Refrigerant R410A
INVERTER

GENERAL

Variable Refrigerant Flow System

AIRSTAGE™

HEAT PUMP & HEAT RECOVERY

VRF CATALOGUE



FUJITSU GENERAL LIMITED

CREATION OF COMFORT

The AIRSTAGE™ series provides high energy savings, comfort, and reliability to the end user. The design, installation, and servicing were developed based on the concepts of high flexibility and simplicity. We offer an abundant VRF system lineup to match regional and customer needs by providing the best combination from low to high capacities and from giving priority to conserving installation space to giving priority to high efficiency.

For **SMALL** BUILDING



8HP - 12HP

14HP - 16HP

Heat Pump type
for heating or cooling operation

AIRSTAGE J-IIIL

8 HP - 12 HP 3 Models
14 HP - 16 HP 2 Models
• 3 phase

P46~



Heat Pump type
for heating or cooling operation

AIRSTAGE J-III

4 HP - 6 HP 6 Models
• Single phase, 3 phase

P52~



Heat Pump type
for heating or cooling operation

AIRSTAGE J-IIS

4 HP - 6 HP 3 Models
• Single phase

P56~

For **LARGE** BUILDING



Heat Recovery Modular type
for simultaneous heating and cooling operation

AIRSTAGE VR-II

8 HP - 48 HP 34 Models
• Space saving combinations: 8 HP to 48 HP/21 models
• Energy efficiency combinations: 16 HP to 44 HP/13 models

P60~



Heat Pump Modular type
for heating or cooling operation

AIRSTAGE V-III

8 HP - 54 HP 39 Models
• Space saving combinations: 8 HP to 54 HP/24 models
• Energy efficiency combinations: 16 HP to 46 HP/15 models

P68~

Heat Pump Modular type
for heating or cooling operation

AIRSTAGE V-III TROPICAL series

Production by order

8 HP - 54 HP 39 Models
• Space saving combinations: 8 HP to 54 HP/24 models
• Energy efficiency combinations: 16 HP to 46 HP/15 models

P74~

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OUR HISTORY

Overseas Air Conditioning Business since 1971
VRF Business since 2001

FUJITSU GENERAL's VRF AIRSTAGE™ Series has been developed based on our long-term air-conditioning technology know-how and was first provided 14 years ago.
We have offered a series of products from large homes to large-scale buildings to meet the various market needs.

For Commercial Use

For Residential & Light Commercial Use



Established as Yaou Shouten Ltd.

Air conditioner exports to Middle East.

S series
10HP / Heat recovery & Heat pump

10HP / Heat recovery 8,10HP / Heat pump & Cooling

J series
6HP / Heat pump

V series
8 to 42HP / Heat pump



AIRSTAGE V-II

V-II series
High efficiency and Compact design model
Extensive lineup from 8HP to 48HP in 2HP increment / Heat pump



AIRSTAGE J-II

J-II series
High efficiency and small capacity model
4HP to 6HP / Heat pump



AIRSTAGE VR-II

VR-II series
High efficiency and Compact design model
8 to 48HP / Heat Recovery

P60



AIRSTAGE V-II

V-II TROPICAL series
Tropical spec model
Extensive lineup from 8HP to 42HP in 2HP increment / Heat pump

P56



AIRSTAGE J-IIS

J-IIS series
High efficiency and compact design model
4HP to 6HP / Heat pump

P68



AIRSTAGE V-III

V-III series
High efficiency and large capacity model. Extensive lineup from 8HP to 54HP in 2HP increment / Heat pump

P52



AIRSTAGE J-III

J-III series
High efficiency and small capacity model
4HP to 6HP / Heat pump

P74



AIRSTAGE V-III

V-III TROPICAL series
Extensive lineup from 8HP to 54HP in 2HP increment / Heat pump



AIRSTAGE J-IIIL

J-IIIL series
High efficiency and compact design model
10HP to 16HP / Heat pump

P46

8HP - 12HP

14HP - 16HP

AIRSTAGE™ History

1936 | 1971 | 1998 | 2001 | 2003 | 2004 | 2006 | 2007 | 2009 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017

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.

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

Refrigerant R410A

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

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

ALL INVERTER

WORLD WIDE LOCATIONS

Promoting Globalization from a global perspective while emphasizing the actual local situation in the field under the aim of advancing our five-base system (Europe, Middle East, Asia & Oceania, Americas, and Japan)



JAPAN Head Office



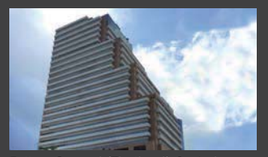
13 Overseas Sales Companies



Fujitsu General Orient International Electronics Sales (Shanghai) Co., Ltd. (China)



Fujitsu General (Taiwan) Co., Ltd.



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



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



Fujitsu General (EURO) GmbH



Fujitsu General (U.K.) Co., Ltd. (U.K.)



Fujitsu General Air Conditioning (UK) Limited



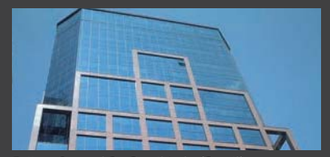
Fujitsu General (Aust.) Pty Ltd. (Australia)



Fujitsu General New Zealand Ltd. (New Zealand)



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



Fujitsu General Do Brasil Ltda.(Brasil)



Fujitsu General America, Inc.



FUJITSU GENERAL SOLUTION CENTER "THE AIRSTAGE"

GLOBAL BUSINESS ACTIVITIES

We are engaging in advertising, human resource development, CS activities, and social contribution activities worldwide. These activities have been recognized throughout different regions by the awards we have been honored with.

North/South America



AHR Expo



HVAC trade show in Brasil


Distributor meeting


Call center

Middle East


Distributor meeting


Technical seminar


Training for dealers

Europe




HVAC trade show in Europe countries


Presentation & training



Oceania



HVAC trade show in Australia



ACR Show



Charity (Christchurch)


Service & Maintenance

Asia



New Product Presentation Meeting, Sales store awards


FG TAIWAN Entire employee workshop


SE training


Call center

International authoritative design awards


"Dealer Design Awards" of "the NEWS"


Gold Award (Category: HVAC & PLUMBING) in Reader's Choice Awards


TOP OF MIND 2016" First prize in "MARCA DE EQUIPAMENTODE AR-CONDICIONADO" category of "CLIMATIZACAO" division

The iF Product Design Award is given each year by "iF International Forum Design GmbH" for industrial products from around the world.

The product design competition has existed since 1955. Its award, the "red dot", is an internationally recognized quality seal.


Coolworld Industry Awards "Most Efficient Air Conditioner"


China State Construction Engineering Luban Prize

Canstar Blue Most Satisfied Customers Award

The Good Design Award is sponsored by the Japan Institute of Design Promotion and is awarded once a year for an item of excellent design.

PROJECT REFERENCE

Our product is popular because of its high quality, energy saving, and easy installation, and so has been installed in a wide range of building types including high-rise office buildings, stores, hotels, public facilities, schools, hospitals and residential.

Fujitsu General's Products have been installed in
over 50 countries worldwide.



1


2


7



8


3



4


9


6


5


10


12


11


13

For LIGHT COMMERCIAL

1 Shop in Asia
2 Restaurant in Middle East
3 Office in Europe
4 Hotel in Oceania
5 School in U.S.A.
6 Hospital in Asia

For COMMERCIAL

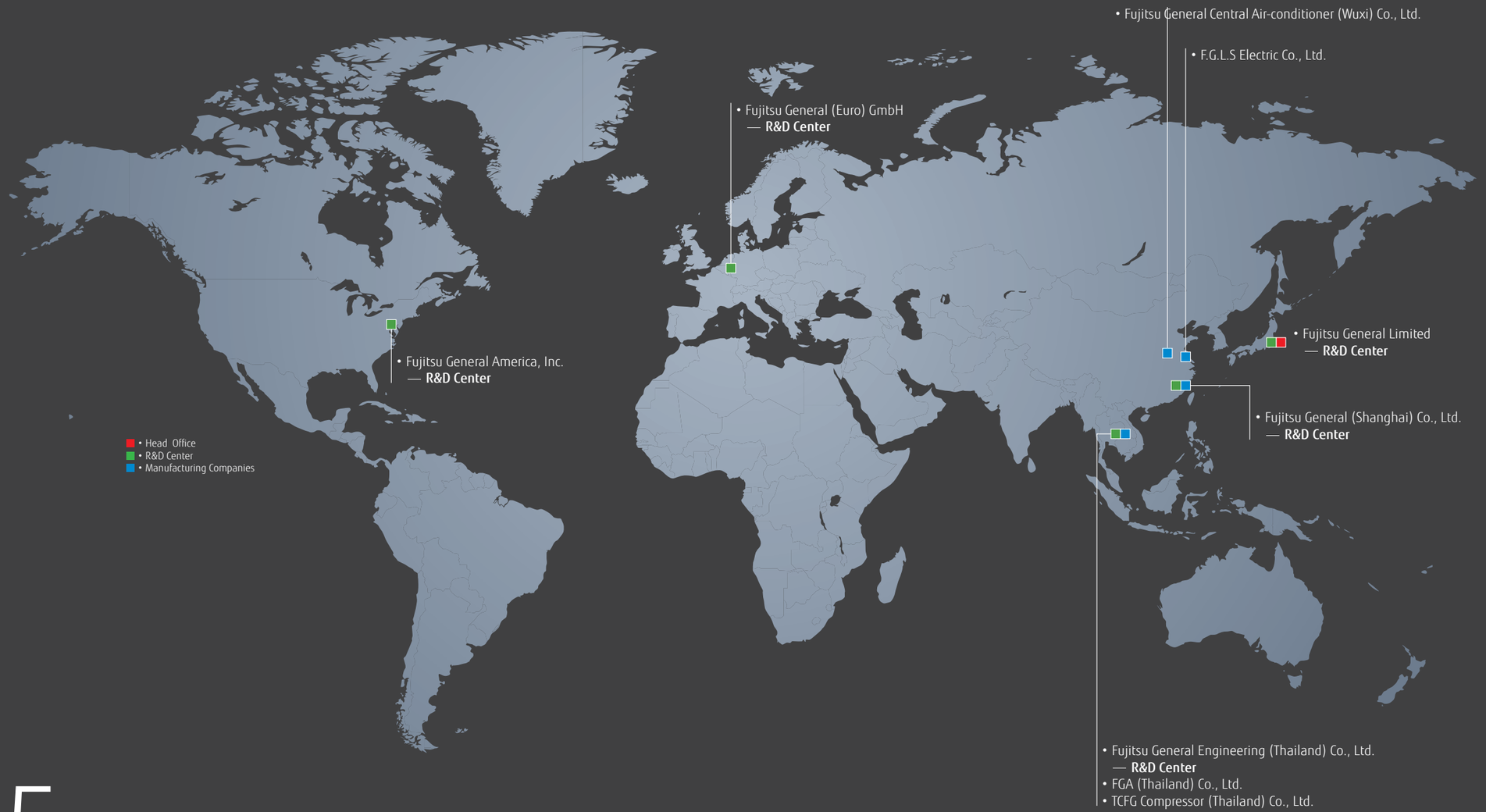
7 Office in Europe
8 Office in Europe
9 Hotel in Asia

For RESIDENTIAL

10 Residential in Europe
11 Residential in Europe
12 Residential in Oceania
12 Residential in Middle East

GLOBAL DEVELOPMENT & PRODUCTION BASES

R&D centers are set up in five countries of Japan, Europe, Asia, China and North America in the world. We pursue the environmental property and comfort to meet each area needs.



- Fujitsu General Engineering (Thailand) Co., Ltd.
  — **R&D Center**
- FGA (Thailand) Co., Ltd.
- TCFG Compressor (Thailand) Co., Ltd.

6 Overseas Manufacturing Companies

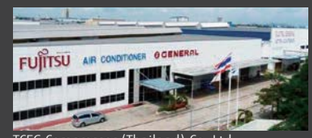

Fujitsu General (Shanghai) Co., Ltd.


F.G.L.S. Electric Co., Ltd.


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


FGA (Thailand) Co., Ltd.


Fujitsu General (Thailand) Co., Ltd.
Fujitsu General Engineering (Thailand) Co., Ltd.



TCFG Compressor (Thailand) Co.,Ltd.

5 R&D Center


R&D Center in Fujitsu General (Shanghai)


R&D Center in Fujitsu General Engineering (Thailand)



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


R&D Center in Fujitsu General America (U.S.A.)

JAPAN Head Office
R&D Center and 60 m Height Difference Testing Tower



HIGH QUALITY DEVELOPMENT & PRODUCTION

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.

Advanced Research Facility and Equipment

Performance Testing



Air Volume Measurement Room

Measure air volumes of the air conditioners from compact RAC 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



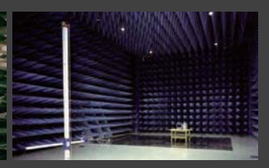
Vibration testing

Testing Laboratory

Fujitsu General EMC Laboratory Limited

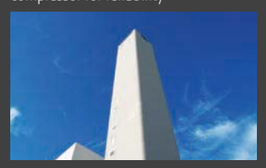






60 m Height Difference Testing Tower

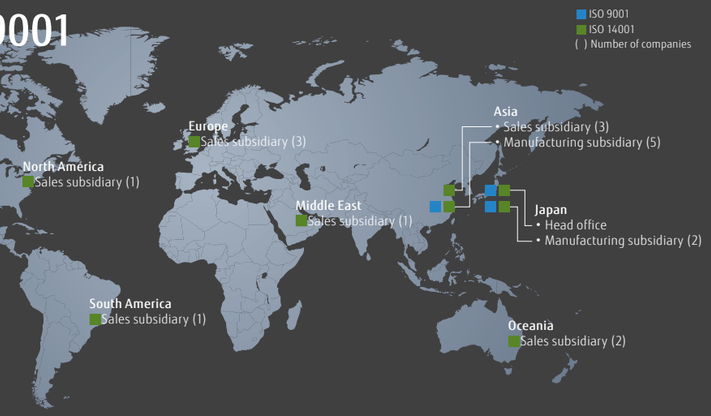
Objective is to confirm oil circulation of compressor for reliability



FACILITIES

ACQUISITION OF ISO 9001 AND ISO 14001

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.



High Product Quality Assurance

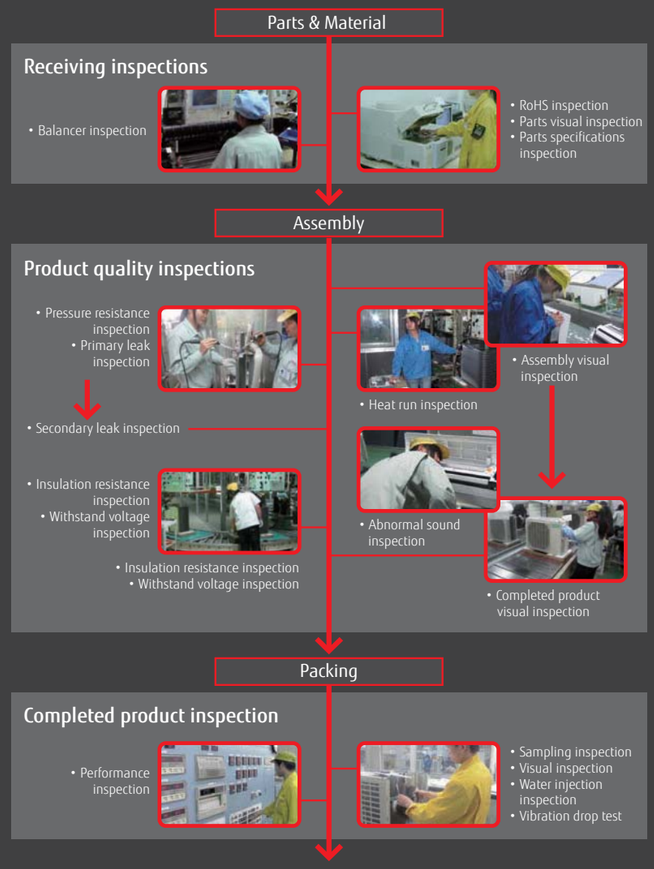
All Fujitsu General factories have acquired ISO 9001, and have built a quality control system common around the world. High quality products are offered to all over the world based on stringent quality inspections.

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.



OUR SOLUTION FOR ALL PROPERTIES

Fujitsu General provides the best solutions suitable for properties.

Solution Point

We provide Fujitsu General
total solutions
for the property unique needs.



Target Property

LIGHT COMMERCIAL

**For Small offices,
Hotels, SCHOOL, Shops
and Restaurant etc.**

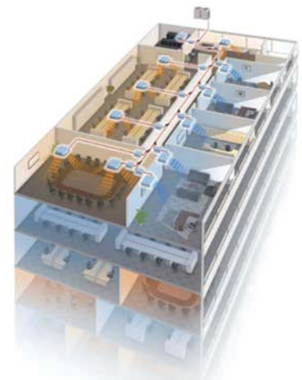
We offer comfortable and economical air conditioning systems focused on small to medium-sized buildings.



COMMERCIAL

For Large Building

We provide single and modular type VRF systems designed for high efficiency, comfort, freedom of design, easy installation and high reliability.

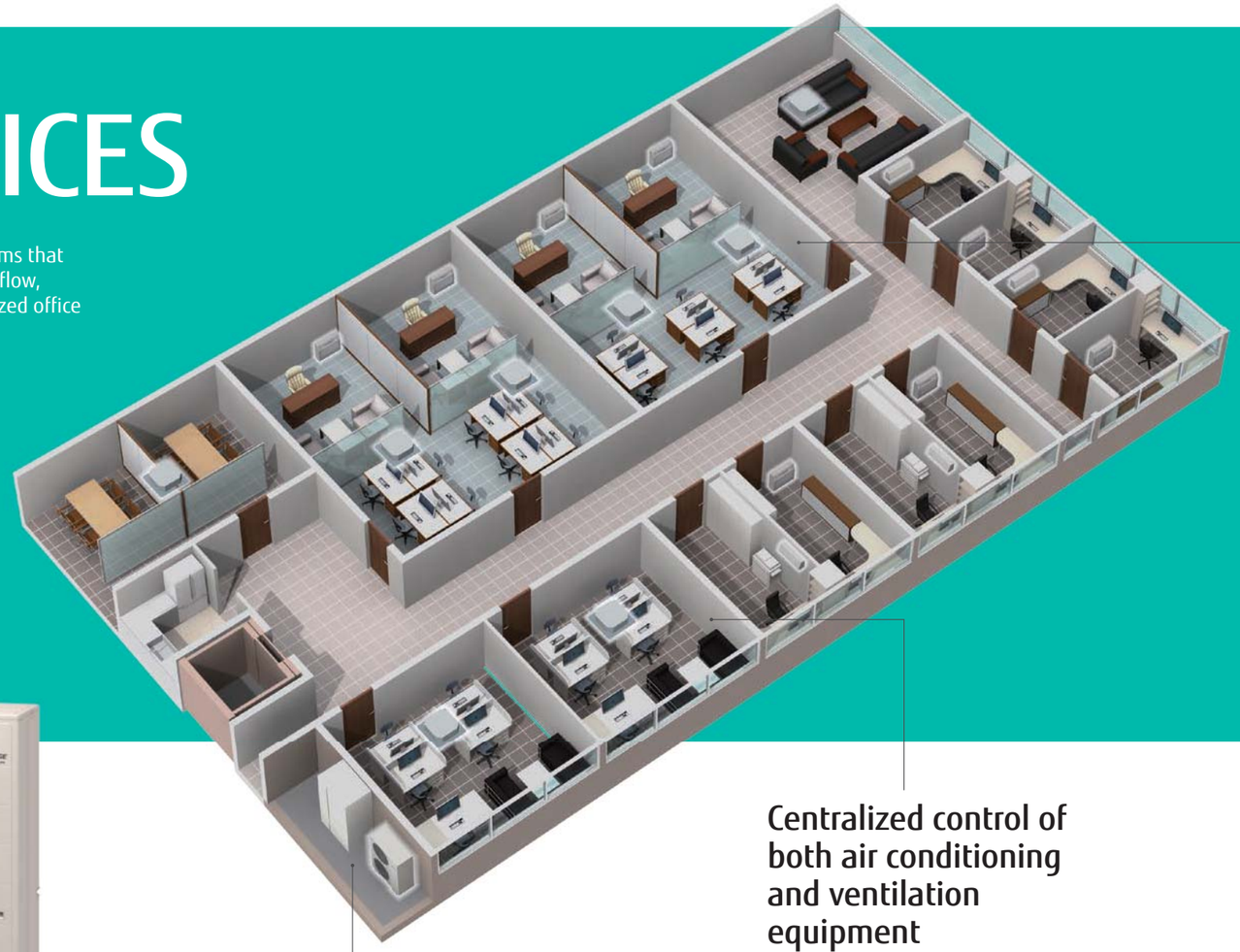


Light Commercial

SMALL OFFICES

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™




Compact Cassette Grid Type


J-III　J-IIIL　J-IIIL High capacity model

AIRSTAGE™ J-Series Up to 16 HP by compact outdoor unit

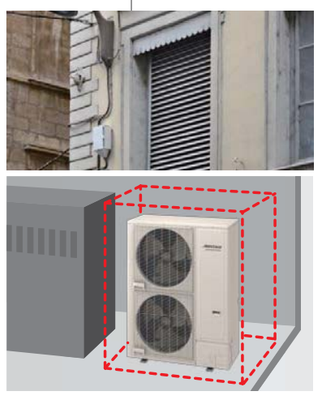
Small VRF system is suitable for the buildings with many small rooms. Max. 40* indoor units can be connected.

*Only J-IIIL 16 HP model

Energy saving solution suitable for meeting rooms and business discussion rooms

When there are no people in the room, save operation starts automatically to prevent unnecessary power consumption by linking up with a human sensor and external input/ output kit.



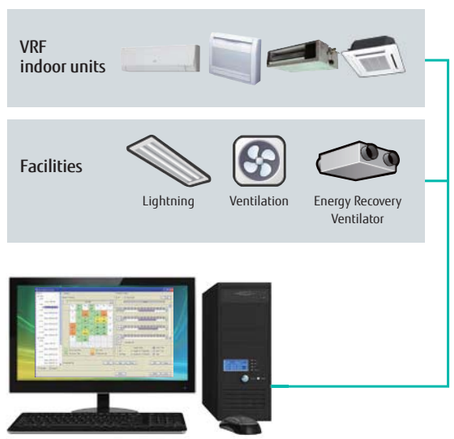

J-IIIL

Compact and low noise design outdoor unit

This compact outdoor unit doesn't take up much space even if installed in a machine room or on the rooftop. This unit secures enough static pressure even if there are louvers. Low noise operation is possible at nighttime by a low noise mode.

Centralized control of both air conditioning and ventilation equipment

It is possible to perform centralized control to stop the operation of lighting and ventilation equipment in addition to air conditioners. This is useful in energy saving management over the whole building.



New design panels ideal for grid ceiling

We have equipped a new 620 mm square design panel that is ideal for the grid ceiling found in many offices in Europe. Easy installation and finished beauty are enhanced by these new panels.



1.1 kW personal air conditioning

Various range of low capacity 1.1 kW indoor units to suit small rooms or spaces.


Wall Mounted


Compact Floor

Light Commercial

HOTELS

Fujitsu General provides perfect total air conditioning systems that take into account comfort, energy saving, external appearance, safety and easy installation for small low-rise hotels.

AIRSTAGE™



J-III J-IIIL

J-IIIL
High capacity model



AIRSTAGE™ J-Series Appearance-oriented compact outdoor unit

Due to the lowest and most compact design in the industry, the appearance of hotel is not damaged even when installed on the building.



Large space air conditioning in the reception and lobby

Ultra-large duct type single split system suitable for large spaces with high ceilings



Ventilation of the whole hotel supported

Outdoor air processing is essential in hotel spaces with a high degree of airtightness. The DX-Kit can link up with air conditioners to ensure sufficient ventilation.
This system can be expanded.



EEV unit



Control unit



System controller

Centralized control of air conditioning in shared spaces

Air conditioning in shared spaces such as lobbies and hallways is controlled centrally. Temperature and operating conditions can be managed without the adjustment by guests.

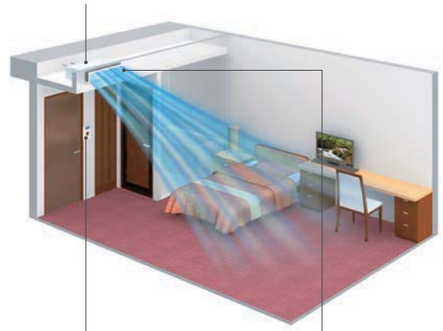


Guest room air conditioning with excellent comfort, energy saving and easy installation

Space saving
Mini duct type with 198 mm height and 450 mm depth. This can be installed in narrow ceiling space easily.



Mini Duct



Card key switch available
Using the card key prevents you from forgetting to switch off the air conditioner.



Use of an external connect switch

Comfortable airflow that switches up and down air directions
The Auto Louver Grille Kit achieves comfortable airflow by adjusting the air direction.



Auto Louver Grille Kit



Simple Remote Controller with sophisticated design

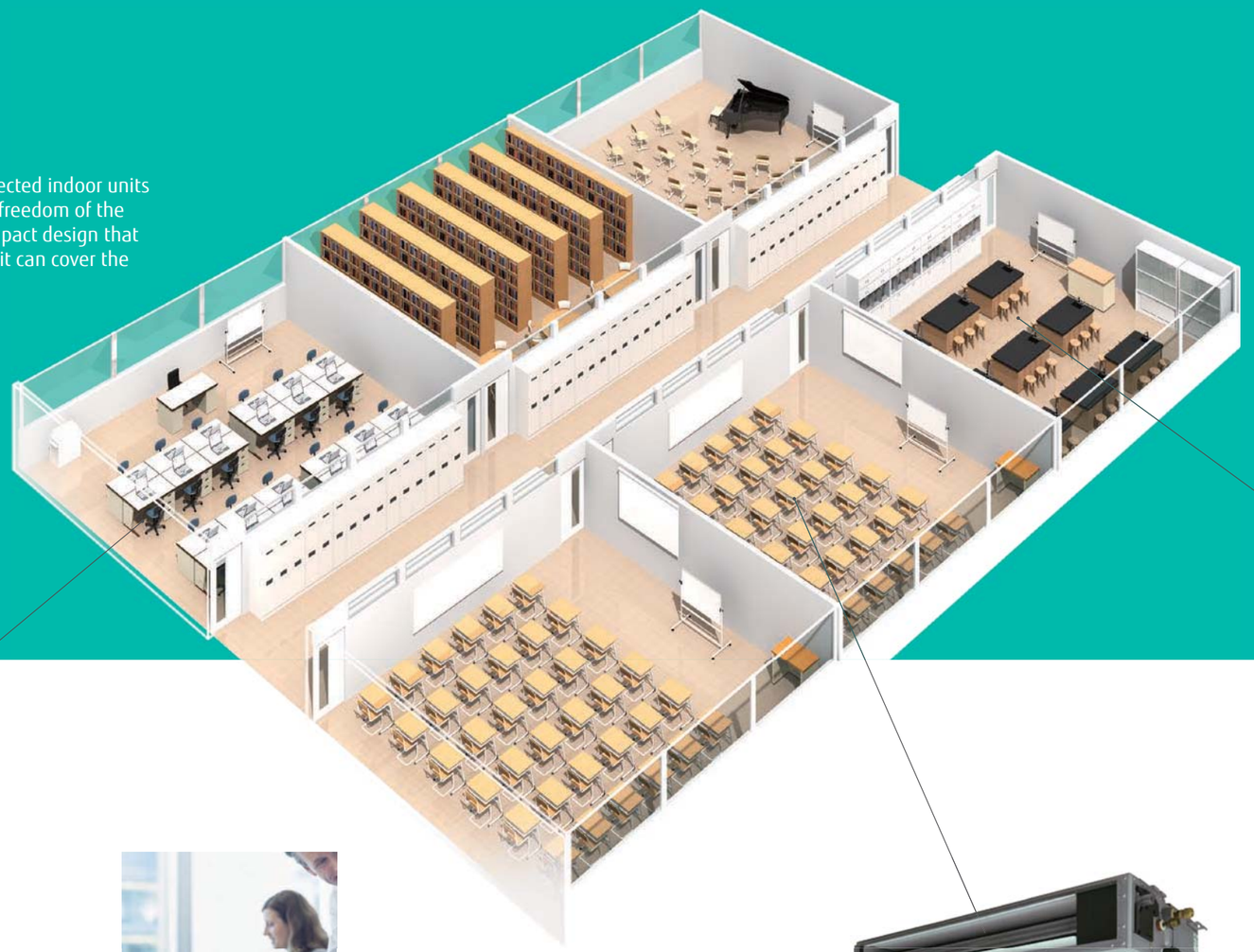
Suitable for hotels or offices as it is easily operated with no complex functions.
Large LCD screen & simple operation buttons White colored backlight on monitor enable easy operation in dark.

Light Commercial

SCHOOL

Fujitsu General provides the optimal number of connected indoor units for mid-sized educational institutions. The degree of freedom of the installation location selection is improved with a compact design that minimizes the installation area. Even one outdoor unit can cover the entire school building.

AIRSTAGE™





Cassette Circular Flow



Touch Panel Controller UTY-DTGYZ1

LAN

PC

Wireless LAN

Router

Fixed IP, IP forwarding and open Port required

INTERNET



Tablet PC

Smartphone

iOS, Android and/or Windows



Mini Duct



Energy Recovery Ventilator

New centralized remote controller with improved operability

Temperature management of each classroom 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.

Control and monitoring

The same management as with the main unit is possible even if you are at your desk. Non-administrators can also operate the air conditioners with a PC, Smartphone or tablet.

Various indoor units

We have a lineup of indoor units that can also support complex applications – from normal classrooms to special classrooms and auditoriums. Air conditioners can be also added easily.

Comfortable room air conditioning without airflow feeling

Circular Airflow Cassette blows out in all directions without temperature unevenness



Individual airflow direction control to prevent people from being exposed to airflow



Energy saving operation when there are no people by linking up with human sensor



Human sensor (Option)

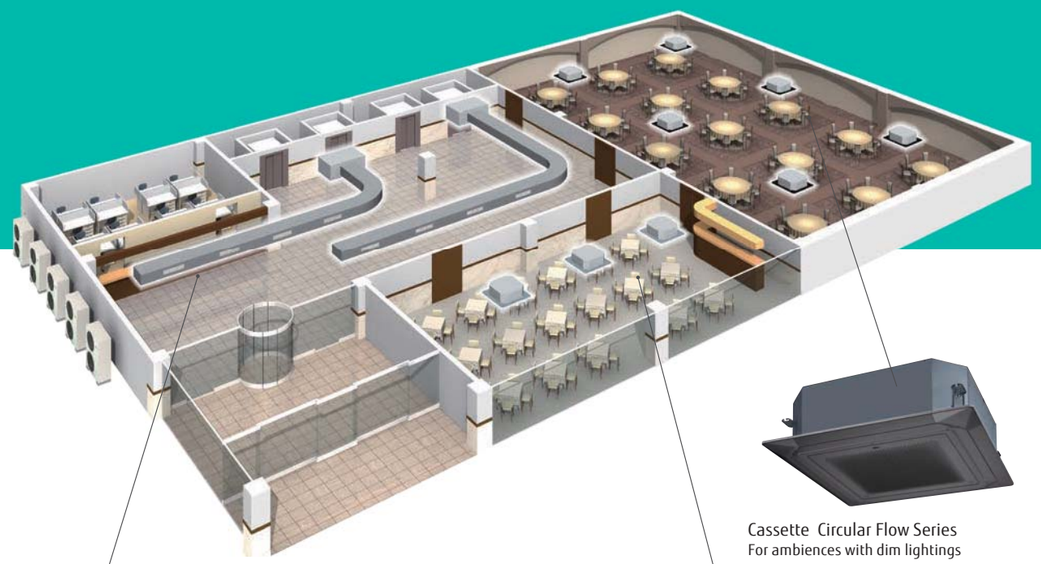
Light Commercial

RESTAURANT, SHOPS

Fujitsu General provides perfect total air conditioning systems that offer smooth support by tenant, by purpose and by customer visit frequency in shops and restaurants with multiple lighting and a high density of customers.

AIRSTAGE™

RESTAURANT



Cassette Circular Flow Series
For ambiences with dim lightings



Cassette Circular Flow Series
For bright Interior rooms etc.



Appropriate air conditioning in the atrium space

Appropriate air conditioning of the high ceiling and glass-sided atrium space with a large duct system

Color variations by two panels

Both black and white panels are available for Cassette type. Black panel is suitable for the dark place such as a restaurant with atmosphere. White panel is usually used at bright areas such as offices. (Available to single split and VRF indoor units)

High Static Pressure Duct



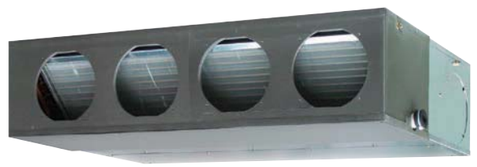
SHOPS



Low outside air temperature cooling air conditioning support

Low outside air temperature cooling operation is necessary in winter in stores with a lot of heat inside. Air conditioning system can be supported flexibility to allow cooling operation at -15°C





Medium Static Pressure Duct

30-150 Pa

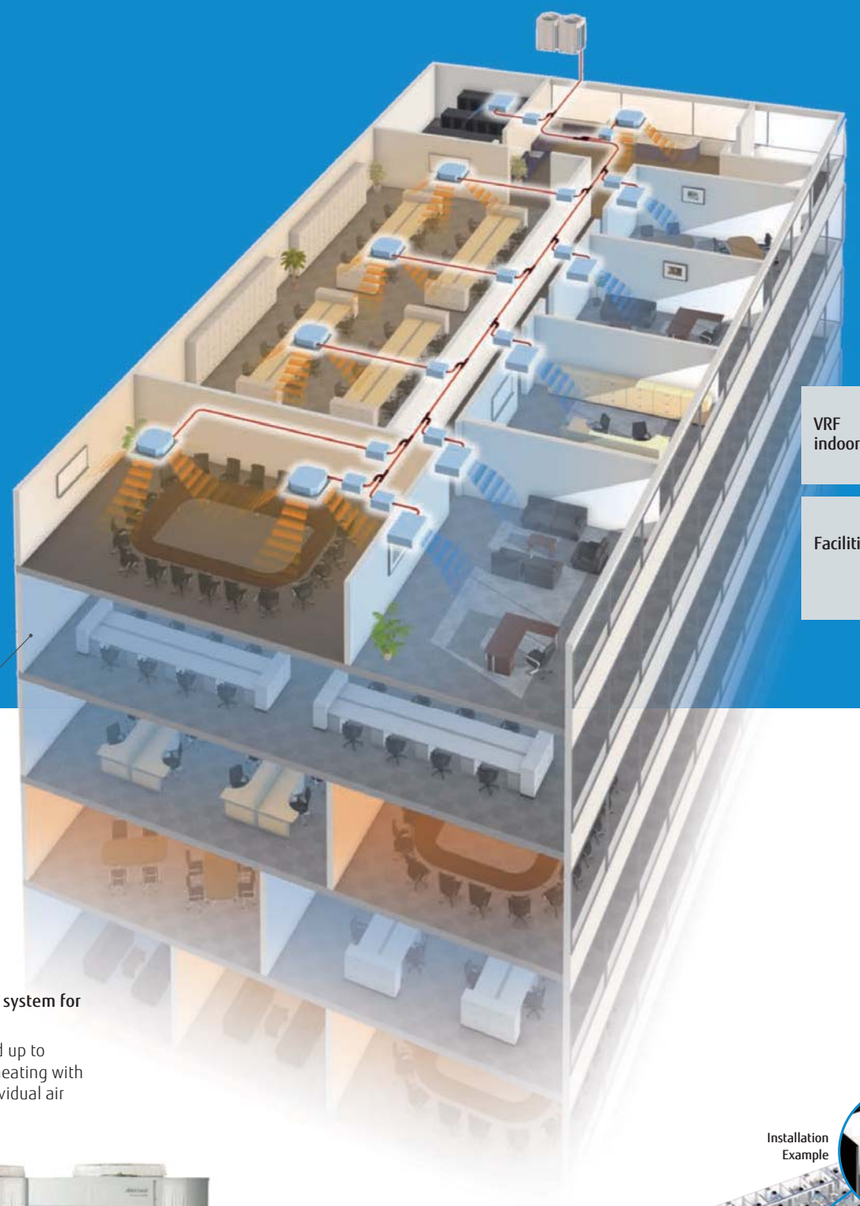
Commercial

LARGE BUILDING

Fujitsu General provides modular type VRF systems that seek high efficiency, comfort, design freedom, easy installation and reliability for skyscraper buildings.

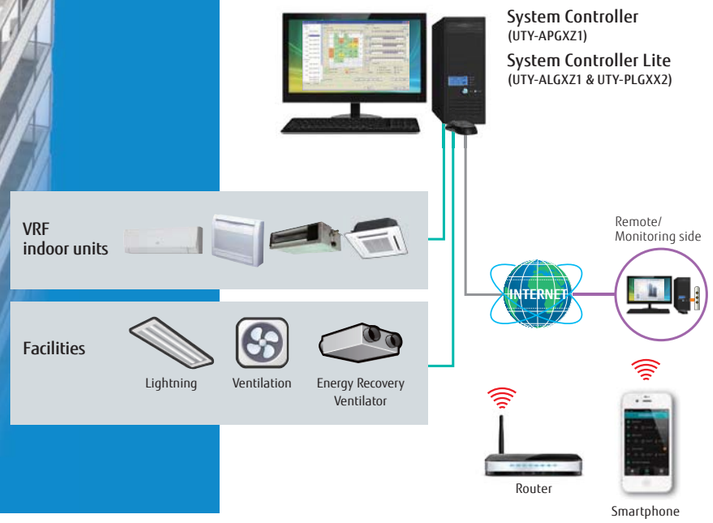
AIRSTAGE™





Centralized control

Not only indoor units in the building but also facilities such as ventilation can be controlled easily by anyone.



Abundant lineup suitable to match the operating environment

VRF series lineup to meet various needs such as energy saving-orientated models and models compatible with a high outdoor air temperature of 52°C



AIRSTAGE™ V-II

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

8 HP - 48 HP 34 Models
- Space saving combinations: 8 HP to 48 HP/21 models
- Energy efficiency combinations: 16 HP to 44 HP/13 models

Individual air conditioning system for large buildings

Capacities can be expanded up to simultaneous cooling and heating with maximum 48HP. Large individual air conditioning is supported.



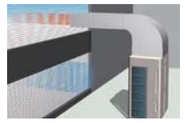
AIRSTAGE™ V-III

AIRSTAGE™ V-III TROPICAL SPEC

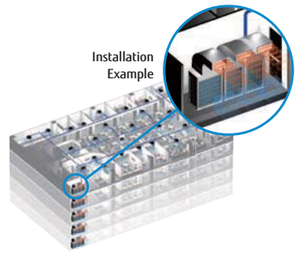
8 HP - 54 HP 39 Models
- Space saving combinations: 8 HP to 54 HP/24 models
- Energy efficiency combinations: 16 HP to 46 HP/ 15 models

High system flexibility

Flexible installation on each floor and installation of diverse indoor units are possible through the industry's top class high static pressure, long piping design and connection capacity.

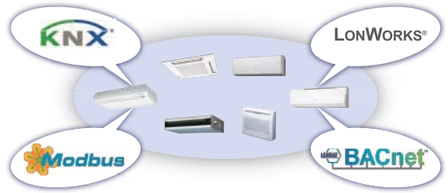


82* Pa
*: 80Pa for VR-II



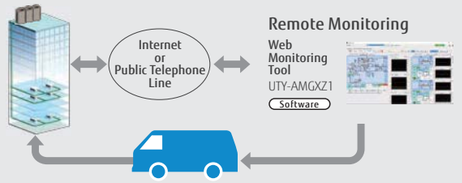
Link up with a variety of BMS

Centralized control including facilities and equipment in addition to air conditioning is possible by linking up with MODBUS, BACnet, KNX and other various interfaces.



Rapid service support

The air conditioning of the entire building can be monitored remotely with Web Monitoring Tool and System Controller. Rapid response for emergency is possible by a self-diagnosis in advance in cooperation with a management company.



AIRSTAGE™ CORE TECHNOLOGY

AIRSTAGE™ VRF SYSTEMS CAN BE DESIGNED TO CREATE AN AIR CONDITIONING SOLUTION TO SUIT MOST BUILDINGS REQUIREMENTS.



AIRSTAGE™ VRF Systems can be designed to effectively provide an air conditioning solution from a large domestic residence through to a large scale commercial building.

HIGH ENERGY EFFICIENCY

MORE COMFORT

HIGH RELIABILITY

DESIGN FLEXIBILITY

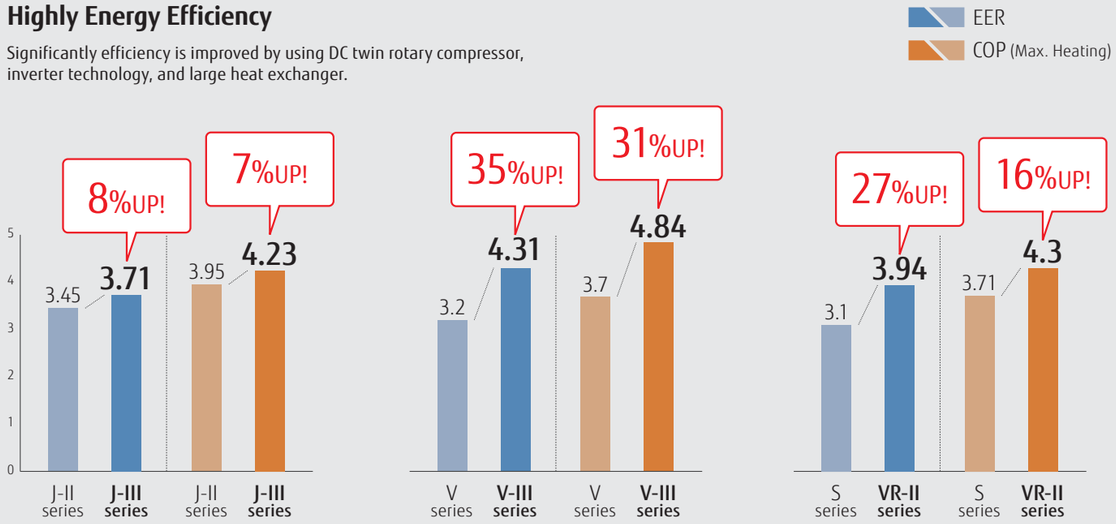
EASY INSTALLATION

EASY SERVICE & MAINTENANCE

HIGH ENERGY EFFICIENCY

Highly Energy Efficiency

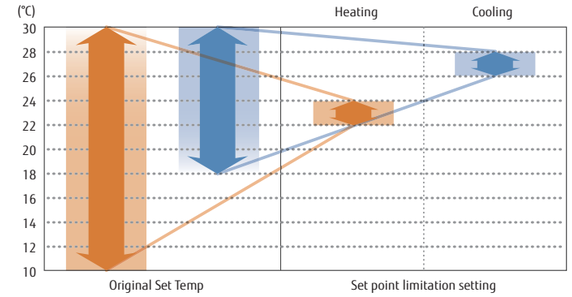
Significantly efficiency is improved by using DC twin rotary compressor, inverter technology, and large heat exchanger.



Operation Performance is Efficiently Controlled.

Room temperature set point limitation

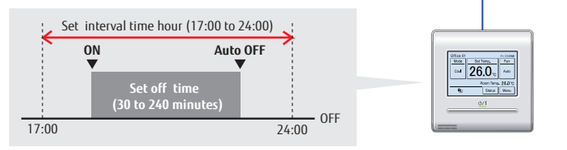
The minimum and maximum temperature ranges can be limited, which provide further energy saving while maintaining the comfort of the occupants.



Auto-off timer

New wired remote controller is equipped with an OFF timer function that automatically stops operation when a fixed time has elapsed from the start of operation. This prevents waste of energy.
Furthermore a new wired remote controller can set up the interval of time in case operation stops.



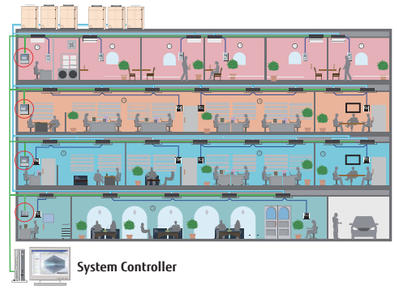


Energy saving management

A variety energy saving operations can be set and managed depending on the season, weather, and time period.
Excellent energy saving operation is performed by using System Controller.

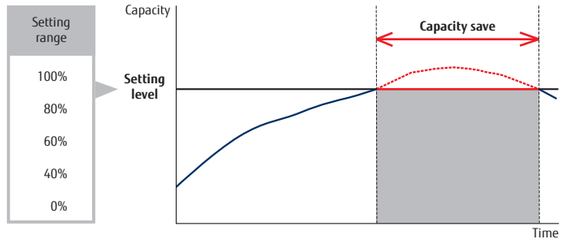


(Screen image is Energy manager software(Option))



Capacity save operation

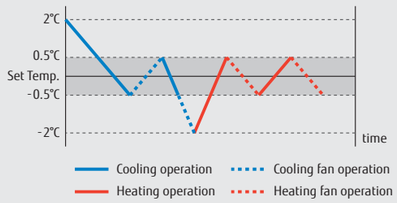
Operation capacity can be set in 5 steps for rated capability.
The power consumption at peak is cut down and the maximum load is suppressed.



MORE COMFORT

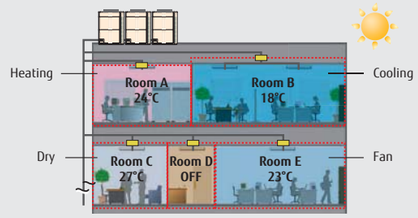
Auto changeover function

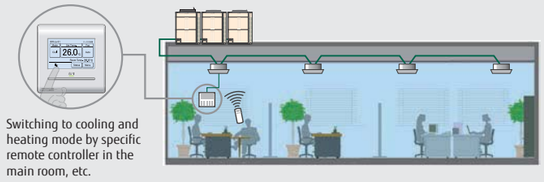
At Auto setting, the cooling/heating mode is automatically switched according to the set temperature and room temperature.



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

Automatic cooling / heating operation for each room is possible

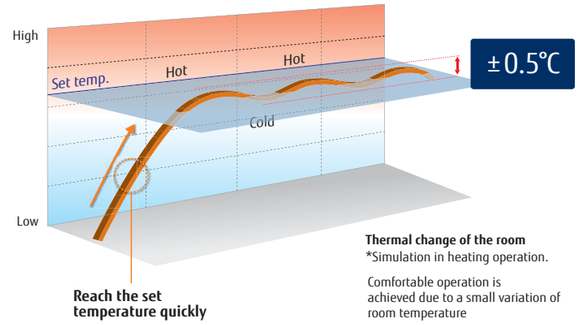




Switching to cooling and heating mode by specific remote controller in the main room, etc.

Precision refrigerant flow control

Precise and smooth refrigerant flow control is achieved by using a DC Inverter control in conjunction with individual indoor unit electronic expansion valve control. This allows high precision comfortable temperature control of ±0.5°C.



Low sound level design

Small capacity indoor units respond for the demands of several applications.

These models will be able to offer greater audibility comfort by operating at super low sound levels.
Especially, Wall mounted (EEV external) type is 19dB(A) when low mode heating operation.

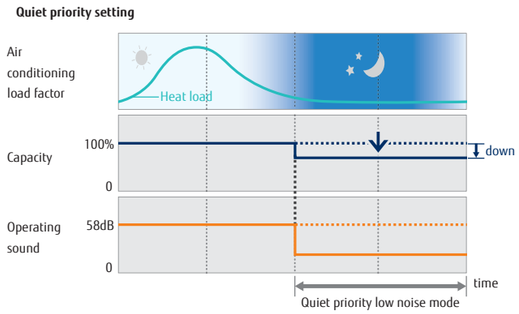


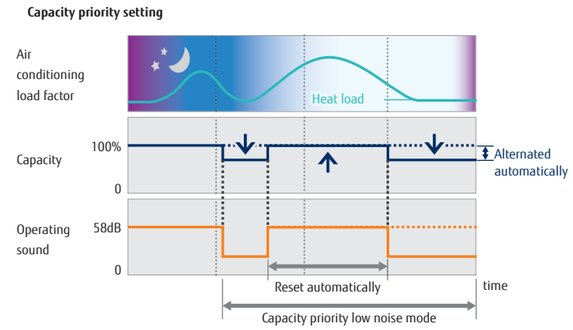
Small capacity indoor unit

Quiet operation

Low noise mode

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

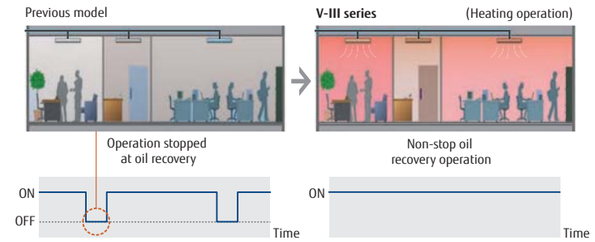




Non-stop oil recovery operation

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

*: AIRSTAGE VR-II series is not available.

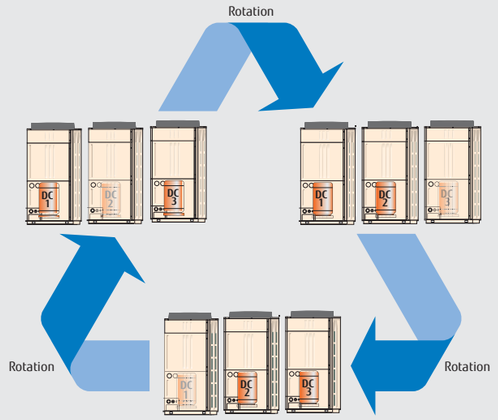


HIGH RELIABILITY



Outdoor unit rotational operation

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

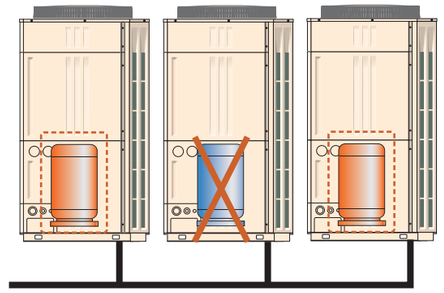


Note: Rotational operation is alternated by the start / stop timing of the compressor.

Backup operation

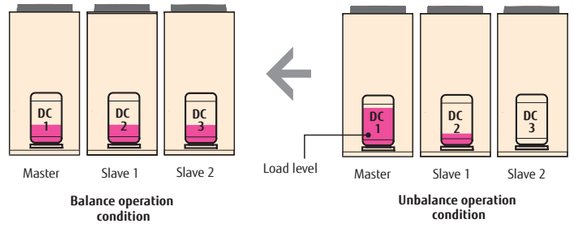
If one compressor fails, backup operation will be performed by the remaining compressors*.

*: Note: Backup operation may not be possible depending on the trouble state.



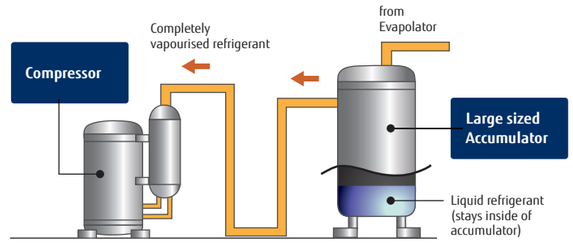
Advanced refrigerant control

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.



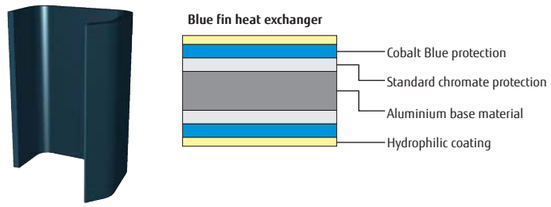
Liquid flow back protection

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



Adoption of blue fin heat exchanger

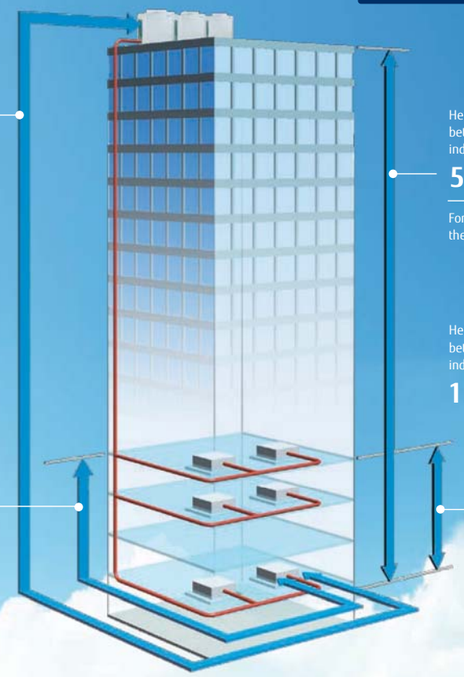
Corrosion resistant of the heat exchanger has been improved by the introduction of blue fin treatment to the outdoor unit's heat exchanger.



DESIGN FLEXIBILITY

Overall piping length 1,000m

Total pipe length
1,000m max.



Actual pipe length
165m
(VR-II, V-III, V-III tropical)

Height difference between outdoor and indoor units
50m max.

For the outdoor unit installed below the indoor units: 40m max.

Pipe length from first separation tube to the farthest indoor unit
60m max.
(VR-II)
90m* max.
(V-III, V-III tropical)

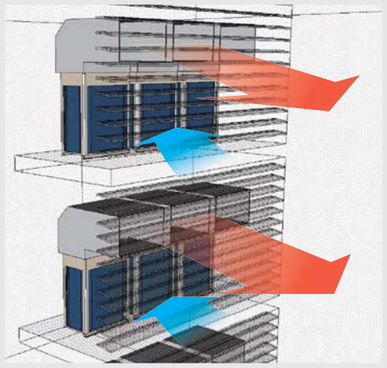
Height difference between indoor and indoor units
15m max.

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

High static pressure

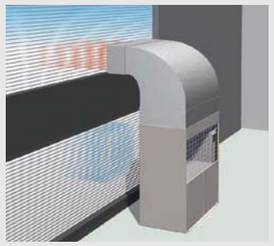
The outdoor unit can have a condenser hood easily connected with a static pressure of 80Pa to 82Pa.
This allows outdoor units to be installed within plant rooms in high rise buildings.

Powerful discharge air prevents a short-circuit.

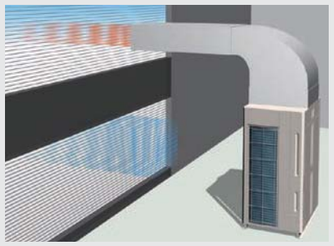


80Pa (VR-II)
82Pa (V-III, V-III tropical)

Previous model



VR-II, V-III, V-III tropical



Large diameter fan and DC motor has been utilized allowing an external static pressure of 80Pa to 82Pa. This is approximately 2.6 times greater than the previous model.

High capacity connection

AIRSTAGE™ VR-II series Heat Recovery type

8HP-48HP



Connectable indoor unit capacity range
50% to 150%*1

Connectable indoor unit number
up to 64

AIRSTAGE™ V-III series Heat Pump type

8HP-54HP



Connectable indoor unit capacity range
50% to 150%*3

Connectable indoor unit number
up to 64

AIRSTAGE™ V-III tropical series Heat Pump type

8HP-54HP



Connectable indoor unit capacity range
50% to 130%

Connectable indoor unit number
up to 64

AIRSTAGE™ J-IIIL series Heat Pump type

14HP-16HP



Connectable indoor unit capacity range
50% to 150%*1

Connectable indoor unit number
up to 40

AIRSTAGE™ J-IIIL series Heat Pump type

8HP-12HP



Connectable indoor unit capacity range
50% to 150%

Connectable indoor unit number
up to 30

AIRSTAGE™ J-III series Heat Pump type

4HP-6HP



Connectable indoor unit capacity range
50% to 150%*1*5

Connectable indoor unit number
up to 13*5

AIRSTAGE™ J-IIS series Heat Pump type

4HP-6HP



Connectable indoor unit capacity range
50%*2 to 130%*1*5

Connectable indoor unit number
up to 8*5

*1. Conditions of maximum connectable indoor unit capacity ratio is as the chart below.
*2. Only 4HP is 46%
*3. Max. capacities in the combinations including the 18HP outdoor unit fall below 150%.

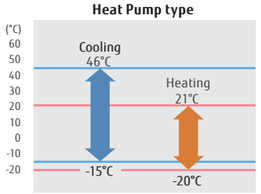
Series	Maximum connectable indoor unit capacity ratio	
	Without 1.1kW models	With 1.1kW models*4
VR-II	150%	130%
V-III tropical	130%	-
J-IIIL	150%	150%
J-III	150%	150%
J-IIS	130%	117%

*4. In the case of connectable indoor units, 1.1 kW models and Cassette and / or Duct type of 9.0 kW class or more, maximum connectable indoor unit capacity ratio is 110%.
*5. When AUXN009/012/014GLAH and ARXN009/012/014GLBH are connected, capacity range is 50% to 105% and only 2 to 4 indoor units are connectable.

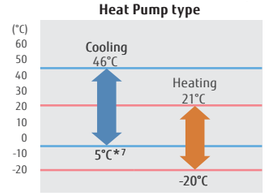
Wide operating range

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

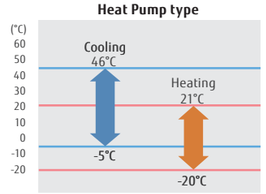
AIRSTAGE™ J-IIIL series(8/10/12HP) Heat Pump type



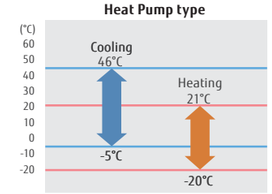
AIRSTAGE™ J-IIIL series(14/16HP) Heat Pump type



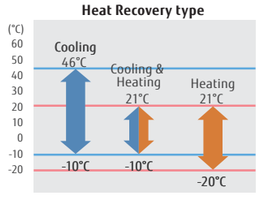
AIRSTAGE™ J-III series Heat Pump type



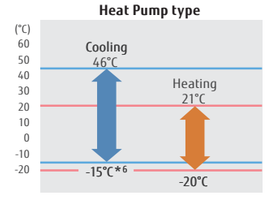
AIRSTAGE™ J-IIS series Heat Pump type



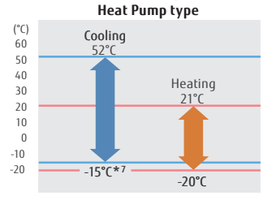
AIRSTAGE™ VR-II series Heat Recovery type



AIRSTAGE™ V-III series Heat Pump type

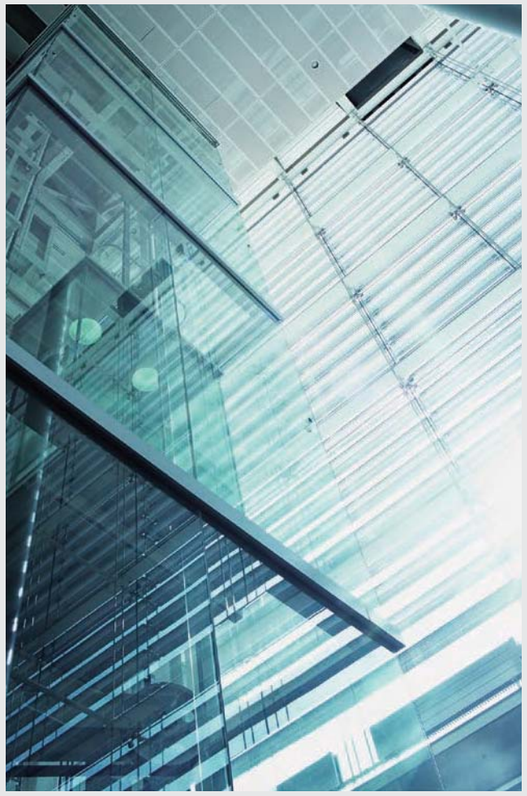


AIRSTAGE™ V-III tropical series Heat Pump type



*6. Note : When a multiple outdoor unit connection is used, operating range is from -5°C to 46°C in cooling.
*7. Note : Only when all indoor units are 5.6 kW or more in the system, the operation range is -15 to 46°C.

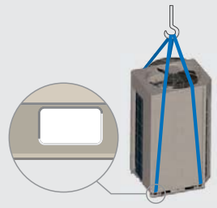
EASY INSTALLATION



Easily transported

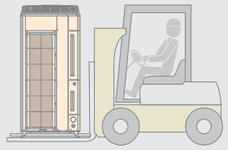
Easily craned using lifting belt hooks

Design of outdoor unit allows for lifting straps to be used



Transporting by forklift

Transport with forklift is possible.

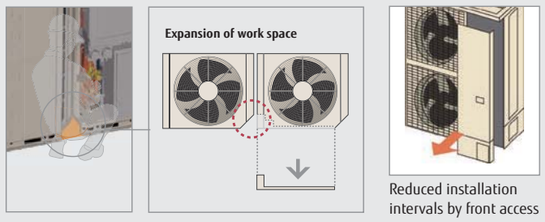


Can be transported in a small elevator



Easy access

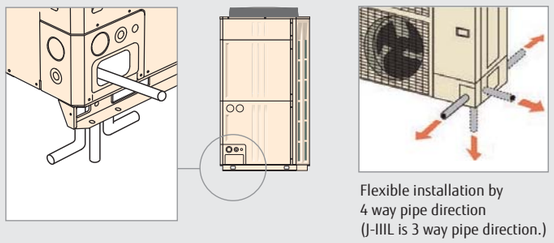
By adopting a L-Shape front panel that can be removed, the work space for installation and service has been significantly expanded by this new design. For multiple installations, work is performed easily and efficiently even in a narrow space.



Reduced installation intervals by front access

Flexible piping connection

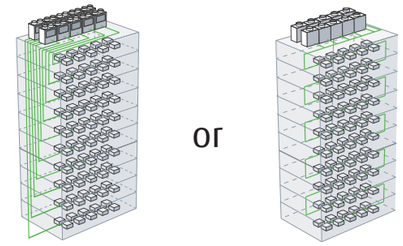
Piping and wiring are available to the front, left and right, and bottom.



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

Simple wiring work

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

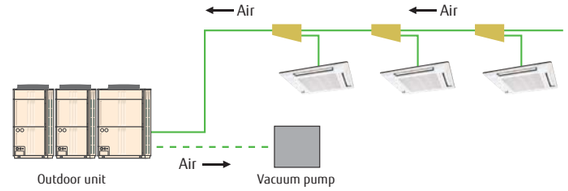


Parallel connection

Serial connection

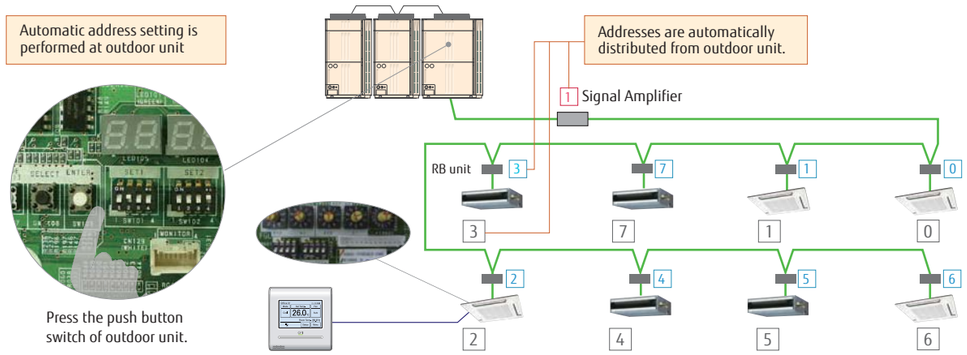
Easy evacuation - using vacuum mode function

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



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.



Press the push button switch of outdoor unit.

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

Easy commissioning by Service Tool

Service tools can be used to check the refrigerant temperature, pressure, and the operating status of the electronic expansion valve, making it easy to determine whether the units are connected properly.



EASY SERVICE & MAINTENANCE



Design for Easy Maintenance

7 segment LED is used to make it easy to check the details about the function setting status, refrigerant temperature, pressure, compressor operation time, and other factors for each model to make it easy to perform self-diagnostics.



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

7-segment LED

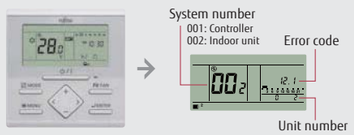
- Operation mode status
- Discharge temperature/Pressure status
- Compressor operation indication
- Address/type/number of outdoor unit

Movable PCB panel
Easier for maintenance work behind the PCB

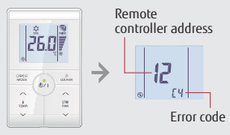
Error status can be checked easily via the indoor unit wired controller

An error code is displayed on a liquid crystal screen.

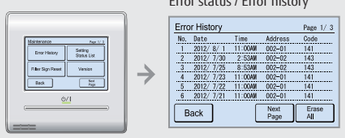
Wired Remote Controller



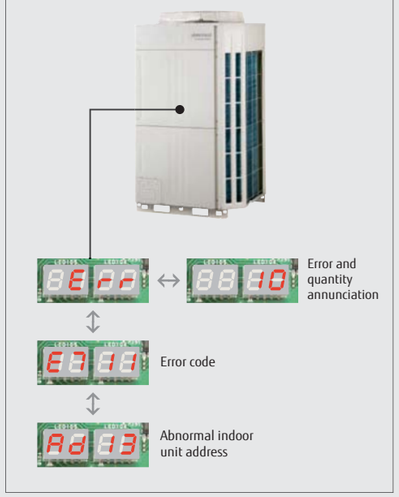
Simple Remote Controller



Wired Remote Controller (Touch panel)



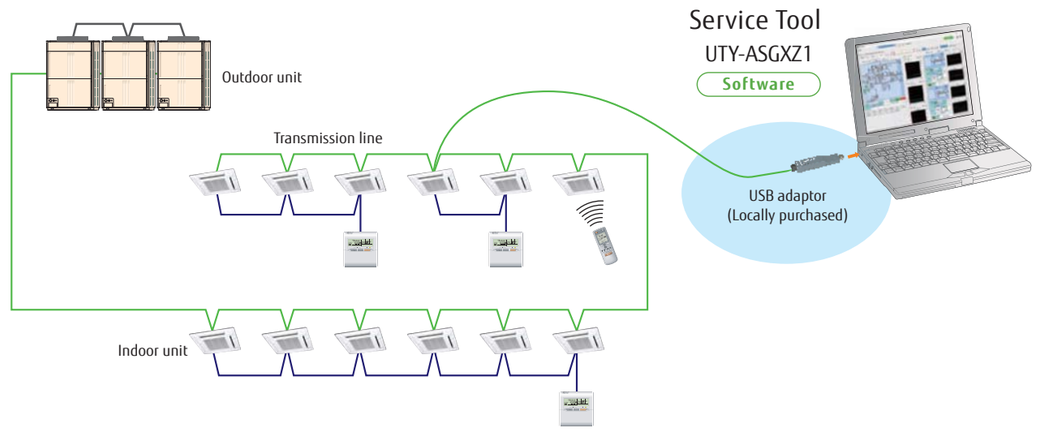
Error status can be cheked easily by outdoor unit display



Error diagnosis by Service Tool

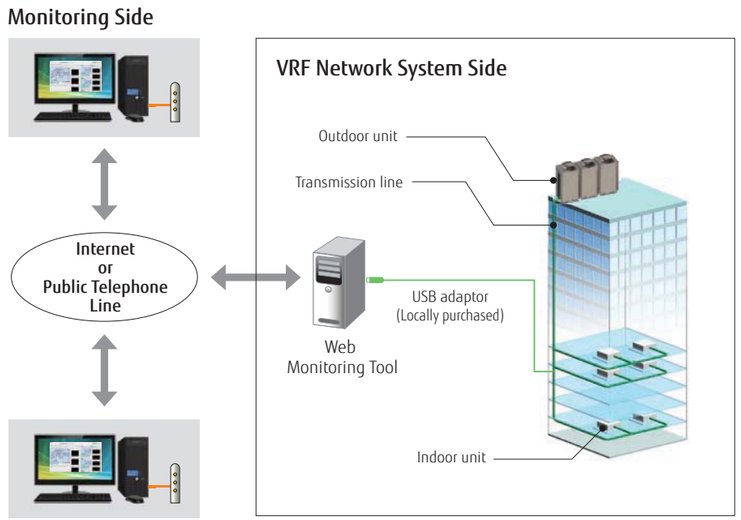
Connection to Service Tool

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



Remote monitoring

The Web Monitoring system allows you to view system operation anytime over the internet, ensuring issue free operation. The operating VRF network system in the building can be monitored real time over the Internet.



AIRSTAGE™ SERIES



The AIRSTAGE™ 6 Series has a total of 126 models to meet the environmental and building size requirements.

The AIRSTAGE™ series outdoor units were 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™ LINE-UP

- HEAT PUMP TYPE AIRSTAGE™ J-IIIL
- HEAT PUMP TYPE AIRSTAGE™ J-III
- HEAT PUMP TYPE AIRSTAGE™ J-IIS
- HEAT RECOVERY TYPE AIRSTAGE™ VR-II
- HEAT PUMP TYPE AIRSTAGE™ V-III
- HEAT PUMP TYPE AIRSTAGE™ V-III TROPICAL Series

AIRSTAGE™ LINE-UP

Fujitsu General provides multi air conditioning systems for buildings AIRSTAGE™ Series matched to the size and application of the property.

Outdoor units range

HP		4	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54
kW class		12.1	14.0	15.5	22.4	28.0	33.5	40.0	45.0	50.4	55.9	61.5	67.0	73.5	78.5	85.0	90.0	95.0	100.5	107.0	112.0	118.5	123.5	130.0	135.0	139.0	143.0	147.0
AIRSTAGE J-IIIL Heat Pump	Space saving				AJH072LELAH	AJH090LELAH	AJH108LELAH	AJH126LELAH	AJH144LELAH																			
AIRSTAGE J-III Heat Pump	High Efficiency (Single phase)	AJH040LBLAH	AJH045LBLAH	AJH054LBLAH																								
	High Efficiency (3 phase)	AJH040LELAH	AJH045LELAH	AJH050LELAH																								
AIRSTAGE J-IIS Heat Pump	Space saving	AJH040LCLAH	AJH045LCLAH	AJH054LCLAH																								
AIRSTAGE VR-II Heat Recovery	Space saving				AJHA72GALH	AJHA90GALH	AJH108GALH	AJH126GALH	AJH144GALH	AJH162GALH	AJH180GALH	AJH198GALH	AJH216GALH	AJH234GALH	AJH252GALH	AJH270GALH	AJH288GALH	AJH306GALH	AJH324GALH	AJH342GALH	AJH360GALH	AJH378GALH	AJH396GALH	AJH414GALH	AJH432GALH			
	High Efficiency								AJH144GALHH			AJH198GALHH	AJH216GALHH	AJH234GALHH	AJH252GALHH	AJH270GALHH	AJH288GALHH	AJH306GALHH	AJH324GALHH	AJH342GALHH	AJH360GALHH	AJH378GALHH	AJH396GALHH					
AIRSTAGE V-III Heat Pump	Space saving				AJH072LALBH	AJH090LALBH	AJH108LALBH	AJH126LALBH	AJH144LALBH	AJH162LALBH	AJH180LALBH	AJH198LALBH	AJH216LALBH	AJH234LALBH	AJH252LALBH	AJH270LALBH	AJH288LALBH	AJH306LALBH	AJH324LALBH	AJH342LALBH	AJH360LALBH	AJH378LALBH	AJH396LALBH	AJH414LALBH	AJH432LALBH	AJH450LALBH	AJH468LALBH	AJH486LALBH
	High Efficiency								AJH144LALBHH	AJH162LALBHH	AJH180LALBHH		AJH216LALBHH	AJH234LALBHH	AJH252LALBHH	AJH270LALBHH	AJH288LALBHH	AJH306LALBHH	AJH324LALBHH	AJH342LALBHH	AJH360LALBHH	AJH378LALBHH	AJH396LALBHH	AJH414LALBHH				
AIRSTAGE V-III TROPICAL series Heat Pump Production by order	Space saving				AJH072LNLBH	AJH090LNLBH	AJH108LNLBH	AJH126LNLBH	AJH144LNLBH	AJH162LNLBH	AJH180LNLBH	AJH198LNLBH	AJH216LNLBH	AJH234LNLBH	AJH252LNLBH	AJH270LNLBH	AJH288LNLBH	AJH306LNLBH	AJH324LNLBH	AJH342LNLBH	AJH360LNLBH	AJH378LNLBH	AJH396LNLBH	AJH414LNLBH	AJH432LNLBH	AJH450LNLBH	AJH468LNLBH	AJH486LNLBH
	High Efficiency								AJH144LNLBHH	AJH162LNLBHH	AJH180LNLBHH		AJH216LNLBHH	AJH234LNLBHH	AJH252LNLBHH	AJH270LNLBHH	AJH288LNLBHH	AJH306LNLBHH	AJH324LNLBHH	AJH342LNLBHH	AJH360LNLBHH	AJH378LNLBHH	AJH396LNLBHH	AJH414LNLBHH				

HEAT PUMP TYPE

AIRSTAGE™ J-IIIL series

Fujitsu General provides air conditioning systems
for a wide range of applications
from small office buildings and stores to large houses.

System Outline

Compact Outdoor unit

The compact and low sound level enable the units to be installed to various environment with restriction and/or limited spaces such as mechanical rooms and or rooftops.

Small room application

Up to 40 indoor units can be connected by the optimum heat exchanger structure. Available to various small rooms.

Quiet design

Top class low sound operation has been achieved. This allows installation of the units to various places without a special sound prevention work.

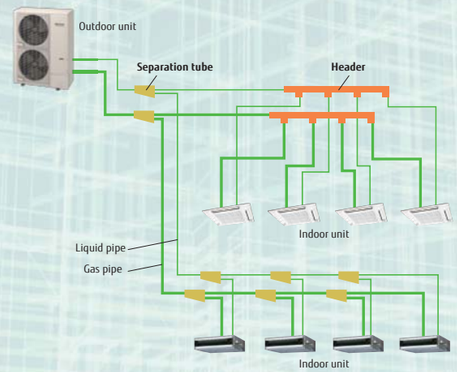
Small Office





System configuration example

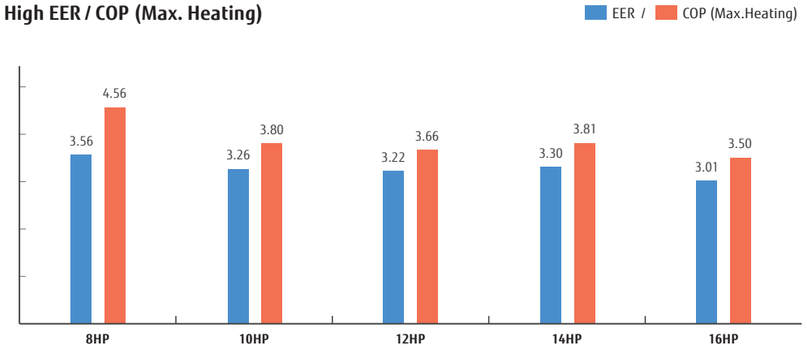
- This system is used for small and medium-sized buildings. 1 refrigerant system is used for each outdoor unit.
- Connection of multiple indoor units using separation tubes and headers.



Efficiency in actual operation

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

High EER / COP (Max. Heating)



Advanced high efficiency technology



∅570mm

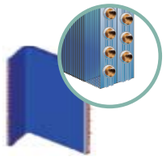
Large propeller fan

The high efficiency and the low sound operation are mutually realized by reduction of a draft loss which are enabled by the Fujitsu General's original blade design and a large diameter propeller fan.



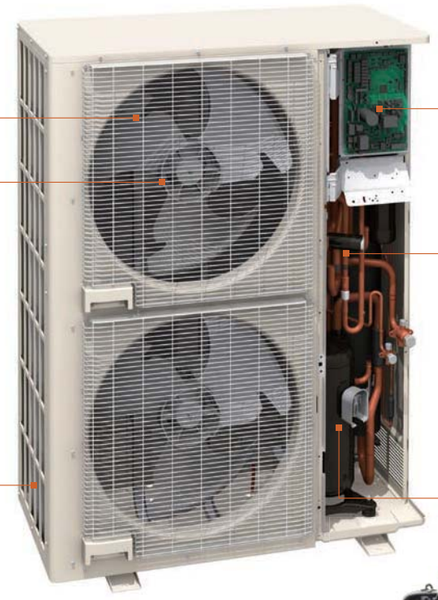
DC fan motor

Miniaturized, low noise, high efficiency, multi-stage DC fan motor is mounted.



Large heat exchanger

Heat exchange performance is substantially improved by mounting of 2.6-row large heat exchanger.





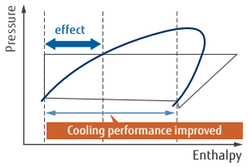
DC inverter control

Efficiency is improved by mounting of new active filter module.



Subcool heat exchanger

Cooling performance is improved by mounting of dual tube heat exchanger.



15-120 rps



Scroll compressor

The equipment of scroll compressor with a wide range of rotational frequency from 15 to 120 rps together with Fujitsu General's unique sensorless sine wave control method which smoothly control the input power run into the motor realized a mutual improvement on the energy efficient operation and the low sound operation.

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.

Image: 8/10/12 HP models

Compact Design





Inhouse installation





AIRSTAGE™ J-Series outdoor unit



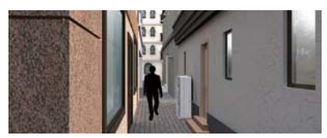
AIRSTAGE™ V-Series outdoor unit

Low noise in consideration for the nearby residents

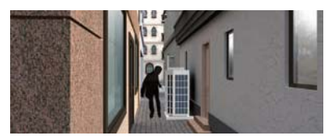
This model is front blow type and about 1000 mm wide, so flexible installation is possible even at narrow inhouse space.

Installation at building back side





AIRSTAGE™ J-Series outdoor unit



AIRSTAGE™ V-Series outdoor unit

Space saving

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

Installation at back street of building





AIRSTAGE™ J-Series outdoor unit



AIRSTAGE™ V-Series outdoor unit

Flexible installation

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

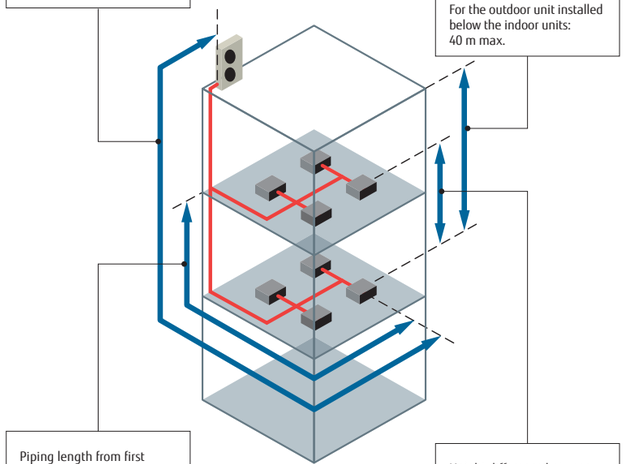
Long piping capability

Our advanced refrigerant control technology allows us to achieve a total refrigerant piping length of 400 m. This opens up new possibilities in system design.

Total pipe length
400m max.

Actual piping length
120m max.

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



Piping length from first separation tube to the farthest indoor unit
90m max.

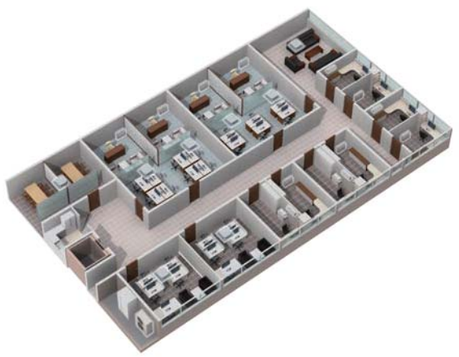
Height difference between indoor and indoor units
50m* max.

*: Only when new indoor units and J-IIIL series are combined

Up to 40 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 40 units.

*: 16HP model



High Static Pressure

External static pressure is available up to 60Pa for 14/16HP. (20Pa for 8HP, 30Pa for 10/12HP)



Top Class Low Operating Sound

Top class low operating sound is realized. Highly suited to densely populated areas thanks to their low operating sound.

Sound Power level

66 dB(A)



AIRSTAGE J-IIIL

-11 dB(A)

77 dB(A)



Current model (8HP)

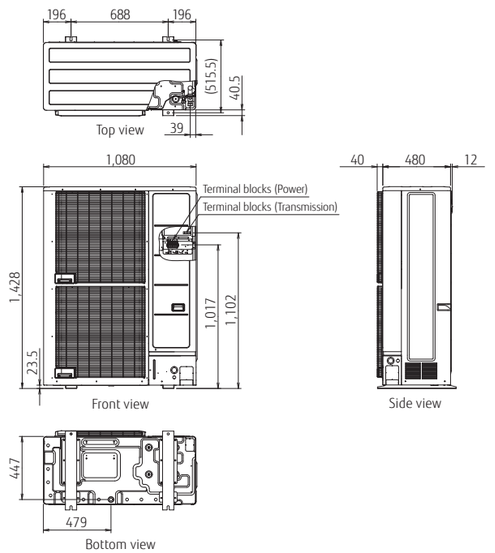
Specifications

Rating Capacity range		HP	8	10	12	14	16
Model name			AJH072LELAH	AJH090LELAH	AJH108LELAH	AJH126LELAH	AJH144LELAH
Maximum Connectable Indoor Unit			1-20	1-25	1-30	1-36	1-40
Power source			3-phase, ~400V, 50Hz				
Capacity	Cooling	kW	22.4	28.0	33.5	40.0	45.0
	Nominal Heating		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		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	8,400	9,000	11,000	13,000	14,000
Sound pressure level / Power level	Cooling	dB (A)	52 / 66	54/69	59/73	62/75	64/77
	Heating		54 /-	57/-	61/-	63/-	65/-
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 (Global Warming Potential)		R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)
	Charge	kg(CO2eq-T)	7.0 (14.6)	7.5 (15.7)	7.5 (15.7)	11.0 (22.9)	11.0 (22.9)
Connection pipe diameter	Liquid	mm	9.52	9.52	12.70	12.70	12.70
	Gas		19.05	22.20	28.58	28.58	28.58
Total pipe length		m	400	400	400	400	400
Max. Height difference			50/40 (Outdoor unit: Upper/Lower)				
Operation range	Cooling	°C	-15 to 46	-15 to 46	-15 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 : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.
* 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.

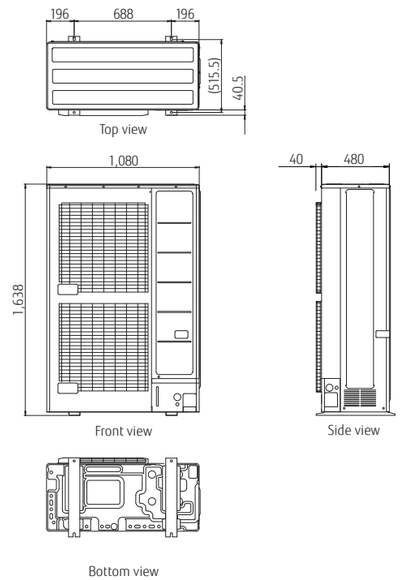
Dimensions

Models : AJH072LELAH / AJH090LELAH / AJH108LELAH



Models : AJH126LELAH / AJH108LELAH

(Unit : mm)



HEAT PUMP TYPE

AIRSTAGE™ J-III series

Fujitsu General provides air conditioning systems
for a wide range of applications
from small office buildings and stores to large houses.

System Outline

High Energy Efficiency

Heat pump inverter control is used to achieve an efficient cooling and heating operation in any indoor unit combination.

Flexible systems for small- and medium-size buildings air conditioning

Space saving design and long piping design allow for flexible installation on the roofs or balconies of small- and medium-size buildings.
Multiple indoor units of various capacities and types can be connected.

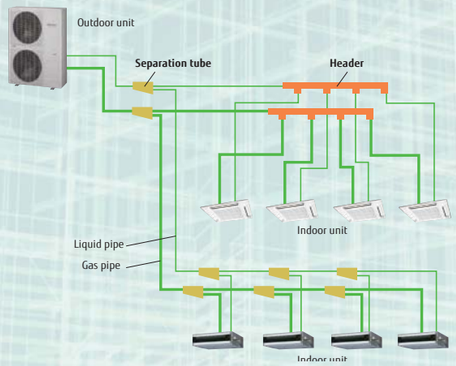
Small Office





System configuration example

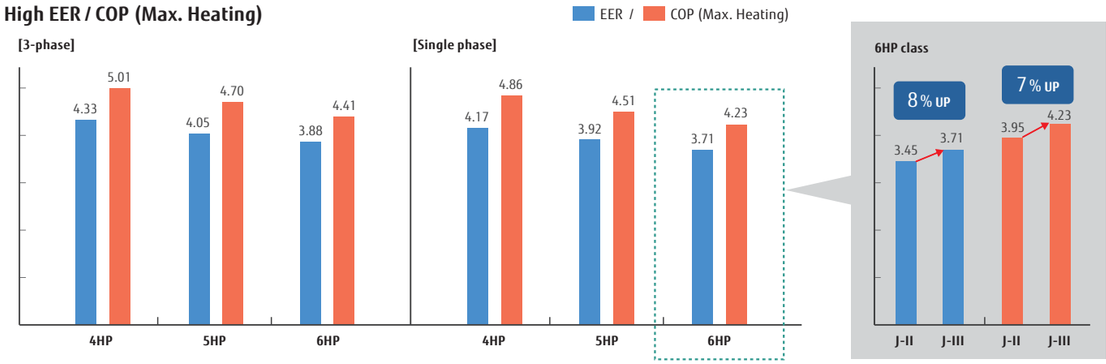
- This system is used for small and medium-sized buildings. 1 refrigerant system is used for each outdoor unit.
- Connection of multiple indoor units using separation tubes and headers.



Efficiency in actual operation

Top class high COP (Max. Heating) is achieved for all models by large heat exchanger, high efficient DC twin compressor, and our own technologies.

High EER / COP (Max. Heating)



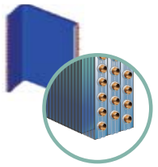
Advanced high efficiency technology



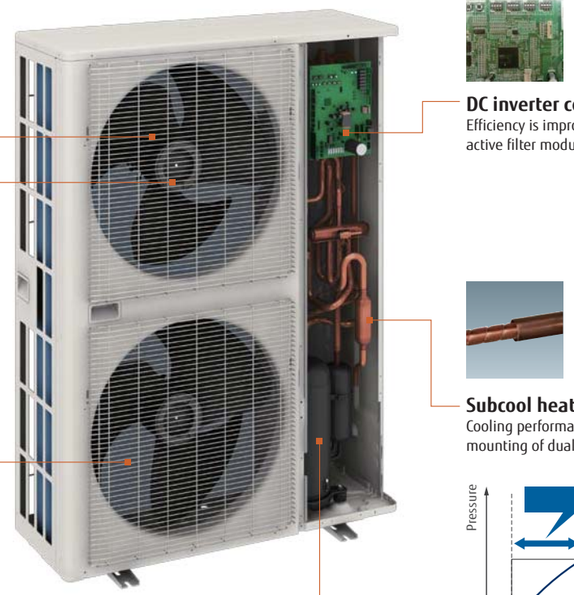
Large propeller fan
High performance and low noise realized by large propeller and optimization of angle.



DC fan motor
Miniaturized, low noise, high efficiency, multi-stage DC fan motor is mounted.

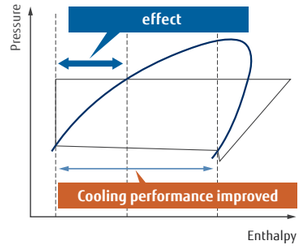


Large heat exchanger
Heat exchange performance is substantially improved by mounting of 3-row large heat exchanger.



DC inverter control
Efficiency is improved by mounting of new active filter module.

Subcool heat exchanger
Cooling performance is improved by mounting of dual tube heat exchanger.



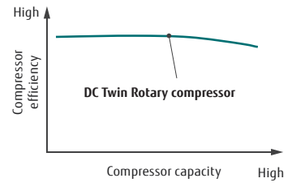
High efficiency compressor motor

Optimized refrigerant flow design

Highly accurate parts



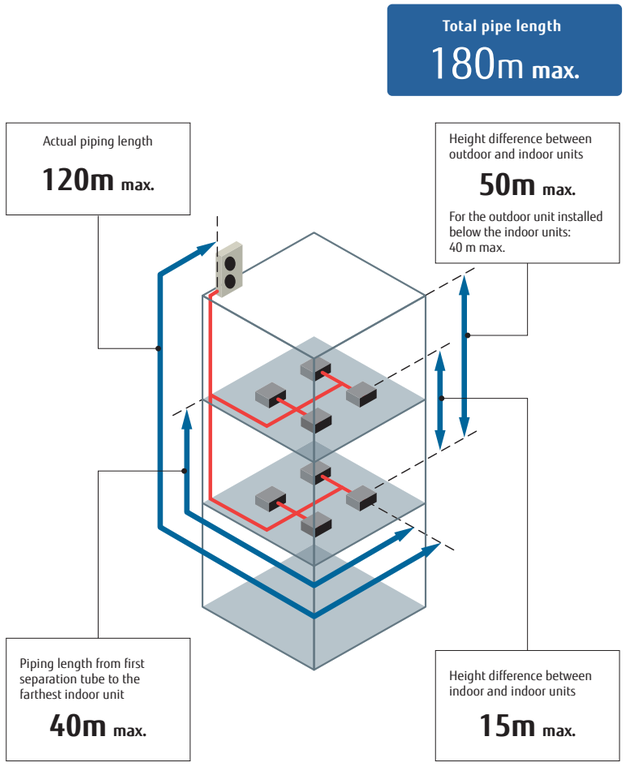
DC twin rotary compressor
Efficiency in all load regions is good. Especially good performance from low to medium at normal operation.



Long piping capability

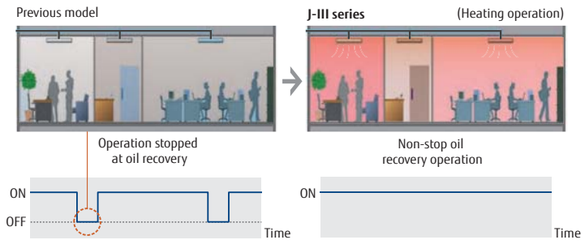
Our advanced refrigerant control technology allows us to achieve a total refrigerant piping length of 180m. This opens up new possibilities in system design.





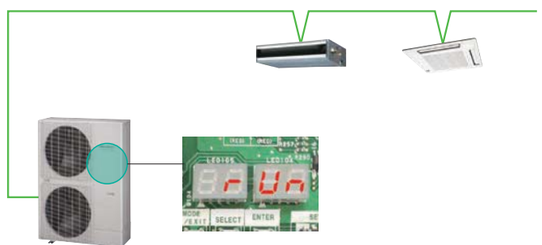
Non-stop oil recovery operation

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



Easier Installation

Connection check function : Possible to confirm whether wiring connection and address setting are correct by a quick check run function.



- Display connected indoor unit numbers
- Duplicately set address number of indoor unit can be displayed

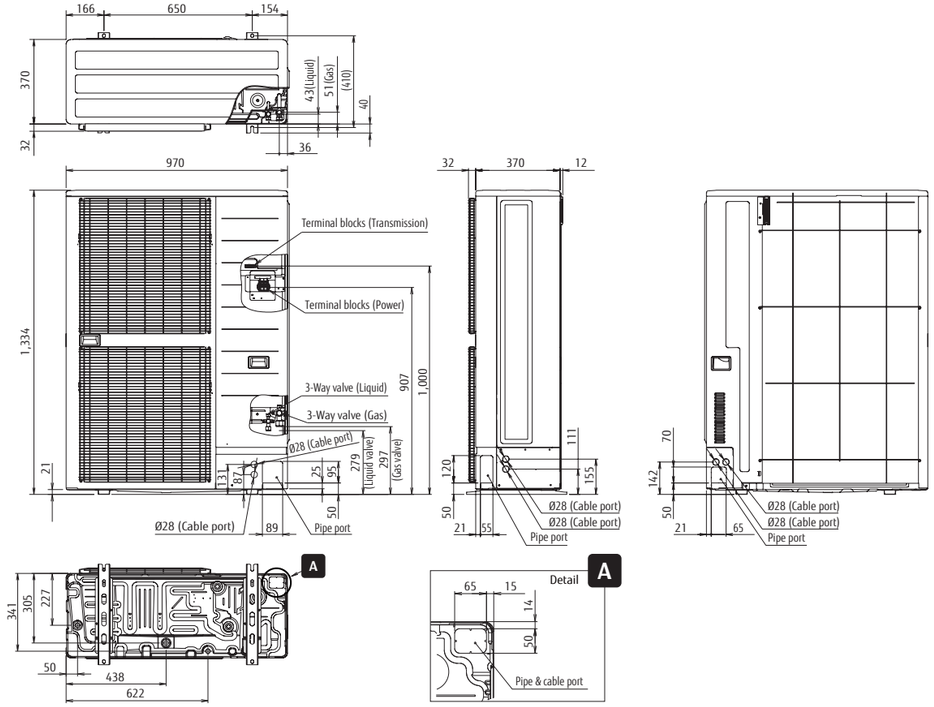
Specifications

Rating Capacity range		HP	4	5	6	4	5	6
Model name			AJH040LBLAH	AJH045LBLAH	AJH054LBLAH	AJH040LELAH	AJH045LELAH	AJH054LELAH
Maximum Connectable Indoor Unit			1-9	1-10	1-13	1-9	1-10	1-13
Power source			Single-phase, ~230V, 50Hz			3-phase, ~400V, 50Hz		
Capacity	Cooling	kW	12.1	14.0	15.5	12.1	14.0	15.5
	Nominal Heating		12.1	14.0	15.5	12.1	14.0	15.5
	Max Heating		13.6	16.0	18.0	13.6	16.0	18.0
Input power	Cooling	kW	2.90	3.57	4.18	2.79	3.46	3.99
	Nominal Heating		2.30	2.83	3.28	2.23	2.71	3.14
	Max Heating		2.80	3.55	4.26	2.71	3.40	4.08
EER	Cooling	W/W	4.17	3.92	3.71	4.33	4.05	3.88
COP	Nominal Heating		5.27	4.96	4.74	5.44	5.17	4.94
	Max Heating		4.86	4.51	4.23	5.01	4.70	4.41
Air flow rate		m3/h	6,200	6,400	6,900	6,200	6,400	6,900
Sound pressure level / Power level	Cooling	dB (A)	50 / 66	51 / 67	53 / 69	50 / 66	51 / 67	53 / 69
	Heating		52 / 68	53 / 69	55 / 71	52 / 68	53 / 69	55 / 71
Heat exchanger fin			Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
Dimensions	Height	mm	1,334	1,334	1,334	1,334	1,334	1,334
	Width		970	970	970	970	970	970
	Depth		370	370	370	370	370	370
Weight		kg	117	117	119	119	119	119
Refrigerant	Type (Global Warming Potential)		R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)
	Charge	kg(CO2eq-T)	4.8 (10.0)	5.3 (11.1)	5.3 (11.1)	4.8 (10.0)	5.3 (11.1)	5.3 (11.1)
Connection pipe diameter	Liquid	mm	9.52	9.52	9.52	9.52	9.52	9.52
	Gas		15.88	15.88	19.05	15.88	15.88	19.05
Total pipe length		m	180	180	180	180	180	180
Max. Height difference			50/40 (Outdoor unit: Upper/Lower)			50/40 (Outdoor unit: Upper/Lower)		
Operation range	Cooling	°C	-5 to 46	-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	-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 : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.
The protective function may work when using it outside the operation range.

Dimensions

Models : AJH040LBLAH / AJH045LBLAH / AJH054LBLAH / AJH040LELAH / AJH045LELAH / AJH054LELAH (Unit : mm)



HEAT PUMP TYPE

AIRSTAGE™ J-IIS series

Fujitsu General provides air conditioning systems
for a wide range of applications
from small office buildings and stores to large houses.

System Outline

Space saving and low sound level design

Economical individual air conditioning is realized by ALL-DC technology, large capacity DC twin rotary compressor, and 3-row heat exchanger though the size is compact.

Flexible systems for homes, shops, small-size buildingss air conditioning

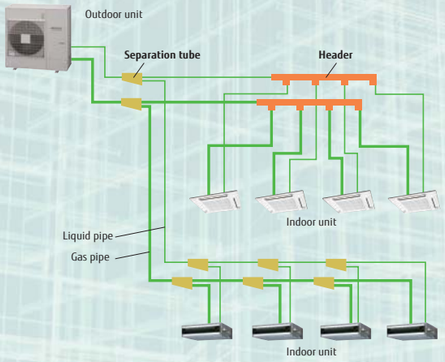
Due to compact size design and flexible piping design, J-IIS series can be installed easily at the place where the installation space is limited such as homes, shops, and small offices. Multiple indoor units of various capacities and types can be connected.

Large Homes

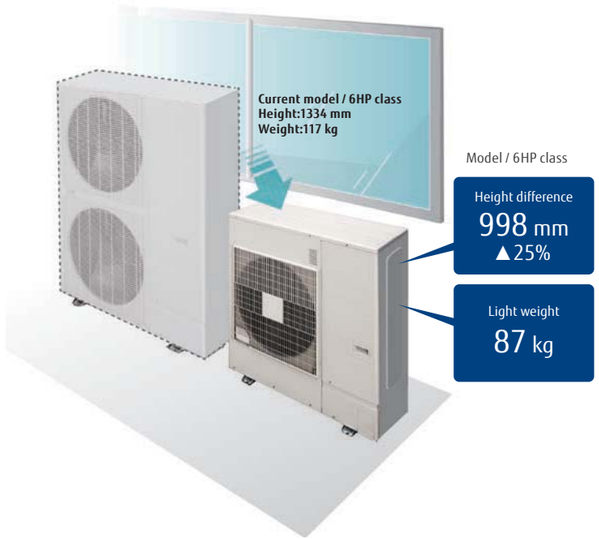




System configuration example



It Can be Easily Carried and Installed Obscure Place



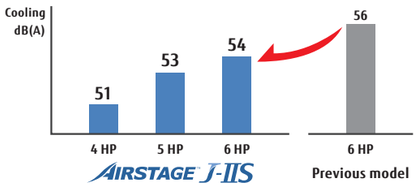
Small and light weight outdoor unit

This model is much more compact than conventional 6HP comparable outdoor units. Even when installed on the balcony it fits within the height of the fence. The compact size with a height of less than 1 m allows it to be installed under windows and 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.



Advanced high efficiency technology



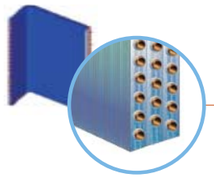
Large propeller fan

High performance and low noise realized by large propeller and optimization of angle.



DC fan motor

Miniaturized, low noise, high efficiency, multi-stage DC fan motor is mounted.



Large heat exchanger

Heat exchange performance is substantially improved by mounting of 3-row large heat exchanger.

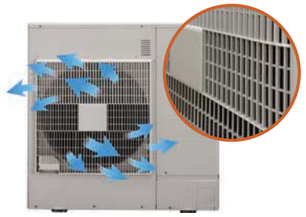


High heat transfer copper tube (Improved lead angle)



Smooth airflow grille

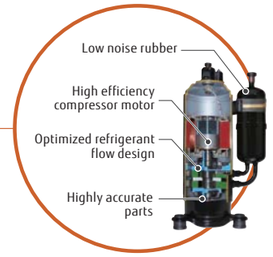
This grille was aerodynamically designed for good efficiency with little blow loss.





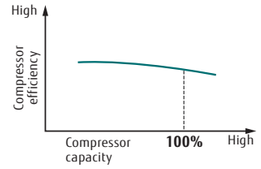
DC inverter control

Efficiency is improved by mounting of new active filter module.



Compact and high performance DC twin rotary compressor

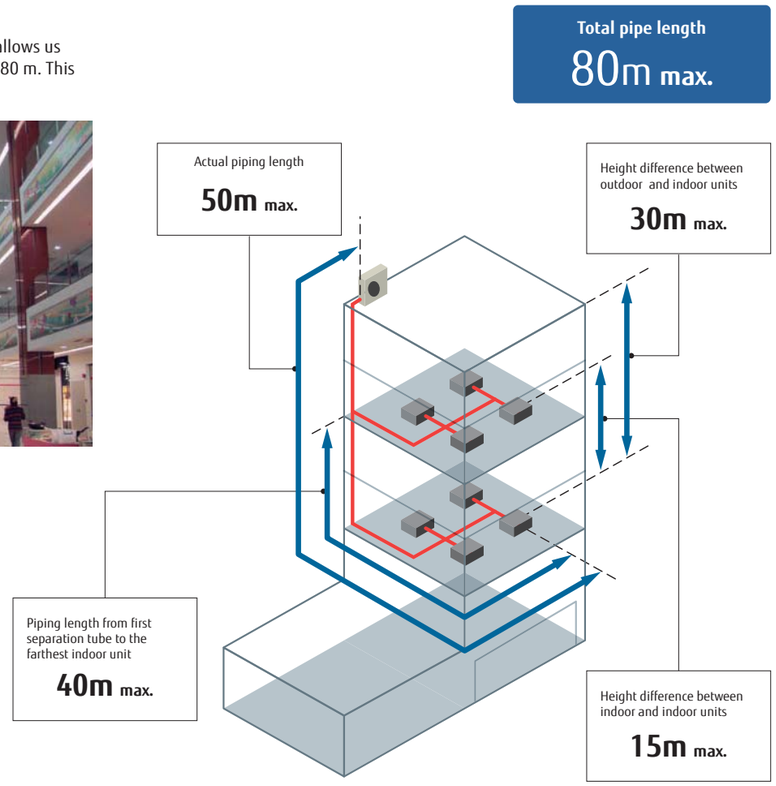
Efficiency in all load regions is good. Especially good performance from low to medium at normal operation.



Long Piping Length

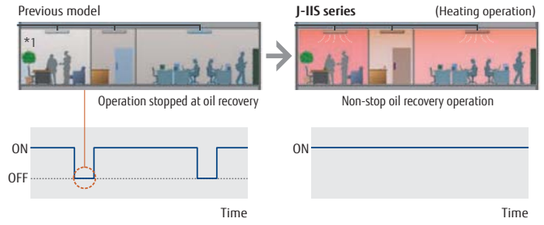
Our advanced refrigerant control technology allows us to achieve a total refrigerant piping length of 80 m. This opens up new possibilities in system design.





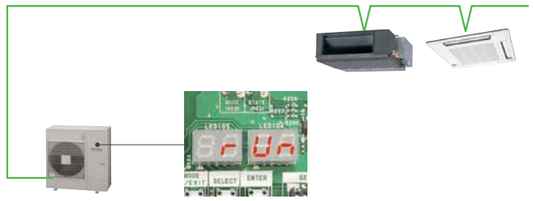
Non-stop oil recovery operation

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



Easier Installation

Connection check function : Possible to confirm whether wiring connection and address setting are correct by a quick check run function.



- Display connected indoor unit numbers
- Duplicately set address number of indoor unit can be displayed

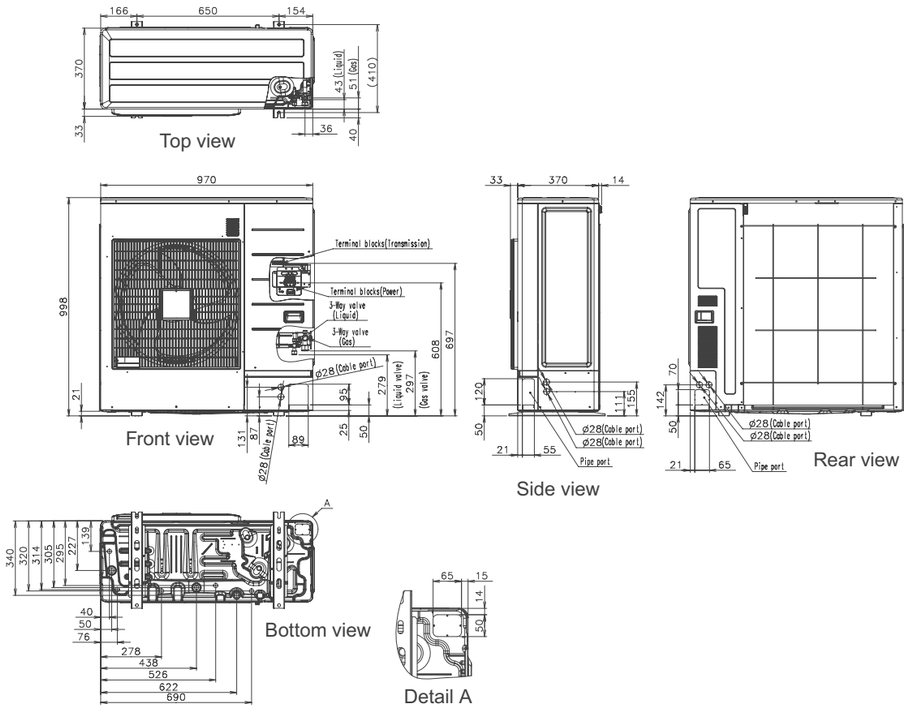
Specifications

Rating Capacity range		HP	4	5	6
Model name			AJH040LCLAH	AJH045LCLAH	AJH054LCLAH
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	4.43	5.03
	Nominal Heating		2.51	3.11	3.52
	Max Heating		3.09	3.93	4.11
EER	Cooling	W/W	3.52	3.16	3.00
COP	Nominal Heating		4.83	4.51	4.30
	Max Heating		4.40	4.07	4.01
Air flow rate		m³/h	4,040	4,200	4,200
Sound pressure level / Power level	Cooling	dB (A)	51 / 67	53 / 69	54 / 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 (Global Warming Potential)		R410A (2,088)	R410A (2,088)	R410A (2,088)
	Charge	kg(CO2eq-T)	4.0 (8.4)	4.0 (8.4)	4.0 (8.4)
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	30
Operation 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 : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.
The protective function may work when using it outside the operation range.

Dimensions

Models : AJH040LCLAH / AJH045LCLAH / AJH054LCLAH (Unit : mm)



HEAT RECOVERY TYPE

AIRSTAGE™ VR-II series

Smart and cutting edge design
Extensive lineup from 8HP to 48HP in 2HP increment
Connectable indoor unit capacity ratio up to 150%

System Outline

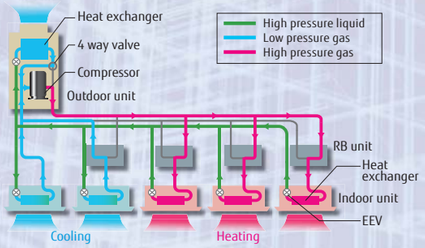
Simultaneous cooling and heating operation using 1 refrigerant system
Cooling and heating can be freely selected for each indoor unit to provide simultaneous cooling and heating in rooms with large temperature differences.

Annual cooling operation
Use annual cooling operation for the rooms and other spaces that require constant temperature control throughout the year.

Handles changes in the temperature difference
The operation mode can be freely changed when there are large temperature differences during the day, such as between seasons.

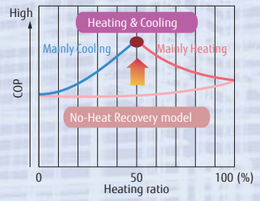
Large Building





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.

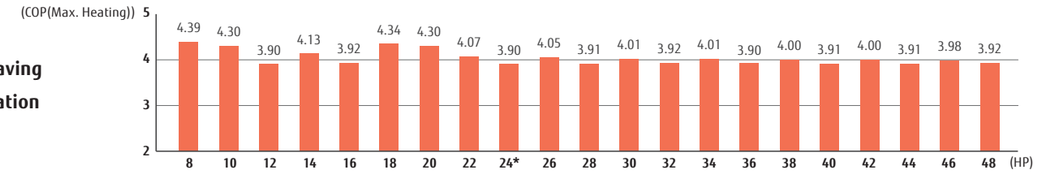
Our Heat recovery systems achieve high operating energy efficiency by drawing heat from the room to be cooled and transferring it as energy for rooms that are to be heated.



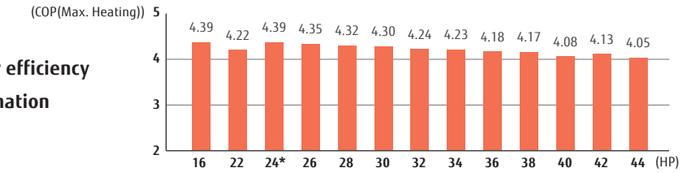
Efficiency in actual operation

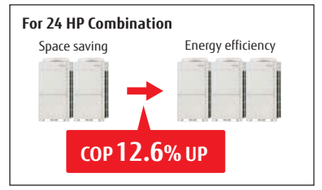
Top class high COP(Max. Heating) is achieved for all combinations by our unique heat exchanger structure, high efficient DC twin compressor, and our own technologies.

Space saving combination



Energy efficiency combination





Energy saving technology that boosted operation efficiency



Powerful large propeller fan
By using CFD*1 technology, a newly designed fan achieves high performance and low noise operation.

*1. CFD = Computational Fluid Dynamics



3 phase DC fan motor
Efficiency is substantially improved by high efficient motor with sophisticated driver control. In addition, low noise is realized by DC fan motor.



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



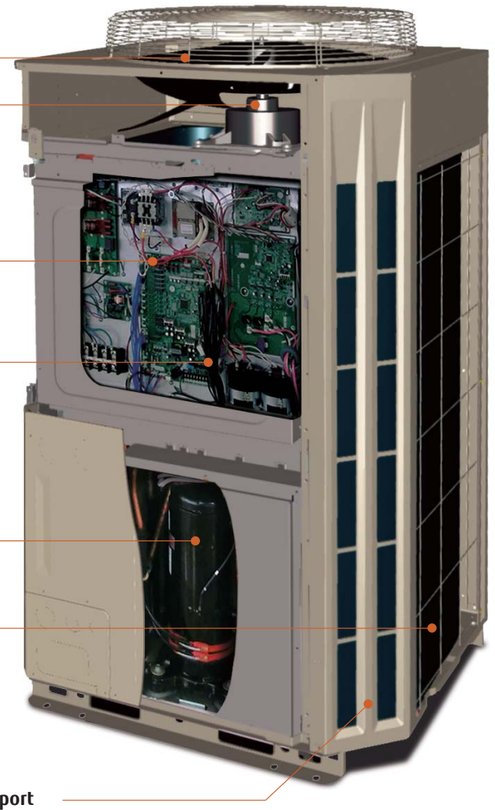
Sine-wave DC inverter control
High efficiency is realized by adoption of reduced switching loss IPM.

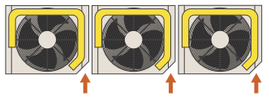


High efficient compressor Large capacity DC inverter compressor
Large capacity high efficient DC twin rotary compressor with excellent intermediate capability.



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







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



All inverter compressor

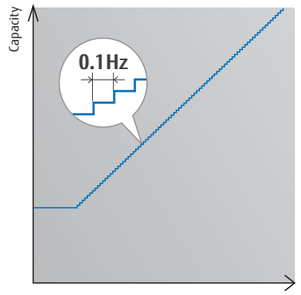
Large capacity DC inverter compressor

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



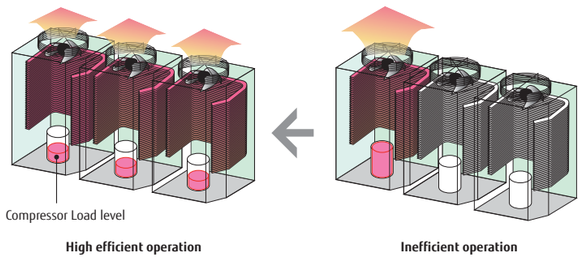
High efficient compressor speed control

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



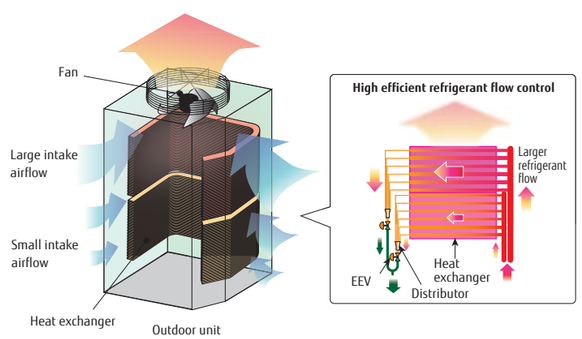
Multiple outdoor operation control

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 which allows for the overall system efficiency to be improved.



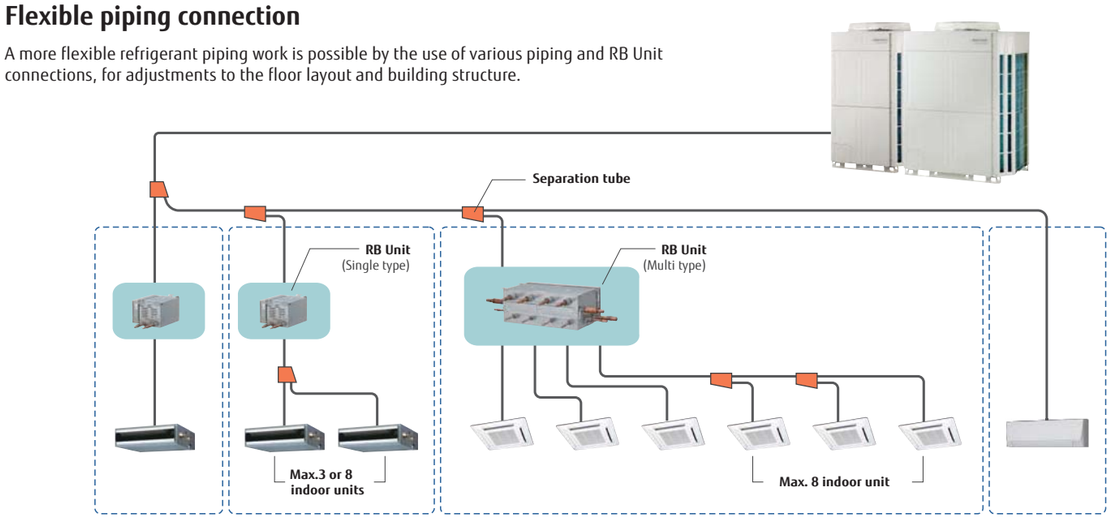
Heat exchanger refrigerant control

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.



Flexible piping connection

A more flexible refrigerant piping work is possible by the use of various piping and RB Unit connections, for adjustments to the floor layout and building structure.

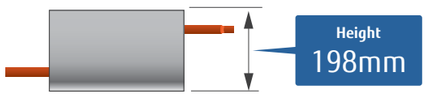


	Single connection	Group connection	Single connection & Group connection	RB Unit less connection*2
Application	Individual cooling and heating	Simultaneous cooling and heating	Individual cooling and heating	Simultaneous cooling and heating / Cooling only

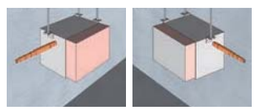
- The RB unit can be freely positioned between the first branch and the indoor unit.
- The maximum height difference between RB units is 15 m.

*2. RB Unit is not necessary for cooling only use.

Flexible installation of RB unit



- Small & slim design saves space
- A drain pipe is not required
- The control box position can be changed to meet the installation conditions

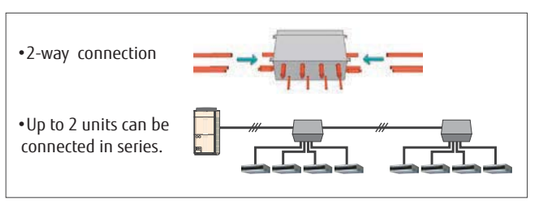


Installation possible from either side for freedom of the control box



Installation possible on the upper-side for use in narrow space

- Small design saves space
- A drain pipe is not required
- Simple installation series connection design



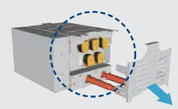


RB unit (single type)

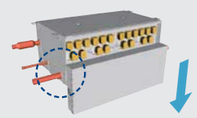


RB unit (multi type)

Easy to maintenance in a narrow space

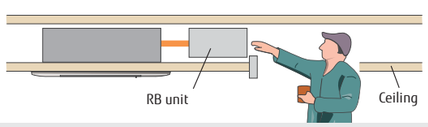


- Maintenance can be performed from the side.



- Electrics box can be temporarily fixed by sliding down.

- Parts can be replaced easily even at narrow space in the ceiling.



• Combinations other than the followings are not recommended.

Space saving combinations

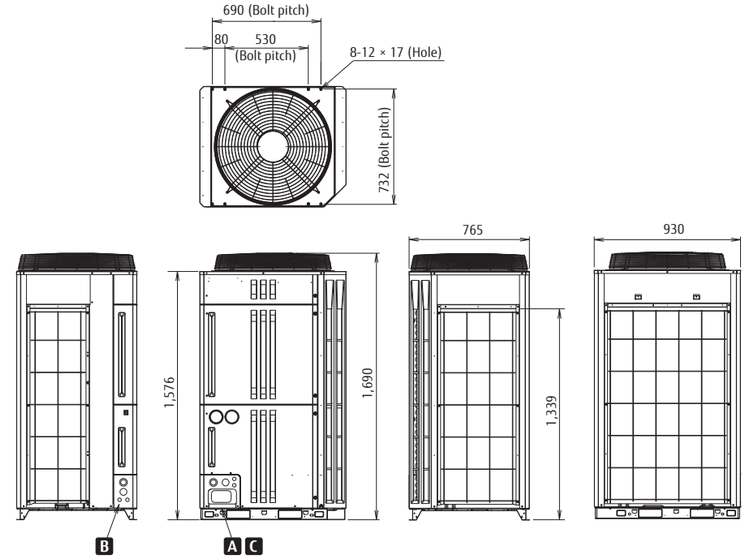
22.4kW (8HP) AJHA72GALH UNIT : AJHA72GALH	28.0kW (10HP) AJHA90GALH UNIT : AJHA90GALH	33.5kW (12HP) AJH108GALH UNIT : AJH108GALH	40.0kW (14HP) AJH126GALH UNIT : AJH126GALH	45.0kW (16HP) AJH144GALH UNIT : AJH144GALH
50.4kW (18HP) AJH162GALH UNIT : AJHA90/A72GALH	56.0kW (20HP) AJH180GALH UNIT : AJHA90/A90GALH	61.5kW (22HP) AJH198GALH UNIT : AJH108/A90GALH	67.0kW (24HP) AJH216GALH UNIT : AJH108/108GALH	73.0kW (26HP) AJH234GALH UNIT : AJH144/90GALH
78.5kW (28HP) AJH252GALH UNIT : AJH144/108GALH	85.0kW (30HP) AJH270GALH UNIT : AJH144/126GALH	90.0kW (32HP) AJH288GALH UNIT :AJH144/144GALH	95.0kW (34HP) AJH306GALH UNIT : AJH108/108/A90GALH	100.5kW (36HP) AJH324GALH UNIT : AJH108/108/108GALH
106.5kW (38HP) AJH342GALH UNIT : AJH144/108/A90GALH	112.0kW (40HP) AJH360GALH UNIT : AJH144/108/108GALH	118.0kW (42HP) AJH378GALH UNIT : AJH144/144/A90GALH	123.5kW (44HP) AJH396GALH UNIT : AJH144/144/108GALH	130.0kW (46HP) AJH414GALH UNIT : AJH144/144/126GALH
135.0kW (48HP) AJH432GALH UNIT : AJH144/144/144GALH				

Energy efficiency combinations

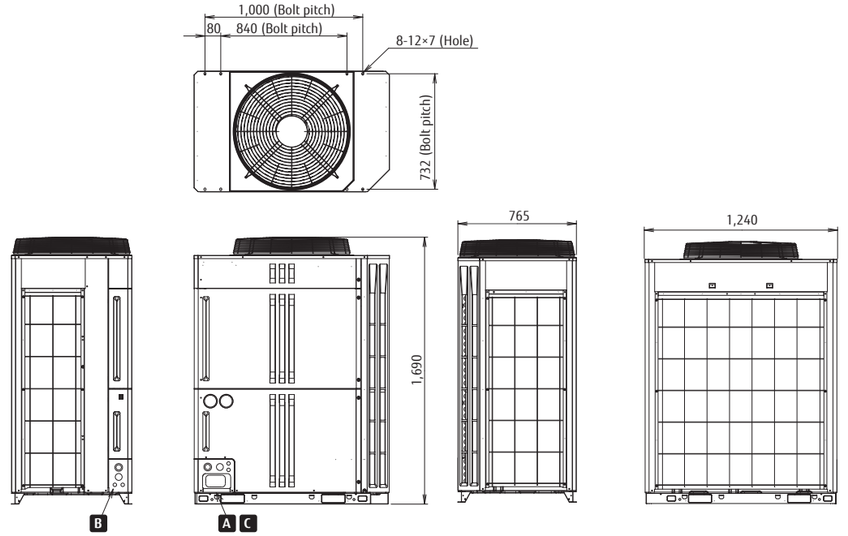
44.8kW (16HP) AJH144GALHH UNIT : AJHA72/A72GALH	62.4kW (22HP) AJH198GALHH UNIT : AJH126/A72GALH	67.2kW (24HP) AJH216GALHH UNIT : AJHA72/A72/A72GALH	72.8kW (26HP) AJH234LALHH UNIT : AJHA90/A72/A72LALH	78.4kW (28HP) AJH252GALHH UNIT : AJHA90/A90/A72GALH
84.0kW (30HP) AJH270GALHH UNIT : AJHA90/A90/A90GALH	90.4kW (32HP) AJH288GALHH UNIT : AJH126/A90/A72GALH	96.0kW (34HP) AJH306GALHH UNIT : AJH126/A90/A90GALH	102.4kW (36HP) AJH324GALHH UNIT : AJH126/126/A72GALH	108.0kW (38HP) AJH342GALHH UNIT : AJH126/126/A90GALH
113.0kW (40HP) AJH360GALHH UNIT : AJH144/126/A90GALH	120.0kW (42HP) AJH378GALHH UNIT : AJH126/126/126GALH	125.0kW (44HP) AJH396GALHH UNIT : AJH144/126/126GALH		

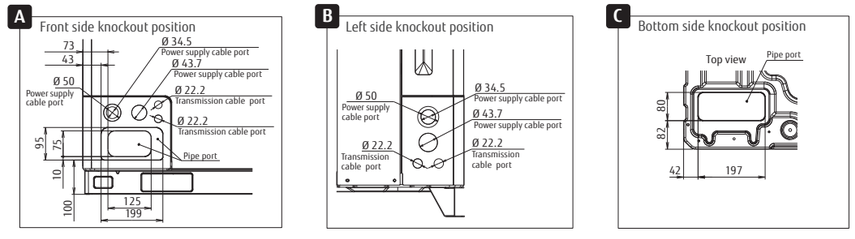
Dimensions

8,10,12HP : AJHA72GALH / AJHA90GALH / AJH108GALH (Unit : mm)



14,16HP : AJH126GALH / AJH144GALH (Unit : mm)





Space Saving Combinations

Rating Capacity range		HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
Model name			AJHA72GALH	AJHA90GALH	AJH108GALH	AJH126GALH	AJH144GALH	AJH162GALH	AJH180GALH	AJH198GALH	AJH216GALH	AJH234GALH	AJH252GALH	AJH270GALH	AJH288GALH	AJH306GALH	AJH324GALH	AJH342GALH	AJH360GALH	AJH378GALH	AJH396GALH	AJH414GALH	AJH432GALH
Unit 1			AJHA72GALH	AJHA90GALH	AJH108GALH	AJH126GALH	AJH144GALH	AJHA90GALH AJHA72GALH	AJHA90GALH AJHA90GALH	AJH108GALH AJHA90GALH	AJH108GALH AJH108GALH	AJH144GALH AJHA90GALH	AJH144GALH AJH108GALH	AJH144GALH AJH126GALH	AJH144GALH AJH144GALH	AJH108GALH AJH108GALH AJHA90GALH	AJH108GALH AJH108GALH AJH108GALH	AJH144GALH AJH108GALH AJHA90GALH	AJH144GALH AJH108GALH AJH108GALH	AJH144GALH AJH144GALH AJHA90GALH	AJH144GALH AJH144GALH AJH108GALH	AJH144GALH AJH144GALH AJH126GALH	AJH144GALH AJH144GALH AJH144GALH
Maximum Connectable Indoor Unit*1			15	16	17	21	24	32	30	32	35	39	42	45	48	50	53	57	60	63	64	64	64
Indoor unit connectable capacity	Cooling	kW	11.2-33.6	14.0-42.0	16.8-50.2	20.0-60.0	22.5-67.5	25.2-75.6	28.0-84.0	30.8-92.2	33.5-100.5	36.5-109.5	39.3-117.7	42.5-127.5	45.0-135.0	47.5-142.5	50.3-150.7	53.3-159.7	56.0-168.0	59.0-177.0	61.8-185.2	65.0-195.0	67.5-202.5
Power source			3-phase 4 wire, 400 V, 50Hz									3-phase 4 wire, 400 V, 50Hz											
Capacity	Cooling	kW	22.4	28.0	33.5	40.0	45.0	50.4	56.0	61.5	67.0	73.0	78.5	85.0	90.0	95.0	100.5	106.5	112.0	118.0	123.5	130.0	135.0
	Nominal Heating		22.4	28.0	33.5	40.0	45.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Max Heating		25.0	31.5	37.5	45.0	50.0	56.5	63.0	69.0	75.0	81.5	87.5	95.0	100.0	106.5	112.5	119.0	125.0	131.5	137.5	145.0	150.0
Input power	Cooling	kW	5.45	7.11	9.75	11.34	13.61	12.56	14.22	16.86	19.50	20.72	23.36	24.95	27.22	26.61	29.25	30.47	33.11	34.33	36.97	38.56	40.83
	Nominal Heating		4.73	6.00	7.89	8.85	10.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Max Heating		5.70	7.33	9.62	10.90	12.77	13.03	14.66	16.95	19.24	20.10	22.39	23.67	25.54	26.57	28.86	29.72	32.01	32.87	35.16	36.44	38.31
EER	Cooling	W/W	4.11	3.94	3.44	3.53	3.31	4.01	3.94	3.65	3.44	3.52	3.36	3.41	3.31	3.57	3.44	3.50	3.38	3.44	3.34	3.37	3.31
COP	Nominal Heating		4.74	4.67	4.25	4.52	4.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Max Heating		4.39	4.30	3.90	4.13	3.92	4.34	4.30	4.07	3.90	4.05	3.91	4.01	3.92	4.01	3.90	4.00	3.91	4.00	3.91	3.98	3.92
Air flow rate	High	m³/h	11,100	11,100	11,100	13,000	13,000	11,100×2	11,100×2	11,100×2	11,100×2	13,000+11,100	13,000+11,100	13,000×2	13,000×2	11,100×3	11,100×3	13,000+11,100×2	13,000+11,100×2	13,000×2+11,100	13,000×2+11,100	13,000×3	13,000×3
Sound pressure level*2 / Power level	Cooling	dB (A)	56 / 77	58 / 79	59 / 80	60 / 81	61 / 82	60 / 81	61 / 82	62 / 83	62 / 83	63 / 84	63 / 84	64 / 84.5	64 / 85	63 / 85	64 / 85	64 / 85	65 / 85.5	65 / 86	65 / 86	65 / 86	66 / 87
	Heating		58 / 80	59 / 81	61 / 83	61 / 83	61 / 83	62 / 84	62 / 84	63 / 85	64 / 86	63 / 85	64 / 86	64 / 86	64 / 86	65 / 87.2	65 / 87	65 / 87	66 / 87.7	65 / 87	66 / 88	66 / 88	66 / 88
Maximum external static pressure		Pa	80	80	80	80	80	80	80	80	80	80	80	80	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	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
Heat exchanger fin			Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue 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	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
	Width		930	930	930	1,240	1,240	930×2	930×2	930×2	930×2	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
	Depth		765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765
Weight		kg	262	262	262	286	286	262×2	262×2	262×2	262×2	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
Refrigerant	Type (Global Warming Potential)		R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)
	Charge	kg(CO2eq-T)	11.8 (24.6)	11.8 (24.6)	11.8 (24.6)	11.8 (24.6)	11.8 (24.6)	11.8×2	11.8×2 (24.6×2)	11.8×2 (24.6×2)	11.8×2 (24.6×2)	11.8×2 (24.6×2)	11.8×2 (24.6×2)	11.8×2 (24.6×2)	11.8×2 (24.6×2)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)
Connection pipe diameter	Liquid	mm	12.70	12.70	12.70	12.70	12.70	15.88	15.88	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	Discharge Gas		15.88	19.05	19.05	22.22	22.22	22.22	22.22	28.58	28.58	28.58	28.58	28.58	28.58	28.58	28.58	34.92	34.92	34.92	34.92	34.92	34.92
	Suction Gas		22.22	22.22	28.58	28.58	28.58	28.58	28.58	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
Operation 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	-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
	Heating		-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	-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		-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	-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

Rating Capacity range		HP	16	22	24	26	28	30	32	34	36	38	40	42	44
Model name			AJH144GALHH	AJH198GALHH	AJH216GALHH	AJH234GALHH	AJH252GALHH	AJH270GALHH	AJH288GALHH	AJH306GALHH	AJH324GALHH	AJH342GALHH	AJH360GALHH	AJH378GALHH	AJH396GALHH
Unit 1			AJHA72GALH	AJH126GALH	AJHA72GALH	AJHA90GALH	AJHA90GALH	AJHA90GALH	AJH126GALH	AJH126GALH	AJH126GALH	AJH126GALH	AJH144GALH	AJH126GALH	AJH144GALH
Unit 2			AJHA72GALH	AJHA72GALH	AJHA72GALH	AJHA72GALH	AJHA90GALH	AJHA90GALH	AJHA90GALH	AJHA90GALH	AJH126GALH	AJH126GALH	AJH126GALH	AJH126GALH	AJH126GALH
Unit 3					AJHA72GALH	AJHA72GALH	AJHA72GALH	AJHA90GALH	AJHA72GALH	AJHA90GALH	AJHA72GALH	AJHA90GALH	AJHA90GALH	AJH126GALH	AJH126GALH
Maximum Connectable Indoor Unit*1			24	33	36	39	42	45	48	51	54	57	60	64	64
Indoor unit connectable capacity	Cooling	kW	22.4-67.2	31.2-93.6	33.6-100.8	36.4-109.2	39.2-117.6	42.0-126.0	45.2-135.6	48.0-144.0	51.2-153.6	54.0-162.0	56.5-169.5	60.0-180.0	62.5-187.5
Power source			3-phase 4 wire, 400 V, 50Hz									3-phase 4 wire, 400 V, 50Hz			
Capacity	Cooling	kW	44.8	62.4	67.2	72.8	78.4	84.0	90.4	96.0	102.4	108.0	113.0	120.0	125.0
	Nominal Heating		—	—	—	—	—	—	—	—	—	—	—	—	—
	Max Heating		50.0	70.0	75.0	81.5	88.0	94.5	101.5	108.0	115.0	121.5	126.5	135.0	140.0
Input power	Cooling	kW	10.90	16.79	16.35	18.01	19.67	21.33	23.90	25.56	28.13	29.79	32.06	34.02	36.29
	Nominal Heating		—	—	—	—	—	—	—	—	—	—	—	—	—
	Max Heating		11.40	16.60	17.10	18.73	20.36	21.99	23.93	25.56	27.50	29.13	31.00	32.70	34.57
EER	Cooling	W/W	4.11	3.72	4.11	4.04	3.99	3.94	3.78	3.76	3.64	3.63	3.52	3.53	3.44
COP	Nominal Heating		—	—	—	—	—	—	—	—	—	—	—	—	—
	Max Heating		4.39	4.22	4.39	4.35	4.32	4.30	4.24	4.23	4.18	4.17	4.08	4.13	4.05
Air flow rate	High	m³/h	11,100×2	13,000+11,100	11,100×3	11,100×3	11,100×3	11,100×3	13,000+11,100×2	13,000+11,100×2	13,000×2+11,100	13,000×2+11,100	13,000×2+11,100	13,000×3	13,000×3
Sound pressure level*2 / Power level	Cooling	dB (A)	59 / 80	61 / 82	61 / 82	62 / 83	62 / 83	63 / 84	63 / 84	64 / 85	64 / 85	64 / 86	65 / 86	65 / 86	65 / 86
	Heating		61 / 83	63 / 85	63 / 85	63 / 85	63 / 85	64 / 86	64 / 86	65 / 87	65 / 87	65 / 87	65 / 87	66 / 88	66 / 88
Maximum external static pressure		Pa	80	80	80	80	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	7.5×3	11.0+7.5×2	11.0+7.5×2	11.0×2+7.5	11.0×2+7.5	11.0×2+7.5	11.0×3	11.0×3
Heat exchanger fin			Blue fin	Blue fin	Blue fin	Blue 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	1,690	1,690	1,690	1,690
	Width		930×2	1,240+930	930×3	930×3	930×3	930×3	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
	Depth		765	765	765	765	765	765	765	765	765	765	765	765	765
Weight		kg	262×2	286+262	262×3	262×3	262×3	262×3	286+262×2	286+262×2	286×2+262	286×2+262	286×2+262	286×3	286×3
Refrigerant	Type (Global Warming Potential)		R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)
	Charge	kg(CO2eq-T)	11.8×2 (24.6×2)	11.8×2 (24.6×2)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)
Connection pipe diameter	Liquid	mm	12.70	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	Discharge Gas		22.22	28.58	28.58	28.58	28.58	28.58	28.58	28.58	28.58	34.92	34.92	34.92	34.92
	Suction Gas		28.58	34.92	34.92	34.92	34.92	34.92	34.92	34.92	41.27	41.27	41.27	41.27	41.27
Operation 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	-10 to 46	-10 to 46	-10 to 46	-10 to 46
	Heating		-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	-20 to 21
	Cooling/Heating		-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	-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 : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

*1 : Minimum connectable indoor unit number is 2.
*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.

HEAT PUMP TYPE

AIRSTAGE™ V-III series

Smart and cutting edge design
Extensive lineup from 8HP to 54HP in 2HP increment
Connectable indoor unit capacity ratio up to 150%

System Outline

Excellent energy saving

Heat pump inverter type realizes the highly energy saving air conditioning for individual cooling and heating operation by all inverter technology for seasonal efficiency.

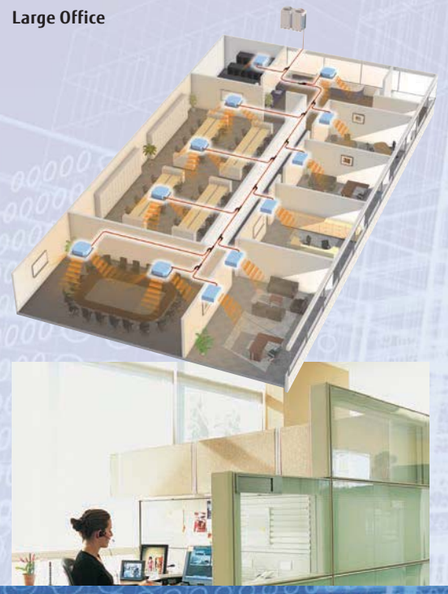
High design flexibility for various building air conditioning

High design flexibly meets the various needs of high-rise building air conditioning such as outdoor unit roof top concentrated installation and each floor installation by large capacity combination, sufficient connection capacity, and high static pressure design.

Easy installation and maintenance

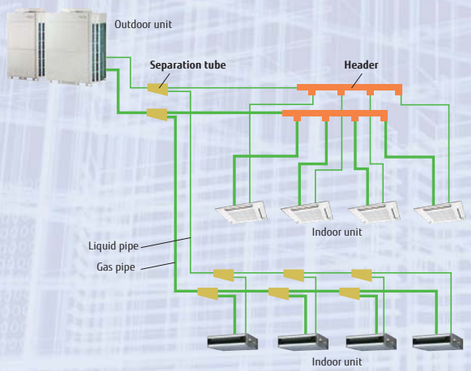
The flexible communication method and piping connections makes installation and maintenance easy even for large systems.

Large Office



System configuration example

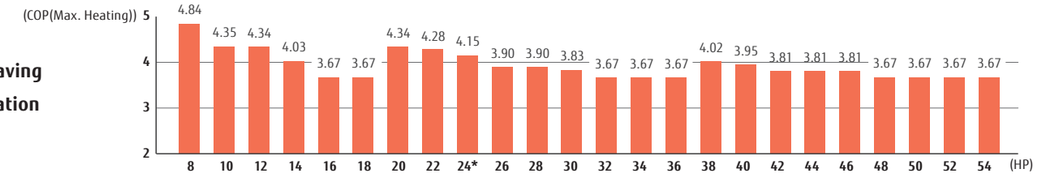
- This system is used for medium-sized and large buildings. Connecting each outdoor unit makes it possible to create a high-capacity system.
- Connection of multiple indoor units using separation tubes and headers.



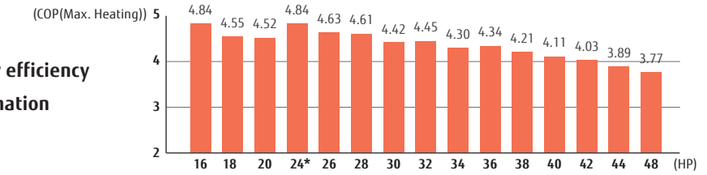
Efficiency in actual operation

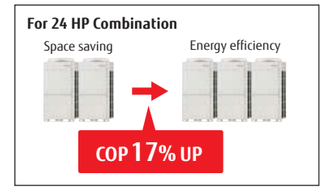
Top class high COP (Max. Heating) is realized for all combinations by our unique heat exchanger structure, high efficient DC twin compressor, and other our own technologies.

Space saving combination



Energy efficiency combination





Energy saving technology that boosted operation efficiency



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



3 phase DC fan motor
Efficiency is substantially improved by high efficient motor with sophisticated driver control. In addition, low noise is realized by DC fan motor.



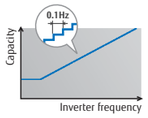
Subcool heat exchanger
High Heat Exchange efficiency is achieved by using an internal projection shape double pipe construction.



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



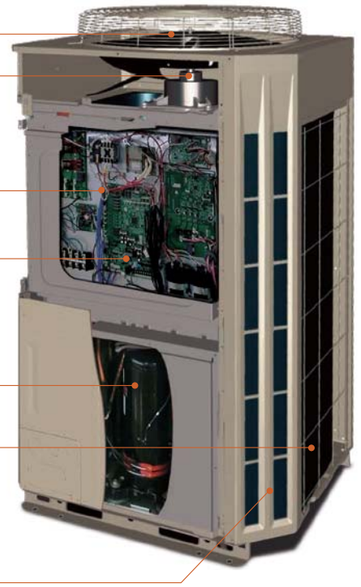
High efficient & Large capacity ALL DC inverter compressor
Large capacity high efficient DC twin rotary compressor with 0.1Hz steps compressor speed control





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

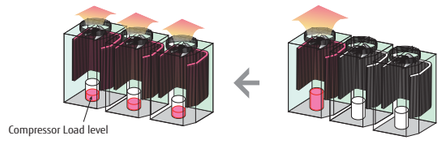
Front intake port (corner cut air inhaling structure)



Advanced energy saving control

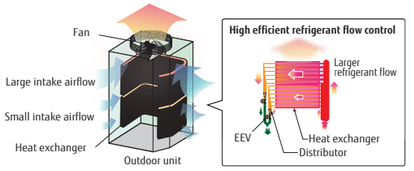
Multiple outdoor operation control

This control method operates all compressors at part load and distributes refrigerant to all heat exchangers to improve the overall system efficiency.



Heat exchanger refrigerant control

The efficiency of the top and bottom heat exchanger in the outdoor unit has been improved by adopting an optimum refrigerant path control.



Outdoor units lineup

• Combinations other than the followings are not recommended.

Space saving Combinations

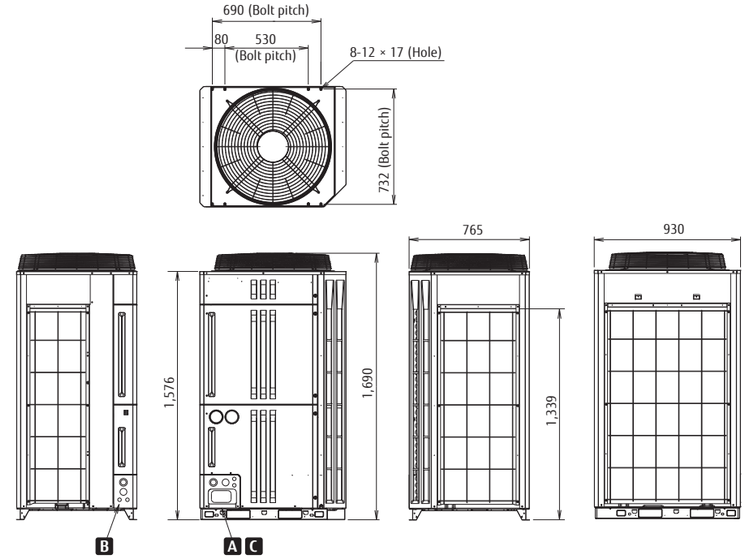
22.4kW (8HP) AJH072LALBH UNIT : AJH072LALBH	28.0kW (10HP) AJH090LALBH UNIT : AJH090LALBH	33.5kW (12HP) AJH108LALBH UNIT : AJH108LALBH	40.0kW (14HP) AJH126LALBH UNIT : AJH126LALBH	45.0kW (16HP) AJH144LALBH UNIT : AJH144LALBH
50.0 kW (18HP) AJH162LALBH UNIT : AJH162LALBH	56.0kW (20HP) AJH180LALBH UNIT : AJH090/090LALBH	62.4 kW (22HP) AJH198LALBH UNIT : AJH126/072LALBH	68.0 kW (24HP) AJH216LALBH UNIT : AJH126/090LALBH	73.0 kW (26HP) AJH234LALBH UNIT : AJH144/090LALBH
78.0 kW (28HP) AJH252LALBH UNIT : AJH162/090LALBH	85.0 kW (30HP) AJH270LALBH UNIT : AJH144/126LALBH	90.0 kW (32HP) AJH288LALBH UNIT : AJH144/144LALBH	95.0 kW (34HP) AJH306LALBH UNIT : AJH162/144LALBH	100.0 kW (36HP) AJH324LALBH UNIT : AJH162/162LALBH
106.0 kW (38HP) AJH342LALBH UNIT : AJH162/090/090LALBH	113.0 kW (40HP) AJH360LALBH UNIT : AJH144/126/090LALBH	118.0 kW (42HP) AJH378LALBH UNIT : AJH144/144/090LALBH	123.0 kW (44HP) AJH396LALBH UNIT : AJH162/144/090LALBH	128.0 kW (46HP) AJH414LALBH UNIT : AJH162/162/090LALBH
135.0 kW (48HP) AJH432LALBH UNIT : AJH144/144/144LALBH	140.0 kW (50HP) AJH450LALBH UNIT : AJH162/144/144LALBH	145.0 kW (52HP) AJH468LALBH UNIT : AJH162/162/144LALBH	150.0 kW (54HP) AJH486LALBH UNIT : AJH162/162/162LALBH	

Energy efficiency Combinations

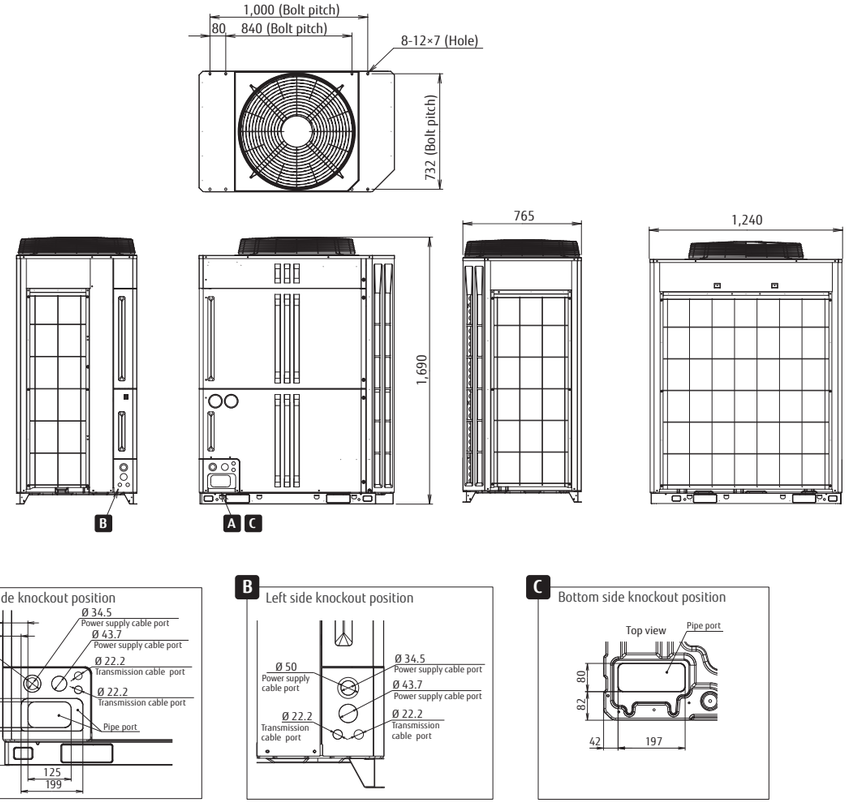
44.8 kW (16HP) AJH144LALBHH UNIT : AJH072/072LALBH	50.4kW (18HP) AJH162LALBHH UNIT : AJH090/072LALBH	55.9 kW (20HP) AJH180LALBH UNIT : AJH108/072LALBH	67.2 kW (24HP) AJH216LALBHH UNIT : AJH072/072/072LALBH	72.8 kW (26HP) AJH234LALBHH UNIT : AJH090/072/072LALBH
78.3 kW (28HP) AJH252LALBHH UNIT : AJH108/072/072LALBH	84.8 kW (30HP) AJH270LALBHH UNIT : AJH126/072/072LALBH	89.4 kW (32HP) AJH288LALBHH UNIT : AJH108/108/072LALBH	95.9 kW (34HP) AJH306LALBHH UNIT : AJH126/108/072LALBH	100.5 kW (36HP) AJH324LALBHH UNIT : AJH108/108/108LALBH
107.0 kW (38HP) AJH342LALBHH UNIT : AJH126/108/108LALBH	113.5 kW (40HP) AJH360LALBHH UNIT : AJH126/126/108LALBH	120.0 kW (42HP) AJH378LALBHH UNIT : AJH126/126/126LALBH	125.0 kW (44HP) AJH396LALBHH UNIT : AJH144/126/108LALBH	130.0 kW (46HP) AJH414LALBHH UNIT : AJH144/144/126LALBH

Dimensions

8,10HP : AJH072LALBH / AJH090LALBH (Unit : mm)



12,14,16,18HP : AJH108LALBH / AJH126LALBH / AJH144LALBH / AJH162LALBH (Unit : mm)



AIRSTAGE V-III

Space Saving combinations

Rating Capacity range		HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54
Model name			AJH072LALBH	AJH090LALBH	AJH108LALBH	AJH126LALBH	AJH144LALBH	AJH162LALBH	AJH180LALBH	AJH198LALBH	AJH216LALBH	AJH234LALBH	AJH252LALBH	AJH270LALBH	AJH288LALBH	AJH306LALBH	AJH324LALBH	AJH342LALBH	AJH360LALBH	AJH378LALBH	AJH396LALBH	AJH414LALBH	AJH432LALBH	AJH450LALBH	AJH468LALBH	AJH486LALBH
Unit 1			AJH072LALBH	AJH090LALBH	AJH108LALBH	AJH126LALBH	AJH144LALBH	AJH162LALBH	AJH090LALBH AJH090LALBH	AJH126LALBH AJH072LALBH	AJH126LALBH AJH090LALBH	AJH144LALBH AJH090LALBH	AJH162LALBH AJH090LALBH	AJH144LALBH AJH126LALBH	AJH144LALBH AJH144LALBH	AJH162LALBH AJH144LALBH	AJH162LALBH AJH162LALBH	AJH162LALBH AJH090LALBH	AJH144LALBH AJH126LALBH	AJH144LALBH AJH144LALBH	AJH162LALBH AJH144LALBH	AJH162LALBH AJH162LALBH	AJH144LALBH AJH144LALBH	AJH162LALBH AJH144LALBH	AJH162LALBH AJH162LALBH	AJH162LALBH AJH162LALBH
Unit 2																		AJH090LALBH	AJH090LALBH	AJH090LALBH	AJH090LALBH	AJH090LALBH	AJH144LALBH	AJH144LALBH	AJH144LALBH	AJH162LALBH
Unit 3																										
Maximum Connectable Indoor Unit*1			17	21	26	30	34	39	43	47	52	56	60	64	64	64	64	64	64	64	64	64	64	64	64	64
Indoor unit connectable capacity	Cooling	kW	11.2-33.6	14.0-42.0	16.8-50.2	20.0-60.0	22.5-67.5	25.0-67.5	28.0-84.0	31.2-93.6	34.0-102.0	36.5-109.5	39.0-109.5	42.5-127.5	45.0-135.0	47.5-135.0	50.0-135.0	53.0-151.5	56.5-169.5	59.0-177.0	61.5-177.0	64.0-177.0	67.5-202.5	70.0-202.5	72.5-202.5	75.0-202.5
Power source			3-phase 4 wire, 400 V, 50Hz											3-phase 4 wire, 400 V, 50Hz												
Capacity	Cooling	kW	22.4	28.0	33.5	40.0	45.0	50.0	56.0	62.4	68.0	73.0	78.0	85.0	90.0	95.0	100.0	106.0	113.0	118.0	123.0	128.0	135.0	140.0	145.0	150.0
	Nominal Heating		22.4	28.0	33.5	40.0	45.0	50.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Max Heating		25.0	31.5	37.5	45.0	50.0	50.0	63.0	70.0	76.5	81.5	81.5	95.0	100.0	100.0	100.0	113.0	126.5	131.5	131.5	131.5	150.0	150.0	150.0	150.0
Input power	Cooling	kW	5.20	7.28	8.96	10.96	13.01	16.56	14.56	16.16	18.24	20.29	23.84	23.97	26.02	29.57	33.12	31.12	31.25	33.30	36.85	40.40	39.03	42.58	46.13	49.68
	Nominal Heating		4.31	5.98	7.10	8.97	11.09	13.63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Max Heating		5.17	7.25	8.65	11.17	13.63	13.63	14.50	16.34	18.42	20.88	20.88	24.80	27.26	27.26	27.26	28.13	32.05	34.51	34.51	34.51	40.89	40.89	40.89	40.89
EER	Cooling	W/W	4.31	3.85	3.74	3.65	3.46	3.02	3.85	3.86	3.73	3.60	3.27	3.55	3.46	3.21	3.02	3.41	3.62	3.54	3.34	3.17	3.46	3.29	3.14	3.02
COP	Nominal Heating		5.20	4.69	4.72	4.46	4.06	3.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Max Heating		4.84	4.35	4.34	4.03	3.67	3.67	4.34	4.28	4.15	3.90	3.90	3.83	3.67	3.67	3.67	4.02	3.95	3.81	3.81	3.81	3.67	3.67	3.67	3.67
Air flow rate	High	m^3/h	11,100	11,100	13,000	13,000	13,700	13,700	11,100×2	13,000+11,100	13,000+11,100	13,000+11,100	13,700+11,100	13,700+13,000	13,700×2	13,700×2	13,700×2	13,700+11,100×2	13,700+13,000+11,100	13,700×2+11,100	13,700×2+11,100	13,700×2+11,100	13,700×3	13,700×3	13,700×3	13,700×3
Sound pressure level*2 / Power level	Cooling	dB (A)	56 / 77	58 / 79	57 / 78	60 / 81	62 / 83	63 / 84	61 / 82	61 / 82	62 / 83	63 / 84	64 / 85	64 / 85	65 / 88	66 / 87	66 / 87	65 / 86	65 / 86	66 / 87	66 / 87	67 / 87	67 / 88	67 / 88	67 / 88	68 / 89
	Heating		58 / 80	59 / 81	60 / 83	62 / 84	64 / 86	64 / 86	62 / 84	63 / 85	64 / 86	65 / 87	65 / 87	66 / 88	67 / 89	67 / 89	67 / 89	66 / 88	67 / 89	68 / 90	68 / 90	68 / 90	69 / 91	69 / 91	69 / 91	69 / 91
Maximum external static pressure		Pa	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
Compressor motor output		kW	7.5	7.5	11.0	11.0	11.0	11.0	7.5×2	11.0+7.5	11.0+7.5	11.0+7.5	11.0+7.5	11.0×2	11.0×2	11.0×2	11.0×2	11.0+7.5×2	11.0×2+7.5	11.0×2+7.5	11.0×2+7.5	11.0×2+7.5	11.0×3	11.0×3	11.0×3	11.0×3
Heat exchanger fin			Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue 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	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
	Width		930	930	1,240	1,240	1,240	1,240	930×2	1,240+930	1,240+930	1,240+930	1,240+930	1,240×2	1,240×2	1,240×2	1,240×2	1,240+930×2	1,240×2+930	1,240×2+930	1,240×2+930	1,240×2+930	1,240×3	1,240×3	1,240×3	1,240×3
	Depth		765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765
Weight		kg	252	252	275	275	275	275	252×2	275+252	275+252	275+252	275+252	275×2	275×2	275×2	275×2	275+252×2	275×2+252	275×2+252	275×2+252	275×2+252	275×3	275×3	275×3	275×3
Refrigerant	Type (Global Warming Potential)		R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)
	Charge	kg(CO2eq-T)	11.7 (24.4)	11.7 (24.4)	11.8 (24.6)	11.8 (24.6)	11.8 (24.6)	11.8 (24.6)	11.7×2 (24.4×2)	11.8+11.7 (24.6+24.4)	11.8+11.7 (24.6+24.4)	11.8+11.7 (24.6+24.4)	11.8+11.7 (24.6+24.4)	11.8×2 (24.6×2)	11.8×2 (24.6×2)	11.8×2 (24.6×2)	11.8×2 (24.6×2)	11.8+11.7×2 (24.6+24.4×2)	11.8×2+11.7 (24.6×2+24.4)	11.8×2+11.7 (24.6×2+24.4)	11.8×2+11.7 (24.6×2+24.4)	11.8×2+11.7 (24.6×2+24.4)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)
Connection pipe diameter	Liquid	mm	12.70	12.70	12.70	12.70	12.70	15.88	15.88	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	Discharge Gas		22.22	22.22	28.58	28.58	28.58	28.58	28.58	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	41.27	41.27	41.27
Operation range	Cooling	˚C	-15 to 46	-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	-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	-5 to 46	-5 to 46
	Heating		-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	-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

Energy Efficiency combinations

Rating Capacity range		HP	16	18	20	24	26	28	30	32	34	36	38	40	42	44	46
Model name			AJH144LALBHH	AJH162LALBHH	AJH180LALBHH	AJH216LALBHH	AJH234LALBHH	AJH252LALBHH	AJH270LALBHH	AJH288LALBHH	AJH306LALBHH	AJH324LALBHH	AJH342LALBHH	AJH360LALBHH	AJH378LALBHH	AJH396LALBHH	AJH414LALBHH
Unit 1			AJH072LALBH	AJH090LALBH	AJH108LALBH	AJH072LALBH	AJH090LALBH	AJH108LALBH	AJH126LALBH	AJH108LALBH	AJH126LALBH	AJH108LALBH	AJH126LALBH	AJH126LALBH	AJH126LALBH	AJH144LALBH	AJH144LALBH
Unit 2			AJH072LALBH	AJH072LALBH	AJH072LALBH	AJH072LALBH	AJH072LALBH	AJH072LALBH	AJH072LALBH	AJH108LALBH	AJH108LALBH	AJH108LALBH	AJH108LALBH	AJH126LALBH	AJH126LALBH	AJH126LALBH	AJH144LALBH
Unit 3						AJH072LALBH	AJH072LALBH	AJH072LALBH	AJH072LALBH	AJH072LALBH	AJH072LALBH	AJH108LALBH	AJH108LALBH	AJH108LALBH	AJH108LALBH	AJH126LALBH	AJH126LALBH
Maximum Connectable Indoor Unit*1			34	39	43	52	56	60	64	64	64			64	64	64	64
Indoor unit connectable capacity	Cooling	kW	22.4-67.2	25.2-75.6	28.0-83.8	33.6-100.8	36.4-109.2	39.2-117.4	42.4-127.2	44.7-134.1	48.0-143.8	50.3-150.7	53.5-160.5	56.8-170.2	60.0-180.0	62.5-187.5	65.0-195.0
Power source			3-phase 4 wire, 400 V, 50Hz											3-phase 4 wire, 400 V, 50Hz			
Capacity	Cooling	kW	44.8	50.4	55.9	67.2	72.8	78.3	84.8	89.4	95.9	100.5	107.0	113.5	120.0	125.0	130.0
	Nominal Heating		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Max Heating		50.0	56.5	62.5	75.0	81.5	87.5	95.0	100.0	107.5	112.5	120.0	127.5	135.0	140.0	145.0
Input power	Cooling	kW	10.40	12.48	14.16	15.60	17.68	19.36	21.36	23.12	25.12	26.88	28.88	30.88	32.88	34.93	36.98
	Nominal Heating		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Max Heating		10.34	12.42	13.82	15.51	17.59	18.99	21.51	22.47	24.99	25.95	28.47	30.99	33.51	35.97	38.43
EER	Cooling	W/W	4.31	4.04	3.95	4.31	4.12	4.04	3.97	3.87	3.82	3.74	3.70	3.68	3.65	3.58	3.52
COP	Nominal Heating		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Max Heating		4.84	4.55	4.52	4.84	4.63	4.61	4.42	4.45	4.30	4.34	4.21	4.11	4.03	3.89	3.77
Air flow rate	High	m^3/h	11,100×2	11,100×2	13,000+11,100	11,100×3	11,000×3	13,000+11,100×2	13,000+11,100×2	13,000×2+11,100	13,000×2+11,100	13,000×3	13,000×3	13,000×3	13,000×3	13,700+13,000×2	13,700×2+13,000
Sound pressure level*2 / Power level	Cooling	dB (A)	59 / 80	60 / 81	60 / 81	61 / 82	62 / 83	61 / 82	63 / 84	61 / 82	63 / 84	63 / 83	64 / 84	64 / 85	65 / 88	66 / 87	66 / 87
	Heating		61 / 83	62 / 84	62 / 85	63 / 85	63 / 85	64 / 86	65 / 87	64 / 87	65 / 88	65 / 88	65 / 88	66 / 88	67 / 89	68 / 90	68 / 90
Maximum external static pressure		Pa	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
Compressor motor output		kW	7.5×2	7.5×2	11.0+7.5	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	11.0×3	11.0×3	11.0×3	11.0×3
Heat exchanger fin			Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue 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	1,690	1,690	1,690	1,690	1,690	1,690
	Width		930×2	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	1,240×3	1,240×3	1,240×3	1,240×3	1,240×3
	Depth		765	765	765	765	765	765	765	765	765	765	765	765	765	765	765
Weight		kg	252×2	252×2	275+252	252×3	252×3	275+252×2	275+252×2	275×2+252	275×2+252	275×3	275×3	275×3	275×3	275×3	275×3
Refrigerant	Type (Global Warming Potential)		R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)
	Charge	kg(CO2eq-T)	11.7×2 (24.4×2)	11.7×2 (24.4×2)	11.8+11.7 (24.6+24.4)	11.7×3 (24.4×3)	11.7×3 (24.4×3)	11.8+11.7×2 (24.6+24.4×2)	11.8+11.7×2 (24.6+24.4×2)	11.8×2+11.7 (24.6×2+24.4)	11.8×2+11.7 (24.6×2+24.4)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)
Connection pipe diameter	Liquid	mm	12.70	15.88	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	Discharge Gas		28.58	28.58	28.58	34.92	34.92	34.92	34.92	34.92	34.92	41.27	41.27	41.27	41.27	41.27	41.27
Operation 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	-5 to 46	-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	-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

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.

*1 : Minimum connectable indoor unit number is 2.
However ARXC72 and ARXC90 can be used 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.

HEAT PUMP TYPE

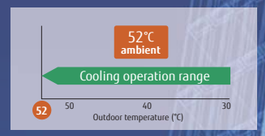
AIRSTAGE™ V-III TROPICAL series

TROPICAL SPEC

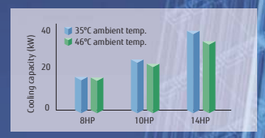
Fujitsu General tropical VRF is designed for tropical weather.
Extensive lineup from 8HP to 54HP in 2HP increment
Connectable indoor unit capacity ratio up to 130%

System Outline

High ambient operation design
Possible to operate cooling up to 52°C outdoor temperature



Powerful cooling capacity design
Keeping high cooling power at even high ambient temperature



Anti-corrosion treatment design
All metalic and PCB components are protected against corrosion



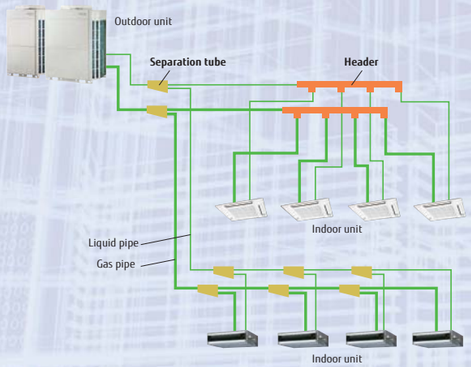
Large Office





System configuration example

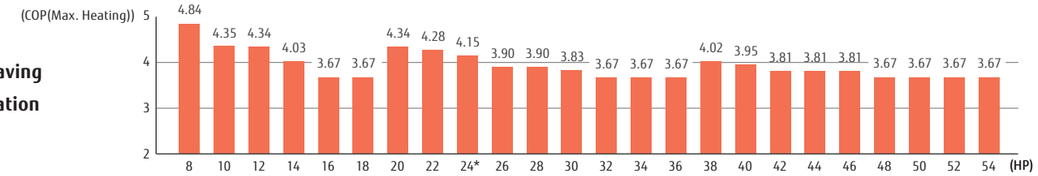
- This system is used for medium-sized and large buildings. Connecting each outdoor unit makes it possible to create a high-capacity system.
- Connection of multiple indoor units using separation tubes and headers.



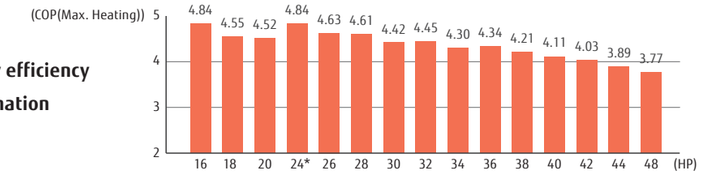
Efficiency in actual operation

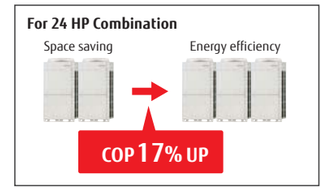
Top class high COP(Max. Heating) is realized for all combinations by our unique heat exchanger structure, high efficient DC twin compressor, and other our own technologies.

Space saving combination



Energy efficiency combination





Energy saving technology that boosted operation efficiency

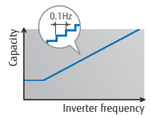
Powerful large propeller fan
By using CFD*1 technology, a newly designed fan achieves high performance and low noise operation.
*1. CFD = Computational Fluid Dynamics

3 phase DC fan motor
Efficiency is substantially improved by high efficient motor with sophisticated driver control. In addition, low noise is realized by DC fan motor.

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

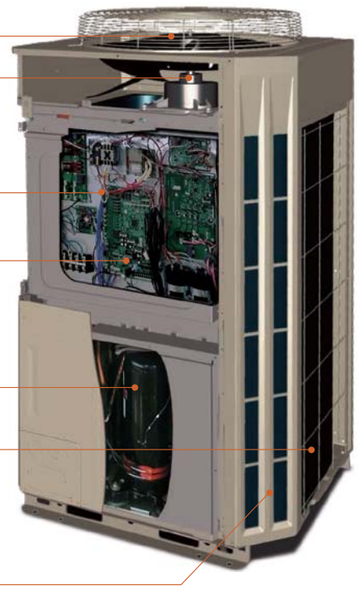
Sine-wave DC inverter control
High efficiency is realized by adoption of reduced switching loss IPM.

High efficient & Large capacity DC inverter compressor
Large capacity high efficient DC twin rotary compressor with 0.1Hz steps compressor speed control



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

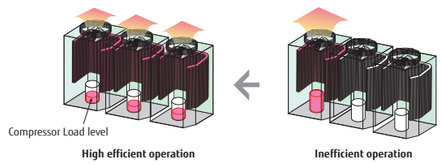
Front intake port (corner cut air inhaling structure)



Advanced energy saving control

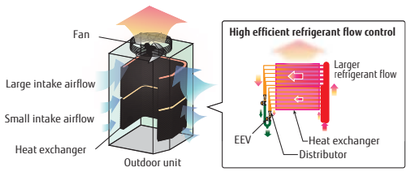
Multiple outdoor operation control

This control method operates all compressors at part load and distributes refrigerant to all heat exchangers to improve the overall system efficiency.



Heat exchanger refrigerant control

The efficiency of the top and bottom heat exchanger in the outdoor unit has been improved by adopting an optimum refrigerant path control.



Outdoor units lineup

• Combinations other than the followings are not recommended.

Space saving combinations

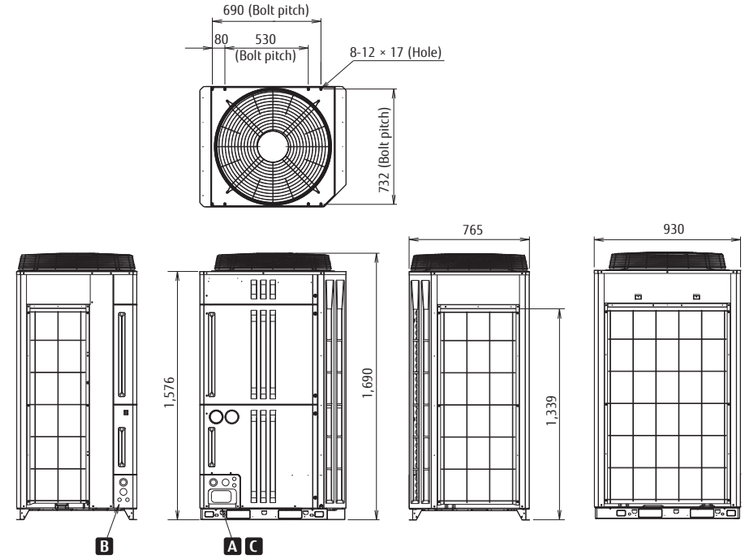
22.4kW (8HP) AJH072LNLBH UNIT : AJH072LNLBH	28.0kW (10HP) AJH090LNLBH UNIT : AJH090LNLBH	33.5kW (12HP) AJH108LNLBH UNIT : AJH108LNLBH	40.0kW (14HP) AJH126LNLBH UNIT : AJH126LNLBH	45.0kW (16HP) AJH144LNLBH UNIT : AJH144LNLBH
50.0 kW (18HP) AJH162LNLBH UNIT : AJH162LNLBH	56.0kW (20HP) AJH180LNLBH UNIT : AJH090/090LNLBH	62.4 kW (22HP) AJH198LNLBH UNIT : AJH126/072LNLBH	68.0 kW (24HP) AJH216LNLBH UNIT : AJH126/090LNLBH	73.0 kW (26HP) AJH234LNLBH UNIT : AJH144/090LNLBH
78.0 kW (28HP) AJH252LNLBH UNIT : AJH162/090LNLBH	85.0 kW (30HP) AJH270LNLBH UNIT : AJH144/126LNLBH	90.0 kW (32HP) AJH288LNLBH UNIT : AJH144/144LNLBH	95.0 kW (34HP) AJH306LNLBH UNIT : AJH162/144LNLBH	100.0 kW (36HP) AJH324LNLBH UNIT : AJH162/162LNLBH
106.0 kW (38HP) AJH342LNLBH UNIT : AJH162/090/090LNLBH	113.0 kW (40HP) AJH360LNLBH UNIT : AJH144/126/090LNLBH	118.0 kW (42HP) AJH378LNLBH UNIT : AJH144/144/090LNLBH	123.0 kW (44HP) AJH396LNLBH UNIT : AJH162/144/090LNLBH	128.0 kW (46HP) AJH414LNLBH UNIT : AJH162/162/090LNLBH
135.0 kW (48HP) AJH432LNLBH UNIT : AJH144/144/144LNLBH	140.0 kW (50HP) AJH450LNLBH UNIT : AJH162/144/144LNLBH	145.0 kW (52HP) AJH468LNLBH UNIT : AJH162/162/144LNLBH	150.0 kW (54HP) AJH486LNLBH UNIT : AJH162/162/162LNLBH	

Energy efficiency combinations

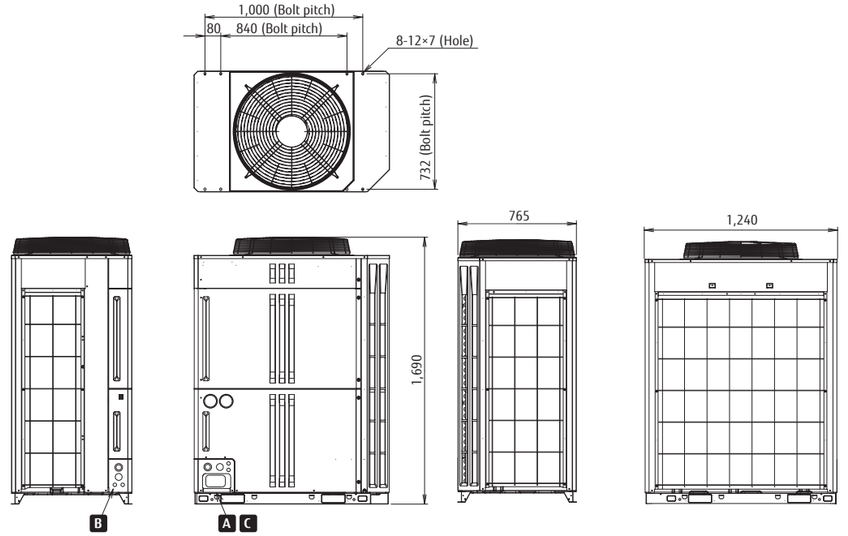
44.8 kW (16HP) AJH144LNLBHH UNIT : AJH072/072LNLBH	50.4kW (18HP) AJH162LNLBHH UNIT : AJH090/072LNLBH	55.9 kW (20HP) AJH180LNLBHH UNIT : AJH108/072LNLBH	67.2 kW (24HP) AJH216LNLBHH UNIT : AJH072/072/072LNLBH	72.8 kW (26HP) AJH234LNLBHH UNIT : AJH090/072/072LNLBH
78.3 kW (28HP) AJH252LNLBHH UNIT : AJH108/072/072LNLBH	84.8 kW (30HP) AJH270LNLBHH UNIT : AJH126/072/072LNLBH	89.4 kW (32HP) AJH288LNLBHH UNIT : AJH108/108/072LNLBH	95.9 kW (34HP) AJH306LNLBHH UNIT : AJH126/108/072LNLBH	100.5 kW (36HP) AJH324LNLBHH UNIT : AJH108/108/108LNLBH
107.0 kW (38HP) AJH342LNLBHH UNIT : AJH126/108/108LNLBH	113.5 kW (40HP) AJH360LNLBHH UNIT : AJH126/126/108LNLBH	120.0 kW (42HP) AJH378LNLBHH UNIT : AJH126/126/126LNLBH	125.0 kW (44HP) AJH396LNLBHH UNIT : AJH144/126/126LNLBH	130.0 kW (46HP) AJH414LNLBHH UNIT : AJH144/144/126LNLBH

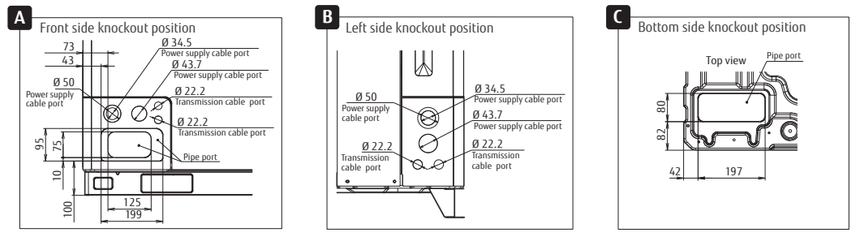
Dimensions

8,10HP : AJH072LNLBH / AJH090LNLBH (Unit : mm)



12,14,16,18HP : AJH108LNLBH / AJH126LNLBH / AJH144LNLBH / AJH162LNLBH (Unit : mm)





AIRSTAGE™ V-III
TROPICAL series

Space Saving Combinations

Rating Capacity range			HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54
Model name				AJH072LNLBH	AJH090LNLBH	AJH108LNLBH	AJH126LNLBH	AJH144LNLBH	AJH162LNLBH	AJH180LNLBH	AJH198LNLBH	AJH216LNLBH	AJH234LNLBH	AJH252LNLBH	AJH270LNLBH	AJH288LNLBH	AJH306LNLBH	AJH324LNLBH	AJH342LNLBH	AJH360LNLBH	AJH378LNLBH	AJH396LNLBH	AJH414LNLBH	AJH432LNLBH	AJH450LNLBH	AJH468LNLBH	AJH486LNLBH
Unit 1				AJH072LNLBH	AJH090LNLBH	AJH108LNLBH	AJH126LNLBH	AJH144LNLBH	AJH162LNLBH	AJH090LNLBH AJH090LNLBH	AJH126LNLBH AJH072LNLBH	AJH126LNLBH AJH090LNLBH	AJH144LNLBH AJH090LNLBH	AJH162LNLBH AJH090LNLBH	AJH144LNLBH AJH126LNLBH	AJH144LNLBH AJH144LNLBH	AJH162LNLBH AJH144LNLBH	AJH162LNLBH AJH162LNLBH	AJH162LNLBH AJH090LNLBH AJH090LNLBH	AJH144LNLBH AJH126LNLBH AJH090LNLBH	AJH144LNLBH AJH144LNLBH AJH090LNLBH	AJH162LNLBH AJH144LNLBH AJH090LNLBH	AJH162LNLBH AJH162LNLBH AJH090LNLBH	AJH144LNLBH AJH144LNLBH AJH144LNLBH	AJH162LNLBH AJH144LNLBH AJH144LNLBH	AJH162LNLBH AJH162LNLBH AJH144LNLBH	AJH162LNLBH AJH162LNLBH AJH162LNLBH
Unit 2																											
Unit 3																											
Maximum Connectable Indoor Unit				13	16	19	23	26	29	33	36	40	43	46	50	53	55	55	55	55	55	55	55	55	55	55	55
Indoor unit connectable capacity		Cooling	kW	11.2-29.1	14-36.4	16.8-43.5	20-52	22.5-58.5	25-65	28-72.8	31.2-81.1	34-88.4	36.5-94.9	39-101.4	42.5-110.5	45-117	47.5-123.5	50-130	53-137.8	56.5-146.9	59-153.4	61.5-159.9	64-166.4	67.5-175.5	70-182	72.5-188.5	75-195
Power source				3-phase 4 wire, 400 V, 50Hz											3-phase 4 wire, 400 V, 50Hz												
T1 condition	Capacity	Cooling	kW	22.4	28.0	33.5	40.0	45.0	50.0	56.0	62.4	68.0	73.0	78.0	85.0	90.0	95.0	100.0	106.0	113.0	118.0	123.0	128.0	135.0	140.0	145.0	150.0
		Nominal Heating		22.4	28.0	33.5	40.0	45.0	50.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Max Heating		25.0	31.5	37.5	45.0	50.0	50.0	63.0	70.0	76.5	81.5	81.5	95.0	100.0	100.0	100.0	113.0	126.5	131.5	131.5	131.5	150.0	150.0	150.0	150.0
		Cooling	Btu/h	76,400	95,500	114,300	136,500	153,500	170,600	191,000	212,900	232,000	249,000	266,100	290,000	307,000	324,100	341,200	361,600	385,500	402,500	419,600	436,700	460,500	477,600	494,700	511,800
		Heating		85,300	107,500	128,000	153,500	170,600	170,600	215,000	238,800	261,000	278,100	278,100	324,100	341,200	341,200	341,200	385,600	431,600	448,700	448,700	448,700	511,800	511,800	511,800	511,800
	Input power	Cooling	kW	5.20	7.28	8.96	10.96	13.01	16.56	14.56	16.16	18.24	20.29	23.84	23.97	26.02	29.57	33.12	31.12	31.25	33.30	36.85	40.40	39.03	42.58	46.13	49.68
		Nominal Heating		4.31	5.98	7.10	8.97	11.09	13.63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Max Heating		5.17	7.25	8.65	11.17	13.63	13.63	14.50	16.34	18.42	20.88	20.88	24.80	27.26	27.26	27.26	28.13	32.05	34.51	34.51	34.51	40.89	40.89	40.89	40.89
	Current	Cooling	A	9.2	12.0	15.0	17.7	20.7	26.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Heating		9.2	12.2	14.6	18.2	21.5	21.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	EER	Cooling	W/W	4.31	3.85	3.74	3.65	3.46	3.02	3.85	3.86	3.73	3.60	3.27	3.55	3.46	3.21	3.02	3.41	3.62	3.54	3.34	3.17	3.46	3.29	3.14	3.02
	COP	Nominal Heating		5.20	4.69	4.72	4.46	4.06	3.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Max Heating		4.84	4.35	4.34	4.03	3.67	3.67	4.34	4.28	4.15	3.90	3.90	3.83	3.67	3.67	3.67	4.02	3.95	3.81	3.81	3.81	3.67	3.67	3.67	3.67
	EER	Cooling	Btu/h/W	14.7	13.1	12.8	12.5	11.8	10.3	13.1	13.2	12.7	12.3	11.2	12.1	11.8	11.0	10.3	11.6	12.3	12.1	11.4	10.8	11.8	11.2	10.7	10.3
	COP	Heating		16.5	14.8	14.8	13.7	12.5	12.5	14.8	14.6	14.2	13.3	13.3	13.1	12.5	12.5	12.5	13.7	13.5	13.0	13.0	13.0	12.5	12.5	12.5	12.5
T3 condition	Capacity	Cooling	kW	20.2	25.2	28.5	32	35.1	35.2	50.4	52.2	57.2	60.3	60.4	67.1	70.2	70.3	70.4	85.6	92.3	95.4	95.5	95.6	105.3	105.4	105.5	105.6
			Btu/h	68,900	86,000	97,200	109,200	119,800	120,100	172,000	178,100	195,200	205,800	206,100	229,000	239,600	239,900	240,200	292,100	315,000	325,600	325,900	326,200	359,400	359,700	360,000	360,300
	Input power		kW	6.73	9.20	9.34	10.70	11.82	12.35	18.39	17.44	19.90	21.02	21.55	22.52	23.64	24.17	24.70	30.75	31.72	32.83	33.37	33.90	35.45	35.99	36.52	37.05
	Current		A	10.8	14.5	14.7	16.9	18.6	19.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	EER		W/W	3.00	2.74	3.05	2.99	2.97	2.85	2.74	2.99	2.87	2.87	2.80	2.98	2.97	2.91	2.85	2.78	2.91	2.91	2.86	2.82	2.97	2.93	2.89	2.85
			Btu/h/W	10.23	9.35	10.40	10.20	10.14	9.72	9.35	10.21	9.81	9.79	9.56	10.17	10.14	9.93	9.72	9.50	9.93	9.92	9.77	9.62	10.14	10.00	9.86	9.72
Power factor			%	90	92	92	92	92	93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Air flow rate		High	m³/h	11,100	11,100	13,000	13,000	13,700	13,700	11,100×2	13,000+11,100	13,000+11,100	13,700+11,100	13,700+11,100	13,700+13,000	13,700×2	13,700×2	13,700×2	13,700+11,100×2	13,700+13,000+11,100	13,700×2+11,100	13,700×2+11,100	13,700×2+11,100	13,700×3	13,700×3	13,700×3	13,700×3
Sound pressure level*2 / Power level		Cooling	dB (A)	56 / 77	58 / 79	57 / 78	60 / 81	62 / 83	63 / 84	61 / 82	61 / 82	62 / 83	63 / 84	64 / 85	64 / 85	65 / 88	66 / 87	66 / 87	65 / 86	65 / 86	66 / 87	66 / 87	67 / 87	67 / 88	67 / 88	67 / 88	68 / 89
		Heating		58 / 80	59 / 81	60 / 83	62 / 84	64 / 86	64 / 86	62 / 84	63 / 85	64 / 86	65 / 87	65 / 87	66 / 88	67 / 89	67 / 89	67 / 89	66 / 88	67 / 89	68 / 90	68 / 90	68 / 90	69 / 91	69 / 91	69 / 91	69 / 91
Maximum external static pressure			Pa	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
Compressor motor output			kW	7.5	7.5	11	11	11	11	7.5×2	11.0+7.5	11.0+7.5	11.0+7.5	11.0+7.5	11.0×2	11.0×2	11.0×2	11.0×2	11.0+7.5×2	11.0×2+7.5	11.0×2+7.5	11.0×2+7.5	11.0×2+7.5	11.0×3	11.0×3	11.0×3	11.0×3
Heat exchanger fin				Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue 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	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
		Width		930	930	1,240	1,240	1,240	1,240	930×2	1,240+930	1,240+930	1,240+930	1,240+930	1,240×2	1,240×2	1,240×2	1,240×2	1,240+930×2	1,240×2+930	1,240×2+930	1,240×2+930	1,240×2+930	1,240×3	1,240×3	1,240×3	1,240×3
		Depth		765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765
Weight			kg	255	255	279	279	279	279	255×2	279+255	279+255	279+255	279+255	279×2	279×2	279×2	279×2	279×2	279×2+255	279×2+255	279×2+255	279×2+255	279×3	279×3	279×3	279×3
Refrigerant	Type (Global Warming Potential)			R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)
	Charge		kg(CO2eq-T)	11.7×2 (24.4×2)	11.7×2 (24.4×2)	11.8×2 (24.6×2)	11.8×2 (24.6×2)	11.8×2 (24.6×2)	11.8×2 (24.6×2)	11.7×2(24.4×2)	11.8+11.7 (24.6+24.4)	11.8+11.7 (24.6+24.4)	11.8+11.7 (24.6+24.4)	11.8+11.7 (24.6+24.4)	11.8×2 (24.6×2)	11.8×2 (24.6×2)	11.8×2 (24.6×2)	11.8×2 (24.6×2)	11.8+11.7×2 (24.6+24.4×2)	11.8×2+11.7 (24.6×2+24.4)	11.8×2+11.7 (24.6×2+24.4)	11.8×2+11.7 (24.6×2+24.4)	11.8×2+11.7 (24.6×2+24.4)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)
Connection pipe diameter		Liquid	mm	12.70	12.70	12.70	12.70	12.70	15.88	15.88	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
		Discharge Gas		22.22	22.22	28.58	28.58	28.58	28.58	28.58	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	41.27	41.27	41.27
Operation range		Cooling	˚C	-15 to 52	-15 to 52	-15 to 52	-15 to 52	-15 to 52	-15 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52
		Heating		-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	-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

Energy Efficiency Combinations

Rating Capacity range			HP	16	18	20	24	26	28	30	32	34	36	38	40	42	44	46
Model name				AJH144LNLBHH	AJH162LNLBHH	AJH180LNLBHH	AJH216LNLBHH	AJH234LNLBHH	AJH252LNLBHH	AJH270LNLBHH	AJH288LNLBHH	AJH306LNLBHH	AJH324LNLBHH	AJH342LNLBHH	AJH360LNLBHH	AJH378LNLBHH	AJH396LNLBHH	AJH414LNLBHH
Unit 1				AJH072LNLBH	AJH090LNLBH	AJH108LNLBH	AJH072LNLBH	AJH090LNLBH	AJH108LNLBH	AJH126LNLBH	AJH108LNLBH	AJH126LNLBH	AJH108LNLBH	AJH126LNLBH	AJH126LNLBH	AJH126LNLBH	AJH144LNLBH	AJH144LNLBH
Unit 2				AJH072LNLBH	AJH072LNLBH	AJH072LNLBH	AJH072LNLBH	AJH072LNLBH	AJH072LNLBH	AJH072LNLBH	AJH108LNLBH	AJH108LNLBH	AJH108LNLBH	AJH108LNLBH	AJH126LNLBH	AJH126LNLBH	AJH126LNLBH	AJH144LNLBH
Unit 3							AJH072LNLBH	AJH072LNLBH	AJH072LNLBH	AJH072LNLBH	AJH072LNLBH	AJH072LNLBH	AJH108LNLBH	AJH108LNLBH	AJH108LNLBH	AJH126LNLBH	AJH126LNLBH	AJH126LNLBH
Maximum Connectable Indoor Unit				26	29	33	39	43	46	50	52	55	55	55	55	55	55	55
Indoor unit connectable capacity		Cooling	kW	22.4-58.2	25.2-65.5	28-72.6	33.6-87.3	36.4-94.6	39.2-101.7	42.4-110.2	44.7-116.2	48-124.6	50.3-130.6	53.5-139.1	56.8-147.5	60-156	62.5-162.5	65-169
Power source				3-phase 4 wire, 400 V, 50Hz											3-phase 4 wire, 400 V, 50Hz			
T1 condition	Capacity	Cooling	kW	44.8	50.4	55.9	67.2	72.8	78.3	84.8	89.4	95.9	100.5	107.0	113.5	120.0	125.0	130.0
		Nominal Heating		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Max Heating		50.0	56.5	62.5	75.0	81.5	87.5	95.0	100.0	107.5	112.5	120.0	127.5	135.0	140.0	145.0
		Cooling	Btu/h	152,800	171,900	190,700	229,200	248,300	267,100	289,300	305,000	327,200	342,900	365,100	387,300	409,500	426,500	443,500
		Heating		170,600	192,800	213,300	255,900	278,100	298,600	324,100	341,300	366,800	384,000	409,500	435,000	460,500	477,600	494,700
	Input power	Cooling	kW	10.40	12.48	14.16	15.60	17.68	19.36	21.36	23.12	25.12	26.88	28.88	30.88	32.88	34.93	36.98
		Nominal Heating		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Max Heating		10.34	12.42	13.82	15.51	17.59	18.99	21.51	22.47	24.99	25.95	28.47	30.99	33.51	35.97	38.43
	Current	Cooling	A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Heating		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	EER	Cooling	W/W	4.31	4.04	3.95	4.31	4.12	4.04	3.97	3.87	3.82	3.74	3.70	3.68	3.65	3.58	3.52
	COP	Nominal Heating		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Max Heating		4.84	4.55	4.52	4.84	4.63	4.61	4.42	4.45	4.30	4.34	4.21	4.11	4.03	3.89	3.77
	EER	Cooling	Btu/h/W	14.7	13.8	13.5	14.7	14.0	13.8	13.5	13.2	13.0	12.8	12.6	12.5	12.5	12.2	12.0
	COP	Heating		16.5	15.5	15.4	16.5	15.8	15.7	15.1	15.2	14.7	14.8	14.4	14.0	13.7	13.3	12.9
T3 condition	Capacity	Cooling	kW	40.4	45.4	48.7	60.6	65.6	68.9	72.4	77.2	80.7	85.5	89.0	92.5	96.0	99.1	102.2
			Btu/h	137,800	154,900	166,100	206,700	223,800	235,000	247,000	263,300	275,300	291,600	303,600	315,600	327,600	338,200	348,800
	Input power		kW	13.47	15.93	16.08	20.20	22.66	22.81	24.17	25.42	26.78	28.03	29.39	30.75	32.11	33.22	34.34
	Current		A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	EER		W/W	3.00	2.85	3.03	3.00	2.89	3.02	3.00	3.04	3.01	3.05	3.03	3.01	2.99	2.98	2.98
			Btu/h/W	10.23	9.72	10.33	10.23	9.87	10.30	10.22	10.36	10.28	10.40	10.33	10.26	10.20	10.18	10.16
Power factor			%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Air flow rate		High	m³/h	11,100×2	11,100×2	13,000+11,100	11,100×3	11,100×3	13,000+11,100×2	13,000+11,100×2	13,000×2+11,100	13,000×2+11,100	13,000×3	13,000×3	13,000×3	13,000×3	13,700+13,000×2	13,700×2+13,000
Sound pressure level*2 / Power level		Cooling	dB (A)	59 / 80	60 / 81	60 / 81	61 / 82	62 / 83	61 / 82	63 / 84	61 / 82	63 / 84	62 / 83	63 / 84	64 / 85	65 / 88	66 / 87	66 / 87
		Heating		61 / 83	62 / 84	62 / 85	63 / 85	63 / 85	64 / 86	65 / 87	64 / 87	65 / 88	65 / 88	66 / 88	66 / 88	67 / 89	68 / 90	68 / 90
Maximum external static pressure			Pa	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
Compressor motor output			kW	7.5×2	7.5×2	11.0+7.5	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	11.0×3	11.0×3	11.0×3	11.0×3
Heat exchanger fin				Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue 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	1,690	1,690	1,690	1,690	1,690	1,690
		Width		930×2	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	1,240×3	1,240×3	1,240×3	1,240×3	1,240×3
		Depth		765	765	765	765	765	765	765	765	765	765	765	765	765	765	765
Weight			kg	255×2	255×2	279+255	255×3	255×3	279+255×2	279+255×2	279×2+255	279×2+255	279×3	279×3	279×3	279×3	279×3	279×3
Refrigerant	Type (Global Warming Potential)			R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)
	Charge		kg(CO2eq-T)	11.7×2 (24.4×2)	11.7×2 (24.4×2)	11.8+11.7 (24.6+24.4)	11.7×3 (24.4×3)	11.7×3 (24.4×3)	11.8+11.7×2 (24.6+24.4×2)	11.8+11.7×2 (24.6+24.4×2)	11.8+11.7×2 (24.6×2+24.4)	11.8+11.7×2 (24.6×2+24.4)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)	11.8×3 (24.6×3)
Connection pipe diameter		Liquid	mm	12.70	15.88	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
		Discharge Gas		28.58	28.58	28.58	34.92	34.92	34.92	34.92	34.92	34.92	41.27	41.27	41.27	41.27	41.27	41.27
Operation range		Cooling	˚C	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52
		Heating		-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	-20 to 21	-20 to 21	-20 to 21

Note: Specifications are based on the following conditions.
Cooling(T1): Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB
Cooling(T3): Indoor temperature of 29°CDB / 19°CWB, and outdoor temperature of 46°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 and indoor unit: 0m.



AIRSTAGE™ INDOOR UNITS

15 types and 91 models available to meet the requirements of any building design.



The AIRSTAGE™ indoor units were developed to be highly efficient, compact, low noise and to have user friendly operation. With a variety of indoor units and capacities available, Fujitsu General has an indoor unit to match any requirement which is easy to install and maintain.
Further, a variety of options are available to achieve an air conditioning environment that is more desirable from the user's perspective.

INDOOR UNITS LINE-UP

- Compact Cassette (Grid type / Standard type)
- 4-way Flow Cassette
- Circular Flow Cassette
- Mini Duct
- Slim Duct / Slim Concealed Floor
- Medium Static Pressure Duct
- High Static Pressure Duct
- Large Airflow Duct
- Compact Floor
- Floor / Ceiling
- Ceiling
- Wall Mounted (EEV Internal / external)

INDOOR UNITS LINE-UP

Comprehensive range of indoor units of variety design and capacity ranges available which can be selected to suit any air conditioning needs.
15 types, 91 models, Capacity range from 1.1kW to 28.0kW

Indoor units range

Model code			4	7	9	12	14	18	24	30	34	36	45	54	60	72	90	96
Capacity range (kW)			1.1	2.2	2.8	3.6	4.5	5.6	7.1	9.0	10.0	11.2	12.5	14.0	18.0	22.4	25.0	28.0
Cassette	Compact Cassette Grid type / Standard type		AUXB04GBLH	AUXB07GALH	AUXB09GALH	AUXB12GALH	AUXB14GALH	AUXB18GALH	AUXB24GALH									
	4-way Flow	(Slim type)						AUXD18GALH	AUXD24GALH									
		(Large type)						AUXA18GALH*3	AUXA24GALH*3	AUXA30GALH	AUXA34GALH	AUXA36GALH	AUXA45GALH	AUXA54GALH				
	Circular Flow	(Slim type)			AUXN009GLAH*4	AUXN012GLAH*4	AUXN014GLAH*4	AUXM018GLAH	AUXM024GLAH	AUXM030GLAH								
		(Large type)						AUXK018GLAH	AUXK024GLAH	AUXK030GLAH	AUXK034GLAH	AUXK036GLAH	AUXK045GLAH	AUXK054GLAH				
Duct	Mini Duct (With drain pump)		ARXK04GCLH	ARXK07GCLH	ARXK09GCLH	ARXK12GCLH	ARXK14GCLH	ARXK18GCLH	ARXK24GCLH									
	Slim Duct (With drain pump)		ARXD04GALH*3	ARXD07GALH	ARXD09GALH	ARXD12GALH	ARXD14GALH	ARXD18GALH	ARXD24GALH									
	Medium Static Pressure Duct								ARXA24GBLH	ARXA30GBLH		ARXA36GBLH	ARXA45GBLH					
	High Static Pressure Duct											ARXC36GBTH	ARXC45GATH		ARXC60GATH*1	ARXC72GBTH*1	ARXC90GBTH*1	ARXC96GATH*1
	Large Airflow Duct	(Compact type)			ARXN009GLBH*4	ARXN012GLBH*4	ARXN014GLBH*4	ARXN018GLBH	ARXN024GTBH	ARXN030GTBH								
		(Large type)						ARXN18GATH*2	ARXN24GATH*2	ARXN30GATH*2	ARXN34GATH*2	ARXN36GATH*2	ARXN45GATH*2					
Floor	Floor (Same as Ceiling models)					ABHA12GATH	ABHA14GATH	ABHA18GATH	ABHA24GATH									
	Slim Concealed Floor (Same as Slim Duct models)		ARXD04GALH	ARXD07GALH	ARXD09GALH	ARXD12GALH	ARXD14GALH	ARXD18GALH	ARXD24GALH									
	Compact Floor		AGHA004GCAH	AGHA007GCAH	AGHA009GCAH	AGHA012GCAH	AGHA014GCAH											
	Compact Floor (EEV external)		AGHE004GCAH	AGHE007GCAH	AGHE009GCAH	AGHE012GCAH	AGHE014GCAH	With this model, connection of EV kit is necessary.										
Ceiling	Ceiling					ABHA12GATH	ABHA14GATH	ABHA18GATH	ABHA24GATH	ABHA30GATH		ABHA36GATH	ABHA45GATH	ABHA54GATH				
Wall Mounted	Wall Mounted		ASHA004GTAH	ASHA007GTAH	ASHA009GTAH	ASHA012GCAH	ASHA014GCAH	ASHA18GBCH	ASHA24GBCH	ASHA030GTAH	ASHA034GTAH							
	Wall Mounted (EEV external)		ASHE004GTAH	ASHE007GTAH	ASHE009GTAH	ASHE012GCAH	ASHE014GCAH	With this model, connection of EV kit is necessary.										

*1: ARXC60/72/90/96G cannot be connected to J-IIS series and J-III series.
*2: Large airflow duct (Large type ARXN∗∗GATH) type can be connected to VR-II / V-III series only.
*3: ARXD04GALH and AUXA18/24GALH can not be connected to J-IIIL series.
*4: AUXN009/012/014GLAH and ARXN009/012/014GLBH can be connected to J-IIS series and J-III series only.

Compact Cassette (Grid type)

Models

AUXB04GBLH
AUXB07GALH
AUXB09GALH
AUXB12GALH
AUXB14GALH
AUXB18GALH
AUXB24GALH

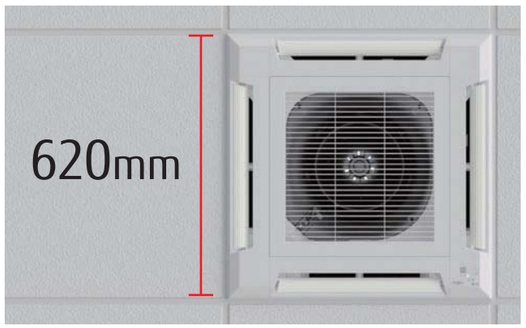


DC FAN

Feature

Compact and stylish panel design

Compact and stylish panel design fits the grid type ceiling. It is a linear design suitable for grid shape of 620mm × 620mm grid ceiling.

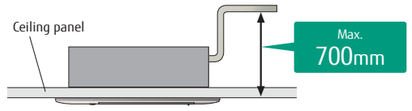


Flexible installation

It is suitable for ceiling of grid type and it has high degree of freedom of installation and it can be installed beside lighting and ventilation opening.



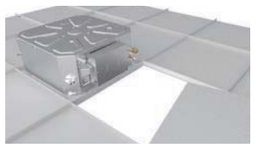
Flexible installation



Easy maintenance

Maintenance is easier by removing the ceiling panel next to the grill, maintenance can be done, and new installation of inspection hole is unnecessary, so construction costs can be suppressed.





The air inlet grill can be installed in various directions, so maintenance is easy.







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**
04	2.7	-
07	2.7	-
09	2.7	-
12	2.7	3.0
14	2.7	3.0
18	2.7	3.0
24	2.7	3.0

Optional parts

Air Outlet Shutter Plate:	UTR-YDZB
Flesh Air Intake Kit:	UTZ-VXAA
Insulation Kit for High Humidity:	UTZ-KXGC
Casette Grille:	UTG-UFGC-W, UTG-UFGE-W



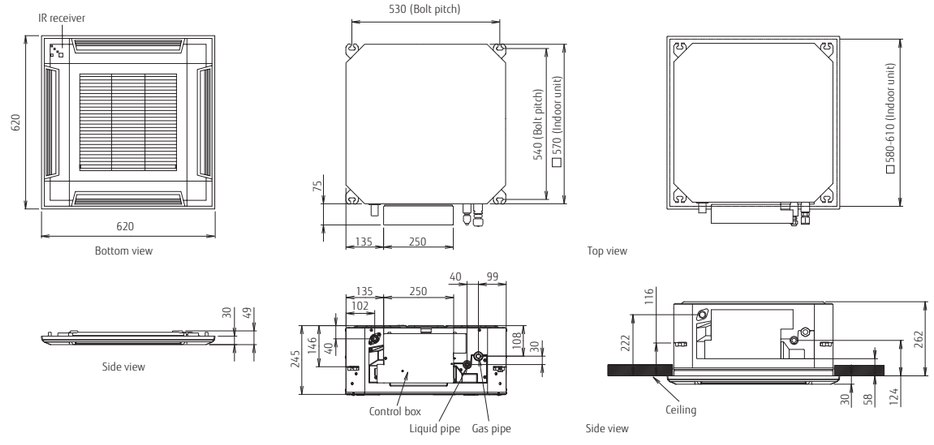
Specifications

Model name			AUXB04GBLH	AUXB07GALH	AUXB09GALH	AUXB12GALH	AUXB14GALH	AUXB18GALH	AUXB24GALH
Power source			Single - phase, ~230V, 50Hz						
Capacity	Cooling	kW	1.1	2.2	2.8	3.6	4.5	5.6	7.1
	Heating		1.3	2.8	3.2	4.1	5.0	6.3	8.0
Input power		W	23	25	25	29	35	36	84
Airflow rate	High	m³/h	530	540	550	600	680	710	1,030
	Med		420 / 450*1	450	450	530	590	580	830
	Low		300 / 350*1	350	350	390	390	400	450
Sound pressure level	High	dB (A)	34	34	35	37	38	41	50
	Med		28 / 30*1	30	30	34	34	35	44
	Low		21 / 25*1	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	245 × 570 × 570
Weight		kg	15	15	15	15	15	17	17
Connection pipe diameter	Liquid (Flare)	mm	6.35	6.35	6.35	6.35	6.35	9.52	9.52
	Gas (Flare)		9.52	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-UFGE-W / UTG-UFGC-W						
	Dimensions (H×W×D)	mm	49 × 620 × 620 / 49 × 700 × 700						
	Weight	kg	2.3 / 2.6						

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].

*1: This value is under cooling operation.

Dimensions (Unit: mm)



4-way Flow Cassette

Models (Slim type)
AUXD18GALH
AUXD24GALH

Models (Large type)
AUXA18GALH
AUXA24GALH
AUXA30GALH
AUXA34GALH
AUXA36GALH
AUXA45GALH
AUXA54GALH



(Slim type)

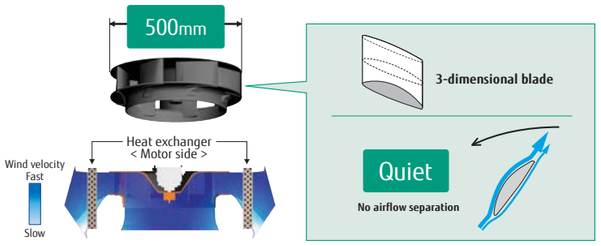
(Large type)

DC FAN

Feature

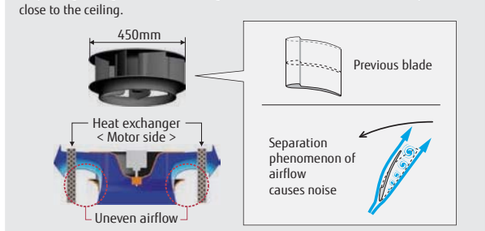
High efficiency turbo fan with 3-dimensional blade

High efficiency airflow distribution has been achieved by the introduction of a 3 dimensional blade which increases the air passing over the heat exchanger.



Previous turbo fan

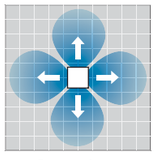
Air passing through the heat exchanger was uneven and the air would only flow close to the ceiling.



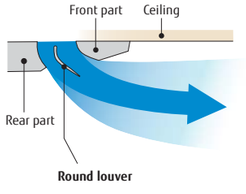
: Spin direction : Airflow direction : Turbulent flow noise

Improvement of the airflow distribution

The louver design distributes air leaving a space between the chassis and the ceiling allowing far and wide air flow distribution.



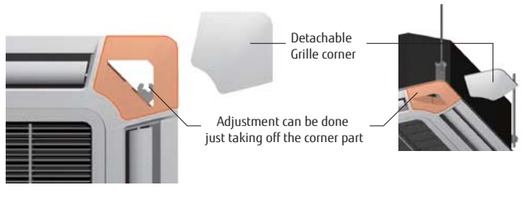
Bottom view





Much less temperature irregularity happens by spreading airflow widely

Adjustment of hanger position is possible after installation

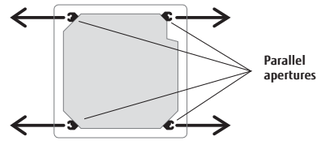


High ceiling mode

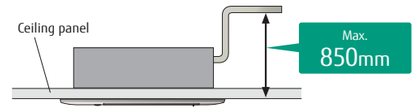
This cassette can be installed up to a height of 4.2m (36/45/54).

Model code	The maximum height from floor to ceiling (m)	
	Standard mode	**High ceiling mode**
18	3.0	3.5
24	3.0	3.5
30	3.2	3.6
34	3.2	3.6
36	3.2	4.2
45	3.2	4.2
54	3.2	4.2

One way installation



High lift drain pump



Optional parts

IR Receiver Unit :	UTY-LRHGB1
Air Outlet Shutter Plate :	UTR-YDZK
Panel Spacer :	UTG-BKXA-W
Insulation Kit for High Humidity :	UTZ-KXRA
Wide Panel :	UTG-AKXA-W
Fresh Air Intake Kit :	UTZ-VXRA

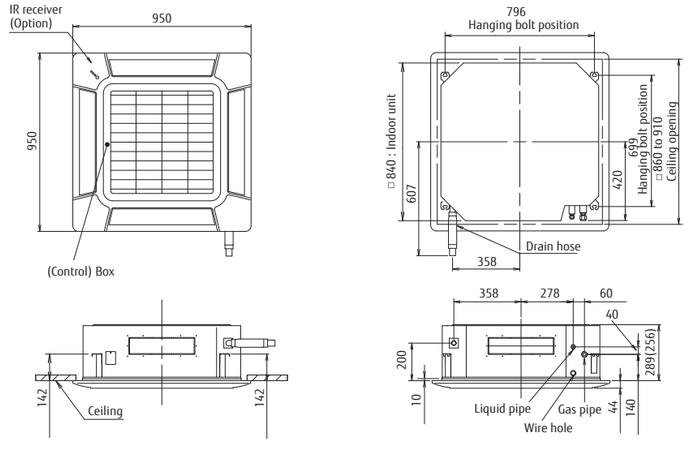
Specifications

Model name			AUXD18GALH	AUXD24GALH	AUXA18GALH	AUXA24GALH	AUXA30GALH	AUXA34GALH	AUXA36GALH	AUXA45GALH	AUXA54GALH
Power source			Single - phase, ~230V, 50Hz								
Capacity	Cooling	kW	5.6	7.1	5.6	7.1	9.0	10.0	11.2	12.5	14.0
	Heating		6.3	8.0	6.3	8.0	10.0	11.2	12.5	14.0	16.0
Input power		W	39	46	51	51	59	77	80	99	119
Airflow rate	High	m³/h	1,150	1,280	1,420	1,420	1,600	1,750	1,800	1,900	2,000
	Med		940	1,040	1,230	1,230	1,300	1,300	1,300	1,370	1,370
	Low		870	870	1,100 / 1,000*1	1,100 / 1,000*1	1,100	1,100	1,100	1,100	1,100
Sound pressure level	High	dB (A)	36	38	40	40	40	43	44	46	47
	Med		30	33	36	36	38	38	38	39	39
	Low		29	29	33 / 31*1	33 / 31*1	33	33	33	33	33
Dimensions (H × W × D)		mm	246 × 840 × 840	246 × 840 × 840	288 × 840 × 840	288 × 840 × 840	288 × 840 × 840	288 × 840 × 840	288 × 840 × 840	288 × 840 × 840	288 × 840 × 840
Weight		kg	22	22	27	27	27	27	27	27	27
Connection pipe diameter	Liquid (Flare)	mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52
	Gas (Flare)		15.88	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05
Drain hose diameter (I.D./O.D.)			25 / 32								
Cassette Grille	Model name		UTG-UGGA-W								
	Dimensions (H×W×D)	mm	50 × 950 × 950								
	Weight	kg	5.5								

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].

*1: This value is under cooling operation.

Dimensions (Unit : mm) ( ) : AUXD18 / AUXD24



Circular Flow Cassette

Models (Slim type)
AUXN009GLAH
AUXN012GLAH
AUXN014GLAH
AUXM018GLAH
AUXM024GLAH
AUXM030GLAH

Models (Large type)
AUXK018GLAH
AUXK024GLAH
AUXK030GLAH
AUXK034GLAH
AUXK036GLAH
AUXK045GLAH
AUXK054GLAH



(Slim type)

(Large type)

DC FAN

Feature

Unique Circular Flow design

New Cassette type realizes Circular Flow to blow large airflow in 360° direction by mounting high performance DC fan motor, new turbo fan and unique seamless airflow louver design.



Uniform temperature air conditioning

Achieve a comfortable air conditioning spread to every corner of the room by circular flow & wide vertical airflow.





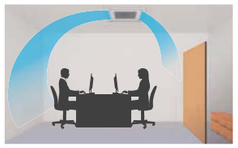
Individual louver control

Each louver can be set individually by Touch Panel Wired Remote Controller to enjoy the comfort of different directional airflows according to various room layouts.

* Touch Panel Wired RC (UTY-RNRGZ2) only



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



Efficient air conditioning based on the room layout

Human sensor increases more energy saving

Energy saving operation starts automatically by detecting the motion of a person. 2 modes of save operation mode and stop mode can be selected.

*Touch Panel Wired RC (UTY-RNRYZ2) only



Human sensor (Option)

2 modes can be selected

Auto saving
Power is saved while people are away.

Auto OFF
Operation stops after people go out.

Optional parts

Human Sensor Kit:	UTY-SHZXC
Wide Panel:	UTG-AKXA-W
Panel Spacer:	UTG-BKXA-W
Fresh Air Intake Kit:	UTZ-VXRA
Air Outlet Shutter Plate:	UTR-YDZK
Insulation Kit for High Humidity:	UTZ-KXRA
Casette Grille:	UTG-UKGC-W, UTG-UKGA-B



Specifications

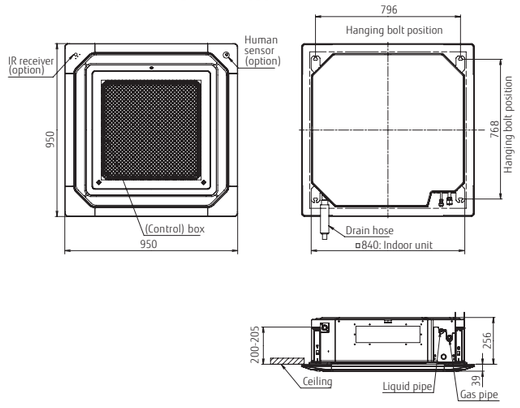
Model name			AUXN009 GLAH	AUXN012 GLAH	AUXN014 GLAH	AUXM018 GLAH	AUXM024 GLAH	AUXM030 GLAH	AUXK018 GLAH	AUXK024 GLAH	AUXK030 GLAH	AUXK034 GLAH	AUXK036 GLAH	AUXK045 GLAH	AUXK054 GLAH
Power source			Single - phase, ~230V, 50Hz												
Capacity	Cooling	kW	2.8	3.6	4.5	5.6	7.1	9.0	5.6	7.1	9.0	10.0	11.2	12.5	14.0
	Heating		3.2	4.0	5.0	6.3	8.0	10.0	6.3	8.0	10.0	11.2	12.5	14.0	16.0
Input power		W	20	20	20	20	25	49	40	40	47	47	61	89	116
Airflow rate	High	m³/h	1,050	1,050	1,050	1,050	1,120	1,470	1,420	1,420	1,440	1,440	1,620	1,820	2,040
	Med-Hi		930	930	930	930	1,050	1,160	1,360	1,360	1,440	1,440	1,500	1,590	1,800
	Med		900	900	900	900	930	1,070	1,300	1,300	1,340	1,340	1,400	1,500	1,590
	Lo-Hi		870	870	870	870	900	930	1,270	1,270	1,300	1,300	1,340	1,400	1,440
	Low		810	810	810	810	870	900	1,200	1,200	1,280	1,280	1,280	1,300	1,300
	Quiet		780	780	780	780	780	780	1,150	1,150	1,150	1,150	1,150	1,150	1,150
Sound pressure level	High	dB (A)	33	33	33	33	35	40	38	38	39	39	41	44	47
	Med-Hi		32	32	32	32	33	36	37	37	38	38	40	42	45
	Med		31	31	31	31	32	34	36	36	37	37	38	40	42
	Lo-Hi		30	30	30	30	31	32	35	35	36	36	37	38	39
	Low		29	29	29	29	30	31	34	34	35	35	36	36	36
	Quiet		28	28	28	28	28	28	33	33	33	33	33	33	33
Dimensions (H × W × D)		mm	246×840×840												
Weight		kg	24.5	24.5	24.5	24.0	24.5	24.5	26.5	26.5	29.5	29.5	29.5	29.5	29.5
Connection pipe diameter	Liquid (Flare)	mm	6.35	6.35	6.35	6.35	9.52	9.52	6.35	9.52	9.52	9.52	9.52	9.52	9.52
	Gas (Flare)		12.70	12.70	12.70	12.70	15.88	15.88	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-UKGC-W / UTG-UKGA-B												
	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 : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

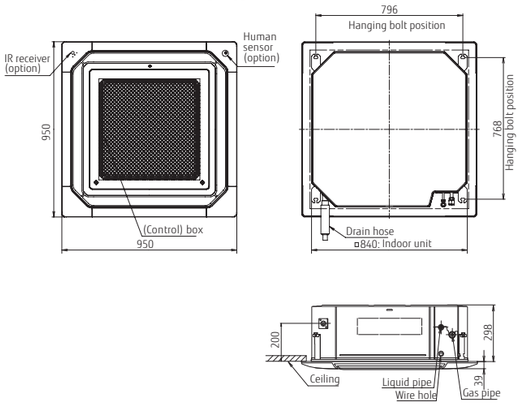
When AUX*018GLAH is connected to the outdoor unit other than J-IIIL, pipe diameter should be Ø9.52/Ø15.88 (Liq/Gas)
When AUXK036GLAH, AUXK045GLAH, and AUXK054GLAH are connected to the outdoor unit other than J-IIIL, gas pipe diameter should be Ø19.05.

Dimensions (Unit: mm)

Models: AUXN009 / AUXN012 / AUXN014
AUXM018 / AUXM024 / AUXM030



Models: AUXK018 / AUXK024 / AUXK030 / AUXK034
AUXK036 / AUXK045 / AUXK054



Mini Duct

Models (With drain pump)
ARXK04GCLH
ARXK07GCLH
ARXK09GCLH
ARXK12GCLH
ARXK14GCLH
ARXK18GCLH
ARXK24GCLH



ARXK04 ARXK07 ARXK09 ARXK12 ARXK14



ARXK18



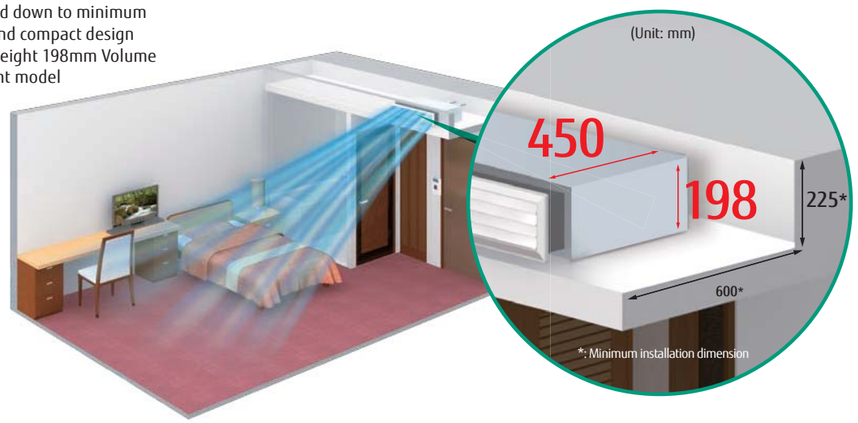
ARXK24

DC FAN

Feature

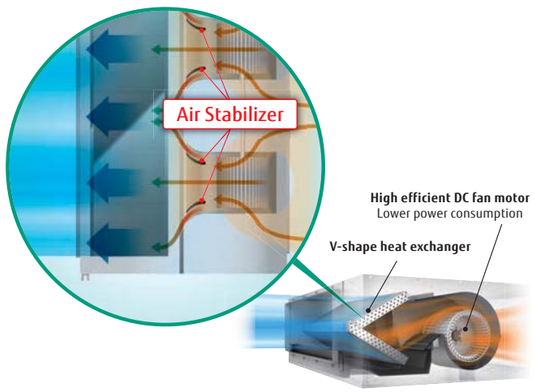
Large living space available

- Installation space can be reduced down to minimum depth 450mm height 198 mm and compact design
- Minimum size: Depth 450mm, Height 198mm Volume 30% down compared with current model
- Lightweight: 16kg 10%down



Optimum airflow path and low noise operation

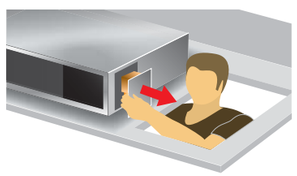
Low noise is realized drastically by stabilized airflow design



Easy design and maintenance for drain

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 remote controller.
*: 0 to 30 Pa. (12)

Built-in drain pump as standard :
Maintenance is easy

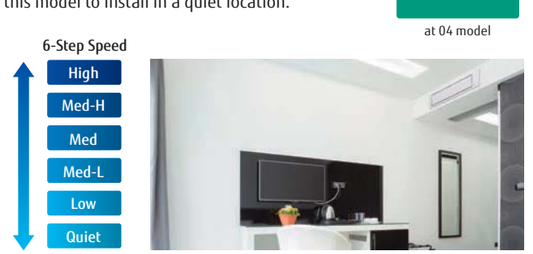


Parts can be replaced from the side of the body where maintenance is easier

6-speed control*

Multistep airflow speed control allows this model to install in a quiet location.

Low noise
20 dB(A)
at 04 model



* Compatible Remote Controller is as follows:
UTY-RNRGZ2 / UTY-RLRG / UTY-RSRG / UTY-RHRG / UTY-DCGG / UTY-DTGGZ1 / UTY-ALGXZ1 / UTY-APGXZ1

Auto Louver Grille Kit (Option)

- Thin design provides a comfortable living environment over a wide area.
- Automatic louver grille provides comfortable air conditioning all the way down to the floor and matches the interior design well. (Optional)



Optional parts

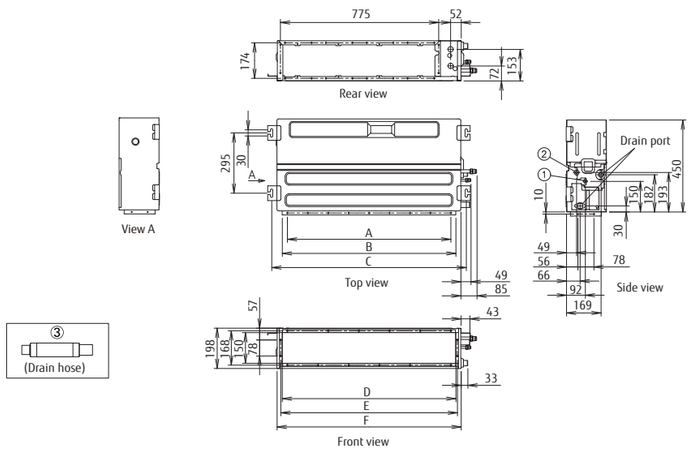
Remote Sensor Unit : UTY-XSZX
IR Receiver Unit : UTB-YWC
Auto Louver Grille Kit : UTD-GXTA-W (for ARXK04/07/09/12/14GCLH)
UTD-GXTB-W (for ARXK18GCLH)
UTD-GXTC-W (for ARXK24GCLH)

Specifications

Model name			ARXK04GCLH	ARXK07GCLH	ARXK09GCLH	ARXK12GCLH	ARXK14GCLH	ARXK18GCLH	ARXK24GCLH
Power source			Single - phase, ~230V, 50Hz						
Capacity	Cooling	kW	1.1	2.2	2.8	3.6	4.5	5.6	7.1
	Heating		1.3	2.8	3.2	4.0	5.0	6.3	8.0
Input power		W	26	28	28	35	66	73	80
Airflow rate	High	m³/h	460	460	460	550	760	930	1,160
	Med-H		440	–	–	–	–	–	–
	Med		420	420	420	480	560	740	960
	Med-L		400	–	–	–	–	–	–
	Low		370	370	370	410	410	540	750
	Quiet		340	–	–	–	–	–	–
Static pressure range		Pa	0 to 30	0 to 30	0 to 30	0 to 30	0 to 50	0 to 50	0 to 50
Standard static pressure			10	10	10	10	15	15	15
Sound pressure level	High	dB (A)	25	26	26	29	34	33	32
	Med-H		24	25	25	27	31	30	30
	Med		23	24	24	26	28	28	28
	Med-L		22	23	23	25	26	26	27
	Low		21	22	22	24	24	24	25
	Quiet		20	21	21	22	22	22	22
Dimensions (H × W × D)		mm	198 × 700 × 450	198 × 700 × 450	198 × 700 × 450	198 × 700 × 450	198 × 700 × 450	198 × 900 × 450	198 × 1,100 × 450
Weight		kg	14.5	15.5	15.5	16	16	19	22.5
Connection pipe diameter	Liquid (Flare)	mm	6.35	6.35	6.35	6.35	6.35	9.52	9.52
	Gas (Flare)		9.52	12.70	12.70	12.70	12.70	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 : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

Dimensions (Unit: mm)



① Refrigerant pipe flare connection (Liquid)
② Refrigerant pipe flare connection (Gas)
③ Drain hose connection

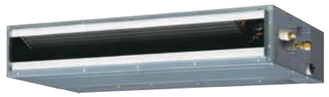
	ARXK04-14	ARXK18	ARXK24
A	P100×6=600	P100×8=800	P100×10=1000
B	650	850	1050
C	752	952	1152
D	650	850	1050
E	665	864	1064
F	700	900	1100

Slim Duct / Slim Concealed Floor

Models (With drain pump)
ARXD04GALH
ARXD07GALH
ARXD09GALH
ARXD12GALH
ARXD14GALH
ARXD18GALH
ARXD24GALH


ARXD04 ARXD07 ARXD09 ARXD12 ARXD14


ARXD18


ARXD24

Slim Concealed Floor

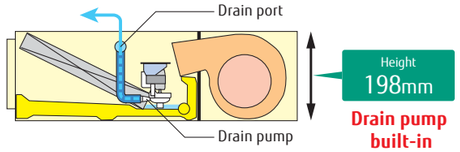


DC FAN

Feature

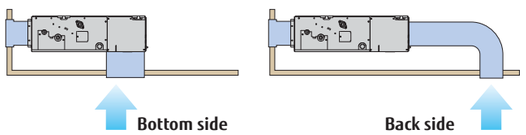
Slim design

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



Air-intake

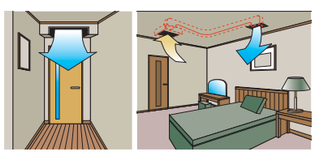
Air intake direction can be selected to match the installation site.



Flexible installation

Ceiling concealed





Floor concealed





Selectable with a wide range of static pressure

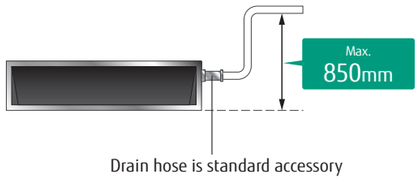
By using DC fan motor, it is possible to change of static pressure range 0 to 90Pa. The change of static pressure range is possible by remote controller.



Static pressure range
0 to 90 Pa

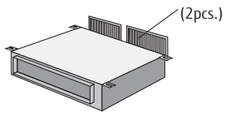
*24 model is 0 to 50Pa

High lift drain pump

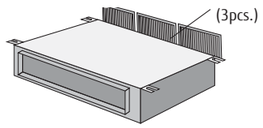


Filter (Accessory)

ARXD04 / 07 / 09 / 12 / 14 / 18

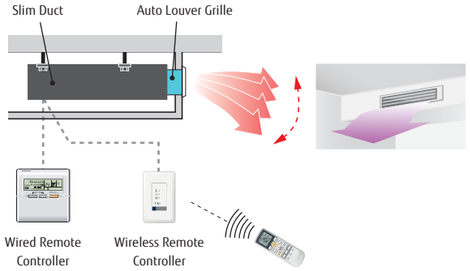


ARXD24



Auto Louver Grille Kit (Option)

Simple flat Auto Louver will provide comfort airflow and harmonize with luxury interior.



Optional parts

Remote Sensor Unit : UTY-XSZX
IR Receiver Unit : UTB-YWC
Auto Louver Grille Kit : UTD-GXTA-W (for ARXD04/07/09/12/14GALH)
UTD-GXTB-W (for ARXD18GALH)
UTD-GXTC-W (for ARXD24GALH)

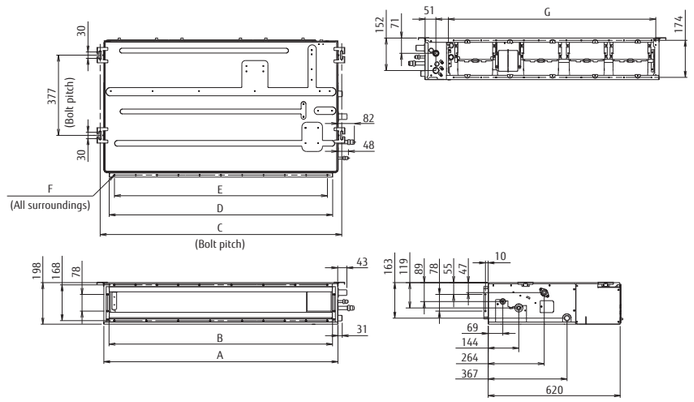
Specifications

Model name			ARXD04GALH	ARXD07GALH	ARXD09GALH	ARXD12GALH	ARXD14GALH	ARXD18GALH	ARXD24GALH
Power source			Single - phase, ~230V, 50Hz						
Capacity	Cooling	kW	1.1	2.2	2.8	3.6	4.5	5.6	7.1
	Heating		1.3	2.8	3.2	4.0	5.0	6.3	8.0
Input power		W	38	44	50	54	92	83	122
Airflow rate	High	m³/h	510	550	600	600	800	940	1,330
	Med		400 / 470*1	490	550	510	710	840	1,240
	Low		320 / 440*1	440	480	450	610	750	1,100
Static pressure range		Pa	0 to 90	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	25
Sound pressure level	High	dB (A)	26	28	29	30	34	34	35
	Med		21 / 25*1	25	26	27	32	32	32
	Low		20 / 22*1	22	24	24	28	28	29
Dimensions (H × W × D)		mm	198 × 700 × 620	198 × 700 × 620	198 × 700 × 620	198 × 700 × 620	198 × 700 × 620	198 × 900 × 620	198 × 1,100 × 620
Weight		kg	17	17	17	18	18	22	26
Connection pipe diameter	Liquid (Flare)	mm	6.35	6.35	6.35	6.35	6.35	9.52	9.52
	Gas (Flare)		12.70	12.70	12.70	12.70	12.70	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 : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].
*1: This value is under cooling operation.

Dimensions (Unit: mm)

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



	ARXD04-14	ARXD18	ARXD24
A	700	900	1100
B	650	850	1050
C	734	934	1134
D	650	850	1050
E	P100x6=600	P100x8=800	P100x10=1000
F	18xØ5	22xØ5	26xØ5
G	574	774	974

Medium Static Pressure Duct

Models

ARXA24GBLH
ARXA30GBLH
ARXA36GBLH
ARXA45GBLH

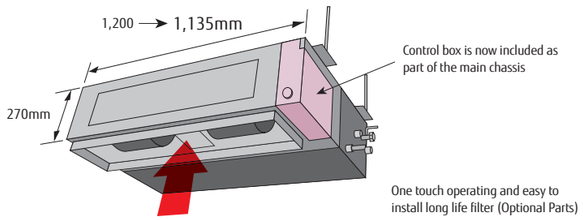


DC FAN

Feature

Slim & 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.



Low energy consumption by high efficiency DC fan motor

Improved motor efficiency from previous model.

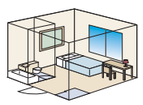


24 model

30 / 36 / 45 model

Can be installed for various location

It can be installed in such locations as high-rise condominiums by low static pressure design.



It can also be installed in wide spade when high static pressure is required, such as for offices.



Selectable with a wide range of static pressure

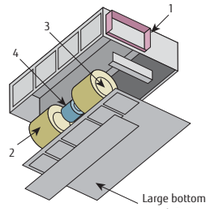
It is possible to change of static pressure range 0 to 150Pa.

Static pressure range
0 to 150 Pa

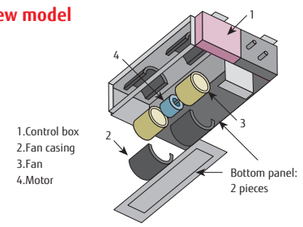
Easy maintenance

See below for the case of rear suction type

Previous model

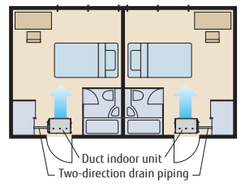


New model



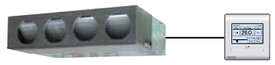
Structural improvement is attained by making the bottom panel two pieces, front and rear. The internal fan casing is also manufactured in two pieces, namely upper and lower. The maintenance of the motor and fan can be easily carried out by removing the rear panel and the lower part of the casing while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

Two-direction drain piping



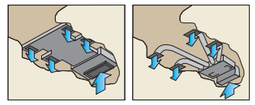
Easy setting by using remote controller

The change of static pressure range is possible by remote controller

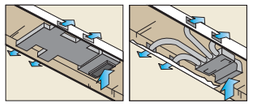


Installation styles

Embedded in Ceiling



Hanging from Ceiling



Optional parts

Remote Sensor Unit : UTY-XSZX
Long Life Filter : UTD-LF25NA
Flange (Square) : UTD-SF045T
Flange (Round) : UTD-RF204
IR Receiver Unit : UTB-YWC
Drain Pump Unit : UTZ-PX1NBA

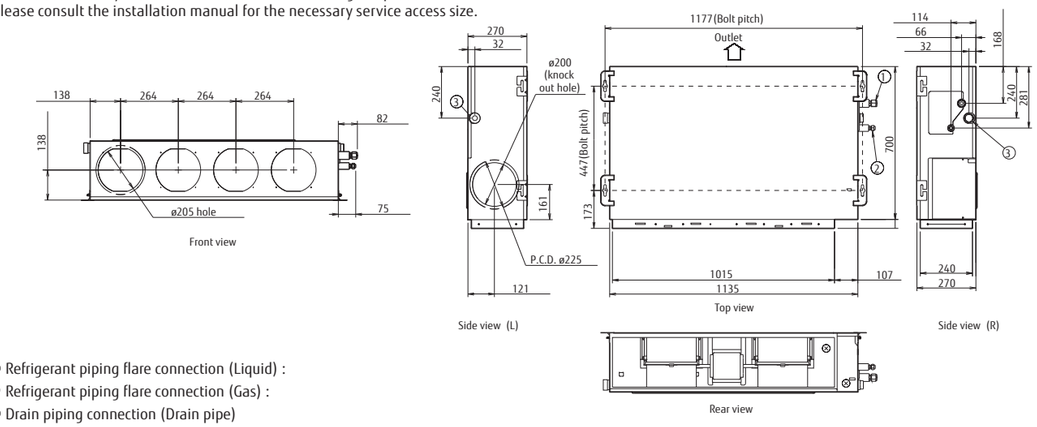
Specifications

Model name			ARXA24GBLH	ARXA30GBLH	ARXA36GBLH	ARXA45GBLH
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	1,280	1,410	1,840	1,970
	Med		990	1,280	1,600	1,860
	Low		840	1,150	1,470	1,640
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)	31	34	37	41
	Med		27	32	35	38
	Low		23	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	19.05	19.05
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 : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

Dimensions (Unit: mm)

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



① Refrigerant piping flare connection (Liquid) :
② Refrigerant piping flare connection (Gas) :
③ Drain piping connection (Drain pipe)

High Static Pressure Duct

Models
ARXC36GBTH
ARXC45GATH
ARXC60GATH

Models
ARXC72GBTH
ARXC90GBTH

Models
ARXC96GATH



ARXC36 ARXC45 ARXC60



ARXC72 ARXC90

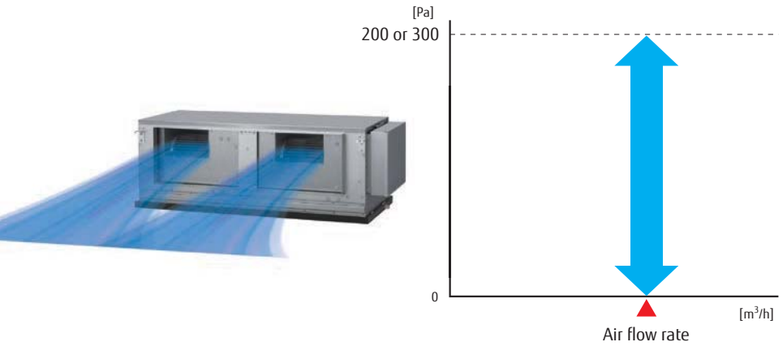


ARXC96

Feature

Static pressure selection

By using DC fan motor, it is possible to change static pressure range from 0 to 200Pa (ARXC36) / 300Pa (ARXC72 / 90 / 96).



MAX. 200 Pa
(ARXC36 / 45 / 60 type)



MAX. 300 Pa
(ARXC72 / 90 type)



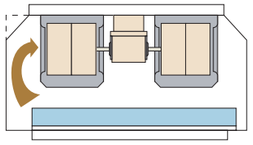
MAX. 300 Pa
(ARXC96 type)



Low noise

Models : ARXC36 / ARXC45 / ARXC60

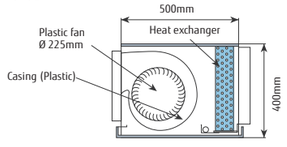
Cutting off the corners of the conventional indoor unit front panel and fan casing, has enabled less turbulent air flow. Low noise is realized by adopting a plastic case and a plastic fan.



New model
(ARXC36GBTH)

ARXC36GBTH : Plastic fan [42dB(A)]

* Model : Material
(At 100Pa : Actual noise measurement value)



Low energy consumption by high efficiency DC fan motor

Improved motor efficiency from previous model.



(ARXC36 type)



(ARXC72 / 90 / 96 type)

Easy installation (Compact size & Lightweight)

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

(Unit:mm)



(ARXC36 / 45 / 60 type)



(ARXC72 / 90 type)



(ARXC96 type)

Optional parts

Long-Life Filter : UTD-LF60KA (For ARXC36 / 45 / 60)
IR Receiver Unit : UTB-YWC
Remote Sensor Unit : UTY-XSZX

Specifications

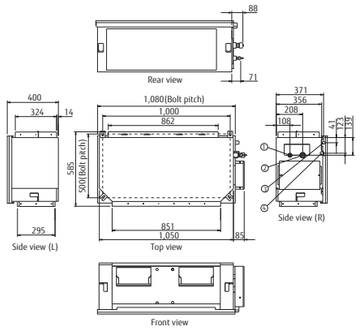
Model name			ARXC36GBTH	ARXC45GATH	ARXC60GATH*	ARXC72GBTH*	ARXC90GBTH*	ARXC96GATH*
Power source			Single - phase, ~230V, 50Hz					
Capacity	Cooling	kW	11.2	12.5	18.0	22.4	25.0	28.0
	Heating		12.5	14.0	20.0	25.0	28.0	31.5
Input power		W	207	715	730	681	819	838
Airflow rate	High	m³/h	1,990	3,500	3,500	3,900	4,300	4,850
	Med		1,680	3,000	3,000	3,300	4,000	4,250
	Low		1,330	2,460	2,460	3,000	3,500	3,600
Static pressure range		Pa	0 to 200	100 to 250	100 to 250	0 to 300	0 to 300	0 to 300
Standard static pressure			100	100	100	150	150	150
Sound pressure level	High	dB (A)	42	49	49	47	48	48
	Med		36	45	45	43	46	45
	Low		32	42	42	40	44	42
Dimensions (H × W × D)		mm	400 × 1,050 × 500	400 × 1,050 × 500	400 × 1,050 × 500	450 × 1,587 × 700	450 × 1,587 × 700	550 × 1,587 × 700
Weight		kg	40	46	46	84	84	105
Connection pipe diameter	Liquid	mm	9.52 (Flare)	9.52 (Flare)	9.52 (Flare)	12.70 (Brazing)	12.70 (Brazing)	12.70 (Brazing)
	Gas		19.05 (Flare)	19.05 (Flare)	19.05 (Flare)	22.22 (Brazing)	22.22 (Brazing)	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 : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

*: ARXC60/72/90/96G cannot be connected to J-III series.

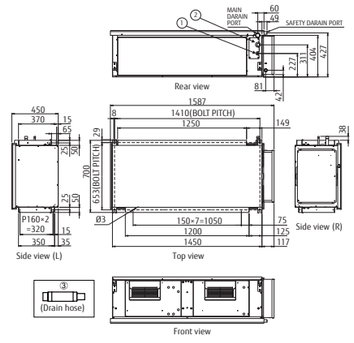
Dimensions (Unit: mm)

Models: ARXC36 / ARXC45 / ARXC60



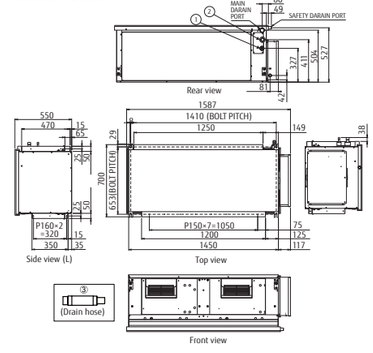
① Refrigerant piping flare connection (Liquid)
② Refrigerant piping flare connection (Gas)
③ Drain piping connection

Models: ARXC72 / ARXC90



① Refrigerant pipe flare connection (Liquid)
② Refrigerant pipe flare connection (Gas)
③ Drain hose

Models: ARXC96



① Refrigerant pipe flare connection (Liquid)
② Refrigerant pipe flare connection (Gas)
③ Drain hose

Large Airflow Duct (Compact type)

Models
ARXN009GLBH
ARXN012GLBH
ARXN014GLBH

Models
ARXN018GLBH

Models
ARXN024GTBH
ARXN030GTBH



ARXN009 ARXN012 ARXN014



ARXN018



ARXN024 ARXN030

DC FAN

Feature

Large airflow volume

It can be installed in places such as early replacement of air required by large airflow volume.



Quiet operation

Multistep airflow speed control allows this model to install in a quiet location.



Low noise
26 dB(A)
at 024/030 models

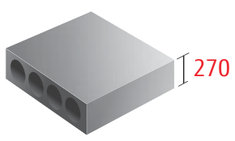
6-Step Speed
High
Med-H
Med
Med-L
Low
Quiet



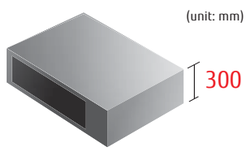
Slim & Compact design

It can be installed in places such as early replacement of air required by large airflow volume.

(unit: mm)



ARXN018



ARXN024 / 030

Optional parts

IR receiver unit:	UTB-YWC
Long life filter:	UTD-LF25NA(For ARXN018GLBH), UTD-LFNA(For ARXN024/030GTBH)
Flange:	UTD-SF045T(For ARXN018GLBH), UTD-RF204(For ARXN018GLBH)
Drain pump unit:	UTZ-PX1NBA(ARXN018GLBH)
Remote sensor unit:	UTY-XSZX
Auto Louver Grille Kit:	UTD-GXTC-W (for ARXN009/012/014GLBH)



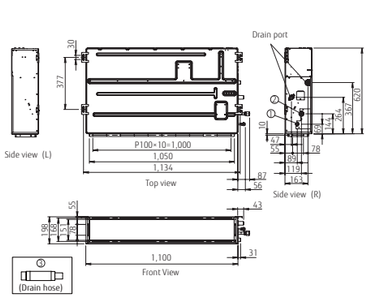
Specifications

Model name			ARXN009GLBH	ARXN012GLBH	ARXN014GLBH	ARXN018GLBH	ARXN024GTBH	ARXN030GTBH
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	88	122	122	173	180	273
Airflow rate	High	m^3/h	1,100	1,330	1,330	1,720	2,100	2,700
	Med-H		-	-	-	-	2,050	2,390
	Med		1,010	1,240	1,240	1,470	1,860	2,080
	Med-L		-	-	-	-	1,660	1,770
	Low		880	1,100	1,100	1,360	1,470	1,470
	Quiet		-	-	-	-	1,260	1,260
Static pressure range		Pa	0 to 50	0 to 50	0 to 50	0 to 80	0 to 100	0 to 100
Standard static pressure			25	25	25	50	50	50
Sound pressure level	High	dB (A)	32	35	35	36	37	41
	Med-H		-	-	-	-	35	38
	Med		30	32	32	33	33	34
	Med-L		-	-	-	-	31	31
	Low		28	29	29	30	28	28
	Quiet		-	-	-	-	26	26
Dimensions (H × W × D)		mm	198 × 1,100 × 620	198 × 1,100 × 620	198 × 1,100 × 620	270 × 1,135 × 700	300 × 1,400 × 700	300 × 1,400 × 700
Weight		kg	26	26	26	40	48	48
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					

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].

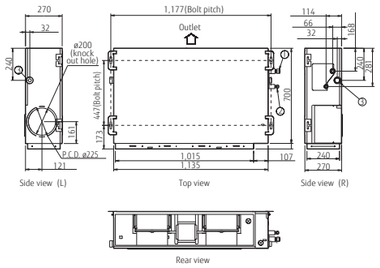
Dimensions (Unit: mm)

Models: ARXN009 / ARXN012 / ARXN014



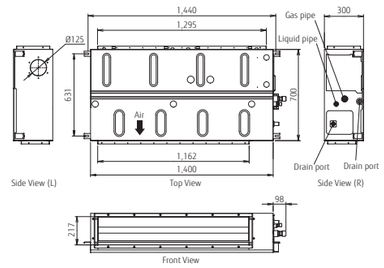
① Refrigerant piping flare connection (Liquid)
② Refrigerant piping flare connection (Gas)
③ Drain piping connection

Models: ARXN018



① Refrigerant pipe flare connection (Liquid)
② Refrigerant pipe flare connection (Gas)
③ Drain hose

Models: ARXN024 / ARXN030



Large Airflow Duct (Large type)

Models

ARXN18GATH
ARXN24GATH
ARXN30GATH
ARXN34GATH
ARXN36GATH
ARXN45GATH



DC FAN

Feature

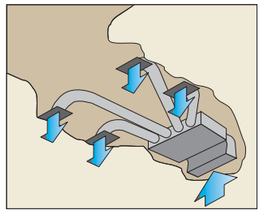
Large airflow volume

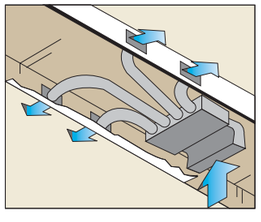
It can be installed in places such as early replacement of air required by large airflow volume.





Installation styles





Selectable with a wide range of static pressure



static pressure range
50 to 250 Pa
(30 / 34class)

static pressure range
50 to 300 Pa
(36 / 45class)

Optional parts

Remote Sensor Unit : UTY-XSZX



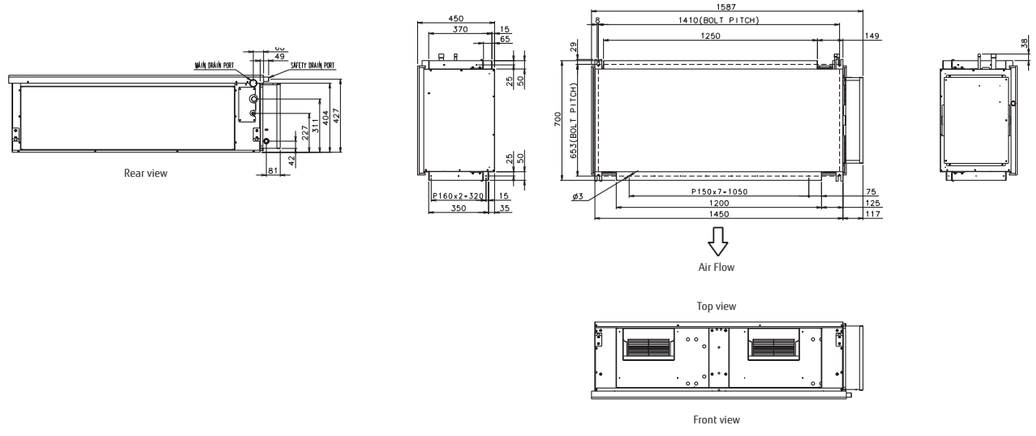
Specifications

Model name			ARXN18GATH	ARXN24GATH	ARXN30GATH	ARXN34GATH	ARXN36GATH	ARXN45GATH
Power source			Single - phase, ~230V, 50Hz					
Capacity	Cooling	kW	5.6	7.1	9.0	10.0	11.2	12.5
	Heating		6.3	8.0	10.0	11.2	12.5	14.0
Input power		W	154	205	306	432	572	572
Airflow rate	High	m³/h	2,280	2,640	3,200	3,720	4,120	4,120
	Med		–	–	–	–	–	–
	Low		–	–	–	–	–	–
Static pressure range		Pa	50 to 100	50 to 150	50 to 250	50 to 250	50 to 300	50 to 300
Standard static pressure			50	50	50	50	60	60
Sound pressure level	High	dB (A)	35	37	40	43	45	45
	Med		–	–	–	–	–	–
	Low		–	–	–	–	–	–
Dimensions (H × W × D)		mm	450 × 1,587 × 700	450 × 1,587 × 700	450 × 1,587 × 700	450 × 1,587 × 700	450 × 1,587 × 700	450 × 1,587 × 700
Weight		kg	84	84	84	84	84	84
Connection pipe diameter	Liquid (Flare)	mm	9.52	9.52	9.52	9.52	9.52	9.52
	Gas (Flare)		15.88	15.88	15.88	15.88	19.05	19.05
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 : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

Large Airflow Duct (Large type) can be connected to VR-II / V-III series only.

Dimensions (Unit: mm)



Compact floor

Models (EEV internal)
AGHA004GCAH
AGHA007GCAH
AGHA009GCAH
AGHA012GCAH
AGHA014GCAH

Models (EEV external)
AGHE004GCAH
AGHE007GCAH
AGHE009GCAH
AGHE012GCAH
AGHE014GCAH



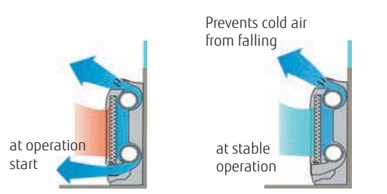
DC FAN

Feature

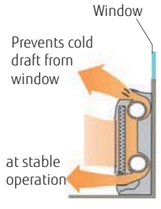
2-Fan & Wide airflow

Individual vertical airflow by 2-fan can control the whole room comfortably.

Cooling



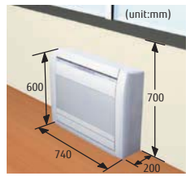
Heating



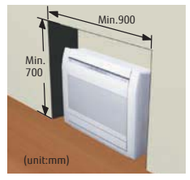
Flexible & easy installation

Due to compact and whole surface suction method model, floor, concealed, half concealed, or wall mounted installation can be available to match the room layout.

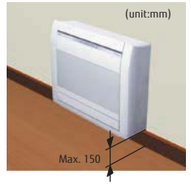
Beneath standard window



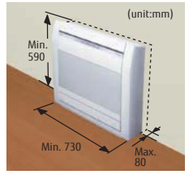
Standard concave portion



Wall



Half concealed
(Optional parts necessary)

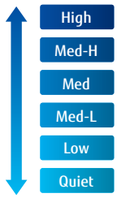


Quiet operation

Quiet operation is realized by 6 fan speed control. (via 2 wire controller)

Low noise
22 dB(A)
at 004/007/009 models

6-Step Speed

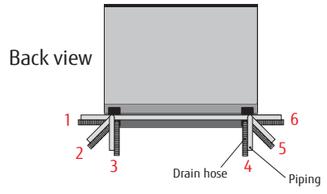




* Compatible Remote Controller is as follows:
UTY-RNRGZ2 / UTY-RLRG / UTY-RSRG / UTY-RHRG / UTY-DCGG / UTY-DTGGZ1 / UTY-ALGXZ1 / UTY-APGXZ1

Flexible piping connection 6 direction of drain & piping

Drain horse and piping can be drawn flexibly in the right, left, side, and down directions



Optional parts

Half concealed kit: UTR-STA



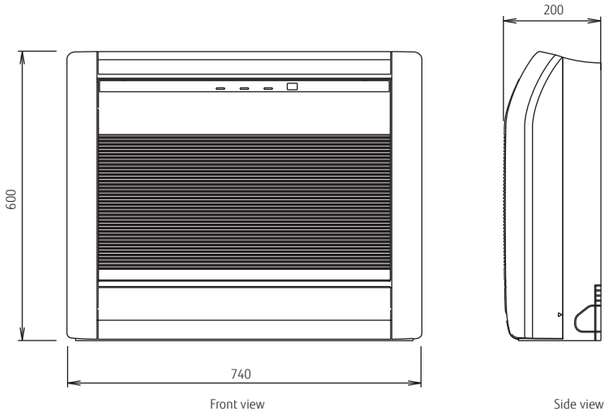
Specifications

Model name			AGHA004GCAH	AGHA007GCAH	AGHA009GCAH	AGHA012GCAH	AGHA014GCAH	AGHE004GCAH	AGHE007GCAH	AGHE009GCAH	AGHE012GCAH	AGHE014GCAH
Power source			Single - phase, ~230V, 50Hz									
Capacity	Cooling	kW	1.1	2.2	2.8	3.6	4.0	1.1	2.2	2.8	3.6	4.0
	Heating		1.3	2.8	3.2	4.0	4.5	1.3	2.8	3.2	4.0	4.5
Input power		W	12 / 14	16	17	22	29	12 / 14	16	17	22	29
Airflow rate	High	m³/h	380 / 430	470	500	590	670	380 / 430	470	500	590	670
	Med-H		350	420	450	520	590	350	420	450	520	590
	Med		320	390	400	470	520	320	390	400	470	520
	Med-L		310	360	360	420	450	310	360	360	420	450
	Low		280	330	330	390	390	280	330	330	390	390
	Quiet		210	270	270	340	340	210	270	270	340	340
Sound pressure level	High	dB (A)	35 / 36	37	38	42	46	35 / 36	37	38	42	46
	Med-H		33	35	36	39	42	33	35	36	39	42
	Med		31	33	34	37	39	31	33	34	37	39
	Med-L		30	31	31	35	36	30	31	31	35	36
	Low		28	29	29	33	33	28	29	29	33	33
	Quiet		22	22	22	30	30	22	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	600×740×200	600×740×200
Weight		kg	15	15	15	15	15	14.5	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	6.35	6.35
	Gas (Flare)		9.52	9.52	9.52	12.70	12.70	9.52	9.52	9.5	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-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 : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

When AGH*004GCAH, AGH*007GCAH, and AGH *009GCAH are connected to the outdoor unit
other than J-IIIL, gas pipe diameter should be Ø12.70.

Dimensions (Unit: mm)



Front view

Side view

Floor / Ceiling

Models
ABHA12GATH
ABHA14GATH
ABHA18GATH
ABHA24GATH



Floor standing



DC FAN

Feature

Flexible installation

Example for floor installation

Floor console



Example for ceiling installation

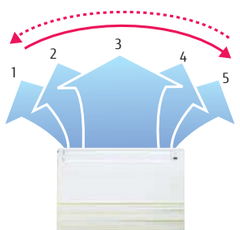
Under ceiling



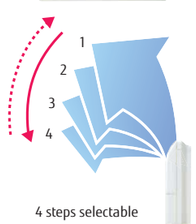
Double auto swing

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

RIGHT and LEFT SWING



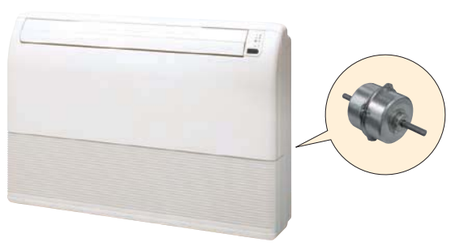
UP and DOWN SWING



4 steps selectable

High power DC fan motor

- High power
- Wide rotation range
- High efficiency



Compact design

Symmetrical, slim and compact design.

(Unit : mm)



Auto-closing louver

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

Super vane

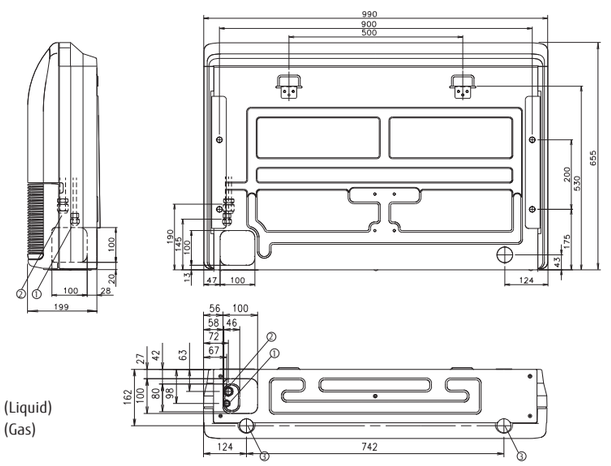
Double Louver Super vane with newly developed special configuration boosts airflow sending cool air quickly to every corner of the room.

Specifications

Model name			ABHA12GATH	ABHA14GATH	ABHA18GATH	ABHA24GATH
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	660	780	1,000	1,000
	Med		570	640	720	820
	Low		490	550	580	680
Sound pressure level	High	dB (A)	36	40	46	47
	Med		32	36	39	42
	Low		28	34	35	37
Dimensions (H × W × D)		mm	199 × 990 × 655			
Weight		kg	25	26	26	27
Connection pipe diameter	Liquid (Flare)	mm	6.35	6.35	9.52	9.52
	Gas (Flare)		12.70	12.70	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 : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

Dimensions (Unit: mm)



① Refrigerant piping flare connection (Liquid)
② Refrigerant piping flare connection (Gas)
③ Drain piping connection

Ceiling

Models
ABHA30GATH
ABHA36GATH
ABHA45GATH
ABHA54GATH

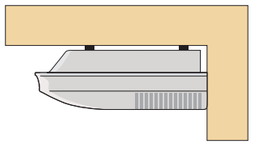


DC FAN

Feature

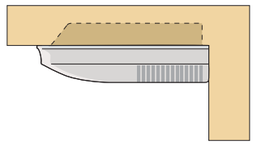
Installation

Open



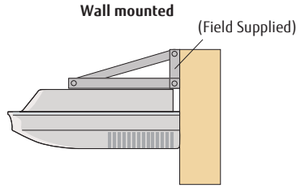
General installation pattern which suspends the indoor unit from the ceiling.

Concealed



Installation pattern where part of the indoor unit is embedded into the ceiling.

Wall mounted

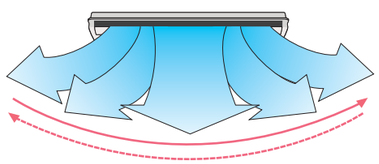


Installation which fixes the indoor unit to the wall by the use of wall brackets (Field supplied). This type of installation can be used when the ceiling space is insufficient.

Double auto swing and wide airflow

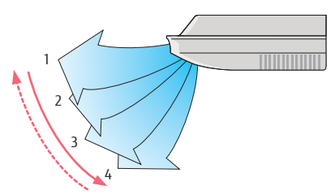
Auto airflow direction and auto swing

Right and left



5 steps selectable

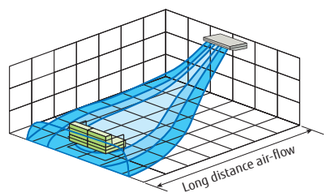
Up and down



4 steps selectable

Long airflow

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

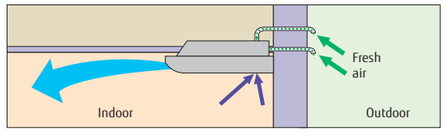


High power DC fan motor

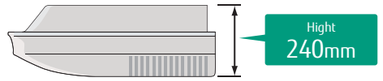
• High power • Wide rotation range • High efficiency



Fresh air intake

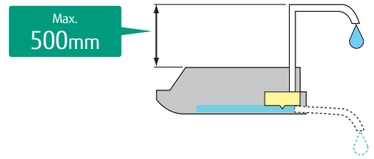


Slim & Compact design



High lift drain pump

Optional drain pump unit allows flexible installation design.



Optional parts

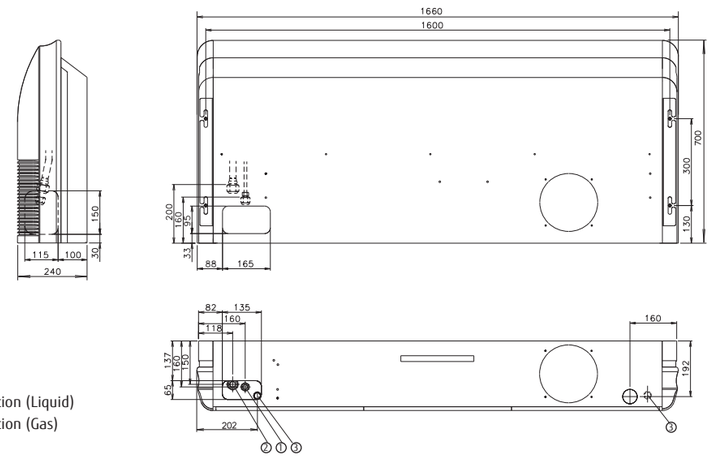
Drain Pump Unit : UTR-DPB24T
Flange : UTD-RF204

Specifications

Model name			ABHA30GATH	ABHA36GATH	ABHA45GATH	ABHA54GATH
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	1,630	1,690	2,010	2,270
	Med		1,370	1,400	1,600	1,780
	Low		1,140	1,170	1,230	1,280
Sound pressure level	High	dB (A)	42	45	48	51
	Med		38	38	42	45
	Low		33	34	35	36
Dimensions (H × W × D)		mm	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	19.05	19.05	19.05
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 : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

Dimensions (Unit: mm)



① Refrigerant piping flare connection (Liquid)
② Refrigerant piping flare connection (Gas)
③ Drain piping connection

Wall Mounted

Models (EEV internal)
ASHA004GTAH
ASHA007GTAH
ASHA009GTAH

Models (EEV external)
ASHE004GTAH
ASHE007GTAH
ASHE009GTAH

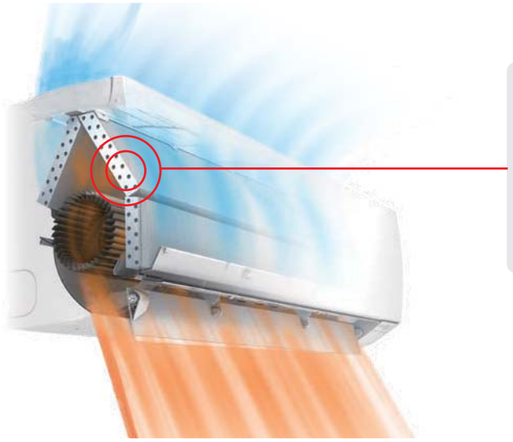


DC FAN

Feature

High efficient compact design

Ø5mm high density heat exchanger is mounted for the first time in the industry.



High density heat exchanger



Making the tube thin:
7 mm → 5 mm
Increase of heat exchanger volume by high density and adopting sub heat exchanger

6 Fan Speed Control

Multistep airflow control is possible to suit the environment.

Fan speed: Quiet
Low noise: 22 dB(A)

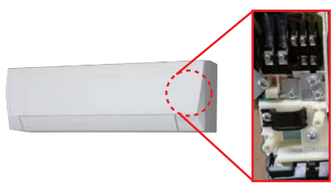
6-Step Speed
High
Med-H
Med
Med-L
Low
Quiet



* Compatible Remote Controller is as follows:
UTY-RNRGZ2 / UTY-RLRG / UTY-RSRG / UTY-RHRG / UTY-DCGG / UTY-DTGGZ1 / UTY-ALGXZ1 / UTY-APGXZ1

Easy installation

Communication wiring can be installed easily by only opening the front panel and wire cover.



Optimized design matches to a small room

Efficient operation and refrigerant saving are realized by optimum heat exchanger design suited for small rooms.



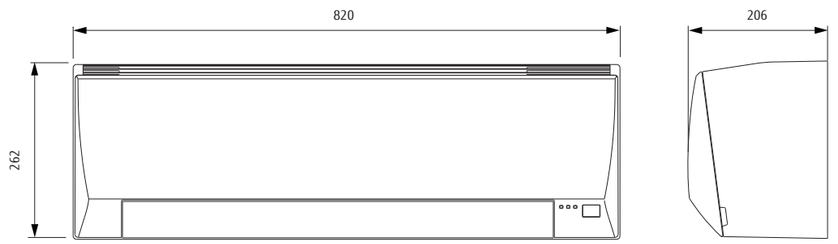
Specifications

Model name			ASHA004GTAH	ASHA007GTAH	ASHA009GTAH	ASHE004GTAH	ASHE007GTAH	ASHE009GTAH
Power source			Single - phase, ~230V, 50Hz					
Capacity	Cooling	kW	1.1	2.2	2.8	1.1	2.2	2.8
	Heating		1.3	2.8	3.2	1.3	2.8	3.2
Input power		W	13	19	34	13	19	34
Airflow rate	High	m^3/h	430	550	720	430	550	720
	Med-H		420	460	570	420	460	570
	Med		390	420	500	390	420	500
	Med-L		380	390	410	380	390	410
	Low		360	360	360	360	360	360
	Quiet		330	330	330	330	330	330
Sound pressure level	High	dB (A)	31	35	43	31	35	43
	Med-H		30	32	38	30	32	38
	Med		28	30	34	28	30	34
	Med-L		26	27	29	26	27	29
	Low		24	24	24	24	24	24
	Quiet		22	22	22	22	22	22
Dimensions (H × W × D)		mm	262×820×206	262×820×206	262×820×206	262×820×206	262×820×206	262×820×206
Weight		kg	7.5	7.5	7.5	7	7	7.5
Connection pipe diameter	Liquid (Flare)	mm	6.35	6.35	6.35	6.35	6.35	6.35
	Gas (Flare)		9.52	9.52	9.52	9.52	9.52	9.52
Drain hose diameter (I.D./O.D.)			13.8 / 15.8 to 16.7					
EV Kit (option)			–	–	–	UTR-EV09XB	UTR-EV09XB	UTR-EV09XB

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].

When ASH*004GTAH, ASH*007GTAH, ASH*009GTAH are connected to the outdoor unit other than J-IIIL, gas pipe diameter should be Ø12.70.

Dimensions (Unit: mm)



Wall Mounted

Models (EEV internal)
ASHA012GCAH
ASHA014GCAH

Models (EEV external)
ASHE012GCAH
ASHE014GCAH



DC FAN

Feature

High efficient compact design

High efficient compact design is realized by mounting a high density and large heat exchanger.
Compact body makes it possible to install inconspicuously even in a meeting or office room and comfortable air conditioning is provided.



High density heat exchanger



Making the tube thin: 7 mm → 5 mm
Increase of heat exchanger volume by high density and adopting sub heat exchanger



Even temperature
↓
Improved heat exchanger effectiveness

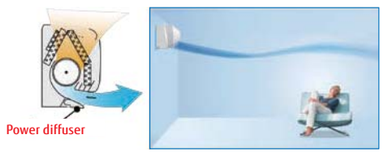
More comfort airflow

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

Heating
Vertical airflow provides powerful floor level heating



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

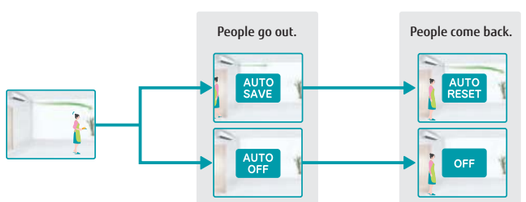


Human sensor increases more energy saving

Energy saving operation starts automatically by detecting the motion of a person. 2 modes of save operation mode and stop mode can be selected.



Human sensor



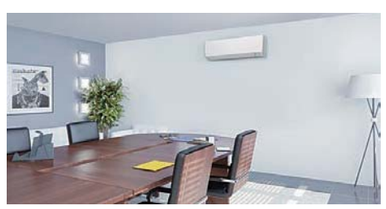
6 Fan Speed Control

Multistep airflow control is possible to suit the environment.

Fan speed
Quiet

Low noise
24 dB(A)

6-Step Speed
High
Med-H
Med
Med-L
Low
Quiet



* Compatible Remote Controller is as follows:
UTY-RNRGZ2 / UTY-RLRG / UTY-RSRG / UTY-RHRG / UTY-DCGG / UTY-DTGGZ1 / UTY-ALGXZ1 / UTY-APGXZ1

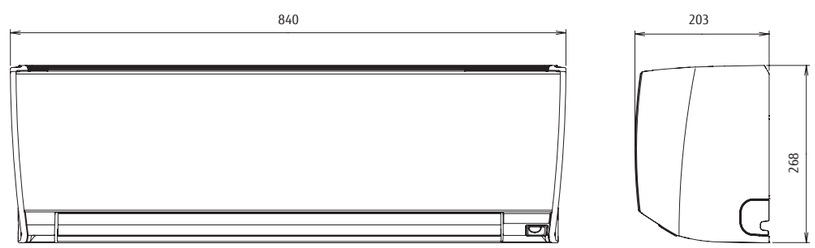


Specifications

Model name			ASHA012GCAH	ASHA014GCAH	ASHE012GCAH	ASHE014GCAH
Power source			Single - phase, ~230V, 50Hz			
Capacity	Cooling	kW	3.6	4.0	3.6	4.0
	Heating		4.0	4.5	4.0	4.5
Input power		W	25	36	25	36
Airflow rate	High	m³/h	690	800	690	800
	Med-H		610	740	610	740
	Med		560	680	560	680
	Med-L		530	610	530	610
	Low		470	550	470	550
	Quiet		330	330	330	330
Sound pressure level	High	dB (A)	40	44	40	44
	Med-H		37	42	37	42
	Med		35	40	35	40
	Med-L		33	37	33	37
	Low		30	34	30	34
	Quiet		24	24	24	24
Dimensions (H × W × D)		mm	268 × 840 × 203	268 × 840 × 203	268 × 840 × 203	268 × 840 × 203
Weight		kg	8.5	8.5	8.5	8.5
Connection pipe diameter	Liquid (Flare)	mm	6.35	6.35	6.35	6.35
	Gas (Flare)		12.70	12.70	12.70	12.70
Drain hose diameter (I.D./O.D.)			13.8 / 15.8 to 16.7			
EV Kit (option)			–	–	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 : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

Dimensions (Unit: mm)



Wall Mounted

Models
ASHA18GBCH
ASHA24GBCH

Models
ASHA030GTAH
ASHA034GTAH



ASHA18 ASHA24



ASHA030 ASHA034

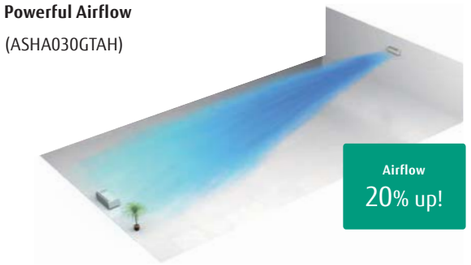
DC FAN

Feature

Powerful & Comfort airflow

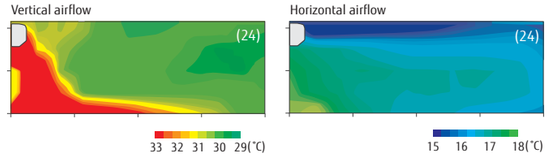
Powerful Airflow

(ASHA030GTAH)



Power diffuser

(ASHA18/24GBCH)



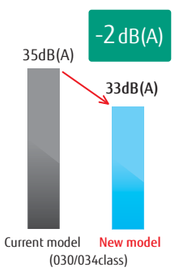
Human sensor (ASHA030/034GTAH only)

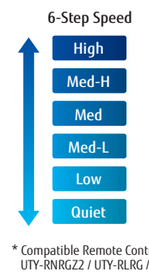
A human sensor senses the movement of humans to reduce operation when one is in the room. the wasteful consumption of energy is reduced automatically to keep down electricity bills.
(Available to wired remote controller as UTY-RNRGZ2)



Quiet operation & 6 Fan speed control

Drastic low noise is realized by new airflow structure. In addition, multistep quiet operation is available by 6-step sound level settings.

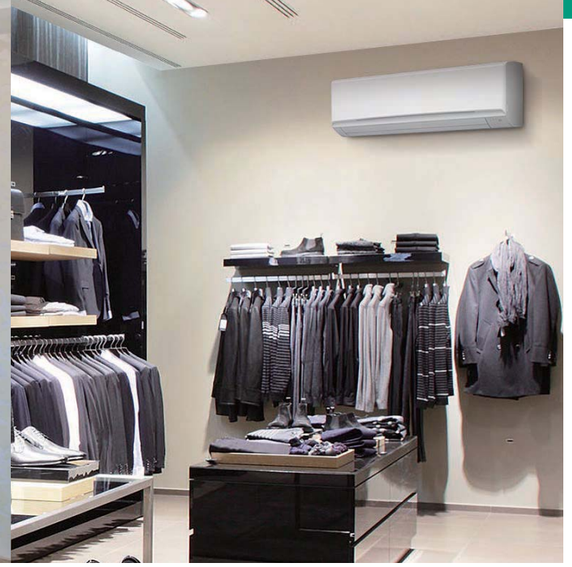






* Compatible Remote Controller is as follows:
UTY-RNRGZ2 / UTY-RLRG / UTY-RSRG / UTY-RHRG / UTY-DCGG / UTY-DTGGZ1 / UTY-ALGXZ1 / UTY-APGXZ1





Specifications

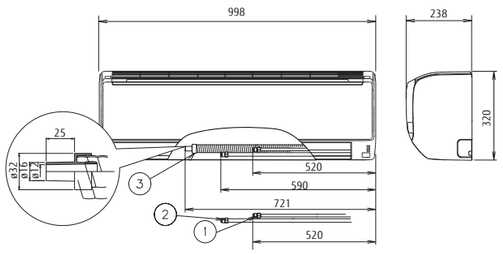
Model name			ASHA18GBCH	ASHA24GBCH	ASHA030GTAH	ASHA034GTAH
Power source			Single - phase, ~230V, 50Hz			
Capacity	Cooling	kW	5.6	7.1	9.0	10.0
	Heating		6.3	8.0	10.0	11.2
Input power		W	32	60	74	103
Airflow rate	High	m³/h	840	1,100	1,440	1,620 / 1,520
	Med-H		-	-	1,200	1,300
	Med		770	910	1,050	1,120
	Med-L		-	-	940	980
	Low		690	730	890	890
	Quiet		-	-	700	700
Sound pressure level	High	dB (A)	41	48	53	55 / 54
	Med-H		-	-	49	51
	Med		39	43	45	47
	Med-L		-	-	42	43
	Low		35	35	39	39
	Quiet		-	-	33	33
Dimensions (H × W × D)		mm	320 × 998 × 238	320 × 998 × 238	340 x 1,150 x 280	340 x 1,150 x 280
Weight		kg	15	15	18	18
Connection pipe diameter	Liquid (Flare)	mm	6.35	9.52	9.52	9.52
	Gas (Flare)		12.70	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 : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

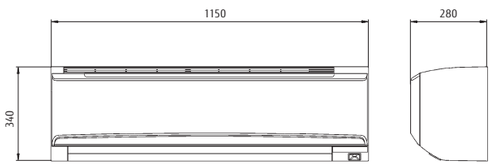
When ASHA18GBCH is connected to the outdoor unit other than J-IIIL, pipe diameter should be Ø9.52/Ø15.88 (Liq/Gas).

Dimensions (Unit: mm)

Models: ASHA18 / ASHA24



Models: ASHA030 / ASHA034

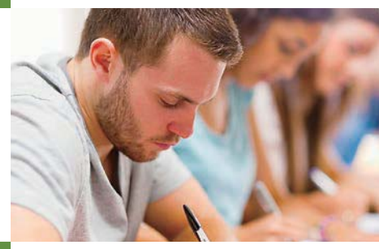


① Refrigerant piping flare connection (Liquid)
② Refrigerant piping flare connection (Gas)
③ Drain piping connection

AIRSTAGE™ CONTROL SYSTEMS



User friendly control system provides individual control to centralized control



The AIRSTAGE™ control system can perform air conditioning control of individual room, centralized control by floor or by building, or centralized energy saving air conditioning control for large buildings.
A variety of air conditioning management schemes are available to match the application, such as linking with the building control system, linking with a single split models, and using various interfaces.

CONTROL SYSTEM

CONTROL SYSTEM OVERVIEW

INDIVIDUAL CONTROLLER

CENTRALIZED CONTROLLER

CONVERTOR / ADAPTOR

BEST CONTROL SOLUTION FOR EACH PROPERTY

Fujitsu General provides the best control solutions suitable for the various properties.

SHOP

Type	Individual Control	Centralized Control				Integrating Control (Interface)		
								
	Wired Remote Controller	**Group Remote Controller**	**Central Remote Controller**	**Touch Panel Controller**	**System Controller**	**Network Convertor for LonWorks®**	**MODBUS® Convertor**	**KNX® Convertor**
	UTY-RNRGZ2, UTY-RLRG	UTY-CGGG	UTY-DCGG	UTY-DTGGZ1	UTY-APGXZ1, UTY-ALGXZ1	UTY-VLGX	UTY-VMGX	UTY-VKGX
Automatic control of A/C (Schedule timer, Weekly timer etc.)	●	●	●	●	●			
Limited control for staff (RC Prohibition, Room temp set point limitation etc.)			●	●	●	●	●	●
Group Control		●	●	●	●			
Advanced Energy Saving (Peak cut, Indoor unit rotation operation etc.)					●			
Remote Management				●	●			
Manage multiple sites				●	●			
Monitor energy consumption					●			
Control third party products					●			
Integrate FGL A/C into BMS						●	●	●

HOTEL

Type	Individual Control			Centralized Control				Integrating Control (Interface)				
												
	Wired Remote Controller	**Simple Remote Controller**	**Wireless Remote Controller**	**Group Remote Controller**	**Central Remote Controller**	**Touch Panel Controller**	**System Controller**	**BACnet® Gateway**	**Network Convertor for LonWorks®**	**MODBUS® Convertor**	**KNX® Convertor**	**External Switch Controller**
	UTY-RNRGZ2, UTY-RLRG	UTY-RSRG, UTY-RHRG	UTY-LNHG	UTY-CGGG	UTY-DCGG	UTY-DTGGZ1	UTY-APGXZ1, UTY-ALGXZ1	UTY-ABGXZ1, UTY-VBGX	UTY-VLGX	UTY-VMGX	UTY-VKGX	UTY-TERX
Local control for hotel guest	●	●	●									
Centralized A/C control for common space				●	●	●	●	●	●	●	●	
Limited control for hotel guests					●	●	●	●	●	●	●	
Remote Management						●	●					
Advanced Energy Saving (Peak cut, Indoor unit rotation operation etc.)							●	●				
Monitor energy consumption							●					
Control third party products							●					
Integrate FGL A/C into BMS								●	●	●	●	
Interlock with window contact												●
Interlock with key-card												●

OFFICE

Type	Individual Control			Centralized Control				Integrating Control (Interface)				
												
	Wired Remote Controller	**Simple Remote Controller**	**Wireless Remote Controller**	**Group Remote Controller**	**Central Remote Controller**	**Touch Panel Controller**	**System Controller**	**BACnet® Gateway**	**Network Convertor for LonWorks®**	**MODBUS® Convertor**	**KNX® Convertor**	**External Switch Controller**
	UTY-RNRGZ2, UTY-RLRG	UTY-RSRG, UTY-RHRG	UTY-LNHG	UTY-CGGG	UTY-DCGG	UTY-DTGGZ1	UTY-APGXZ1, UTY-ALGXZ1	UTY-ABGXZ1, UTY-VBGX	UTY-VLGX	UTY-VMGX	UTY-VKGX	UTY-TERX
Local control for office staff	●	●	●	●	●							
Automatic control of A/C (Schedule timer, Weekly timer etc.)	●		●	●	●	●	●	●				
Centralized A/C control for management					●	●	●	●	●	●	●	
Limited control for office staff (RC Prohibition, Room temp set point limitation etc.)					●	●	●	●	●	●	●	
Advanced Energy Saving (Peak cut, Indoor unit rotation operation etc.)							●	●				
Remote Management						●	●					
Energy Charge Apportionment						●	●	●				
Monitor energy consumption							●					
Control third party products							●					
Integrate FGL A/C into BMS								●	●	●	●	
Interlock with door contact												●
Interlock with human sensor for meeting room												●

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.

For Light Commercial
• J- Series



For Commercial
• V- Series



Air Conditioning
Individual Control



Wired Remote Controller
(Touch panel)
UTY-RNRGZ2



Wired Remote Controller
UTY-RNRG



Simple Remote Controller
UTY-RSRG
UTY-RHRG
Without operation mode



Wireless Remote Controller
UTY-LNHG



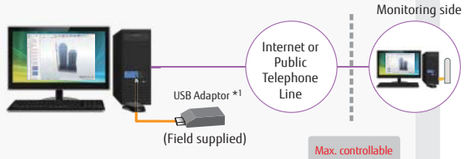
For Duct



For Cassette

IR Receiver Unit
UTB-YWC For Duct type
UTY-LRHGB1 For Cassette type

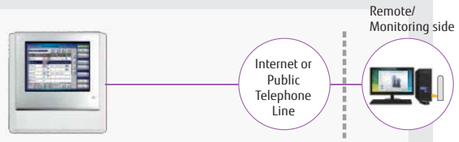
Air Conditioning
Centralized Control



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

Max. controllable 1600* Indoor units

*: Lite edition is max. controllable 400 indoor units



Touch Panel Controller
UTY-DTGGZ1

Max. controllable 400 Indoor units



Central Remote Controller
UTY-DCGG

Max. controllable 100 Indoor units



Group Remote Controller
UTY-CGGG

Network Convertor
(for Group Remote Controller)
UTY-VGGXZ1

Max. controllable 8 Remote Controller Groups

Convertor / Adaptor
For external device

BACnet® Gateway
UTY-ABGXZ1 Software



BACnet® Gateway
UTY-VBGX Hardware



Network Convertor For LONWORKS®
UTY-VLGX



MODBUS® Convertor
UTY-VMGX



MODBUS® Interface
FJ-RC-MBS-1



KNX® Convertor For VRF
UTY-VKGX



KNX® Interface
FJ-RC-KNX-1i



Wireless LAN Interface
FJ-RC-WIFI-1 / UTY-TFSXZ1



External Switch Controller
UTY-TERX

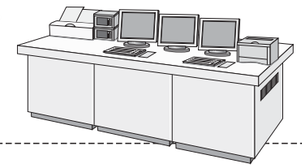


Card-key
(Field supplied)

Internet device



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

Convertor / Adaptor
For system expansion

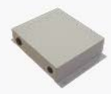
Network Convertor
(DC power supply)
UTY-VTGX



Network Convertor
(AC power supply)
UTY-VTGXV



Signal Amplifier
UTY-VSGXZ1





COMPARISON TABLE OF CONTROLLERS

Item			 Wired Remote Controller (Touch panel)	 Wired Remote Controller	 Simple Remote Controller	 Simple Remote Controller*1	 Wireless Remote Controller	 Group Remote Controller	 Central Remote Controller	 Touch Panel Controller	 System Controller Lite (Software)	 System Controller (Software)
Model name			UTY-RNRGZ2	UTY-RLRG	UTY-RSRG	UTY-RHRG	UTY-LNHG	UTY-CGGG	UTY-DCGG	UTY-DTGGZ1	UTY-ALGXZ1	UTY-APGXZ1
Max. controllable remote controller groups			1	1	1	1	1	8	100	400	400	1600
Max. controllable indoor units			16	16	16	16	16	128	100	400	400	1600
Max. controllable groups			–	–	–	–	–	–	16	400	400	1600
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 louver 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		●	●	●	●	–	●	●	●	●	●
	Cooling/heating priority		●	●	●	●	–	●	●	●	●	●
	Address display		●	●	●	●	–	●	●	●	●	●
	Room temp		●	–	●	●	–	–	–	●	–	–
	Multi language		●	–	–	–	–	–	●	●	●	●
	Summer time		●	–	–	–	–	–	●	●	●	●
	Name registration		●	–	–	–	–	–	●	●	●	●
	Backlight		●	–	●	●	–	–	●	●	–	–
	2D floor layout / 3D building display		–	–	–	–	–	–	–	–	–	●
	Refrigerant leakage detection function		–	–	–	–	–	–	–	●	●	●
Timer	Schedule timer	Period	Week	Week	–	–	–	Week	Week	Year	Year	Year
		On/off, Temp, Mode, Times per day	8	4	–	–	–	4	20	20	144	144
	On/off timer		●	●	–	–	●	–	–	–	–	–
	Sleep timer		–	–	–	–	●	–	–	–	–	–
	Program timer		–	–	–	–	●	–	–	–	–	–
	Auto off timer		●	●	–	–	–	–	–	●	–	–
	Day off		●	●	–	–	–	–	●	●	●	●
	Min. unit of timer setting (Minutes)		10 • 30	30	–	–	5	10	10	10	10	10
Control	Status monitoring system		–	–	–	–	–	–	●	●	●	●
	Electricity charge apportionment		–	–	–	–	–	–	–	○	○	●
	Error history		●	●	–	–	–	●	●	●	●	●
	Emergency stop		–	–	–	–	–	–	●*2	●*2	–	–
	Remote management		–	–	–	–	–	–	–	●	○	●
	Energy saving management		–	–	–	–	–	–	–	–	○	○
	E-mail notification for malfunction		–	–	–	–	–	–	–	●	●	●
	Key lock		● Child lock	● Child lock	–	–	–	● Child lock	● Password setting	● Password setting	● Password setting	● Password setting
	Low noise mode		–	–	–	–	–	–	–	●	–	–

*1 "Operation mode" setting is not available for this model. *2 This function is available only through external input control. ●: Supported ○: Optional function –: Not supported yet

Wired Remote Controller (Touch Panel)

Max. controllable 16 indoor units

UTY-RNRGZ2

Easy operation by high-definition large STN-LCD touch panel screen

- Easy finger touch operation with LCD panel
- Built-in weekly/Daily timer (ON/OFF, Temp., Mode)
- Backlight enables easy operation in a darkened room
- Room temperature display
- Control up to 16 indoor units
- Corresponds to 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 realized using one remote controller only.

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.



Backlight

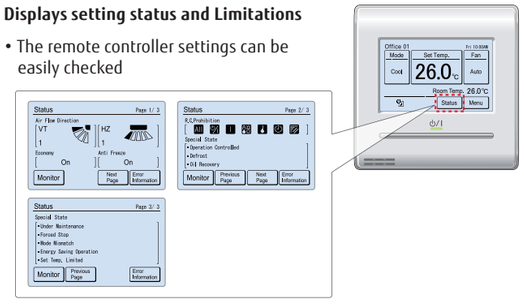
- Backlight enable easy operation in a darkened room.
- For the lighting time of Backlight, 30 or 60 seconds can be set.
- Backlight activates while the buttons are operated and goes off 30 or 60 seconds after the operation stops.



Various convenient functions

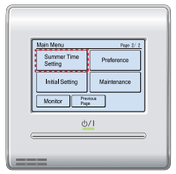
Displays setting status and Limitations

- The remote controller settings can be easily checked



Summer Time display

- This function can be set easily from 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.



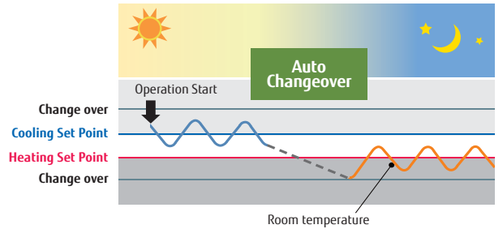
Various energy saving control

Custom Auto

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

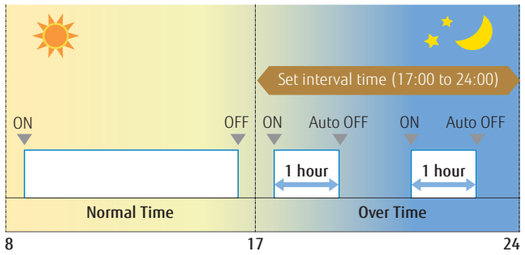
* This function is not available for some models.

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



Auto OFF timer

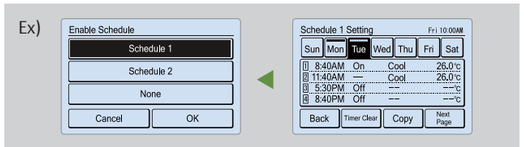
- The indoor unit automatically is turned off when it reaches to the preset operating time frame.
- The time frame of the "Auto off timer" can be flexibly scheduled.
- Can be set off time 30 to 240 minutes



Ex.) At 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 such as for the summer and winter can be set.
- 8 setting changeable per day of week (Setting items: On/Off, Temperature, Mode, Time)



Set Temperature Auto Return

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

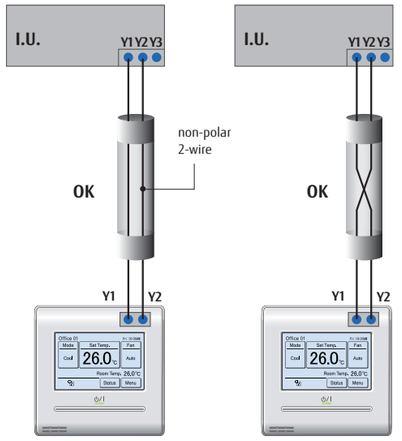
Set Temperature Upper and Lower Limit Setting

- The set temperature range can be set for each operation mode. (Cooling / Heating / Auto).

Simplified installation

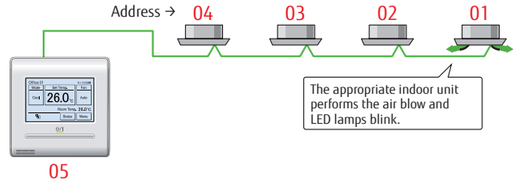
Uses non-polar 2-wire type

- The faulty wiring can be prevented by using non-polar 2-wire.



Auto Address Setting/Setting Position Notification

- Reduce errors and install time compared with the current specification Rotary SW
- When will be set remote controller groups, can also be set automatically new Wired remote controller address
- After auto address setting of new wired remote controller groups, what number can also confirm addresses



Easy Maintenance

Error History Display

- The errors that occur in the indoor unit or remote controller are saved as a history.
- A maximum of 32 error incidents can be saved.



Specifications

Model name		UTY-RNRGZ2
Power Supply		DC 12V
Dimensions (H x W x D)	mm	120 × 120 × 20.4
Weight	g	220

DC12V is supplied by indoor unit.

Wired Remote Controller

Max. controllable 16 indoor units

UTY-RLRG

- Various timer setup (ON / OFF / WEEKLY) are possible.
- The room temperature can be controlled by detecting the temperature accurately with Built-in thermo sensor.
- When a failure occurs, the error code is displayed.
- Error history. (Last 16 error codes can be accessed.)
- 2-wire type



Functions

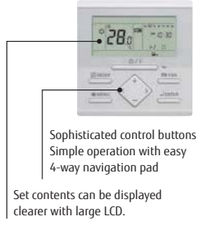
High performance and compact size

In addition to the individual control, weekly timer, and various energy saving controls can be realized using only one remote controller.



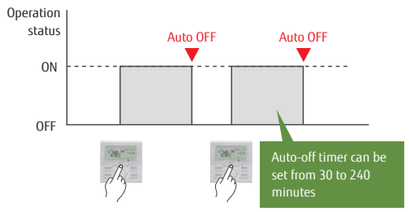
High visibility and easy operation

- "Mode", "Set Temp", and "Fan" are displayed at large size on the top screen.
- Each function to be set is indicated by an icon.
- Control guide is displayed and operation is simple and straightforward.



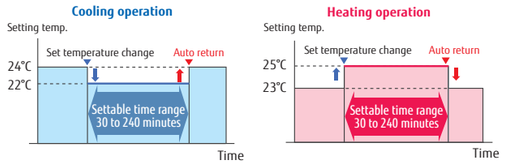
Auto-off timer

- The indoor unit automatically turns off after a set time has passed.



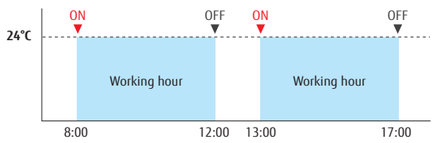
Set temperature auto return

- The setting temperature automatically returns to the previously set temperature.
- The time range in which the set temperature can be changed is 30 to 240 minutes.



Weekly timer function

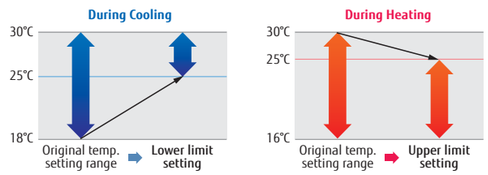
- Not only time setting On / Off, but also setting of the operation mode and set temperature can be set by Weekly timer function.



4 types (ON, OFF, ON, OFF) can be set on every day of the week in a week.

Set temperature upper and lower limit setting

- The set temperature range can be set for each operation mode. (Cooling / Heating / Auto)



Specifications

Model name		UTY-RLRG
Power Supply		DC 12V
Dimensions (H x W x D)	mm	120 × 120 × 17
Weight	g	170

DC12V is supplied by indoor unit.

Simple Remote Controller

Max. controllable 16 indoor units

UTY-RSRG
UTY-RHRG (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.
- Stylish design: Simple design to match the stylish interior.
- Large LCD screen & simple operation buttons
- Backlight: White colored backlight on monitor enable easy operation in dark.
- 2-wire type



UTY-RSRG



UTY-RHRG
Without Operation mode

Functions

Corresponding to various applications

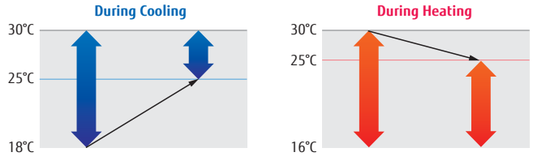
- **Vertical louver control:**

  Vertical air flow direction can be adjusted for Duct types with auto louver and Cassette types, which are installed in hotels and conference rooms, can be adjusted.



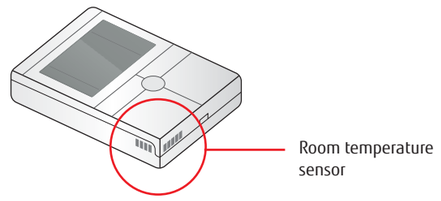
- **Room temperature set point limitation:**

  The Simple Remote Controller can manage to energy saving operation in small buildings without the central control unit.



- **Built in room temperature sensor:**

  The Simple Remote Controller detects actual room temperature and controls room climate accuracy.



Specifications

Model name		UTY-RSRG	UTY-RHRG
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

Max. controllable 16 indoor units

Selectable 4 daily timers

UTY-LNHG

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

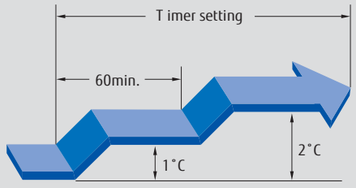
Select from 4 different timer programs : On / Off / Program / Sleep

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.

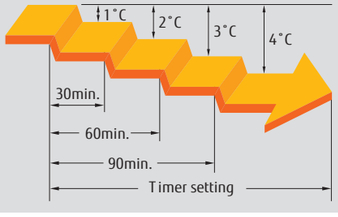
Cooling operation/dry operation

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.



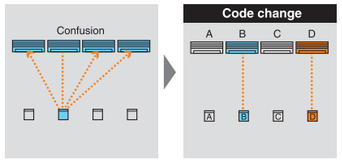
Heating operation

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.



Easy installation and operation

Code selector switch prevents indoor unit mix-up. (Up to 4 codes can be set.)

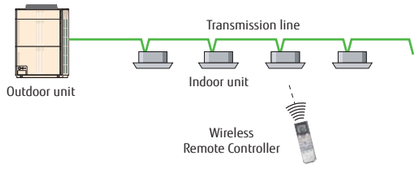


Wide and precise



Address setting

During installation work, address setting can be performed using the Wireless Remote Controller, thus eliminating manual switch setting.



Specifications

Model name		UTY-LNHG
Power Supply		1.5V (R03 / LR03 / AAA) × 2
Dimensions (H x W x D)	mm	170 × 56 × 19
Weight	g	85

IR Receiver Unit

UTB-YWC

Duct type* indoor units can be controlled with Wireless Remote Controller

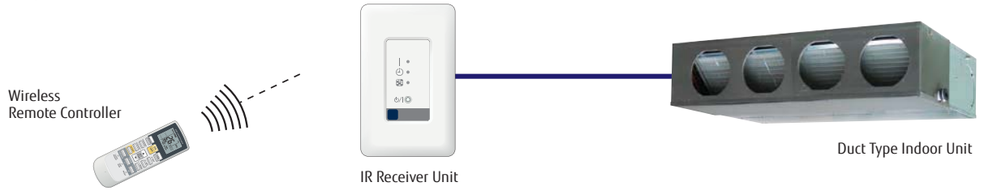
*Only Large Airflow Duct can not be connected to IR Receiver Unit.

- 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.



Functions

Wiring connection



Specifications

Model name		UTB-YWC
Power Supply		DC 5V
Dimensions (H x W x D)	mm	145 × 90 × 30
Weight	g	150

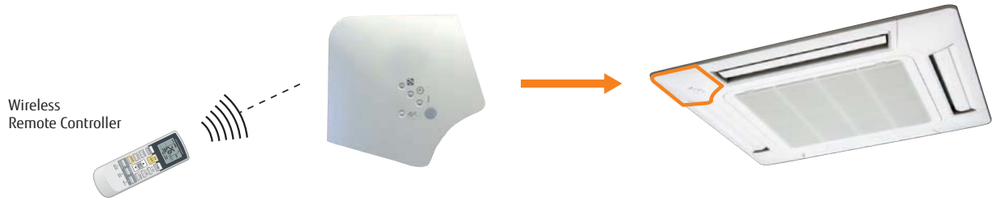
IR Receiver Unit

UTY-LRHGB1

Cassette type indoor unit can be controlled
with Wireless Remote Controller



Functions



Specifications

Model name		UTY-LRHGB1
Power Supply		DC 5V
Dimensions (H x W x D)	mm	193.9 × 193.9 × 31.2
Weight	g	140

Group Remote Controller / Network Convertor

Max. controllable **8** remote controller groups

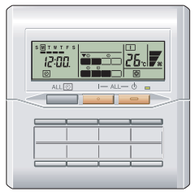
Max. controllable **92** indoor units in **8** Groups

Max. controllable **2** refrigerant circuits

UTY-CGGG / UTY-VGGXZ1

Group control of indoor units with simple operation

- Up to 8 remote controller groups can be controlled by one Group Remote Controller.
- Up to 64 Group Remote Controllers can be connected in one VRF network system.
- Network Convertor is required to connect Group Remote Controllers to a VRF network system. (Network Convertor allows up to 4 Group Remote Controllers)
- 3-wire type



Group Remote Controllers
UTY-CGGG

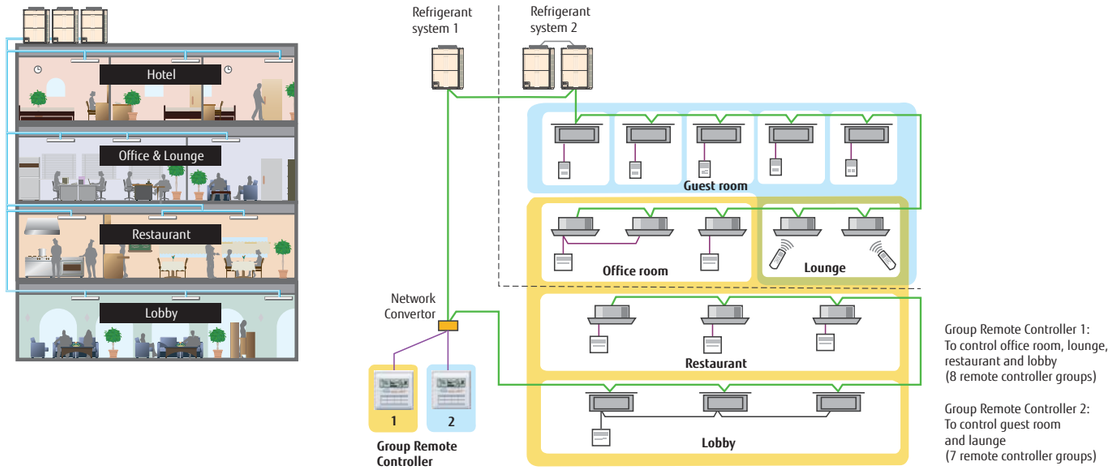


Network Convertor
UTY-VGGXZ1
For Group Remote Controller

Functions

Control up to 8 remote controller groups

Single Group Remote Controller controls and monitors up to 8 remote controller groups.



Group Remote Controller 1:
To control office room, lounge, restaurant and lobby
(8 remote controller groups)

Group Remote Controller 2:
To control guest room and launge
(7 remote controller groups)

High performance and compact size

ON / OFF, Operating mode, Room temperature and Fan speed setting can be controlled / monitored centrally or individually.

Central control + **ON/OFF control** + **Weekly timer** →



Built-in weekly timers

The weekly timer is provided as a standard function.

Specifications

Model name		UTY-CGGG
Power Supply		DC 12V
Dimensions (H x W x D)	mm	120 × 120 × 18
Weight	g	200

DC12V is supplied by indoor unit.

Model name		UTY-VGGXZ1
Power Supply		208-240V 50/60Hz, Single phase
Input power	W	8.5
Dimensions (H x W x D)	mm	67 × 288 × 211
Weight	g	1,500

Central Remote Controller

Max. controllable **100** indoor units

Max. controllable **16** groups

UTY-DCGG

Central control of small- and medium-sized buildings and tenants. The operation status of all connected indoor units can be viewed at a glance on a large LCD monitor to simplify individual control to batched control.

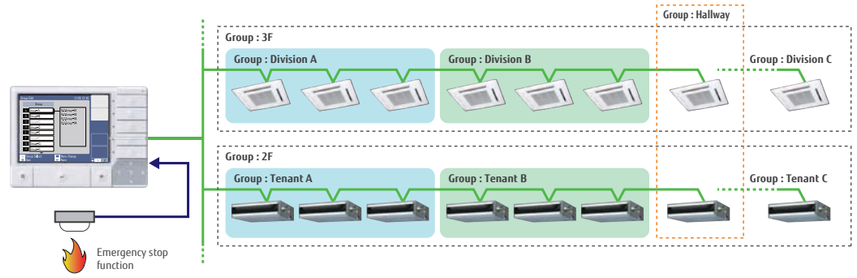
- Individual control and monitor of 100 indoor units
- 5 inch TFT color screen
- User friendly view and easy operation
- External input / output contact
- Detachable power supply unit
- Corresponds to 7 different languages (English, Chinese, French, German, Spanish, Russian, Polish)



Functions

System overview

- It allows multiple indoor units grouping (Max.16 groups controlled)
- Interlock with external device



Functions

- Diverse control of indoor units



- Remote controller prohibition (All, On / Off, Mode, Temp, Timer, Filter)



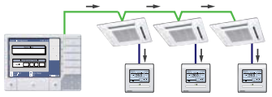
- Weekly timer



- Error history



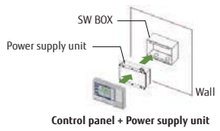
- Automatic clock adjustment



Easy Installation

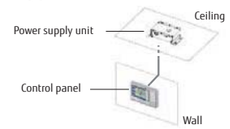
- The control panel and power supply unit can be installed separately.
- For flexibility in installation, the Control panel can be built into the wall or fix on the wall.

Setting pattern 1

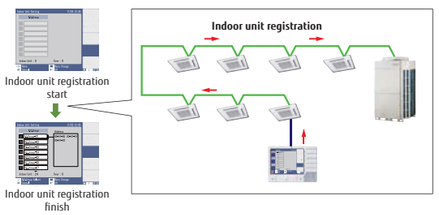


Control panel + Power supply unit

Setting pattern 2



- Automatic or manual indoor unit registration



Specifications

Model name		UTY-DCGG	
		Control Panel	Power Supply Unit
Power Supply		DC 5 V	100-240V, 50-60Hz, Single phase
Dimensions (H x W x D)	mm	120 x 162 x 25.7	99 x 135 x 39.2
Weight	g	308	355
<PACKING LIST>			
Packing List		Control Panel / Power Supply Unit / Connecting cable, etc.	

Touch Panel Controller

Max. controllable 400 indoor units | Max. controllable 100 outdoor units | Max. controllable 400 groups

UTY-DTGGZ1

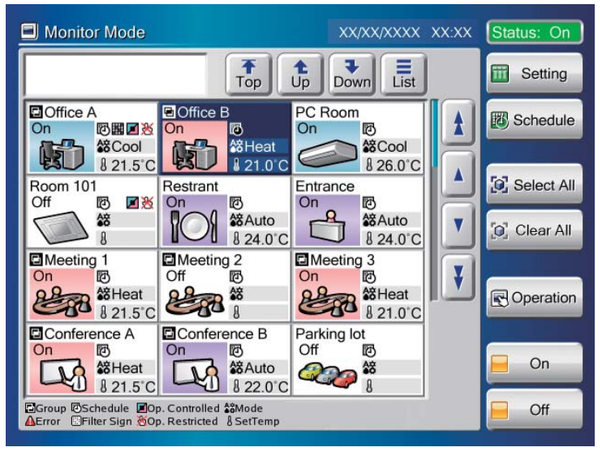


- Large-sized 7.5-inch TFT color
- LCD Easy finger touch operation
- Stylish shape and design to suit all application
- Up to 400 indoor units can be controlled
- Selectable 2 display types (Icon / List) in monitoring mode
- Supports 7 different-languages ,English, Chinese, French, German, Spanish, Russian, Polish.
- Mounted with LAN interface for remote control & operation, external input / output with emergency stop and batch ON / OFF

Functions

Control & monitoring from anywhere

- Control and monitor Fujitsu's air conditioner via LAN or Internet.
- Allow user or tenant to manage only assigned equipment by their PC or tablet from anywhere.
- Error contents are notified automatically by E-mail at error occurrence to handle the trouble promptly.



Easy maintenance

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

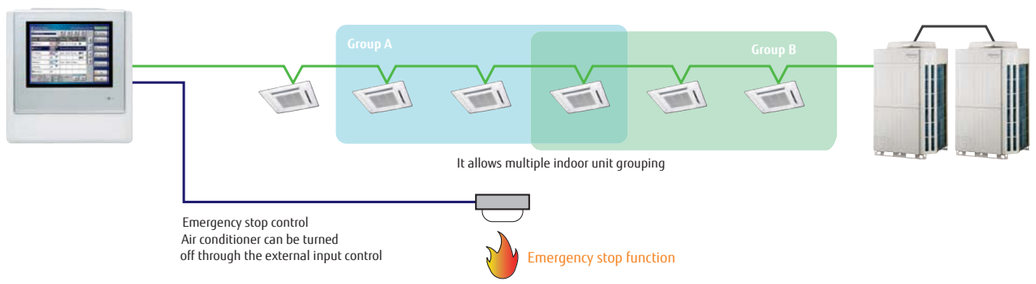


Easy installation

- Touch Panel Controller is easily mounted to the wall.
- Flat back surface allows to be installed wherever it is needed.
- No additional component is required for installation

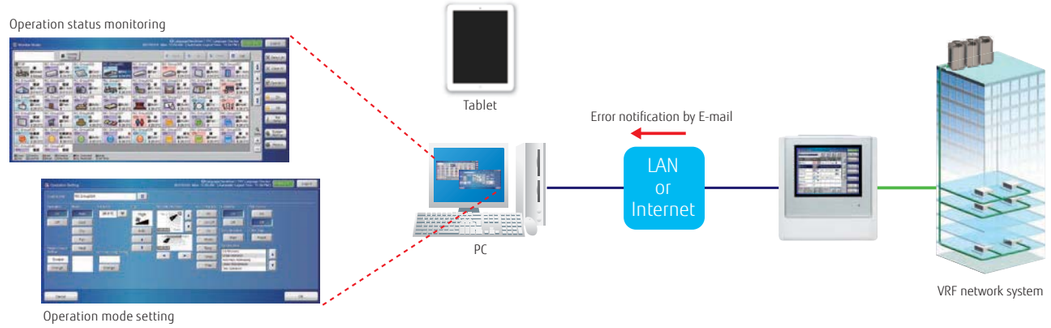


Up to 400 indoor units can be controlled



Control & monitoring

- Control and monitor Fujitsu's air conditioner via LAN or Internet.
- Allow user or tenant to manage only assigned equipment by their PC or tablet from anywhere.
- Error contents are notified automatically by E-mail at error occurrence to handle the trouble promptly.



Smart Phone

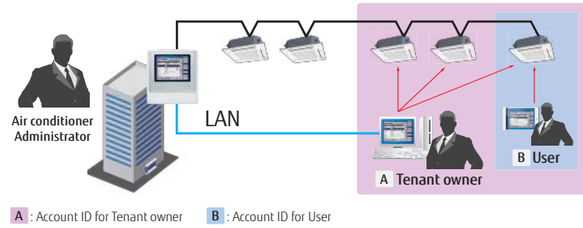
Model name	Browser
Nexus 6P (Android 7.1.1)	Google Chrome 5.5
iphone7 (iOS 10.1)	Safari 10

Tablet

Model name	Browser
ipad Pro 9.7inch (iOS 10.2.1)	Safari 10

Flexible access permission for Point each level user.

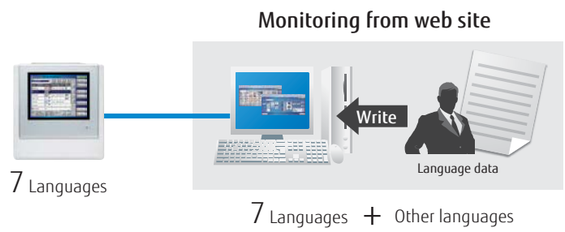
Administrator can register multiple user to permit which indoor unit(s) and which function can access.



A : Account ID for Tenant owner B : Account ID for User

Additional languages function

Corresponds to 7 different languages, English, Chinese, French, German, Spanish, Russian, Polish as standard.
Additional language can be integrated on remote device by creating language database.
Additional language is displayed on only the remote device, and Touch Panel Controller cannot be added other languages.

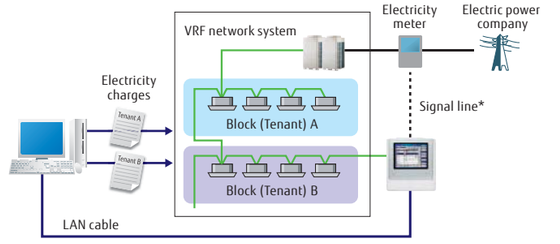


Electricity charge apportionment

Option UTY-PTGXA

- Electricity charge apportionment can be performed easily for the power consumed when billing users for air conditioning power charges.

- 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



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

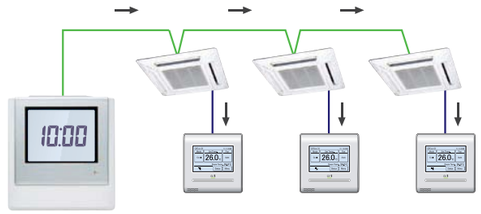
Automatic summer time setting

Providing function

1) Schedule setting of summer time setting
- It prevents the user from forgetting to set summer time. In addition, it reduces the time and labor of user.

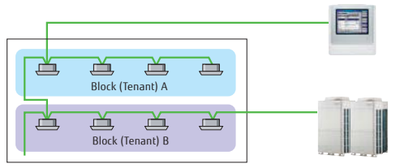
Automatic clock adjustment

2) The time setting of each controller can be set in batch automatically.

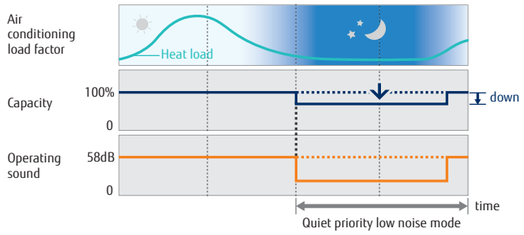


Outdoor low noise operation

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



Quiet priority setting



NEW Various energy saving control

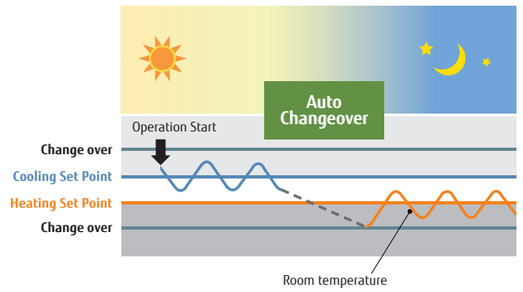
Custom Auto

- 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. 28℃, Heating set temp. 18℃



NEW Refrigerant leakage detection function

The refrigerant leak condition is indicated by the management equipment, and if refrigerant leakage occurs, it is displayed as a pop-up, the user is notified, and the refrigerant is shut off.



FUNCTIONS SUMMARY

	UTY-DTGGZ1	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 louver control	●*1	●
Group setting	●	●
RC prohibition	●	●
Anti freeze setting	●	●
Set temp. auto return	–	●
Various energy saving control	–	●
Economy mode setting	●	●
Human sensor control	–	●
Display		
Error	●	●
Defrosting	●	●
Current time	●	●
Day of week	●	●
R.C. prohibition	●	●
Cooling/heating priority	●	●
Address display	●	●
Room temp	●	●
Multi language	●	●
Summer time	●	●
Time zone setting	●	●
Name registration	●	●
Backlight	●	●
Language setting	7	7+other
Filter sign reset	●	●
Memory operation	●	●
Refrigerant leakage detection function	●	●

		UTY-DTGGZ1	Monitoring side
Timer			
Schedule timer	Period	Year	Year
	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		–	–
E-mail 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.

Specifications

Model name		UTY-DTGGZ1
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

System Controller Software

UTY-APGXZ1

System Controller realizes the advanced integrated monitoring & control of VRF network system from small scale buildings 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 air conditioning precision control function, central remote control, electricity charge calculation, schedule management, and energy saving functions are strengthened and building manager and owner needs are met.

Max. controllable	Max. controllable	Max. controllable
4	1,600	400
VRF network systems	indoor units	outdoor units



System Controller Lite Software

UTY-ALGXZ1

System Controller Lite has standard functions sufficient for air conditioner 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.

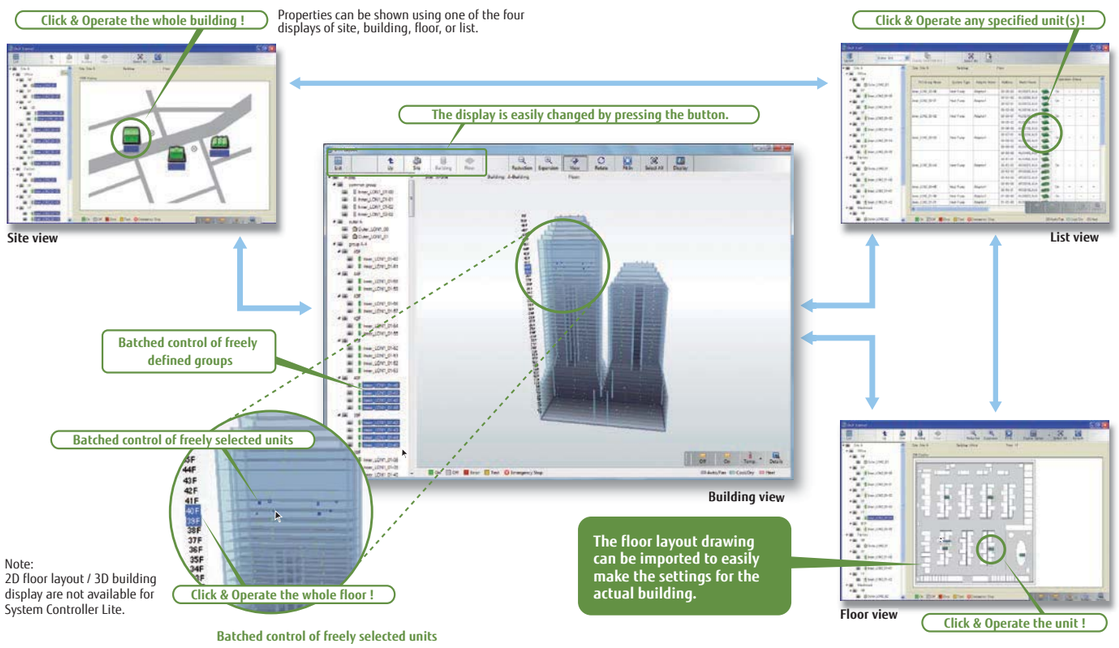
Max. controllable	Max. controllable	Max. controllable
1	400	100
VRF network system	indoor units	outdoor units



Functions

User friendly view and operation

- **Click & Operate** : The property is shown visually from the perspective most suitable for operation and operated accordingly (Click & Operate). You can select from among the 4 displays of site, building, floor, or list.
- **Freely define groups for batched control** : Indoor units can be freely grouped for simple batched control from a tree menu. Grouping by hierarchal structure, such as by section, division or department is possible.

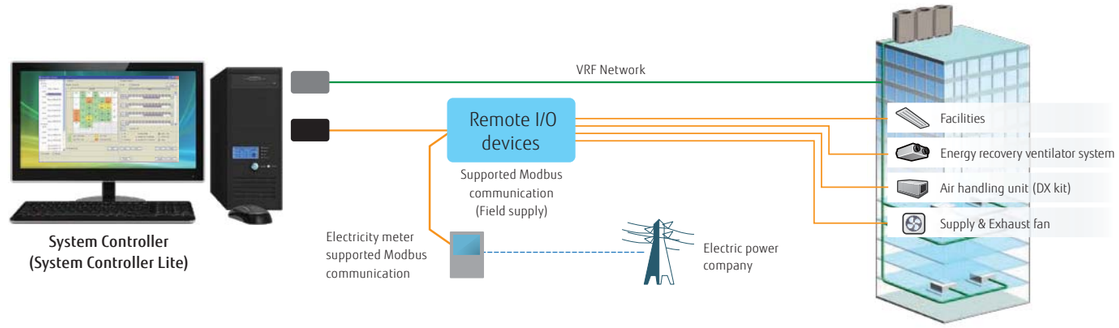


Note:
2D floor layout / 3D building display are not available for System Controller Lite.

3rd party devices connected by Modbus can be controlled.

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

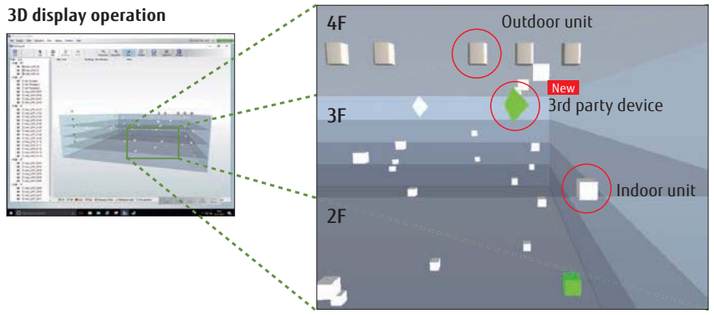
When Modbus Adaptor (locally purchased) is connected to PC, the electric facilities supported by Modbus can be controlled centrally. Wasteful electricity charge by forgetting to turn off and patrol activities can be reduced in the entire building.



3D display of external equipment

3D display is also enabled for 3rd party devices, so Installation location and operation status can be checked at a glance and the operation can be managed easily.

3D display operation

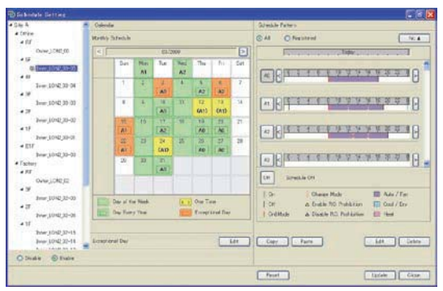


*UTY-APGXZ1 only

Diverse operation management & Data management

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.
- Settings can be made for periods straddling midnight.
- Allows programming of special settings for holidays, including public holidays, for a complete year.
- Low noise operation of outdoor unit can be scheduled.



Diverse control of indoor 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.

Automatic clock adjustment

The time setting of each controller can be set in batch automatically.

Error display & E-mail notification

Error is notified with popup message, audible sound and E-mail real time when error occurs. Error for the past 1 year are logged and can be reviewed later.

Data base import/export

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

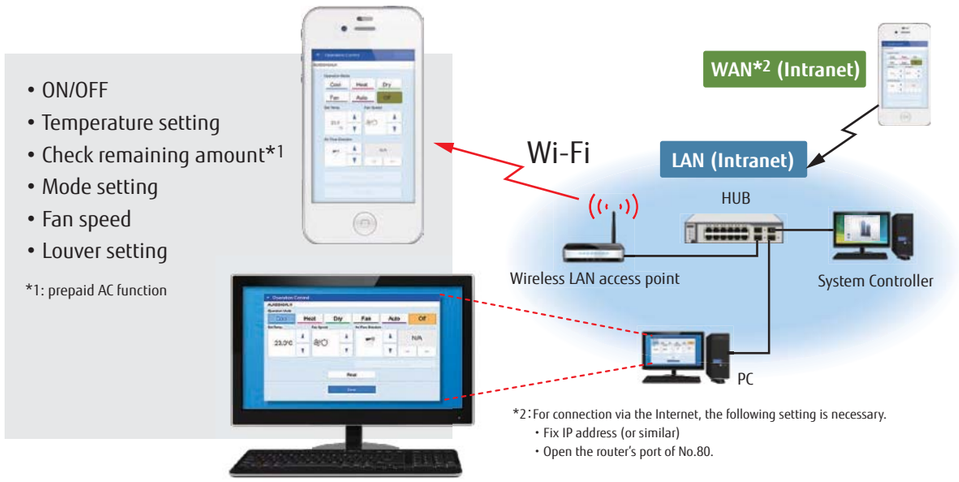
Operating & control record

Displays the history of operation status and control.

Functions

Web Operation

PC and smartphones can be used as simple remote controller.
(Indoor unit user setting is necessary to operate it from System Controller side)



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

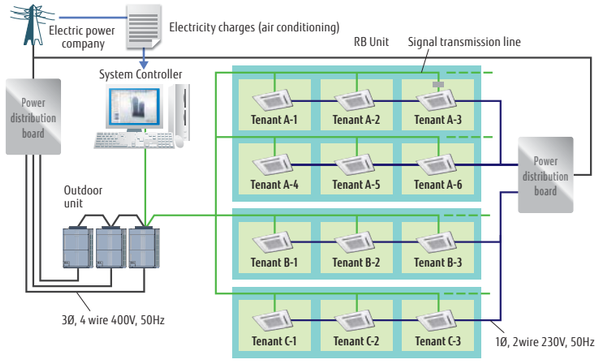
Electricity charge apportionment

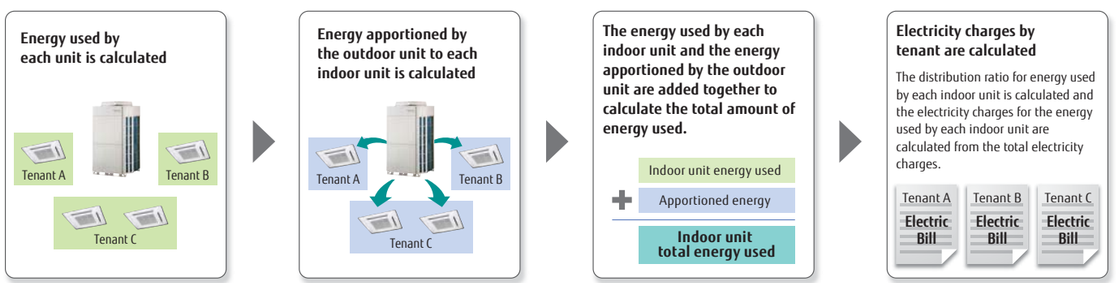
Standard for System Controller Option for System Controller Lite UTY-PLGXA2

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, used energy apportionment ratio will be provided, calculating in detail the energy consumed by the units used by each tenant. 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 at right)
The detailed calculation takes into consideration such things as unused rooms and nighttime electricity charges and shows them in a charges calculation sheet.

System Configuration Example

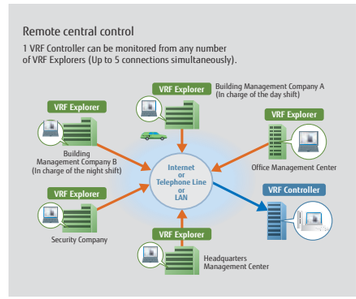


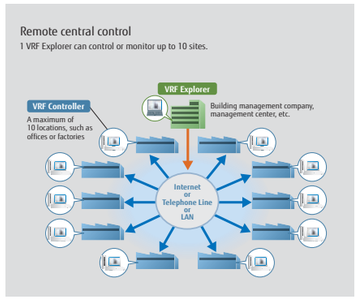


Remote management

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

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





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. Excellent energy saving operation is performed while keeping users comfortable.

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 analyze the energy saving effect.

Indoor unit rotation operation

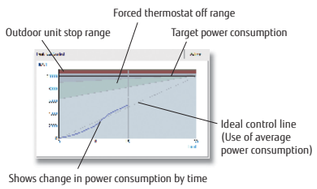
The operation of indoor units can be automatically rotated within a group in accordance with the set annual schedule to reduce power consumption while maintaining comfort. The indoor unit operation stoppage rate can be selected.



Indoor unit rotation screen

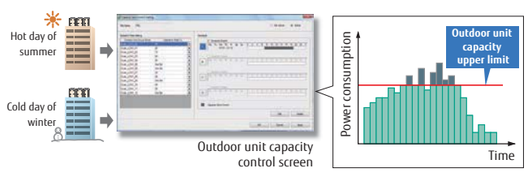
Peak cut operation

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



Outdoor unit capacity save

Outdoor unit capacity save 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.

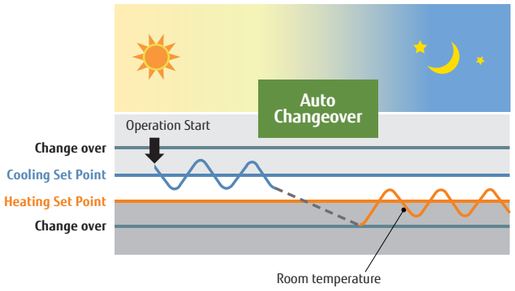


Functions

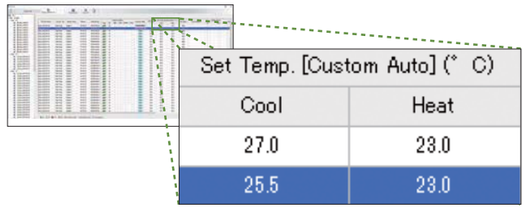
Custom Auto Function

Set the temperature to start cooling and the temperature to start heating, and perform the cooling / heating operation according to the room temperature. When the room temperature is between the cooling set temperature and the heating set temperature, since air conditioning is not performed, energy saving performance is improved.

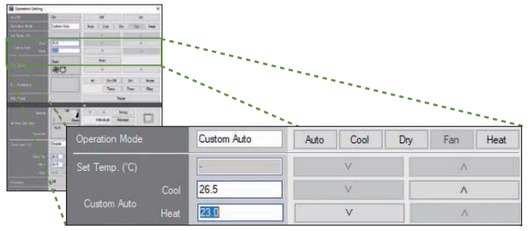
Cooling set temp. 28˚C, Heating set temp. 18˚C



Custom Auto operation display



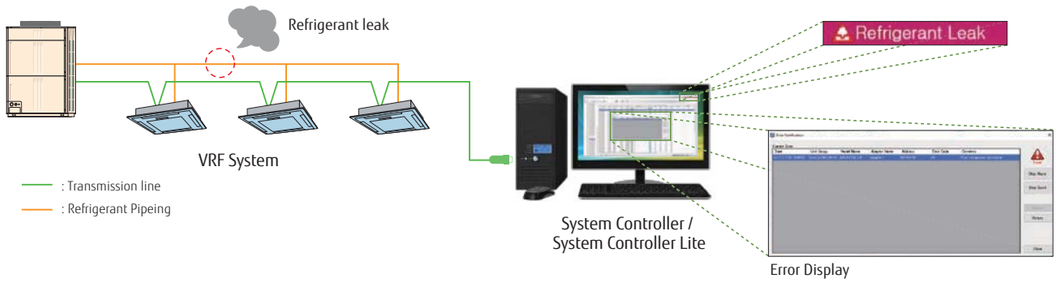
Custom Auto operation display



*This function can display only the indoor unit that supports Custom Auto Function.

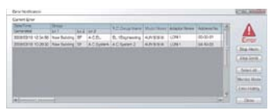
Refrigerant leakage detect function

The refrigerant leak condition is indicated by the management equipment, and if refrigerant leakage occurs, it is displayed as a pop-up, the user is notified, and the refrigerant is shut off.



Error display

Error is notified with popup message, audible sound and real time e-mail when error occurs. Error for the past 1year are logged and can be reviewed later.



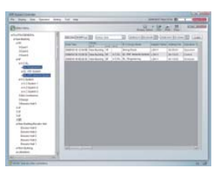
Diverse control of indoor units

- Indoor unit operation state, operation mode, etc. are displayed.
- Indoor unit start/stop and operation mode switching, temperature setting, remote controller prohibition, etc. setting.



Operating & control record

Displays the history of operation status and indications.



Energy saving function

Energy saving operation considering comfort by economy setting, temperature set point limitation, etc.



FUNCTIONS SUMMARY

Function	Type		System controller UTY-APGXZ1	System controller (Option) UTY-PEGXZ1	System controller lite UTY-ALGXZ1	(Option) UTY-PLGXR2	(Option) UTY-PLGXA2	(Option) UTY-PLGXE2	(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 / 1 site		20	—	—	—	—	—	—
	Number of floor per 1 site		200	—	—	—	—	—	—
	Number of floor per 1 building		50	—	—	—	—	—	—
	3D graphical layout view		●	—	—	—	—	—	—
	2D graphical layout view		●	—	—	—	—	—	—
	List display		●	—	●	—	—	—	—
	Tree display		●	—	●	—	—	—	—
	Group display		●	—	●	—	—	—	—
Error management	Error notification		●	—	●	—	—	—	—
	Audible alarm		●	—	●	—	—	—	—
	Error e-mail 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	●	—	●	—	—	—	—
		Antifreeze	●	—	●	—	—	—	—
		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		●	—	●	—	—	—	—
	Special 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 managemment	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 rotation		—	●	—	—	—	●	—
	Peak cut control		—	●	—	—	—	●	—
	Outdoor unit capacity save		—	●	—	—	—	●	—
	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	—	—	—	—
	Refrigerant leakage detection function		●	—	●	—	—	—	—

●●: 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 space355	
Display	1024 x 768 or higher resolution	
Interface	•Ethernet port (for getting access to the Internet using LAN) or Modem (for getting access to the Internet using 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 getting access to the Internet using LAN) or Modem (for getting access to the Internet using 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.)re.

<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	Electricity charge apportionment	Energy saving	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.

BACnet® Gateway

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

UTY-ABGXZ1

- It is possible to connect 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 & 100 outdoor units for one network system) can be connected to one BACnet® Gateway.
- It is possible to control or monitor VRF network system from BMS via BACnet® Gateway.
- Compatible with BACnet® (ANSI / ASHRAE-135-2014) application specific controller (B-ASC).
- Compatible with BACnet®/IP over Ethernet.
- Scheduling function, Alarm & Event functions as well as Electricity Change Apportionment function are provided in BACnet® Gateway.
- Connection between VRF network system to personal computer is possible via small U10 USB interface. However, both U10 USB interface & personal computer are field supplied items.
- Corresponds to 7 different languages, English, Chinese, French, German, Spanish, Russian, Polish.

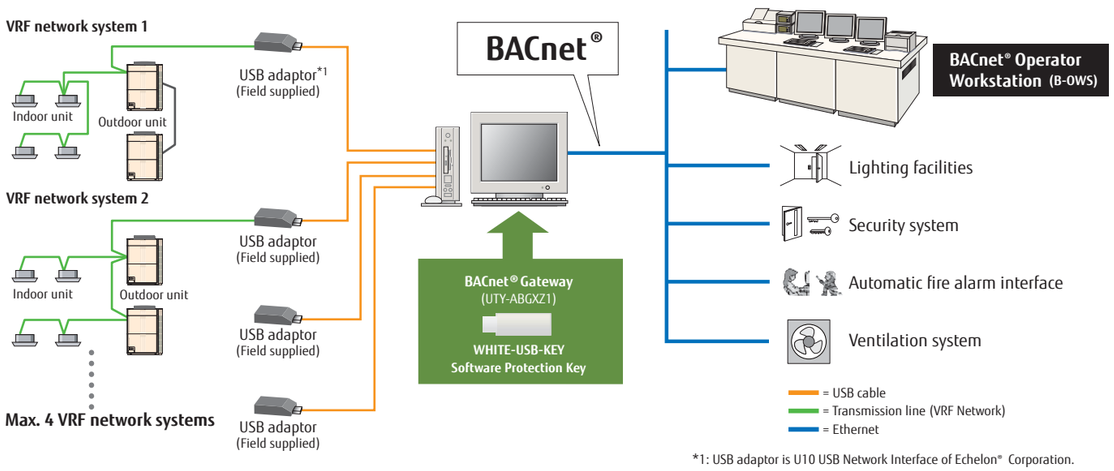
BACnet is a registered trademark of ASHRAE. ASHRAE does not endorse, approve or test products for compliance with ASHRAE standards. Compliance of listed products to the requirements of ASHRAE Standard 135 is the responsibility of BACnet International (BI). BTL is a registered trademark of BACnet International.



WHITE-USB-KEY
(Software Protection Key)

Functions

Installation example



*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)

Max. controllable **1** VRF network system | Max. controllable **32** refrigerant system | Max. controllable **128** indoor units

UTY-VBGX

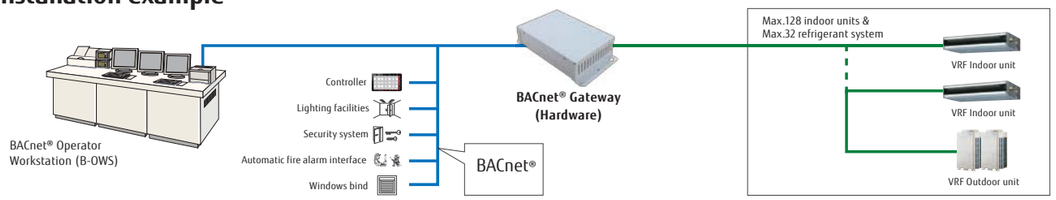
- BACnet® Gateway enables to connect a BMS and FG VRF system.
- A maximum of 128 indoor units and 32 refrigerant system can be connected to a single BACnet® Gateway.
- Compatible with BACnet® (ANSI / ASHRAE-135-2012) application specific controller (B-ASC).
- Compatible with BACnet®/IP over Ethernet.

BACnet is a registered trademark of ASHRAE. ASHRAE does not endorse, approve or test products for compliance with ASHRAE standards. Compliance of listed products to the requirements of ASHRAE Standard 135 is the responsibility of BACnet International (BI). BTL is a registered trademark of BACnet International.



Functions

Installation example



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 etwork		4
Power Supply		100-240V 50/60Hz, single phase
Power Consumption	W	4.6 (max)
Dimensions (H x W x D)	mm	59.6 × 270.4 × 176
Weight	g	1,200

Network Convertor for LonWorks®

Max. controllable **4** Units to BMS | Max. controllable **128** indoor units | Max. controllable **100** outdoor units

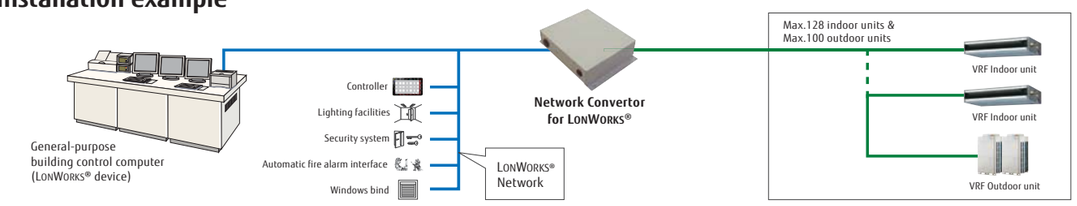
UTY-VLGX

- For connection between VRF network system and a LONWORKS® open network for management of small to medium-sized BMS and VRF network system.
- 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 Convertor for LONWORKS®



Functions

Installation example



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.)

MODBUS® Convertor

Max. connectable 9 units to one VRF | Max. controllable 128 indoor units | Max. controllable 100 outdoor units

UTY-VMGX



The MODOBUS Convertor 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 Convertor
- The MODBUS Convertor permits central monitoring and control of air conditioners from BMS or Central Controller.

Functions



Specifications

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

MODBUS® Interface

Max. controllable 1 Single indoor unit

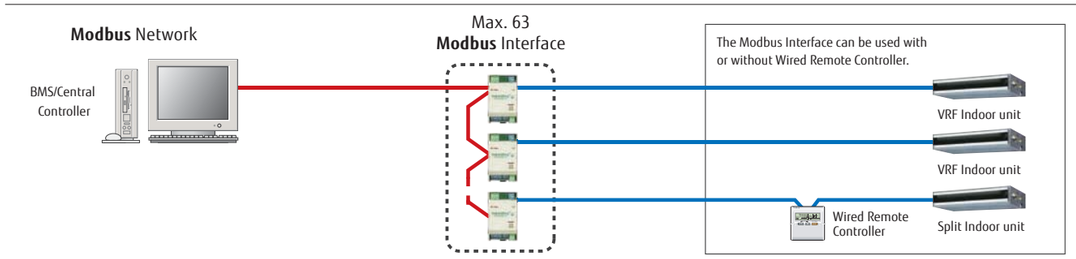
FJ-RC-MBS-1



The Modbus Interface 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 Interface permits central monitoring and control of air conditioners from BMS.

Functions



Specifications

Model name		FJ-RC-MBS-1
Dimensions (H x W x D)	mm	93 × 53 × 58
Weight	g	85

KNX® Convertor (for VRF)

Max. controllable 128 indoor units | Max. controllable 100 outdoor units

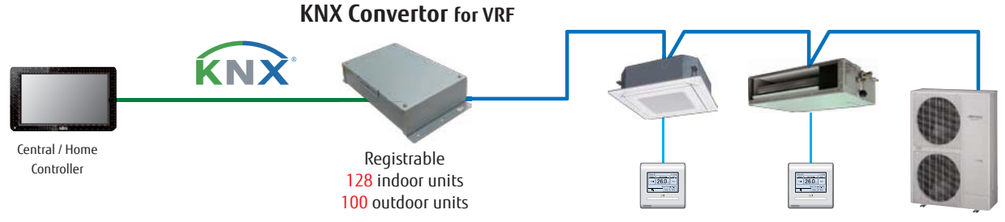
UTY-VKGX



It is possible to control the VRF system from central / home controller via KNX network.

- New KNX Convertor enables to connect 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



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

KNX® Interface

Max. controllable 1 group

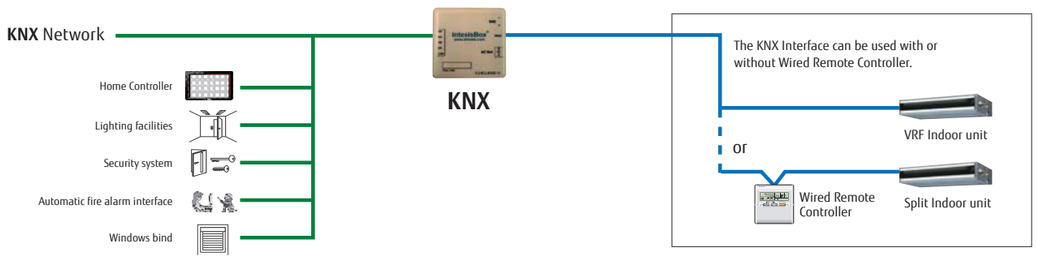
FJ-RC-KNX-1i



The KNX Interface allows a complete integration of air conditioners with KNX Network systems.

- Simple installation due to small and compact size.
- No separate external power supply required (just KNX bus power).
- Can be used for single indoor units and group controlled (up to 16) indoor units

Functions



Specifications

Model name		FJ-RC-KNX-1i
Dimensions (H x W x D)	mm	70 × 70 × 28
Weight	g	70

Wireless LAN Interface

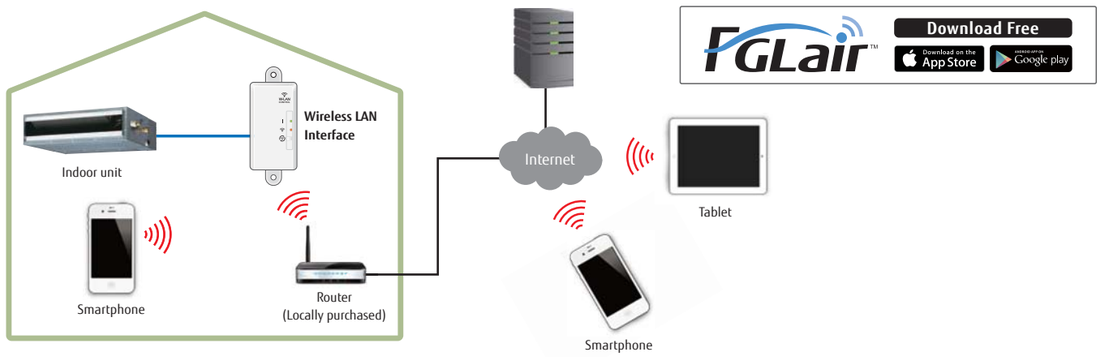
Max. controllable
1
Single indoor unit

UTY-TFSXZ1

- It is the most advanced solution to remotely manage an Air Conditioning system using all sort of mobile devices such as Smartphones, and tablets.
- No separate external power supply required
- Can be used for single indoor units and multi system indoor units



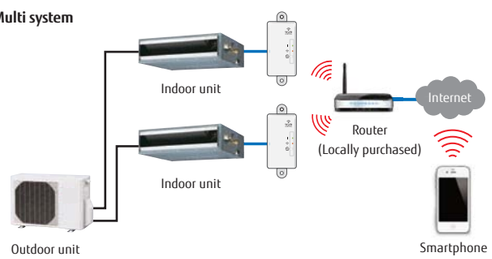
Functions



Basic control

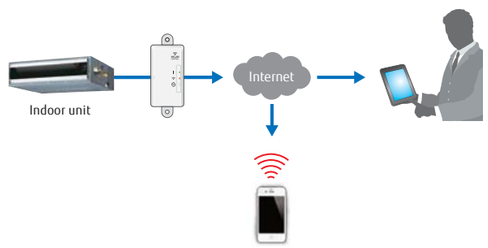
- Turning the units on and off
- Mode control (Heat, Cool, Dry, Auto, Fan)
- Fan speed setting
- Louver position (Airflow direction setting)
- Timer operation setting (Weekly timer)
- Economy mode setting

Multi system



Error display & E-mail notification

- Alerts e-mail notification
- Air conditioning malfunction display
- It enables rapid service response when error occurs.



Multiple air conditioning management

- Multiple air conditioning management at difference locations.

Specifications

Model name		UTY-TFSXZ1
Dimensions (H x W x D)	mm	71 × 38 × 15
Weight	g	35

Wireless LAN Interface IntesisHome®

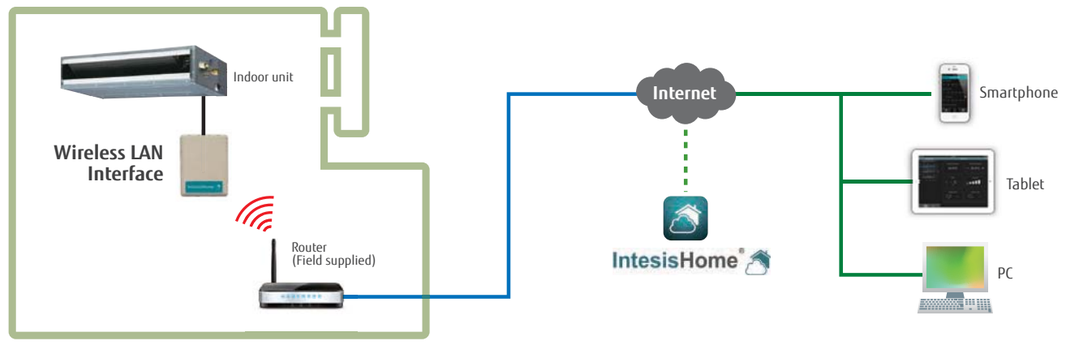
Max. controllable
1
Single indoor unit

FJ-RC-WIFI-1

- It is the most advanced solution to remotely manage an Air Conditioning system using all sort of mobile devices such as Smartphones, Tablets and PC
- No separate external power supply required
- Can be used for single indoor units and group controlled (up to 16) indoor units



Functions



Basic control

- Turning the units on and off
- Mode control (Heat, Cool, Dry, Auto, Fan)
- Fan speed setting
- Louver position (Airflow direction setting)
- Room temperature display
- Set temperature control
- Multi Language
- One Scene and Timer



(Application screen image)

Advanced control (Optional functions)

- Climate working modes (ECO, Comfort, Powerful) (future release)
- Schedulable functionalities (ON/OFF, Modes, Set point temperature, Fan Speed, Louver position)
- Set temperature limitation (future release)
- Multiple Scenes & Timers and Calendar function

Notifications and History

- Alerts e-mail notification (future release)
- Air conditioning malfunction alerts
- Connectivity monitoring and alerts
- History (future release)

Specifications

Model name		FJ-RC-WIFI-1
Dimensions (H x W x D)	mm	108 × 70 × 28
Weight	g	80

Network Convertor

Max. controllable 16 single indoor units

Max. controllable 100 Network Convertors

UTY-VTGX (DC power supply type)

UTY-VTGXV (AC power supply type)

Compact remote controller provides access to basic functions

- The network convertors are required when connecting single split system to VRF network system.
- Compact and light weight design
- Connectable to both types of 2-wire and 3-wire remote controllers



UTY-VTGX
DC power supply type

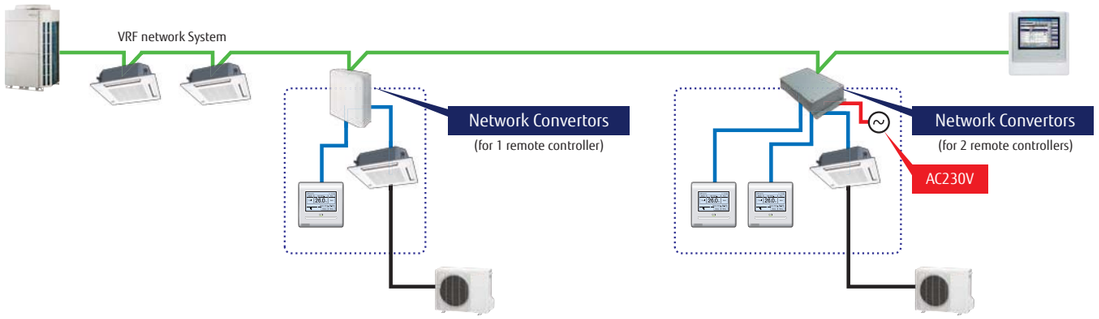


UTY-VTGXV
AC power supply type

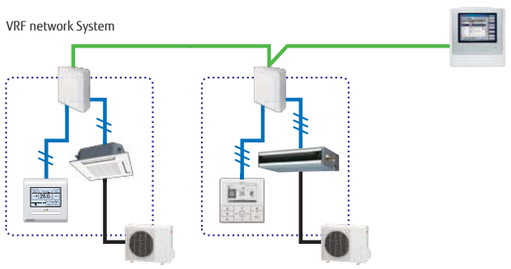
Functions

Installation example

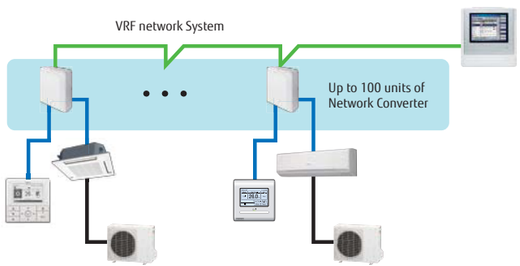
- 2 types of 1 remote controller type and 2 remote controllers type are available.
- Power supply (AC220-240V, 50/60Hz) is required for 2 remote controllers type.



- 2-wire and 3-wire type of the wired remote controller can be connectable.
- Power supply (AC220-240V, 50/60Hz) is required for 2 remote controllers type.



- A central control can be provided for the single split systems. (Up to 100 units of Network Convertor is connectable in one VRF network system)



Specifications

Model name		UTY-VTGX		UTY-VTGXV
Power Supply		polar 3-wire DC12V	non-polar 2-wire DC12V	220-240V 50/60Hz, Single phase
Input power	W	Max. 1.2		Max. 3
Dimensions (H x W x D)	mm	140 × 117 × 43		54 × 260 × 150
Weight	g	250		1,100

External Switch Controller

Max. controllable 1 group

UTY-TERX

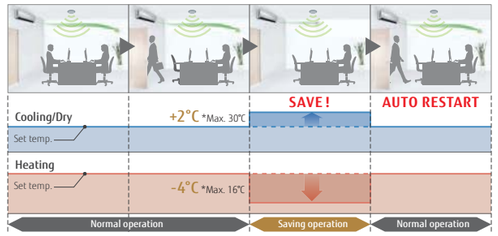
- In combination with a field supply Card-Key Switch or other sensor, the External Switch Controller allows control of the ON / OFF, Room temperature, Fan speed and Master control functions. This makes this product suitable for installations such as hotel rooms.
- Card-key or other sensor switches are available as a locally purchased parts.
- 2-wire type
- The set temperature can be specified at two points for cooling and heating individually (4 points).



Functions

Installation example

Human sensor catches movements of people in a room, and operates with lower capacity when people come back to the room, it automatically returns to previous operation mode.



Human sensor equipment needs to be purchased locally. The above example indicated that a signal is sent to this External Switch Controller if human sensor does not detect for 20 minutes. Human sensor is not mounted on the External Switch Controller.

Specifications

Model name		UTY-TERX
Power Supply		DC 6.5-16V
Dimensions (H x W x D)	mm	140 × 117 × 43
Weight	g	250

DC12V is supplied by indoor unit.

Signal Amplifier

UTY-VSGXZ1

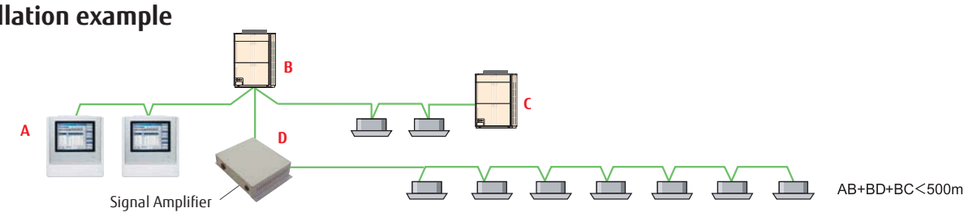
- Transmission Line length can be extended up to 3,600m with multiple Signal Amplifiers.
- Up to 40 signal amplifiers can be installed in a VRF network system.
- A signal amplifier is required,

(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



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

VENTILATION

EFFECTIVE HEAT EXCHANGE AND 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 heat exchange or normal ventilation setting, according to the requirements of the conditioned space.

Energy Recovery Ventilator

DX-Kit for airhandling applications

Energy Recovery Ventilator range

Airflow rate (m³/h)	250	350	500	800	1000
Model code	025	035	050	080	100
Energy Recovery Ventilator	 UTZ-BD025C	 UTZ-BD035C	 UTZ-BD050C	 UTZ-BD080C	 UTZ-BD100C

AIRSTAGE™

Energy Recovery Ventilator

Models
UTZ-BD025C
UTZ-BD035C
UTZ-BD050C
UTZ-BD080C
UTZ-BD100C


UTZ-BD025C


UTZ-BD035C


UTZ-BD050C


Controller


UTZ-BD080C


UTZ-BD100C

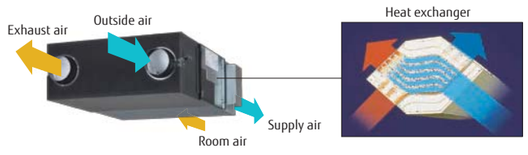
Feature

Heat exchange ventilation and normal ventilation

Heat exchange ventilation
When a room is cooled or heated, the exhausted cooling / heating energy is recovered by heat-exchange ventilation.

Normal ventilation
The operation is used during periods when the room space requires no cooling or heating effect, i.e. when there is minimal temperature difference between the indoor and outdoor environments.

Adopts a highly efficient counter-flow heat exchange element



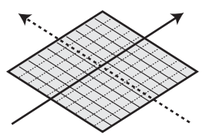
Energy efficiency and ecology

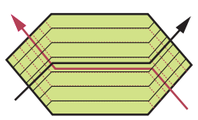
Energy consumption is dramatically reduced by using a counterflow heat-exchange element. Air conditioning load is reduced by approximately 20%, resulting in significant energy savings. Recovers up to 77% of the heat in the outgoing air.

Energy saving
20%

Features of heat exchange element

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


Other element
(Cross-flow element)


Fujitsu element
(Counter-flow element)

Quiet operation

Significantly reducing low pressure loss and noise allows low-noise operation.

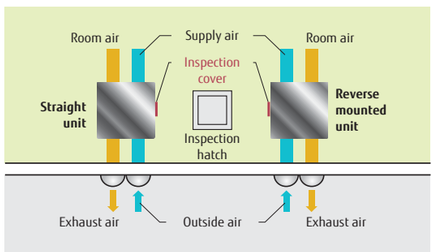
Reverse mountable direct air supply / exhaust system

Adoption of straight air supply / exhaust system:

Duct design is simplified because the air supply / exhaust ducts are straight.

Since each unit can be mounted in reverse position, only one inspection hole is needed for two units:

Two units can share one inspection hole so duct work is easier and more flexible.



Slim shape and easier installation

Counter-flow heat exchange element used for reduced noise and slimmer, more compact body shape.



Extended range of an external static pressure

An external static pressure is improved by adopting a powerful fan motor.
This allows for application in a wide variety building.

Easy remote operation



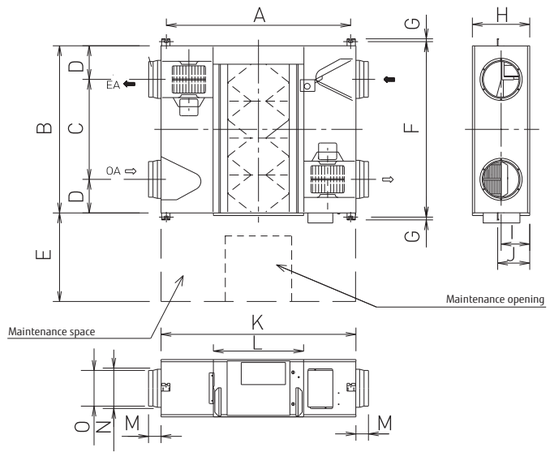
- POWER ON/OFF
- Air volume High/Low
- Heat exchange /Normal Ventilation
- ON/OFF Timer
- Clean filter display

Specifications

Rated flow rate				**250 m³/h**	**350 m³/h**	**500 m³/h**	**800 m³/h**	**1000 m³/h**
Model name				**UTZ-BD025C**	**UTZ-BD035C**	**UTZ-BD050C**	**UTZ-BD080C**	**UTZ-BD100C**
Power source				220 - 240V, 50Hz				
HEAT EXCHANGE VENTILATION	Input power	Extra high / High / Low	W	128 / 123 / 96	190 / 185 / 168	289 / 225 / 185	418 / 378 / 295	464 / 432 / 311
	Air flow rate	Extra high / High / Low	m³/h	250 / 250 / 190	350 / 350 / 240	500 / 500 / 440	800 / 800 / 630	1000 / 1000 / 700
	External static pressure	Extra high / High / Low	Pa	105 / 95 / 45	140 / 60 / 45	120 / 60 / 35	140 / 110 / 55	105 / 80 / 75
	Temperature Exchange Efficiency	Extra high / High / Low	%	75 / 75 / 77	75 / 75 / 78	75 / 75 / 76	75 / 75 / 76	75 / 75 / 79
	Energy Exchange Efficiency Cooling	Extra high / High / Low	%	63 / 63 / 65	66 / 66 / 71	62 / 62 / 64	65 / 65 / 68	65 / 65 / 70
	Energy Exchange Efficiency Heating	Extra high / High / Low	%	70 / 70 / 72	69 / 69 / 73	67 / 67 / 69	71 / 71 / 74	71 / 71 / 76
	Sound pressure level	Extra high / High / Low	dB*	31.5 / 30.5 / 26.5	33.0 / 31.0 / 25.5	37.5 / 35.5 / 32.5	37.5 / 37.0 / 34.5	38.5 / 37.5 / 34.5
NORMAL VENTILATION	Input power	Extra high / High / Low	W	128 / 123 / 96	190 / 185 / 168	289 / 225 / 185	418 / 378 / 295	464 / 432 / 311
	Air flow rate	Extra high / High / Low	m³/h	250 / 250 / 190	350 / 350 / 240	500 / 500 / 440	800 / 800 / 630	1000 / 1000 / 700
	External static pressure	Extra high / High / Low	Pa	105 / 95 / 45	140 / 60 / 45	120 / 60 / 35	140 / 110 / 55	105 / 80 / 75
	Sound pressure level	Extra high / High / Low	dB*	31.5 / 30.5 / 26.5	33.0 / 31.0 / 25.5	38.5 / 38.0 / 32.5	37.5 / 37.0 / 34.5	40.5 / 39.5 / 36.5
Dimensions (W × D × H)			mm	882 × 599 × 270	1050 × 804 × 317	1090 × 904 × 317	1322 × 884 × 388	1322 × 1134 × 388
Weight			kg	29	49	57	71	83
Outlet duct diameter			mm	150	150	200	250	250
Operation range			℃	-10 to 40	-10 to 40	-10 to 40	-10 to 40	-10 to 40
Maximum humidity			%	85	85	85	85	85

* The noise level must be measured 1.5 m below the centre of the unit.

Dimensions (Unit: mm)



	UTZ-BD025C	UTZ-BD035C	UTZ-BD050C	UTZ-BD080C	UTZ-BD100C
A	810	978	1018	1250	1250
B	599	804	904	884	1134
C	315	580	640	428	678
D	142	112	132	228	228
E	600	600	600	600	600
F	655	860	960	940	1190
G	19	19	19	19	19
H	270	317	317	388	388
I	135	159	159	194	194
J	159	182	182	218	218
K	882	1050	1090	1322	1322
L	414	470	470	612	612
M	95	70	70	85	85
N	Ø164	Ø164	Ø210	Ø258	Ø258
O	Ø144	Ø144	Ø194	Ø242	Ø242

DX-Kit for air handling applications

Models

Control unit
UTY-VDGX

EEV unit
UTP-VX30A
UTP-VX60A
UTP-VX90A

These kits enable other manufacturers air handling units (AHU) and fan coil units (FCU) to be incorporated into a Fujitsu VRF system or, be connected to a dedicated Fujitsu VRF outdoor unit as a 1:1 system to control outside air ventilation (AHU) or room temperature (FCU).



Control unit
UTY-VDGX



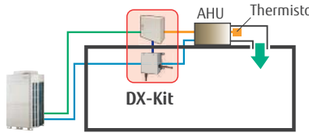
EEV unit
UTP-VX30A

EEV unit
UTP-VX60A

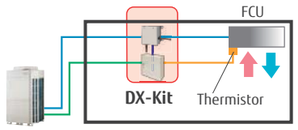
EEV unit
UTP-VX90A

Feature

Multiple temperature sensors optimally control the air handling unit and fan coil unit.

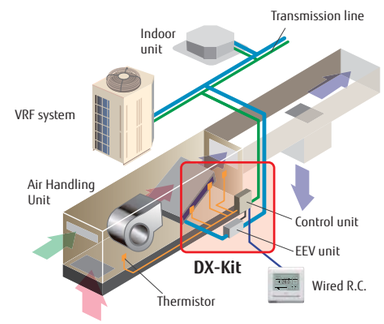


When connecting to an air handling unit, the supply air temperature is controlled by the discharge sensor.



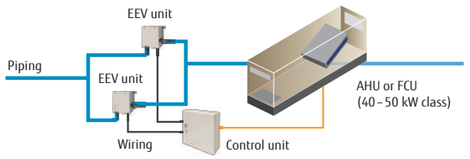
When connecting to a fan coil unit, the room temperature is controlled by the return air temperature sensor.

Arrangement as part of a VRF system



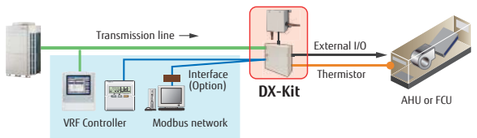
Supports a wide range of capacity classes

- 2 EEV units can be connected in parallel and up to 20 HP (50 kW) large capacity units. (Separation Tube of UTP-LX180A is required.)
- Connectable capacity range: 5 kW to 50 kW

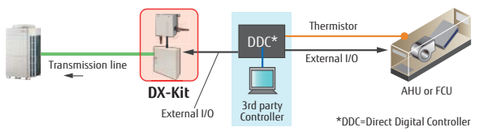


A variety of controls to match the application

- Central control using our VRF controllers or central management controllers



- Central control from external controllers



*DDC=Direct Digital Controller

Functions Summary

Inputs

- ON/OFF
- Setting temperature
- Capacity demand
- Heating / Cooling operation mode
- Fault information

Outputs

- ON/OFF indication
- Fan ON/OFF indication
- Thermo ON/OFF indication
- Defrost indication
- Fault indication

Modbus Control

- Possible to control via a Modbus enabled BMS by using optional interface.

Installation Limitation

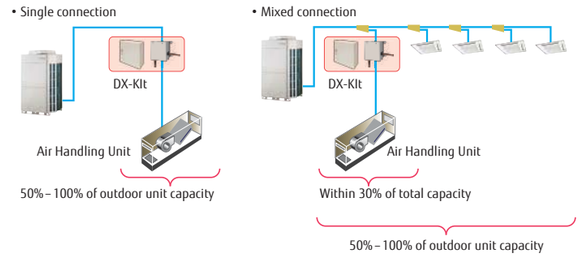
- Connectable VRF series : All VRF
- Connectable DX-Kit system capacity range : 50 to 100% of the outdoor unit capacity
- Connectable DX-Kit system capacity range with AHU or FCU : 30% or less of the outdoor unit capacity (Mixed connection)
- Max. wiring length from control unit : 10 m
- Max. piping length between EEV unit and indoor unit : 5 m
- Outdoor installation : Control unit (IP54 class) and EEV unit can be installed at an outdoor space.

[For 2EEV units connection (option)]

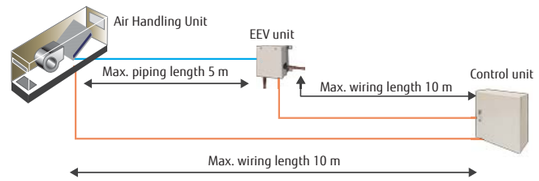
- Separation Tube : UTP-LX180A



Connectable capacity



Piping and wiring length



Specifications

EEV unit			UTP-VX30A			UTP-VX60A			UTP-VX90A		UTP-VX90A×2	
Power source		V/Ø/Hz	230/1/50									
Connectable capacity class		kW	5.0	6.3	8.0	10.0	12.5	14.0	20.0	25.0	40.0	50.0
Capacity	Cooling	kW	5.6 (5.1-5.9)	6.3 (6.0-7.1)	8 (7.2-9.0)	10 (9.1-11.1)	12.5 (11.2-13.2)	14 (13.3-18.0)	22.4 (18.1-23.7)	25 (23.8-28.0)	40 (28.1-44.7)	50.4 (44.8-50.4)
	Heating		6.3 (5.7-6.7)	7.1 (6.8-8.0)	9 (8.1-10.0)	11.2 (10.1-12.4)	14 (12.5-15.0)	16 (15.1-20.0)	25 (20.1-26.5)	28 (26.6-31.5)	45 (31.6-49.9)	56.5 (50.0-56.5)
Airflow Rate(Reference value)		m³/h	1,060	1,200	1,520	1,600	2,000	2,240	3,560	4,000	6,400	8,000
Dimensions (H × W × D)		mm	160 × 220 × 90								(160 × 220 × 90)× 2	
Weight		kg	2								2 × 2	
Connection pipe diameter	Liquid	mm	9.52	9.52	9.52	9.52	9.52	9.52	12.70	12.70	12.70	12.70

Control unit		UTY-VDGX
Power source	V/Ø/Hz	230 / 1 / 50
Dimensions (H × W × D)	mm	400 × 400 × 120
Weight	kg	10

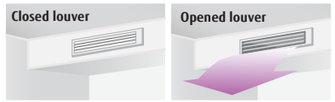
Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m Voltage : 230 [V].

AIRSTAGE™ OPTION

Auto Louver Grille Kit

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





Feature

Flexible Control

- **Operation with indoor unit**

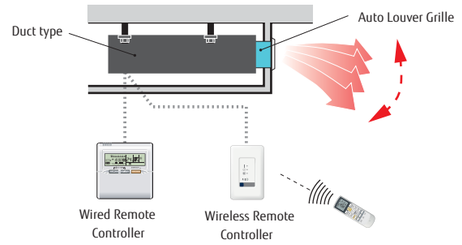
  Auto Louver can be operated by synchronizing remote controller of indoor unit.

- **UP and Down auto swing**

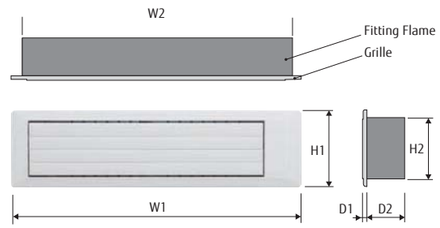
  - Auto airflow direction and auto swing
  - 4 steps selectable

- **Auto-closing louver**

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



Dimensions



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				

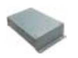
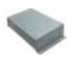
Specifications

Model name			UTD-GXTA-W	UTD-GXTB-W	UTD-GXTC-W
Applicable Indoor Unit			ARXD04/07/09/12/14GALH ARXK04/07/09/12/14GCLH	ARXD18GALH ARXK18GCLH	ARXD24GALH ARXK24GCLH ARXN009/012/014GLBH
Power source			Connecting with Control box of indoor unit		
Fixing of Auto Louver 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		
Louver Motor			Stepping Motor		
Accessories			Fitting Flame, etc.		
Operation Range	Cooling	℃	18 to 32		
		% RH	80% or less		
	Heating	℃	16 to 30		

*: The Auto Louver Grille Kit can also be installed to ARXD07/09/12/14/18/24LATH revision code B models. Please refer to the Design & Technical manual for "revision code " details.

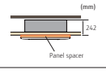
CONTROL SYSTEM LIST

Controllers / Interface

	Type		Indoor unit									Indoor unit												
			Cassette					Duct				Duct			Floor		Ceiling / Floor	Ceiling	Wall Mounted					
			Compact (Grid / Standard)	4-way		Circular Flow		Mini (With drain pump)	Slim (With drain pump)	Medium Static Pressure	High Static Pressure	High Static Pressure	Large Airflow Duct (Compact)	Large Airflow Duct (Large)	–	EEV external			–	EEV external	–	EEV external	–	
			AUXB 04GBLH, AUXB 07/09/12/ 14/18/24 GALH	AUXD 18/24GALH	AUXA 18/24/30/34/ 36/45/54 GALH	AUXN 009/012/014 GLAH, AUXM 018/024/030 GLAH	AUXK 018/024/030/034/ 036/045/054 GLAH	ARXK 04/07/09/12/ 14/18/24 GCLH	ARXD 04/07/09/12/ 14/18/24 GALH	ARXA 24/30/36/45 GBLH	ARXC 36GBTH, ARXC 45/60GATH	ARXC 72/90GBTH, ARXC 96GATH	ARXN 009/012/014/018 GLBH, ARXN 024/030 GTBH	ARXN 18/24/30/ 34/36/45 GATH	AGHA 004/007/ 009/012/014 GCAH	AGHE 004/007/ 009/012/014 GCAH	ABHA 12/14/18/24 GATH	ABHA 30/36/45/54 GATH	ASHA 004/007/009 GTAH	ASHE 004/007/009 GTAH	ASHA 012/014 GCAH	ASHE 012/014 GCAH	ASHA 18/24 GBCH	ASHA 030/034 GTAH
Controllers	Wired Remote Controller		● UTY-RNRGZ2									● UTY-RNRGZ2												
			● UTY-RLRG									● UTY-RLRG												
	Simple Remote Controller	 2-wire type 3-wire type	● UTY-RSRG, UTY-RHRG, UTY-RSKG, UTY-RHKG									● UTY-RSRG, UTY-RHRG, UTY-RSKG, UTY-RHKG												
	Wireless Remote Controller		● UTY-LNHG									● UTY-LNHG												
	Group Remote Controller		● UTY-CGGG + UTY-VGGXZ1									● UTY-CGGG + UTY-VGGXZ1												
	Central Remote Controller		● UTY-DCGG									● UTY-DCGG												
	Touch Panel Controller		● UTY-DTGGZ1									● UTY-DTGGZ1												
	System Controller, System Controller Lite		● UTY-APGXZ1, UTY-ALGXZ1									● UTY-APGXZ1, UTY-ALGXZ1												
	IR Receiver Unit			● UTY-LRHGB1		● UTY-LBHXD		● UTB-YWC				● UTB-YWC												
Interface	BACnet Gateway		● UTY-ABGXZ1, UTY-VBGX									● UTY-ABGXZ1, UTY-VBGX												
	Network Convertor for LonWorks		● UTY-VLGX									● UTY-VLGX												
	MODBUS Convertor		● UTY-VMGX									● UTY-VMGX												
	MODBUS Interface		● FJ-RC-MBS-1					● FJ-RC-MBS-1				● FJ-RC-MBS-1					● FJ-RC-MBS-1						● FJ-RC-MBS-1	
	KNX Convertor		● UTY-VKGX									● UTY-VKGX												
	KNX Interface		● FJ-RC-KNX-1i					● FJ-RC-KNX-1i				● FJ-RC-KNX-1i					● FJ-RC-KNX-1i						● FJ-RC-KNX-1i	
	Wireless LAN Interface					● UTY-TFSXZ1									● UTY-TFSXZ1				● UTY-TFSXZ1					● UTY-TFSXZ1
			● FJ-RC-WIFI-1					● FJ-RC-WIFI-1				● FJ-RC-WIFI-1					● FJ-RC-WIFI-1						● FJ-RC-WIFI-1	
	External Switch Controller		● UTY-TERX									● UTY-TERX												
	Network Convertor for single split		● UTY-VTGX									● UTY-VTGX												

OPTIONAL PARTS LIST

Others

Type			Indoor unit																							
			Cassette					Duct						Duct		Floor		Ceiling / Floor	Ceiling	Wall Mounted						
			Compact (Grid / Standard)	4-way		Circular Flow		Mini (With drain pump)	Slim (With drain pump)	Medium Static Pressure	High Static Pressure	High Static Pressure	Large Airflow Duct (Compact)	Large Airflow Duct (Large)	–	EEV external			–	EEV external	–	EEV external	–		
			AUXB 04GBLH, AUXB 07/09/12/ 14/18/24 GALH	AUXD 18/24GALH	AUXA 18/24/30/34/ 36/45/54 GALH	AUXN 009/012/014 GLAH, AUXM 018/024/030 GLAH	AUXK 018/024/030/034/ 036/045/054 GLAH	ARXK 04/07/09/12/ 14/18/24 GCLH	ARXD 04/07/09/12/ 14/18/24 GALH	ARXA 24/30/36/45 GBLH	ARXC36 GBTH, ARXC45/60 GATH	ARXC 72/90GBTH, ARXC 96GATH	ARXN 009/012/014/018 GLBH, ARXN 024/030 GTBH	ARXN 18/24/30/ 34/36/45 GATH	AGHA 004/007/ 009/012/014 GCAH	AGHE 004/007/ 009/012/014 GCAH	ABHA 12/14/18/24 GATH	ABHA 30/36/45/54 GATH	ASHA 004/007/009 GTAH	ASHE 004/007/009 GTAH	ASHA 012/014 GCAH	ASHE 012/014 GCAH	ASHA 18/24 GBCH	ASHA 030/034 GTAH
Others	Human Sensor Kit					● UTY-SHZXC																			
	Remote Sensor Unit	 New amenity space can be offered by installing the Remote sensor.						● UTY-XSZX					● UTY-XSZX												
	Cassette Grille	 UTG-UFGE-W  UTG-UFGC-W  UTG-UKGC-W  UTG-UKGB	● UTG-UFGE-W UTG-UFGC-W			● UTG-UKGC-W UTG-UKGA-B																			
	Auto Louver Grille Kit							● UTD-GXTA-W UTD-GXTB-W(18) UTD-GXTC-W(24)					● UTD-GXTC-W (009/012/014)												
	Long Life Filter									● UTD-LF25NA	● UTD-LF60KA		● UTD-LF25NA (018) UTD-LFNA (024/030)												
	Flange									● UTD-SF045T UTD-RF204			● UTD-SF045T(018) UTD-RF204(018)					● UTD-RF204							
	Drain Pump Unit									● UTZ-PX1NBA			● UTZ-PX1NBA (018)					● UTR-DPB24T							
	Wide Panel			● UTG-AKXA-W UTG-AGYA-W		● UTG-AKXA-W																			
	Panel Spacer			● UTG-BKXA-W UTG-BGYA-W		● UTG-BKXA-W																			
	Fresh Air Intake Kit	 For Compact Cassette / For Cassette	● UTZ-VXAA	● UTZ-VXRA		● UTZ-VXRA																			
	Air Outlet Shutter Plate	 For Compact Cassette / For Cassette	● UTR-YDZB	● UTR-YDZK		● UTR-YDZK																			
	Insulation for High Humidity	 For Compact Cassette type / Cassette type	● UTZ-KXGC	● UTZ-KXRA	● UTZ-KXRA	● UTZ-KXRA																			
	Half Concealed Kit	 This kit is used to half conceal floor type indoor unit into the wall.													● UTR-STA										

OPTIONAL PARTS

Controllers

For Individual Control

Wired Remote Controller (Touch Panel)
UTY-RNRGZ2



Wired Remote Controller
UTY-RLRG



Simple Remote Controller
UTY-RSRG
With operation mode



Simple Remote Controller
UTY-RHRG
Without operation mode



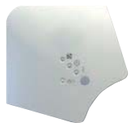
Wireless Remote Controller
UTY-LNHG



IR Receiver Unit
UTB-YWC
For All Duct types except Large Airflow Duct(Large type)



IR Receiver Unit
UTY-LRHGB1
For Cassette type



Human Sensor Kit
UTY-SHZXC
For Circular Flow Cassette type



For Centralized Control

Group Remote Controller
UTY-CGGG



Central Remote Controller
UTY-DCGG



Touch Panel Controller
UTY-DTGGZ1
Option
UTY-PTGXA



System Controller Lite Software
UTY-ALGXZ1
WHITE-USB-KEY
(Software Protection Key)
Option
UTY-PLGXR2
UTY-PLGXA2
UTY-PLGXE2
UTY-PLGXX2



System Controller Software
UTY-APGXZ1
WHITE-USB-KEY
(Software Protection Key)
Option
UTY-PEGXZ1



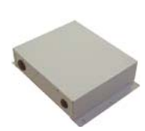
Convertors / Adaptors

For External device

BACnet® Gateway Software
UTY-ABGXZ1
WHITE-USB-KEY
(Software Protection Key)



Network Convertor
for LONWORKS®
UTY-VLGX



MODBUS® Convertor
for VRF
UTY-VMGX



MODBUS® Interface
FJ-RC-MBS-1



KNX® Convertor for VRF
UTY-VKGX



KNX® Interface
FJ-RC-KNX-1i



Wireless LAN Interface
FJ-RC-WIFI-1



Wireless LAN Interface
UTY-TFSXZ1



For System expansion

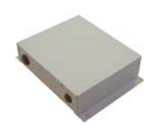
Network Convertor
for single split
UTY-VTGX
DC power supply type



Network Convertor
for single split
UTY-VTGXV
AC power supply type



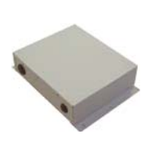
Network Convertor
for Group Remote Controller
UTY-VGGXZ1



External Switch Controller
UTY-TERX



Signal Amplifier
UTY-VSGXZ1



OPTIONAL PARTS

Panels

For Cassette type

Cassette Grille
NEW UTG-UFGE-W
For Compact Grid type



Cassette Grille
UTG-UFGC-W
For Compact Cassette type



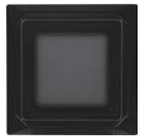
Cassette Grille
UTG-UGGA-W
For Cassette type



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



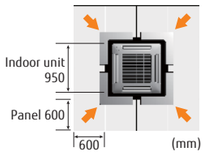
Cassette Grille
UTG-UKGA-B
For Circular Flow Cassette type



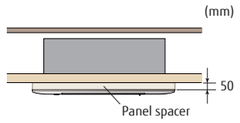
Others

For Cassette type

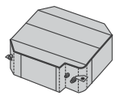
Wide Panel
UTG-AKXA-W
For Cassette type



Panel Spacer
UTG-BGYA-W
For Cassette type



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



* Not applicable for VRF V-II tropical and V-III tropical series

Air Outlet Shutter Plate
UTR-YDZB
For Compact Cassette type
Shuts the air outlet when only using as 3 blow out.



Air Outlet Shutter Plate
UTR-YDZK
For Cassette type
Shuts the air outlet when only using as 3 blow out.



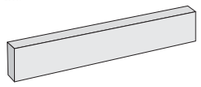
For Ceiling type

Drain Pump Unit
UTR-DPB24T
For Ceiling type



For Floor type

Half Concealed Kit
UTR-STA
For Floor type
This kit is used to half conceal floor type indoor unit into the wall.



Others

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
New amenity space can be offered by installing the 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 ARXD04/07/09/12/14GALH, ARXK04/07/09/12/14GCLH)
UTD-GXTB-W (For ARXD18GALH, ARXK18GCLH)
UTD-GXTC-W (For ARXD24GALH, ARXK24GCLH, ARXN009/012/014GLBH)
For Slim Duct type / Mini Duct type



Drain Pump Unit
UTZ-PX1BBA
For Low Static Pressure Duct type
UTZ-PX1NBA
For Medium Static Pressure Duct



Communication system: External Connect Kit

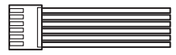
For Indoor unit
UTY-XWZXZ7



UTY-XWZXZB



UTY-XWZXZC



UTY-XWZXZD



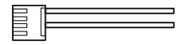
UTY-XWZXZE



For Outdoor unit
UTY-XWZXZ6



UTY-XWZXZ9



UTY-XWZXZF



For RB unit
UTY-XWZXZ6



UTY-XWZXZB



For Central Remote Controller
UTY-XWZXZ7



UTY-XWZXZ8



UTY-XWZXZA



For Touch Panel Controller
UTY-XWZXZA



FUNCTION LIST

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

		Indoor unit														Outdoor unit						Controller		Other
		Cassette			Duct				Floor		Floor / Ceilling		Wall Mounted											
	Type	Compact Grid type / Standard type	4-way	Circular Flow	Mini (With drain pump)	Slim (With drain pump)	Medium Static Pressure	High Static Pressure	—	EEV external	Floor / Ceilling		—	EEV external	—	J-IIIL	J-III	J-IIS	V-III	V-III Tropical	VR-II	Central Remote Controller	Touch Panel Controller	RB Unit
		AUXB 04GBLH, AUXB 07/09/12/14/18/24 GALH	AUXD 18/24GALH, AUXA 18/24/30/34/36/45/54 GALH	AUXN 009/012/014 GLAH, AUXM 018/024/030 GLAH, AUXK 018/024/030/034/036/045/054GLAH	ARXK 04/07/09/12/14/18/24 GCLH	ARXD 04/07/09/12/14/18/24 GALH	ARXA 24/30/36/45 GBLH	ARXC 36GBTH, ARXC 45/60GATH, ARXC 72/90GBTH, ARXC 96GATH	AGHA 004/007/009/012/014 GCAH	AGHE 004/007/009/012/014 GCAH	ABHA 12/14/18/24 GATH	ABHA 30/36/45/54 GATH	ASHA 004/007/009 GTAH, ASHA 012/014GCAH	ASHE 004/007/009 GTAH, ASHE 012/014GCAH	ASHA 18/24GBCH	ASHA 030/034GTAH	AJH 072/090/108/126/144 LELAH	AJH 040/045/054 LBLAH, AJH 040/045/054 LELAH	AJH 040/045/054 LCLAH	AJH 072/090/108/126/144/162 LNLBH	AJH 072/090/108/126/144/162 LALBH	AJH A72/A90/108/126/144 GALH	UTY-DCGG	UTY-DTGGZ1	UTY-RX01AH UTY-RX01BH UTY-RX01CH UTY-RX04BH
Input	Operation / Stop	●UTY-XWZXZD ○UTY-XWZXZB											●UTY-XWZXZD ○UTY-XWZXZB											
	All On / All Off																					●UTY-XWZXZ7 ○UTY-XWZXZ8	●*2 ○*2	
	Batch Stop															●UTY-XWZXZ6								
	Forced Stop	●UTY-XWZXZD ○UTY-XWZXZB											●UTY-XWZXZD ○UTY-XWZXZB											
	Emergency Stop	●UTY-XWZXZD ○UTY-XWZXZB											●UTY-XWZXZD ○UTY-XWZXZB			●UTY-XWZXZ6						●UTY-XWZXZ7 ○UTY-XWZXZ8	●*2 ○*2	
	Forced Thermostat off	●UTY-XWZXZE ○UTY-XWZXZ7											●UTY-XWZXZE ○UTY-XWZXZ7											
	Low Noise Mode Operation															●UTY-XWZXZ6								
	Cooling/ Heating Priority															●UTY-XWZXZ6								●UTY-XWZXZ6 ○UTY-XWZXZB
	Outdoor Unit Operation Peak Control															●UTY-XWZXZ6								
	Power Usage Information from Electricity Meter															●UTY-XWZXZF							●*2 ○*2	
Output	Operation Status	●UTY-XWZXZC											●UTY-XWZXZC			○UTY-XWZXZ6						○UTY-XWZXZA		
	Error Status	●UTY-XWZXZC											●UTY-XWZXZC			○UTY-XWZXZ6						○UTY-XWZXZA		
	Indoor Unit Fun Operation Status	●UTY-XWZXZC											●UTY-XWZXZC											
	Auxiliary Heater Output				●UTY-XWZXZC																			
	Base Heater															●UTY-XWZXZ9			●UTY-XWZXZ9					

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

●: Dry Contact ○: Apply Voltage

SEPARATION TUBE etc.

Connection Units

Separation Tube

UTP-AX054A

Gas Pipe



Liquid Pipe



UTP-AX090A

Gas Pipe



Liquid Pipe



UTP-AX180A

Gas Pipe



Liquid Pipe



UTP-AX567A

Gas Pipe



Liquid Pipe



UTP-BX090A

Suction Gas Pipe



Discharge Gas Pipe



Liquid Pipe



UTP-BX180A

Suction Gas Pipe



Discharge Gas Pipe



Liquid Pipe



UTP-BX567A

Suction Gas Pipe



Discharge Gas Pipe



Liquid Pipe



UTP-LX180A for DX-Kit



Header

UTR-H0906L / UTR-H1806L

Gas Pipe



Liquid Pipe



UTR-H0908L / UTR-H1808L

Gas Pipe



Liquid Pipe



UTP-J0906A / UTP-J1806A

Suction Gas Pipe



Discharge Gas Pipe



Liquid Pipe



UTP-J0908A / UTP-J1808A

Suction Gas Pipe



Discharge Gas Pipe



Liquid Pipe



Outdoor Unit Branch Kit

UTP-CX567A

Gas Pipe



Liquid Pipe

UTP-DX567A

Suction Gas Pipe



Discharge Gas Pipe



Liquid Pipe



EV Kit

Model code ≦ 09 : UTR-EV09XB
Model code ≧ 12 : UTR-EV14XB
For Compact Wall Mounted type



Model code ≦ 09 : UTR-EV09XB
Model code ≧ 12 : UTR-EV14XB
For Compact Floor type



RB Unit

UTP-RX01AH / UTP-RX01BH / UTP-RX01CH
Single type



UTP-RX04BH
Multi 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	UTP-BX180A	UTP-BX567A
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	UTP-J1806A
	3-8 Branches	UTP-J0908A	UTP-J1808A
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 / V-III Tropical)	UTP-DX567A (for VR-II)
Model name	2 outdoor units	1	
	3 outdoor units	2	

EV Kit

Model name	UTR-EV09XB		UTR-EV14XB	
Application Model	ASHE004GTAH ASHE007GTAH ASHE009GTAH	AGHE004GCAH AGHE007GCAH AGHE009GCAH	ASHE012GCAH ASHE014GCAH	AGHE012GCAH AGHE014GCAH

RB Unit

Model name		Single type			Multi type
Number of Outdoor unit		UTP-RX01AH	UTP-RX01BH	UTP-RX01CH	UTP-RX04BH
Power source	V/Ø/Hz	230 / 1 / 50			
Input power	W	17	24	31	96
Number of branches		1	1	1	4
Maximum capacity of connectable indoor units(Q)	kW	Q ≦ 8.0	Q ≦ 18.0	Q ≦ 28.0	Q ≦ 56.0*1
Maximum capacity of connectable indoor units per branch(Q)	kW	Q ≦ 8.0	Q ≦ 18.0	Q ≦ 28.0	Q ≦ 18.0
Maximum number of connectable indoor units per branch		3	8	8	8
Dimensions (H×W×D)	mm	198 × 298 × 268	198 × 298 × 268	198 × 298 × 268	260 × 658 × 428

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

SUPPORT

Our know-how supports you not only during the product release but also from guiding implementation to product maintenance.

AIRSTAGE™ SUPPORT

AIRSTAGE™ / RAC SUPPORT TOOL

QUICK SERVICE & 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 (RAC, PAC, VRF)	CFD Simulation	Service Tool / Web Monitoring Tool	Mobile Technician
Product Training	●	●														
Product Information Seek			●	●	●	●	●									
Technical Information Seek							●	●								
Model Selection							●						●			
Design							●		●	●						
Verification														●		
Installation							●				●					
After sales and Service												●			●	●

AIRSTAGE™ SUPPORT

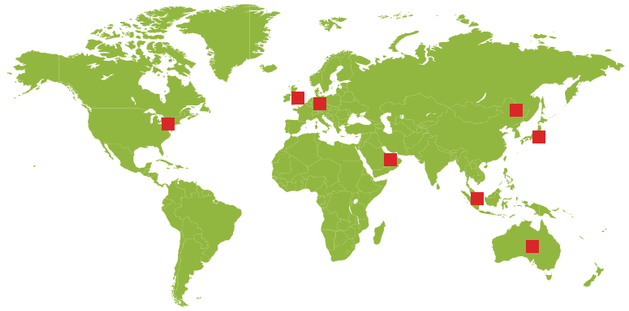
Fujitsu General provides a variety of product and technical information to engineers and consultants, and also conducts new product research and design support activities.
We provide a wide range of support to maintain high quality from design to installation.

Training

Fujitsu General has many training facilities around the world that regularly conduct specialized product, technical, and service training. These research facilities also support the development of people with high technical capability.

Features

- Designing AIRSTAGETM Systems
- Control System on-site training




Head Office Training Center: Japan


Europe Training Center: Germany


Europe Training Center: U.K.


America Training Center: U.S.A.


China Training Center: China


Asia Training Center: Singapore


Middle East Training Center: UAE

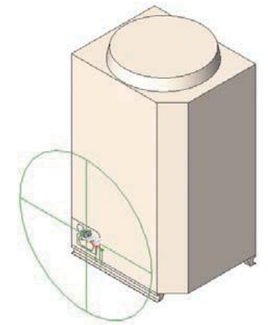

Oceania Training Center: Australia

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 & Technical Manual
- Model Selection & Estimation
- Certificate Data
- 2D/3D CAD Data



Product information

New product information is provided in the form of documents and movies 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 & All Manuals
- Feature Promotion Movie

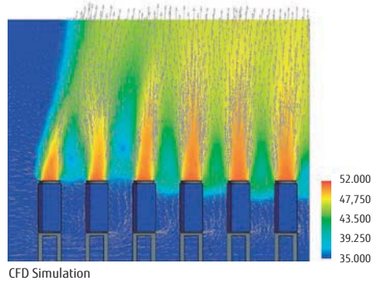


Technical support

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

Features

- CFD Simulation
- Guide line
- Commissioning Support



CFD Simulation


Commissioning Support

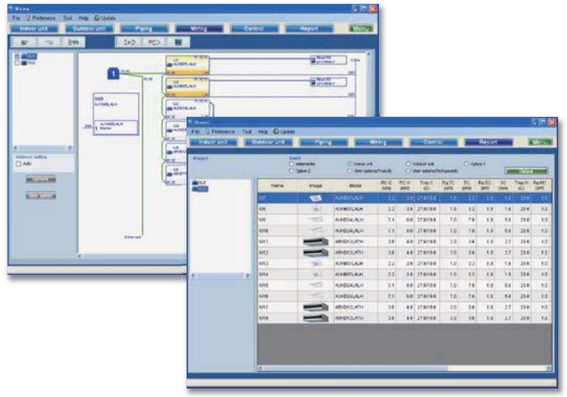
AIRSTAGE™ /RAC SUPPORT TOOL

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 - it'll even export to Word, Excel, or Acrobat formats, and group the relevant CAD data for your project.

Design Simulator

Automatically create model selection information

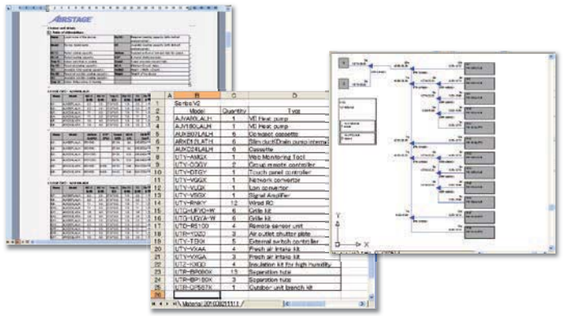
- Each unit can be automatically set by entering the required performance, type, and temperature conditions for each indoor unit and then dragging and dropping into the outdoor unit.
- Piping and wiring diagrams can be created automatically and it is easy to set branches, grouping, and options.
- The 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

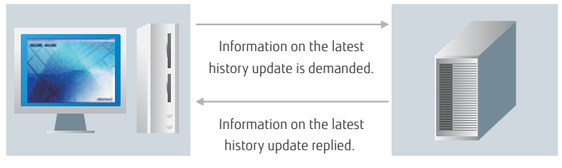
The information specific to your project can be exported in a number of industry standard file formats.

- Word format (rtf)(doc)
- Excel format (csv)
- Acrobat format (pdf)
- Auto CAD format (DXF)
- 2D Data (DXF)
- 3D Data (RFA)



Update your Design Simulator

Database can be easily updated online using AutoUpdate function through FTP.

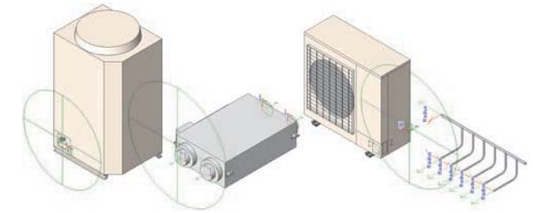


BIM Building Information Modeling

Fujitsu General provides the Building Information Modeling (BIM) object models and contents for our VRF system and some products to the architect, designer and contractor using Autodesk® Revit® technology from our Website and Autodesk® Seek Website, etc.

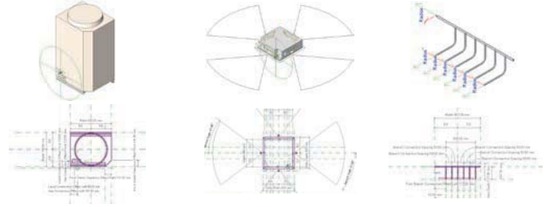
3D and 2D product data

We provide 3D data that closely resemble the actual product appearance. 2D CAD design operations are supported and 2D display is also provided. The data can also be output in other formats, such as DXF and DWG, which are used by other design CAD.



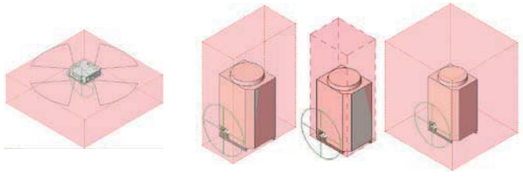
Installation limitation

The equipment installation limitation range is shown. Installation requirements, such as distance from the wall, is automatically displayed to make it easy to produce highly reliable layout designs.



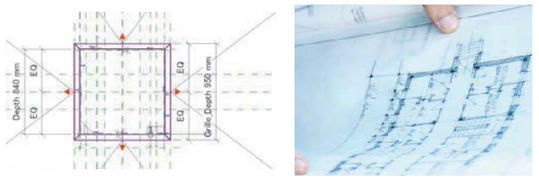
Update your Design Simulator

Other information, such as symbols showing the airflow direction that are required for installation drawings, is built in and can be automatically reflected in 2D drawings. Installation drawings can be created easily.



Product specifications & link information

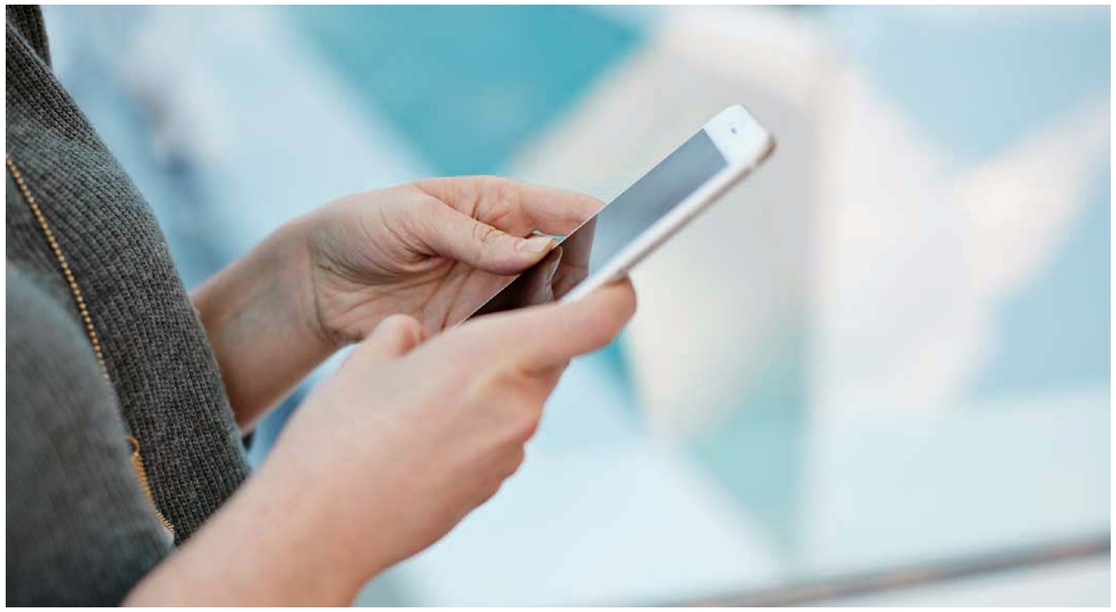
Contains the basic information required for air conditioner design, including unit size, capacity, input power, noise, and airflow rate. These data can be procured from the Fujitsu General Website, Design Simulator, and Autodesk® Seek Website.



QUICK SERVICE & MAINTENANCE

If trouble should occur in a unit or system, abundant support tools such as trouble code display at the product, Service Tool that allows checking of the detailed status of the entire system, and remote monitoring tool that uses the internet, etc. support quick service and maintenance anywhere and at any time.

Mobile troubleshooting tool for iPhone & Android



We will release an App of troubleshooting tool for iPhone, iPod touch and other Apple products. This application is a troubleshooting tool for Fujitsu General air conditioner (RAC/PAC, VRF)

It helps you to check air conditioner condition. Error code check, Troubleshooting, and Sensor check are available.



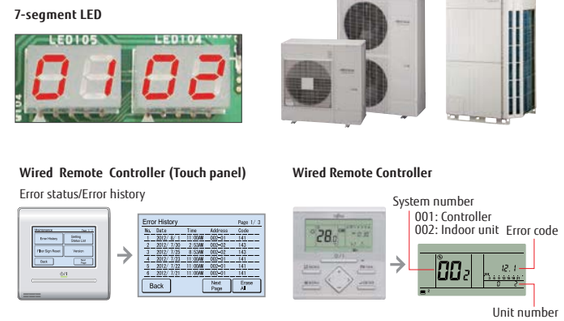
Mobile Technician FREE

Easy maintenance & monitoring

Design for easy maintenance

Design for easy maintenance
The air conditioner operating status and trouble status of the detailed are displayed at the 7-segment of the outdoor unit PCB or on the remote controller screen.
The unit status can be checked rapidly and quick response is also possible.

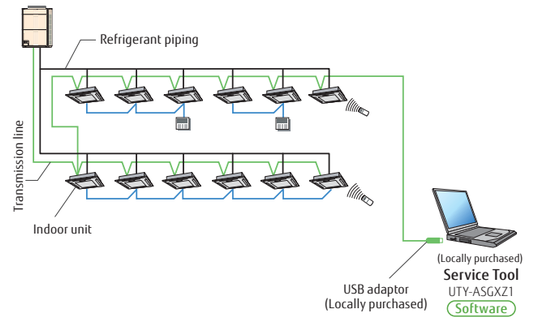
- Operation mode status
- Discharge temperature/Pressure status
- Compressor operation indication
- Address/Type/Number of outdoor unit
- Error code.



Error diagnosis by Service Tool

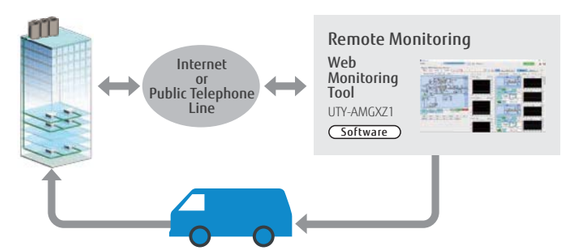
Error diagnosis by Service Tool
The unit status details for VRF system can be checked on PC screen by connecting Service Tool.
Quick countermeasures can be taken

- 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



Remote monitoring

VRF system operating status and trouble status details can be constantly and remotely monitored over the Internet, etc.
Rapid cooperation with the service personnel are also possible.



SERVICE TOOL

UTY-ASGXZ1

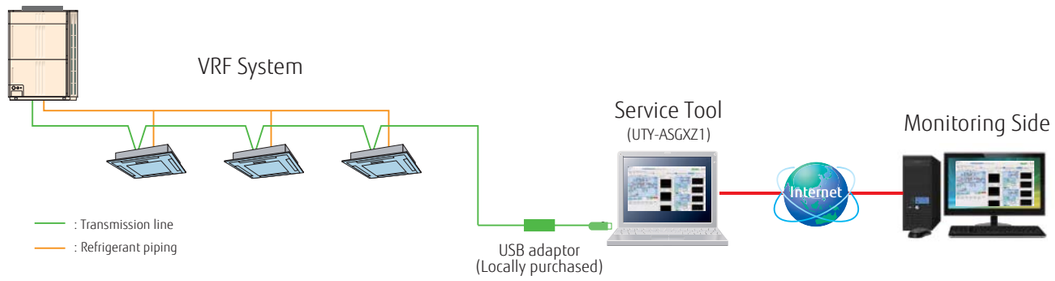
Extensive monitoring and analysis functions for installation and maintenance

- Operation status can be checked and analyzed to detect even the smallest abnormalities
- Storage of data on system operation status on a PC allows access even from 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)

Functions

System Over View



Automatic operation check for refrigeration cycle

After product installation, operation check can be performed automatically. Self-diagnosis function automatically judges whether each sensor value is normal, so the operation check work can be reduced. The diagnosis can also be output as a report.





[Note] Use only as a guide and judge for yourself finally.

Whether each sensor value is normal is judged automatically.

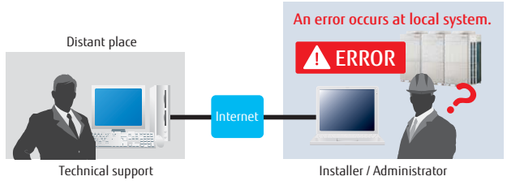
- ☑ Discharge temperature normal value OK
- ☑ Super heat volume normal value OK
- ☑ High pressure pipe normal value OK
- ☑ Low pressure pipe normal value OK

...etc.



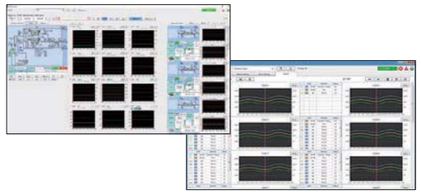
Remote technical support & maintenance

On-site check screen can be shared with the skilled person in a distant place. When visiting for troubleshooting on site, operation status can be shared in real time and get assistance easily. Online chat function helps to support on site staff.

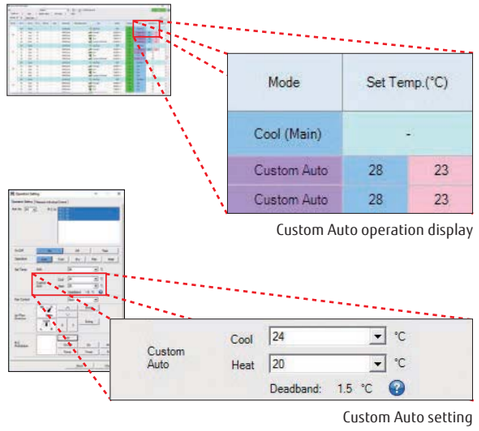


Various trend graph display

Previously, only 3 kinds of each sensor value can be displayed. However, multiple graphs can be displayed in new Service Tool depending on the situation. The refrigeration cycle can be checked in detail.



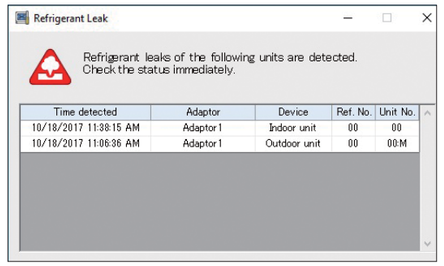
NEW Custom Auto Function



Custom Auto operation display

Custom Auto setting

NEW Refrigerant leakage detect Function



Refrigerant leak alart display

Function summary

	UTY-ASGXZ1
Interchangeability of equipment	●
Indication of equipment list	●
Operation control	●
Indication of refrigerant circuit diagram	●
Commissioning tool	●
Storage and CSV output of operating history (sensor data)	●
Indication of trend graph	●
Printing of trend graph	●
Monitoring and screen display of abnormalities	●
E-mail automatic transmission of abnormalities	–
Network Topology Analyzer	●
Remote Setting	●
System Time Setting	●
Central Release	●
Model Name Writer	●
Error Memory Reader	●
Time Guard Information	●
Automatic operation check for refrigeration cycle	●
Many different kinds of graph display	●
Automatic update of software	●
NEW Custom Auto function	●
NEW Display of individual louver control function	●
NEW Display of human sensor control function	●
NEW Refrigerant leakage detect function (Europe only)	●

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	• USB port for U10 USB Network Interface and Software protection key
Software	Internet Explorer® 11 or Microsoft Edge

•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 (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

UTY-AMGXZ1

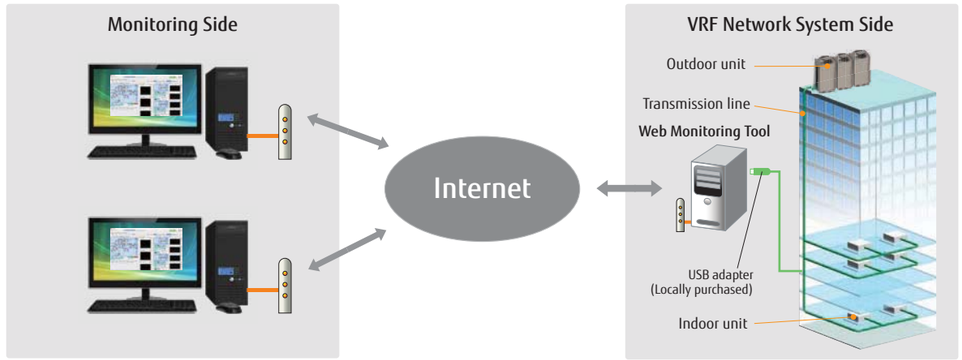
Product features

- 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.
- Determination of an error occurrence can be made through error warnings and equipment status information obtained from a remote location.
- The monitoring data in a remote side can be optionally downloaded. And, this data can be displayed in offline mode of the service tool.
- Monitoring side computer is not required to install special software, requires only general web browser.

*1: Use of internet mail system required.

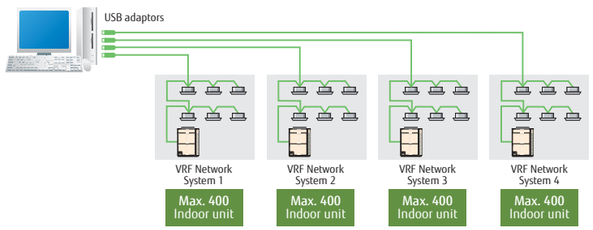
Functions

Web Monitoring System

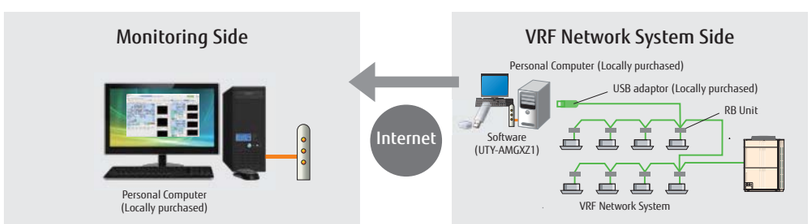


Support 4 VRF network systems

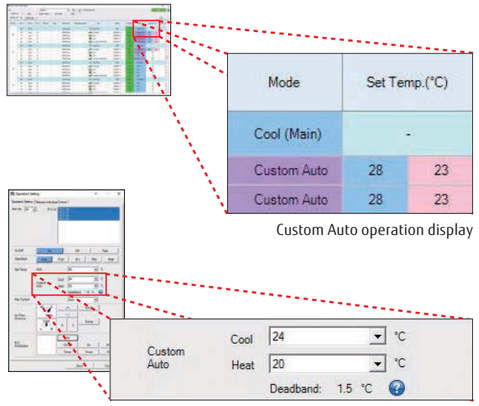
USB adaptor (max. 4 adaptors per PC) permit, monitoring of up to 1,600 indoor units.
Suitable for large-scale buildings or hotels.



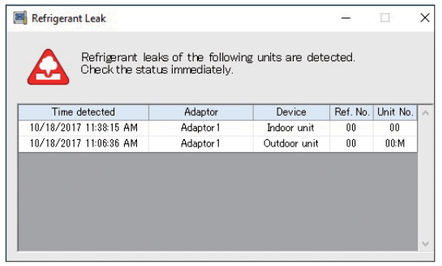
System components



NEW Custom Auto Function



NEW Refrigerant leakage detect Function



Refrigerant leak alart display

Function summary

	UTY-AMGXZ1
Interchangeability of equipment	●
Indication of equipment list	●
Operation control	●
Indication of refrigerant circuit diagram	●
Commissioning tool	●
Storage and CSV output of operating history (sensor data)	●
Indication of trend graph	●
Printing of trend graph	●
Monitoring and screen display of abnormalities	●
E-mail automatic transmission of abnormalities	●
Network Topology Analyzer	●
Remote Setting	●
System Time Setting	●
Central Release	●
Model Name Writer	—
Error Memory Reader	—
Time Guard Information	●
Automatic operation check for refrigeration cycle	—
Many different kinds of graph display	●
Automatic update of software	●
NEW Custom Auto function	●
NEW Display of individual louver control function	●
NEW Display of human sensor control function	●
NEW Refrigerant leakage detect function (Europe only)	●

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	• USB port (for 10 USB Network Interface Max.4, Software protection key) • Either of the following interface is required for remote connection: - Public Telephone Line: Modem is required - Internet using LAN: Ethement port is required
Software	Internet Explorer® 11 or Microsoft Edge

•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 (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

Variable Refrigerant Flow System

AIRSTAGE™

HEAT PUMP & HEAT RECOVERY

VRF CATALOGUE



ISO 9001
Certified number: 01 100 075229

ISO 14001
Certified number: 01 104 9245

Fujitsu General (Thailand) Co., Ltd.

ISO 9001
Certified number: 01 100 79269

ISO 14001
Certified number: CNBJ312244-UK

Fujitsu General (Shanghai) Co., Ltd.

ISO 9001
Certified number: 15917Q20073R5M

ISO 14001
Certified number: 15915E10020R4M

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

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