- When using the touch panel controller to control a remote controller group, new functionality enables the controller to set the respective RC addresses
- After the addresses are assigned these can be confirmed from the indoor unit
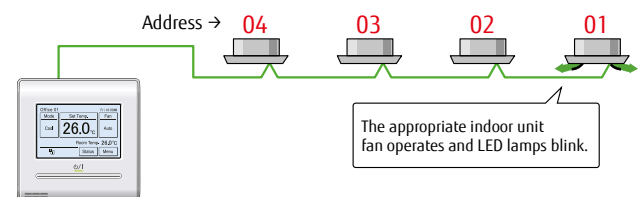
Easy maintenance

Error history display

- Errors that occur in the indoor unit or or on the remote controller are saved in the error history
- A maximum of 32 error incidents can be saved

Specifications

Model name		UTY-RNRYT5
Power supply		DC 12V
Dimensions (H x W x D)	mm	120 × 120 × 20.4
Weight	g	220

DC12V is supplied by indoor unit.

AIRSTAGE
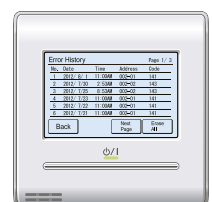
Simple Remote Controller

Maximum controllable
16
indoor units

UTY-RSRY

UTY-RHRY (without operation mode)

Compact remote controller provides access to basic functions

- Up to 16 indoor units can be controlled with one remote controller
- Suitable for hotels or offices as it is easily operated with no complex functions
- Simple and stylish design to match stylish interiors
- Large LCD screen and simple operation buttons
- Backlight: white coloured backlight on monitor enables easy operation in dark environments
- 2-wire type

UTY-RSRY   UTY-RHRY
without operation mode

Functions

Corresponding with various applications

- **Vertical louvre control:**

Vertical airflow direction can be adjusted for Mini Duct & Slim Duct types, and cassette types, using the auto louvre option. This suits indoor units installed in applications such as hotels and conference rooms.
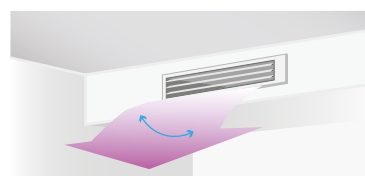
- **Room temperature set point limitation:**

The Simple Remote Controller can assist with management of energy usage in small buildings without the central control unit.

During cooling

30℃
25℃
18℃

During heating

30℃
25℃
16℃
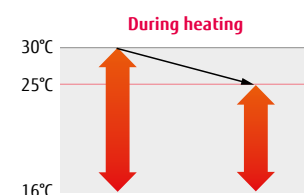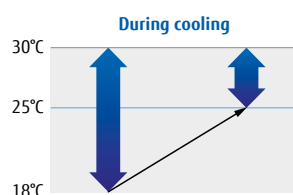
- **Built in room temperature sensor:**

The Simple Remote Controller detects actual room temperature and controls room climate accordingly.
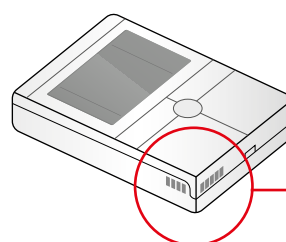
Room temperature sensor

Specifications

Model name		**UTY-RSRY**	**UTY-RHRY**
Power supply		DC 12V	
Dimensions (H x W x D)	mm	120 × 75 × 19.4	
Weight	g	120	

DC12V is supplied by indoor unit.

Wireless Remote Controller

Maximum controllable	Selectable
16	**4**
indoor units	daily timers

UTY-LNHY

Simple and sophisticated operations
with a choice of 4 daily timers

• A single controller controls up to 16 indoor units.

Functions

Built-in daily timer

Select from 4 different timer programs : ON / OFF / program / sleep

Program timer: The program timer operates the ON and OFF timer once within a 24 hour period.

Sleep timer: The sleep timer function automatically corrects the set temperature according to the time setting to prevent excessive cooling or heating during sleep hours.

Cooling operation / dry operation

When the sleep timer is set, the set temperature automatically rises 1˚C every hour. The set temperature can rise up to a maximum of 2˚C.

Timer setting

60min.

1˚C

2˚C

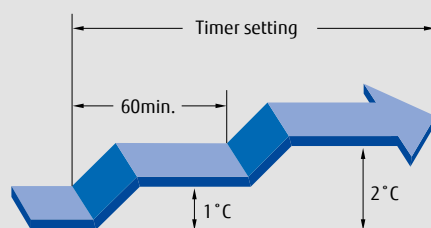#### Heating operation

When the sleep timer is set, the set temperature automatically drops 1˚C every 30 minutes. The set temperature can drop to a max. of 4˚C.

1˚C 2˚C 3˚C 4˚C

30min.

60min.

90min.

Timer setting
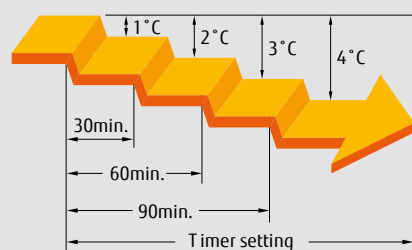
Easy operation with multiple indoor units

The code selector switch prevents indoor units from unintended control. (Up to 4 codes can be set.)

Confusion

Code change

A B C D
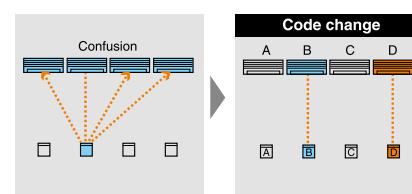
Wide and precise
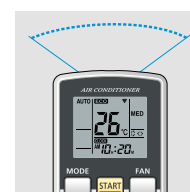
Address setting

During installation work, address setting can be performed using the wireless remote controller, thus eliminating manual switch setting.

Transmission line

Outdoor unit

Indoor unit

Wireless
Remote Controller

Specifications

Model name		**UTY-LNHY**
Power supply		1.5V AAA × 2
Dimensions (H x W x D)	mm	170 × 56 × 19
Weight	g	85

AIRSTAGE

IR Receiver Unit for Duct

UTB-TWC, UTY-TRHX

Option required to control ducted type units via a Wireless Remote Controller

• Up to 16 indoor units can be controlled with one remote controller
• Suitable for hotels or offices as it is easily operated with no complex functions
* The wireless remote controller (model: UTY-LNHY) is necessary separately

Functions

Wiring connection

Duct type indoor unit

IR Receiver Unit
UTB-TWC

Wireless Remote
Controller

Duct type indoor unit

IR Receiver Unit
UTY-TRHX

Wireless Remote
Controller
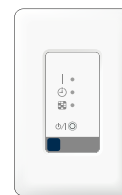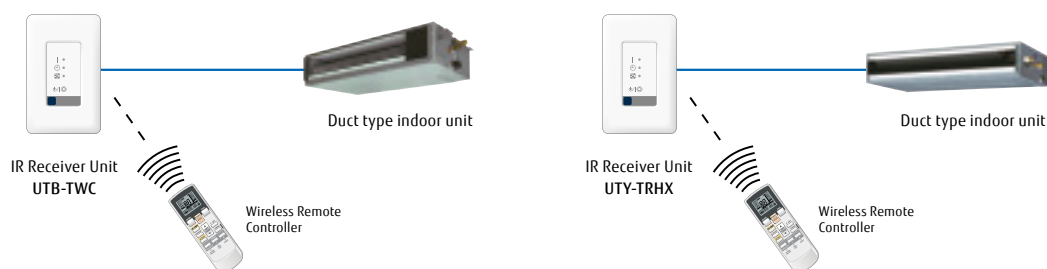
Specifications

Model name		UTB-TWC	UTY-TRHX
Power supply		DC 5V	
Dimensions (H x W x D)	mm	145 × 90 × 30	
Weight	g	150	

IR Receiver Unit for Cassette

UTY-LRHYB1
UTY-LBHXD

Cassette type indoor unit can be controlled
with the Wireless Remote Controller
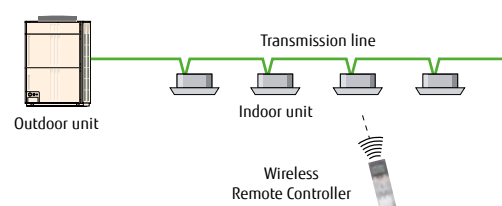
*The wireless remote controller (model: UTY-LNHY) is required.
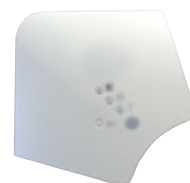
UTY-LRHYB1   UTY-LBHXD

Functions

Wiring connection

Wireless
Remote Controller

Wireless
Remote Controller

Specifications

Model name		UTY-LRHYB1	UTY-LBHXD
Power supply		DC 5V	
Dimensions (H x W x D)	mm	193.9 × 193.9 × 31.2	
Weight	g	140	

FUJITSU

AIRSTAGE

Central Remote Controller

Maximum controllable	Maximum controllable
100 indoor units	**50** groups

UTY-DCGYZ2

For small and medium-sized buildings and tenants

- Individual control and monitor of 100 indoor units
- 7.0inch TFT color screen
- High visibility and easy operation
- Room temperature display by indoor unit sensor & remote controller sensor
- 50 Remote Controller Groups Display & remote controller group rename
- Supports 12 different languages
  (English, Spanish, German, French, Italian, Russian,Portuguese, Turkish, Polish, Greek, Dutch, Chinese)

FUJITSU

Functions

Easy Management

Air conditioning management by detecting room temperatures of each room

The room temperature detected with indoor unit sensor or remote controller sensor can be displayed. New model can detect the room temperature by indoor units sensors even if wired remote controllers are not connected to the indoor units.

Not connected wired remote controller

(↓) : Indoor Unit Sensor

Thermistor

Connected wired remote controller

🏠 : Remote Controller Sensor / other sensors

Thermistor
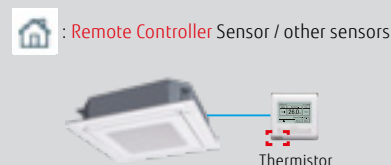
50 Remote Controller Groups Display

The group display and the 50 remote controller groups display can be switched easily.
Users can choose which display is better, depending on the situation.

Group Display

Manage & Monitor
by each Groups

One-tap
to switch

50 Remote Controller Groups Display

Manage & Monitor
by 50 Remote Controller Groups

Remote Controller Groups Rename

The remote controller group names can be changed. Users can know easily where the air conditioning is located by changing the remote controller group names.

The remote controller group name can be changed.

- Easy intuitive operation from the touch panel display.
- All functions can be accessed through the monitoring screen showing a pop-up window for detailed operation.
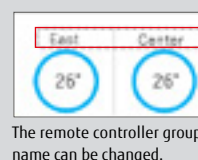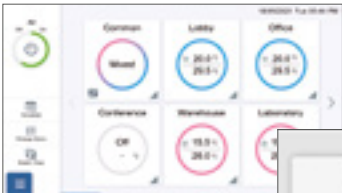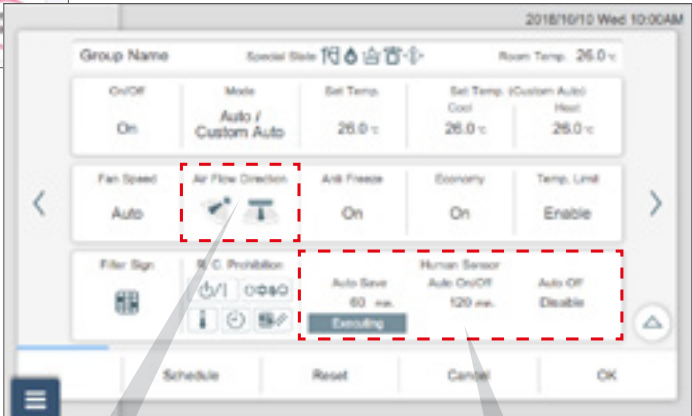
Monitoring screen

Individual setting

Added individual wind direction control

Individual wind direction control has been added.
Circular Flow cassette

Circular flow cassette

Human Sensor Compatible

Human sensor setting
- Auto save
- Auto on / off
- Auto off detection time
- Enable and disable
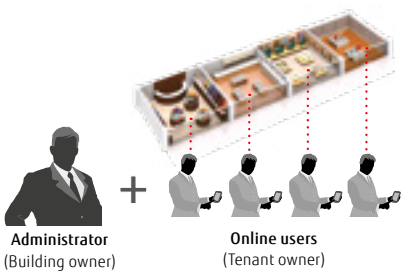
Remote Management

Remote monitoring / Remote operation

New central remote controller can control your tenant's air conditioner anytime and anywhere.
When the central remote controller manages the indoor units of some tenants, air conditioning of each tenants can be managed separately online.

Increased the Number of Accounts

Maximum
30
accounts

Administrator
(Building owner)

Online users
(Tenant owner)

Trouble support function

Display error details
Display descriptive explanation when an error occurs

All indoor unit groups display

Display error details
- Indoor unit error
- Outdoor unit error
- Central remote controller error

Sensor value monitoring function
Monitor sensor data of indoor unit / outdoor unit, send mail

Notify room temperature by email*
Notify by e-mail when the temperature around the air conditioner is too high or too low

*:This function is available only when using wired remote controller.

Specifications

Model name		UTY-DCGYZ2
Power supply		100-240 V 50 / 60 Hz
Dimensions (H x W x D)	mm	134.6 × 216.2 × 37.9
Weight	g	800
Interface		Transmission / LAN / USB / EXT IN / EXT OUT

AIRSTAGE

Touch Panel Controller

Maximum controllable	Maximum controllable	Maximum controllable
400	**100**	**400**
indoor units	outdoor units	groups

UTY-DTGYZ1

• Large-sized 7.5-inch TFT colour
• LCD easy touch operation
• Stylish shape and design to suit all applications
• Up to 400 indoor units can be controlled
• Selectable 2 display types (icon / list) in monitoring mode
• Supports 7 different languages - English, Chinese, French, German, Spanish, Russian, Polish
• Mounted with LAN interface for remote control and operation, external input / output with emergency stop and group ON / OFF

Functions

Easy operation

• Wide range of simple-to-understand icons
• Operation can be selected using your finger or the dedicated stylus pen by pressing the appropriate on-screen icon.
• Back colour identifies current control operation: blue for monitoring; green for operational control.
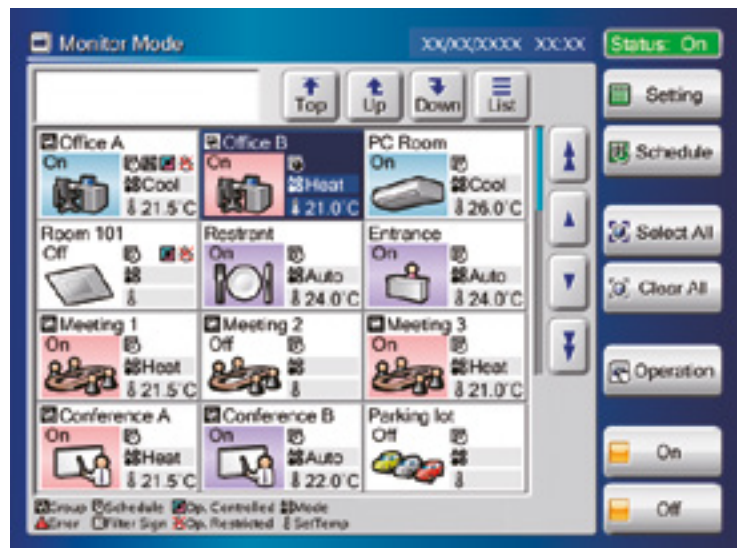
Easy maintenance

• Flat touch screen is easily cleaned
• Non glare coating on touch panel controller minimises fingerprint marking
• Easy to remove front cover

Easy installation

• The touch panel controller is easily mounted to the wall
• The flat back surface allows the controller to be installed wherever required
• No additional components are required for installation

Up to 400 indoor units can be controlled

Group A   Group B

It allows multiple indoor unit grouping ability

Emergency stop control
Air conditioner can be turned
off through the external input control

Emergency stop function
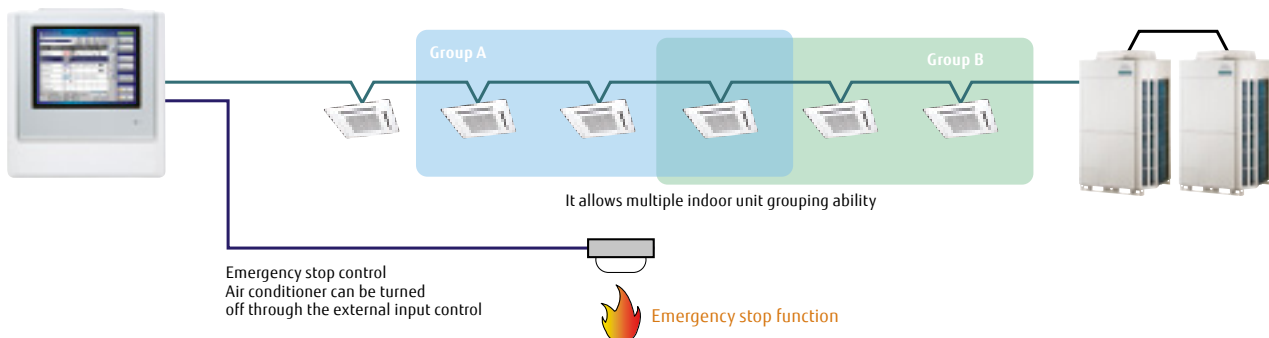
Fujitsu

Control and monitoring
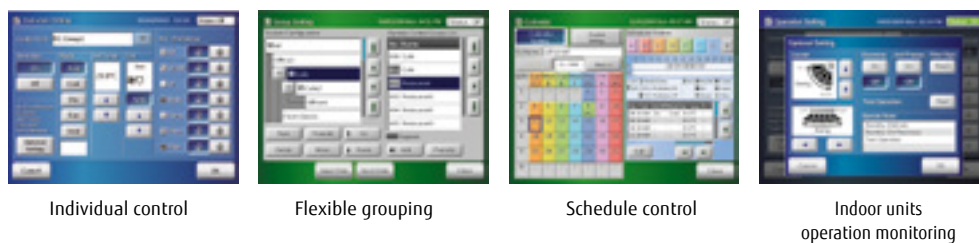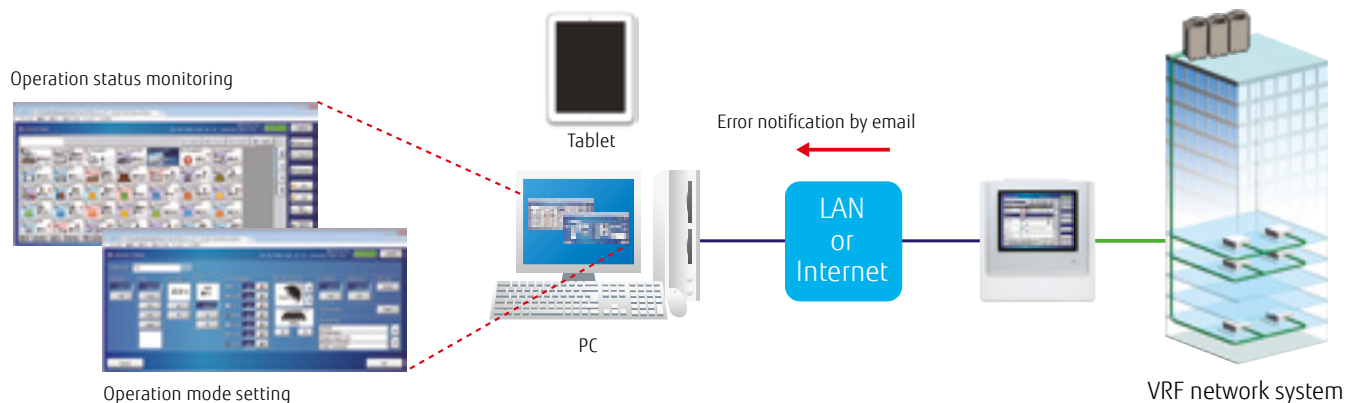
- Control and monitor Fujitsu air conditioners via LAN or Internet
- Allow the user or tenant to manage only assigned equipment by their PC or tablet from anywhere
- Error messages can be notified automatically by email upon an error occurrence to enable the issue to be handled promptly

Operation status monitoring

Tablet

Error notification by email

LAN or Internet

PC

Operation mode setting

VRF network system

Individual control

Flexible grouping

Schedule control

Indoor units operation monitoring

Not only operations but also detailed settings such as schedule or group settings can be operated from remote locations.

Smart phone

Model name	Browser
Nexus 6P (Android 7.1.1) or later	Google Chrome 5.5 or later
iPhone 7 (iOS 10.1) or later	Safari 10 or later

Tablet

Model name	Browser
iPad Pro 9.7inch (iOS 10.2.1) or later	Safari 10 or later

Flexible access permission with individual user levels

The administrator can register multiple users to permit which indoor unit(s) and which functions can be accessed.

ON / OFF prohibition

Monitoring from website

Operation ON

Administrator

Operation ON

Staff / employee
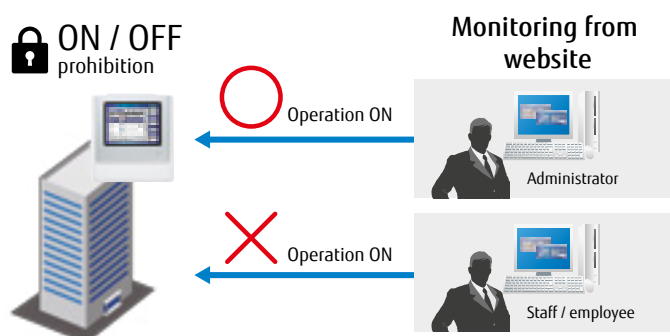
Additional language functionality

Available in 7 different languages- English, Chinese, French, German, Spanish, Russian and Polish as standard.
Additional languages can be integrated on a remote device by creating a language database.
Additional languages are displayed only on the remote device.
The touch panel controller cannot be configured to display these additional languages.

Monitoring from website

Write

Language data

7 Languages

7 Languages ＋ Other languages

AIRSTAGE
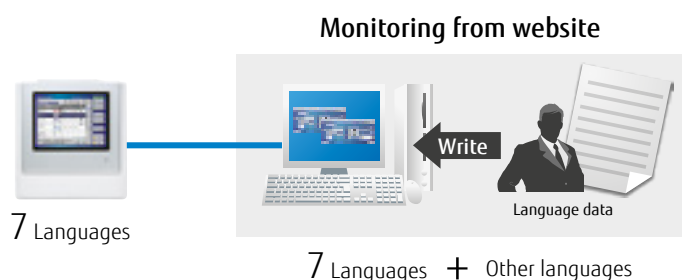
Functions

Electricity charge apportionment

• Electricity charge apportionment can be utilised to easily attribute power usage to each tenant based on their usage

• Apportionment charge / bill calculation
• Tenant (block) setting
• Common facilities apportionment setting
• Rated power consumption allotment setting
• Individual calculation for both cooling and heating
• Electricity meter supported

Electricity charges
Tenant A
Tenant B
LAN cable
VRF network system
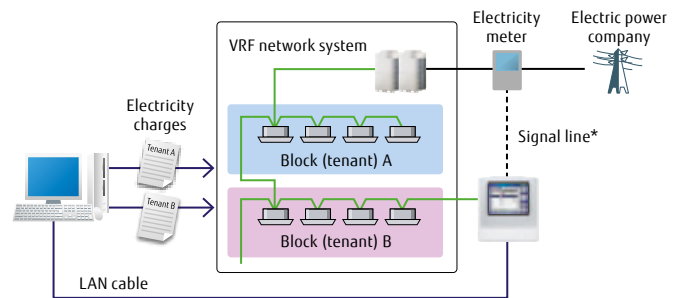Electricity meter
Electric power company
Block (tenant) A
Signal line*
Block (tenant) B

* Electricity meter (1 unit) can be connected to external input connector of the TPC unit. In this case, electricity meter cannot be connected to outdoor unit simultaneously.
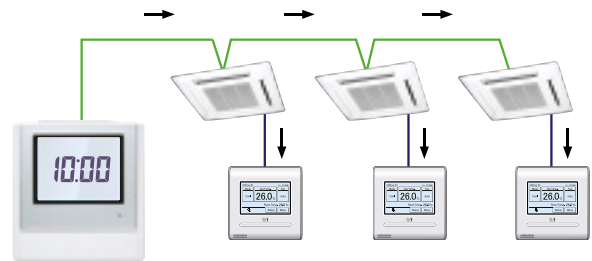
Automatic summer time setting

Function overview

1) This function enables a schedule to be set within the system to adjust the timer to summer time at the appropriate time to ensure the time matches the time zone.

Automatic clock adjustment

2) The time setting of each controller can be set from the one location.

10:00
26.0 | 26.0 | 26.0

Outdoor low noise operation

Users can choose from 4 low noise levels, depending on the installation environment.
The operation time can be set using the timer.

Block (Tenant) A

Block (Tenant) B

Quiet priority setting

Air conditioning load factor

Heat load

Capacity   100%   down
0

Operating sound   58dB
0

Quiet priority low noise mode   time
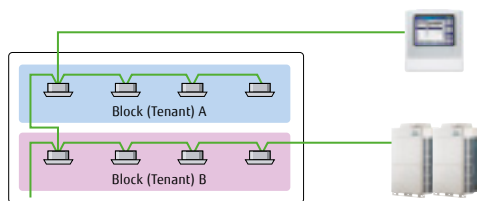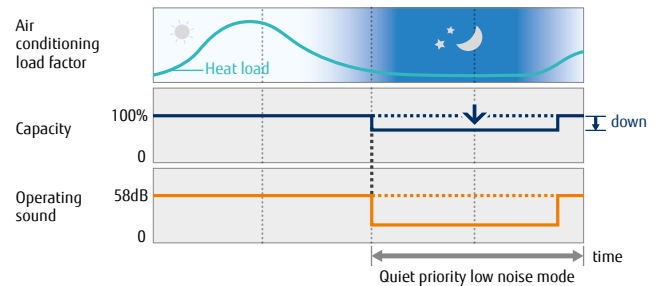
Energy saving control

Custom Auto

• Maintains 2 separate set points for heating and cooling
• Automatically changes mode between heating and cooling

* This function is not available for some models.

Cooling set temp. 27℃, heating set temp. 26℃

Auto changeover

Operation Start

Changeover
Cooling set point
Heating set point
Changeover

Room temperature

FUNCTIONS SUMMARY

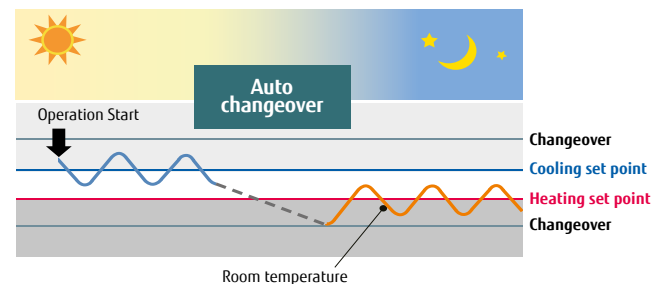|	UTY-DTGYZ1	Monitoring side
Air conditioning control function		
On / Off	●	●
Operation mode setting	●	●
Fan speed setting	●	●
Room temp. setting	●	●
Room temp. set point limitation	●	●
Test operation	●	●
Up / down air direction flap setting	●	●
Right / left air direction flap setting	●	●
Individual louvre control	●*1	●
Group setting	●	●
RC prohibition	●	●
Anti freeze setting	●	●
Set temp. auto return	–	●
Various energy saving controls	–	●
Economy mode setting	●	●
Human sensor control	–	●
Custom Auto setting	●	●
Display		
Error	●	●
Defrosting	●	●
Current time	●	●
Day of week	●	●
R.C. prohibition	●	●
Cooling / heating priority	●	●
Address display	●	●
Room temp	●*3	●*3
Multi-language	●	●
Summer time	●	●
Time zone setting	●	●
Name registration	●	●
Backlight	●	●
Language setting	7	7+other

Timer		UTY-DTGYZ1	Monitoring side
	Period	Year	Year
Schedule timer	On / Off, temp, mode, times per day	20	20
On / Off timer		–	–
Sleep timer		–	–
Program timer		–	–
Auto off timer		–	●
Day off		●	●
Min. unit of timer setting (minutes)		10	10
Control			
Status monitoring system		●	●
Electricity charge apportionment		○	○
Error history		●	●
Emergency stop		●*2	●*2
Remote management		–	●
Energy saving management		–	–
Email notification for malfunction		–	●
Key lock		● Password setting	–
Low noise mode		●	●

●: Supported   ○: Optional function   – : Not supported yet

*1 Only setting cancellation can be operated.
*2 This function is available only through external input control.
*3 This function is available only when using wired remote controller.

Specifications

Model name		UTY-DTGYZ1
Power supply		100-240V 50 / 60Hz, Single phase
Dimensions (H x W x D)	mm	260 × 246 × 54
Weight	g	2,150
Interface		Transmission / LAN / USB / EXT IN / EXT OUT / Reset SW

AIRSTAGE

System Controller (Software)

Maximum controllable	Maximum controllable	Maximum controllable
4	**1,600**	**400**
VRF network systems	indoor units	outdoor units

UTY-APGXZ1

System Controller offers advanced integrated monitoring and control of the VRF network system from small to large scale buildings.

- Up to a maximum of 4 VRF network systems, 1600 indoor units, and 400 outdoor units can be controlled
- In addition to the air conditioning control function, central remote control, electricity charge calculation, schedule management and energy saving functions ensure the building manager and owner needs are met

System Controller Lite (Software)

Maximum controllable	Maximum controllable	Maximum controllable
1	**400**	**100**
VRF network system	indoor units	outdoor units

UTY-ALGXZ1

System Controller Lite has functions suited for air conditioning management in small and medium scale buildings.

- Up to a maximum of 1 VRF network system, 400 indoor units, and 100 outdoor units can be controlled
- In addition to air conditioning precision control function, a variety of management software is available as an option to give customers a wide range of choice
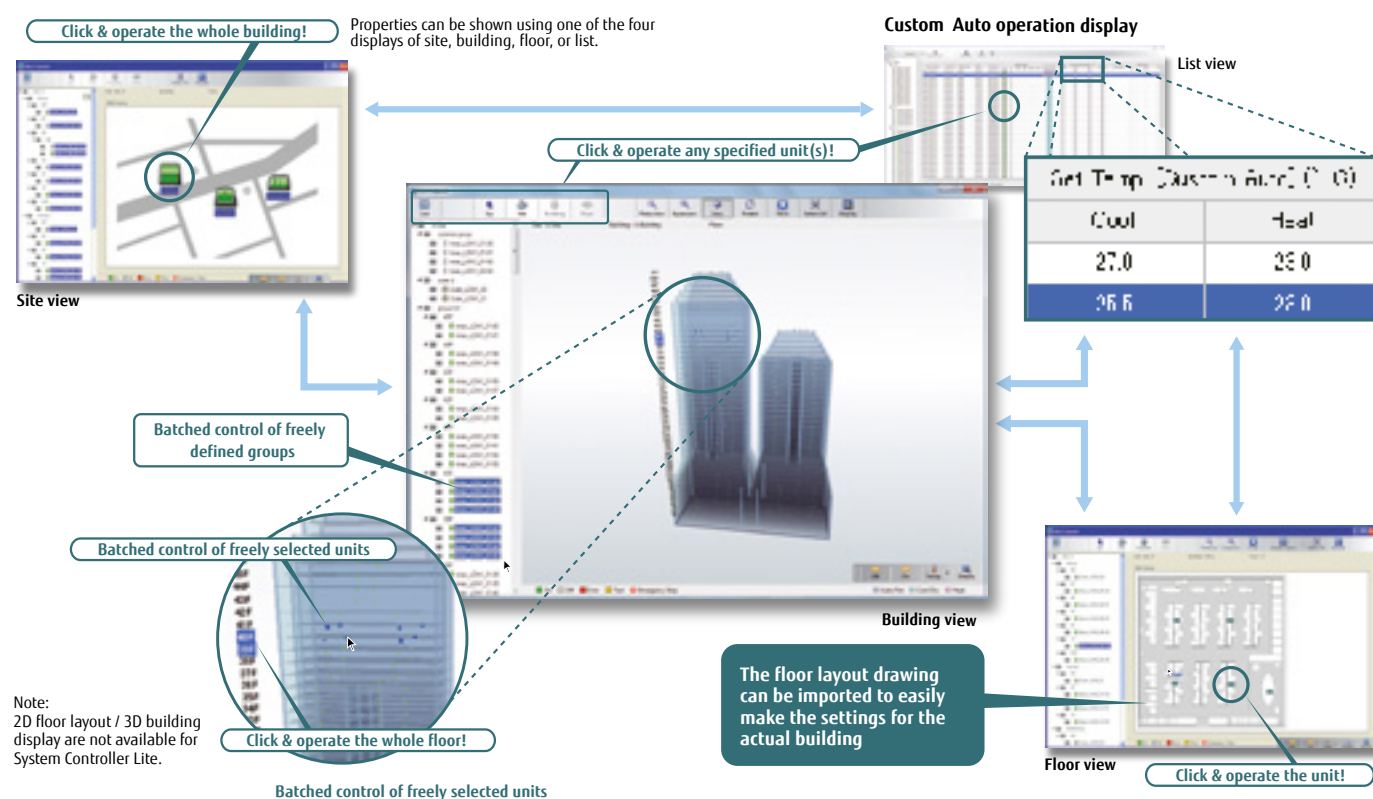
Functions

User friendly view and operation

- **Click and operate**: The property is shown visually from the perspective most suitable for operation and operated accordingly (Click and Operate). You can select from among the 4 displays of site, building, floor, or list.

- **Define custom groups for batched control**: Indoor units can be grouped for simple batched control from a tree menu. Grouping by hierarchal structure, such as by section, division or department is possible.

Click & operate the whole building!

Properties can be shown using one of the four displays of site, building, floor, or list.

Custom Auto operation display

List view

Click & operate any specified unit(s)!

Site view

Set Temp. (Custom Auto[° C])	
Cool	Heat
27.0	23.0
26.5	23.0

Batched control of freely defined groups

Batched control of freely selected units

Note:
2D floor layout / 3D building display are not available for System Controller Lite.

Click & operate the whole floor!

Batched control of freely selected units

Building view

The floor layout drawing can be imported to easily make the settings for the actual building

Floor view

Click & operate the unit!

3rd party devices connected by Modbus can be controlled

`Standard` for System Controller   `Option` for System Controller Lite UTY-PLGXX2

When a Modbus Adaptor (locally purchased) is connected to PC, the devices supported by Modbus can be controlled from a central location. Electricity usage can be reduced by enabling all unrequired devices to be turned off or scheduled to turn off at the end of the day.
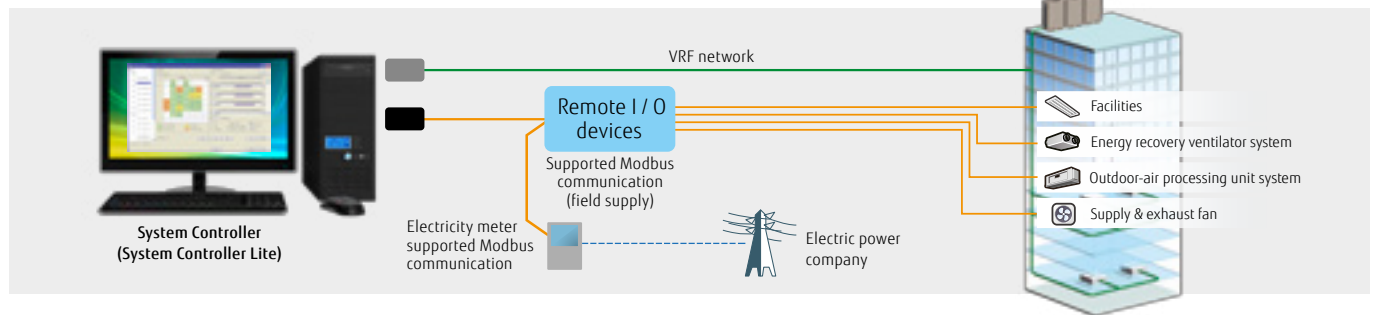

Diverse operation management and data management

`Standard` for System Controller and System Controller Lite

Schedule management
- Annual schedules can be set for each remote controller group / user defined group
- Start / stop, operating mode, remote controller prohibition, and temperature settings can be set up to 143 times per day at 10 minute intervals for up to 101 configurations for each remote controller group
- Allows programming of special settings for holidays, including public holidays, for a complete year
- Low noise operation of the outdoor unit can be scheduled
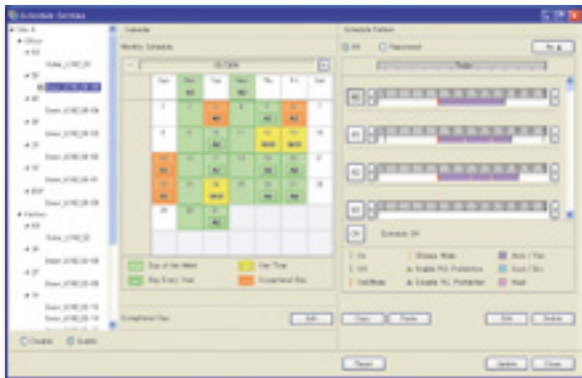
Diverse control of indoor unit and outdoor unit
- Indoor unit operation state, operation mode, etc. are displayed
- Indoor unit start / stop and operation mode switching
- Room temperature set point limitation

Remote controller prohibition
This prohibits changes to the operation mode, temperature, start / stop, etc.

Error display and email notification
Errors are notified with pop-up message, audible sound and email in real time when errors occur. Errors for the past year are logged and can be reviewed at any time.

Operating and control record
Displays the history of operation status and control.

Database import / export
Imports / exports registration data, layout data, and image data. Only the administrator can make this setting.

Automatic clock adjustment
The time setting of each controller can be set centrally with one command.
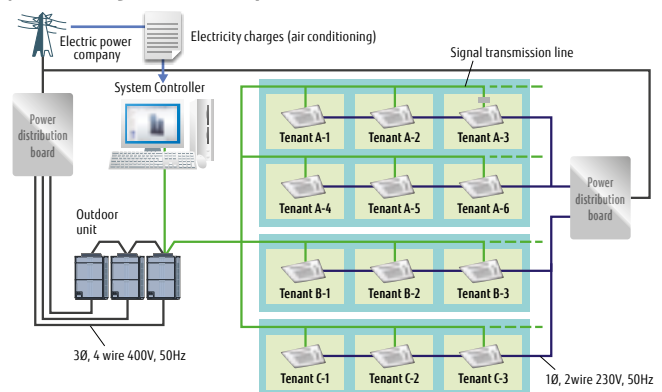
Electricity charge apportionments*

`Standard` for System Controller
`Option` for System Controller Lite UTY-PLGXA2

Electricity charge apportionment calculation framework
Suppose you want to find the power consumed by the air conditioners of each tenant from the electricity charge for each month. With electricity charge apportionment function, the used energy apportionment ratio will be provided, calculating in detail the energy consumed by the units within each tenancy. This information is then used to calculate the charges for the electricity consumed for air conditioning by each tenant from the total electricity charges in the bill from the electric power company. (See figure on the right.)
The detailed calculation takes into consideration variables such as unused rooms and nighttime electricity charges and shows them in the charge calculation sheet.

System configuration example

* The electricity charge apportionment function does not calculate official electricity charges like those established by the laws and regulations of each country.

AIRSTAGE

Remote management

Standard for System Controller

Option for System Controller Lite UTY-PLGXR2

The System Controller may be used on site or remotely over various networks for remote central control.
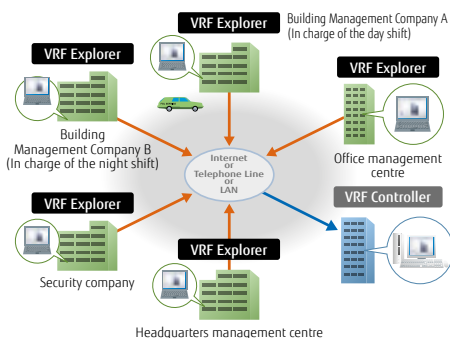System Controller requires 2 software applications working together. VRF Controller runs on site and communicates with the VRF System.
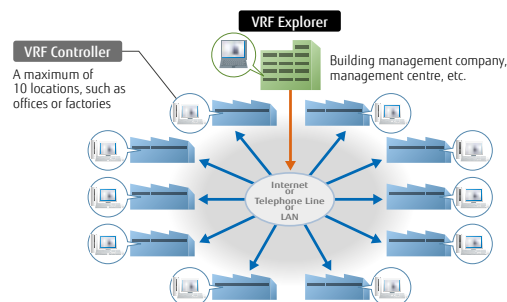VRF Explorer runs remotely and provides user interface and communicates with the VRF Controller.
VRF Controller and the VRF Explorer program may operate on a single PC or on different PCs separated by a network.
By using VRF Explorer software, one PC can perform central control of 10 VRF System sites with a maximum 20 buildings per site.
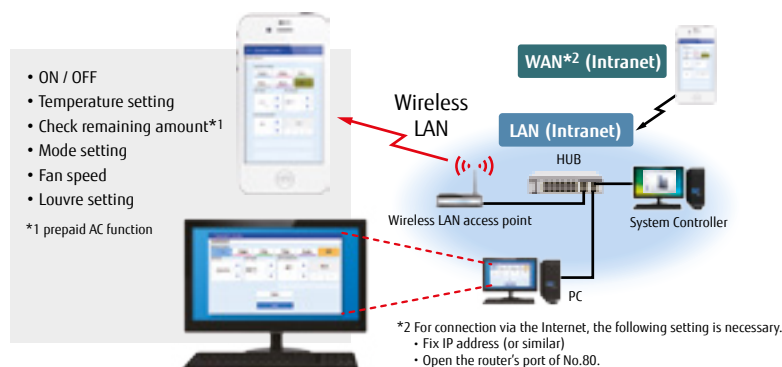
Remote central control

Web operation

PC and smartphones can be used as a simple remote controller.

- ON / OFF
- Temperature setting
- Check remaining amount*1
- Mode setting
- Fan speed
- Louvre setting

*1 prepaid AC function

*2 For connection via the Internet, the following setting is necessary.
· Fix IP address (or similar)
· Open the router's port of No.80.

Energy saving management

Option for System Controller UTY-PEGX

Option for System Controller Lite UTY-PLGXE2

A variety of energy saving operations can be set and managed depending on the season, weather, and time period.

Energy Saving Management Main Screen

Energy saving graph data: this graph compares the electricity consumption with the previous month and previous year to make it easy to analyse the energy saving effect.

Indoor unit lead lag operation

The operation of indoor units can be automatically rotated within a group in accordance with the set annual schedule to reduce power consumption while maintaining comfort. The indoor unit operation stop rate can be selected.

Peak cut operation

A power meter is connected to detect the total power consumption by shifting the indoor unit set temperature, turning the indoor unit forced thermostat off, and taking other measures to carefully control the power consumed to maintain target power consumption set for the specified time. The indoor units to be controlled can be grouped and the control level can be set.

Outdoor unit capacity limit

Outdoor unit capacity limit function switches the outdoor unit capability upper limit to suppress power consumption during hot summers and cold winters by averaging the power saving effect of each refrigerant system. You can select from 50% or more of the capacity upper limit.

FUNCTIONS SUMMARY

Function	Type	System Controller UTY-APGXZ1	System Controller Option UTY-PEGXZ1	System Controller Lite UTY-ALGXZ1	System Controller Lite Option UTY-PLGXR2	System Controller Lite Option UTY-PLGXA2	System Controller Lite Option UTY-PLGXE2	System Controller Lite Option UTY-PLGXX2
System specification	Max. VRF networks supported	4	–	1	–	–	–	–
	Max. indoor unit / remote controller groups per VRF network	400	–	400	–	–	–	–
	Max. outdoor units per System Controller	100	–	100	–	–	–	–
	Max. indoor units / remote Controller groups per System Controller	1600	–	400	–	–	–	–
	Max. outdoor units per System Controller	400	–	100	–	–	–	–
Site supervision	Multi-site display	10	–	10	–	–	–	–
	Number of building per 1 site	20	–	–	–	–	–	–
	Number of floors per 1 site	200	–	–	–	–	–	–
	Number of floors per 1 building	50	–	–	–	–	–	–
	3D graphical layout view	●	–	–	–	–	–	–
	2D graphical layout view	●	–	–	–	–	–	–
	List display	●	–	●	–	–	–	–
	Tree view	●	–	●	–	–	–	–
	Group display	●	–	●	–	–	–	–
Error management	Error notification	●	–	●	–	–	–	–
	Audible alarm	●	–	●	–	–	–	–
	Error email notification	●	–	●	–	–	–	–
History	Error history	●	–	●	–	–	–	–
	Operation history	●	–	●	–	–	–	–
	Control history	●	–	●	–	–	–	–
Operation control — Individual control	On / Off	●	–	●	–	–	–	–
	Operation mode	●	–	●	–	–	–	–
	Room temperature	●	–	●	–	–	–	–
	Fan speed	●	–	●	–	–	–	–
	Air flow direction	●	–	●	–	–	–	–
	Economy mode	●	–	●	–	–	–	–
	Room temperature set point limitation	●	–	●	–	–	–	–
	Anti freeze	●	–	●	–	–	–	–
	Outdoor unit low noise setting	●	–	●	–	–	–	–
Individual management	Remote control prohibition setting	●	–	●	–	–	–	–
	Temperature upper and lower limit setting	●	–	●	–	–	–	–
	Filter sign reset	●	–	●	–	–	–	–
Other	Memory operation	●	–	●	–	–	–	–
	Pattern operation	●	–	●	–	–	–	–
	Web operation	●	–	●	–	–	–	–
Schedule	Annual schedule	●	–	●	–	–	–	–
	Exception day setting	●	–	●	–	–	–	–
	On / Off per day	72	–	72	–	–	–	–
	On / Off per week	504	–	504	–	–	–	–
	Day off	●	–	●	–	–	–	–
	Min. unit of timer setting (minutes)	10	–	10	–	–	–	–
	Low noise mode weekly schedule	●	–	●	–	–	–	–
Remote management	Web operation	●		●	–			
	Remote monitoring	●	–	–	●	–	–	–
	Remote operation control	●	–	–	●	–	–	–
	Remote function setting	●	–	–	●	–	–	–
Electricity charge apportionment	Apportionment charge / bill calculation	●	–	–	–	●	–	–
	Tenant (block) setting	●	–	–	–	●	–	–
	Common facilities apportionment setting	●	–	–	–	●	–	–
	Rated power consumption allotment setting	●	–	–	–	●	–	–
	Individual calculation at cooling and heating	–	●	–	–	●	–	–
	Electricity meter supported	–	●	–	–	●	–	–
Energy saving management	Indoor unit lead lag	–	●	–	–	–	●	–
	Peak cut control	–	●	–	–	–	●	–
	Outdoor unit capacity limit	–	●	–	–	–	●	–
	Record of energy saving operation	–	●	–	–	–	●	–
	Energy saving information	–	●	–	–	–	●	–
	Power consumption monitor	–	●	–	–	–	●	–
	Electricity meter supported		●		–		●	–
External device control	Monitor	●	–	–	–	–	–	●
	Control	●	–	–	–	–	–	●
Others	Database import / export	●	–	●	–	–	–	–
	Automatic clock adjustment	●	–	●	–	–	–	–
	Multi-language	7 languages	–	7 languages	–	–	–	–

●● Available.　– Not available.　* Power calculation application software is necessary, please contact the local FGL representative.

Personal computer system requirements

The required PC specifications are shown in the following table.

	System Controller	System Controller Lite
Operating system	• Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit) • Microsoft® Windows® 10 Home (32-bit or 64-bit), Windows® 10 Pro (32-bit or 64-bit) [Supported languages] English, Chinese, French, German, Russian, Spanish, and Polish	
CPU	Intel® CoreTM i3 2 GHz or higher	
Memory	• 2 GB or more (for Windows® 7 [32-bit])　　• 4 GB or more (for Windows® 7 [64-bit], Windows® 8.1, and Windows® 10)	
HDD	40 GB or more of free space	
Display	1024 x 768 or higher resolution	

Interface	•Ethernet port (for accessing the Internet using LAN) or
	  modem (for accessing the Internet using a public telephone line)
	•USB ports (maximum of 6 ports)
	  (Required only for the server PC that works as VRF Controller)
	- Maximum of 2 USB ports are required for WHITE-USB-KEY / WibuKey connection
	- Maximum of 4 USB ports are required for Echelon® U10 USB Network Interface
	* Maximum number of required USB port depends on the applicable system configuration.
		•Ethernet port (for accessing the Internet using LAN) or
		  modem (for accessing the Internet using a public telephone line)
		•USB ports (Maximum of 6 ports)
		  (Required only for the server PC that works as VRF Controller)
		- Maximum of 4 USB ports are required for WHITE-USB-KEY / WibuKey connection
		- 1 USB port is required for Echelon® U10 USB Network Interface
		* The maximum number of required USB port depends on the applicable system configuration.

Graphic accelerator	Microsoft® DirectX 9.0c compatible	
Software	Adobe® Reader 9.0 or later	

• Echelon® U10 USB Network Interface – TP / FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)

<PACKING LIST>

Type	For System Controller — System controller	For System Controller — Option Energy manager	For System Controller Lite — System Controller Lite	For System Controller Lite — Option Remote access	For System Controller Lite — Option Electricity charge apportionment	For System Controller Lite — Option Energy saving	For System Controller Lite — Option Central Control
Model name	UTY-APGXZ1	UTY-PEGXZ1	UTY-ALGXZ1	UTY-PLGXR2	UTY-PLGXA2	UTY-PLGXE2	UTY-PLGXX2
WHITE-USB-KEY	1	1	1	1	1	1	1

*1　Software protection key to be inserted in a USB slot running System Controller or System Controller Lite.
　　System Controller or System Controller Lite may only run on a PC with WHITE-USB-KEY. However, WHITE-USB-KEY is not required for remote VRF Explorer software.

AIRSTAGE

BACnet Gateway

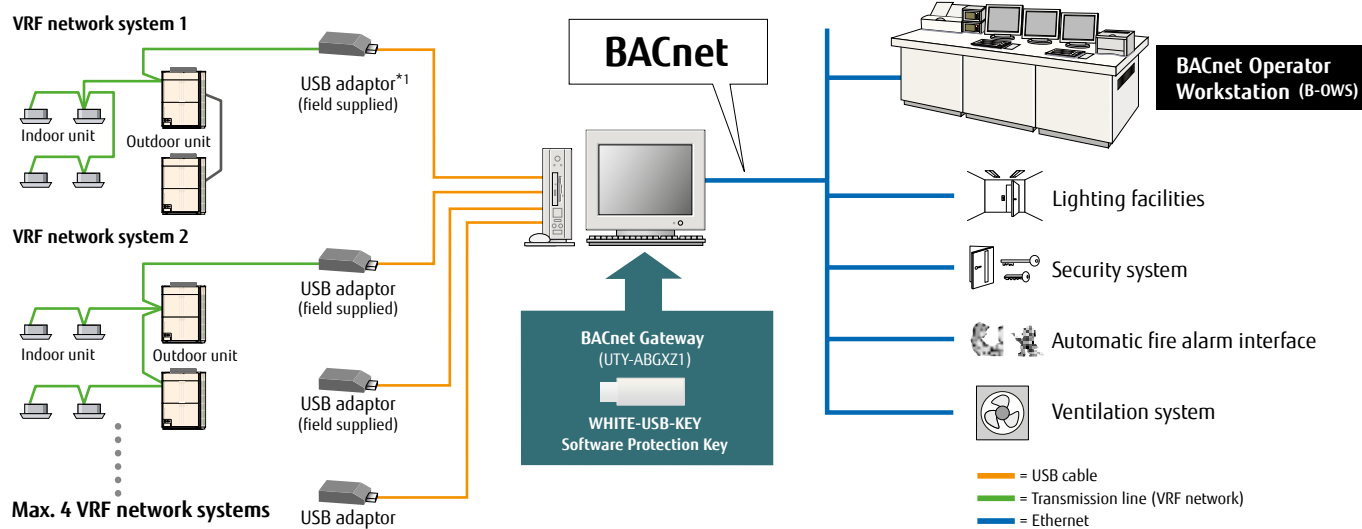| Maximum controllable	Maximum controllable	Maximum controllable
4	**1,600**	**400**
VRF network systems	indoor units	outdoor units

UTY-ABGXZ1

- Enables the connection of medium to large sized BMS to VRF network system via BACnet, a global standard for open networks
- A maximum of 1600 indoor units with 4 VRF network systems (a maximum of 400 indoor units and 100 outdoor units for one network system) can be connected to one BACnet Gateway
- Control or monitor VRF network system from BMS via BACnet Gateway
- Compatible with BACnet (ANSI / ASHRAE-135-2012) application specific controller (B-ASC)
- Compatible with BACnet / IP over Ethernet
- Scheduling, alarm and event functions as well as electricity charge apportionment function are provided in the BACnet Gateway
- The connection between VRF network system to personal computer is possible via small U10 USB interface. However, both U10 USB interface and personal computer are field supplied items
- Available for use in 7 different languages, English, Chinese, French, German, Spanish, Russian, Polish

WHITE-USB-KEY
(Software Protection Key)

Functions

Installation example

VRF network system 1

Indoor unit   Outdoor unit

USB adaptor*1
(field supplied)

VRF network system 2

Indoor unit   Outdoor unit

USB adaptor
(field supplied)

Max. 4 VRF network systems

USB adaptor
(field supplied)

USB adaptor
(field supplied)

BACnet

BACnet Operator Workstation (B-OWS)

Lighting facilities

Security system

Automatic fire alarm interface

Ventilation system

BACnet Gateway
(UTY-ABGXZ1)

WHITE-USB-KEY
Software Protection Key

= USB cable
= Transmission line (VRF network)
= Ethernet

*1 USB adaptor is U10 USB network interface of Echelon® Corporation.

Personal computer system requirements

	UTY-ABGXZ1
Operating system	• Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit) • Microsoft® Windows® 10 Home (32-bit or 64-bit), Windows® 10 Pro (32-bit or 64-bit) [Supported languages] English, Chinese, French, German, Russian, Spanish, and Polish
CPU	Intel® CoreTM i3 2 GHz or higher
Memory	• 2 GB or more (for Windows® 7 [32-bit]) • 4 GB or more (for Windows® 7 [64-bit], Windows® 8.1, and Windows® 10)
HDD	40 GB or more of free space
Display	1024 x 768 or higher resolution
Interface	• Ethernet port (for getting access to the Internet using LAN) • USB ports (Maximum of 5 ports) - 1 USB port is required for WHITE-USB-KEY / WibuKey connection - Maximum of 4 USB ports are required for Echelon® U10 USB Network Interface * Maximum number of required USB ports depends on the applicable system configurations.
Software	Adobe® Reader 9.0 or later

•Echelon® U10 USB Network Interface – TP / FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)

<PACKING LIST>

Name and shape	Quantity	Application
WHITE-USB-KEY	1	Includes the software and manuals, license for BACnet Gateway.

BACnet Gateway (hardware)

Maximum controllable	Maximum controllable	Maximum controllable
1	**32**	**128**
VRF network system	refrigerant system	indoor units

UTY-VBGX

- BACnet Gateway enables connection between the BMS and FG VRF System
- A maximum of 128 indoor units and 32 refrigerant system can be connected to a single BACnet Gateway
- Compatible with BACnet (ANSI / ASHRAE-135-2010) application specific controller (B-ASC)
- Compatible with BACnet / IP over Ethernet

Functions

Installation example

Controller
Lighting facilities
Security system
Automatic fire alarm interface
Windows bind

BACnet Gateway (Hardware)

BACnet

BACnet Operator Workstation (B-OWS)

Max.128 indoor units & Max.32 refrigerant system

VRF indoor unit
VRF indoor unit
VRF outdoor unit
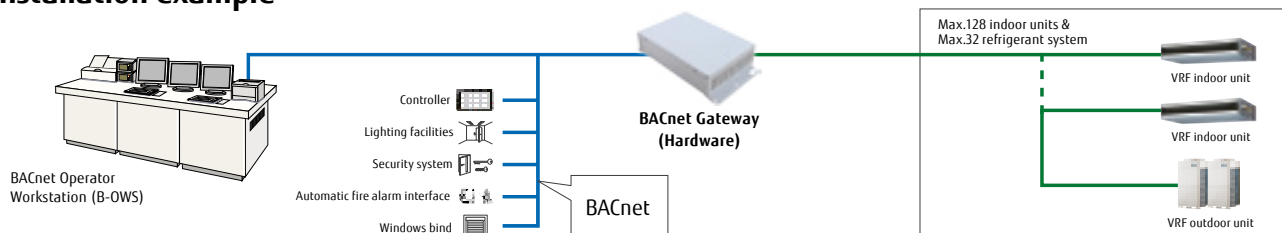
Specifications

Model name	UTY-VBGX
Number of controllable indoor units	128
Number of controllable refrigerant system	32
Number of controllable VRF network	1
Number of connectable units / one VRF network	4

Model name		UTY-VBGX
Power supply		208-240V 50 / 60Hz, single phase
Power consumption	W	-
Dimensions (H x W x D)	mm	260 × 59 × 145
Weight	g	-

Network Converter for LONWORKS

Maximum controllable	Maximum controllable	Maximum controllable
4	**128**	**100**
units to BMS	indoor units	outdoor units

UTY-VLGX

- For connection between VRF network system and a LONWORKS open network for management of small to medium sized BMS and VRF network systems
- The UTY-VLGX permits central monitoring and control of a VRF network system from a BMS through a LONWORKS interface
- Up to 128 indoor units can be connected to one Network Converter for LONWORKS

Functions

Installation example

Controller
Lighting facilities
Security system
Automatic fire alarm interface
Windows bind

Network Converter for LONWORKS

LONWORKS Network

General-purpose building control computer (LONWORKS device)

Max.128 indoor units & Max.100 outdoor units

VRF indoor unit
VRF indoor unit
VRF outdoor unit
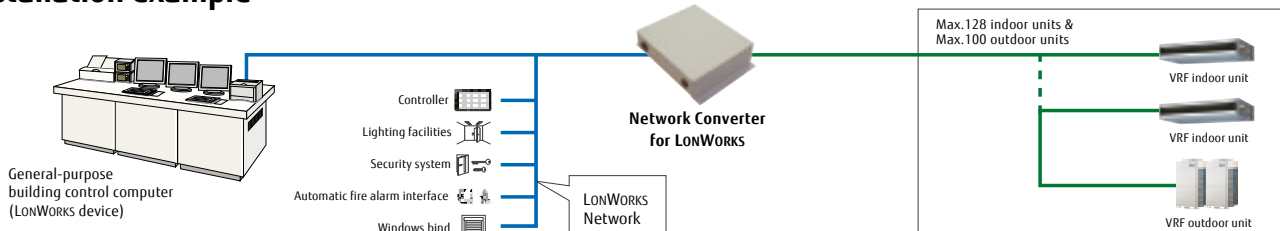
Specifications

Model name		UTY-VLGX
Power supply		208-240V 50 / 60Hz, Single phase
Power consumption	W	4.5
Dimensions (H x W x D)	mm	67 × 288 × 211
Weight	g	1,500

Transmission specifications (BMS side)

Transmission speed	78 kbps
Transceiver	FT-X1 (Echelon® Corporation)
Transmission way form	Free topology
Terminal resistor	None (It attaches at the terminal of a network.)

AIRSTAGE

MODBUS Converter (for VRF)

Maximum connectable	Maximum controllable	Maximum controllable
9	**128**	**100**
units to one VRF	indoor units	outdoor units

UTY-VMGX

The MODBUS Converter allows a complete integration of air conditioners into MODBUS Networks

• Compact and lightweight design
• Direct connection to MODBUS network
• Up to 128 indoor units can be controlled in one MODBUS Converter
• The MODBUS Converter permits central monitoring and control of air conditioners from BMS or central controller

Functions

BMS/Central Controller

Controller
Lighting facilities
Security system
Automatic fire alarm interface
* BMS : Bulding Management System — Windows bind

MODBUS Converter for VRF

VRF System (LON network)

VRF indoor unit — VRF indoor unit

VRF outdoor unit
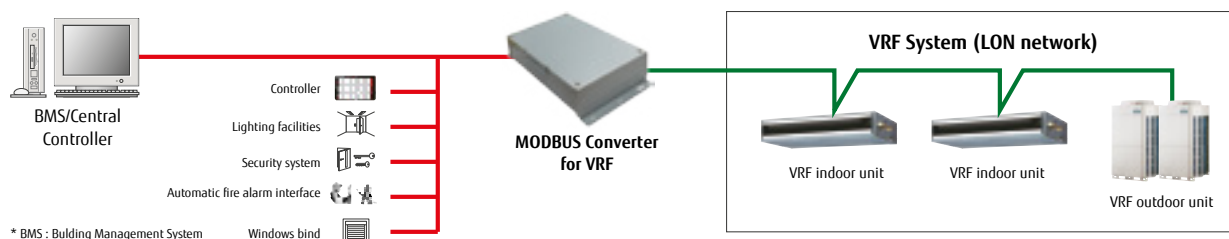
Specifications

Model name		UTY-VMGX
Power supply		220-240V 50 / 60Hz, single phase
Input power	W	Max. 2
Dimensions (H x W x D)	mm	54 × 260 × 150
Weight	g	1,100

KNX® Convertor (for VRF)

Maximum controllable	Maximum controllable
128	**100**
indoor units	outdoor units

UTY-VKGX

It is possible to control the VRF System from the Central / Home Controller via the KNX network

• The new KNX Convertor enables connection of the Central / Home Controller and FG VRF System
• A maximum of 128 indoor units and 100 outdoor units can be connected to single KNX Convertor

Functions

KNX Convertor for VRF

VRF network

Central / Home Controller

Registrable
128 indoor units
100 outdoor units
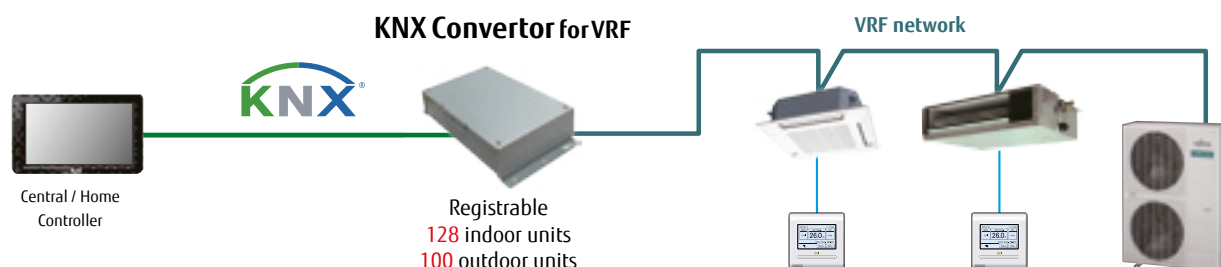
Specifications

Model name		UTY-VKGX
Power supply		220-240V 50 / 60Hz
Input power	W	1.5
Dimensions (H x W x D)	mm	54 × 260 × 150
Weight	g	1,200

MODBUS Converter (for indoor unit)

UTY-VMSX

The MODBUS Converter allows a complete integration of air conditioners into MODBUS networks

• Simple installation due to small and compact size
• No separate external power supply required
• The MODBUS Converters must be connected one by one in the indoor unit
• The MODBUS controller permits central monitoring and control of air conditioners from BMS / Central / Home Controller

Functions

BMS/Central/
Home Controller

MODBUS network

Lighting facilities

Security system

Automatic fire alarm interface

Windows bind

MODBUS Converter
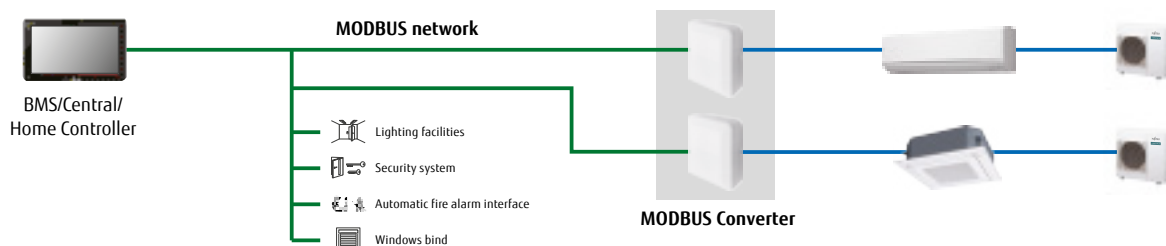
Specifications

Model name		UTY-VMSX
Power supply		DC12V
Input power	W	Max. 1.2
Dimensions (H x W x D)	mm	140 × 117 × 43
Weight	g	200

Temperature	Operating / packaged	°C	0~46 / -10~60
Humidity	Operating / packaged	%	0~95 / 0~95
Maximum connectible indoor unit number per 1 MODBUS Converter			1

KNX® Convertor (for indoor unit)

UTY-VKSX

It is possible to control the VRF System from the Central / Home Controller via the KNX network

• New KNX Convertor enables connection between Central / Home Controller and FG indoor unit
• Compact and lightweight design

Functions

Central / Home
Controller

KNX Convertor
for indoor unit

Single split indoor unit
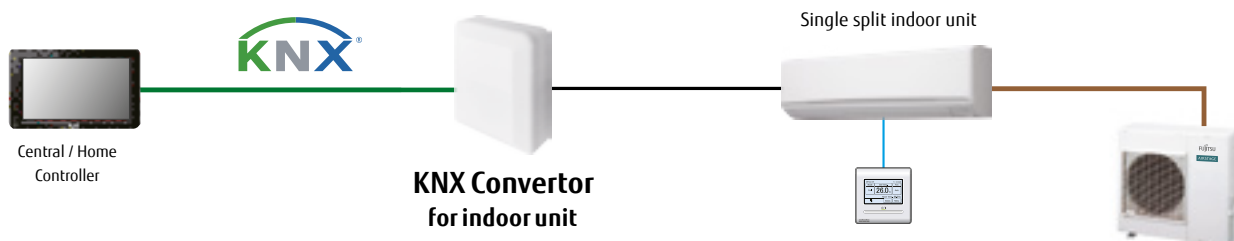
Specifications

Model name		UTY-VKSX
Power supply		(DC12V)
Input power	W	0.6
Dimensions (H x W x D)	mm	140 × 117 × 43
Weight	g	250

AIRSTAGE

Network Converter

Maximum controllable	Maximum controllable
16	**100**
single indoor units	network converters

UTY-VTGX (DC power supply type)

The Network Converter offers a total solution to control multiple air conditioning systems.

Functions

Solutions for multiple air conditioning systems

• The converter is required when connecting single units to a VRF network system
• Administrator can perform total management of single units with a centralised VRF controller

Single unit with VRF

VRF network system

Network Converters
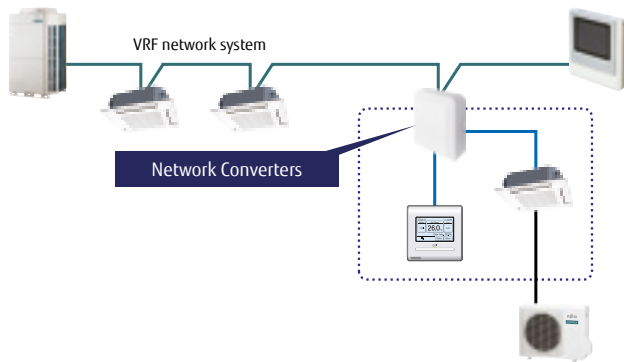
Single split type unit management

VRF network system

Max Network Converters in one VRF network system: 100

Max indoor units connected by one converter: 16
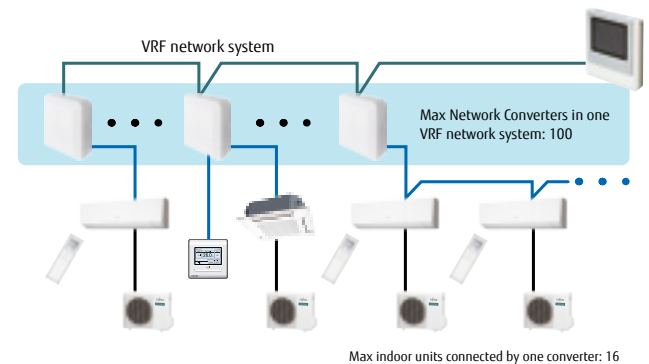
Solutions for easy installation

DC power supply type can be powered by indoor unit
No power supply construction for converter

Easy wiring

VRF network system

Network Converters

Simple connection

Single unit
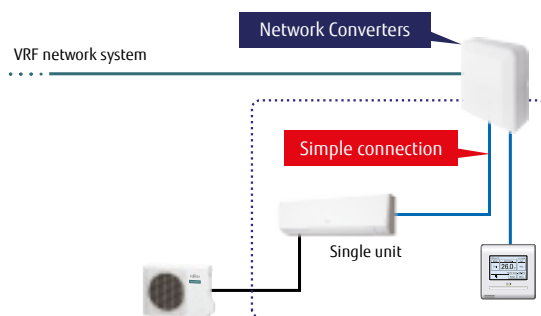
The new converter is lightweight and compact, reducing the installation space required

Design flexibility

Size
85% REDUCTION

Weight
250g

Previous model

288
211
67
140
117
40
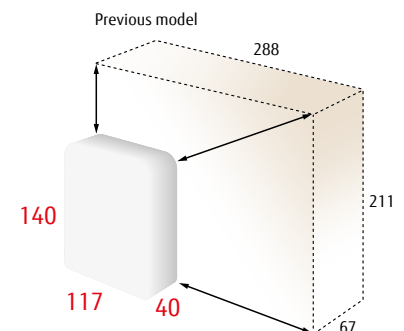
Specifications

Model name		UTY-VTGX	
Power supply		polar 3-wire DC12V	non-polar 2-wire DC12V
Input power	W	Max. 1.2	
Dimensions (H x W x D)	mm	43 × 117 × 140	
Weight	g	250	

Signal Amplifier

UTY-VSGXZ1

• Transmission line length can be extended up to 3,600m with multiple Signal Amplifiers
• Up to 40 signal amplifiers can be installed in a VRF network system
• A signal amplifier is required

(1) When the total wiring length of the transmission line exceeds 500m
(2) When the total number of units on the transmission line exceeds 64

Functions

Installation example

AB+BD+BC＜500m

Signal Amplifier
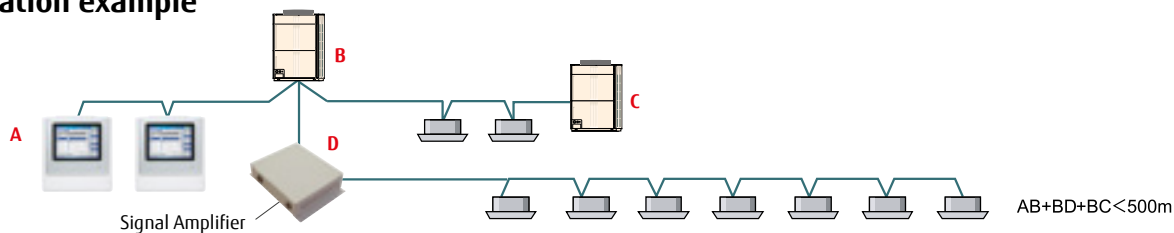
Specifications

Model name		UTY-VSGXZ1
Power supply		208-240V 50 / 60Hz, single phase
Input power	W	4.5
Dimensions (H x W x D)	mm	67 × 288 × 211
Weight	g	1,500

AIRSTAGE

AIRSTAGE™
OPTION

Diverse building air conditioning control functions can be controlled easily by AIRSTAGE™ options.

Various kinds of optional parts are provided such as controllers, adaptors and converters to meet the needs of every user.

AIRSTAGE™ OPTION

External Power Supply Unit

Auto Louvre Grille Kit

CONTROL SYSTEM LIST

OPTIONAL PARTS LIST

OPTIONAL PARTS

EXTERNAL INPUTS AND OUTPUTS

PIPING AND REFRIGERATION ACCESSORIES

AIRSTAGE

External Power Supply Unit

Models
UTZ-GXXC

Features

A) When power is isolated the system will not go into a communication error.

B) The expansion valve is controlled even when the power is isolated.

C) 24v power supply control when mains power is isolated.

D) The UTZ-GXXC has an in-built relay.

Main power AC 220/230/240 V Auxiliary power AC 24 V

Breaker ON

External Power Supply Unit

Relay (Power shut down detection part)

Indoor unit

Main power AC 220/230/240 V Auxiliary power AC 24 V

Breaker OFF

External Power Supply Unit

⚠ Relay (Power shut down detection part)

A
B
C

Indoor unit

Outdoor unit

VRF network system
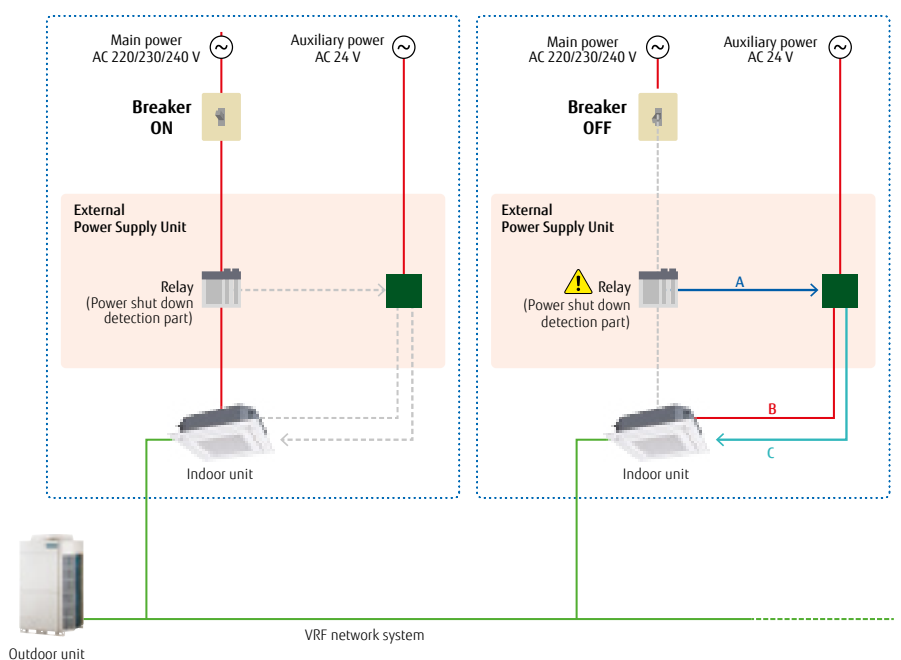
*:Locally purchased

Note
- When changing the power supply voltage to AC24V, use a power transformer with an insulated structure that complies with the regulations * of the installation area.
- Indoor units that are powered off and driven by an External Power Supply Unit are handled in the same manner as operation off units in the electricity charge apportionment function. Since standby power may be charged to them, the electricity charge apportionment result for them may not be 0.

* For example UL Class II or IEC 61558 Class III

Specifications

Model name		UTZ-GXXC
Power Supply		220 - 240V
Dimensions (H × W × D)	mm	200 × 178 × 97
Weight	g	800

FUJITSU

Auto Louvre Grille Kit

Models
UTD-GXTA-W
UTD-GXTB-W
UTD-GXTC-W

Closed louvre

Opened louvre
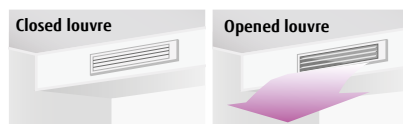
Features

Flexible control

• **Operation with indoor unit**

The Auto louvre can be operated via the remote controller of the indoor unit.

• **Up and down auto swing**

• Auto airflow direction and auto swing
• 4 steps selectable

• **Auto closing louvre**

When the operation of the indoor unit is stopped, the louvre will automatically close.

Duct type

Auto louvre grille

Wired remote controller

Wireless remote controller

Dimensions

W2
Fitting frame
Grille
H1
H2
W1
D1 D2
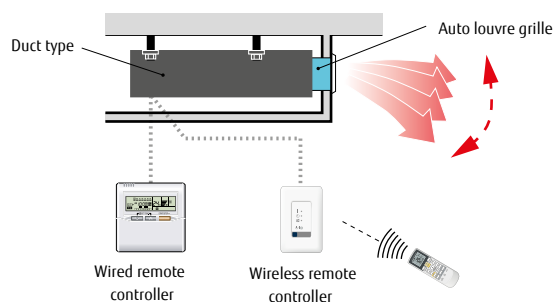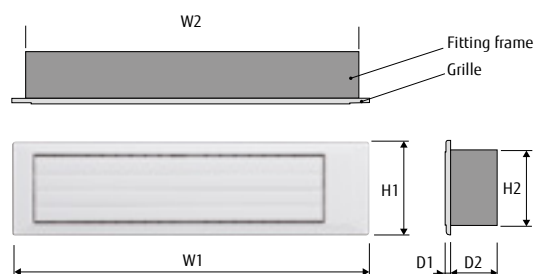
Unit: mm

Model name	W1	W2	H1	H2	D1	D2
UTD-GXTA-W	683	645	180	148	9	84
UTD-GXTB-W	883	845				
UTD-GXTC-W	1,083	1,045				

Specifications

Model name			UTD-GXTA-W	UTD-GXTB-W	UTD-GXTC-W
Applicable indoor unit			ARXD007 / 009 / 012 / 014GLEH ARXK007 / 009 / 012 / 014GLGH	ARXD018GLEH ARXK018GLGH	ARXD024GLEH ARXK024GLGH
Power source			Connecting with control box of indoor unit		
Fixing of auto louvre grille			Screw fixing to flange or square duct		
Extension square duct limit			1.0m (Max. duct length between indoor unit and grille)		
Dimensions (H × W × D)		mm	180 × 683 × (84+9)	180 × 883 × (84+9)	180 × 1083 × (84+9)
Weight	Net	kg	2.0	2.5	3.0
	Gross		3.0	3.5	4.0
Color			White		
Louvre motor			Stepping motor		
Accessories			Fitting frame, etc.		
Operating range	Cooling	°C	18 to 32		
		% RH	80% or less		
	Heating	°C	16 to 30		

AIRSTAGE

CONTROL SYSTEM LIST

Controllers / Interface

Type			Indoor unit						
			Cassette						
			1-way Flow	4-way Flow Compact		Circular Flow Slim type		Circular Flow Large type	
			AUXV 007 / 009 / 012 / 014 / 018 / 024 GLEH	AUXB 007 / 009 / 012 / 014 / 018 / 024 GLEH	AUXB 07 / 09 / 12 / 14 / 18 / 24 GALH	AUXM 018 / 024 / 030 GLEH	AUXN 009 / 012 / 014 GLAH AUXM 018 / 024 / 030 GLAH	AUXK 018 / 024 / 030 / 034 / 036 / 045 / 054GLEH	AUXK 018 / 024 / 030 / 034 / 036 / 045 / 054GLAH
Controllers	Wired Remote Controller	2-wire type	● UTY-RNRYT5						
	Simple Remote Controller	2-wire type	● UTY-RSRY, UTY-RSRYT, UTY-RHRYT, UTY-RHRY						
	Wireless Remote Controller		● UTY-LNHY						
	Central Remote Controller		● UTY-DCGYZ2						
	Touch Panel Controller		● UTY-DTGYZ1						
	System Controller, System Controller Lite		● UTY-APGXZ1, UTY-ALGXZ1						
Interface	BACnet Gateway		● UTY-ABGXZ1, UTY-VBGX						
	Network Converter for LONWORKS		● UTY-VLGX						
	MODBUS Converter for VRF		● UTY-VMGX						
	KNX Convertor for VRF		● UTY-VKGX						
	MODBUS Converter for indoor unit		● UTY-VMSX			● UTY-VMSX			
	KNX Convertor for indoor unit		● UTY-VKSX			● UTY-VKSX			

Indoor unit												
Duct					Floor		Ceiling / Floor	Ceiling	Wall mounted			
Mini (with drain pump)	Slim (with drain pump)	Medium Static Pressure	High Static Pressure	High Static Pressure	—	EEV external			—	EEV external	—	
ARXK 007 / 009 / 012 / 014 / 018 / 024 GLGH	ARXD 007 / 009 / 012 / 014 / 018 / 024 GLEH	ARXA 024 / 030 / 036 / 045 GLEH	ARXC 36 / 45 / 60 GATH	ARXC 036 / 045 /060 072 /090 / 096 GTEH	AGYA 007 / 009 / 012 / 014 GCGH	AGYE 007 / 009 / 012 / 014 GCEH	ABYA 012 / 014 / 018 / 024 GTEH	ABYA 030 / 036 / 045 / 054 GTEH	ASYA 007 / 009 / 012 / 014 GCGH	ASYE 007 / 009 / 012 / 014 GCEH	ASYA 18 / 24GBCH ASYA 018 / 024GCEH	ASYA 030 / 034 GTEH
						• UTY-RNRYT5						
						• UTY-RSRY, UTY-RHRY						
						• UTY-LNHY						
						• UTY-DCGYZ2						
						• UTY-DTGYZ1						
						• UTY-APGXZ1, UTY-ALGXZ1						
						• UTY-ABGXZ1, UTY-VBGX						
						• UTY-VLGX						
						• UTY-VMGX						
						• UTY-VKGX						
	• UTY-VMSX						• UTY-VMSX					• UTY-VMSX
	• UTY-VKSX						• UTY-VKSX					• UTY-VKSX
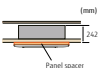
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OPTIONAL PARTS LIST

Others

Type		Indoor unit						
		Cassette						
		1-way Flow	4-way Flow Compact		Circular Flow Slim type		Circular Flow Large type	
		AUXV 007 / 009 / 012 / 014 / 018 / 024 GLEH	AUXB 007 / 009 / 012 / 014 / 018 / 024 GLEH	AUXB 07 / 09 / 12 / 14 / 18 / 24 GALH	AUXM 018 / 024 / 030 GLEH	AUXN 009 / 012 / 014 GLAH AUXM 018 / 024 / 030 GLAH	AUXK 018 / 024 / 030 / 034 / 036 / 045 / 054GLEH	AUXK 018 / 024 / 030 / 034 / 036 / 045 / 054GLAH
IR Receiver Unit		UTY-TRHX	UTY-LBHXD					
Human Sensor Kit			UTY-SHZXC					
Remote Sensor Unit								
Cassette Grille		UTG-UNYA-W UTG-UNYB-W	UTG-UFYC-W					
					UTG-UKYC-W			
Auto Louvre Grille Kit								
Long Life Filter								
Flange								
Drain Pump Unit								
Wide Panel					UTG-AKXA-W			
Panel Spacer					UTG-BKXA-W			
Fresh Air Intake Kit	For Compact Cassette / For Cassette		UTZ-VXAA		UTZ-VXRA			
Air Outlet Shutter Plate	For Compact Cassette / For Cassette		UTR-YDZB		UTR-YDZK			
Insulation for High Humidity	For Compact Cassette type / Cassette type		UTZ-KXGC		UTZ-KXRA			
Half Concealed Kit								
External Power Supply Unit		UTZ-GXXC			UTZ-GXXC		UTZ-GXXC	
Pressure Sensor Kit								

	Indoor unit													Outdoor unit
	Duct					Floor		Ceiling / Floor	Ceiling	Wall mounted				V-III
	Mini (with drain pump)	Slim (with drain pump)	Medium Static Pressure	High Static Pressure	High Static Pressure	—	EEV external			—	EEV external	—	—	V-III
	ARXK 007 / 009 / 012 / 014 / 018 / 024 GLGH	ARXD 007 / 009 / 012 / 014 / 018 / 024 GLEH	ARXA 024 / 030 / 036 / 045 GLEH	ARXC 36 / 45 / 60 GATH	ARXC 036 / 045 /060 072 /090 / 096 GTEH	AGYA 007 / 009 / 012 / 014 GCGH	AGYE 007 / 009 / 012 / 014 GCEH	ABYA 012 / 014 / 018 / 024 GTEH	ABYA 030 / 036 / 045 / 054 GTEH	ASYA 007 / 009 / 012 / 014 GCGH	ASYE 007 / 009 / 012 / 014 GCEH	ASYA 18 / 24GBCH ASYA 018 / 024GCEH	ASYA 030 / 034 GTEH	AJY 072 / 090 / 108 / 126 / 144 / 162 LALBH
		UTY-TRHX		UTB-TWC	UTY-TRHX									
			UTY-XSZX											
	UTD-GXTA-W (007-014), UTD-GXTB-W (018), UTD-GXTC-W (024)													
			UTD-LF25NA	UTD-LF60KA	UTD-LF60KA (036/045/060)									
			UTD-SF045T UTD-RF204						UTD-RF204					
			UTZ-PX1NBA						UTR-DPB24T					
							UTR-STA							
		UTZ-GXXC						UTZ-GXXC					UTZ-GXXC	
														UTY-SPWX

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OPTIONAL PARTS

Controllers

For Individual Control

Wired Remote Controller (Touch Panel)	Simple Remote Controller	Wireless Remote Controller
UTY-RNRYT5	UTY-RSRY, UTY-RSRYT with operation mode UTY-RHRY, UTY-RHRYT without operation mode	UTY-LNHY
	UTY-RSRY UTY-RHRY	
IR Receiver Unit UTB-TWC, UTY-TRHX **For Duct type**	**IR Receiver Unit** UTY-LRHYB1 **For Cassette type**	**IR Receiver Unit** UTY-LBHXD **For Circular Flow Cassette type**
Human Sensor Kit UTY-SHZXC **For Circular Flow Cassette type**		

For Centralised Control

Central Remote Controller	Touch Panel Controller	System Controller Lite Software
UTY-DCGYZ2	UTY-DTGYZ1 Option UTY-PTGXA	UTY-ALGXZ1 Option UTY-PLGXR2 UTY-PLGXA2 UTY-PLGXE2 UTY-PLGXX2
System Controller Software UTY-APGXZ1 Option UTY-PEGXZ1		

Converters / Adaptors

For External Device

BACnet Gateway `Software` UTY-ABGXZ1 WHITE-USB-KEY (Software Protection Key)	**BACnet Gateway** UTY-VBGX `Hardware`	**Network Converter** for LONWORKS UTY-VLGX
MODBUS Converter for VRF UTY-VMGX	**KNX® Convertor** for VRF UTY-VKGX	**MODBUS Converter** for Indoor unit UTY-VMSX
KNX® Convertor for Indoor unit UTY-VKSX		

For System Expansion   For Indoor unit

Network Converter for single split system UTY-VTGX DC power supply type	**Signal Amplifier** UTY-VSGXZ1	**External Power Supply Unit** UTZ-GXXC

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OPTIONAL PARTS

For Cassette type

Cassette Grille
UTG-UFYC-W
For Compact Cassette type

Cassette Grille
UTG-UGYA-W
For Cassette type

Cassette Grille
UTG-UKYC-W
For Circular Flow Cassette type

Cassette Grille
UTG-UNYA-W
For 1-way Flow type

Cassette Grille
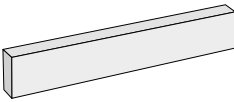UTG-UNYB-W
For 1-way Flow type

For Duct type

Flange (round)
UTD-RF204
For Medium Static Pressure Duct type / Ceiling type

Flange (square)
UTD-SF045T
For Medium Static Pressure Duct type

Remote Sensor Unit
UTY-XSZX
For all Duct type

Remote temperature sensor unit replaces indoor unit return air sensor with sensor from location of remote sensor.

Long-Life Filter
UTD-LF25NA
For Medium Static Pressure Duct type

UTD-LF60KA
For High Static Pressure Duct type

Auto Louver Grille Kit
UTD-GXTA-W (for ARXD07 / 09 / 12 / 14, ARXK07 / 09 / 12 / 14)
UTD-GXTB-W (for ARXD18, ARXK18)
UTD-GXTC-W (for ARXD24, ARXK24)
For Slim Duct type / Mini Duct type

Drain Pump Unit
UTZ-PX1NBA
For Medium Static Pressure Duct type
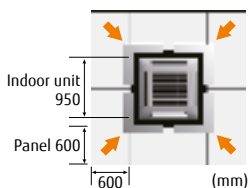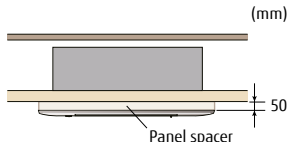
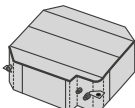## For Ceiling type

Drain Pump Unit
UTR-DPB24T
For Ceiling type

For Floor type

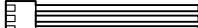**Half Concealed Kit**
UTR-STA
For Floor type

For Outdoor Unit
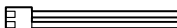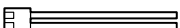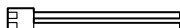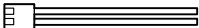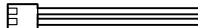
Pressure Sensor Kit
UTY-SPWX
For V-III

For Cassette type

Wide Panel
UTG-AKXA-W

For Cassette type

Indoor unit
950

Panel 600

600 (mm)

Panel Spacer
UTG-BKXA-W

For Cassette type

(mm)

50

Panel spacer

Insulation Kit for high humidity
UTZ-KXRA

For Cassette type

UTZ-KXGC

For Compact Cassette type

Fresh Air Intake Kit
UTZ-VXAA

**For Compact
Cassette type**

UTZ-VXRA

For Cassette type

Air Outlet Shutter Plate
UTR-YDZB

For Compact Cassette type

Shuts the 4th outlet when
installed in a 3 outlet
directional airflow scenario.

Air Outlet Shutter Plate
UTR-YDZK

For Cassette type

Shuts the 4th outlet when
installed in a 3 outlet
directional airflow scenario.

Others

Communication system: External Connect Kit

For Indoor unit				**For Outdoor unit**	
UTY-XWZXZ7		UTY-XWZXZD		UTY-XWZXZ6	
UTY-XWZXZB		UTY-XWZXZE		UTY-XWZXZ9	
UTY-XWZXZC				UTY-XWZXZF	

For RB unit		**For Central Remote Controller**		**For Touch Panel Controller**	
UTY-XWZXZ6		UTY-XWZXZ7		UTY-XWZXZA	
UTY-XWZXZB		UTY-XWZXZ8			
		UTY-XWZXZA			

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EXTERNAL INPUTS AND OUTPUTS

External Input and Output Function / External Connect Kit / Communication Kit

		Indoor unit										
		Cassette				Duct				Floor		
Type		1-way Flow	4-way Flow Compact	Circular Flow Slim type	Circular Flow Large type	Mini (with drain pump)	Slim (with drain pump)	Medium Static Pressure	High Static Pressure	–	EEV external	Ceiling / Floor
		AUXV 007 / 009 / 012 014 / 018 / 024 GLEH	AUXB 07 / 09 / 12 14 / 18 / 24 GALH, AUXB 007 / 009 / 012 014 / 018 / 024 GLEH	AUXN 009 / 012 / 014 GLAH, AUXM 018 / 024 / 030 GLEH, AUXM 018 / 024 / 030 GLAH	AUXK 018 / 024 / 030 034 / 036 / 045 054GLEH, AUXK 018 / 024 / 030 034 / 036 / 045 054GLAH	ARXK 007 / 009 / 012 014 / 018 / 024 GLGH	ARXD 007 / 009 / 012 014 / 018 / 024 GLEH	ARXA 024 / 030 036 / 045 GLEH	ARXC 36 / 45 / 60 GATH, ARXC 036 / 045 / 060 072 /090 / 096 GTEH	AGYA 007 / 009 012 / 014 GCGH	AGYE 007 / 009 012 / 014 GCEH	ABYA 012 / 014 018 / 024 GTEH
Input	Operation / Stop	●UTY-XWZXZD ○UTY-XWZXZB										
	All On / All Off											
	Group stop											
	Forced stop	●UTY-XWZXZD ○UTY-XWZXZB										
	Emergency stop	●UTY-XWZXZD ○UTY-XWZXZB										
	Forced thermostat off	●UTY-XWZXZE ○UTY-XWZXZ7										
	Low noise mode operation											
	Cooling / Heating priority											
	Outdoor unit operation peak control											
	Power usage information from electricity meter											
Output	Operation status	●UTY-XWZXZC										
	Error status	●UTY-XWZXZC										
	Indoor unit fun operation status	●UTY-XWZXZC										
	Auxiliary heater output					●UTY-XWZXZC						
	Base heater											

*2: Touch Panel Controller has these functions for Dry contact and Apply voltage, however, the above External Connect Kit is not necessary because Touch Panel Controller has an external input terminal block.

Indoor unit					Outdoor unit					Controller		Other
	Wall mounted											
Ceiling	_	EEV external	_	_	J-IVL	J-IV	J-IVS	VR-IV	V-III	Central Remote Controller	Touch Panel Controller	RB Unit
ABYA 030 / 036 045 / 054 GTEH	ASYA 007 / 009 012 / 014 GCGH	ASYE 007 / 009 012 / 014 GCEH	ASYA 18 / 24GBCH ASYA 018 / 024GCEH	ASYA 030 / 034GTEH	AJY 072 / 090 108 / 126 / 144 LELBH	AJY 040 / 045 / 054 LBLBH	AJT 040 / 045 / 054 LCLBH	AJT 072 / 090 108 / 126 / 144 GALCH	AJY 072 / 090 108 / 126 / 144 LALBH	UTY-DCGYZ2	UTY-DTGYZ1	UTP-RX01AH UTP-RX01BH UTP-RX01CH UTP-RX04BH
		●UTY-XWZXZD ○UTY-XWZXZB										
										●UTY-XWZXZ7 ○UTY-XWZXZ8	●*2 ○*2	
							●UTY-XWZXZ6					
		●UTY-XWZXZD ○UTY-XWZXZB										
		●UTY-XWZXZD ○UTY-XWZXZB					●UTY-XWZXZ6			●UTY-XWZXZ7 ○UTY-XWZXZ8	●*2 ○*2	
		●UTY-XWZXZE ○UTY-XWZXZ7										
							●UTY-XWZXZ6					
						●UTY-XWZXZ6						●UTY-XWZXZ6 ○UTY-XWZXZB
						●UTY-XWZXZ6						
						●UTY-XWZXZF					●*2 ○*2	
		●UTY-XWZXZC					○UTY-XWZXZ6			○UTY-XWZXZA		
		●UTY-XWZXZC					○UTY-XWZXZ6			○UTY-XWZXZA		
		●UTY-XWZXZC										
						●UTY-XWZXZ9		●UTY-XWZXZ9				

●: Dry contact   ○: Apply voltage

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PIPING AND REFRIGERATION ACCESSORIES

Connection units

Separation Tube

UTP-AX054A	UTP-AX090A	UTP-AX180A	UTP-AX567A
Gas Pipe	Gas Pipe	Gas Pipe	Gas Pipe
Liquid Pipe	Liquid Pipe	Liquid Pipe	Liquid Pipe

UTP-BX090A	UTP-BX180A	UTP-BX567A	
Suction Gas Pipe	Suction Gas Pipe	Suction Gas Pipe	
Discharge Gas Pipe	Discharge Gas Pipe	Discharge Gas Pipe	
Liquid Pipe	Liquid Pipe	Liquid Pipe	

Header

UTR-H0906L / UTR-H1806L	UTR-H0908L / UTR-H1808L	UTP-J0906A / UTP-J1806A	UTP-J0908A / UTP-J1808A
Gas Pipe	Gas Pipe	Suction Gas Pipe	Suction Gas Pipe
Liquid Pipe	Liquid Pipe	Discharge Gas Pipe	Discharge Gas Pipe
		Liquid Pipe	Liquid Pipe
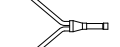
Outdoor Unit Branch Kit

UTP-CX567A	UTP-DX567A
Gas Pipe	Suction Gas Pipe
	Discharge Gas Pipe
Liquid Pipe	Liquid Pipe

Separation tube for RB unit

UTP-EX060A	UTP-EX096A
Gas Pipe	Gas Pipe
Liquid Pipe	Liquid Pipe

EV Kit

Model code $\leqq$ 09:UTR-EV09XB

Model code $\geqq$ 12:UTR-EV14XB

For Compact Wall Mounted type Floor type (compact)

RB Unit

UTP-RX01AH / UTP-RX01BH / UTP-RX01CH	UTP-RX04BH	UTP-RX08AH	UTP-RX12AH
Single type	**Multi-split type**	**Multi-split type**	**Multi-split type**

Specifications

Separation Tube

Model name		UTP-AX054A	UTP-AX090A	UTP-AX180A	UTP-AX567A
Total cooling capacity of indoor unit	kW	19.6 or less	28.0 or less	28.1 to 56.0	56.1 or more

Model name		UTP-BX090A (forVR-IV)	UTP-BX180A (for VR-IV)	UTP-BX567A (for VR-IV)
Total cooling capacity of indoor unit	kW	28.0 or less	28.1 to 56.0	56.1 or more

Header

Model name	3-6 Branches	UTR-H0906L	UTR-H1806L
	3-8 Branches	UTR-H0908L	UTR-H1808L
Total cooling capacity of indoor unit	kW	28.0 or less	28.1 to 56.0

Model name	3-6 Branches	UTP-J0906A (for VR-IV)	UTP-J1806A (for VR-IV)
	3-8 Branches	UTP-J0908A (for VR-IV)	UTP-J1808A (for VR-IV)
Total cooling capacity of indoor unit	kW	28.0 or less	28.1 to 56.0

Outdoor unit Branch kit

Model name		UTP-CX567A (for V-III)	UTP-DX567A (for VR-IV)
Model name	2 outdoor units	1	
	3 outdoor units	2	

EV Kit

Model name		UTR-EV09XB		UTR-EV14XB	
Application model		ASYE007GTEH ASYE009GTEH	AGYE007GCEH AGYE009GCEH	ASYE012GCEH ASYE014GCEH	AGYE012GCEH AGYE014GCEH

RB Unit

Model name		Single type			Multi-split type		
Number of outdoor unit		UTP-RX01AH	UTP-RX01BH	UTP-RX01CH	UTP-RX04BH	UTP-RX08AH	UTP-RX12AH
Power source	V/Ø/Hz	230 / 1 / 50					
Input power	W	17	24	31	96	136	204
Number of branches		1	1	1	4	8	12
Maximum capacity of connectable indoor units(Q)	kW	$Q \leqq 8.0$	$Q \leqq 18.0$	$Q \leqq 28.0$	$Q \leqq 56.0$*1	$Q \leqq 72.0$	$Q \leqq 95.0$
Maximum capacity of connectable indoor units per branch(Q)	kW	$Q \leqq 8.0$	$Q \leqq 18.0$	$Q \leqq 28.0$	$Q \leqq 18.0$	$Q \leqq 8.0$	$Q \leqq 8.0$
Maximum number of connectable indoor units per branch		3	8	8	8	7	7
Dimensions (H×W×D)	mm	198 × 298 × 268	198 × 298 × 268	198 × 298 × 268	260 × 658 × 428	298 × 660 × 618	298 × 990 × 618

*1: In the case of two RB units connected in series (total 8-branches), the maximum capacity of connectable indoor units is up to 56.0kW.

AIRSTAGE

ABOUT US

Since we began our air conditioning business in 1971, our products have been popular globally, and we continue to improve, evolve and expand our lineup to exceed customers' expectations.

FUJITSU GENERAL

FGL

OUR HISTORY

Fujitsu General's overseas air conditioning business has been in operation since 1971, with our VRF solutions being on the market since 2001.

Fujitsu General's VRF Airstage™ Series has been developed based on our air conditioning technology along with an ongoing investment in research and development.
We offer a series of products suitable for large homes to large scale buildings to meet the various needs of the market.

For Residential & Light Commercial Use

For Commercial Use

AIRSTAGE J-IIS

2014
J-IIS Series
High efficiency and compact design model
4HP to 6HP / Heat Pump

AIRSTAGE J-II

2004
J Series
6HP / Heat Pump

2011
J-II Series
High efficiency and small capacity model 4HP to 6HP / Heat Pump

1936
Established as Yaou Shouten Ltd.

1971
Air conditioner exports to Middle East.

2001
S Series
10HP / Heat Recovery & Heat Pump

2003
10HP / Heat Recovery 8HP,10HP / Heat Pump & Cooling

2007
V Series
8HP to 42HP / Heat Pump

AIRSTAGE V-II

2009
V-II Series
High efficiency and compact design model Extensive lineup from 8HP to 48HP in 2HP increments / Heat Pump

AIRSTAGE VR-II

2012
VR-II Series
High efficiency and compact design model 8HP to 48HP / Heat Recovery

HYPER TROPICAL SPEC

AIRSTAGE V-II

2013
V-II TROPICAL Series
Tropical spec model Extensive lineup from 8HP to 42HP in 2HP increments / Heat Pump

1936-1971	1998	2001-2003	2004-2011	2012-2013

Certification Acquisition of

ISO14001

1998 Fujitsu General (Shanghai) Co.,Ltd.
1999 Fujitsu General (Thailand) Co.,Ltd.
2002 FGA (Thailand) Co.,Ltd.
2006 Fujitsu General Central Air-conditioner (Wuxi) Co.,Ltd.

2004
New Product Initiatives
Fujitsu introduced inverter technology which used R410A refrigerant.

Refrigerant
R410A

2006
RoHS Compliant
Restriction of Hazardous Substances (RoHS) is an EU directive on the restriction of the use of certain hazardous substances in all consumer electrical and electronic equipment.

✓RoHS
COMPLIANT

AIRSTAGE J-III

2016
J-III Series
High efficiency and small capacity model
4HP to 6HP / Heat Pump

AIRSTAGE J-IIIL

2017 - 2019
J-IIIL Series
High efficiency and compact design
model 10HP to 18HP / Heat Pump

AIRSTAGE J-IVS

AIRSTAGE J-IV

AIRSTAGE J-IVL

2020
J-IV, J-IVS, J-IVL Series
High efficiency and compact design model
4HP to 18HP / Heat Pump

AIRSTAGE V-III

2015
V-III Series
High efficiency and large capacity model
Extensive lineup from 8HP to 54HP
in 2HP increment / Heat Pump

TROPICAL SPEC

AIRSTAGE V-III

2016
V-III TROPICAL Series
Extensive lineup from 8HP to
54HP in 2HP increments /
Heat Pump

AIRSTAGE VR-IV

2020
VR-IV Series
High efficiency and compact design
model 8HP to 48HP / Heat Recovery

AIRSTAGE V-III

2022
V-III Series Update
Lineup updated (starting from serial number R4)
with the latest software to include the New
Intelligent Refrigerant Control feature.

| 2014-2015 | 2016 | 2017-2019 | 2020 | 2022 |

2012
DC Inverter Compressors
Use of 100% inverter driven
DC compressors.

ALL
INVERTER

AIRSTAGE

WORLDWIDE LOCATIONS

Under a system of five bases in Europe, the Middle East, Asia and Oceania, North and South America, and Japan, the company promotes Globalization from a worldwide perspective while emphasizing the actual conditions in each region.

JAPAN Head Office

Technology research building (Japan)

• Air conditioner solution center "THE AIRSTAGE" in Manhattan, New York

• Fujitsu General America, Inc.

• Fujitsu General Do Brasil Ltda.

18 Overseas Sales Companies
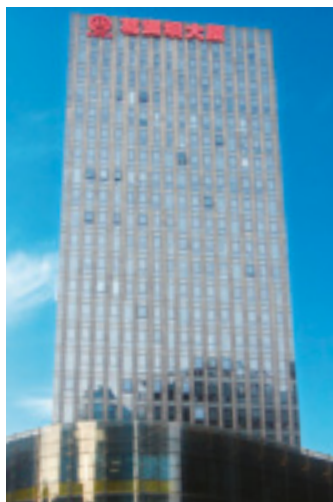
Fujitsu General (Taiwan) Co., Ltd. (Taiwan)

Fujitsu General (Thailand) Co.,Ltd. Bangkok Office (Thailand)

Fujitsu General (Asia) PTE. Ltd. (Singapore)

Fujitsu General Sales & Trading (Shanghai) Co., Ltd.

Fujitsu General (EURO) GmbH (Germany)

Fujitsu General Air Conditioning (UK) Ltd. (U.K.)
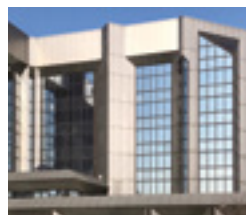
Fujitsu General Commercial Air Conditioning Italia S.p.A. (Italy)

Fujitsu General (India) Private Ltd. (India)

FUJITSU

- Fujitsu General Air Conditioning (UK) Ltd.

- Fujitsu General (Euro) GmbH
- Fujitsu General Commercial Air Conditioning Italia S.p.A.

- Fujitsu General Electronics (Suzhou) Co., Ltd.
- Fujitsu General Sales & Trading (Shanghai) Co., Ltd.

■ • Fujitsu General Limited

- Fujitsu General (Taiwan) Co., Ltd.

- Fujitsu General (Thailand) Co.,Ltd. Bangkok Office

- Fujitsu General (Aust.) Pty Limited
- Precise Air Group (Holding) Pty Ltd.
- Fujitsu General New Zealand Ltd.

- ABS Aircon Engineers Private Ltd.

- Fujitsu General (India) Private Ltd.

- Fujitsu General (Middle East) FZE

- Fujitsu General (Asia) Pte. Ltd.

Fujitsu General (Aust.) Pty Ltd. (Australia)

Precise Air Group (Holding) Pty Ltd. (Australia)

Fujitsu General New Zealand Ltd. (New Zealand)

Fujitsu General (Middle East) FZE (U.A.E.)

ABS Aircon Engineers Private Ltd. (India)

Fujitsu General Do Brasil Ltda. (Brasil)

Fujitsu General America, Inc. (U.S.A.)

FUJITSU GENERAL SOLUTION CENTER "THE AIRSTAGE" (U.S.A.)

AIRSTAGE

PROJECT REFERENCES

Introduced in
over 50 countries worldwide

Highly popular for their excellent quality, energy efficiency, and ease of installation, Fujitsu General's products are installed in a wide range of buildings around the world, including high-rise office buildings, stores, hotels, public facilities, schools, hospitals, and residences.
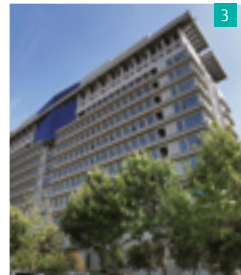
For Light commercial use

1 Shop in Europe
2 Factory in Europe
3 School in Asia
4 Hospital in Asia
5 Office in Asia
6 Shop in Oceania
7 Office in Oceania
8 School in the Middle East
9 Public facility in the United States

FUJITSU
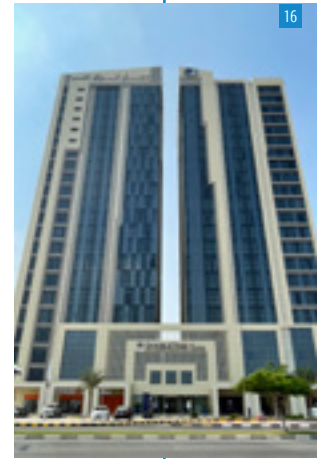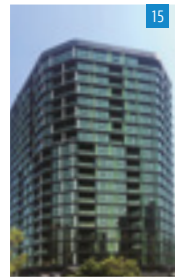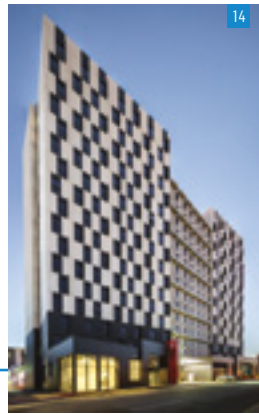
For Commercial use

10 Public Square in Asia
11 Office in Asia
12 Hotel in Asia
13 Public facility in Asia
14 Apartment in Oceania
15 Apartment in Oceania
16 Hotel in the Middle East
17 Hotel in the Middle East

For Residential use

18 Villa in the Africa
19 Residence in Oceania
20 Residence in the United States
21 Villa in the Middle East

AIRSTAGE

GLOBAL DEVELOPMENT & PRODUCTION BASES

We have established R&D bases in five countries from Japan, Europe, Asia, China, and North America to pursue environmental properties and comfort according to the needs of each region.

■ • Head office
■ • R&D center
■ • Manufacturing companies

• Fujitsu General (Euro) GmbH
— **R&D center**

• North America R&D Center
— **R&D center**

R&D center & Technology Research Building

R&D center in Fujitsu General (EURO) GmbH (Germany)

North America R&D Center (USA)

Fujitsu General Air Conditioning R&D (Thailand) Co., Ltd. (Thailand)

R&D center in Fujitsu General (Shanghai)

JAPAN Head office, R&D center and 60 m height difference testing tower (Japan)

Technology research building
in Japan Head office

Constructing IoT-based manufacturing
We are implementing a real-time IoT-enabled system to immediately visualize and analyze various information such as facility operating status, assembly line production progress, and parts inventory and transportation status. This will further enhance the accuracy of production and shipping forecasts in the Head Office and factory management departments. The system will also help improve activities by employees at production sites, with the aim of improving the efficiency of the production process, the efficiency of parts distribution operations, and the utilization rates of the facilities.

• Fujitsu General Central Air-conditioner (Wuxi) Co., Ltd.

• F.G.L.S Electric Co., Ltd.

• Fujitsu General Electronics Ltd.

■ • Fujitsu General Limited
— **R&D center**

• Fujitsu General (Shanghai) Co., Ltd.
— **R&D center**

• Fujitsu General Air Conditioning R&D (Thailand) Co., Ltd.
— **R&D center**
• Fujitsu General (Thailand) Co., Ltd.
• Fujitsu General (Thailand) Co., Ltd. Factory-2
• FGA (Thailand) Co., Ltd.
• TCFG Compressor (Thailand) Co., Ltd.

Overseas manufacturing companies

Fujitsu General (Shanghai) Co., Ltd. (China)

F.G.L.S. Electric Co., Ltd. (China)

Fujitsu General Central Air-conditioner (Wuxi) Co., Ltd. (China)

Fujitsu General Electronics Ltd. (Japan)

Fujitsu General (Thailand) Co., Ltd. (Thailand) Factory-2

Fujitsu General (Thailand) Co., Ltd. (Thailand)
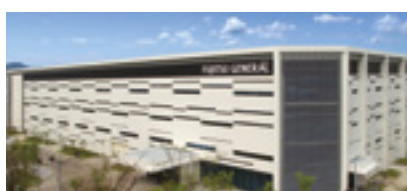
Fujitsu General Air Conditioning R&D (Thailand) Co., Ltd. (Thailand)

FGA (Thailand) Co., Ltd. (Thailand)

TCFG Compressor (Thailand) Co., Ltd. (Thailand)

AIRSTAGE

HIGH QUALITY DEVELOPMENT AND PRODUCTION

Fujitsu General is one of Japan's leading air conditioning manufacturers with an R&D Centre in Japan. We aim to provide customers with high quality and performance tested products.

Advanced Research Facility and Equipment

Fujitsu General is one of Japan's leading manufacturers with an R&D Center in Japan. We provide customers with the highest quality and performance using these facilities.

Performance Testing

Air Volume Measurement Room
Measure air volumes of the air conditioners from compact room air conditioner models to VRF.

Calorimeter
Measure the cooling/heating capacity by measuring the inlet and outlet temperatures, humidity, and air volume of the air conditioner.

Silent Room
Measure the operating sounds of air conditioners with the sound reflection-proof walls and ceiling.

Reliability Testing

Constant Temperature Room
Check on the product performance in cooling/heating operation under the various temperature and humidity conditions.

Practical Test Room
Check on whether the air conditioners performance under the actual house conditions is sustainable.

Shower Test Room
Check on whether the electrical box of the outdoor unit is protected by rain waters with Typhoon like wind.

Transportation & Handling

Compressibility testing

Vibration testing

Technology Research Building
in Japan Head Office

Testing Laboratory

Fujitsu General EMC Laboratory Limited
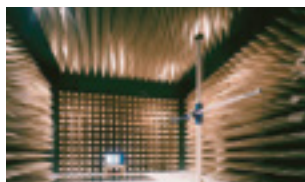
60 m Height Difference Testing Tower

Objective is to confirm oil circulation of compressor for reliability

FUJITSU

FACILITIES

Acquisition of ISO 9001 and ISO 14001

■ ISO 9001
■ ISO 14001
( ) Number of companies

Each of overseas production bases (5 companies) has completed the acquisition of ISO 9001 and ISO 14001 individually.
In 2012, overseas sales bases (11 companies) acquired the certification of ISO 14001.

North America
■ Sales subsidiary (1)

Europe
■ Sales subsidiary (3)

Middle East
■ Sales subsidiary (1)

South America
■ Sales subsidiary (1)

Asia
• Sales subsidiary (3)
• Manufacturing subsidiary (5)

Japan
• Head office
• Manufacturing subsidiary (2)

Oceania
■ Sales subsidiary (2)
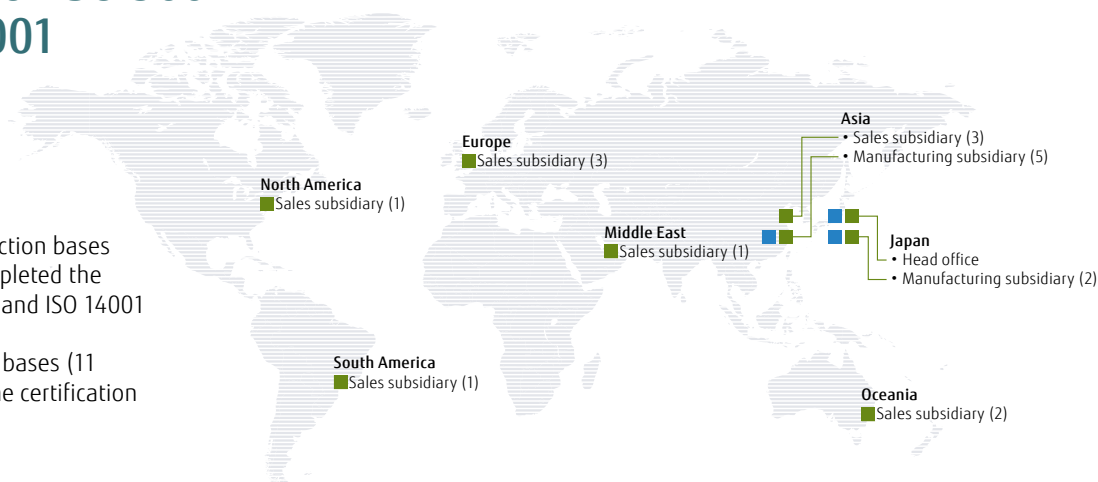
High Product Quality Assurance

All Fujitsu General factories have acquired ISO 9001, and have built a quality control system common around the world. High quality products are offered to all over the world based on stringent quality inspections.

Receiving inspection

Parts procurement requires a supplier's test report. European regulation RoHS inspection is also performed by special test department in-house. Total number inspection is performed especially on main parts to remove defectives.

Stringent product quality inspection

Stringent quality inspection is carried out at all production processes. High quality is maintained by stringent checks by inspectors and repetitive inspection.

Parts & Material

Receiving inspections
• Balancer inspection
• RoHS inspection
• Parts visual inspection
• Parts specifications inspection

Assembly

Product quality inspections
• Pressure resistance inspection
• Primary leak inspection
• Secondary leak inspection
• Insulation resistance inspection
• Withstand voltage inspection
• Insulation resistance inspection
• Withstand voltage inspection
• Heat run inspection
• Assembly visual inspection
• Abnormal sound inspection
• Completed product visual inspection

Packing

Completed product inspection
• Performance inspection
• Sampling inspection
• Visual inspection
• Water injection inspection
• Vibration drop test

Shipping

Operation check
• Check for operation Errors by camera analysis

AIRSTAGE

SUPPORT

Our support offering methodology is focused on total support. From the stages of design, installation and commissioning through to after sales support.

AIRSTAGE™ SUPPORT
AIRSTAGE™ / RAC SUPPORT TOOL
QUICK SERVICE AND MAINTENANCE
SERVICE TOOL
WEB MONITORING TOOL

Category	Information Material												Tool			
	Product Sales Training Material	Product Technical Training Material	Product News	Brochures	Feature Promotion Movie	Operating Manual	Design & Technical Manual	Certificate Data	2D CAD Data	3D CAD (Revit) Data	Installation Manual	Service Manual	Design Simulator (Room air conditioner, Packaged air conditioner, VRF)	CFD Simulation	Service Tool / Web Monitoring Tool	Mobile Technician
Product Training	●	●														
Product Information			●	●	●	●	●									
Technical Information							●	●								
Model Selection							●						●			
Design							●		●	●						
Verification														●		
Installation							●				●					
After Sales and Service												●			●	●

AIRSTAGE

AIRSTAGE™ SUPPORT

Fujitsu General provides a variety of product and technical information to engineers and consultants.
We also conduct new product research and design support activities.
We provide a wide range of support to maintain high quality from design to installation.

Technical information

We provide information and tools that are useful for air conditioning system design, such as unit performance data and tools that make model selection and estimation easy.

Features

• Design and Technical Manual
• Model Selection and Estimation
• Certificate Data
• 2D / 3D CAD Data

2D/3D CAD Data

Technical support

Technical support is provided at every stage from design to installation to assist in providing the most suitable air conditioning solution.

Features

• CFD Simulation
• Commissioning Support

CFD Simulation

Product information

New product information is provided in the form of documents for every new model released. These can be downloaded from a private section of our website. To access this website, please contact your Fujitsu representative.

Features

• Product News
• Brochures and all Manuals
• Feature / Promotion Movie

www.fujitsu-general.com/uk/support/downloads/vrf/

Commissioning Support

Training facilities

Training

Fujitsu General has many training facilities around the world that regularly conduct specialised product, technical, and service training. These research facilities also support the development of people to ensure high technical capability.

Features

- Designing AIRSTAGE™ Systems
- Control systems on site training

1. Head Office Training Center: Japan
2. China Training Center: China
3. Asia Training Center: Singapore
4. Europe Training Center: U.K.
5. Europe Training Center: Germany
6. America Training Center: U.S.A.
7. Middle East Training Center: UAE
8. Oceania Training Center: Australia

AIRSTAGE

AIRSTAGE™ / RAC SUPPORT TOOL

Put the charts and pens away and design your projects on your computer with ease using the Design Simulator.

Everything from selecting indoor and outdoor units, allocating controls and optional parts to designing the piping and wiring systems is made easier using the program's built-in features.

Once your project is designed, take advantage of the Export functions to easily get materials lists, product specifications, refrigerant calculations and more. You can even export to Word, Excel, or Acrobat formats and group the relevant CAD data for your project.

Design Simulator
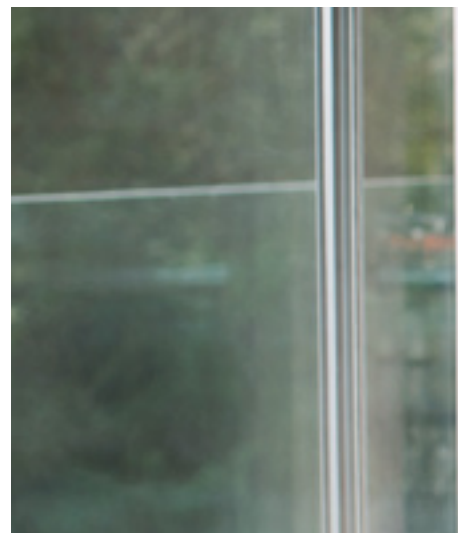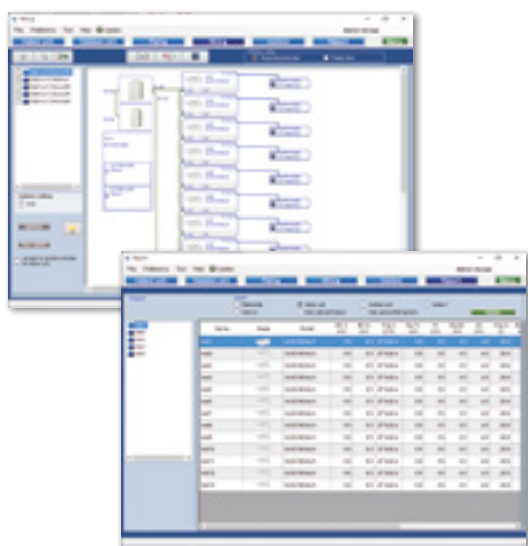
Automatically create model selection information

- Each unit can be automatically set by entering the required performance, type, and temperature conditions for each indoor unit and then dragging and dropping into the outdoor unit.
- Piping and wiring diagrams can be created automatically and it is easy to set branches, grouping and options.
- The additional refrigerant charging amount is automatically calculated when the pipe length is entered.
- It is also easy to set the remote controller groups, central controller and converters.
- The equipment list including the equipment information is created automatically.

Output the format that matches the application

The information specific to your project can be exported in a number of industry standard file formats.

- Word format (rtf)(doc)
- Excel format (csv)
- Acrobat format (pdf)
- Auto CAD format (DXF)
- 2D Data (DXF)
- 3D Data (RFA)

Information on the latest history update is demanded.

Information on the latest history update replied.

User side (PC)   FTP server side (PC)
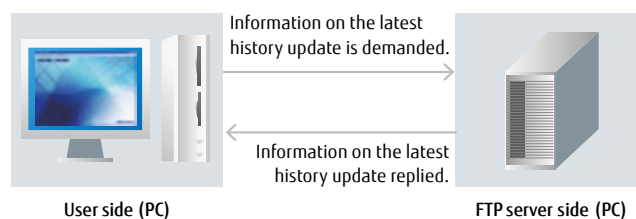
Update your Design Simulator

The database can be easily updated online using Auto Update function through FTP.

FUJITSU

BIM Building Information Modeling

www.bimobject.com/en

BIM files of Fujitsu General's products available on BIMobject®

We are pleased to inform that Fujitsu General has released BIM files of products on BIMobject®'s website (BIMobject.com).

Outline of BIMobject
BIMobject® is a game changer for the construction industry, offering development,
maintenance, and syndication of objects on the world's biggest BIM platform.

About the BIM file

- BIM files are Autodesk Revit 2018 version.
- Each of the BIM files has different refrigerant and drain piping connector location.
- Each of the BIM file includes several family types.
- Revit file type catalog (Specification) is available for every product.

Go to search bar and key in the brand name FUJITSU GENERAL to search the products

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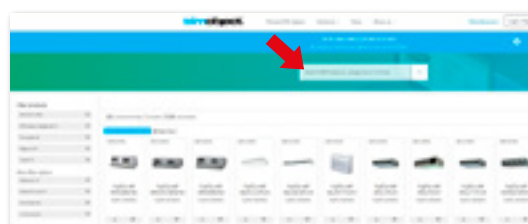
R **RFA (Revit data)**
Data format available for BIM-designed projects.

Data content
- Shape (Size)
- Drain direction
- Piping direction
- Power source location
- Specifications etc.

Type catalog
(specifications of product)

A **DWG**
Standard data available for Autodesk's products.

DXF
Intermediate data generally available for CAD products.

Data content
- Shape (Size)

*How to use the BIM files please refer to Instruction video on each product page.   **youtu.be/wfL-hwFQ7dM**

AIRSTAGE

QUICK SERVICE AND MAINTENANCE

If an error should occur on a unit or system, there is an abundance of support tools such as trouble code display on the product. The VRF Service Tool allows checking of the detailed status for the entire system, and a remote monitoring tool that uses the internet meaning support, quick service and maintenance is available anywhere and at any time.

Easy maintenance and monitoring

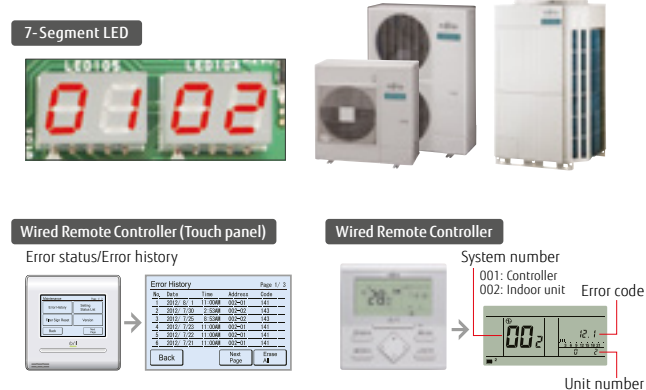### Design for easy maintenance

The air conditioner operating status and trouble status are viewable on the 7 segment display of the outdoor unit PCB or on the remote controller screen.
The unit status can be checked efficiently enabling a quick response.

• Operation mode status
• Discharge temperature / Pressure status
• Compressor operation indication
• Address / Type / Number of outdoor units
• Error code

7-Segment LED

Wired Remote Controller (Touch panel)
Error status/Error history

Wired Remote Controller
System number
001: Controller
002: Indoor unit
Error code
Unit number

Error diagnosis with the Service Tool

The unit status details for the VRF System can be checked on a PC screen by connecting to the Service Tool.
A quick analysis can be made. Viewable parameters include:

• Operation status / control
• Monitoring operating condition
• Monitoring sensor data
• Indication of trend graph
• Error history
• Indication of refrigerant circuit diagram
• Automatic operation check for refrigeration cycle

Service Monitoring Tool
UTY-ASSX
(Communication box and Software)
(Locally purchased)

Refrigerant piping
Transmission line
Indoor unit

(Locally purchased)
Service Tool
UTY-ASGXZ1
USB adaptor
(Locally purchased)
Software
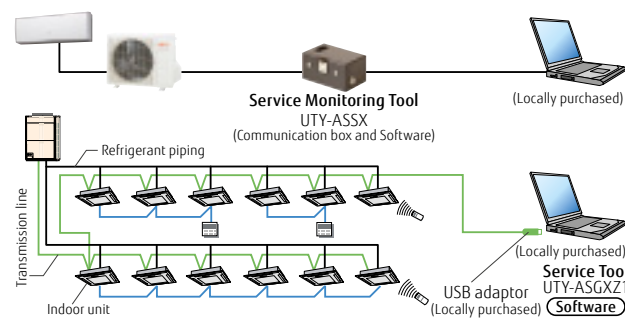
Remote monitoring

VRF System operating status and error status details can be constantly monitored over the Internet.

Internet
or
Public Telephone
Line

Remote Monitoring
Web Monitoring Tool
UTY-AMGXZ1
Software
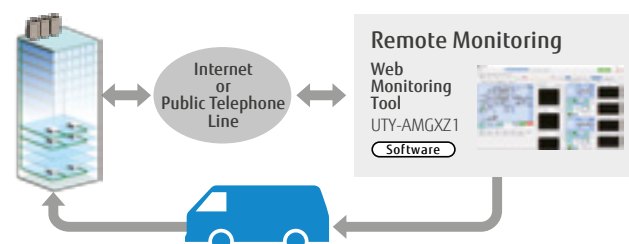
Mobile Troubleshooting Tool for iPhone & Android

We will release an App of troubleshooting tool for iPhone, iPod touch and other Apple products and Android products. This application is a troubleshooting tool for Fujitsu General air conditioner (Room air conditioner / Packaged air conditioner, VRF, ATW, "FGLair", R32 calculation of allowable refrigerant capacity)

It helps you to check air conditioner condition. Error code check, Troubleshooting, and Sensor check are available.

Mobile Technician   FREE

Service Monitoring Tool   for Single Split, Multi-split

- Quick overview about temperature sensor readings and controlled parts like EEV, Fan, Compressor and so on.
- It is not easy to judge the point. So it would be better to delete it.
- Visualization of protection operation
- Helpful for intermittent troubleshooting
- Proof of normal operation for the customer during periodical maintenance.

Actual operating condition display

Graph display

Operation history display

	UTY-ASSX
Dimensions (H×W×D) (mm)	60 x 160 x 160
Weight (g)	500

AIRSTAGE

SERVICE TOOL

**Extensive monitoring and analysis functions for installation and maintenance**

• Operation status can be checked and analysed to detect even the smallest abnormalities
• Service Tool can be used to log system operation for further analysis off site
• Up to 400 indoor units (a single VRF network system) can be controlled and monitored for large scale buildings or hotels
• This software can be connected to any point of transmission line with USB adaptor (locally purchased)

* The saved data can be displayed offline. However, the data saved by the following model cannot be displayed.
• UTR-YSTB / UTR-YSTC (Service Tool)
• UTR-YMSA (Web Monitoring Tool)

Automatic operation check for refrigeration cycle

After product installation, an operation check can be performed automatically. Self diagnosis functionality automatically judges whether each sensor value is normal, saving time and workload. The diagnosis can also be output as a report.
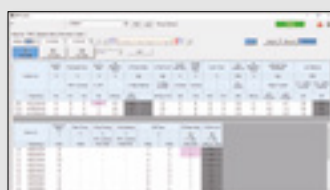
Note : Use only as a guide

Whether each sensor value is normal is judged automatically.

☑ Discharge temperature normal value OK
☑ Super heat volume normal value OK
☑ High pressure pipe normal value OK
☑ Low pressure pipe normal value OK
etc.

Remote technical support and maintenance

On site the service tool's screen can be shared with support personnel in a remote location. When visiting a site for troubleshooting, operation status can be shared in real time making assistance easy. The online chat function helps to support on site staff.

Remote location

An error occurs at local system.

⚠ ERROR

Internet

Technical support

Installer / Administrator
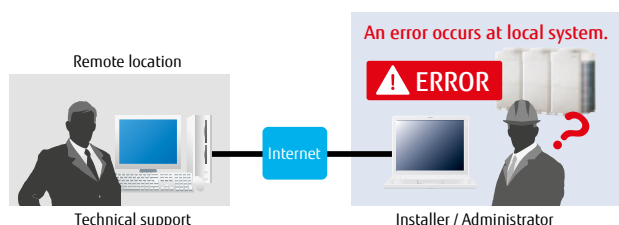
Various trend graphs are displayable

Previously, only 3 graphs could be viewed simultaneously, now multiple graphs can be displayed on the new Service Tool depending on the requirements.
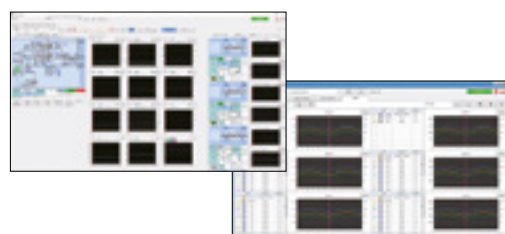
Personal computer system requirements

	UTY-ASGXZ1
Operating system	• Microsoft® Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8.1 Pro (32-bit or 64-bit) • Microsoft® Windows® 10 Pro (32-bit or 64-bit)
CPU	1 GHz or higher
Memory	• 1 GB or more (for Windows® 7 [32-bit], Windows® 8.1 [32-bit], and Windows® 10 [32-bit]) • 2 GB or more (for Windows® 7 [64-bit], Windows® 8.1 [64-bit], and Windows® 10 [64-bit])
HDD	40 GB or more of free space
Display	1366 x 768 or higher resolution

Interface	• 2 USB ports
	  - 1 USB port is required for software protection key connection
	  - 1 USB port is required for Echelon® U10 USB Network Interface

Software	Internet Explorer® 11 or Microsoft Edge / Adobe® Reader 9.0 or later

•Echelon® U10 USB Network Interface – TP / FT-10 Channel (Model number: 75010R) (Required for each VRF Network.) NOTE: Echelon adapter is sold separately.

<PACKING LIST>

Name and shape	Quantity	Application
WHITE-USB-KEY (Software protection key)	1	Software protection key to be connected to USB port on the Service Tool-installed PC. These products run only on a PC with WibuKey.

•Personal computer that satisfies the following system requirements

WEB MONITORING TOOL

Product features

• Troubleshooting is performed by monitoring each air conditioning unit remotely during periodical system checks
• Error notification can be automatically transmitted to several locations using the internet *1
• Requires either a dedicated internet connection or public telephone line
• Identification of an error is possible via error warnings and equipment status information obtained from a remote location
• The system data can be downloaded remotely. This data can be viewed in the offline mode of the service tool
• The PC being used to monitor equipment isn't required to install special software as access is via a general web browser
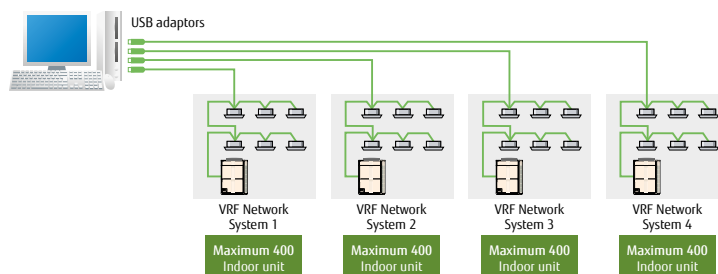
*1: Use of internet mail system required.

Web Monitoring System
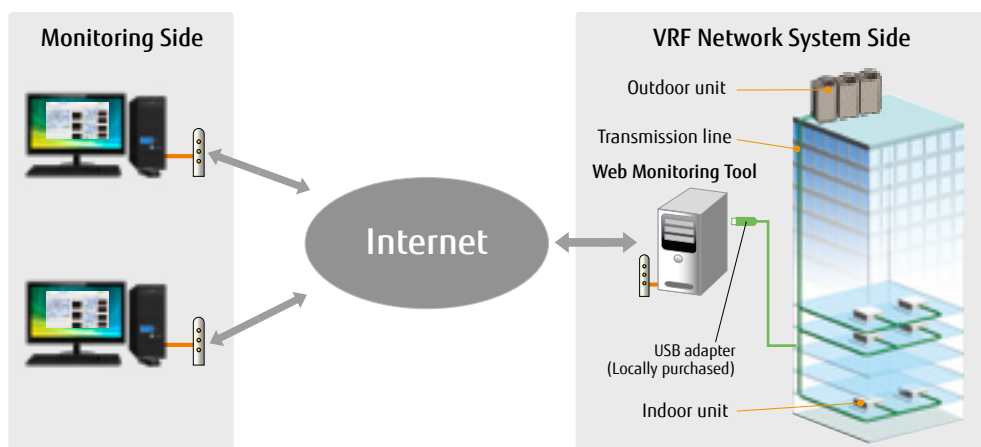
Support 4 VRF network systems

USB adaptor (maximum 4 adaptors per PC) permitted, monitoring of up to 1,600 indoor units.
Suitable for large scale buildings or hotels.

Personal computer system requirements

	UTY-AMGXZ1
Operating system	• Microsoft® Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8.1 Pro (32-bit or 64-bit) • Microsoft® Windows® 10 Pro (32-bit or 64-bit)
CPU	1 GHz or higher
Memory	• 1 GB or more (for Windows® 7 [32-bit], Windows® 8.1 [32-bit], and Windows® 10 [32-bit]) • 2 GB or more (for Windows® 7 [64-bit], Windows® 8.1 [64-bit], and Windows® 10 [64-bit])
HDD	40 GB or more of free space
Display	1366 x 768 or higher resolution

Interface	• 2 USB ports
	  - 1 USB port is required for software protection key connection
	  - 1 USB port is required for Echelon® U10 USB Network Interface per VRF wiring network (maximum 400 indoor units, 100 outdoor units)
	Up to 4 Echelon adapters may be required if there are multiple VRF Wiring networks on site. 1 x Echelon adapter per wiring network, maximum 4 x wiring networks.

Software	Internet Explorer® 11 or Microsoft Edge / Adobe® Reader 9.0 or later

•Echelon® U10 USB Network Interface – TP / FT-10 Channel (Model number: 75010R) (Required for each VRF Network.) NOTE: Echelon adapters are sold separately.

<PACKING LIST>

Name and shape	Quantity	Application
WHITE-USB-KEY (Software protection key)	1	Software protection key to be connected to USB port on the Service Tool-installed PC. These products run only on a PC with WibuKey.

•Personal computer that satisfies the following system requirements

AIRSTAGE

SATISFACTION FOR ALL CUSTOMERS

FUJITSU GENERAL NEW ZEALAND LIMITED

A Subsidiary of FUJITSU GENERAL LIMITED
www.fujitsugeneral.co.nz

HEAD OFFICE WELLINGTON
109 Port Road, Seaview, Wellington 5010
Tel: 04 5688 761

Email
contact@fujitsugeneral.co.nz

Fujitsu General (Thailand) Co., Ltd.

ISO 9001
01 100 075229

ISO 14001
01 104 9245

TÜV

ISO 9001 Certified number: 01 100 075229
ISO 14001 Certified number: 01 104 9245

Fujitsu General (Shanghai) Co., Ltd.

ISO 9001 Certified number: ISO 14001 Certified number:
01 100 79269   CNBJ312244-UK

Fujitsu General Central Air-conditioner (Wuxi) Co., Ltd.

ISO 9001 Certified number: ISO 14001 Certified number:
15917Q20073R5M   15918E20021R5M

All products specified in this brochure comply with the Australian Communications Authority's (ACA) and New Zealand's Radio Spectrum Management (RSM) requirements for Electromagnetic

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- The products or equipments in this catalogue contain fluorinated greenhouse gases.
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109 Port Road, Seaview, Wellington 5010
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