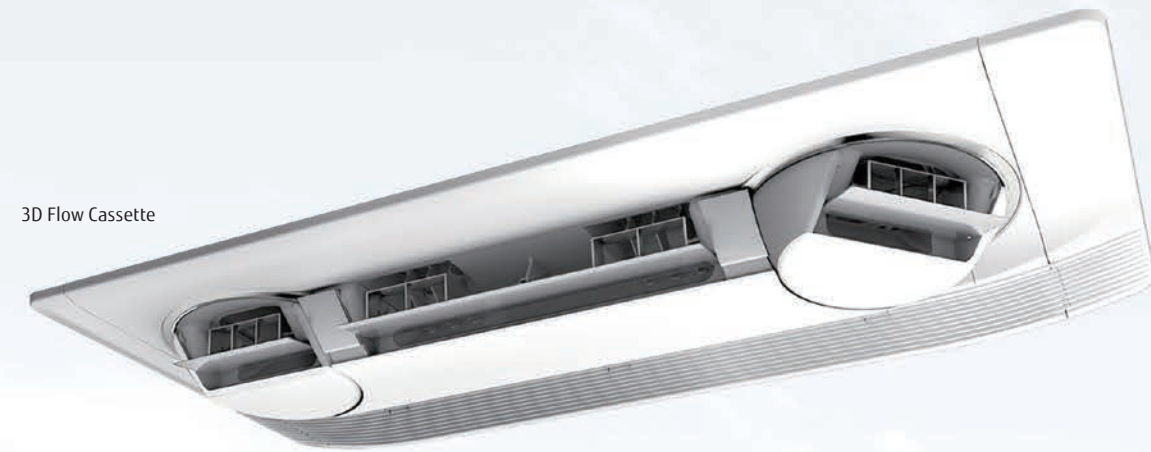# GENERAL

VRF Systems
CATALOGUE 2024
for ASIA

Distributed by :

FUJITSU GENERAL LIMITED

3-3-17, Suenaga, Takatsu-ku, Kawasaki, Kanagawa, 213-8502, Japan
www.fujitsu-general.com

VRF Systems CATALOGUE 2024 for ASIA

FUJITSU GENERAL LIMITED

FUJITSU GENERAL LIMITED

OUR MESSAGE

SOLUTIONS

CORE TECHNOLOGY

AIRSTAGE™ SERIES

INDOOR UNITS

VENTILATION

CONTROL SYSTEMS

OPTION

SUPPORT

3D Flow Cassette

DESIGN for COMFORT

NEW VRF VC-V
8 HP model

REFRIGERANT R32

NEW VRF J-VS
4/5/6 HP model

The VRF 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 Light Commercial

VRF J-IVS
REFRIGERANT R32

Heat Pump type
for heating or cooling operation
4 HP - 6 HP 3 Models/Single phase
This product uses R32, a new
environmentally friendly refrigerant.

VRF J-IIIL
Heat Pump type
for heating or cooling operation
8 HP - 12 HP 3 Models
14 HP - 16 HP & 18 HP 3 Models/3 phase

VRF J-III   VRF J-III Tropical
Heat Pump type
for heating or cooling operation
4 HP - 6 HP 6 Models/Single phase, 3 phase

VRF J-IIS
Heat Pump type
for heating or cooling operation
4 HP - 6 HP 3 Models/Single phase

For Commercial

VRF VC-V
Cooling only type
8 HP - 80 HP 51 Models
Standard combination:
8 HP to 80 HP/37 models
Energy efficiency combinations:
16 HP to 44 HP/14 models

VRF V-III   VRF V-III Tropical
Production by order

Heat Pump Modular type
for heating or cooling operation
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

Contents

OUR MESSAGE
SOLUTIONS
CORE TECHNOLOGY
VRF SERIES
INDOOR UNITS
VENTILATION
CONTROL SYSTEMS
OPTION
SUPPORT

OUR HISTORY

Overseas Air Conditioning Business since 1971
1960: Air conditioning business starts. Japan-domestic business starts.

1971 Air conditioner exports to the Middle East.

1977 "Super Power, Super Quiet" Series released

1982 Window type 3 Super Series released
AL/AX Series

1985 Large wall-mounted type and multi-split air conditioner released.
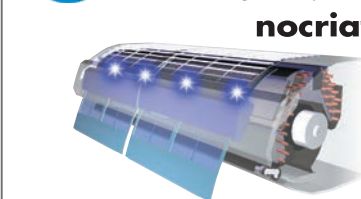
*1,*2 **1991** World's first air conditioner equipped with lambda heat exchanger

1994 World's first air conditioner with power diffuser

2001 AIRSTAGE Series released VRF air conditioners for large buildings

AIRSTAGE

*3 **2002** Air conditioner with the world's first automatic self-cleaning filter system
nocria

2004 Standalone Compact VRF AIRSTAGE J Series released
AIRSTAGE J

2006 VRF Heat Pump type Maximum 42 HP AIRSTAGE V Series released
AIRSTAGE V

2009 VRF Heat Pump Modular type Maximum 48 HP AIRSTAGE V-II Series released

2009 Air to water system released
WATERSTAGE

For Light commercial use
2011 Compact 2 Fan type VRF AIRSTAGE J-II Series released

2014 Compact 1 Fan type VRF AIRSTAGE J-IIS Series released

2016 Compact 2 Fan type VRF AIRSTAGE J-III Series released

2017-19 Compact VRF AIRSTAGE J-IIIL Series for light commercial use released

2020 Compact & lightweight outdoor unit AIRSTAGE J-IVL, J-IV, J-IVS Series released

2019 New cassette style released 3D Flow Cassette

For Commercial use
2012 VRF AIRSTAGE VR-II Series released

2014-15 VRF AIRSTAGE VR-III Series released

2020 Heat Recovery Modular type VRF AIRSTAGE VR-IV Series & AIRSTAGE Air handling unit released

2022 Energy-saving operation model VRF V-IV Series released
VRF V-IV

For Residential use
2011 Hi-spec Design model LT Series & LU Series released

2017 Flagship Wall-mounted type "nocria X" released

2017-19 Added to this lineup recently are the environment-friendly R32 refrigerant models. (Split & Multi-split type)
nocria X

2022 Harmonizes beautifully design model KE Series released
KE Series

For Commercial use
R32

VRF J-VS
2024 New VRF products with R32 refrigerant released

VRF VC-V
2024 New VRF products for cooling operation relased

Wired Remote Controller
Simple and stylish design that harmonizes with the installation space

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| 1950 ~ | 1970 ~ | 2000 ~ | 2010 ~ | 2024 What's New |

Manufacturing Company Establishment

1955 Head Office established in Kawasaki
1964 Electronic components factory in Ichinoseki

1977 Air conditioner manufacturing company in Hamamatsu (now Hamamatsu business office)
1991 Air conditioner manufacturing company in Thailand
1994 Air conditioner manufacturing company in Shanghai, China
1998 Air conditioner motor manufacturing company in Thailand

2006 VRF air conditioner manufacturing, sale, and service company in China
2007 Air Conditioner Technology Building becomes operational on the premises of the Kawasaki Headquarters. Air conditioner R&D Center in Kawasaki
2009 Compressor Factory begins operation in Thailand

2012 Joint venture in Thailand to manufacture compressors
2016 Commercial use air conditioner R&D Center in Thailand
2019 New building constructed at Kawasaki Head Office to strengthen development capabilities

2020 Building IoT-based manufacturing in Thailand

2023 FGAI R&D New Office: FGAI Research & Development office moved to the new office in New jersey, USA

Sales & service maintenance company established

Fujitsu General (UK) Co., Ltd. (UK)

Fujitsu General (EURO) GmbH

1976 North America sales company
1977 Europe sales company (UK)
1978 Australia sales company and Europe sales company (Germany)
1980 Brazil sales company
1997 Asia sales company (Singapore)
1998 Middle East sales company (UAE) and New Zealand sales company

2000 Air conditioner manufacturing and sale technical partnership in India
2002 Taiwan sales company
2006 China sales company

2016 THE AIRSTAGE on Broadway in New York
THE AIRSTAGE ON BROADWAY
Fujitsu General Solution Center

2023 Communication Lounge EURO: New lounge in Dusseldorf, Germany

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*1: Announced 1991. In room air conditioner for the home (Our company's investigation) *2: Announced 1994. In the category of room air conditioners for the home (Our company's investigation).
*3: Announced 2002. In the category of room air conditioners for the home (Our company's investigation).

*4: Announced 2018. In room air conditioner for the home (Our company's investigation) *5: Announced 2012. In room air conditioner for the home (Our company's investigation)
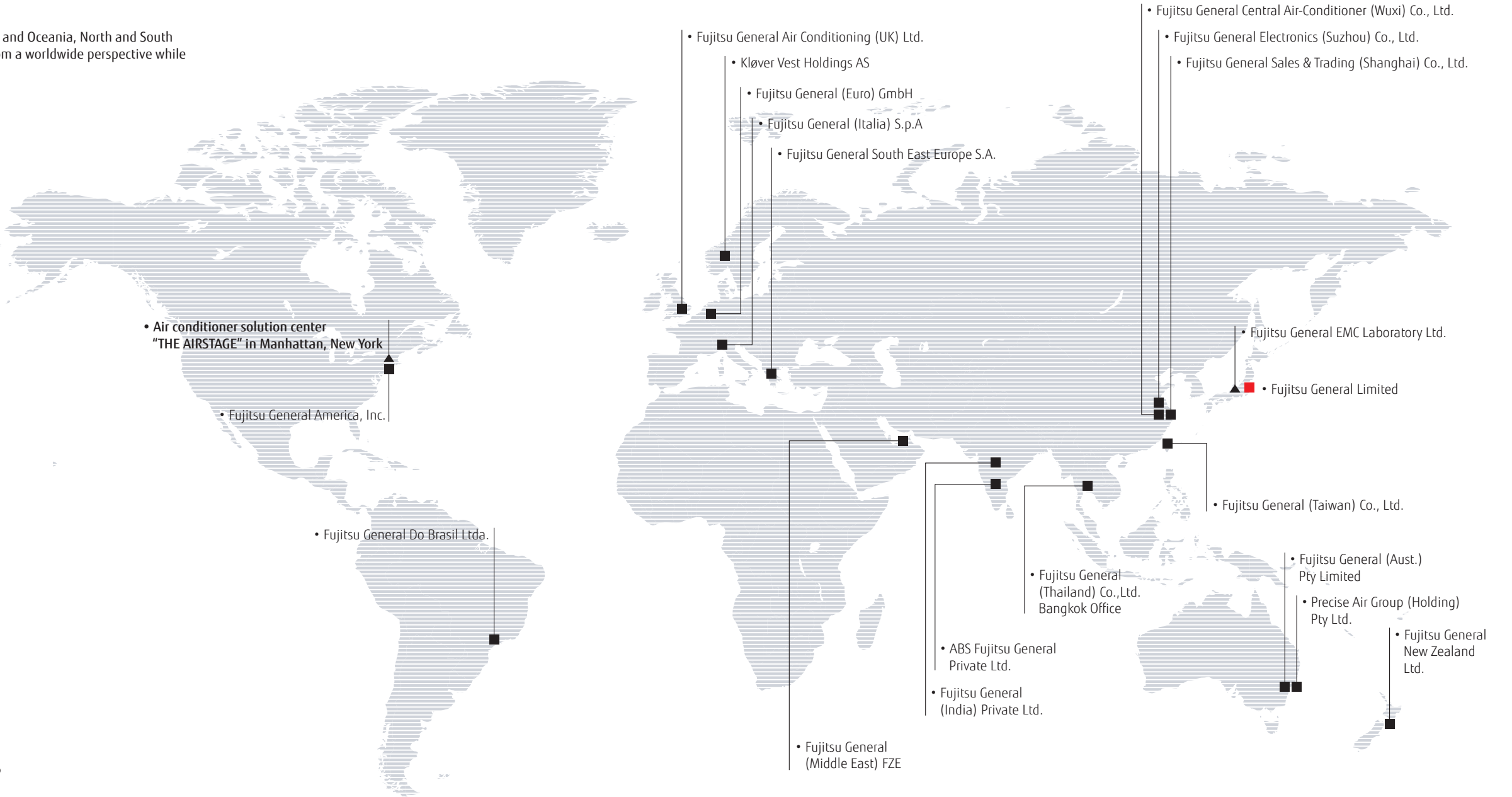
WORLD WIDE LOCATIONS

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

JAPAN Head Office

Technology research building (Japan)

18 Overseas Sales Companies

- Air conditioner solution center "THE AIRSTAGE" in Manhattan, New York
- Fujitsu General America, Inc.
- Fujitsu General Do Brasil Ltda.

- Fujitsu General Air Conditioning (UK) Ltd.
- Kløver Vest Holdings AS
- Fujitsu General (Euro) GmbH
- Fujitsu General (Italia) S.p.A
- Fujitsu General South East Europe S.A.

- Fujitsu General Central Air-Conditioner (Wuxi) Co., Ltd.
- Fujitsu General Electronics (Suzhou) Co., Ltd.
- Fujitsu General Sales & Trading (Shanghai) Co., Ltd.
- Fujitsu General EMC Laboratory Ltd.
- Fujitsu General Limited
- Fujitsu General (Taiwan) Co., Ltd.

- Fujitsu General (Thailand) Co.,Ltd. Bangkok Office
- ABS Fujitsu General Private Ltd.
- Fujitsu General (India) Private Ltd.
- Fujitsu General (Middle East) FZE

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

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

Fujitsu General (Taiwan) Co., Ltd. (Taiwan)

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

Fujitsu General Electronics (Suzhou) Co., Ltd.

Fujitsu General South East Europe S.A. (Greece)

Fujitsu General (EURO) GmbH (Germany)

Fujitsu General Air Conditioning (UK) Ltd. (U.K.)

Fujitsu General (Italia) S.p.A (Italy)

Fujitsu General (India) Private Ltd. (India)

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

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

Fujitsu General New Zealand Ltd. (New Zealand)

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

ABS Fujitsu General Private Ltd. (India)

Fujitsu General Do Brasil Ltda. (Brasil)
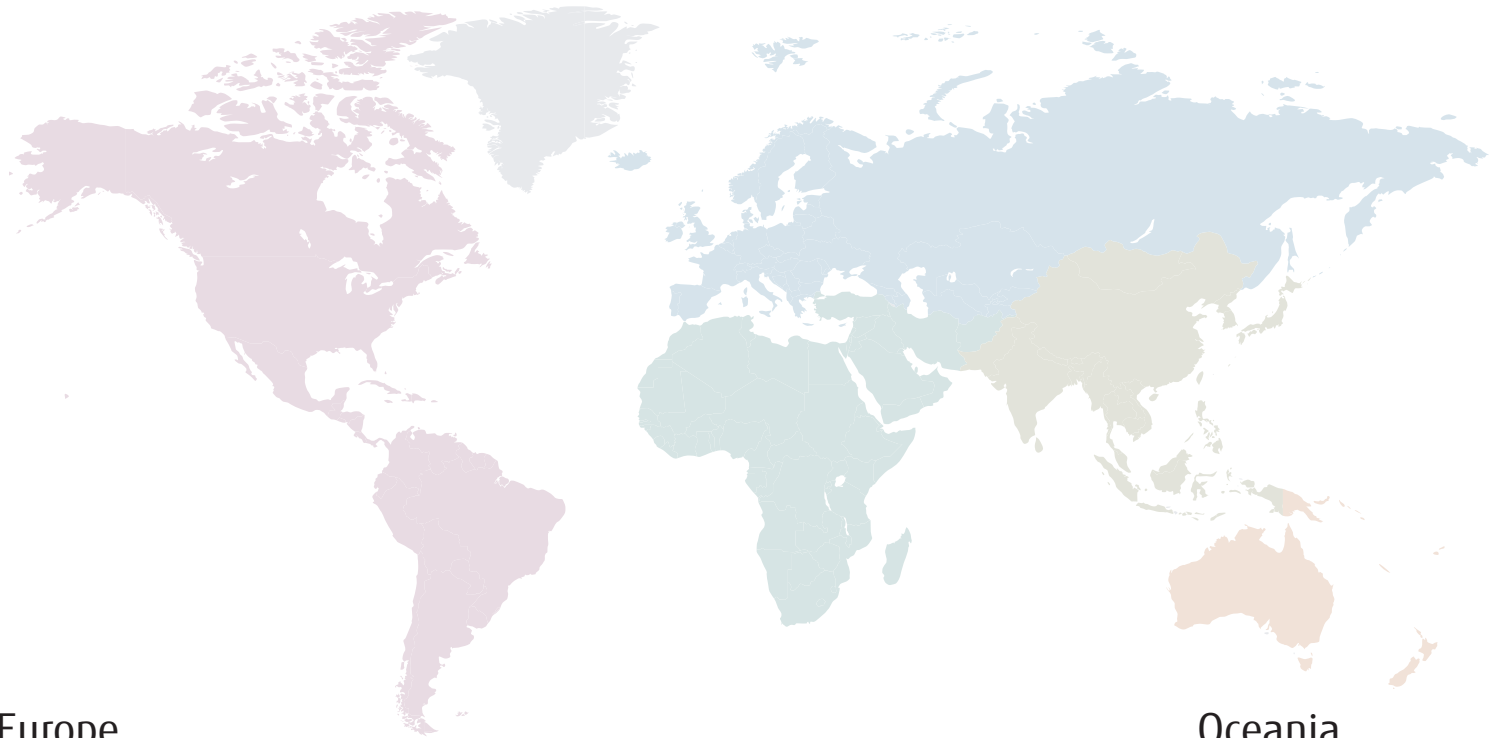
Fujitsu General America, Inc. (U.S.A.)

Kløver Vest Holdings AS (Norway)

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

GLOBAL BUSINESS ACTIVITIES

We have been recognized for our activities in advertising, human resource development and customer service, as well as for our community-based social contribution activities in each region, winning numerous awards and achieving a high level of customer satisfaction.

Asia

Thanksgiving party in Taiwan

Exhibition in India

Opening ceremony in India

New product presentation seminar in Singapore

Service training in Vietnam

North and South Americas

AHR Expo

HVAC trade shows in Brazil

Distributor conference in USA

Call center

Middle East
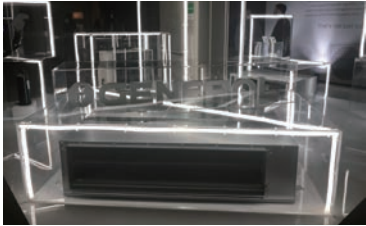
Exhibition

Training in Kuwait

Launch event in Oman

New product seminar in UAE

Europe

HVAC trade show in Germany

HVAC trade show in Germany

Training seminar in Italy

Training in Germany

Event in the United Kingdom

Oceania

HVAC trade show in Australia

Launch event in New Zealand

Launch event in New Zealand

International authoritative design awards

The NEWS Dealer Design Awards

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

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

Superbrands is the world's largest independent arbiter of branding.

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

The Plus X Award is the world's largest innovation award for technology, sports and lifestyle.

reddot winner 2020

A product design competition that has been held since 1955. Products that win the award are given the "Red Dot" seal, a sign of international recognition of quality.

One of the famous design award in the world. Designs are judged on innovation and aesthetics, as well as their benefit to users, clients/brands, and society.

ProductReview.com.au's annual awards are selected from products and services that have been well-rated by the ProductReview community.

Voted by Australians as the 'Most Trusted Brand – Air Conditioning Category 5 Years Running'

China State Construction Engineering Luban Prize

The Good Design Award is an award sponsored by the Japan Institute of Design Promotion, and is given once a year to items of outstanding design.

PROJECT REFERENCE

Introduced in
over 50 countries worldwide

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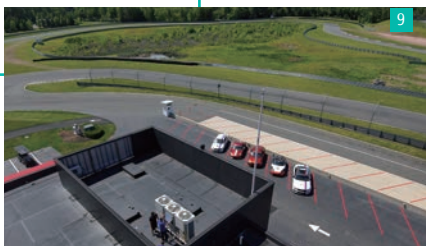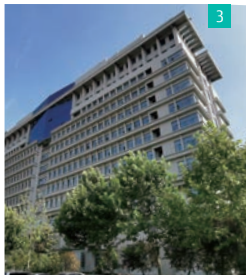
For Light commercial use

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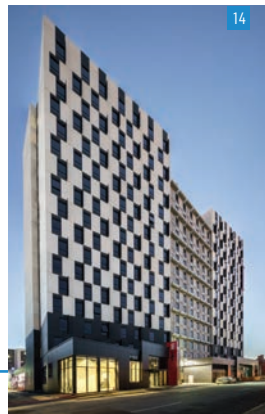
For Commercial use

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

For Residential use

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

10

11

GLOBAL DEVELOPMENT & PRODUCTION BASES

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

- Head Office
- R&D Center
- Manufacturing Companies

R&D center & Technology Research Building

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

North America R&D Center (USA)

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

R&D center in Fujitsu General (Shanghai)

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

Technology research building
in Japan Head office

- • Fujitsu General Central Air-conditioner (Wuxi) Co., Ltd.
- • F.G.L.S Electric Co., Ltd.
- • Fujitsu General (Euro) GmbH
  — **R&D center**
- • FGAHP
- • North America R&D Center
  — **R&D center**
- • Fujitsu General Electronics Ltd.
- • Fujitsu General Limited
  — **R&D center**
- • Fujitsu General (Shanghai) Co., Ltd.
  — **R&D center**
- • Fujitsu General Air Conditioning R&D (Thailand) Co., Ltd.
  — **R&D center**
- • Fujitsu General (Thailand) Co., Ltd.
- • Fujitsu General (Thailand) Co., Ltd. Factory-2
- • FGA (Thailand) Co., Ltd.
- • TCFG Compressor (Thailand) Co., Ltd.

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

Overseas manufacturing companies

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

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

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

Fujitsu General Electronics Ltd. (Japan)

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

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

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

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

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

HIGH QUALITY DEVELOPMENT & PRODUCTION FACILITIES

Advanced Research Facility and Equipment

Performance Testing

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.

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

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

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

Reliability Testing

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

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

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

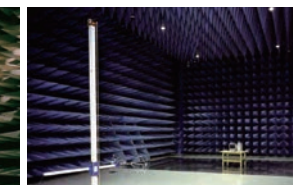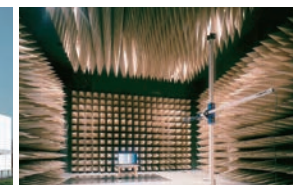### Transportation & Handling

Compressibility testing

Vibration testing

Technology Research Building
in Japan Head Office

Testing Laboratory

Fujitsu General EMC Laboratory Limited

60 m Height Difference Testing Tower
Objective is to confirm oil circulation of compressor for reliability

Acquisition of ISO 9001 and ISO 14001

■ ISO 9001
■ ISO 14001
( ) Number of companies

North America
■ Sales subsidiary (1)

Europe
■ Sales subsidiary (3)

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

Middle East
■ Sales subsidiary (1)

Japan
• Head office
• Manufacturing subsidiary (2)

South America
■ Sales subsidiary (1)

Oceania
■ Sales subsidiary (2)

Each of overseas production bases (5 companies) has completed the acquisition of ISO 9001 and ISO 14001 individually.
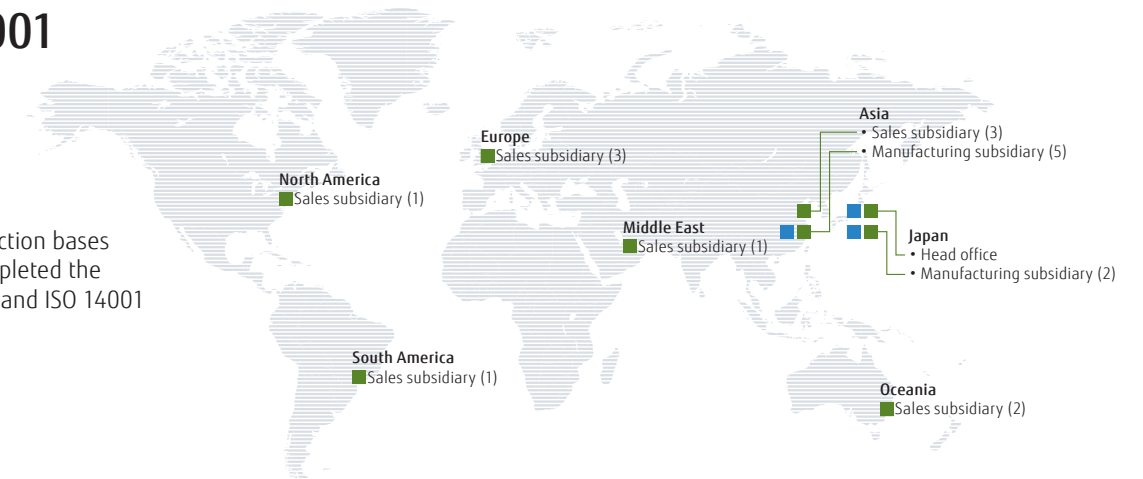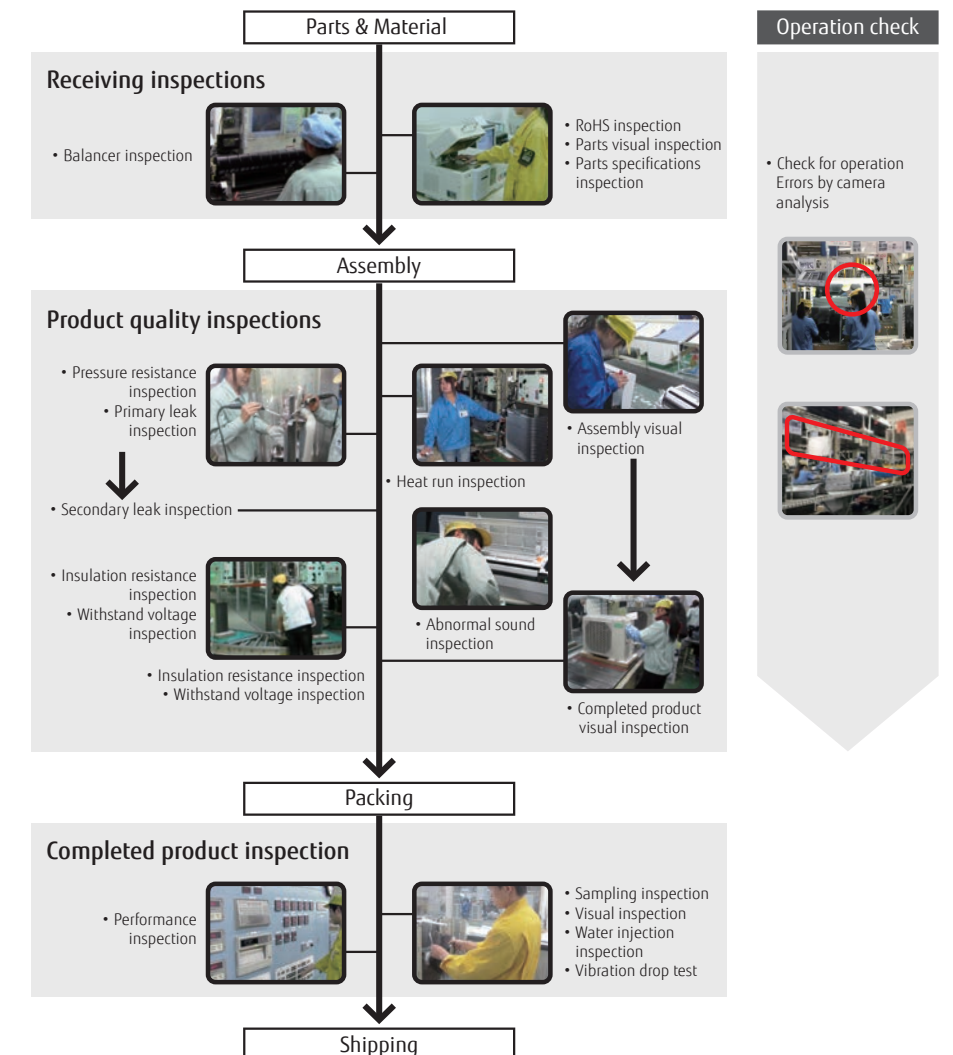
High Product Quality Assurance

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

Receiving inspection

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

Stringent product quality inspection

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

Parts & Material

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

Assembly

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

Packing

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

Shipping

Operation check
• Check for operation Errors by camera analysis

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.

Excellent
Energy Saving

Pleasant
Comfort

THE
TOTAL SOLUTION

Easy
Installation

High
Durability

Enhanced
Safety

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.

Small Offices
For Light Commercial

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.

18 HP model

J-III

J-IIIL

J-IIIL
High capacity model
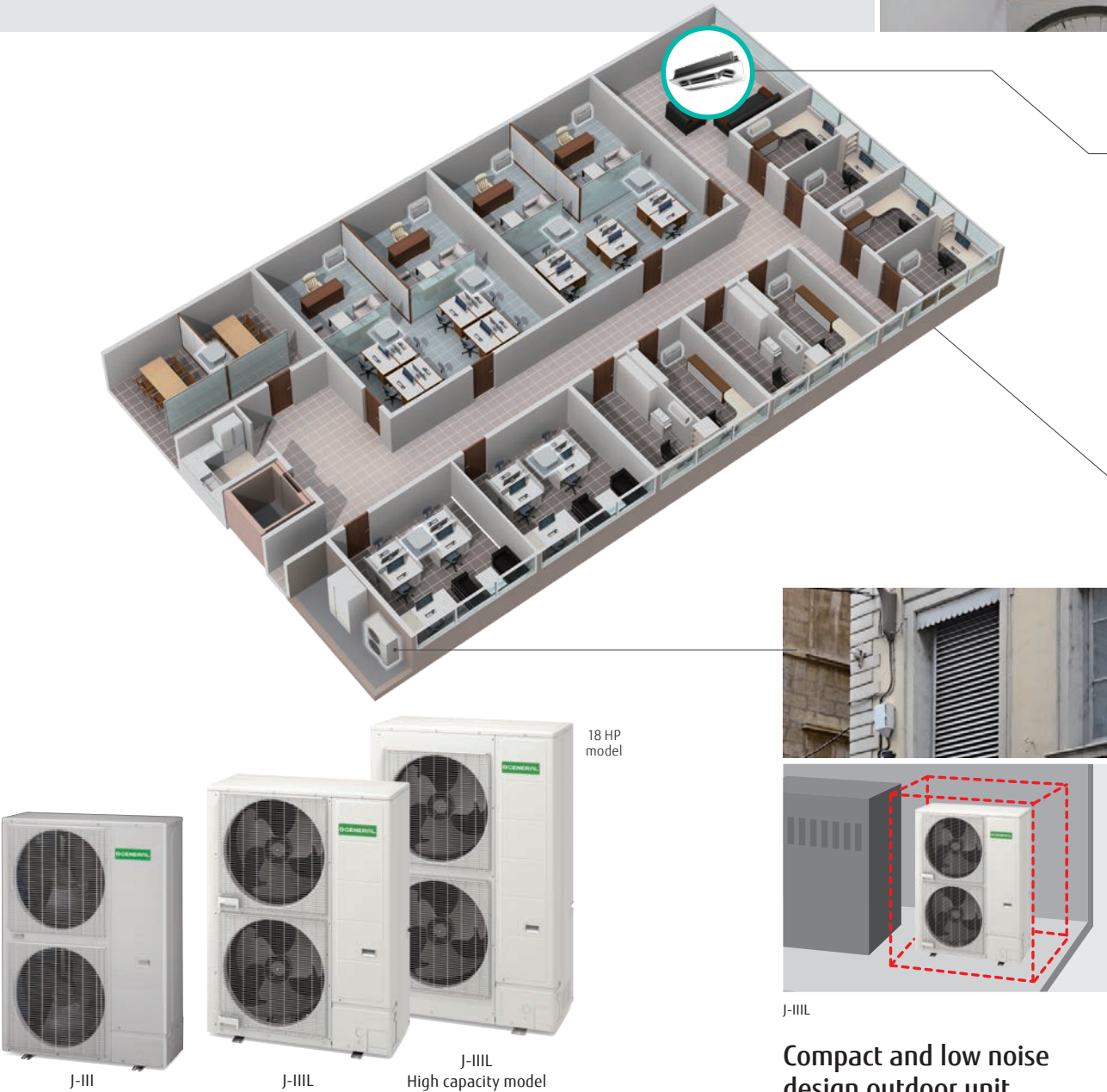
VRF J Series Up to 18 HP by compact outdoor unit

Small VRF system is suitable for the buildings with many small rooms. maximum 34* indoor units can be connected.

*Only J-IIIL 18 HP model

J-IIIL

Compact and low noise design outdoor unit

This compact outdoor unit does not 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.

Breakthrough 3D flow cassette with innovative pursuit of comfort

The left and right air outlet ports with maximum 100° rotation angle and the wide center air outlet port can minimize uneven temperature to create a comfortable space.

3D Flow Cassette

Various indoor units lineup for low capacity class

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

Wall Mounted

Floor (compact)

Compact Cassette Grid Type
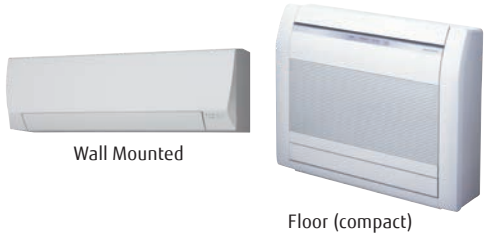
Centralized remote controller with improved operability

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

NEW

Central Remote Controller UTY-DCGGZ3

LAN

PC

Wireless LAN

Fixed IP, IP forwarding and open Port required

INTERNET

Router

Tablet PC

Smartphone

*Wireless LAN support : Future release
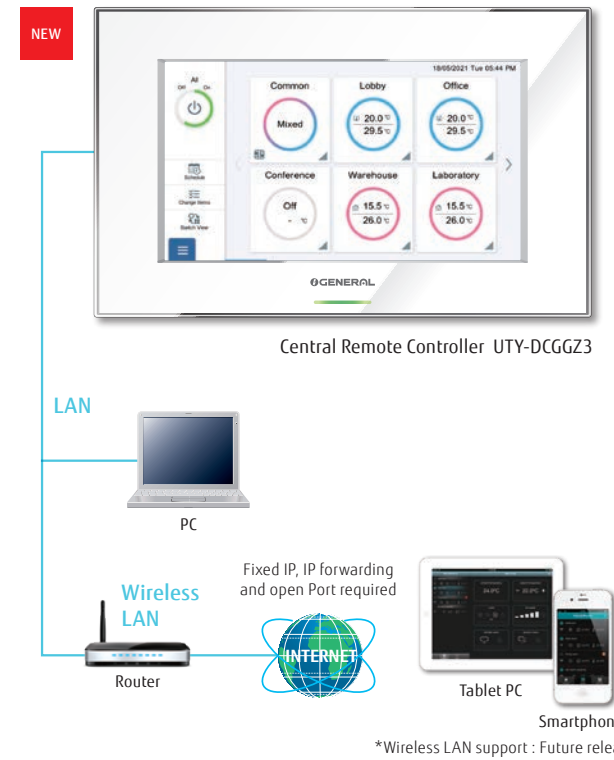
Compact wired remote controller

The size is compact but the screen is large and easy to operate. Stylish design that fits the interior.

Hotels
For Light Commercial

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.

One-way flow cassette Series

Compact chassis with low noise operation The low operating noise makes the model ideal for use in the corridor of a hotel.
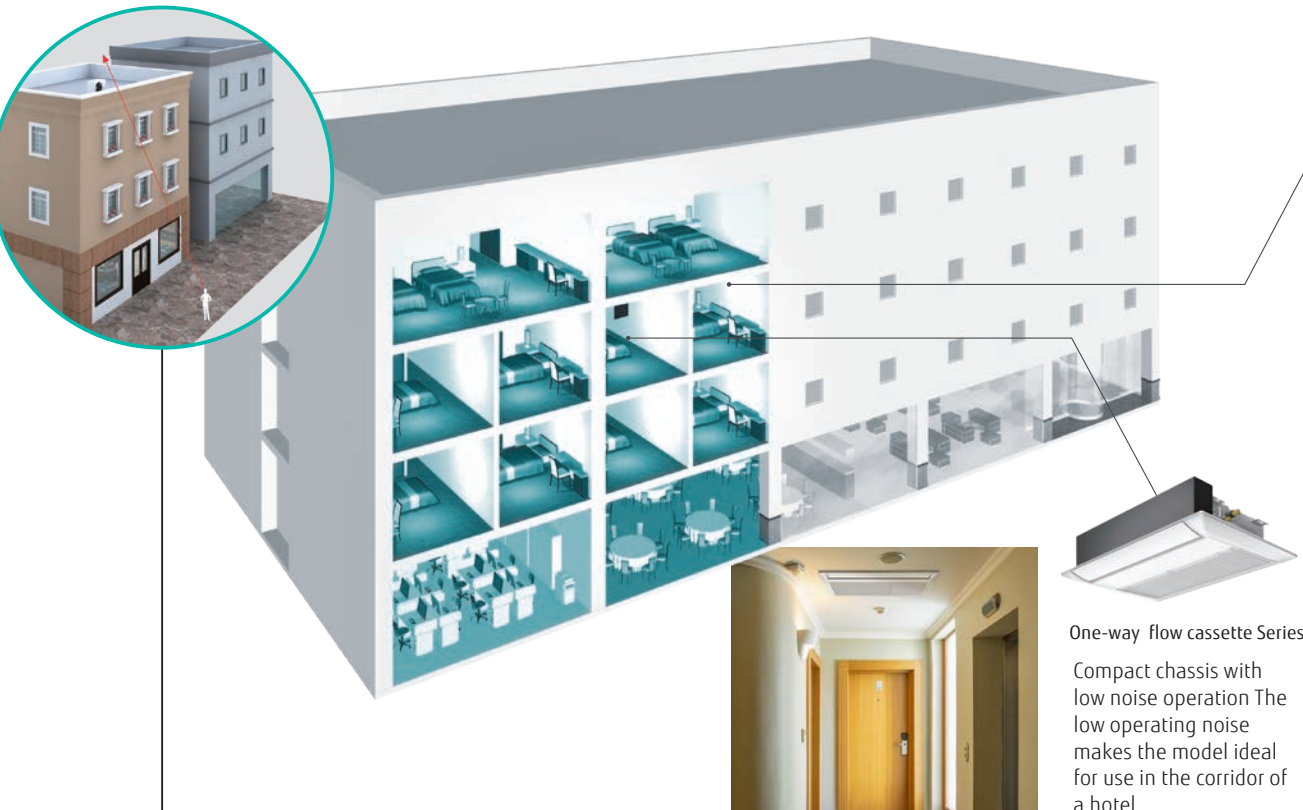
Select the product best suited to the characteristics of the property.

	Split	VRF J-VS NEW	VRF VC-V NEW
Project size	Small	Middle	Large
Individual Air conditioning	Great	Good	Good
Reduction of installation space	Fair	Great	Great
Landscape (hide outdoor unit)	Fair*	Great	Fair
Maintenance (individualized)	Great	Good	Fair

*Depends on pipe length constraints

Guest room air conditioning with superior comfort, energy efficiency, and ease of installation

Space saving
Mini duct type with a height of 198 mm and a depth of 450 mm. Easily installed in a narrow ceiling space.

Mini duct
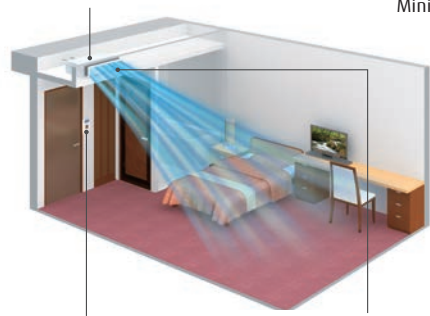
Card key switch available
Linked to a card key to prevent people from forgetting to turn off the air conditioner.
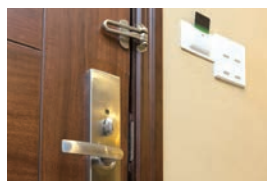
Comfortable airflow by switching the up/down airflow direction
The Auto louver grille kit creates comfortable airflow by adjusting the air direction.

External connection switch

Auto louver grille kit

Ventilation of each room can be achieved relatively inexpensively by combining an appropriate duct fan (locally procured) through a hole for Fresh air in the indoor unit. If the airflow required to ventilate the room is not sufficient, use ERV (Energy Recovery Ventilator).

Medium Static Pressure Duct

Duct fan (Locally purchased)

Use External Output

Indoor   Outdoor
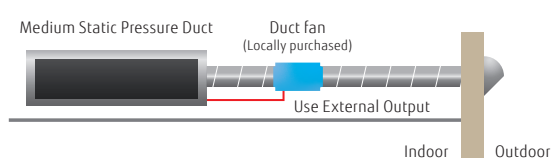
Centralized control of air conditioning for shared spaces

Centralized control of air conditioning for shared spacesLobbies, hallways, and other common spaces are centrally controlled for air conditioning.Central Remote Controller can manage VRF products, but Split products can also be managed together via Network converter.

NEW

Central remote controller UTY-DCGGZ3

Network Converter UTY-VTGX*

NEW

J-VS   Split

*Some functions will not be available.
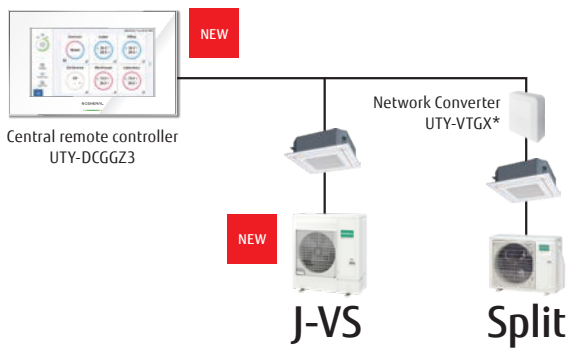
Wired remote controller (design type) with sophisticated design. The touch panel can be easily operated by swiping vertically and horizontally.

NEW

Wired remote controller (design type) UTY-RVRG

Hotel logo display

## Large space air conditioning for the reception area and lobby

Duct type Big duct Series suitable for large spaces with high ceilings

School
For Light Commercial

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.
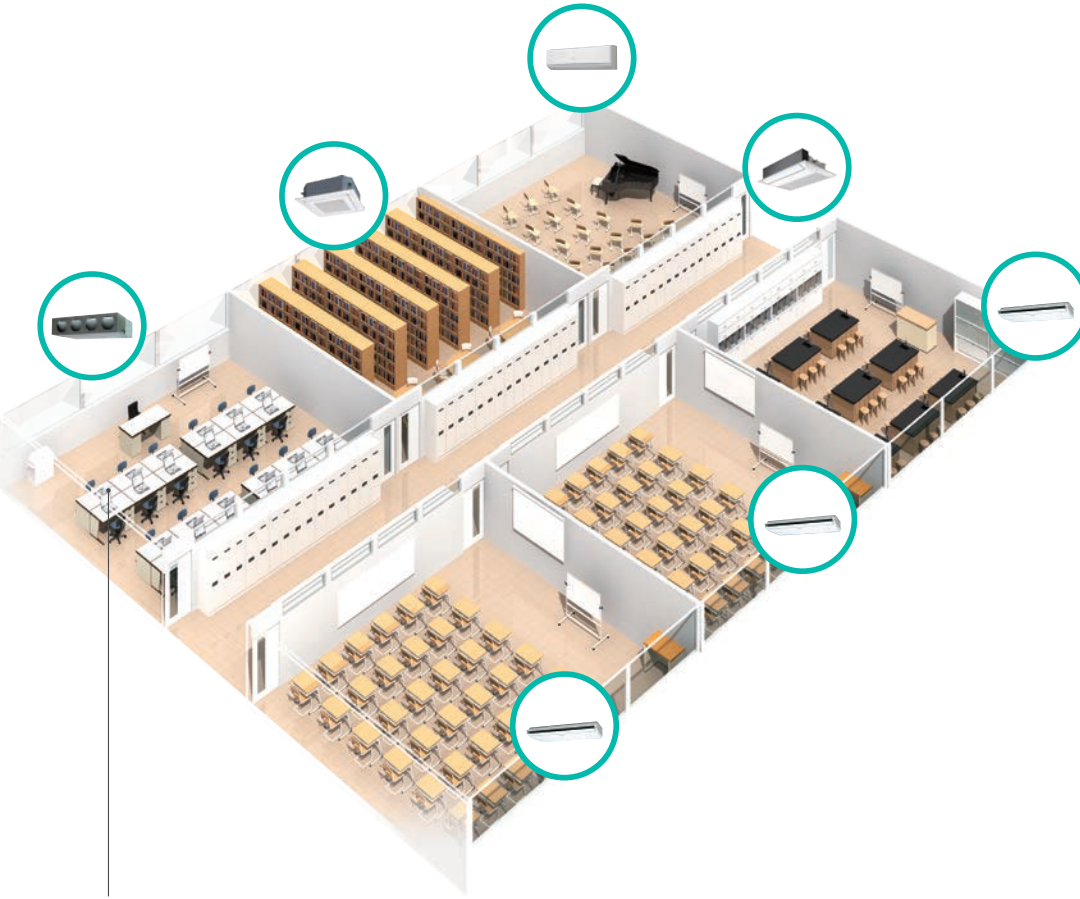
Centralized control of both air conditioning and ventilation equipment

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.

VRF
indoor units

Facilities

Lightning

Ventilation

System Controller Lite

Cassette (1-way Flow type) Series

Mini duct

Ceiling type

Wall-mounted type

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.
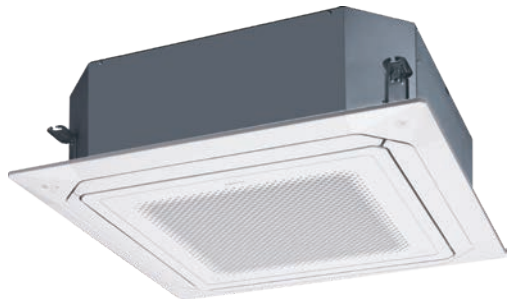
Circular Flow Cassette

Comfortable room air conditioning without airflow feeling

Circular Flow 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

3.2m

8.8m

Occupancy sensor
(Option)
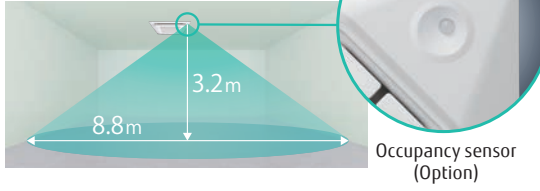
Restaurant, Shops

For Light Commercial

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.

RESTAURANT

SHOPS
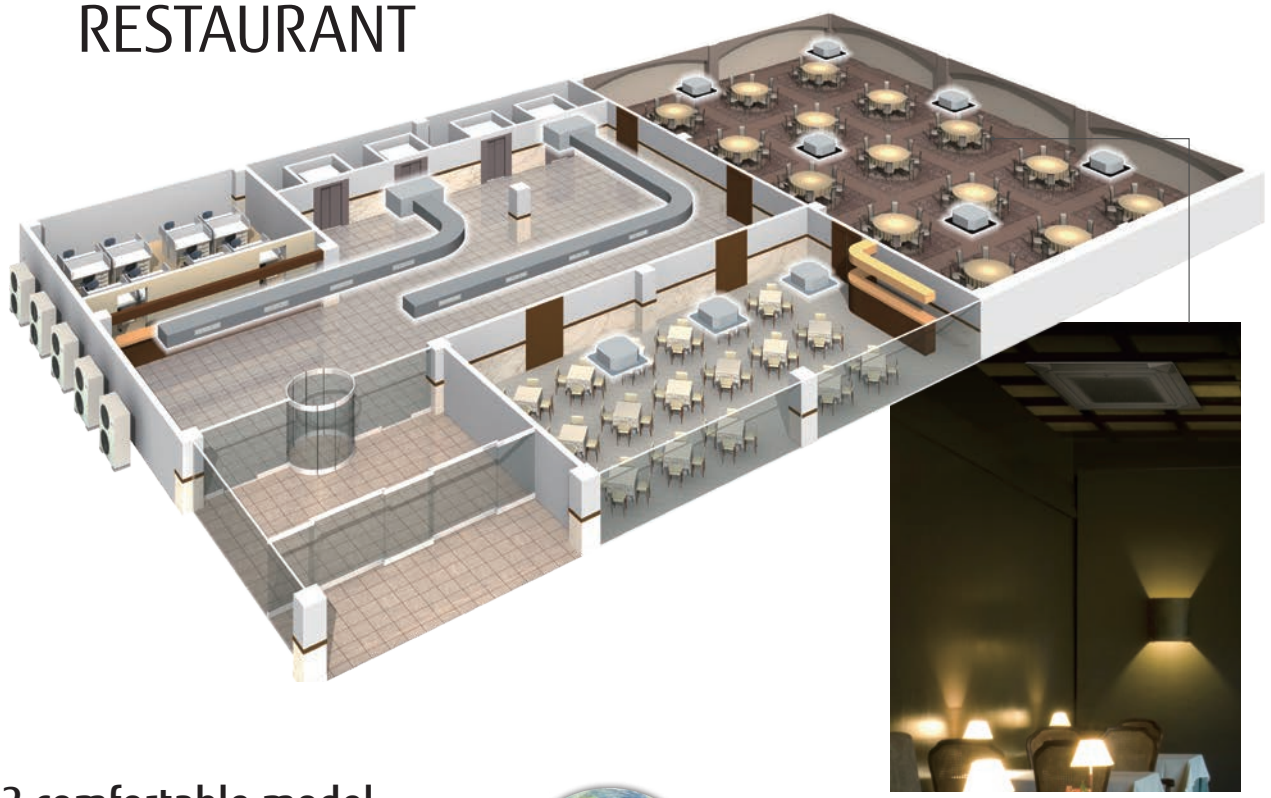
R32 comfortable model lineup expanded

Expanded lineup of wall-mounted, cassette, and duct types suitable for comfortable spaces using environmentally friendly R32 refrigerant.

REFRIGERANT R32

NEW
Compact Grid type/ Standard type

NEW

Slim Duct
NEW

Wall-mounted type

Circular flow cassette Series
For ambience with dimmed lighting

For rooms with bright interiors

Two panel colors

Both black and white panels are available for Cassette type. Black panels are suitable for dark places such as atmospheric restaurants. White panels, by contrast, are more appropriate for use in brightly lit spaces such as offices. (Available for Single split and VRF indoor units)

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℃
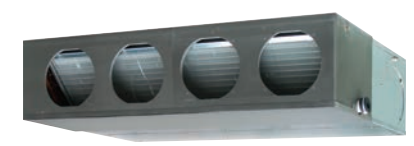
Medium Static Pressure Duct

40-150 Pa

Operation from anywhere

With a single smartphone, you can check the operating status of not only one air conditioner, but also the other air conditioners in your shop (up to 24 air conditioners).

AIRSTAGE Mobile
Download Free
App Store   Google play
+

With the WLAN adapter and the AIRSTAGE Mobile app, you can control the heating and cooling of your home anytime, anywhere.

Large Building

For Commercial

Fujitsu General provides modular type VRF systems that seek high efficiency, comfort, design freedom, easy installation and reliability for skyscraper buildings.
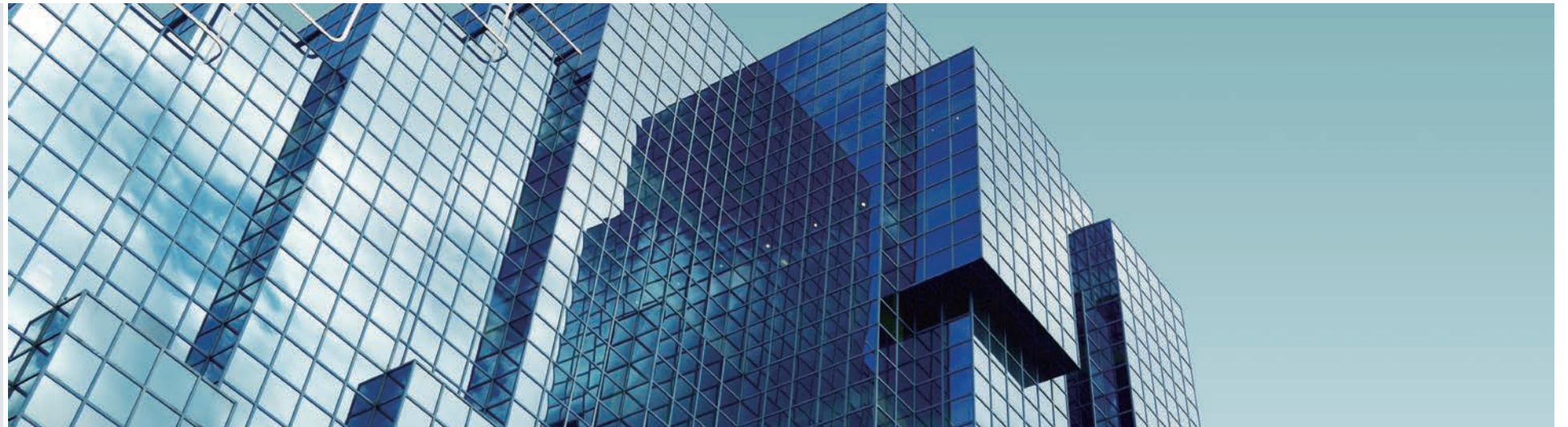
Abundant lineup optimized for the operating environment

The VRF system meets a variety of needs, including energy-saving models and models with compatibility to outdoor temperatures of up to 55°C.

NEW

VRF VC-V

Smart, cutting-edge design Extensive lineup from 8HP to 80 HP with the capacity ratio of indoor units connectable up to 150%.

51 models with 8 to 80 HP
- Standard combination: 37models from 8 to 80 HP
- Energy efficient combination: 14 models from 16 to 44 HP

Individual air conditioning system for large buildings

Capacities can be expanded up to simultaneous cooling and heating with maximum 54HP. Large individual air conditioning is supported.

VRF V-III Tropical 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

Centralized control

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

System Controller
(UTY-APGXZ1)

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

INTERNET

Remote/ Monitoring side

Router

Smartphone
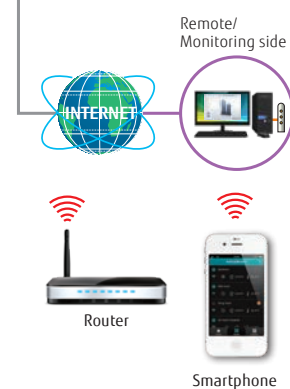
VRF indoor units

Facilities

Lightning   Ventilation

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.

KNX   LONWORKS

Modbus   BACnet
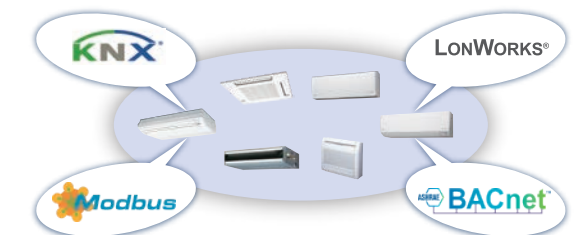
High system flexibility

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
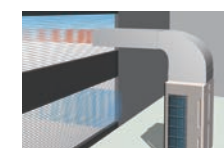
Installation example
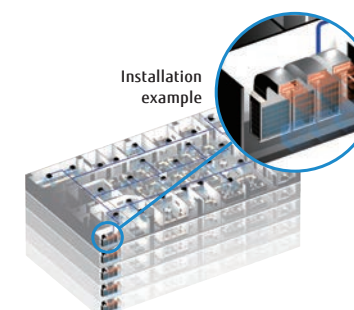
Rapid service support

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.

Internet or Public Telephone Line

Remote Monitoring
Web Monitoring Tool
UTY-AMGXZ1
Software
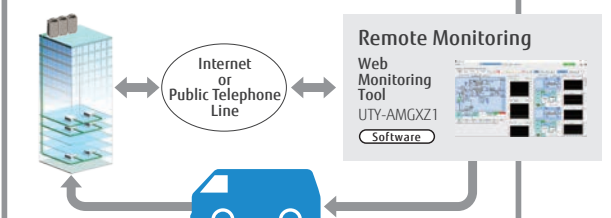
VRF CORE TECHNOLOGY

HIGH ENERGY EFFICIENCY

MORE COMFORT

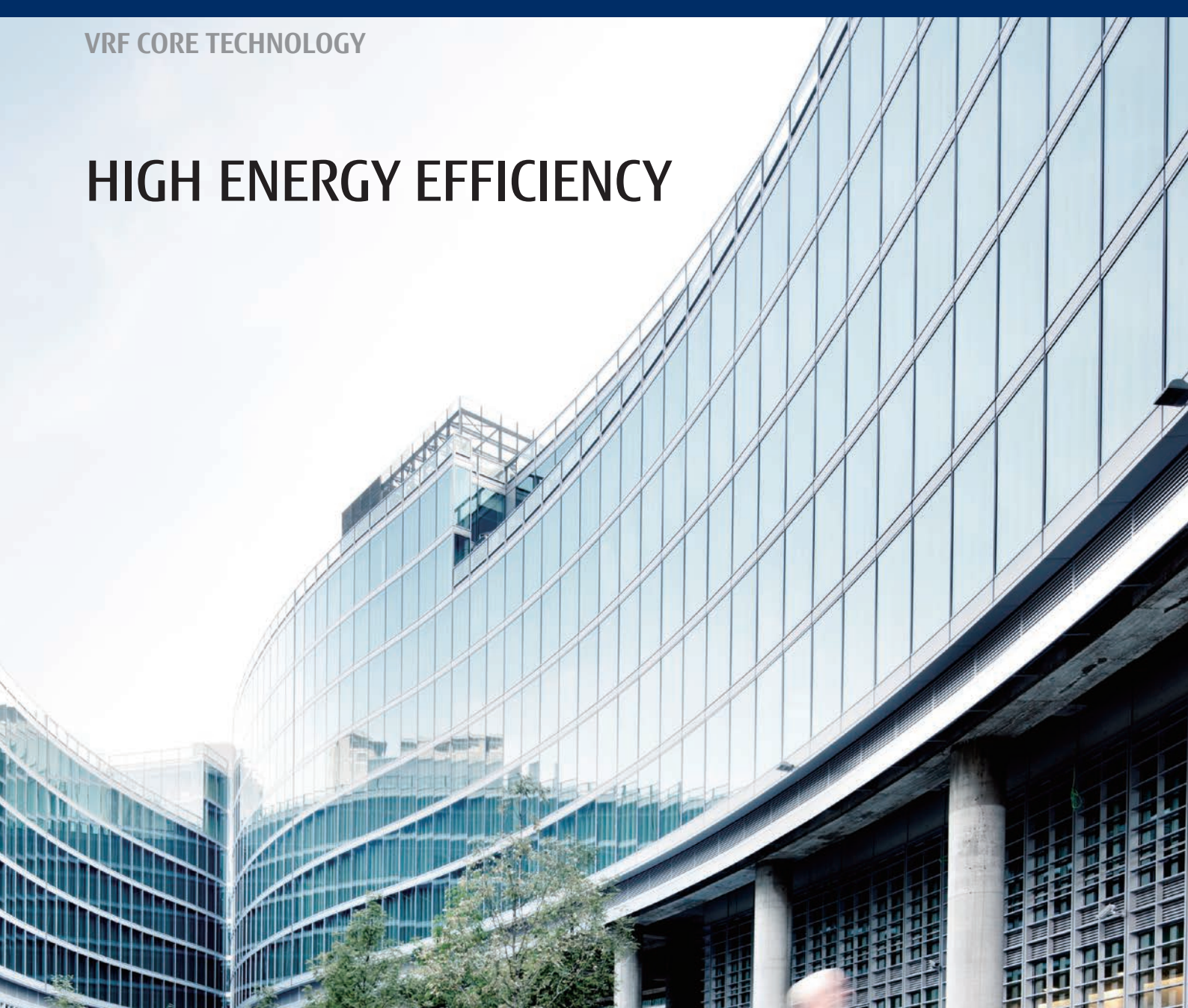HIGH RELIABILITY

DESIGN FLEXIBILITY

EASY INSTALLATION

EASY SERVICE & MAINTENANCE

VRF systems can be designed to create an air conditioning solution to suit most buildings requirements.
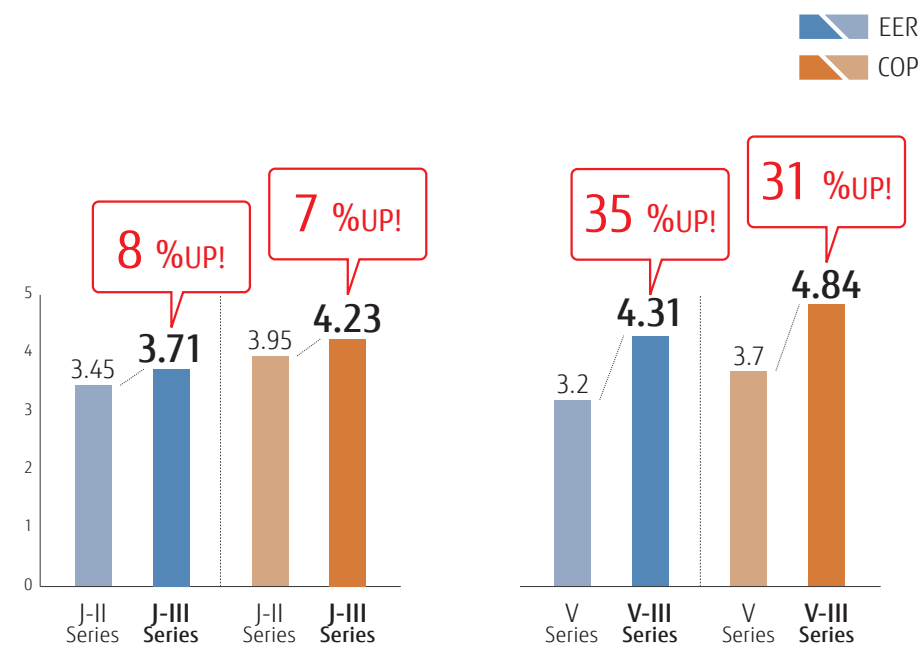
VRF Systems can be designed to effectively provide an air conditioning solution from a large domestic residence through to a large scale commercial building.
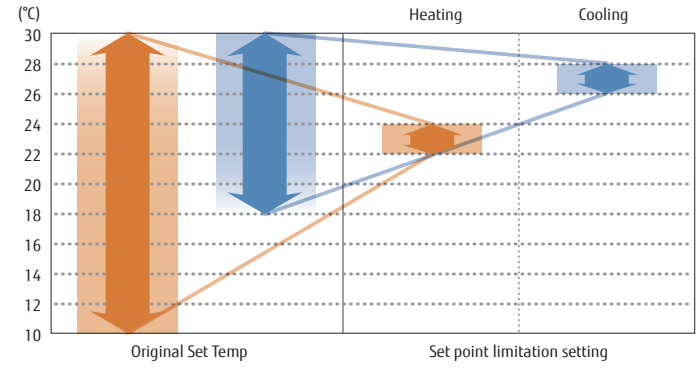
HIGH ENERGY EFFICIENCY

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.
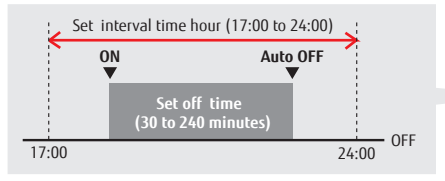
Energy saving management

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))

System Controller
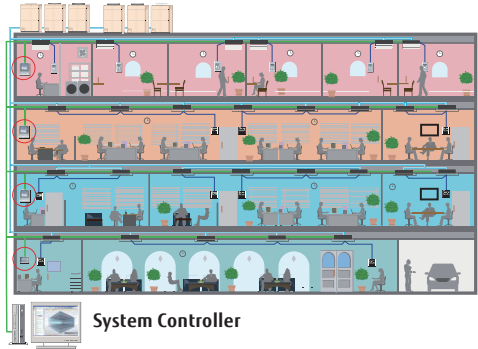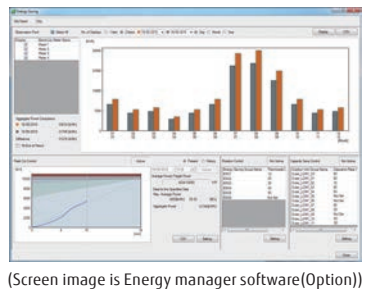
Capacity limit operation

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.

Highly Energy Efficiency

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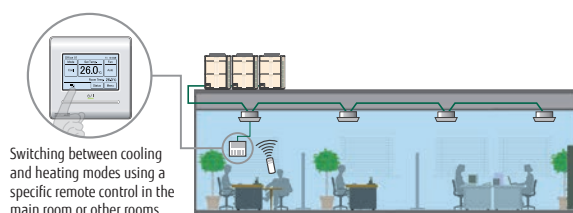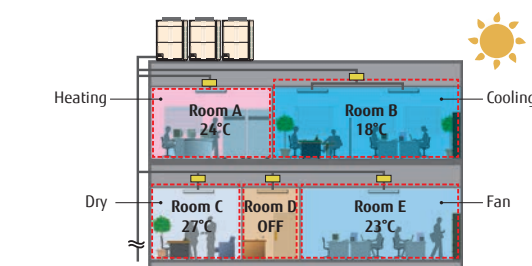
EER
COP
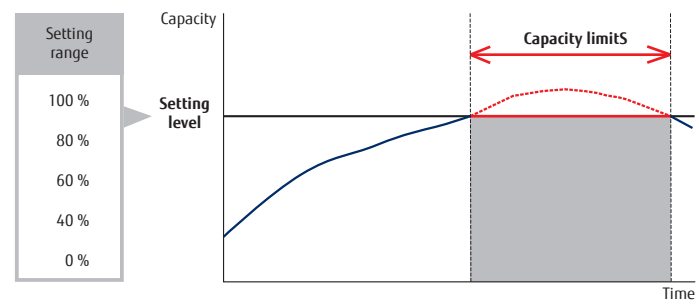
MORE COMFORT

Auto changeover

In Auto setting, the air conditioner switches between cooling and heating modes automatically according to the set temperature and the room temperature.
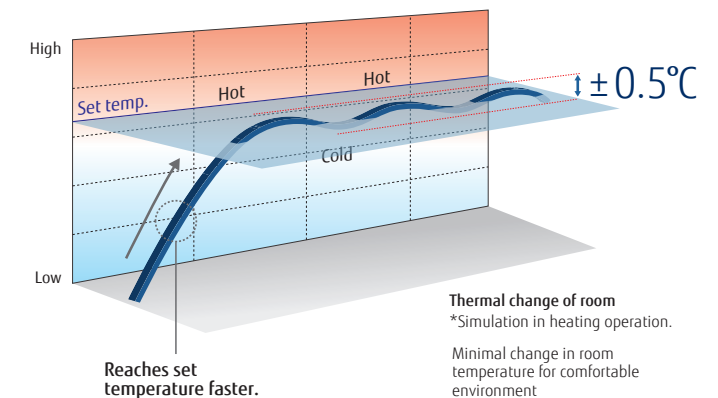

—— Cooling operation	····· Cooling fan operation
—— Heating operation	····· Heating fan operation
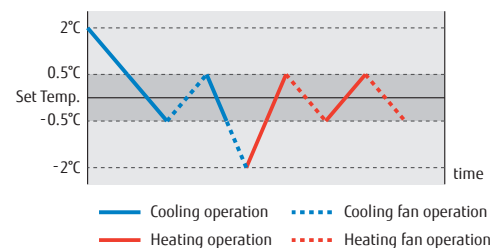
Auto changeover settings enable the indoor unit to easily switch between cooling and heating regardless of the operating mode of other indoor units. These settings can be made using a wired remote controller for a specific indoor unit. Provides a comfortable environment all year round.

Automatic cooling/heating operation for each room is possible

Heating — Room A 24℃ Room B 18℃ — Cooling

Dry — Room C 27℃ Room D OFF Room E 23℃ — Fan

Switching between cooling and heating modes using a specific remote control in the main room or other rooms

Precise control of refrigerant flow

The combination of DC inverter control and individual control of electronic expansion valves of an indoor unit enables precise and smooth control of the refrigerant flow. This means the room temperature can be set in increments of 0.5℃.

High
Set temp.   Hot   Hot
    Cold   ±0.5℃
Low
Reaches set temperature faster.

Thermal change of room
*Simulation in heating operation.

Minimal change in room temperature for comfortable environment
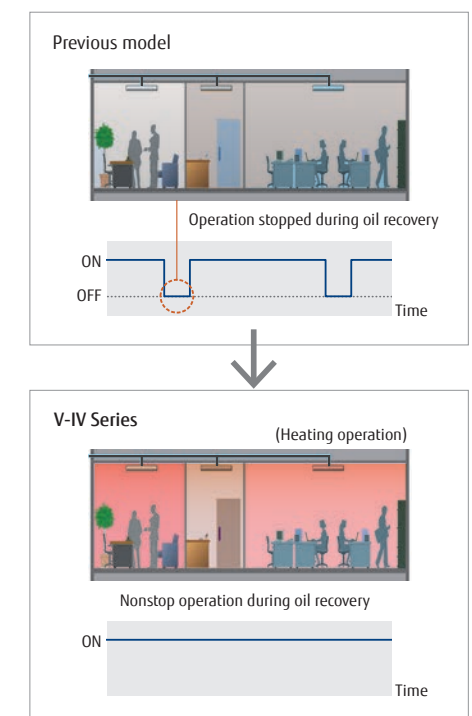
Quiet operation

Quiet operation

Two low noise modes can be switched over automatically between one in which low noise is prioritized over performance, and the other in which performance is prioritized over low noise, depending on the room temperature and outdoor temperature. This feature can be controlled by external input from the outdoor unit or a system controller.
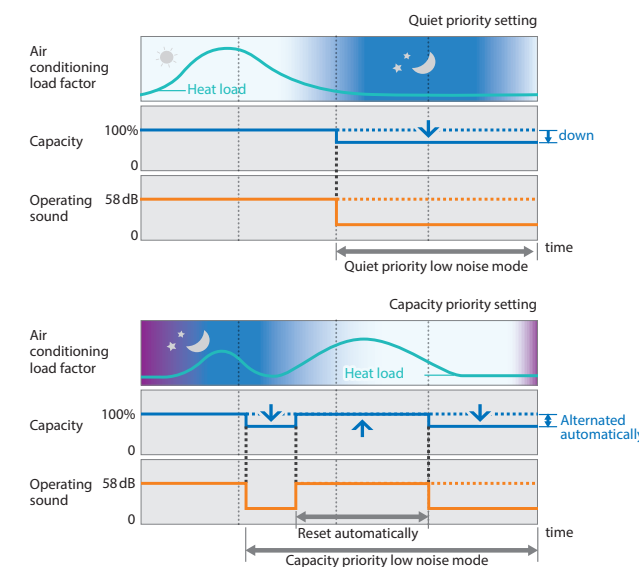
Quiet priority setting

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

Capacity priority setting

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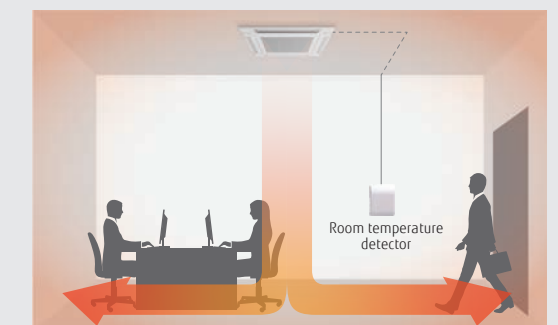Capacity priority low noise mode

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.

Previous model
Operation stopped during oil recovery
ON
OFF   Time

V-IV Series   (Heating operation)
Nonstop operation during oil recovery
ON   Time

NEW **Switching room temperature sensing position for improved heating comfort (Option)**

The optional remote sensor kit (UTY-XSZXZ1) can be connected to the indoor unit to improve comfort by installing the unit at a height appropriate for the living environment.

Connectable products
ALL Cassette types   ALL Duct types   ALL Wall-mounted types

Room temperature detector

HIGH RELIABILITY
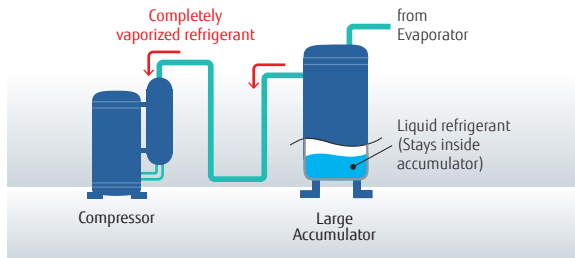
Outdoor unit rotation

The compressor starting order is rotated to equalize the cumulative running time of each unit.

Rotation
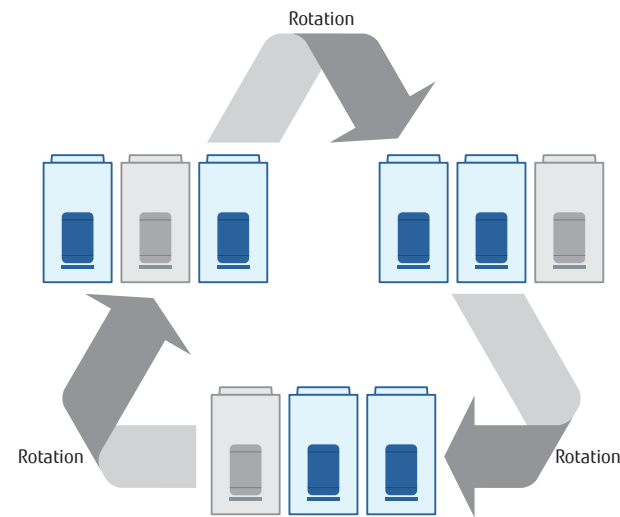
The start and stop timings are alternated among connected compressors.
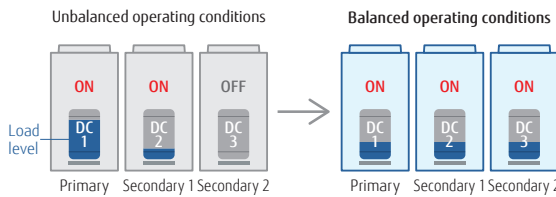
Backup operation

If one compressor fails, the other compressors will initiate backup operation*.

Note: Backup operation may not be possible depending on the cause of failure.
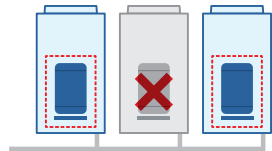
Advanced refrigerant control

Compressor control logic controls the inverter speed to balance the mass airflow rate of refrigerant in each outdoor unit.

Unbalanced operating conditions

Load level — ON (DC 1) ON (DC 2) OFF (DC 3)
Primary — Secondary 1 — Secondary 2

Balanced operating conditions

ON (DC 1) ON (DC 2) ON (DC 3)
Primary — Secondary 1 — Secondary 2

Protection against liquid flowback

The use of a large accumulator means that refrigerant that has not been completely vaporized stays inside the accumulator to ensure no liquid refrigerant is fed into the compressor.

Completely vaporized refrigerant

from Evaporator

Liquid refrigerant (Stays inside accumulator)

Compressor — Large Accumulator

Blue fin heat exchanger

The anti-corrosion blue fin treatment is applied to the heat exchanger of the outdoor unit.

Hydrophilic coating
Cobalt Blue protection
Aluminium base materials
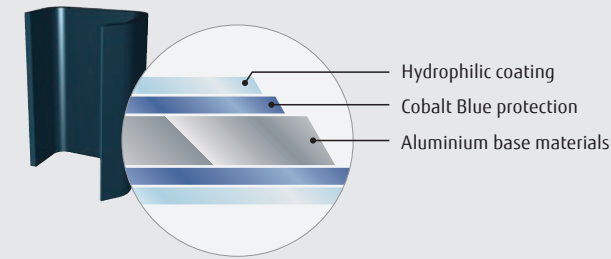
DESIGN FLEXIBILITY

Class-leading compact design

An industry-leading compact outdoor unit with optimal airflow pattern design.
(Up to 18 HP)

VRF J Series Compact Outdoor Unit

J-VS   J-IIS   J-III
J-III Tropical   J-IIIL   J-IIIL
High-capacity model

Long pipe design

Pipe design suitable for long and narrow office buildings with elevation differences and low-rise stores with long distances (VRF J-IVL Series)

VRF J-VS Series

Height difference between indoor and indoor units on different floors **Maximum 50 m**

Pipe length from first separation tube to farthest indoor unit **Maximum 120 m**
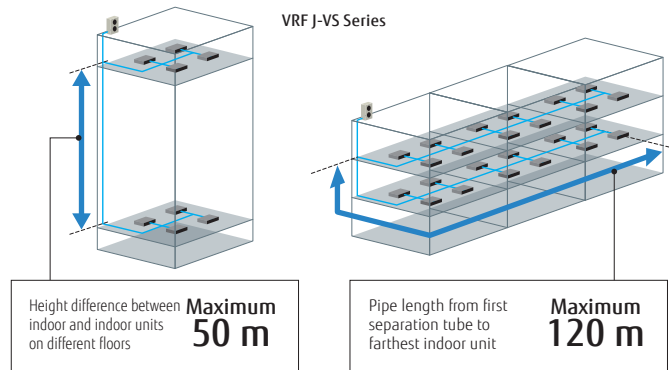
Max. allowable overall pipe length: 1,000 m

The class-leading pipe length of 1,000 m increases flexibility of installation in a wide variety of buildings.

Actual pipe length
Maximum **165 m**
(VC-V, V-III, V-III tropical)

Pipe length from first separation tube to farthest indoor unit
Maximum **90 m** *¹
(VC-V, V-III, V-III tropical)

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

Height difference between outdoor and indoor units
Maximum **50 m**

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

Height difference s
Maximum **110 m** *

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

Height difference between indoor and indoor units
Maximum **50 m**

* For VC-V only

High-capacity connection

*: 6-HP model only.

Series	Connectable indoor unit capacity range	Connectable indoor units
VRF J-VS Series Heat pump type	50% to 130%	up to 13*
VRF J-IIIL Series 14/16/18 HP Heat pump type	50% to 150%	up to 34
VRF J-IIIL Series 8/10/12 HP Heat pump type	50% to 150%	up to 22
VRF J-III Series Heat pump type	50% to 150%	up to 13
VRF J-III Tropical Series Heat pump type	50% to 130%	up to 9

Series	Connectable indoor unit capacity range	Connectable indoor units
VRF J-IIS Series Heat pump type	50% to 130%	up to 8
VRF VC-V Series Cooling Only type	50% to 150%	up to 64
VRF V-III Series Heat Pump type	50% to 150%	up to 64
VRF V-III Tropical Series Heat Pump type	50% to 130%	up to 55

Designed for low refrigerant charge

The optimal design of the indoor and outdoor units reduces the amount of refrigerant required and can be easily installed in a room as small as 15 m2.

Installing in Small Room

Low ambient operation

Our refrigeration cycle technology enables cooling operation even at -15℃.

Various optional parts

- Fresh air intake kit to bring in fresh air
- Comfortable temperature control with a remote sensor
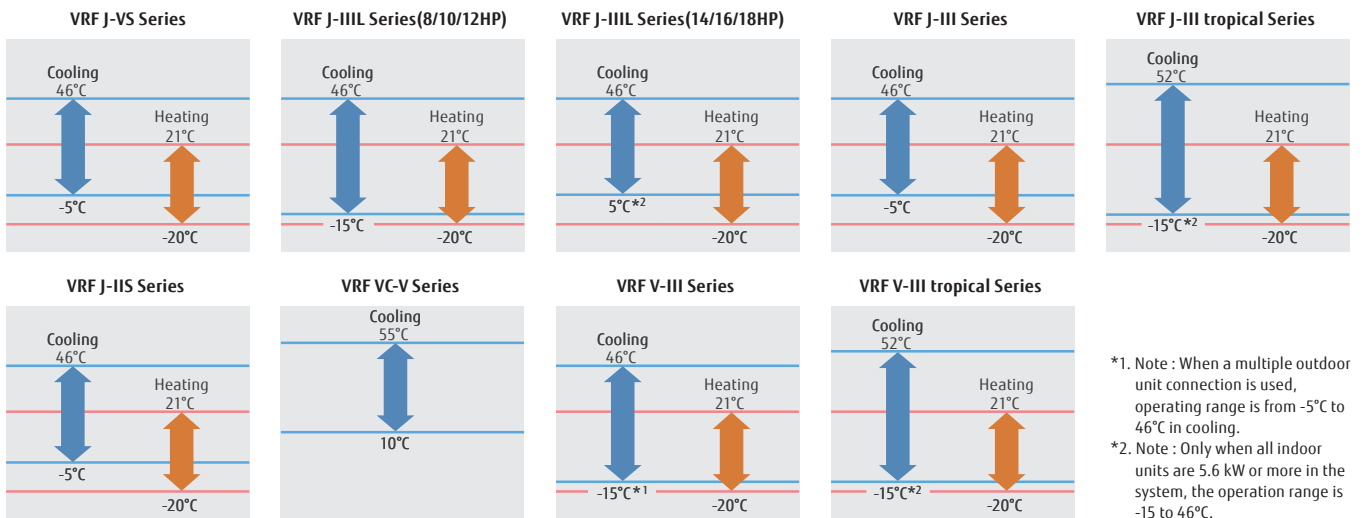- DX kit links ventilation equipment and air handling units.

Supports for ventilation

Fresh air intake kit   EEV unit   Control unit
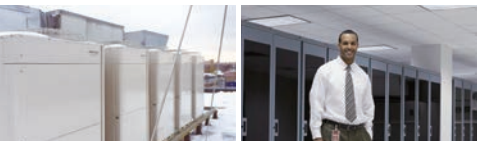
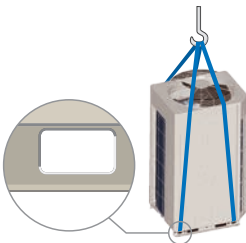## Wide operating range

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

VRF J-VS Series
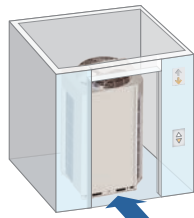Cooling 46℃ / Heating 21℃ / -5℃ / -20℃

VRF J-IIIL Series(8/10/12HP)
Cooling 46℃ / Heating 21℃ / -15℃ / -20℃

VRF J-IIIL Series(14/16/18HP)
Cooling 46℃ / Heating 21℃ / 5℃*² / -20℃

VRF J-III Series
Cooling 46℃ / Heating 21℃ / -5℃ / -20℃

VRF J-III tropical Series
Cooling 52℃ / Heating 21℃ / -15℃*² / -20℃

VRF J-IIS Series
Cooling 46℃ / Heating 21℃ / -5℃ / -20℃

VRF VC-V Series
Cooling 55℃ / 10℃

VRF V-III Series
Cooling 46℃ / Heating 21℃ / -15℃*¹ / -20℃

VRF V-III tropical Series
Cooling 52℃ / Heating 21℃ / -15℃*² / -20℃

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

EASY INSTALLATION

Simple wiring work

Installation of the wiring systems is made easier as the communication wiring can be installed continuously between the indoor and outdoor.
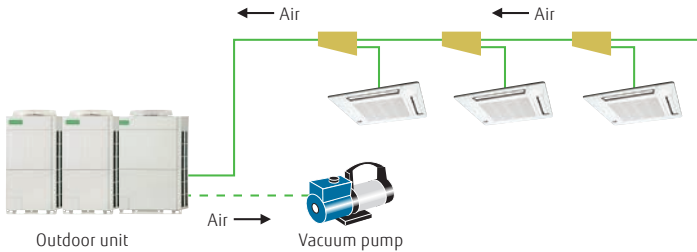
Parallel connection

Serial connection

Maximum wiring length:
3,600 m

Note: The automatic address setting is not available on a serially connected multiple refrigerant system.

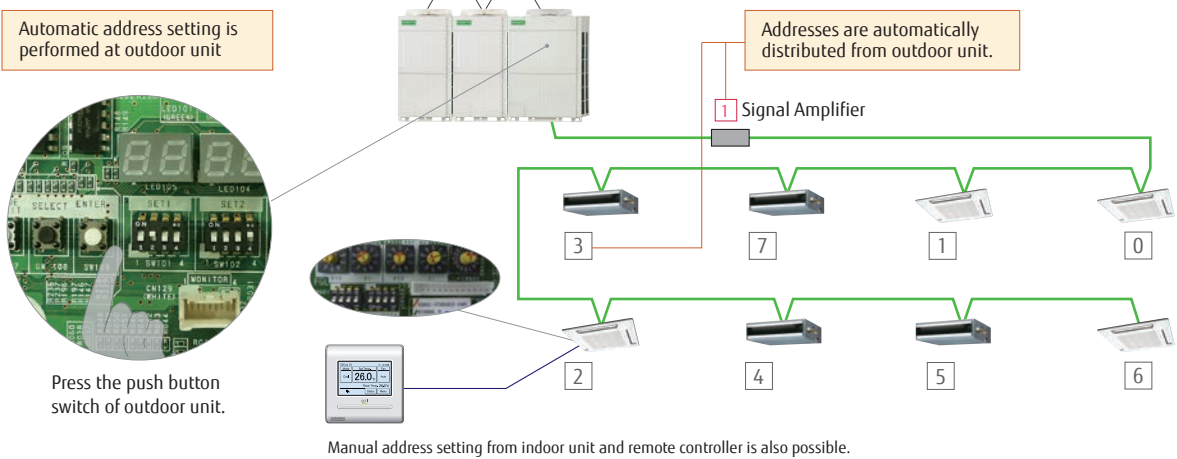## Easy evacuation – using vacuum mode function

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.

Air   Air

Outdoor unit   Air   Vacuum pump

Easily transported

A lifting strap can be hooked onto an outdoor unit
Design of outdoor unit allows for lifting straps to be used
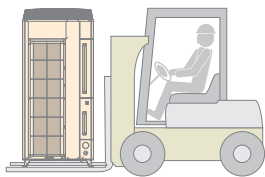
Transportable by forklift
The outdoor unit can be lifted and transported by forklift.

Fits into a small elevator.

Automatic address setting

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

Automatic address setting is performed at outdoor unit

Addresses are automatically distributed from outdoor unit.

1 Signal Amplifier

Press the push button switch of outdoor unit.

3   7   1   0

2   4   5   6

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

Easy access

The removable L-shaped front panel provides more room for installation and service work. Multiple installations can be performed easily and efficiently even in tight spaces.

J-IVL

Work space expanded

V-IV
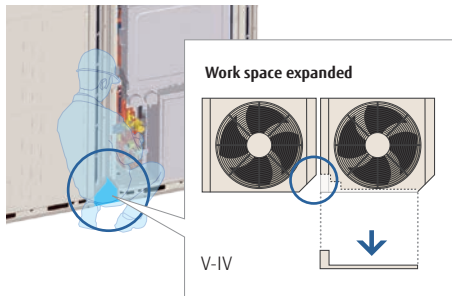
Front access reduces installation intervals

Flexible pipe connection

Piping and wiring can be accessed from the front, left, right, and bottom.

V-IV   J-IVL

Easy commissioning by Service Tool

• Service Tool (UTY-ASGXZ1)

The Service Tool checks the refrigerant temperature and pressure, and the operating status of the electronic expansion valves, making it easy to determine if the units are connected properly.

NEW • Central Remote Controller (UTY-DCGGZ3)

After the VRF system has been installed.
Conveniently, the "test run" required to verify proper system operation can be performed from a nearby Central RC.

Test run
START

EASY SERVICE & MAINTENANCE

Designed for easy maintenance

A 7-segment indicator lamp panel provides detailed information on the function setting status, refrigerant temperature and pressure, compressor operation time, and other factors, facilitating self-diagnosis for each unit.
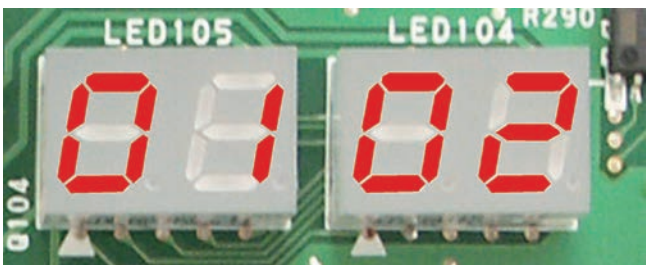
Easy-to-read 7-segment indicator lamp

Shows the following detailed operation and error status without need of any special tools.
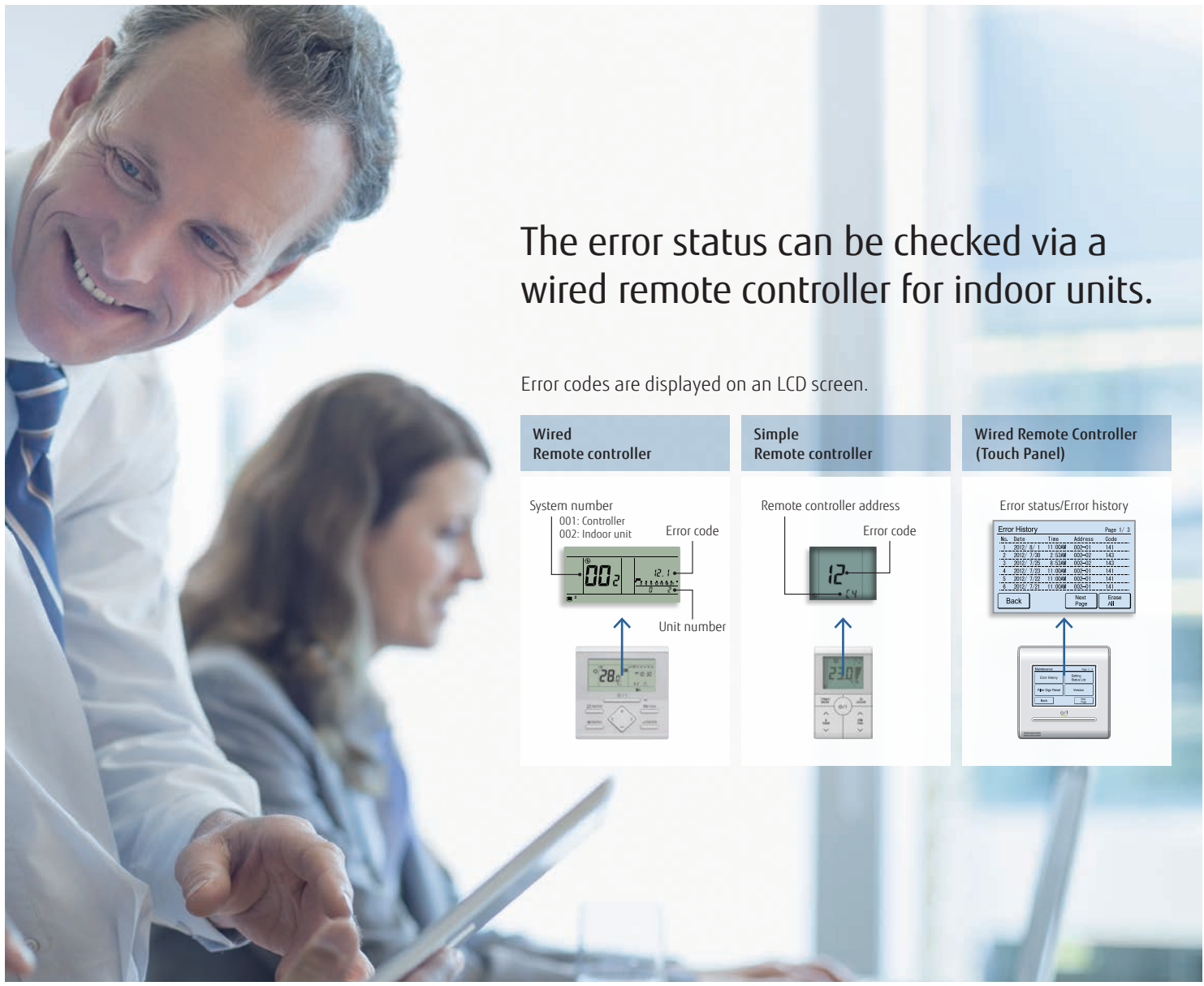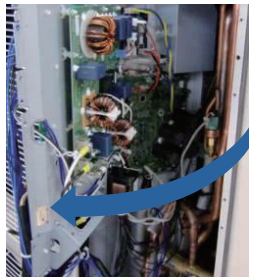
Error status can be checked on an outdoor unit's display

• System operation mode
• Discharge temperature and pressure
• Compressor operation status
• Address, type, and number of outdoor unit

Error and quantity annunciation

Error code

Abnormal indoor unit address
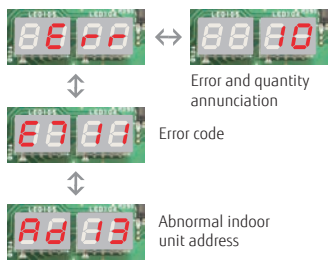
• Error status can easily be checked on an outdoor unit's display.

Movable PCB panel

Enables easier access behind the PCB for maintenance work.

The error status can be checked via a wired remote controller for indoor units.

Error codes are displayed on an LCD screen.

Wired Remote controller	Simple Remote controller	Wired Remote Controller (Touch Panel)
System number 001: Controller 002: Indoor unit — Error code — Unit number	Remote controller address — Error code	Error status/Error history

Error diagnosis by Service tool

Connection to Service tool

• A detailed operation status and recent error history can be checked and analyzed using Service tool.
• The last 5 minutes of operation status can be recorded continuously.

Outdoor unit
Transmission line
RB units
Indoor unit

Service Tool
UTY-ASGXZ1
Software

USB adapter
(Locally available)
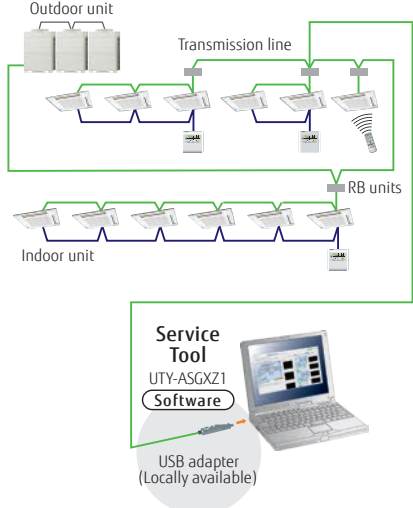
Remote monitoring

The Web Monitoring system enables the monitoring of the system's operation status at any time via the internet to ensure trouble-free operation.
The operating VRF network system in the building can be monitored real time over the internet.
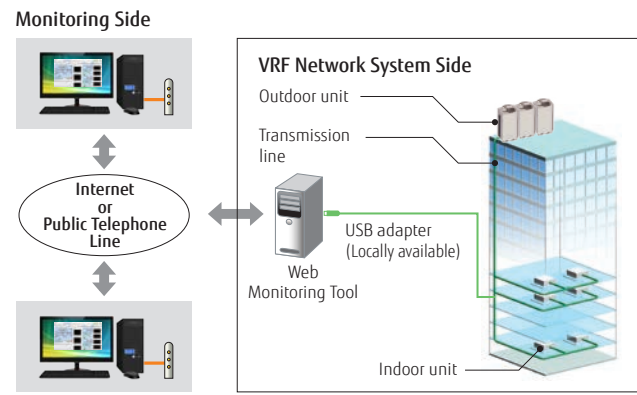
Monitoring Side

Internet or Public Telephone Line

Web Monitoring Tool

VRF Network System Side
Outdoor unit
Transmission line
USB adapter
(Locally available)
Indoor unit

VRF SERIES

The VRF 8 Series has a total of 99 models to meet the environmental and building size requirements.

The VRF 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.

VRF Series LINE-UP

Outdoor units range

Capacity (kW): 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 | 56 | 58 | 60 | 62 | 64 | 66 | 68 | 70 | 72 | 74 | 76 | 78 | 80

HP: 12.1 | 14 | 15.1-15.5 | 22.4 | 28 | 33.5 | 40 | 45 | 50.4 | 55.9 | 61.5 | 67 | 73.5 | 78.5 | 85 | 90 | 95 | 100.5 | 107 | 112 | 118.5 | 123.5 | 130 | 135 | 139.0 | 143.0 | 147.0

J-VS Series (NEW, R32):
AJH040 LCLAH | AJH045 LCLAH | AJH054 LCLAH

J-IIS Series (R410A):
AJH040 LCLAH | AJH045 LCLAH | AJH054 LCLAH

J-III Tropical Series (R410A):
High Efficiency (Single phase): AJH040 LBTAHN | AJH045 LBTAHN | AJH054 LBTAHN
High Efficiency (3 phase): AJH040 LETAHN | AJH045 LETAHN | AJH054 LETAHN

J-III Series (R410A):
High Efficiency (Single phase): AJH040 LETAHN | AJH045 LETAHN | AJH054 LETAHN
High Efficiency (3 phase): AJH040 LETAHN | AJH045 LETAHN | AJH054 LETAHN

J-IIIL Series (R410A):
AJH072 LELAH | AJH090 LELAH | AJH108 LELAH | AJH126 LELAH | AJH144 LELAH | AJH162 LELAH

VRF VC-V Serie (NEW, R410A):
Standard combination — Set Model:
AJG072 JATAH | AJG090 JATAH | AJG108 JATAH | AJG126 JATAH | AJG144 JATAH | AJG162 JATAH | AJG180 JATAH | AJG198 JATAH | AJG216 JATAH | AJG234 JATAH | AJG252 JATAH | AJG270 JATAH | AJG288 JATAH | AJG306 JATAH | AJG324 JATAH | AJG342 JATAH | AJG360 JATAH | AJG378 JATAH | AJG396 JATAH | AJG414 JATAH | AJG432 JATAH | AJG450 JATAH | AJG468 JATAH | AJG486 JATAH | AJG504 JATAH | AJG522 JATAH | AJG540 JATAH | AJG558 JATAH | AJG576 JATAH | AJG594 JATAH | AJG612 JATAH | AJG630 JATAH | AJG648 JATAH | AJG666 JATAH | AJG684 JATAH | AJG702 JATAH | AJG720 JATAH

Energy Efficiency — Set Model:
AJG144 JATAHH | AJG162 JATAHH | AJG180 JATAHH | AJG216 JATAHH | AJG234 JATAHH | AJG252 JATAHH | AJG270 JATAHH | AJG288 JATAHH | AJG306 JATAHH | AJG324 JATAHH | AJG342 JATAHH | AJG360 JATAHH | AJG378 JATAHH | AJG396 JATAHH

VRF V-III Tropical Series (R410A):
Space Saving — Set Model:
AJH072 LNTCH | AJH090 LNTCH | AJH108 LNTCH | AJH126 LNTCH | AJH144 LNTCH | AJH162 LNTCH | AJH180 LALDH | AJH198 LALDH | AJH216 LNTCH | AJH234 LNTCH | AJH252 LNTCH | AJH270 LNTCH | AJH288 LNTCH | AJH306 LNTCH | AJH324 LNTCH | AJH342 LNTCH | AJH360 LNTCH | AJH378 LNTCH | AJH396 LNTCH | AJH414 LNTCH | AJH432 LNTCH | AJH450 LNTCH | AJH468 LNTCH | AJH486 LNTCH

Energy Efficiency — Set Model:
AJH144 LNTCHH | AJH162 LNTCHH | AJH180 LALDHH | AJH216 LNTCHH | AJH234 LNTCHH | AJH252 LNTCHH | AJH270 LNTCHH | AJH288 LNTCHH | AJH306 LNTCHH | AJH324 LNTCHH | AJH342 LNTCHH | AJH360 LNTCHH | AJH378 LNTCHH | AJH396 LNTCHH | AJH414 LNTCHH

VRF V-III Series (R410A):
Space Saving — Set Model:
AJH072 LALBH | AJH090 LALBH | AJH108 LALBH | AJH126 LALBH | AJH144 LALBH | AJH162 LALBH | AJH180 LALDH | AJH198 LALDH | AJH216 LALBH | AJH234 LALBH | AJH252 LALBH | AJH270 LALBH | AJH288 LALBH | AJH306 LALBH | AJH324 LALBH | AJH342 LALBH | AJH360 LALBH | AJH378 LALBH | AJH396 LALBH | AJH414 LALBH | AJH432 LALBH | AJH450 LALBH | AJH468 LALBH | AJH486 LALBH

Energy Efficiency — Set Model:
AJH144 LALBHH | AJH162 LALBHH | AJH180 LALDHH | AJH216 LALBHH | AJH234 LALBHH | AJH252 LALBHH | AJH270 LALBHH | AJH288 LALBHH | AJH306 LALBHH | AJH324 LALBHH | AJH342 LALBHH | AJH360 LALBHH | AJH378 LALBHH | AJH396 LALBHH | AJH414 LALBHH

*: Not available to sale in some regions

REFRIGERANT
R32

Heat Pump
for Small-capacity type

VRF **J-VS**

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

System configuration example
- Suitable for air conditioning small and medium-size buildings. One refrigerant system is used for each outdoor unit.
- Multiple indoor units are connected with separation tubes and headers.

Outdoor unit

Separation tube   Header

Liquid pipe
Gas pipe

Indoor unit

Indoor unit

This product uses R32, a new environmentally friendly refrigerant. With TOP-class energy efficiency and compact design, it can be installed in a limited and narrow space without being conspicuous.

for **SHOP**

for **LARGE APARTMENT**

for **OFFICE**

Saving CO2

Sustainable (R32)

Small Body

"5S" leading to the optimal solution

Situational Piping Design

Sightliness installation

Outdoor unit

REFRIGERANT
R32

R32 refrigerant with reduced global warming potential

- **Zero** Ozone Depletion Potential (ODP[*1])
- High environmental properties
- High performance
- Economically efficient

GWP[*2]   (Reference: IPCC 4th Report)

2088

67%
reduction

675

R410A   **R32**
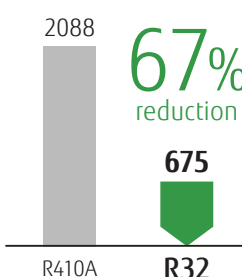
[*1] **ODP (Ozone Depleting Potential):** a relative value that indicates the impact per unit weight of ozone-depleting substances released into the atmosphere when CFC-11 (trichlorofluoromethane, CCl3F) is fixed at 1.0

[*2] **GWP (Global Warming Potential):** a measurement that indicates how much other greenhouse gases are capable of warming the Earth based on carbon dioxide This is the integrated value of radiant energy given to the Earth (i.e., the estimated impact on global warming) expressed as a ratio to CO_2.

J-VS

Sustainable

European F-Gas Regulation Plan

In light of the UN recommendations, Japanese government targets, and recent social trends, we have set a new long-term target of FY2050 as the target year, and reviewed our medium-term targets to

achieve the long-term target. by resolution of the Board of Directors in August 2023.

2029 Available at J-VS	2033	2035	2050
Split AC & HP Over 12 kW: GWP 750 and above prohibited 12 kW or less: GWP 150 and above prohibited	Split AC & HP Over 12 kW: GWP 150 and above prohibited	Split AC & HP HFC use prohibited	an economy with net-zero greenhouse gas emissions.

Refrigerant saving design

Refrigerant saving design the compact indoor unit, piping design, and optimization of heat exchanger volume significantly reduce the system refrigerant volume.
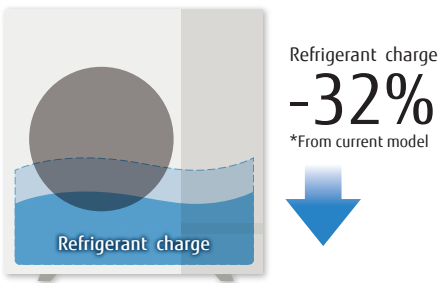
Refrigerant charge
-32%
*From current model

Refrigerant charge

Enhanced disaster safety measures

The system is designed to meet the environmental safety requirements specified in the IEC 603352-40 standard for the use of R32 refrigerant. The environment requiring safety measures is determined by the size of the room in relation to the amount of refrigerant required. For example, if the system is designed for maximum pipe length and the refrigerant charge is 6 kg, safety measures are required for rooms of 15 m2 or less.

Shut off valve kit
UTP-GX027A, UTP-GX060A
Block the path to prevent refrigerant flow in the event of a refrigerant leakage.

Expansion kit
UTZ-JXXA*
Used to ensure standards compliance and safety when R32 VRF products are installed.
*Connection cable (UTY-XWZXZL) is required.

Gas sensor kit
UTY-SGZH
Gas Sensor kit Used to ensure standards compliance and safety when R32 VRF products are installed.
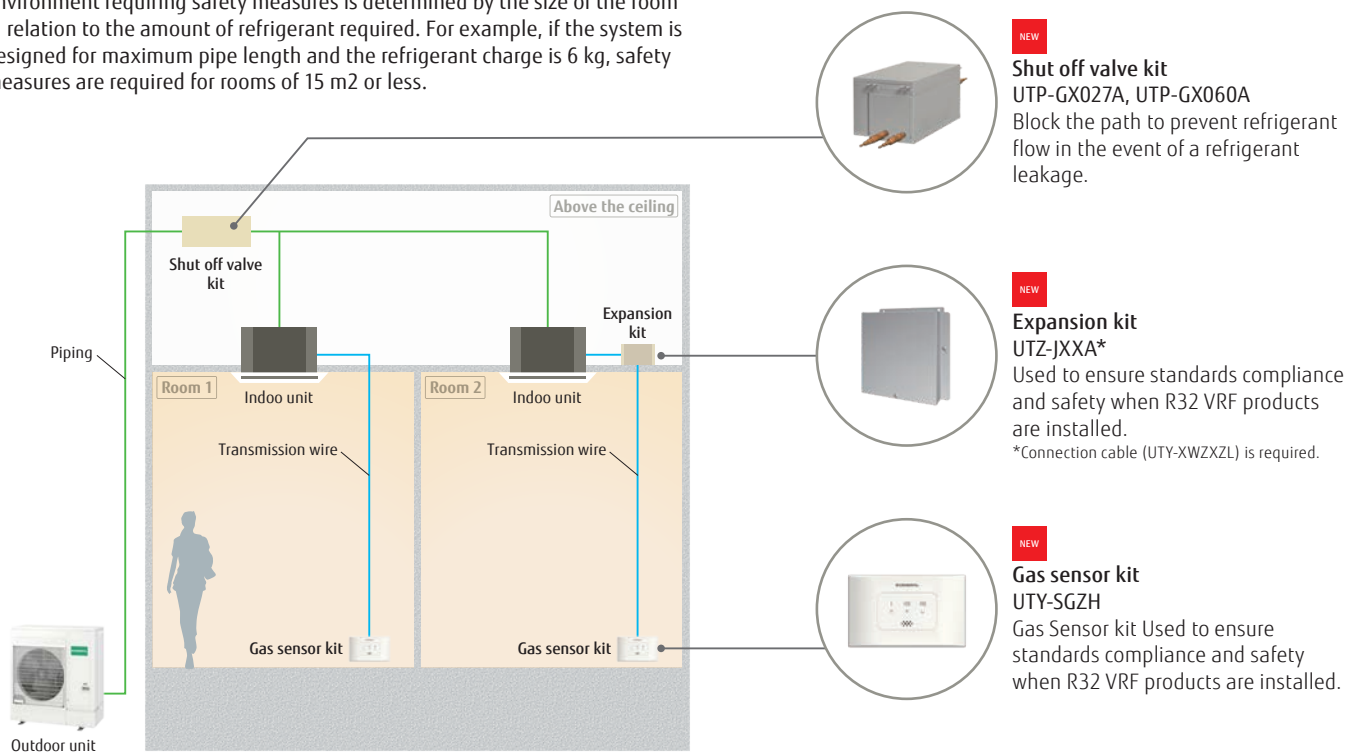
Saving CO2

TOP Class High Energy Saving

The use of large heat exchanger and a high-efficiency Rotary compressor achieves class-leading SEER/SCOP in all models.

SEER 8.27 *045 model
SCOP 5.37 *040 model

SEER / SCOP

8.20 / 5.37 — 4 HP
8.27 / 4.93 — 5 HP
7.79 / 4.82 — 6 HP
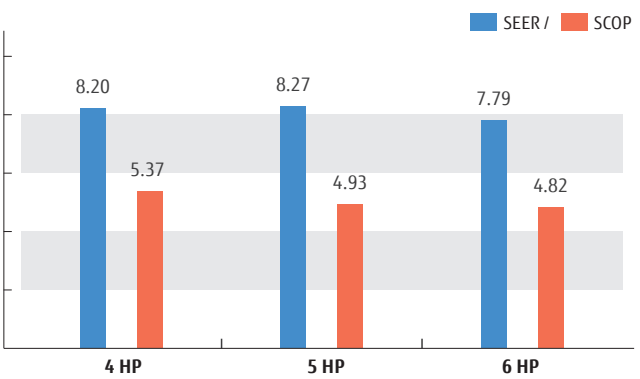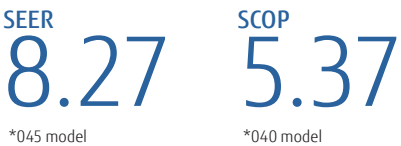
More Energy-Saving compressor control

When the room temperature approaches the set temperature after the start of operation, the capacity required for the outdoor unit becomes lower. The minimum compressor speed at this time can now be controlled at a lower value than with conventional products, enabling more energy-efficient operation.

Can be operated at a lower rps than the current model.

Minimum, 15 rps
Low power consumption
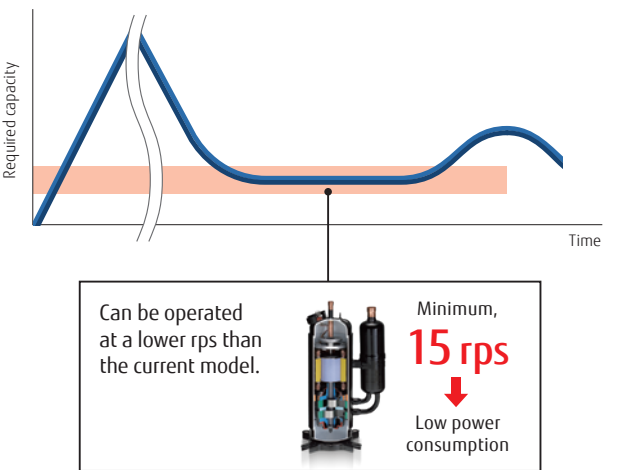
Small Body

Easy to carry, easy to install

Light 74kg
Height difference 998mm
320
940
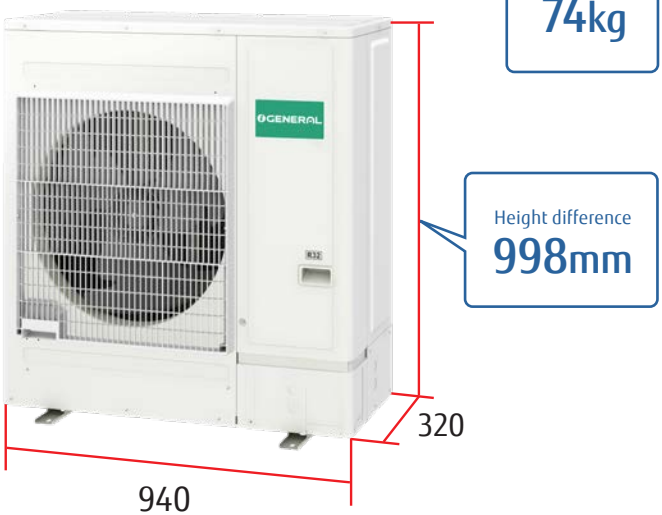
Small, lightweight outdoor unit

The outdoor units in this series are much more compact than conventional outdoor units of comparable capacity. They can be installed on a balcony, fitting below the height of the railing. With a height of less than 1 m, they can be installed in tight spaces such as under windows.
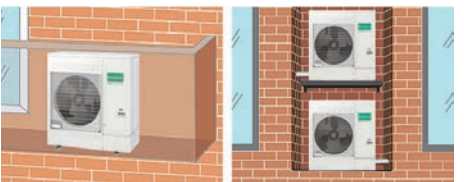
Low noise design

Significantly low noise levels are achieved by the use of a DC twin-rotary compressor, inverter technology, and an advanced airflow pattern design.

48 49

Situational Piping Design

Long pipe length

Our advanced refrigerant control technology extends the maximum allowable length of refrigerant piping to 120 m. This provides high flexibility in system design.

Long piping lengths are achieved by installing a large-capacity accumulator. No liquid refrigerant is supplied to the compressor even when the required amount of refrigerant is charged in the long piping.

Large Accumulator

Total pipe length

120 m maximum

Height difference between outdoor and indoor units

30 m Maximum

Actual piping length
50 m Maximum

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

Height difference between indoor and indoor units
15 m Maximum
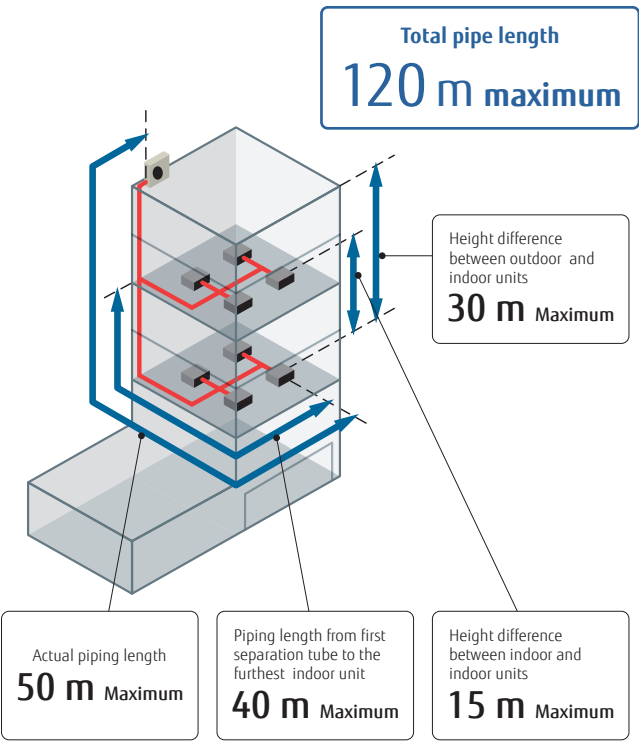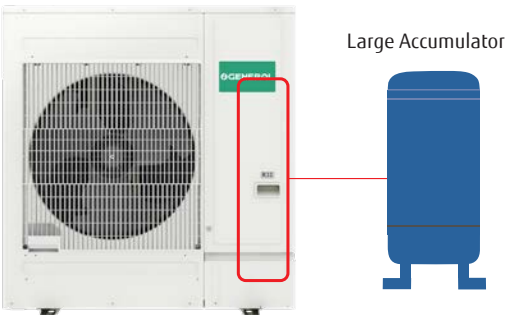
Up to 13 indoor units* can be connected

The combination of smaller but sufficiently powerful indoor units and a new outdoor unit with an optimized heat exchanging structure makes it possible to connect up to 13 indoor units, which is the best in its class.

*: 6 HP model

Rating Capacity range (HP)	4	5	6
Max. Connectable indoor unit	1-11	1-12	1-13

Sightliness installation

External static pressure

External static pressure measures up to 30 Pa for 4/5/6 HP models. Even if the outdoor unit is installed in a small space to hide it, the grille and duct airflow path required for exhaust air can be installed up to a static pressure value of 30 Pa.

Duct airflow paths

30Pa

Grille
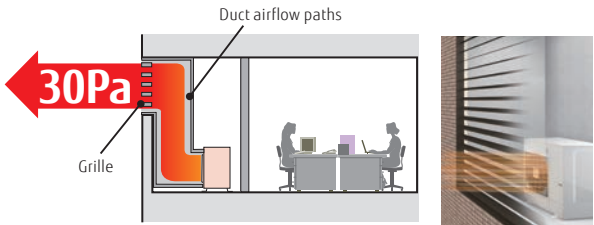
Cooling piping system

New Heat Rejection Technology Cooling piping system "Cooling piping system" is adopted toensure reliability in high outside air.
Even when the outdoor unit is installed in an environment where heat tends to stay (small space), the cooling system using refrigerant can reduce damage caused by heat from PCBs.
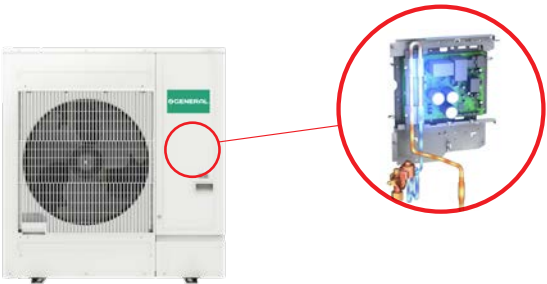
Specifications

Rating Capacity range	HP	4	5	6
Model name		AJH040LCLAH	AJH045LCLAH	AJH054LCLAH
Maximum Connectable Indoor Unit				
Power source		Single phase, ~230V, 50Hz		
Capacity	Cooling	kW	12.1	14.0	15.1
	Heating		12.1	14.0	15.1
Input power	Cooling	kW	3.15	3.82	4.48
	Heating		2.55	2.91	3.20
EER	Cooling	W/W	3.84	3.66	3.37
COP	Heating		4.74	4.80	4.71
Air flow rate		m3/h	4,240	4,450	4,450
Sound pressure level / Power level	Cooling	dB (A)	52 / 70	53 / 71	54 / 72
	Heating		54 / 71	55 / 72	56 / 73
Heat exchanger fin			Blue fin	Blue fin	Blue fin
Dimensions	Height	mm	998	998	998
	Width		940	940	940
	Depth		320	320	320
Weight		kg	74	74	74
Refrigerant	Type (Global Warming Potential)		R32 (675)	R32 (675)	R32 (675)
	Charge	kg(CO2eq-T)	2.7 (1.823)	2.7 (1.823)	2.7 (1.823)
Connection pipe diameter	Liquid	mm	9.52	9.52	9.52
	Gas		15.88	15.88	15.88
Total pipe length		m	120	120	120
Max. Height difference			30	30	30
Operating range	Cooling	°C	-5 to 46	-5 to 46	-5 to 46
	Heating		-20 to 21	-20 to 21	-20 to 21

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

Top view

Front view

Side view

Rear view

VRF SERIES

REFRIGERANT
R410A

Heat Pump
for Small-capacity type

VRF **J-IIS**

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

System configuration example

Outdoor unit

Separation tube   Header

Liquid pipe
Gas pipe
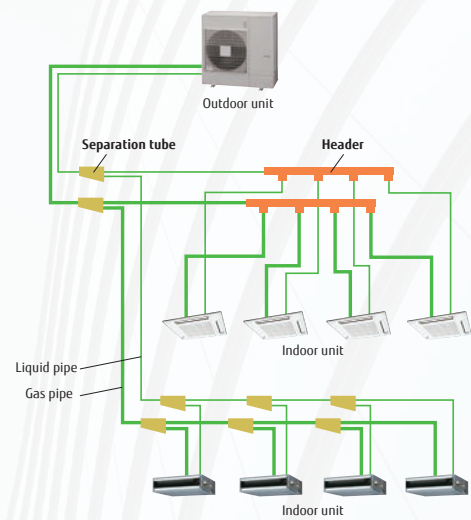
Indoor unit

Indoor unit

It Can be Easily Carried and Installed Obscure Place

Current model / 6HP class
Height:1334 mm
Weight:117 kg

Model / 6HP class

Height difference
998 mm
▲25%

Light weight
87 kg

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.

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
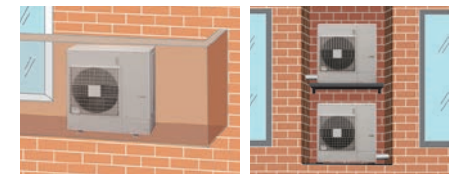
Low sound level design

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

Cooling
dB(A)

51 — 4 HP
53 — 5 HP
54 — 6 HP
56 — 6 HP Previous model

VRF **J-IIS**

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

Low noise rubber
High efficiency compressor motor
Optimized refrigerant flow design
Highly accurate parts

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.

High

Compressor efficiency

Compressor capacity   **100%**   High
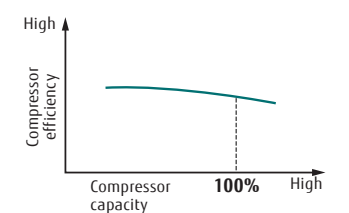
Long Piping Length

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.

Total pipe length

80 m maximum

Actual piping length

50 m maximum

Height difference between outdoor and indoor units

30 m maximum

Piping length from first separation tube to the farthest indoor unit

40 m maximum

Height difference between indoor and indoor units

15 m maximum

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.

Previous model

J-IIS Series   (Heating operation)

*1

Operation stopped at oil recovery

Non-stop oil recovery operation

ON

OFF

Time

ON

Time

Easier Installation

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

run

• 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
	Heating		13.6	16.0	16.5
Input power	Cooling	kW	3.44	4.43	5.03
	Heating		3.09	3.93	4.11
EER	Cooling	W/W	3.52	3.16	3.00
COP	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
Operating range	Cooling	°C	-5 to 46	-5 to 46	-5 to 46
	Heating		-20 to 21	-20 to 21	-20 to 21

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

Top view

Front view

Side view

Rear view

Bottom view

Detail A

REFRIGERANT R410A
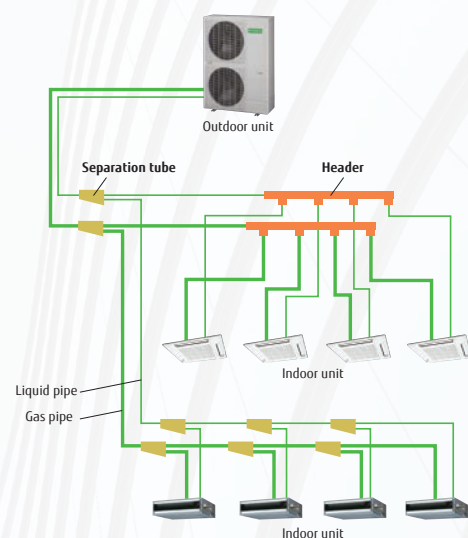
Heat Pump
for Small-capacity type

VRF J-III Tropical

TROPICAL SPEC

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

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

Outdoor unit

Separation tube   Header

Indoor unit

Liquid pipe
Gas pipe

Indoor unit

System Outline

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

Up to **52°C**

Cooling operation range

52 50   40   30
Outdoor temperature (°C)

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

Cooling capacity (kW)
20
■ 35°C ambient temp.
■ 46°C ambient temp.
10
0
4HP   5HP   6HP
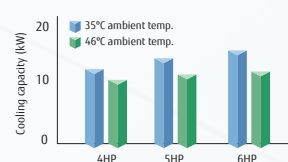
Anti-corrosion treatment design
All metallic and PCB components are protected against corrosion

Energy efficiency

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

High EER / COP

■ EER / ■ COP

[3 phase]

4.33 | 5.01 | 4.05 | 4.70 | 3.88 | 4.41

4HP   5HP   6HP

[Single phase]

4.17 | 4.86 | 3.92 | 4.51 | 3.71 | 4.23

4HP   5HP   6HP

6HP class

8 % UP   7 % UP

3.45 | 3.71 | 3.95 | 4.23

J-II   J-III   J-II   J-III
      TROPICAL   TROPICAL
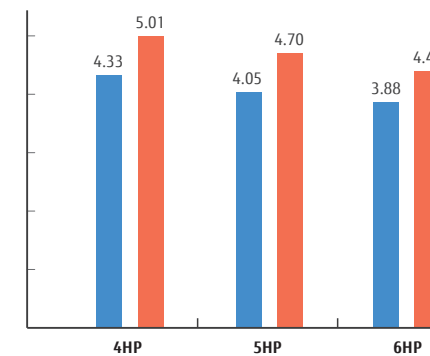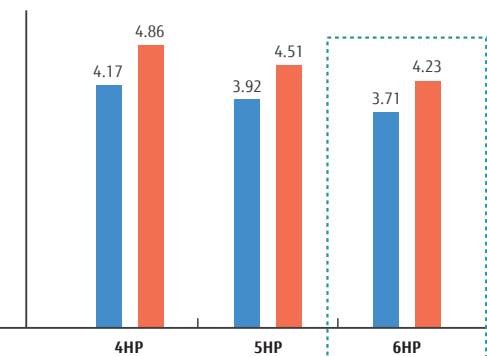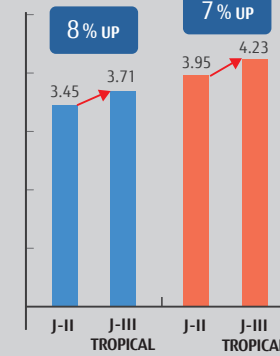
Advanced high efficiency technology

Large propeller fan
High performance and low noise realized by large propeller and optimization of angle.
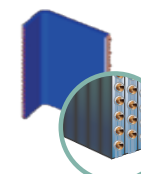
Large heat exchanger
Heat exchange performance is substantially improved by mounting of 3-row large heat exchanger.

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

Pressure

effect

Cooling performance improved

Enthalpy
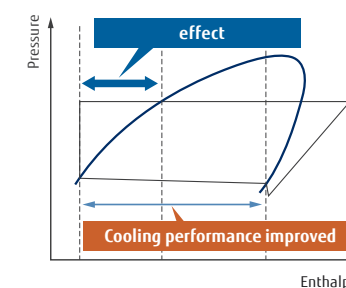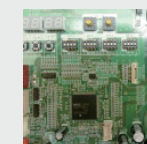
All Inverter

INVERTER control PCB
Efficiency is improved by mounting of new active filter module.

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

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

Made in JAPAN

J-III Tropical

Long piping capability

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

Total pipe length
180 m maximum

Actual piping length
120 m maximum

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

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

Height difference between indoor and indoor units
15 m maximum

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.

Previous model

J-III Series (Heating operation)

Operation stopped at oil recovery

Non-stop oil recovery operation

ON
OFF
Time

ON
Time

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		AJH040LBTAHN	AJH045LBTAHN	AJH054LBTAHN	AJH040LETAHN	AJH045LETAHN	AJH054LETAHN
Maximum Connectable Indoor Unit		1-7	1-8	1-9	1-7	1-8	1-9
Power source		Single phase, ~230V, 50Hz			3 phase, ~400V, 50Hz		
Capacity	Cooling(T1/T3) kW	12.1/10.3	14.0/11.1	15.5/11.5	12.1/10.3	14.0/11.1	15.5/11.5
	Heating	13.6	16.0	18.0	13.6	16.0	18.0
Input power	Cooling(T1/T3) kW	2.90/3.47	3.57/3.77	4.18/3.92	2.79/3.30	3.46/3.57	3.99/3.71
	Heating	2.80	3.55	4.26	2.71	3.40	4.08
Current	Cooling(T1/T3) A	12.7/15.2	15.7/16.6	18.4/17.2	5.2/6.2	6.6/6.6	7.7/6.9
	Heating	12.3	15.6	18.7	5.0	6.5	7.8
EER	Cooling(T1/T3) W/W	4.17/2.97	3.92/2.95	3.71/2.94	4.33/3.13	4.05/3.11	3.88/3.10
COP	Heating W/W	4.86	4.51	4.23	5.01	4.70	4.41
Air flow rate	High m³/h	6,200	6,400	6,900	6,200	6,400	6,900
Sound pressure level	Cooling dB(A)	50	51	53	50	51	53
	Heating	52	53	55	52	53	55
Net 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
Net Weight	kg	120	120	120	120	120	120
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A	R410A
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
Operating range	Cooling °CDB	-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

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.

Dimensions

Models : AJH040LBTAHN / AJH045LBTAHN / AJH054LBTAHN / AJH040LETAHN / AJH045LETAHN / AJH054LETAHN (Unit : mm)

Terminal blocks (Transmission)
Terminal blocks (Power)
3-Way valve (Liquid)
3-Way valve (Gas)
Ø28 (Cable port)
Ø28 (Cable port)
Pipe port
Ø28 (Cable port)
Ø28 (Cable port)
Pipe port
Ø28 (Cable port)
Ø28 (Cable port)
Pipe port
Detail
Pipe & cable port

VRF SERIES
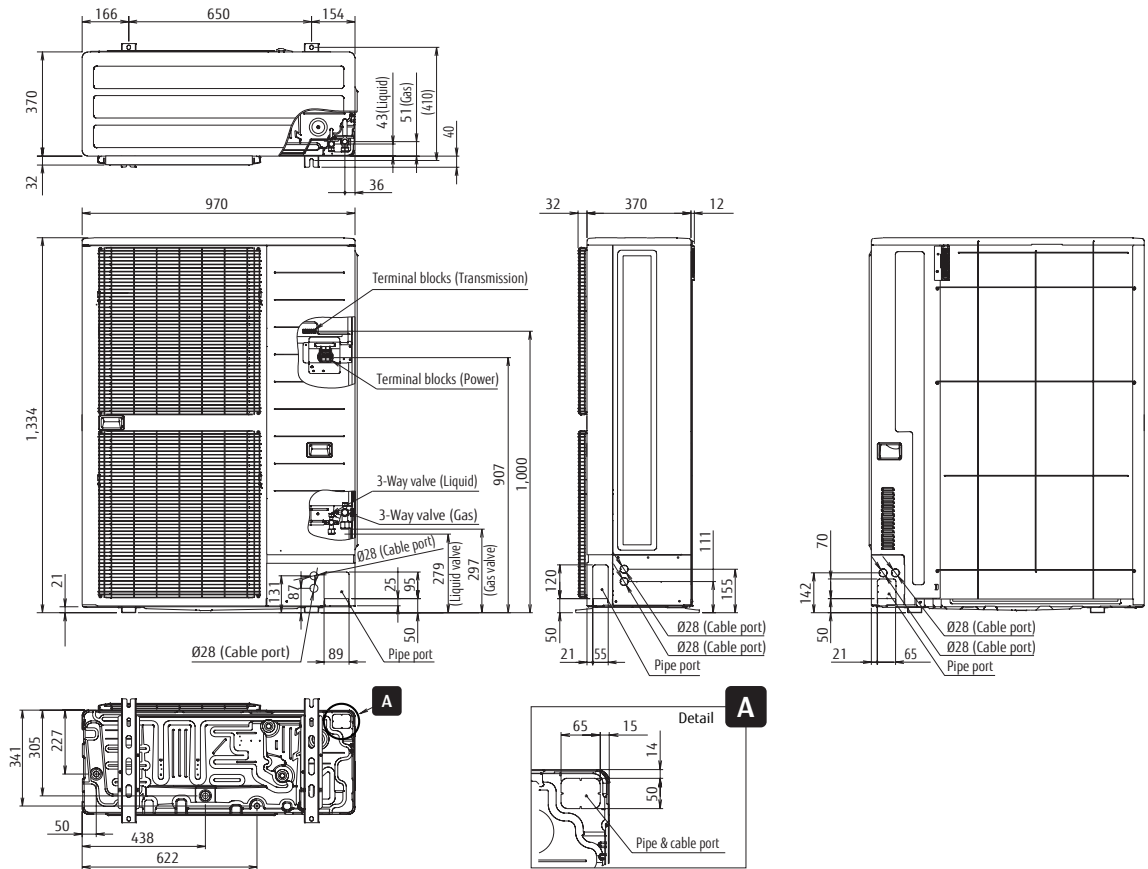
Heat Pump
for Small-capacity type

VRF J-III

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

System configuration example

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

Outdoor unit

Separation tube   Header

Liquid pipe
Gas pipe

Indoor unit

Indoor unit

Efficiency in actual operation

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

High EER / COP   EER / COP

[3 phase]

	4HP	5HP	6HP
EER	4.33	4.05	3.88
COP	5.01	4.70	4.41

[Single phase]

	4HP	5HP	6HP
EER	4.17	3.92	3.71
COP	4.86	4.51	4.23

6HP class

	J-II	J-III	J-II	J-III
EER	3.45	3.71		
COP			3.95	4.23

8 % UP   7 % UP

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.

effect

Pressure

Cooling performance improved

Enthalpy

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.

High

Compressor efficiency

DC Twin Rotary compressor

Compressor capacity   High

Long piping capability

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

Total pipe length

180 m maximum

Actual piping length

120 m maximum

Height difference between outdoor and indoor units

50 m maximum

For the outdoor unit installed below the indoor units: 40 m maximum

Piping length from first separation tube to the farthest indoor unit

40 m maximum

Height difference between indoor and indoor units

15 m maximum

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.

Previous model

J-III Series   (Heating operation)

Operation stopped at oil recovery

Non-stop oil recovery operation

ON
OFF
Time

ON
Time

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
	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
	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	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	118	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)		
Operating 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)

Terminal blocks (Transmission)
Terminal blocks (Power)
3-Way valve (Liquid)
3-Way valve (Gas)
Ø28 (Cable port)
Pipe port
Ø28 (Cable port)
Detail
Pipe & cable port

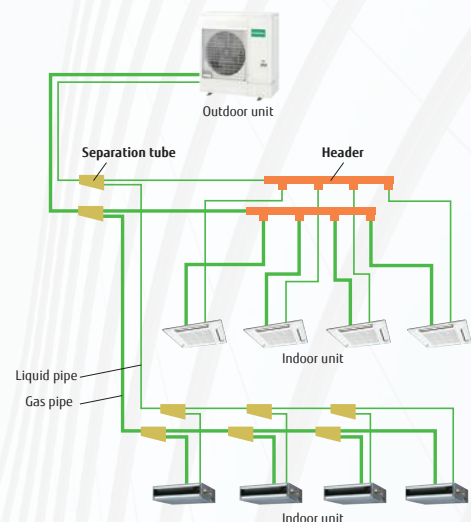VRF SERIES

REFRIGERANT
R410A
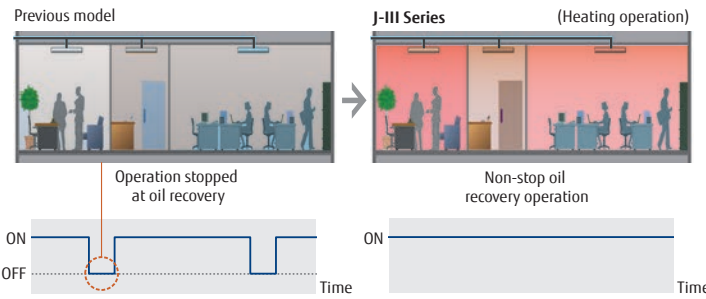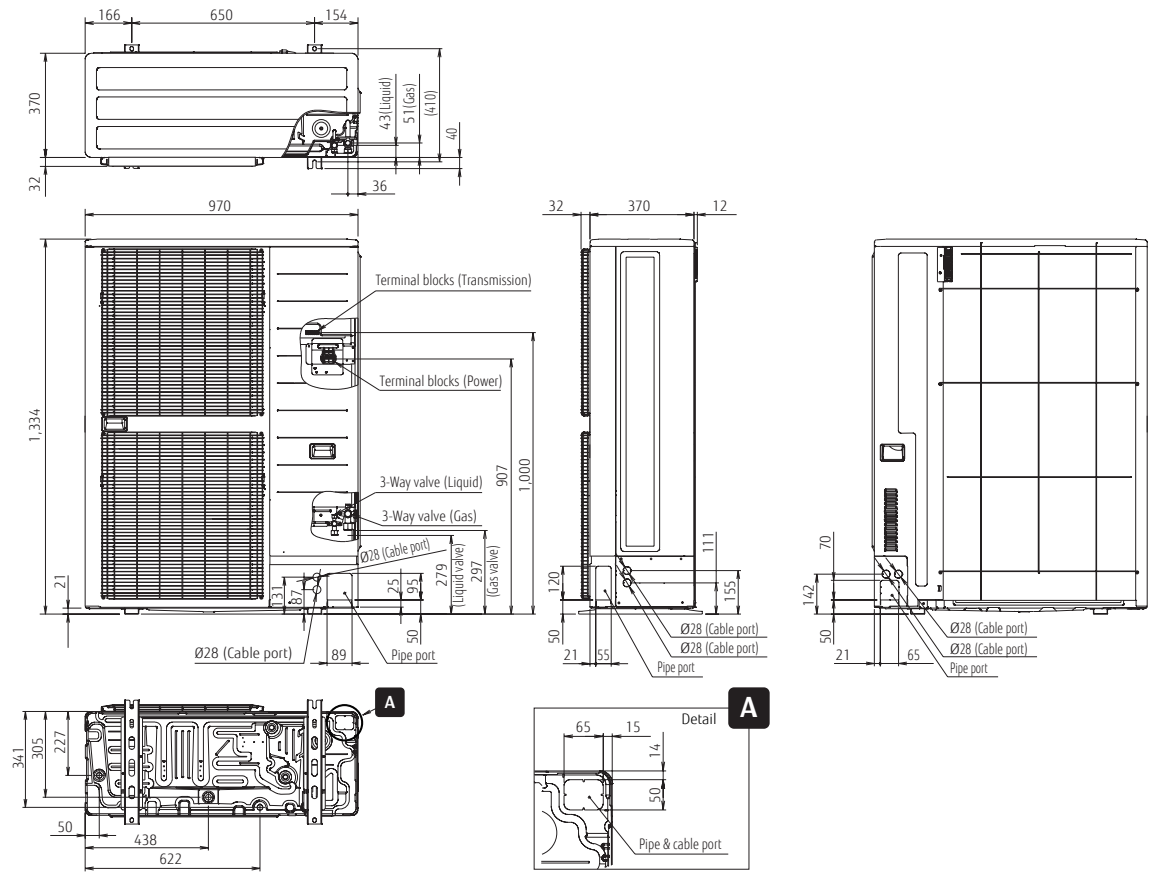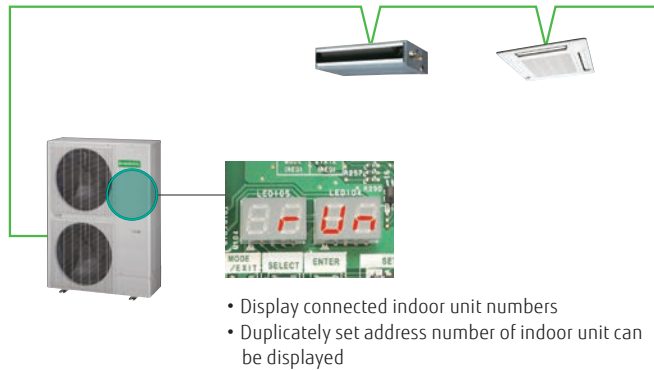
Heat Pump
for Small-capacity type

VRF J-IIIL

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

System configuration example

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

Outdoor unit

Separation tube

Header

Liquid pipe

Gas pipe

Indoor unit

Indoor unit
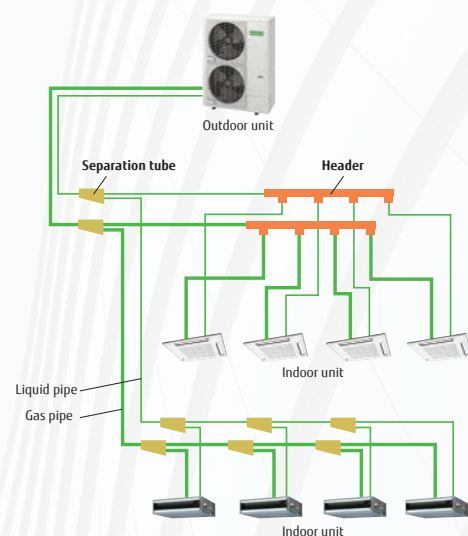
Efficiency in actual operation

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

High EER / COP   ■ EER / ■ COP

	8HP	10HP	12HP	14HP	16HP	18HP
EER	3.56	3.26	3.22	3.30	3.01	2.70
COP	4.82	4.24	4.10	4.12	3.81	3.66
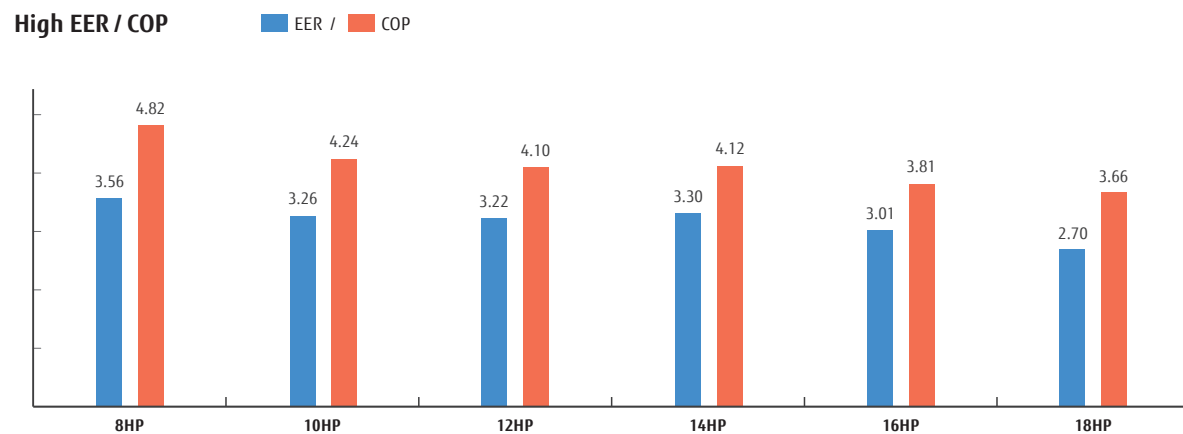
Advanced high efficiency technology

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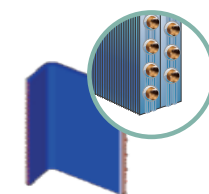
Large heat exchanger
Heat exchange performance is substantially improved by mounting of 2.6-row large heat exchanger.

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.

Pressure

effect

Cooling performance improved

Enthalpy
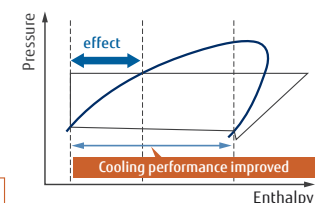
Scroll compressor
The equipment of scroll compressor with a wide range of rotational frequency from 15 to 130 rps together with Fujitsu General's unique sensorless sine wave control method which smoothly control the input power run into the motor realized a mutual improvement on the energy efficient operation and the low sound operation.

*18HP only

15-130 rps*

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.

VRF **J-IIIL**

Image: 8/10/12 HP models

Slim & Compact Design

VRF **J-IIIL**
14/16 HP models & 18 HP model

765 mm

Current model
VRF V-Series
outdoor unit
14/16/18 HP models

480 mm

Depth difference	Space requirement	Weight
-285 mm	**-45%**!	**-58** kg!
J-IIIL all models Compared with current all models	Compared with current 14/16/18 HP models	Compared with current 18 HP model

Height difference
-262 mm
Compared with current 8 HP model

VRF **J-IIIL**
8/10/12 HP models

1,690 mm

1,428 mm

Current model
VRF V-Series
outdoor unit
8/10 HP models

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

66

Various Installation

VRF V Series outdoor unit   VRF J Series outdoor unit

In house installation
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 in house space.

VRF V Series outdoor unit   VRF J Series outdoor unit

Narrow space behind building
Space saving

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

VRF V Series outdoor unit   VRF J Series outdoor unit
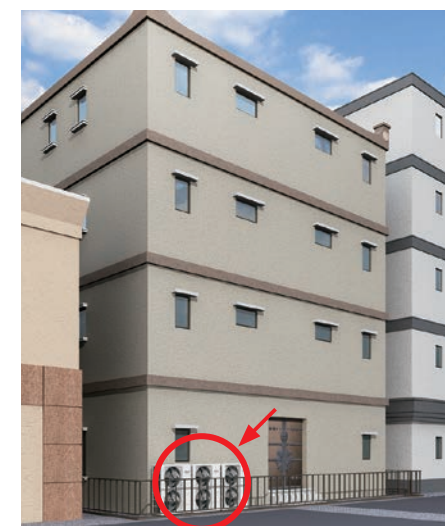
Installation at back street of building
Flexible installation

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.

67

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.

Up to 34 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 34 units.

*: 18HP model
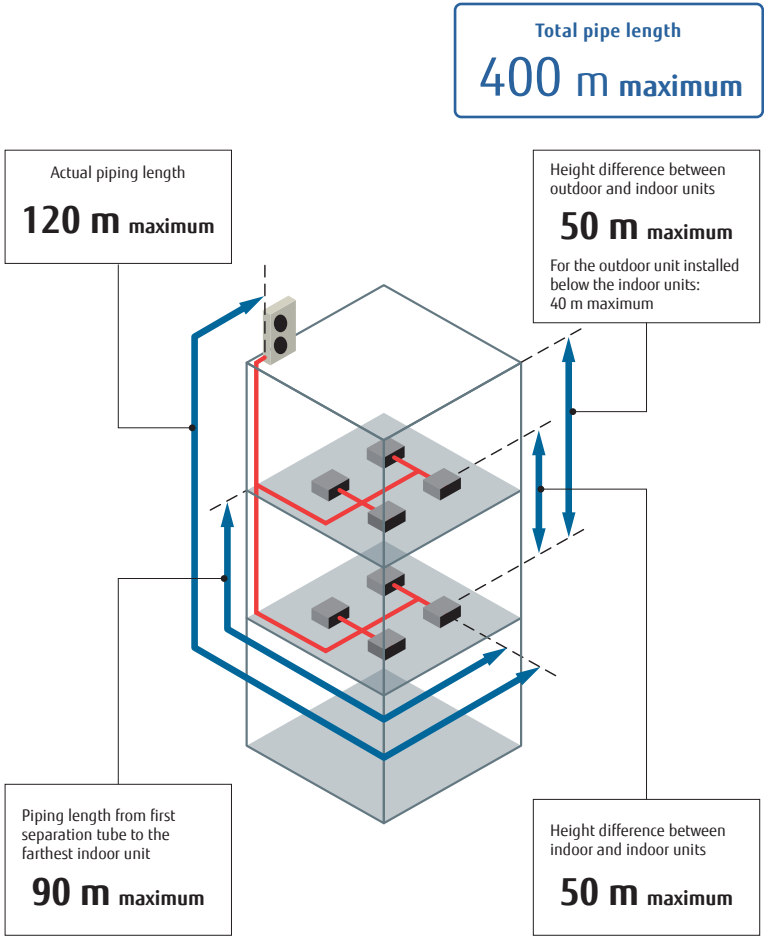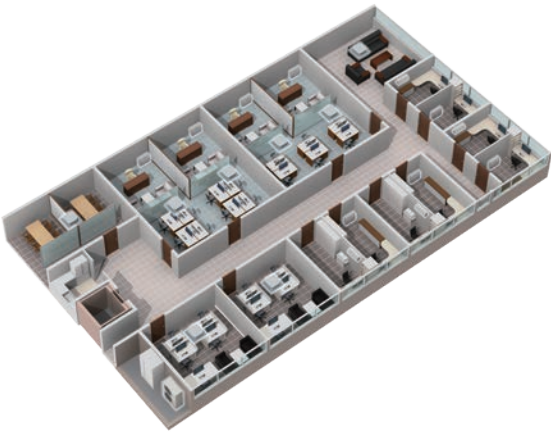
External static pressure

External static pressure is available up to 60 Pa for 14/16/18HP.
(20 Pa for 8HP, 30Pa for 10/12HP)

60 Pa

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)

77 dB(A)

−11 dB(A)

J-IIIL (8 HP)

Current model (8 HP)

Total pipe length

400 m maximum

Actual piping length

120 m maximum

Height difference between outdoor and indoor units

50 m maximum

For the outdoor unit installed below the indoor units:
40 m maximum

Piping length from first separation tube to the farthest indoor unit

90 m maximum

Height difference between indoor and indoor units

50 m maximum

Specifications

Rating Capacity range		HP	8	10	12	14	16	18
Model name			AJH072LELAH	AJH090LELAH	AJH108LELAH	AJH126LELAH	AJH144LELAH	AJH162LELAH
Maximum Connectable Indoor Unit			1-15	1-19	1-22	1-27	1-30	1-34
Power source			3 phase, ~400V, 50Hz					
Capacity	Cooling	kW	22.4	28.0	33.5	40.0	45.0	50.0
	Heating		22.4	28.0	33.5	40.0	45.0	50.0
Input power	Cooling	kW	6.30	8.59	10.42	12.12	14.96	18.52
	Heating		4.65	6.61	8.18	9.71	11.81	13.66
EER	Cooling	W/W	3.56	3.26	3.22	3.30	3.01	2.70
COP	Heating		4.82	4.24	4.10	4.12	3.81	3.66
Air flow rate		m³/h	8,400	9,000	11,000	13,000	14,000	14,800/15,300
Sound pressure level / Power level	Cooling	dB (A)	52 / 66	54 / 69	59 / 73	62 / 75	64 / 77	65/79
	Heating		54 / -	57 / -	61 / -	63 / -	65 / -	68 / -
Dimensions	Height	mm	1,428	1,428	1,428	1,638	1,638	1,638
	Width		1,080	1,080	1,080	1,080	1,080	1,080
	Depth		480	480	480	480	480	480
Weight		kg	170	177	178	213	213	217
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)	7.0 (14.6)	7.5 (15.7)	7.5 (15.7)	11.0 (22.9)	11.0 (22.9)	11.8 (24.6)
Connection pipe diameter	Liquid	mm	9.52	9.52	12.70	12.70	12.70	12.70
	Gas		19.05	22.20	28.58	28.58	28.58	28.58
Total pipe length		m	400	400	400	400	400	400
Max. Height difference			50/40 (Outdoor unit: Upper/Lower)					
Operating range	Cooling	°C	-15 to 46	-15 to 46	-15 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 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 5.6 kW.

Dimensions

Models : AJH072LELAH / AJH090LELAH / AJH108LELAH

Models : AJH126LELAH / AJH144LELAH / AJH162LELAH   (Unit : mm)

196 688 196

(515.5) 40.5

Top view 39

1,080

Terminal blocks (Power)
Terminal blocks (Transmission)

40 480 12

1,428

23.5

1,017 1,102

Front view

Side view

447

479

Bottom view

196 688 196

(515.5) 40.5

Top view

1,080 40 480

1,638

Front view

Side view

Bottom view

NEW

REFRIGERANT
R410A
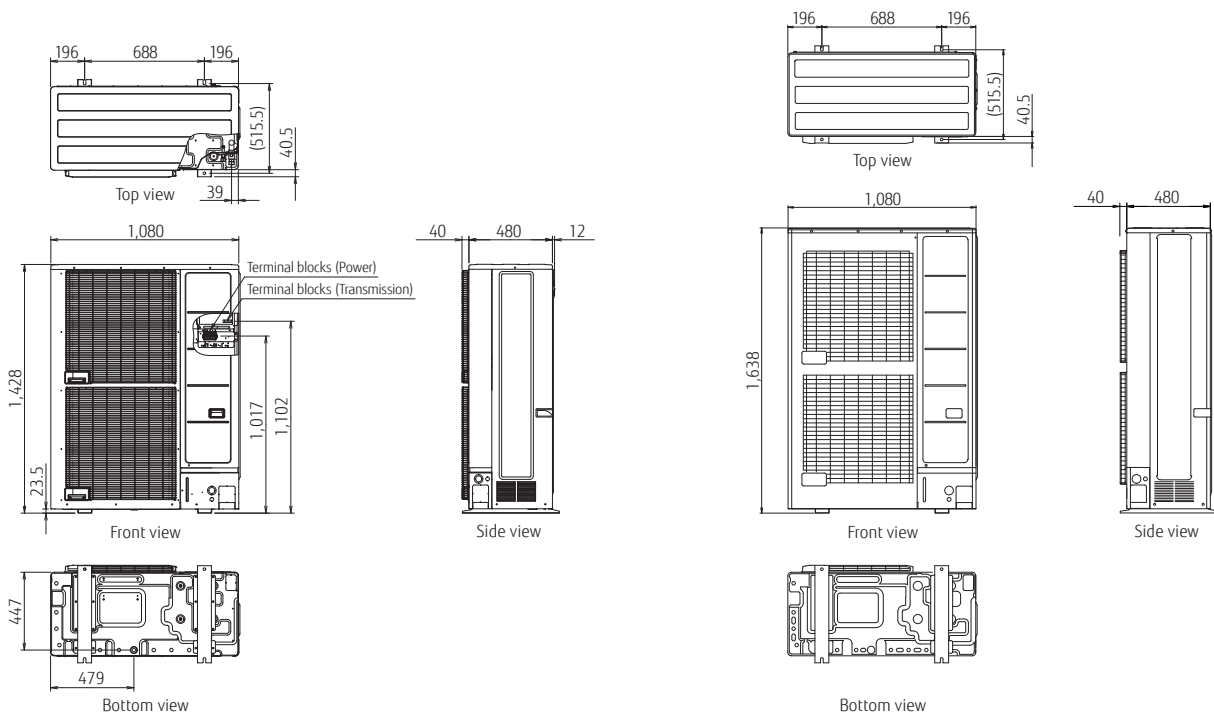
Cooling Only type

VRF **VC-V**

Smart and cutting edge design
Extensive lineup from 8HP to 80HP in 2HP increment
Connectable indoor unit capacity ratio up to 150%
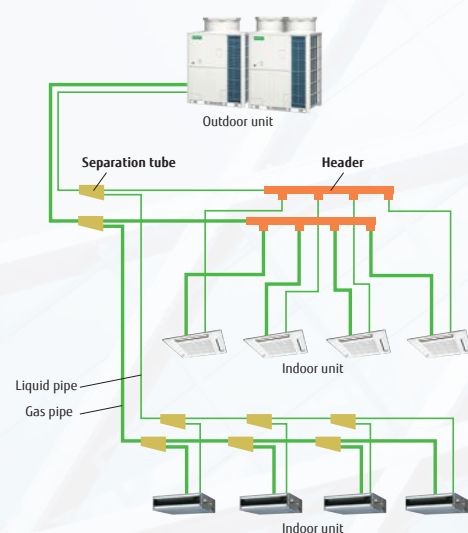
From City to Oasis
And to the Future of the Earth

System configuration example

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

Outdoor unit

Separation tube   Header

Liquid pipe
Gas pipe

Indoor unit

Indoor unit

Standard combination improvement 80HP

New series **51 systems**   More Wide lineup

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	56	58	60	62	64	66	68	70	72	74	76	78	80
Standard combination	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Energy Efficiency					●	●	●		●	●	●	●	●	●	●	●	●	●																			

Standard combination and compact size

Compact size has been achieved by significantly reducing the chassis of the outdoor units compared to previous models.

12HP Current using space
0.95 m²

12HP New using space
0.71 m²

Current 80HP
2 system

40HP
+
40HP

VC-V 80HP
1 system
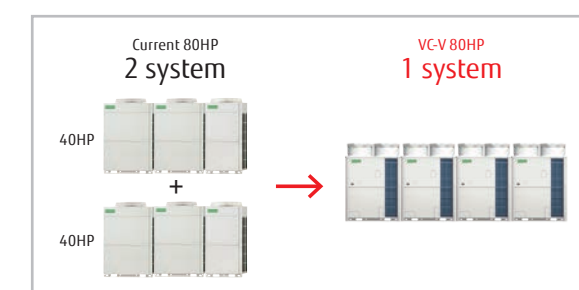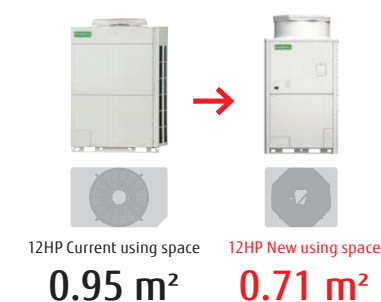
Contributes to reduction of project costs

Up to 80 HP can be selected for a single refrigerant system.
This reduces the number of outdoor units and materials required for installation (piping, power lines, communication lines, racking, breakers, conduit, etc.) compared to conventional products.
This product is expected to reduce project costs.

Current product   **VC-V**

Save Costs

⬇ Outdoor Unit

⬇ Materials

⬇ Labor
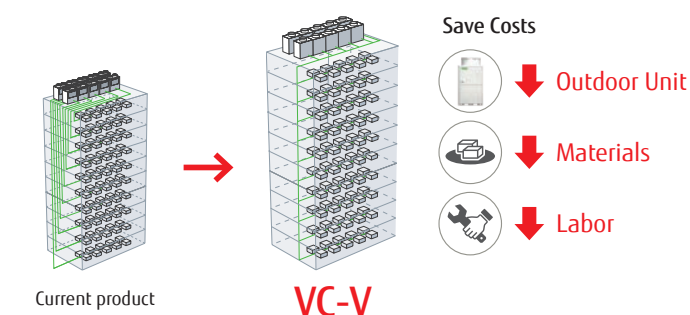
Reduces the number of systems and installation area

Since the installation area can be reduced, the reduced space can be used for other purposes.
For example, the area can be used as a biotope to contribute to a sustainable future by greening it.

*Comparison of multiple 80 HP systems installed, for example

⬤⬤ : VC-V

⬤ : Current product

Save area
Max **52%**

Rooftop of a building

Rooftop of a building

Space saving improvement
80HP

5,020

765

20

1,240   1,240   1,240   1,240

New using space only
= **3.8m²**
Save 52%

3,450

2,330

800

20

1,240   1,240   930

765

Current using space
= **8.0m²**
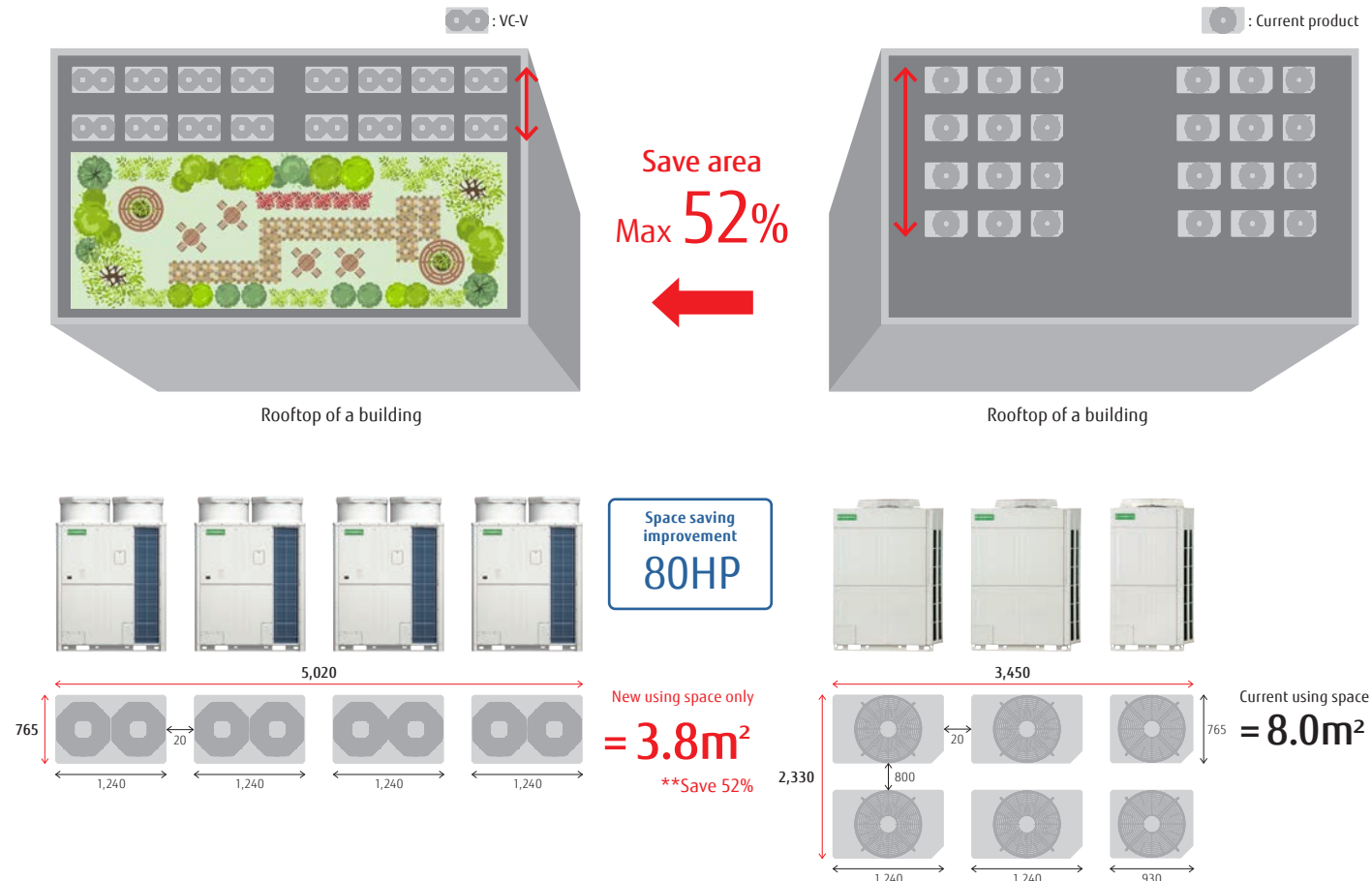
High Energy Efficiency

Class-leading high EER (Maximum) The use of our proprietary heat exchanger structure and
high-efficiency Scroll compressors achieves the class-leading coefficient of performance (EER) in every combination.

Energy Efficiency Combinations

(EER)

5.07	4.86	4.71	5.07	4.92	4.70	4.61	4.45	4.40	4.36	4.25	4.23	4.21	4.13	
16	18	20	24	26	28	30	32	34	36	38	40	42	44	(HP)

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.

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.

Scroll Compressor

High Performance Scroll Compressor

The combination of a scroll compressor with 120 rps and our proprietary sensorless sine-wave control that smoothly controls the input power into the motor achieves more a wide rotational frequency range from 15 to energy-efficient and quieter operation.

Scroll Compressor

Intelligent Refrigerant Control

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

New model (VC-V)

Low capacity operation
↓
Indoor unit request
Low capacity

Adequate capacity

The outdoor unit provides sufficient capacity to meet the demands of the indoor unit.
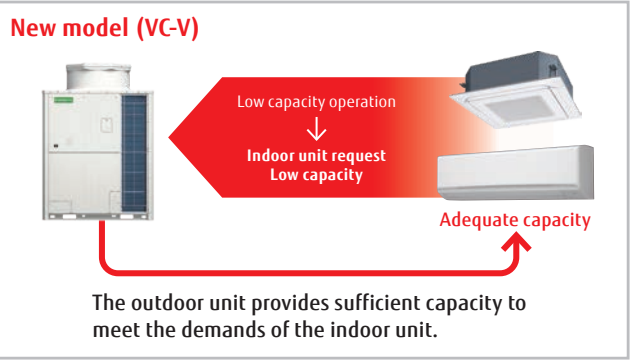
* The improvements due to the control and the actual sine wave vary depending on the combination of the indoor unit and system operating conditions.

VRF SERIES

High Reliability

PCB Protection – Low-High voltage support

Even if the product is installed in an area where the power supply (voltage) is not stable, the PCB that controls the product is protected, so the product can be installed with peace of mind.
For example, even if the system goes down due to factors such as lightning strikes, the system will operate at its original operational content when the power is restored, making management easy.

☑ Not damaged
☑ Protected

Electric power company

Low-High Voltage Support
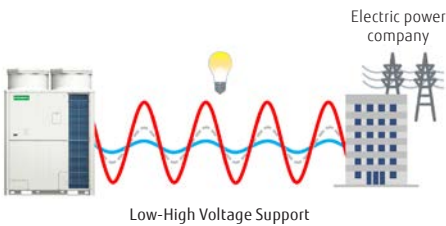
☑ Not damaged
☑ Protected
☑ Can auto recovery

Protects against power supply mis-wiring

Even if there is a mistake in the wiring connection during the "reverse phase," "phase loss," or "missing phase" of the power connection during installation, the product will not be damaged and can be installed with peace of mind.

Reverse phase (R-S-T)

Power supply

☑ Can operate

Phase loss (R-S-T-N)

Power supply

☑ Protected
☑ Not damaged

Missing phase (N-phase)

Power supply

☑ Protected
☑ Not damaged
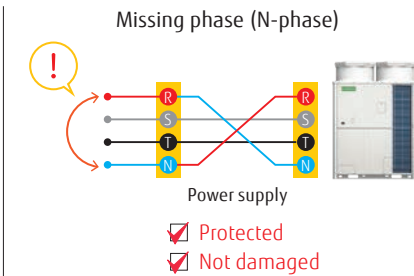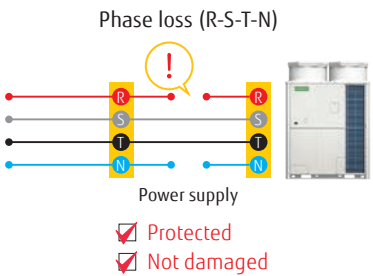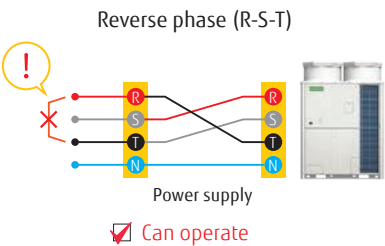
New refrigerant cooling technology

New Refrigerant Cooling Technology, ensures the stability of PCB temperature and improves reliability at high ambient temperatures.
It's possible to cool the inverter power module stability even at high ambient temperatures. This helps to keep air conditioner capacity and also ensures efficient and reliable operation.

PCB

Refrigerant cooling technology
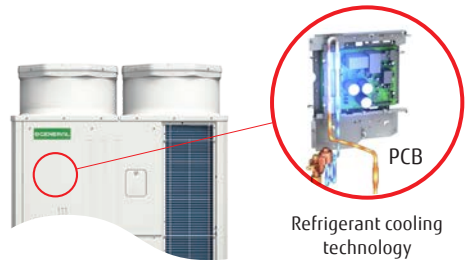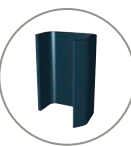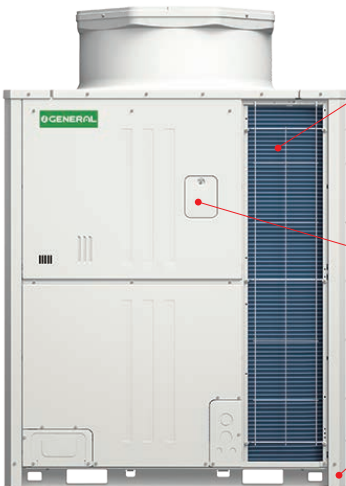
Anti-corrosion

Bluefin heat exchanger

Blue fin treatment of the condenser offers improved corrosion resistance and longer life of the heat exchanger. Adoption blue coating for the fins in the heat exchanger provides protection against rust and salt damage.

Hydrophilic coating
Aluminium base materials
Cobalt Blue protection
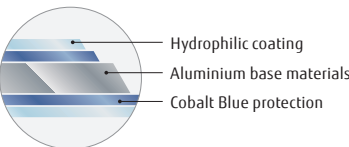
Silicon coated PCB

High-ambient-temperature-compatible electronic components are used. Silicon coating is applied to all PCB circuits for corrosion protection.

High corrosion screw

Zinc-chrome-acid film treatment applied to all screws.

Wide operating range

Designed to perform at ambient conditioners as high as 55 °C. Installation in extreme temperature conditions is possible due to an increased operational range.

VC-V
Current model
18 °C   52 °C   55 °C
Outdoor temp
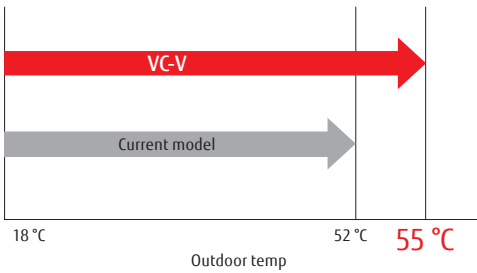
Design for easy service and maintenance

Access panel
Comes with an access panel that allows you to access 7 segments and push buttons without removing the panel.
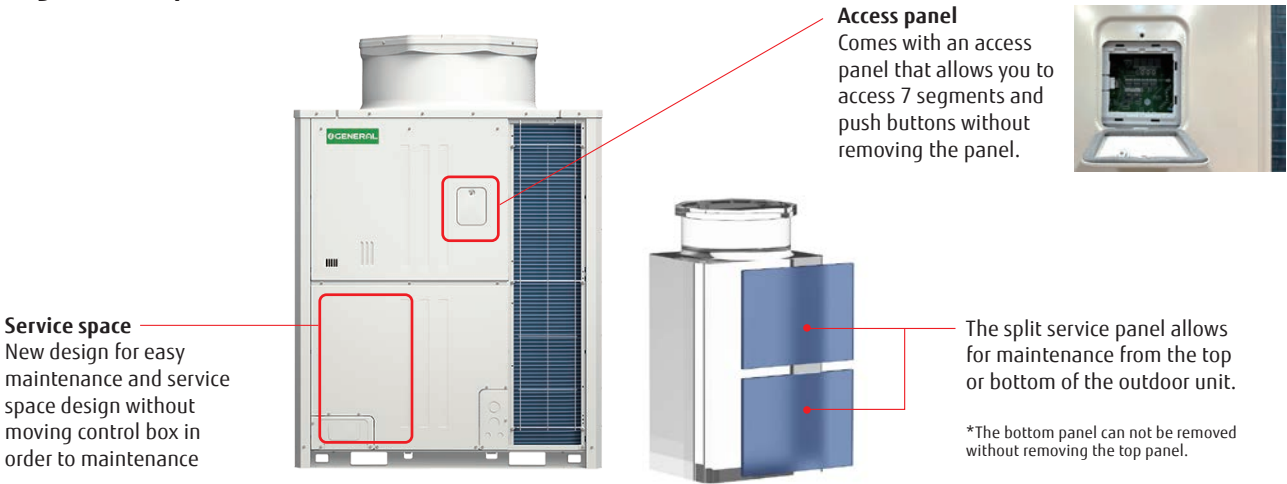
Service space
New design for easy maintenance and service space design without moving control box in order to maintenance

The split service panel allows for maintenance from the top or bottom of the outdoor unit.

*The bottom panel can not be removed without removing the top panel.

Automatic address setting

The address of the indoor 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.

Automatic address setting is performed at outdoor unit

Addresses are automatically distributed from outdoor unit.

3   7   1   0
2   4   5   6

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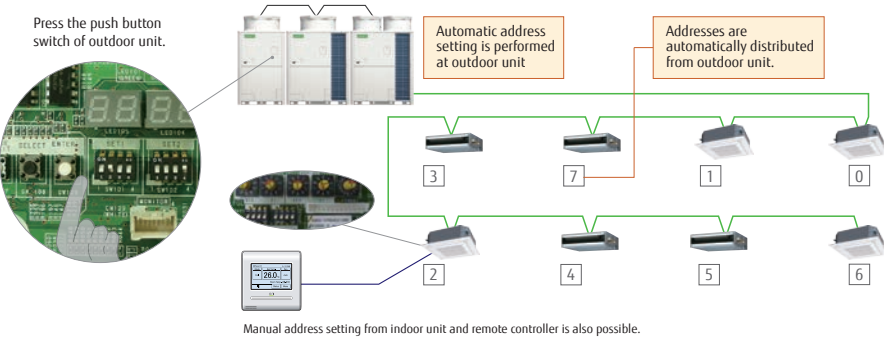
Various combinations

Various combination from 8HP to 80HP increments. 21 types, 114 models of indoor units can be selected ranging from 2.2kW to 28kW in capacity. A maximum of 150% indoor unit connectable capacity.

Connectable indoor unit capacity
150%

Connectable indoor unit number
up to **64**

Wide variation of indoor units
21types, **114** indoor unit

• Combinations other than the followings are not recommended.

Standard combination

22.4kW (8HP)	28.0kW (10HP)	33.5kW (12HP)	40.0kW (14HP)	45.0kW (16HP)	50.4kW (18HP)
AJG072JATAH UNIT : AJG072JATAH	AJG090JATAH UNIT : AJG090JATAH	AJG108JATAH UNIT : AJG108JATAH	AJG126JATAH UNIT : AJG126JATAH	AJG144JATAH UNIT : AJG144JATAH	AJG162JATAH UNIT : AJG162JATAH
55.9kW (20HP)	61.5 kW (22HP)	67.0 kW (24HP)	73.5 kW (26HP)	78.5 kW (28HP)	83.5 kW (30HP)
AJG180JATAH UNIT : AJG180JATAH	AJG198JATAH UNIT : AJG108/090JATAH	AJG216JATAH UNIT : AJG108/108JATAH	AJG234JATAH UNIT : AJG126/108JATAH	AJG252JATAH UNIT : AJG144/108JATAH	AJG270JATAH UNIT : AJG162/108JATAH
90.0 kW (32HP)	95.0 kW (34HP)	100.0 kW (36HP)	106.0 kW (38HP)	112.0 kW (40HP)	117.0 kW (42HP)
AJG288JATAH UNIT : AJG144/144JATAH	AJG306JATAH UNIT : AJG162/144JATAH	AJG324JATAH UNIT : AJG162/162JATAH	AJG342JATAH UNIT : AJG180/162JATAH	AJG360JATAH UNIT : AJG180/180JATAH	AJG378JATAH UNIT : AJG162/108/108JATAH
123.0 kW (44HP)	130.0 kW (46HP)	135.0 kW (48HP)	140.0 kW (50HP)	145.0 kW (52HP)	150.0 kW (54HP)
AJG396JATAH UNIT : AJG180/108/108JATAH	AJG414JATAH UNIT : AJG162/126/126JATAH	AJG432JATAH UNIT : AJG162/144/126JATAH	AJG450JATAH UNIT : AJG162/162/126JATAH	AJG468JATAH UNIT : AJG162/162/144JATAH	AJG486JATAH UNIT : AJG162/162/162JATAH
156.0 kW (56HP)	162.0 kW (58HP)	168.0 kW (60HP)	173.0 kW (62HP)	179.0 kW (64HP)	183.5 kW (66HP)
AJG504JATAH UNIT : AJG180/162/162JATAH	AJG522JATAH UNIT : AJG180/180/162JATAH	AJG540JATAH UNIT : AJG180/180/180JATAH	AJG558JATAH UNIT : AJG180/162/108/108JATAH	AJG576JATAH UNIT : AJG180/180/108/108JATAH	AJG594JATAH UNIT : AJG162/162/162/108JATAH
189.5 kW (68HP)	195.5 kW (70HP)	201.5 kW (72HP)	206.0 kW (74HP)	212.0 kW (76HP)	218.0 kW (78HP)
AJG612JATAH UNIT : AJG180/162/162/108JATAH	AJG630JATAH UNIT : AJG180/180/162/108JATAH	AJG648JATAH UNIT : AJG180/180/180/108JATAH	AJG666JATAH UNIT : AJG180/162/162/162JATAH	AJG684JATAH UNIT : AJG180/180/162/162JATAH	AJG702JATAH UNIT : AJG180/180/180/162JATAH
224.0 kW (80HP)					
AJG720JATAH UNIT : AJG180/180/180/180JATAH					

Energy efficiency combinations

44.8 kW (16HP)	50.4 kW (18HP)	56.0 kW (20HP)	67.2 kW (24HP)	72.8 kW (26HP)	78.3 kW (28HP)
AJG144JATAHH UNIT : AJG072/072JATAH	AJG162JATAHH UNIT : AJG090/072JATAH	AJG180JATAHH UNIT : AJG090/090JATAH	AJG216JATAHH UNIT : AJG072/072/072JATAHH	AJG234JATAHH UNIT : AJG090/072/072JATAHH	AJG252JATAHH UNIT : AJG108/072/072JATAHH
83.9 kW (30HP)	89.4 kW (32HP)	95.0 kW (34HP)	101.5 kW (36HP)	107.0 kW (38HP)	113.5 kW (40HP)
AJG270JATAHH UNIT : AJG108/090/072JATAHH	AJG288JATAHH UNIT : AJG108/108/072JATAHH	AJG306JATAHH UNIT : AJG108/108/090JATAHH	AJG324JATAHH UNIT : AJG126/108/090JATAHH	AJG342JATAHH UNIT : AJG126/108/108JATAHH	AJG360JATAHH UNIT : AJG126/126/108JATAHH
120.0 kW (42HP)	125.0 kW (44HP)				
AJG378JATAHH UNIT : AJG126/126/126JATAHH	AJG396JATAHH UNIT : AJG144/126/126JATAHH				

Dimensions

(Unit : mm)

8,10,12HP : AJG072JATAH / AJG090JATAH / AJG108JATAH

Bolt pitch: 766 / Bolt pitch: 610 / 78 / Hole: 8-15×17 / Bolt pitch: 732 / Top view
Left view / Front view / A C / B / Right view / Rear view
1,441 / 1,740 / 765 / 930 / 1,382
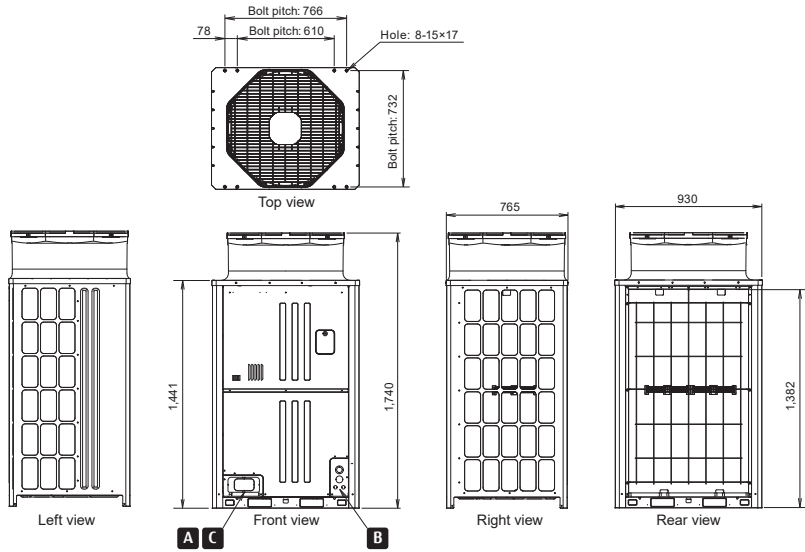
14,16HP : AJG126JATAH / AJG144JATAH

Bolt pitch: 1,076 / Bolt pitch: 920 / 78 / Hole: 8-15×17 / Bolt pitch: 732 / Top view
Left view / Front view / A C / B / Right view / Rear view
1,441 / 1,740 / 765 / 1,240 / 1,382
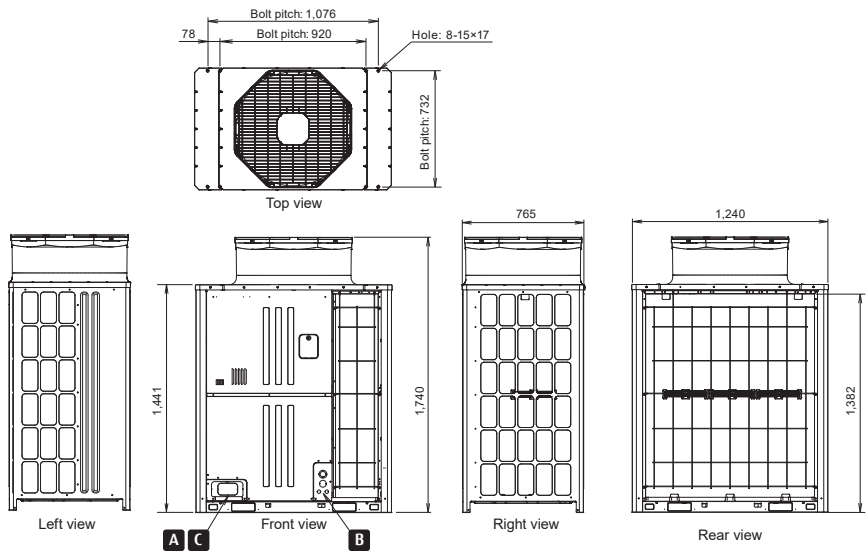
18,20HP : AJG162JATAH / AJG180JATAH

Bolt pitch: 1,076 / Bolt pitch: 920 / 78 / Hole: 8-15×17 / Bolt pitch: 732 / Top view
Left view / Front view / A C / B / Right view / Rear view
1,441 / 1,740 / 765 / 1,240 / 1,382

A Front view / Knockout / 95 / 75 / 101 / 111 / 100 / 138 / 125 / 98 / 199

B Left view / Ø50 Power supply cable port / Ø34.5 Power supply cable port / Ø43.7 Power supply cable port / Ø22.2 Transmission cable port / Ø22.2 Transmission cable port

C Top view / Pipe port / 80 / 57 / 97 / 197

VRF SERIES

Standard combination

Rating Capacity range	HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44
Model name		AJG072JATAH	AJG090JATAH	AJG108JATAH	AJG126JATAH	AJG144JATAH	AJG162JATAH	AJG180JATAH	AJG198JATAH	AJG216JATAH	AJG234JATAH	AJG252JATAH	AJG270JATAH	AJG288JATAH	AJG306JATAH	AJG324JATAH	AJG342JATAH	AJG360JATAH	AJG378JATAH	AJG396JATAH
Unit 1 / Unit 2 / Unit 3		AJG072JATAH	AJG090JATAH	AJG108JATAH	AJG126JATAH	AJG144JATAH	AJG162JATAH	AJG180JATAH	AJG108JATAH AJG090JATAH	AJG108JATAH AJG108JATAH	AJG126JATAH AJG108JATAH	AJG144JATAH AJG108JATAH	AJG162JATAH AJG108JATAH	AJG144JATAH AJG144JATAH	AJG162JATAH AJG144JATAH	AJG162JATAH AJG162JATAH	AJG180JATAH AJG162JATAH	AJG180JATAH AJG180JATAH	AJG162JATAH AJG108JATAH AJG108JATAH	AJG180JATAH AJG108JATAH AJG108JATAH
Maximum Connectable Indoor Unit*1		15	19	22	27	30	34	38	41	45	50	53	56	61	64	64	64	64	64	64
Indoor unit connectable capacity — Cooling	kW	11.2-33.6	14.0-42.0	16.75-50.25	20.0-60.0	22.5-67.5	25.0-75.0	28.0-84.0	30.75-92.25	33.5-100.5	36.75-110.3	39.25-117.8	41.75-125.3	45.0-135.0	47.5-142.5	50.0-150.0	53.0-159.0	56.0-168.0	58.5-175.5	61.5-184.5
Power source		3N 400 V ~ 50/60 Hz																		
Capacity — Cooling	kW	22.4	28.0	33.5	40.0	45.0	50.0	56.0	61.5	67.0	73.5	78.5	83.5	90.0	95.0	100.0	106.0	112.0	117.0	123.0
	Btu/h	76,400	95,500	114,300	136,500	153,500	170,600	191,100	209,800	228,600	250,800	267,900	284,900	307,100	324,200	341,200	361,700	382,200	399,200	419,700
Input power — Cooling	kW	4.42	5.95	7.83	9.50	11.25	14.70	17.72	13.78	15.66	17.33	19.08	22.53	22.50	25.95	29.40	32.42	35.44	30.36	33.38
EER — Cooling	W/W	5.07	4.71	4.28	4.21	4.00	3.40	3.16	4.46	4.28	4.24	4.11	3.71	4.00	3.66	3.40	3.27	3.16	3.85	3.68
Air flow rate — High	m^3/h	10,200	10,200	10,200	13,700	13,700	15,500	16,800	10,200 × 2	10,200 × 2	10,200 + 13,700	10,200 + 13,700	10,200 + 15,500	13,700 × 2	13,700 + 15,500	15,500 × 2	15,500 + 16,800	16,800 × 2	10,200 × 2 + 15,500	10,200 × 2 + 16,800
Sound pressure level*1 — Cooling	dB (A)	55	55	56	62	63	64	67	59	59	63	63	65	66	67	67	69	70	65	68
Maximum external static pressure	Pa	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
Compressor motor output	kW	4.7	4.7	4.7	4.7	4.7	6.2	6.2	4.7 × 2	4.7 × 2	4.7 × 2	4.7 × 2	4.7 × 2	4.7 + 6.2	4.7 × 2	4.7 + 6.2	6.2 × 2	6.2 × 2	4.7 × 2 + 6.2	4.7 × 2 + 6.2
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
Dimensions — Height	mm	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1740	1740	1740	1740	1740	1740	1740	1740	1740	1740	1740	1740
Dimensions — Width	mm	930	930	930	1,240	1,240	1,240	1,240	930 × 2	930 × 2	1,240 + 930	1,240 + 930	1,240 + 930	1,240 × 2	1,240 × 2	1,240 × 2	1,240 × 2	1,240 × 2	1,240 + 930 × 2	1,240 + 930 × 2
Dimensions — Depth	mm	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765
Weight	kg	209	209	209	232	232	255	255	209 × 2	209 × 2	209 + 226	209 + 226	209 + 255	232 × 2	232 + 255	255 × 2	255 × 2	255 × 2	209 × 2 + 255	207 × 2 +255
Refrigerant — Type (Global Warming Potential)		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant — Charge	kg	9.7	9.7	9.7	11.8	11.8	11.8	11.8	9.7 × 2	9.7 × 2	9.7 + 11.8	9.7 + 11.8	9.7 + 11.8	11.8 × 2	11.8 × 2	11.8 × 2	11.8 × 2	11.8 × 2	9.7 × 2 + 11.8	9.7 × 2 + 11.8
Connection pipe diameter — Liquid	mm	9.52	9.52	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
Connection pipe diameter — Discharge Gas	mm	19.05	22.22	28.58	28.58	28.58	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
Operating range — Cooling	°C	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55

Rating Capacity range	HP	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80
Model name		AJG414JATAH	AJG432JATAH	AJG450JATAH	AJG468JATAH	AJG486JATAH	AJG504JATAH	AJG522JATAH	AJG540JATAH	AJG558JATAH	AJG576JATAH	AJG594JATAH	AJG612JATAH	AJG630JATAH	AJG648JATAH	AJG666JATAH	AJG684JATAH	AJG702JATAH	AJG720JATAH
Unit 1 / Unit 2 / Unit 3		AJG162JATAH AJG126JATAH AJG126JATAH	AJG162JATAH AJG144JATAH AJG126JATAH	AJG162JATAH AJG162JATAH AJG126JATAH	AJG162JATAH AJG162JATAH AJG144JATAH	AJG162JATAH AJG162JATAH AJG162JATAH	AJG180JATAH AJG162JATAH AJG162JATAH	AJG180JATAH AJG180JATAH AJG162JATAH	AJG180JATAH AJG180JATAH AJG180JATAH	AJG180JATAH AJG162JATAH AJG108JATAH AJG108JATAH	AJG180JATAH AJG162JATAH AJG108JATAH AJG108JATAH	AJG180JATAH AJG162JATAH AJG108JATAH AJG108JATAH	AJG180JATAH AJG162JATAH AJG162JATAH AJG108JATAH	AJG180JATAH AJG180JATAH AJG162JATAH AJG108JATAH	AJG180JATAH AJG180JATAH AJG162JATAH AJG108JATAH	AJG180JATAH AJG162JATAH AJG162JATAH AJG162JATAH	AJG180JATAH AJG180JATAH AJG162JATAH AJG162JATAH	AJG180JATAH AJG180JATAH AJG180JATAH AJG162JATAH	AJG180JATAH AJG180JATAH AJG180JATAH AJG180JATAH
Maximum Connectable Indoor Unit*1		64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64
Indoor unit connectable capacity — Cooling	kW	65.0-195.0	67.5-202.5	70.0-210.0	72.5-217.5	75.0-225.0	78.0-234.0	81.0-243.0	84.0-252.0	86.5-259.5	89.5-268.5	91.8-275.3	94.8-284.3	97.8-293.3	100.8-302.3	103.0-309.0	106.0-318.0	109.0-327.0	112.0-336.0
Power source		3N 400 V ~ 50/60 Hz																	
Capacity — Cooling	kW	130.0	135.0	140.0	145.0	150.0	156.0	162.0	168.0	173.0	179.0	183.5	189.5	195.5	201.5	206.0	212.0	218.0	224.0
	Btu/h	443,600	460,600	477,700	494,800	511,800	532,300	552,800	573,200	590,300	610,800	626,100	646,600	667,100	687,500	702,900	723,400	743,800	764,300
Input power — Cooling	kW	33.70	35.45	38.90	40.65	44.10	47.12	50.14	53.16	48.08	51.10	51.93	54.95	57.97	60.99	61.82	64.84	67.86	70.88
EER — Cooling	W/W	3.86	3.81	3.60	3.57	3.40	3.31	3.23	3.16	3.60	3.50	3.53	3.45	3.37	3.30	3.33	3.27	3.21	3.16
Air flow rate — High	m^3/h	13,700 × 2 + 15,500	13,700 × 2 + 15,500	13,700 + 15,500 × 2	13,700 + 15,500 × 2	15,500 × 3	15,500 × 2 + 16,800	15,500 + 16800 × 2	16,800 × 3	10,200 × 2 + 15,500 + 16,800	10,200 × 2 + 16,800 × 2	10,200 + 15,500 × 3	10,200 + 15,500 × 2 + 16,800	10,200 + 15,500 + 16,800 × 2	10,200 + 16,800 × 3	15,500 × 3 + 16,800	15,500 × 2 + 16,800 × 2	15,500 + 16,800 × 3	16,800 × 4
Sound pressure level*1 — Cooling	dB (A)	68	68	68	68	69	70	71	72	69	70	69	70	71	72	71	72	72	73
Maximum external static pressure	Pa	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
Compressor motor output	kW	4.7 × 2 + 6.2	4.7 × 2 + 6.2	4.7 + 6.2 × 2	4.7 + 6.2 × 2	6.2 × 3	6.2 × 3	6.2 × 3	6.2 × 3	4.7 × 2 + 6.2 × 2	4.7 × 2 + 6.2 × 2	4.7 + 6.2 × 3	4.7 + 6.2 × 3	4.7 + 6.2 × 3	4.7 + 6.2 × 3	4.7 + 6.2 × 3	6.2 × 4	6.2 × 4	6.2 × 4
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
Dimensions — Height	mm	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740
Dimensions — Width	mm	1,240 × 2	1,240 × 2	1,240 × 2	1,240 × 2	1,240 × 3	1,240 × 3	1,240 × 3	1,240 × 3	1,240 × 2 + 930 × 2	1,240 × 2 + 930 × 2	1,240 × 3 + 930	1,240 × 3 + 930	1,240 × 3 + 930	1,240 × 3 + 930	1,240 × 4	1,240 × 4	1,240 × 4	1,240 × 4
Dimensions — Depth	mm	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765
Weight	kg	232 × 2 + 255	232 × 2 + 255	232 + 255 × 2	232 + 255 × 2	255 × 3	255 × 3	255 × 3	255 × 3	209 × 2 + 255 × 2	209 × 2 + 255 × 2	209 + 255 × 3	209 + 255 × 3	209 + 255 × 3	209 + 255 × 3	209 + 255 × 3	255 × 4	255 × 4	255 × 4
Refrigerant — Type (Global Warming Potential)		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant — Charge	kg	11.8 × 3	11.8 × 3	11.8 × 3	11.8 × 3	11.8 × 3	11.8 × 3	11.8 × 3	11.8 × 3	9.7 × 2 + 11.8 × 2	9.7 × 2 + 11.8 × 2	9.7 + 11.8 × 3	9.7 + 11.8 × 3	9.7 + 11.8 × 3	9.7 + 11.8 × 3	9.7 + 11.8 × 3	11.8 × 4	11.8 × 4	11.8 × 4
Connection pipe diameter — Liquid	mm	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	19.05	22.22	22.22	22.22	22.22
Connection pipe diameter — Discharge Gas	mm	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27
Operating range — Cooling	°C	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55

NOTES:
- Specifications are based on the following conditions:
  – Cooling: Indoor temperature of 27°CDB/19°CWB, and outdoor temperature of 35°CDB/24°CWB.
  – Pipe length: 7.5 m, Height difference: 0 m. (Between outdoor unit and indoor unit.)
- This data is based on following standard: EN14511, EN12102.
- Protective function might work when using it outside the operation range.
- *1: Sound pressure level:
  – Measured values in manufacturer's anechoic chamber.
  – Because of the surrounding sound environment, the sound levels measured in actual installation conditions might be higher than the specified values here.
- *2: Connection pipe Max. length: Total pipe length is limited by the condition that total refrigerant amount. For details of additional charge calculation, refer to "Additional charge calcula- tion" on page 06-40.
- *3: Connection pipe Max. height difference: When installing the pressure sensor kit on the nearest pipe to the indoor unit with the largest difference in elevation with the outdoor unit.

Energy Efficiency Combinations

Rating Capacity range		HP	16	18	20	24	26	28	30	32	34	36	38	40	42	44
Model name			AJG144JATAHH	AJG162JATAHH	AJG180JATAHH	AJG216JATAHH	AJG234JATAHH	AJG252JATAHH	AJG270JATAHH	AJG288JATAHH	AJG306JATAHH	AJG324JATAHH	AJG342JATAHH	AJG360JATAHH	AJG378JATAHH	AJG396JATAHH
Unit 1 / Unit 2 / Unit 3			AJG072JATAH AJG072JATAH	AJG090JATAH AJG072JATAH	AJG090JATAH AJG090JATAH	AJG072JATAH AJG072JATAH AJG072JATAH	AJG090JATAH AJG072JATAH AJG072JATAH	AJG108JATAH AJG072JATAH AJG072JATAH	AJG090JATAH AJG090JATAH AJG072JATAH	AJG108JATAH AJG108JATAH AJG072JATAH	AJG108JATAH AJG108JATAH AJG090JATAH	AJG126JATAH AJG108JATAH AJG090JATAH	AJG126JATAH AJG108JATAH AJG108JATAH	AJG126JATAH AJG126JATAH AJG108JATAH	AJG126JATAH AJG126JATAH AJG126JATAH	AJG144JATAH AJG126JATAH AJG126JATAH
Maximum Connectable Indoor Unit*1			30	34	38	45	49	53	57	60	64	64	64	64	64	64
Indoor unit connectable capacity	Cooling	kW	22.4-67.2	25.2-75.6	28.0-84.0	33.6-100.8	36.4-109.2	39.2-117.5	42.0-125.9	44.7-134.1	47.5-142.5	50.8-152.3	53.5-160.5	56.8-170.3	60.0-180.0	62.5-187.5
Power source			3N 400 V ~ 50/60 Hz							3N 400 V ~ 50/60 Hz						
Capacity	Cooling	kW	44.8	50.4	56.0	67.2	72.8	78.3	83.9	89.4	95.0	101.5	107.0	113.5	120.0	125.0
		Btu/h	152,900	172,000	191,100	229,300	248,400	267,200	286,300	305,000	324,200	346,300	365,100	387,300	409,500	426,500
Input power	Cooling	kW	8.84	10.37	11.90	13.26	14.79	16.67	18.20	20.8	21.61	23.28	25.16	26.83	28.50	30.25
EER	Cooling	W/W	5.07	4.86	4.71	5.07	4.92	4.70	4.61	4.45	4.40	4.36	4.25	4.23	4.21	4.13
Air flow rate	High	m³/h	10,200 × 2	10,200 × 2	10,200 × 2	10,200 × 3	10,200 × 3	10,200 × 3	10,200 × 3	10,200 × 3	10,200 × 3	10,200 × 2 + 13,700	10,200 × 2 + 13,700	10,200 + 13,700 × 2	13,700 × 3	13,700 × 3
Sound pressure level*1	Cooling	dB (A)	58	58	58	62	60	60	60	60	60	64	64	66	67	67
Maximum external static pressure		Pa	82	82	82	82	82	82	82	82	82	82	82	82	82	82
Compressor motor output		kW	4.7 × 2	4.7 × 2	4.7 × 2	4.7 × 3	4.7 × 3	4.7 × 3	4.7 × 3	4.7 × 3	4.7 × 3	4.7 × 3	4.7 × 3	4.7 × 3	4.7 × 3	4.7 × 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
Dimensions	Height	mm	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740
	Width	mm	930 × 2	930 × 2	930 × 2	930 × 3	930 × 3	930 × 3	930 × 3	930 × 3	930 × 3	1,240 + 930 × 2	1,240 + 930 × 2	1,240 ×2 + 930	1,240 × 3	1,240 × 3
	Depth	mm	765	765	765	765	765	765	765	765	765	765	765	765	765	765
Weight		kg	209 × 2	209 × 2	209 × 2	209 × 3	209 × 3	209 × 3	209 × 3	209 × 3	209 × 3	209 × 2 + 230	209 × 2 + 230	209 × 230 × 2	232 × 3	232 × 3
Refrigerant	Type (Global Warming Potential)		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charge	kg	9.7 × 2	9.7 × 2	9.7 × 2	9.7 × 3	9.7 × 3	9.7 × 3	9.7 × 3	9.7 × 3	9.7 × 3	9.7 × 2 + 11.8	9.7 × 2 + 11.8	9.7 + 11.8 × 2	11.8 × 3	11.8 × 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
	Discharge Gas	mm	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
Operating range	Cooling	°C	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55	10 to 55

NOTES:
• Specifications are based on the following conditions:
– Cooling: Indoor temperature of 27°CDB/19°CWB, and outdoor temperature of 35°CDB/24°CWB.
– Pipe length: 7.5 m, Height difference: 0 m. (Between outdoor unit and indoor unit.)
• This data is based on following standard: EN14511, EN12102.
• Protective function might work when using it outside the operation range.
• *1: Sound pressure level:
– Measured values in manufacturer's anechoic chamber.
– Because of the surrounding sound environment, the sound levels measured in actual installation conditions might be higher than the specified values here.
• *2: Connection pipe Max. length: Total pipe length is limited by the condition that total refrigerant amount. For details of additional charge calculation, refer to "Additional charge calcula- tion" on page 06-40.
• *3: Connection pipe Max. height difference: When installing the pressure sensor kit on the nearest pipe to the indoor unit with the largest difference in elevation with the outdoor unit.

VRF SERIES

Heat Pump
Modular type

VRF **V-III** Tropical

TROPICAL SPEC

R410A REFRIGERANT

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 configuration example

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

Outdoor unit

Separation tube   Header

Liquid pipe
Gas pipe

Indoor unit

Indoor unit

System Outline

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

Up to **52°C**

Cooling operation range

52   50   40   30
Outdoor temperature (°C)

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

Cooling capacity (kW)
40
20
0
35°C ambient temp.
46°C ambient temp.
8HP   10HP   14HP

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

Efficiency in actual operation

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

Space saving combination

(COP)
5
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
4
3
2
8 10 12 14 16 18 20 22 24* 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 (HP)

Energy efficiency combination

(COP)
5
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
4
3
2
16 18 20 24* 26 28 30 32 34 36 38 40 42 44 48 (HP)

* : For 24 HP Combination
Space saving   Energy efficiency
COP 17 % UP

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

0.1Hz
Capacity
Inverter frequency
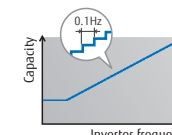
4-face heat exchanger
Heat exchange efficiency is significantly improved by the introduction of a new 4-face heat exchanger that increases effective surface area.

Front intake port (corner cut air inhaling structure)
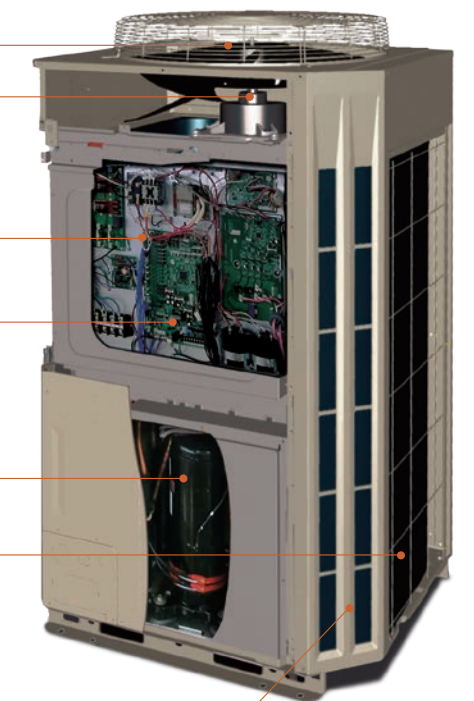
Advanced energy saving control

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.

Compressor Load level
High efficient operation   **Inefficient operation**
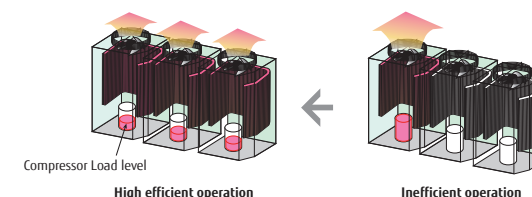
Heat exchanger refrigerant control

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

Fan
Large intake airflow
Small intake airflow
Heat exchanger
Outdoor unit

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

VRF SERIES

Space saving combinations

22.4kW (8HP)	28.0kW (10HP)	33.5kW (12HP)	40.0kW (14HP)	45.0kW (16HP)
AJH072LNTCH UNIT : AJH072LNTCH	AJH090LNTCH UNIT : AJH090LNTCH	AJH108LNTCH UNIT : AJH108LNTCH	AJH126LNTCH UNIT : AJH126LNTCH	AJH144LNTCH UNIT : AJH144LNTCH
50.0 kW (18HP)	56.0kW (20HP)	62.4 kW (22HP)	68.0 kW (24HP)	73.0 kW (26HP)
AJH162LNTCH UNIT : AJH162LNTCH	AJH180LNTCH UNIT : AJH090/090LNTCH	AJH198LNTCH UNIT : AJH126/072LNTCH	AJH216LNTCH UNIT : AJH126/090LNTCH	AJH234LNTCH UNIT : AJH144/090LNTCH
78.0 kW (28HP)	85.0 kW (30HP)	90.0 kW (32HP)	95.0 kW (34HP)	100.0 kW (36HP)
AJH252LNTCH UNIT : AJH162/090LNTCH	AJH270LNTCH UNIT : AJH144/126LNTCH	AJH288LNTCH UNIT : AJH144/144LNTCH	AJH306LNTCH UNIT : AJH162/144LNTCH	AJH324LNTCH UNIT : AJH162/162LNTCH
106.0 kW (38HP)	113.0 kW (40HP)	118.0 kW (42HP)	123.0 kW (44HP)	128.0 kW (46HP)
AJH342LNTCH UNIT : AJH162/090/090LNTCH	AJH360LNTCH UNIT : AJH144/126/090LNTCH	AJH378LNTCH UNIT : AJH144/144/090LNTCH	AJH396LNTCH UNIT : AJH162/144/090LNTCH	AJH414LNTCH UNIT : AJH162/162/090LNTCH
135.0 kW (48HP)	140.0 kW (50HP)	145.0 kW (52HP)	150.0 kW (54HP)	
AJH432LNTCH UNIT : AJH144/144/144LNTCH	AJH450LNTCH UNIT : AJH162/144/144LNTCH	AJH468LNTCH UNIT : AJH162/162/144LNTCH	AJH486LNTCH UNIT : AJH162/162/162LNTCH	

Energy efficiency combinations

44.8 kW (16HP)	50.4kW (18HP)	55.9 kW (20HP)	67.2 kW (24HP)	72.8 kW (26HP)
AJH144LNTCHH UNIT : AJH072/072LNTCH	AJH162LNTCHH UNIT : AJH090/072LNTCH	AJH180LNTCHH UNIT : AJH108/072LNTCH	AJH216LNTCHH UNIT : AJH072/072/072LNTCH	AJH234LNTCHH UNIT : AJH090/072/072LNTCH
78.3 kW (28HP)	84.8 kW (30HP)	89.4 kW (32HP)	95.9 kW (34HP)	100.5 kW (36HP)
AJH252LNTCHH UNIT : AJH108/072/072LNTCH	AJH270LNTCHH UNIT : AJH126/072/072LNTCH	AJH288LNTCHH UNIT : AJH108/108/072LNTCH	AJH306LNTCHH UNIT : AJH126/108/072LNTCH	AJH324LNTCHH UNIT : AJH108/108/108LNTCH
107.0 kW (38HP)	113.5 kW (40HP)	120.0 kW (42HP)	125.0 kW (44HP)	130.0 kW (46HP)
AJH342LNTCHH UNIT : AJH126/108/108LNTCH	AJH360LNTCHH UNIT : AJH126/126/108LNTCH	AJH378LNTCHH UNIT : AJH126/126/126LNTCH	AJH396LNTCHH UNIT : AJH144/126/126LNTCH	AJH414LNTCHH UNIT : AJH144/144/126LNTCH

Dimensions

8,10HP : AJH072LNTCH / AJH090LNTCH (Unit : mm)

690 (Bolt pitch)
80 530 (Bolt pitch)
8-12 × 17 (Hole)
732 (Bolt pitch)
765
930
1,576
1,690
1,339
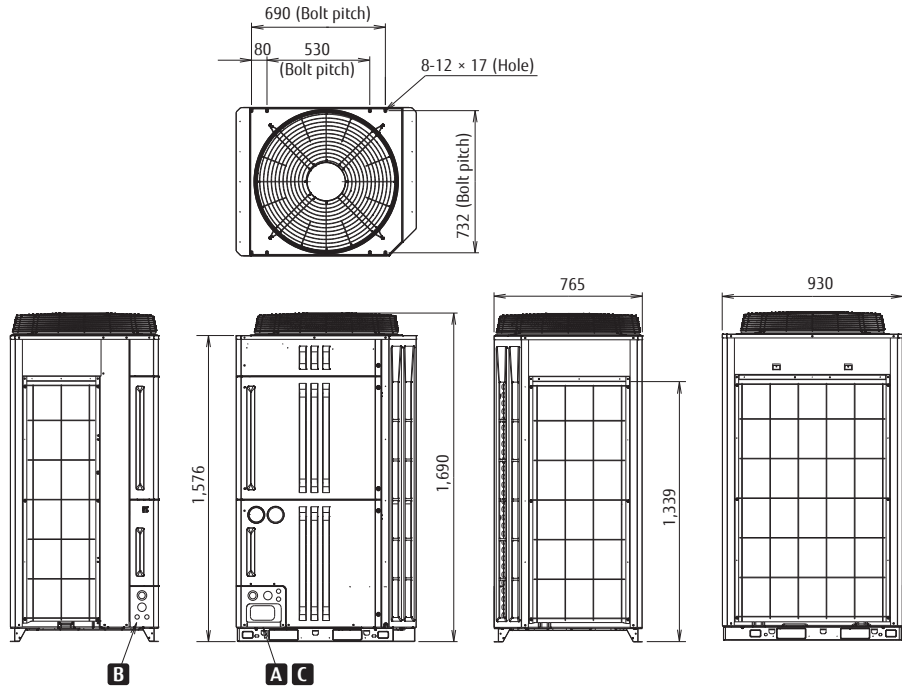
12,14,16,18HP : AJH108LNTCH / AJH126LNTCH / AJH144LNTCH / AJH162LNTCH (Unit : mm)

1,000 (Bolt pitch)
80 840 (Bolt pitch)
8-12×7 (Hole)
732 (Bolt pitch)
765
1,240
1,690

A Front side knockout position
73
43
Ø 34.5 Power supply cable port
Ø 43.7 Power supply cable port
Ø 50 Power supply cable port
Ø 22.2 Transmission cable port
Ø 22.2 Transmission cable port
Pipe port
95
10 75
100
125
199

B Left side knockout position
Ø 50 Power supply cable port
Ø 34.5 Power supply cable port
Ø 43.7 Power supply cable port
Ø 22.2 Transmission cable port
Ø 22.2 Transmission cable port

C Bottom side knockout position
Top view Pipe port
82 80
42 197

VRF 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		AJH072LNTCH	AJH090LNTCH	AJH108LNTCH	AJH126LNTCH	AJH144LNTCH	AJH162LNTCH	AJH180LNTCH	AJH198LNTCH	AJH216LNTCH	AJH234LNTCH	AJH252LNTCH	AJH270LNTCH	AJH288LNTCH	AJH306LNTCH	AJH324LNTCH	AJH342LNTCH	AJH360LNTCH	AJH378LNTCH	AJH396LNTCH	AJH414LNTCH	AJH432LNTCH	AJH450LNTCH	AJH468LNTCH	AJH486LNTCH
Unit 1		AJH072LNTCH	AJH090LNTCH	AJH108LNTCH	AJH126LNTCH	AJH144LNTCH	AJH162LNTCH	AJH090LNTCH	AJH126LNTCH	AJH126LNTCH	AJH144LNTCH	AJH162LNTCH	AJH144LNTCH	AJH144LNTCH	AJH162LNTCH	AJH162LNTCH	AJH162LNTCH	AJH144LNTCH	AJH144LNTCH	AJH162LNTCH	AJH162LNTCH	AJH144LNTCH	AJH162LNTCH	AJH162LNTCH	AJH162LNTCH
Unit 2								AJH090LNTCH	AJH072LNTCH	AJH090LNTCH	AJH090LNTCH	AJH090LNTCH	AJH126LNTCH	AJH144LNTCH	AJH144LNTCH	AJH162LNTCH	AJH090LNTCH	AJH126LNTCH	AJH144LNTCH	AJH144LNTCH	AJH162LNTCH	AJH144LNTCH	AJH144LNTCH	AJH162LNTCH	AJH162LNTCH
Unit 3																	AJH090LNTCH	AJH090LNTCH	AJH090LNTCH	AJH090LNTCH	AJH090LNTCH	AJH144LNTCH	AJH144LNTCH	AJH144LNTCH	AJH162LNTCH
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	14.0-36.4	16.8-43.5	20.0-52.0	22.5-58.5	25.0-65.0	28.0-72.8	31.2-81.1	34.0-88.4	36.5-94.9	39.0-101.4	42.5-110.5	45.0-117.0	47.5-123.5	50.0-130.0	53.0-137.8	56.5-146.9	59.0-153.4	61.5-159.9	64.0-166.4	67.5-175.5	70.0-182	72.5-188.5	75.0-195.0

Power source: 3 phase 4 wire, 400 V, 50Hz

T1 condition		8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54
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
Capacity Heating	kW	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	150.0	150.0	150.0	150.0	150.0
Capacity 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
Capacity Heating	Btu/h	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	511,800	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
Input power Heating	kW	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Current Heating	A	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 Heating	W/W	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	Btu/h/W	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	32.0	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
Capacity	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 Cooling	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
EER	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 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
Power level Heating	dB(A)	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+7.5	11.0+7.5	11.0+7.5	11.0+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	mm	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	mm	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	279×255×2	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(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	mm	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	34.92	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27
Operating 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	°C	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-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		AJH144LNTCHH	AJH162LNTCHH	AJH180LNTCHH	AJH216LNTCHH	AJH234LNTCHH	AJH252LNTCHH	AJH270LNTCHH	AJH288LNTCHH	AJH306LNTCHH	AJH324LNTCHH	AJH342LNTCHH	AJH360LNTCHH	AJH378LNTCHH	AJH396LNTCHH	AJH414LNTCHH
Unit 1		AJH072LNTCH	AJH090LNTCH	AJH108LNTCH	AJH072LNTCH	AJH090LNTCH	AJH108LNTCH	AJH126LNTCH	AJH108LNTCH	AJH126LNTCH	AJH108LNTCH	AJH126LNTCH	AJH126LNTCH	AJH126LNTCH	AJH144LNTCH	AJH144LNTCH
Unit 2		AJH072LNTCH	AJH072LNTCH	AJH072LNTCH	AJH072LNTCH	AJH072LNTCH	AJH072LNTCH	AJH072LNTCH	AJH108LNTCH	AJH108LNTCH	AJH108LNTCH	AJH108LNTCH	AJH126LNTCH	AJH126LNTCH	AJH144LNTCH	AJH144LNTCH
Unit 3					AJH072LNTCH	AJH072LNTCH	AJH072LNTCH	AJH072LNTCH	AJH072LNTCH	AJH072LNTCH	AJH108LNTCH	AJH108LNTCH	AJH108LNTCH	AJH126LNTCH	AJH126LNTCH	AJH126LNTCH
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	28.0-72.6	33.6-87.3	36.4-94.6	39.2-101.7	42.4-110.2	44.7-116.2	48.0-124.6	50.3-130.6	53.5-139.1	56.8-147.5	60.0-156.0	62.5-162.5	65.0-169

Power source: 3 phase 4 wire, 400 V, 50Hz

T1 condition		16	18	20	24	26	28	30	32	34	36	38	40	42	44	46
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
Capacity Heating	kW	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
Capacity 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
Capacity Heating	Btu/h	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
Input power Heating	kW	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Current Heating	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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 Heating	W/W	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	Btu/h/W	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	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
Capacity	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 Cooling	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
EER	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 Cooling	dB(A)	59/80	60/81	60/81	61/82	62/83	61/82	61/82	63/84	64/86	62/83	63/84	64/85	65/88	66/87	66/87
Power level Heating	dB(A)	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	mm	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	mm	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)	11.8×2+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	mm	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
Operating 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	°C	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-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: 7.5 m. Height difference between outdoor and indoor unit: 0 m.

VRF SERIES

Heat Pump
Modular type

VRF **V-III**

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

REFRIGERANT R410A

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.

Outdoor unit

Separation tube   Header

Liquid pipe
Gas pipe
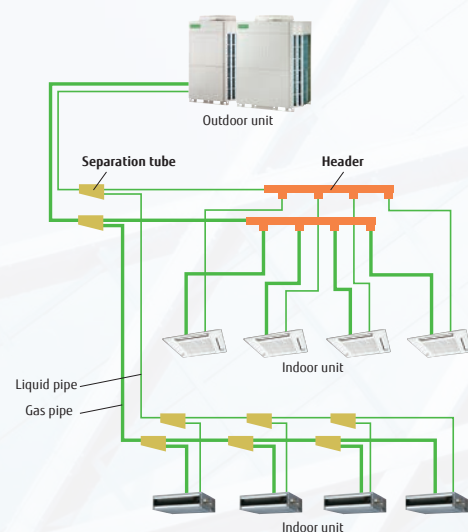
Indoor unit

Indoor unit

New intelligent refrigerant control

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

Current model (V-II)

Low capacity operation
↓
Indoor unit request
Low capacity

Excess capacity

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

New model (V-III)

Low capacity operation
↓
Indoor unit request
Low capacity

Adequate capacity

The outdoor unit provides sufficient capacity to meet the demands of the indoor unit.
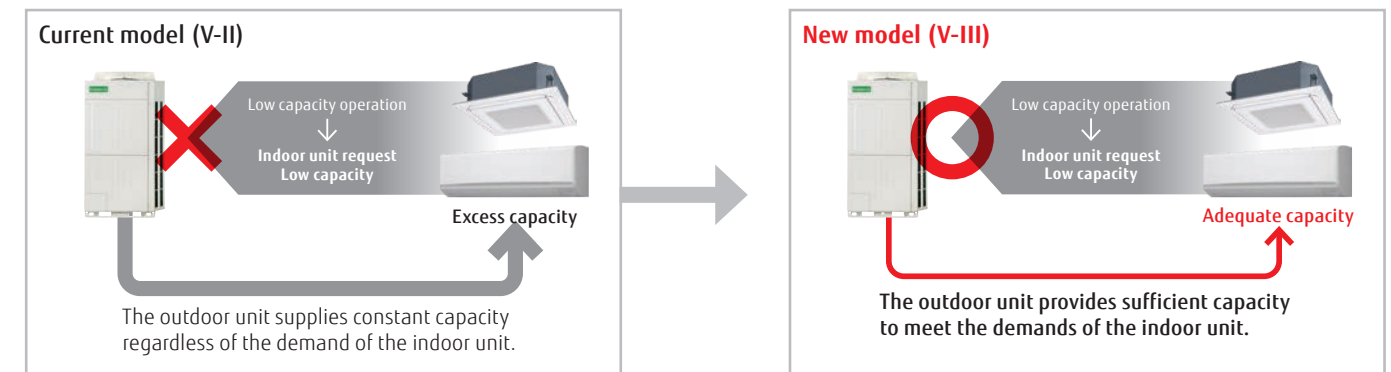
* The improvements due to the control and the actual sine wave vary depending on the combination of the indoor unit and system operating conditions.

Efficiency in actual operating conditions

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

Space saving combination
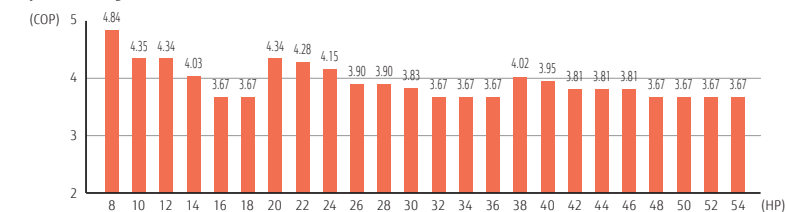
Energy efficiency combination
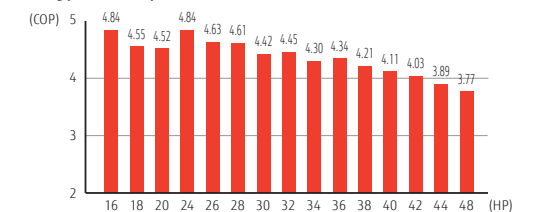
* These specifications are determined by Cassette combination.

Energy saving technology that boosted operation efficiency

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

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

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.

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

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

Capacity

0.1Hz

Inverter frequency

Front intake port (corner cut air inhaling structure)

• Combinations other than the followings are not recommended.

Space saving combinations

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

Energy efficiency combinations

44.8 kW (16HP)	50.4kW (18HP)	55.9 kW (20HP)	67.2 kW (24HP)	72.8 kW (26HP)
AJH144LALBHH UNIT : AJH072/072LALBH	AJH162LALBHH UNIT : AJH090/072LALBH	AJH180LALBHH UNIT : AJH108/072LALBH	AJH216LALBHH UNIT : AJH072/072/072LALBH	AJH234LALBHH UNIT : AJH090/072/072LALBH
78.3 kW (28HP)	84.8 kW (30HP)	89.4 kW (32HP)	95.9 kW (34HP)	100.5 kW (36HP)
AJH252LALBHH UNIT : AJH108/072/072LALBH	AJH270LALBHH UNIT : AJH126/072/072LALBH	AJH288LALBHH UNIT : AJH108/108/072LALBH	AJH306LALBHH UNIT : AJH126/108/072LALBH	AJH324LALBHH UNIT : AJH108/108/108LALBH
107.0 kW (38HP)	113.5 kW (40HP)	120.0 kW (42HP)	125.0 kW (44HP)	130.0 kW (46HP)
AJH342LALBHH UNIT : AJH126/108/108LALBH	AJH360LALBHH UNIT : AJH126/126/108LALBH	AJH378LALBHH UNIT : AJH126/126/126LALBH	AJH396LALBHH UNIT : AJH144/126/108LALBH	AJH414LALBHH UNIT : AJH144/144/126LALBH

Dimensions

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

690 (Bolt pitch)
80 / 530 (Bolt pitch)
8-12 × 17 (Hole)
732 (Bolt pitch)
765   930
1,576   1,690   1,339

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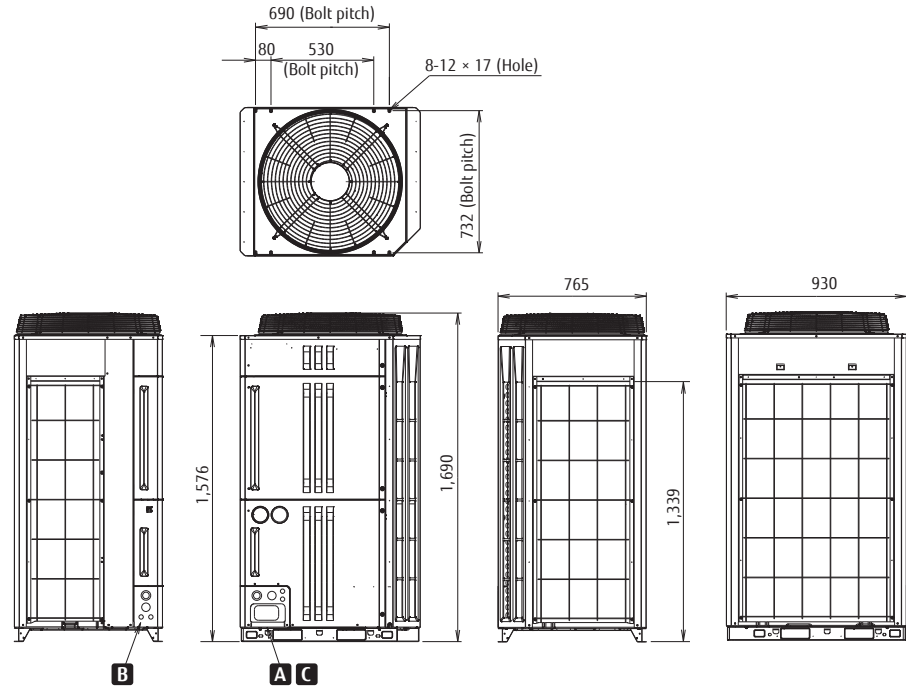
12,14,16,18HP : AJH108LALBH / AJH126LALBH / AJH144LALBH / AJH162LALBH (Unit : mm)

1,000 (Bolt pitch)
80 / 840 (Bolt pitch)
8-12×7 (Hole)
732 (Bolt pitch)
765   1,240
1,690

B   A C

A Front side knockout position
73
43
Ø 34.5
Power supply cable port
Ø 43.7
Power supply cable port
Ø 50
Power supply cable port
Ø 22.2
Transmission cable port
Ø 22.2
Transmission cable port
95
75
Pipe port
10
100
125
199

B Left side knockout position
Ø 50
Power supply cable port
Ø 34.5
Power supply cable port
Ø 43.7
Power supply cable port
Ø 22.2
Transmission cable port
Ø 22.2
Transmission cable port

C Bottom side knockout position
Top view
Pipe port
82
80
42   197

VRF 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	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	AJH126LALBH	AJH126LALBH	AJH144LALBH	AJH162LALBH	AJH144LALBH	AJH144LALBH	AJH162LALBH	AJH162LALBH	AJH162LALBH	AJH144LALBH	AJH144LALBH	AJH162LALBH	AJH162LALBH	AJH144LALBH	AJH162LALBH	AJH162LALBH	AJH162LALBH
Unit 2							AJH090LALBH	AJH072LALBH	AJH090LALBH	AJH090LALBH	AJH090LALBH	AJH126LALBH	AJH144LALBH	AJH144LALBH	AJH162LALBH	AJH090LALBH	AJH126LALBH	AJH144LALBH	AJH144LALBH	AJH162LALBH	AJH144LALBH	AJH144LALBH	AJH162LALBH	AJH162LALBH
Unit 3																AJH090LALBH	AJH090LALBH	AJH090LALBH	AJH090LALBH	AJH090LALBH	AJH144LALBH	AJH144LALBH	AJH144LALBH	AJH162LALBH
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	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	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
Capacity Heating (kW)	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
Input power Heating (kW)	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 Heating (W/W)	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 (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	62/83	61/82	61/82	62/83	63/84	64/85	64/85	65/86	66/87	66/87	65/86	65/86	66/87	66/87	67/88	67/88	67/88	67/88	68/89
Sound pressure level*2 / Power level Heating (dB(A))	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
Dimensions Width (mm)	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
Dimensions Depth (mm)	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)
Refrigerant 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
Connection pipe diameter Discharge Gas (mm)	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
Operating 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
Operating range Heating (°C)	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-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	AJH072LALBH	AJH108LALBH	AJH126LALBH	AJH108LALBH	AJH126LALBH	AJH126LALBH	AJH126LALBH	AJH126LALBH	AJH126LALBH	AJH144LALBH	AJH144LALBH
Unit 2	AJH072LALBH	AJH072LALBH	AJH072LALBH	AJH072LALBH	AJH072LALBH	AJH072LALBH	AJH072LALBH	AJH108LALBH	AJH108LALBH	AJH126LALBH	AJH108LALBH	AJH126LALBH	AJH126LALBH	AJH126LALBH	AJH144LALBH
Unit 3				AJH072LALBH	AJH072LALBH	AJH072LALBH	AJH072LALBH	AJH072LALBH	AJH072LALBH	AJH072LALBH	AJH108LALBH	AJH108LALBH	AJH126LALBH	AJH126LALBH	AJH126LALBH
Maximum Connectable Indoor Unit*1	34	39	43	52	56	60	64	64	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	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	3 phase 4 wire, 400 V, 50Hz	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
Capacity Heating (kW)	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
Input power Heating (kW)	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	3.73	3.68	3.65	3.58	3.52
COP Heating (W/W)	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 (m³/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	64/83	64/84	64/85	65/88	66/87	66/87
Sound pressure level*2 / Power level Heating (dB(A))	61/83	62/84	62/85	63/85	63/85	64/86	65/87	64/87	65/88	66/88	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
Dimensions Width (mm)	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
Dimensions Depth (mm)	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)
Refrigerant 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
Connection pipe diameter Discharge Gas (mm)	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
Operating range Cooling (°C)	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
Operating range Heating (°C)	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-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.

VRF SERIES

VRF INDOOR UNITS

VRF INDOOR UNITS LINE-UP for J-VS
Compact Cassette Grid type
Low Static Pressure Duct Slim Duct
Wall-mounted type (EEV Internal / external)

VRF INDOOR UNITS LINE-UP for J-IIS, J-III TROPICAL, J-III, J-IIIL, VC-V, V-III TROPICAL, V-III
Cassette 1-way Flow type
3D Flow Cassette
Compact Cassette Grid type
Compact Cassette Standard type
Cassette Slim type 4-way Flow type
Cassette Large type 4-way Flow type
Cassette Slim type Circular Flow
Cassette Large type Circular Flow
Mini Duct
Low Static Pressure Duct / Concealed Floor
Slim Duct / Slim Concealed Floor
Low / Medium Static Pressure Duct
High Static Pressure Duct
Floor Compact
Floor / Ceiling
Ceiling
Wall Mounted (EEV Internal / external)

16 Types and 148 models available to meet the requirements of any building design.

VRF 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 for J-VS

Indoor units range

*1: Production by order
Specifications and design are subject to change without notice.
*Products other than ducts can be connected to all outdoor units.

Model code			4	5	7	9	12	14	14	18	24
Capacity range (kW)			1.1	1.7	2.2	2.8	3.6	4.0	4.5	5.6	7.1
Cassette	Compact Cassette	Compact (Grid type)	AUXB004HLAH	AUXB005HLAH	AUXB007HLAH	AUXB009HLAH	AUXB012HLAH		AUXB014HLAH	AUXB018HLAH	
		(High Efficiency*1)				AUXN009HLAH	AUXN012HLAH		AUXN014HLAH		
Duct	Low Static Pressure Duct	Slim Duct (With drain pump)	ARXD004HLAH	ARXD005HLAH	ARXD007HLAH	ARXD009HLAH	ARXD012HLAH		ARXD014HLAH	ARXD018HLAH	ARXD024HLAH
		(High Efficiency*1)				ARXP009HLAH	ARXP012HLAH		ARXP014HLAH		
Wall Mounted	Wall Mounted	(EEV internal)	ASHA004HCAH	ASHA005HCAH	ASHA007HCAH	ASHA009HCAH	ASHA012HCAH	ASHA014HCAH			
		(EEV external)	ASHE004HCAH	ASHE005HCAH	ASHE007HCAH	ASHE009HCAH	ASHE012HCAH	ASHE014HCAH			
			This model requires the EV kit to be connected.			This model requires the EV kit to be connected.					

INDOOR UNITS

NEW

Compact Cassette
Grid type

Model: AUXB004HLAH / AUXB005HLAH / AUXB007HLAH
AUXB009HLAH / AUXB012HLAH / AUXB014HLAH
AUXB018HLAH

AUXN009HLAH / AUXN012HLAH / AUXN014HLAH   * Production by order

DC FAN

Specifications

Model name			AUXB004HLAH	AUXB005HLAH	AUXB007HLAH	AUXB009HLAH	AUXB012HLAH	AUXB014HLAH	AUXB018HLAH	AUXN009HLAH	AUXN012HLAH	AUXN014HLAH
Power source			Single phase, 220-240V, 50Hz							Single phase, 220-240V, 50Hz		
Capacity	Cooling	kW	1.1	1.7	2.2	2.8	3.6	4.5	5.6	2.8	3.6	4.5
	Heating		1.3	1.9	2.8	3.2	4.1	5.0	6.3	3.2	4.1	5.0
Input power		W	21	21	23	24	27	33	50	41	71	81
Airflow rate (Cooling / Heating)*	High	m³/h	530	530	540	550	600	680	820	750	970	1,030
	Med-High		490 / 480	490 / 480	500	520	560	620	660	550	600	680
	Med		450 / 430	450 / 430	460	480	520	560	590	480	520	560
	Med-Low		420 / 380	420 / 380	420	440	480	500	520	440	480	500
	Low		390 / 340	390 / 340	390	400	430	440	460	400	430	440
	Quiet		350 / 300	350 / 300	350	350	390	390	400	350	390	390
Sound pressure level (Cooling / Heating)*	High	dB (A)	34	34	34	35	37	39	45	42	49	50
	Med-High		32 / 31	32 / 31	32	33	34	37	39	35	37	39
	Med		30 / 29	30 / 29	30	31	33	34	36	31	33	34
	Med-Low		28 / 26	28 / 26	28	29	31	32	33	29	31	32
	Low		27 / 24	27 / 24	27	27	29	30	30	27	29	30
	Quiet		25 / 21	25 / 21	25	25	27	27	27	25	27	27
Net Dimensions (H × W × D)		mm	245 × 570 × 570							245 × 570 × 570		
Weight		kg	14.5	14.5	15	15	15.5	15.5	17	15	15.5	15.5
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	9.52	12.70	12.70	12.70	9.52	12.70	12.70
Drain Hose Diameter (I.D./O.D.)			25 / 32	25 / 32	25 / 32	25 / 32	25 / 32	25 / 32	25 / 32	25 / 32	25 / 32	25 / 32
Cassette Grille	Model name		UTG-UFGH-W							UTG-UFGH-W		
	Dimensions (H×W×D)	mm	49 × 620 × 620							49 × 620 × 620		
	Weight	kg	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3

Note: Specifications are subject to 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]
*The value is the same for cooling and heating if there is one value.

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 620 mm × 620 mm grid ceiling.

620 mm

Optional parts

Wireless remote controller:	UTY-LNVG	External power supply unit:	UTZ-GXXD
Flesh Air Intake Kit:	UTZ-VXAA	WLAN adapter:	UTY-TFSXZ1, UTY-TFSXJ3,
Insulation kit for high humidity:	UTZ-KXGC		FG-AC-WIF1Z1
Silver Ion Filter:	UTD-HFAA	Gas sensor kit:	UTY-SGZH
Remote sensor kit:	UTY-XSZXZ1	Expansion kit:	UTZ-JXXA
Cassette Grille:	UTG-UFGH-W	Air Outlet Shutter Plate:	UTR-YDZB

Ceiling panel
Maximum **700mm**

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.

Dimensions (Unit: mm)

620
620

580 to 610: Ceiling openings
580 to 610: Ceiling openings
570: Indoor unit
540 : Bolt pitch
Drain hose
Gas pipe
Liquid pipe
B
A

150 to 200
Indoor unit
Service access
Min. 450
Min. 450

View A
Drain up
Max. 700
285
148
Ceiling

View B
570: Indoor unit
530 : Bolt pitch
262
215
19
Control box

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.

High ceiling mode

The cassette can be installed up to a height of 3.0 m. (012/014/018).

Model code	The maximum height from floor to ceiling (m)	
	Standard mode	High ceiling mode
004	2.7	-
005	2.7	-
007	2.7	-
009	2.7	-
012	2.7	3.0
014	2.7	3.0
018	2.7	3.0

INDOOR UNITS

NEW

Low Static Pressure Duct
Slim Duct

ARXD004/005/007/009/012/014HLAH
ARXP009/012/014HLAH

ARXK018HLAH

ARXK024HLAH

Model: (With drain pump)
ARXD004HLAH / ARXD005HLAH / ARXD007HLAH
ARXD009HLAH / ARXD012HLAH / ARXD014HLAH
ARXD018HLAH / ARXD024HLAH

ARXP009HLAH / ARXP012HLAH / ARXP014HLAH   * Production by order

Specifications

Model name			ARXD004HLAH	ARXD005HLAH	ARXD007HLAH	ARXD009HLAH	ARXD012HLAH	ARXD014HLAH	ARXD018HLAH	ARXD024HLAH	ARXP009HLAH	ARXP012HLAH	ARXP014HLAH
Power source			Single phase, 220-240V, 50Hz								Single phase, 220-240V, 50Hz		
Capacity	Cooling	kW	1.1	1.7	2.2	2.8	3.6	4.5	5.6	7.1	2.8	3.6	4.5
	Heating		1.3	1.9	2.8	3.2	4.0	5.0	6.3	8.0	3.2	4.0	5.0
Input power		W	38	38	41	47	48	84	76	107	77	128	128
Airflow rate	High	m³/h	530	530	550	600	580	790	930	1,250	770	940	940
	Med-High		480	480	520	550	550	720	880	1,180	630	810	810
	Med		440	440	480	500	520	640	780	1,060	530	660	660
	Med-Low		410	410	450	460	480	560	670	930	480	580	580
	Low		370	370	400	400	430	470	580	810	430	490	490
	Quiet		320	320	360	360	350	370	510	640	380	390	390
Static pressure range		Pa	0 to 90	0 to 90	0 to 90	0 to 90	0 to 90	0 to 90	0 to 90	0 to 50	0 to 25	0 to 25	0 to 25
Standard static pressure			25	25	25	25	25	25	25	25	25	25	25
Sound pressure level	High	dB (A)	26	26	28	29	30	34	34	35	36	40	40
	Med-High		26	26	26	27	28	32	31	32	32	38	38
	Med		25	25	25	25	27	30	29	30	28	33	33
	Med-Low		24	24	24	24	26	28	27	27	27	31	31
	Low		22	22	22	22	24	25	25	24	25	27	27
	Quiet		21	21	21	21	22	22	23	21	23	24	24
Net Dimensions (H × W × D)		mm	198 × 700 × 620						198 × 900 × 620	198 × 1,100 × 620	198 × 700 × 620		
Weight		kg	16	16	16.5	16.5	17	17	21	25	16.5	17	17
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	6.35
	Gas (Flare)		9.52	9.52	9.52	9.52	12.70	12.70	12.70	15.88	9.52	12.70	12.70
Drain Hose Diameter (I.D./O.D.)			25 / 32	25 / 32	25 / 32	25 / 32	25 / 32	25 / 32	25 / 32	25 / 32	25 / 32	25 / 32	25 / 32

Note: Specifications are subject to 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.

Slim design

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

Drain port
Drain pump

Height 198 mm
Built-in drain pump

Air-intake

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

Bottom side   Back side

Wide range of static pressures

The use of a DC fan motor makes it possible to adjust the static pressure between 0 and 90 Pa.
The static pressure range can be changed by a remote controller.

Static pressure range
0 to 90 Pa

* 024 model static pressure range is 0 to 50 Pa.

Optional parts

Wireless remote controller: UTY-LNVG*
Remote sensor unit: UTY-XSZXZ1
IR receiver unit: UTY-TRHX
WLAN adapter: UTY-TFSXJ3
UTY-TFSXZ1
FG-AC-WIF1Z1
External power supply unit: UTZ-GXXD
Expansion kit: UTZ-JXXA

Auto Louver Grille Kit: UTD-GXTA-W (004-014)
UTD-GXTB-W (018)
UTD-GXTC-W (024)
Silver Ion Filter: UTD-HFTA (004-014)
UTD-HFTB (018)
UTD-HFTC (024)
Gas sensor kit: UTY-SGZH

Drain hose provided as an accessory.
Maximum **850mm**

Auto louver grille kit (Option)

The optional clean-looking flat Auto louver blends into any interior and provides a comfortable airflow.

Filter (Accessory)

ARXD004-018

(2 pcs.)

ARXD024

(3 pcs.)

Dimensions (Unit: mm)

Air inlet

Control box
Service access*
Air
Min. 10
Min. 400

Hanger

Air outlet
Drain up
Max. 700
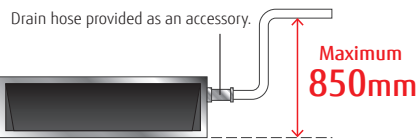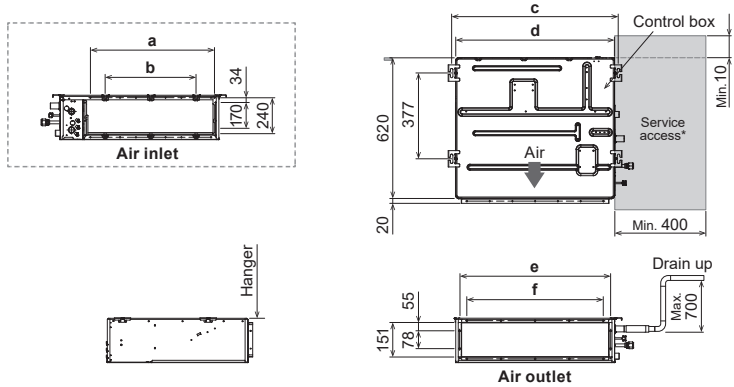
	ARXD004-014 ARXP009-014	ARXD018	ARXD024
a	574	774	974
b	P200×2=400	P200×3=600	P200x4=800
c	734	934	1,134
d	700	900	1,100
e	650	850	1,050
f	P100×6=600	P100×8=800	P100×10=1,000

*The design of the service access depends on the installation method. Refer to the installation manual for more information.

Liquid pipe
Gas pipe
Drain port
Drain port
198

INDOOR UNITS

NEW

Wall-mounted type

DC FAN
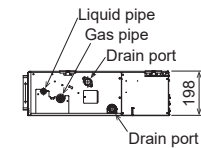
Highly-efficiency, compact design

The 004-014 models share the same design.
The high-density and large heat exchanger achieves a highly-efficiency and compact design.
The compact body blends in well with conference rooms and offices, providing comfortable air conditioning.

High-density heat exchanger

φ5

Slim tube design: **5** mm
Greater heat-exchanging capacity is achieved through the use of a high-density heat exchanger and a sub-heat exchanger.
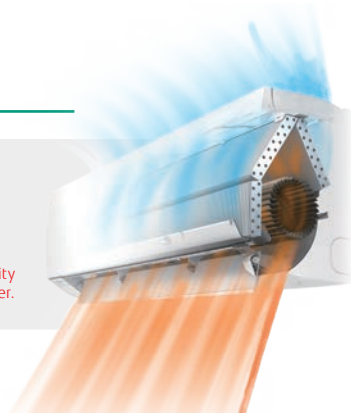
More comfort airflow

The unique power diffuser provides comfortable air conditioning.

Heating
Vertical airflow provides powerful floor level heating
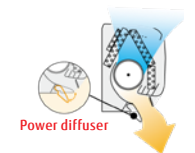
Cooling
The left/right airflow avoids blowing cool air directly at the occupants in a room.

Power diffuser

Power diffuser
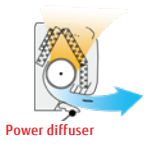
Quiet operation & 6 Fan speed control

The airflow pattern achieves significant noise reduction. Multistep airflow adjustment to suit the environment
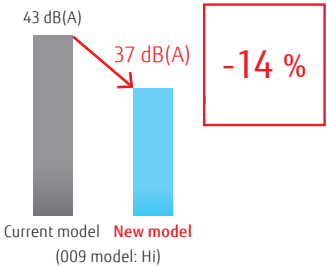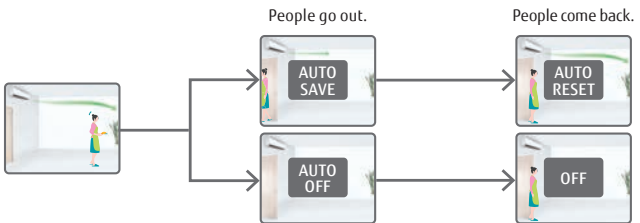
43 dB(A)
37 dB(A)
-14 %
Current model   New model
(009 model: Hi)

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

* Compatible Remote Controller is as follows:
UTY-RNRGZ5 / UTY-RLRG / UTY-RSRG / UTY-RHRG / UTY-DCGGZ2 / UTY-DTGGZ1 / UTY-ALGXZ1 / UTY-APGXZ1
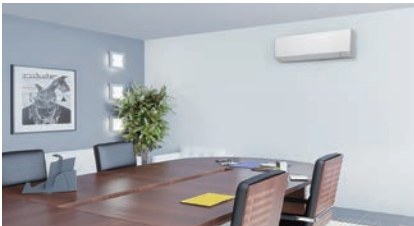
Human sensor increases energy saving operation

Energy saving operation starts automatically by detecting the motion of a person. Two modes of save operation mode and stop mode can be selected.
*If you want to use the Occupancy sensor control' function, you need an setting device that can set the Occupancy sensor control' function. For example: Wired RC (Touch panel).

People go out.
People come back.

AUTO SAVE
AUTO RESET

AUTO OFF
OFF

Model: (EEV internal)
ASHA004HCAH / ASHA005HCAH / ASHA007HCAH
ASHA009HCAH / ASHA012HCAH / ASHA014HCAH

(EEV external)
ASHE004HCAH / ASHE005HCAH / ASHE007HCAH
ASHE009HCAH / ASHE012HCAH / ASHE014HCAH

Specifications

Model name			ASHA004HCAH	ASHA005HCAH	ASHA007HCAH	ASHA009HCAH	ASHA012HCAH	ASHA014HCAH	ASHE004HCAH	ASHE005HCAH	ASHE007HCAH	ASHE009HCAH	ASHE012HCAH	ASHE014HCAH
Power source			Single phase, 220-240V, 50Hz						Single phase, 220-240V, 50Hz					
Capacity	Cooling	kW	1.1	1.7	2.2	2.8	3.6	4.0	1.1	1.7	2.2	2.8	3.6	4.0
	Heating		1.3	1.9	2.8	3.2	4.0	4.5	1.3	1.9	2.8	3.2	4.0	4.5
Input power		W	12	12	16	19	25	35	12	12	16	19	25	35
Airflow rate	High	m³/h	450	450	550	590	660	770	450	450	550	590	660	770
	Med-High		430	430	490	550	590	710	430	430	490	550	590	710
	Med		400	400	450	490	550	650	400	400	450	490	550	650
	Med-Low		380	380	390	420	510	590	380	380	390	420	510	590
	Low		360	360	360	360	450	530	360	360	360	360	450	530
	Quiet		310	310	320	320	320	320	310	310	320	320	320	320
Sound pressure level	High	dB(A)	31	31	34	37	40	44	31	31	34	37	40	44
	Med-High		30	30	32	34	37	42	30	30	32	34	37	42
	Med		28	28	30	32	34	40	28	28	30	32	34	40
	Med-Low		27	27	28	29	33	37	27	27	28	29	33	37
	Low		26	26	26	26	30	34	26	26	26	26	30	34
	Quiet		22	22	22	22	22	22	22	22	22	22	22	22
Net Dimensions (H × W × D)		mm	268 × 840 × 203						268 × 840 × 203					
Weight		kg	8	8	8.5	8.5	8.5	8.5	8	8	8.5	8.5	8.5	8.5
Connection pipe diameter	Liquid (Flare)	mm	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35
	Gas (Flare)		9.52	9.52	9.52	9.52	12.70	12.70	9.52	9.52	9.52	9.52	12.70	12.70
Drain Hose Diameter (I.D./O.D.)			13.8/15.8 to16.7						13.8/15.8 to16.7					
EV kit (optional)			–	–	–	–	–	–	UTR-EV09XC				UTR-EV14XC	

Note: Specifications are subject to 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 connecting ASH*004G**H, ASH*007G**H, ASH*009G**H to an outdoor unit other than the outdoor unit of the J-IVL Series, the gas pipe diameter should be Ø12.70 mm.

Optional parts

Wireless remote controller:	UTY-LNVG	Silver Ion Filter:	UTR-FA16-5
External power supply unit:	UTZ-GXXD	Remote sensor kit:	UTY-XSZXZ1
WLAN adapter:	UTY-TFSXZ1	Gas sensor kit:	UTY-SGZH
	UTY-TFSXJ3	Expansion kit:	UTZ-JXXA
	FG-AC-WIF1Z1		
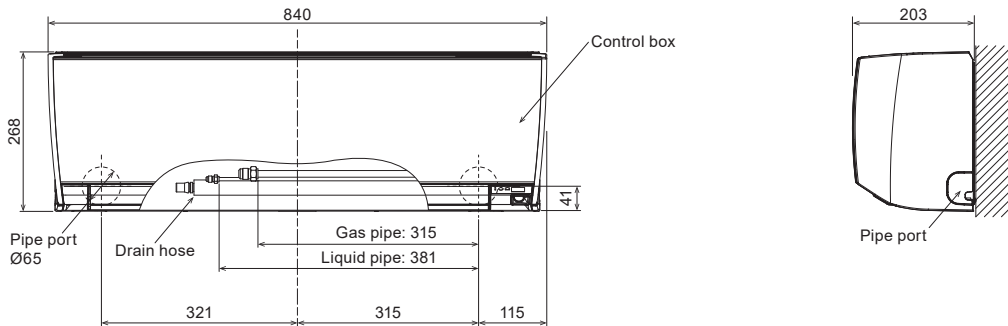
Dimensions (Unit: mm)

840
203
268
41
Control box
Pipe port Ø65
Drain hose
Gas pipe: 315
Liquid pipe: 381
Pipe port
321
315
115

INDOOR UNITS

REFRIGERANT R410A

INDOOR UNITS LINE-UP for J-IIS, J-III TROPICAL, J-III, J-IIIL, VC-V, V-III TROPICAL, V-III

*1:AUXA18/24GALH can not be connected to J-IIIL Series.
*2:ARXC60/72/90/96 cannot be connected to J-IIS Series and J-III Series.
*3 Floor (Compact) can not be connected to VC-V
*4 Circular flow cassette AUXN009/012/014GLAH can connected to VC-V only
*: Circular Flow Cassette (except AUXM030GLAH) , Mini Duct, Low Static Pressure Duct, Slim Duct, Medium Static Pressure Duct, High Static Pressure Duct (ARXC45GATH only) can be connected to J-III Series for Singapore.

Indoor units range

Model code			7	9	12	14	18	24	30	34	36	45	54	60	72	90	96
Capacity range (kW)			2.2	2.8	3.6	4.5	5.6	7.1	9.0	10.0	11.2	14.0	16.0	18.0	22.4	25.0	28.0
Cassette	1-way Flow		AUXV007GLEH	AUXV009GLEH	AUXV012GLEH	AUXV014GLEH	AUXV018GLEH	AUXV024GLEH									
	3D Flow						AUXS018GLEH	AUXS024GLEH									
	Compact	(Grid type)	AUXB007GLEH	AUXB009GLEH AUXB09GATH	AUXB012GLEH AUXB12GATH	AUXB014GLEH AUXB14GATH	AUXB018GLEH AUXB18GATH	AUXB024GLEH AUXB24GATH									
		(Standard type)	AUXB007GLEH	AUXB009GLEH AUXB09GATH	AUXB012GLEH AUXB12GATH	AUXB014GLEH AUXB14GATH	AUXB018GLEH AUXB18GATH	AUXB024GLEH AUXB24GATH									
	4-way Flow	(Slim type)					AUXD18GALH	AUXD24GALH									
		(Large type)					AUXA18GALH	AUXA24GALH	AUXA30GALH	AUXA34GALH	AUXA36GALH	AUXA45GALH	AUXA54GALH				
	Circular Flow	(Slim type)		AUXN009GLAH*4	AUXN012GLAH*4	AUXN014GLAH*4	AUXM018GLEH AUXM018GTAH	AUXM024GLEH AUXM024GTAH	AUXM030GLEH								
		(Large type)					AUXK018GLEH	AUXK024GLEH	AUXK030GLEH AUXK030GTAH	AUXK034GLEH	AUXK036GLEH AUXK036GTAH	AUXK045GLEH AUXK045GTAH	AUXK054GLEH AUXK054GTAH				
Duct	Mini Duct (With drain pump)		ARXK007GLGH	ARXK009GLGH	ARXK012GLGH	ARXK014GLGH	ARXK018GLGH	ARXK024GLGH									
	Low Static Pressure Duct		ARXB07GALH	ARXB09GALH	ARXB12GALH	ARXB14GALH	ARXB18GALH	ARXB24GALH	ARXB30GALH		ARXB36GALH	ARXB45GALH					
	Slim Duct (With drain pump)		ARXD007GLEH ARXD07GATH	ARXD009GLEH ARXD09GATH	ARXD012GLEH ARXD12GATH	ARXD014GLEH ARXD14GATH	ARXD018GLEH ARXD18GATH	ARXD024GLEH ARXD24GATH									
	Medium Static Pressure Duct							ARXA024GLEH ARXA24GBTH	ARXA030GLEH ARXA30GBTH		ARXA036GLEH ARXA36GBTH	ARXA045GLEH ARXA45GBTH	ARGB054GBTH				
	High Static Pressure Duct										ARXC036GTEH	ARXC045GTEH		ARXC060GTEH*2	ARXC072GTEH*2	ARXC090GTEH*2	ARXC096GTEH*2
Floor	Concealed Floor (Same as Low Static Pressure Duct models)		ARXB07GALH	ARXB09GALH	ARXB12GALH	ARXB14GALH	ARXB18GALH										
	Floor (Same as Ceiling models)				ABHA012GTEH	ABHA014GTEH	ABHA018GTEH	ABHA024GTEH									
	Slim Concealed Floor (Same as Slim Duct models)		ARXD007GLEH ARXD07GATH	ARXD009GLEH ARXD09GATH	ARXD012GLEH ARXD12GATH	ARXD014GLEH ARXD14GATH	ARXD018GLEH ARXD18GATH	ARXD024GLEH ARXD24GATH									
	Floor (compact)*3		AGHA007GCGH	AGHA009GCGH	AGHA012GCGH	AGHA014GCGH											
Ceiling	Ceiling				ABHA012GTEH	ABHA014GTEH	ABHA018GTEH	ABHA024GTEH	ABHA030GTEH		ABHA036GTEH	ABHA045GTEH	ABHA054GTEH				
Wall Mounted	Wall Mounted		ASHA07GATH	ASHA09GATH	ASHA12GATH	ASHA14GATH	ASHA18GATH	ASHA24GACH ASHA24GATH	ASHA30GACH ASHA30GATH								
			ASHA007GCGH	ASHA009GCGH	ASHA012GCGH	ASHA014GCGH	ASHA18GBCH	ASHA24GBCH	ASHA030GTEH	ASHA034GTEH							
			ASHA007GTEH	ASHA009GTEH													

INDOOR UNITS

Cassette
1-way Flow type

DC
FAN

Model: AUXV004GLEH / AUXV007GLEH / AUXV009GLEH
AUXV012GLEH / AUXV014GLEH / AUXV018GLEH
AUXV024GLEH

AUXV004/007/009/012GLEH

AUXV014/018/024GLEH

Compact chassis size

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

Compact depth fits the grid ceiling

Dimensions (Panel size)   (Unit : mm)

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

Wide airflow range

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

Triangle design

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

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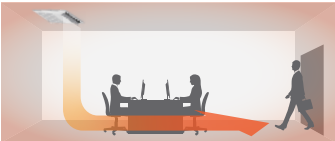
Note: This is a conceptual drawing. Air conditioning performance may vary depending on installation, room size, and the distance from the wall.

Low noise operation

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

Specifications

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

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

Optional parts

IR Receiver Unit: UTY-TRHX
Cassette Grille: UTG-UNGA-W (007/009/012), UTG-UNGB-W (014/018/024)
External Power Supply Unit: UTZ-GXX

Flexible Installation

The L-shaped pipe kit allows for more flexible installation.

Equipped with a built-in drain pump as standard, which enables a maximum pipe height difference of 700 m from the ceiling.

Ceiling panel

Maximum
700mm

Dimensions (Unit: mm)

Min. 20
Service access*
Min. 400

Ceiling openings **b**

295 Bolt pitch
113
570 Indoor unit
590 Ceiling openings
620
a

Control box

Drain port Gas pipe

198
176
133

Hanger
22

Liquid pipe

Drain up
Max. 700

Bolt pitch **c**
Indoor unit **d**

40.5 105

105
40.5

Fresh air inlet
Ø100

	AUXV 004 / 007 / 009 / 012 GLEH	AUXV 014 / 018 / 024 GLEH
a	950	1,360
b	920	1,330
c	752	1,152
d	785	1,190

*The design of the service access depends on the installation method. Refer to the installation manual for more information.

INDOOR UNITS

# 3D Flow Cassette

DC FAN

3 Air Outlet Ports can be controlled individually

Using the "Comfortable airflow setting" function allows the left and right air outlet ports and the wide center air outlet ports to automatically create a comfortable space for improved comfort.

Temperature distribution during cooling and heating (when set to comfortable airflow)

Cooling
When cooling operation is stable with an outside air temperature of 35°C, a set temperature of 18°C and an air volume set to "Hi" in a 40m² environmental our test room for the AUXS024GLEH

Heating
When heating operation is stable with an outside air temperature of 7°C, a set temperature of 30°C and an air volume set to "Hi" in a 40m² environmental our test room for the AUXS024GLEH

WORLD'S FIRST *1

Maximum rotation angle **100°**

Side air outlet port
Center air outlet port
Side air outlet port
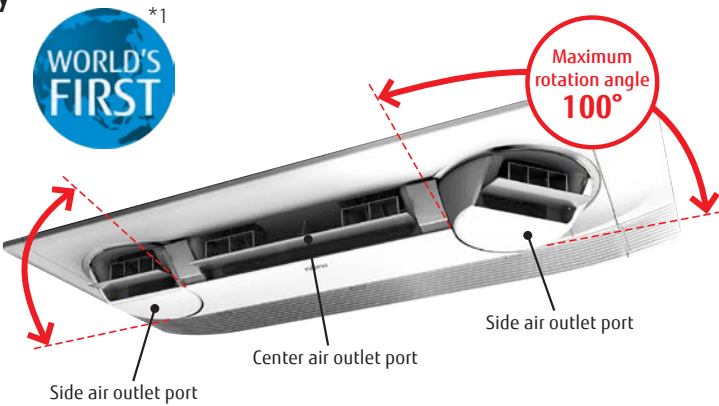
*1: Announced 2018. In room air conditioner for the home (our company's investigation)

Individual airflow setting

Equipped with an "Individual airflow setting" function that optimizes the airflow setting in accordance with the installation location.

Suitably setting the side air outlet ports to match how the space is used achieves air conditioning with no waste.

Optimum airflow control for improved comfort is achieved even for long rooms.
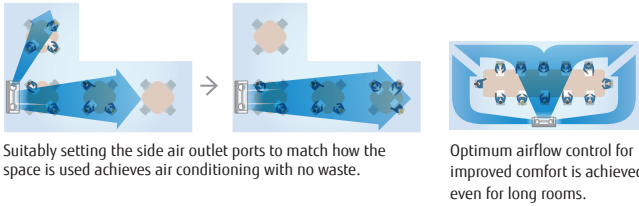
Individual air outlet port control

"Individual airflow setting" is possible using the Wired Remote Controller (Touch Panel) and Central Remote Controller*. The airflow of the respective air outlet ports can be individually set.

Wired Remote Controller (Touch Panel)
UTY-RNRGZ5

Central Remote Controller
UTY-DCGGZ3

*Wired Remote Controller (Touch Panel) (UTY-RNRYZ5) and Central remote controller (UTY-DCGYZ3) only

High Energy Saving

The "New structural design" featuring large intake and smooth output reduces air blowing loss to achieve top class energy saving.

Efficient air outlet port

Expansion of air return port area

Low power consumption 20 w*

*: 018 model
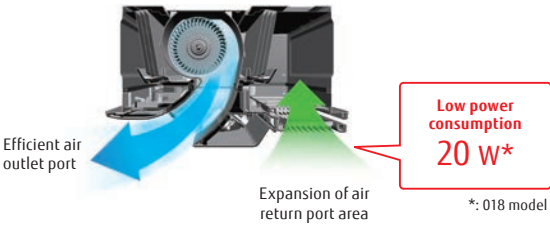
Model: AUXS018GLEH / AUXS024GLEH

Specifications

Model name			AUXS018GLEH	AUXS024GLEH
Power source			Single phase, ~230V, 50Hz	
Capacity	Cooling	kW	5.60	7.10
	Heating		6.30	8.00
Input power		W	20/28	34 / 43
Airflow rate*	High	m³/h	750 / 870	950 / 1,040
	Med-High		710 / 830	890 / 990
	Med		690 / 780	860 / 930
	Med-Low		660 / 740	810 / 880
	Low		630 / 700	770 / 840
	Quiet		540 / 540	540 / 540
Sound pressure level*	High	dB (A)	38 / 41	43 / 46
	Med-High		36 / 40	42 / 45
	Med		35 / 39	41 / 43
	Med-Low		35 / 37	40 / 42
	Low		33 / 36	38 / 40
	Quiet		29 / 29	29 / 29
Dimensions (H × W × D)		mm	200 × 1,240 × 500	200 × 1,240 × 500
Weight		kg	25	25
Connection pipe diameter	Liquid (Flare)	mm	6.35	9.52
	Gas (Flare)		12.70	15.88
Drain hose diameter (I.D./O.D.)			25 / 32	
Cassette Grille	Model name		UTG-USGA-W	
	Dimensions (H×W×D)	mm	85 × 1,350 × 580	
	Weight	kg	11.5	

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].

*: This value is "cooling operation / heating operation".

Optional parts

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

Dimensions (Unit: mm)

1,350
1,300 to 1,320: Ceiling openings
Drain port
Control box
Liquid pipe
Gas pipe
580
530 to 550 : Ceiling openings
500: Indoor unit
460: Bolt pitch

1,222: Bolt pitch
1,182: Indoor unit
Drain up
Hanger
23
250
50
Max. 850
85 204

Compact Cassette
Grid type

DC FAN

Model: AUXB007GLEH / AUXB009GLEH / AUXB012GLEH
AUXB014GLEH / AUXB018GLEH / AUXB024GLEH

AUXB09GATH / AUXB12GATH / AUXB14GATH
AUXB18GATH / AUXB24GATH

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 620 mm × 620 mm grid ceiling.

620 mm
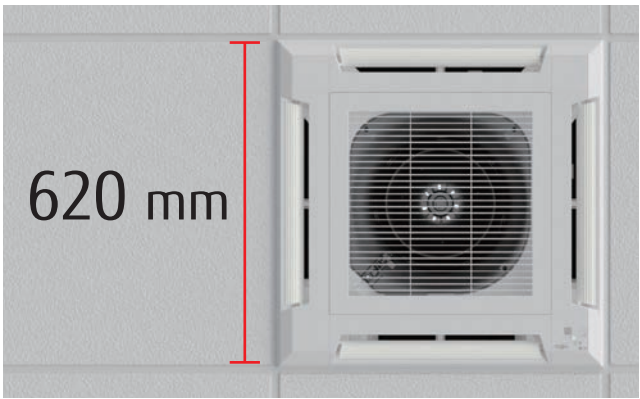
Easy maintenance

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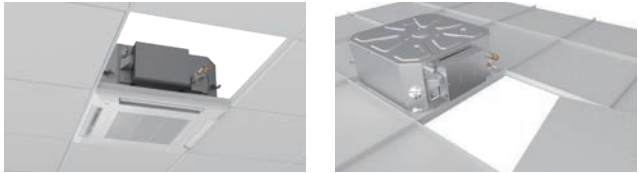
The air inlet grill can be installed in various directions, so maintenance is easy.

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.

High ceiling mode

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

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

Specifications

Model name			AUXB007GLEH	AUXB009GLEH AUXB09GATH	AUXB012GLEH AUXB12GATH	AUXB014GLEH AUXB14GATH	AUXB018GLEH AUXB18GATH	AUXB024GLEH AUXB24GATH
Power source			Single phase, ~230V, 50Hz					
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating		2.8	3.2	4.1	5.0	6.3	8.0
Input power		W	25	25	29	35	36	84
Airflow rate	High	m³/h	540	550	600	680	710	1,030
	Med-High*1		500	520	560	620	660	910
	Med		460	480	520	560	590	790
	Med-Low*1		420	440	480	500	520	680
	Low		390	400	430	440	460	560
	Quiet*1		350	350	390	390	400	450
Sound pressure level	High	dB (A)	34	35	37	38	41	50
	Med-High*1		32	33	34	37	39	46
	Med		30	31	33	34	36	43
	Med-Low*1		28	29	31	32	33	39
	Low		27	27	29	30	30	35
	Quiet*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
Weight		kg	15	15	15	15	17	17
Connection pipe diameter	Liquid (Flare)	mm	6.35	6.35	6.35	6.35	6.35 / 9.52*2	9.52
	Gas (Flare)		9.52 / 12.70*2	9.52 / 12.70*2	12.70	12.70	12.70 / 15.88*2	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: AUXB***GLEH only
*2: GLEH / GATH

Optional parts

Air Outlet Shutter Plate: UTR-YDZB
Flesh Air Intake Kit: UTZ-VXAA
Insulation Kit for High Humidity: UTZ-KXGC
Casette Grille: UTG-UFGE-W
External Power Supply Unit: UTZ-GXXC (AUXB***GLEH)

Ceiling panel

Maximum **700**mm

Dimensions (Unit: mm)

620
620

580 to 610: Ceiling openings
580 to 610: Ceiling openings
570: Indoor unit
540 : Bolt pitch
A →
Drain hose
B
Gas pipe
Liquid pipe

150 to 200
Indoor unit
Service access
Min. 450
Min. 450

View A
285
148
Drain up
Max. 700
Ceiling

View B
570: Indoor unit
530 : Bolt pitch
262
215
19
Control box

INDOOR UNITS

Compact Cassette
Standard type

DC FAN

Model: AUXB007GLEH / AUXB009GLEH / AUXB012GLEH
AUXB014GLEH / AUXB018GLEH / AUXB024GLEH

AUXB09GATH / AUXB12GATH / AUXB14GATH
AUXB18GATH / AUXB24GATH

2-stage turbo fan

High efficiency design by 2 stage structure

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

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

Heat exchange efficiency **20 %UP**

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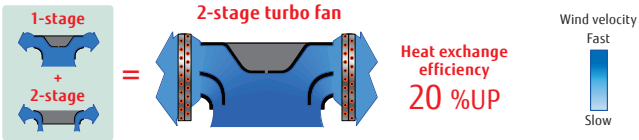
Previous turbo fan
In the case of a previous fan, the air outlet range was narrow as the airflow moved to the motor side which meant the velocity of air passing through the heat exchanger was uneven.

Quiet quality

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

Adoption of laminar wing

Quiet

Spin direction
Airflow direction

Laminar wing
Airflow runs through smoothly along the laminar wing

Quiet
No airflow separation
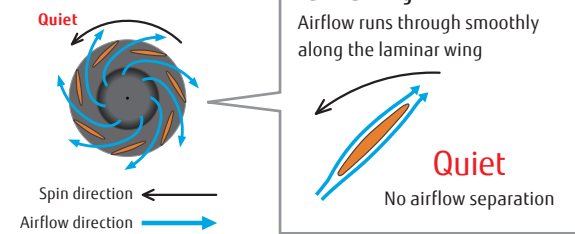
Improvement of the airflow distribution

1
A
B
C
D
3
2
Grille cover
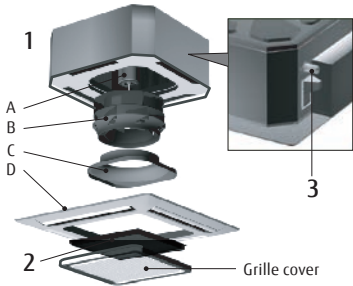
1. Maintenance of fan motor and fan

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

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

2. Air filter : standard equipment

3. Adaptation of transparent drainage parts

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

High ceiling mode

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

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

Compact design

Worlds first 24,000 Btu model in the compact cassette category
(Easy installation by taking off ceiling panel of 600 x 600 size)

570mm
570mm

Specifications

Model name			AUXB007GLEH	AUXB009GLEH AUXB09GATH	AUXB012GLEH AUXB12GATH	AUXB014GLEH AUXB14GATH	AUXB018GLEH AUXB18GATH	AUXB024GLEH AUXB24GATH
Power source			Single phase, ~230V, 50Hz					
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating		2.8	3.2	4.1	5.0	6.3	8.0
Input power		W	25	25	29	35	36	84
Airflow rate	High	m³/h	540	550	600	680	710	1,030
	Med-High*1		500	520	560	620	660	910
	Med		460	480	520	560	590	790
	Med-Low*1		420	440	480	500	520	680
	Low		390	400	430	440	460	560
	Quiet*1		350	350	390	390	400	450
Sound pressure level	High	dB (A)	34	35	37	38	41	50
	Med-High*1		32	33	34	37	39	46
	Med		30	31	33	34	36	43
	Med-Low*1		28	29	31	32	33	39
	Low		27	27	29	30	30	35
	Quiet*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
Weight		kg	15	15	15	15	17	17
Connection pipe diameter	Liquid (Flare)	mm	6.35	6.35	6.35	6.35	6.35 / 9.52*2	9.52
	Gas (Flare)		9.52 / 12.70*2	9.52 / 12.70*2	12.70	12.70	12.70 / 15.88*2	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: AUXB***GLEH only
*2: GLEH / GATH

Optional parts

Air outlet shutter plate : UTR-YDZB
Insulation kit for high humidity: UTZ-KXGC
Fresh air intake kit: UTZ-VXAA
Casette Grille: UTG-UFGC-W
External Power Supply Unit: UTZ-GXXC (AUXB***GLEH)
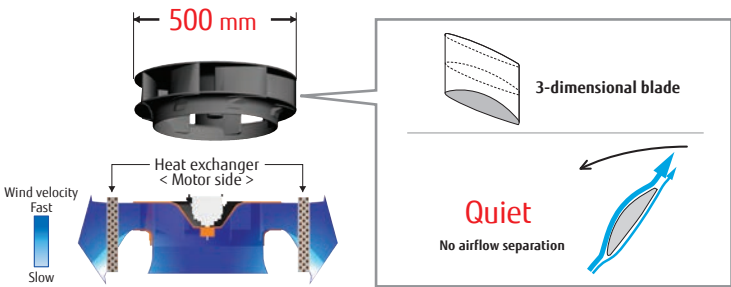
Ceiling panel
Maximum **700mm**

Dimensions (Unit: mm)

530 (Bolt pitch)
540 (Bolt pitch) (Indoor unit)
□570 (Indoor unit)
□590~660 (Ceiling opening)
700
75
135
250
Top view
700
Bottom view
30
49
Side view
135
250
40
99
102
146
245
40
108
30
222
116
Control box
Liquid pipe Gas pipe
Side view
Ceiling
58
124
262

INDOOR UNITS

Cassette Slim type
4-way Flow

DC FAN

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.

500 mm

3-dimensional blade

Heat exchanger < Motor side >

Wind velocity Fast / Slow

Quiet
No airflow separation

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

450 mm

Previous blade

Heat exchanger < Motor side >

Separation phenomenon of airflow causes noise

Uneven airflow

← : 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 airflow distribution.

Bottom view

Front part   Ceiling

Rear part

Round louver

Much less temperature irregularity happens by spreading airflow widely

Adjustment of hanger position is possible after installation

Detachable Grille corner

Adjustment can be done just taking off the corner part
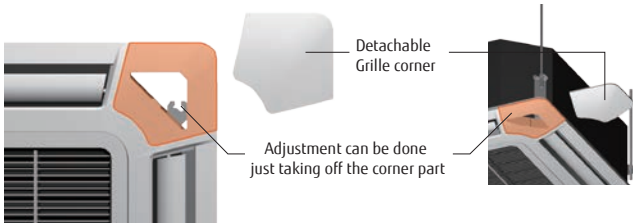
High ceiling mode

This cassette can be installed up to a height of 3.5 m.

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

Model: AUXD18GALH / AUXD24GALH

Specifications

Model name			AUXD18GALH	AUXD24GALH
Power source			Single phase, ~230V, 50Hz	
Capacity	Cooling	kW	5.6	7.1
	Heating		6.3	8.0
Input power		W	39	46
Airflow rate	High	m³/h	1,150	1,280
	Med		940	1,040
	Low		870	870
Sound pressure level	High	dB (A)	36	38
	Med		30	33
	Low		29	29
Dimensions (H × W × D)		mm	246 × 840 × 840	246 × 840 × 840
Weight		kg	22	22
Connection pipe diameter	Liquid (Flare)	mm	9.52	9.52
	Gas (Flare)		15.88	15.88
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].

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
Cassette Grille : UTG-UGGA-W

Ceiling panel

Maximum **850mm**

Dimensions (Unit: mm)

IR receiver (Option)   950   950

(Control) Box

142   Ceiling   142

796 Hanging bolt position

□ 840 : Indoor unit   607

699 Hanging bolt position / Ceiling opening   420

Drain hose   358

358   278   60   40

200   10   Liquid pipe   Gas pipe   256   44   140

Wire hole

Cassette Large type
4-way Flow

DC FAN

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.

500 mm

3-dimensional blade

Heat exchanger < Motor side >

Wind velocity
Fast

Slow

Quiet

No airflow separation

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

450 mm

Previous blade

Heat exchanger < Motor side >

Separation phenomenon of airflow causes noise

Uneven airflow

← : 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 airflow distribution.

Bottom view

Front part   Ceiling

Rear part

Round louver

Much less temperature irregularity happens by spreading airflow widely

Adjustment of hanger position is possible after installation

Detachable Grille corner

Adjustment can be done just taking off the corner part

High ceiling mode

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

Model code	The maximum height from floor to ceiling (m)	
	Standard mode	High ceiling mode
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

Model: AUXA18GALH / AUXA24GALH / AUXA30GALH
AUXA34GALH / AUXA36GALH / AUXA45GALH
AUXA54GALH

Specifications

Model name			AUXA18GALH	AUXA24GALH	AUXA30GALH	AUXA34GALH	AUXA36GALH	AUXA45GALH	AUXA54GALH
Power source			Single phase, ~230V, 50Hz						
Capacity	Cooling	kW	5.6	7.1	9.0	10.0	11.2	14.0	16.0
	Heating		6.3	8.0	10.0	11.2	12.5	16.0	18.0
Input power		W	51	51	59	77	80	99	119
Airflow rate	High	m³/h	1,420	1,420	1,600	1,750	1,800	1,900	2,000
	Med		1,230	1,230	1,300	1,300	1,300	1,370	1,370
	Low		1,100 / 1,000*	1,100 / 1,000*	1,100	1,100	1,100	1,100	1,100
Sound pressure level	High	dB (A)	40	40	40	43	44	46	47
	Med		36	36	38	38	38	39	39
	Low		33 / 31*	33 / 31*	33	33	33	33	33
Dimensions (H × W × D)		mm	288 × 840 × 840	288 × 840 × 840	288 × 840 × 840	288 × 840 × 840	288 × 840 × 840	288 × 840 × 840	288 × 840 × 840
Weight		kg	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
	Gas (Flare)		15.88	15.88	15.88	15.88	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].

*: This value is under cooling operation.

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
Cassette Grille :   UTG-UGGA-W

Ceiling panel

Maximum 850mm

Dimensions (Unit: mm)

IR receiver (Option)

950

950

796
Hanging bolt position

□ 840 : Indoor unit

607

420

699
Hanging bolt position
Ceiling opening
860 to 910

358

Drain hose

(Control) Box

142   Ceiling   142

358   278   60
40

200

10

Liquid pipe   Gas pipe

289
140
44

Wire hole

INDOOR UNITS

Cassette
Slim type
Circular Flow

DC FAN

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.

Ø7 mm high density heat exchanger

New DC fan motor

High efficient turbo fan

Seamless airflow louver

Uniform temperature air conditioning

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

Comfortable!

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-RNRGZ5) and Central Remote Controller(UTY-DCGGZ2) 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

Occupancy 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-RNRGZ5) and Central Remote Controller(UTY-DCGGZ2) only

Occupancy sensor (Option)

2 modes can be selected

| Auto saving | Power is saved while people are away. |
| Auto OFF | Operation stops after people go out. |

Model: AUXM018GLEH / AUXM024GLEH / AUXM030GLEH
AUXM018GTAH / AUXM024GTAH

Black panel

Specifications

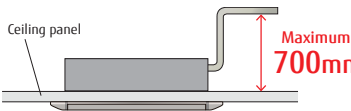| Model name			AUXN009GLAH	AUXN012GLAH	AUXN014GLAH	AUXM018GLEH AUXM018GTAH	AUXM024GLEH AUXM024GTAH	AUXM030GLEH
Power source			Single phase, ~230V, 50Hz					
Capacity	Cooling	kW				5.6	7.1	9.0
	Heating					6.3	8.0	10.0
Input power		W				20	25	49
Airflow rate	High	m³/h				1,050	1,120	1,470
	Med-High					930	1,050	1,160
	Med					900	930	1,070
	Med-Low					870	900	930
	Low					810	870	900
	Quiet					780	780	780
Sound pressure level	High	dB (A)				33	35	40
	Med-High					32	33	36
	Med					31	32	34
	Med-Low					30	31	32
	Low					29	30	31
	Quiet					28	28	28
Dimensions (H × W × D)		mm	246×840×840	246×840×840	246×840×840	246×840×840	246×840×840	246×840×840
Weight		kg				24.0	24.5	24.5
Connection pipe diameter	Liquid (Flare)	mm				6.35	9.52	9.52
	Gas (Flare)					12.70	15.88	15.88
Drain hose diameter (I.D./O.D.)			25 / 32					
Cassette Grille	Model name		UTG-UKGC-W /UTG-UKGA-B (Black)					
	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].
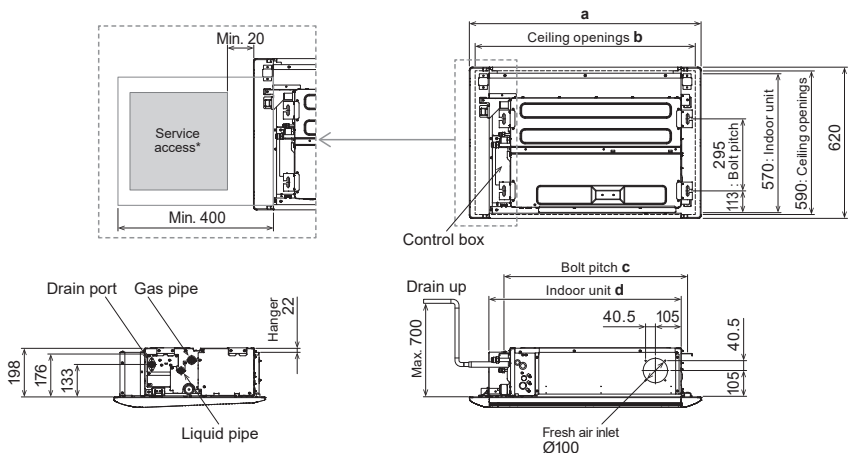
Optional parts

Occupancy 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
Casette Grille: UTG-UKGC-W, UTG-UKGA-B (Black)

Insulation Kit for High Humidity: UTZ-KXRA
External Power Supply Unit: UTZ-GXXC (AUXM***GLEH, AUXK***GLEH)
IR Receiver unit: UTY-LBHXD

Dimensions (Unit: mm)

950

950

860 to 910: Ceiling openings

860 to 910: Ceiling openings

840: Indoor unit

768: Bolt pitch

Drain hose

Gas pipe

Liquid pipe

Control box

View A

56

420

Drain hose

Ceiling

View B

840: Indoor unit

796: Bolt pitch

256

200

10

View C

237

40

40

164

Fresh air inlet Ø95

INDOOR UNITS

Cassette Large type
Circular Flow

Model: AUXK018GLEH / AUXK024GLEH / AUXK030GLEH
AUXK034GLEH / AUXK036GLEH / AUXK045GLEH
AUXK054GLEH

AUXK030GTAH / AUXK036GTAH / AUXK045GTAH
AUXK054GTAH

Black panel

DC FAN

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.

Ø7 mm high density heat exchanger
New DC fan motor
High efficient turbo fan
Seamless airflow louver

Uniform temperature air conditioning

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

Comfortable!

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-RNRGZ5) and Central Remote Controller(UTY-DCGGZ2) 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

Occupancy 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-RNRGZ5) and Central Remote Controller(UTY-DCGGZ2) only

Occupancy sensor (Option)

2 modes can be selected

Auto saving — Power is saved while people are away.

Auto OFF — Operation stops after people go out.

Specifications

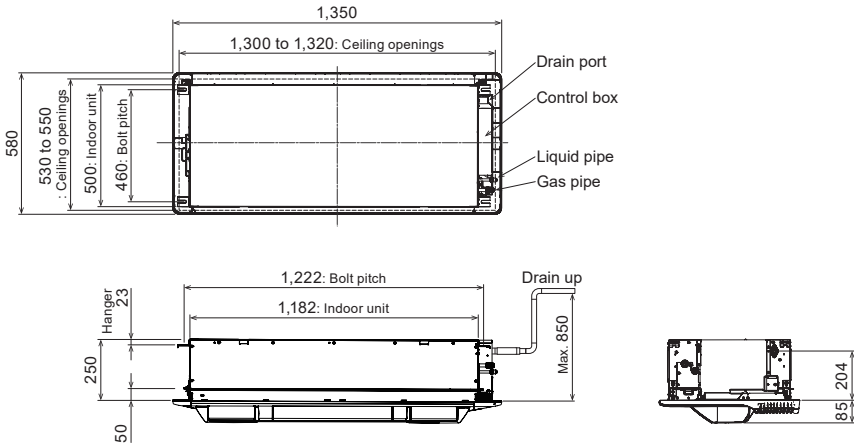| Model name			AUXK018GLEH	AUXK024GLEH	AUXK030GLEH AUXK030GTAH	AUXK034GLEH	AUXK036GLEH AUXK036GTAH	AUXK045GLEH AUXK045GTAH	AUXK054GLEH AUXK054GTAH
Power source									
Capacity	Cooling	kW	5.6	7.1	9.0	10.0	11.2	14.0	16.0
	Heating		6.3	8.0	10.0	11.2	12.5	16.0	18.0
Input power		W	40	40	47	47	61	89	116
Airflow rate	High	m³/h	1,420	1,420	1,440	1,440	1,620	1,820	2,040
	Med-High		1,360	1,360	1,400	1,400	1,500	1,590	1,800
	Med		1,300	1,300	1,340	1,340	1,400	1,500	1,590
	Med-Low		1,270	1,270	1,300	1,300	1,340	1,400	1,440
	Low		1,200	1,200	1,280	1,280	1,280	1,300	1,300
	Quiet		1,150	1,150	1,150	1,150	1,150	1,150	1,150
Sound pressure level	High	dB (A)	38	38	39	39	41	44	47
	Med-High		37	37	38	38	40	42	45
	Med		36	36	37	37	38	40	42
	Med-Low		35	35	36	36	37	38	39
	Low		34	34	35	35	35	36	36
	Quiet		33	33	33	33	33	33	33
Dimensions (H × W × D)		mm	288×840×840	288×840×840	288×840×840	288×840×840	288×840×840	288×840×840	288×840×840
Weight		kg	26.5	26.5	29.5	29.5	29.5	29.5	29.5
Connection pipe diameter	Liquid (Flare)	mm	6.35	9.52	9.52	9.52	9.52	9.52	9.52
	Gas (Flare)		12.70	15.88	15.88	15.88	15.88	15.88	15.88
Drain hose diameter (I.D./O.D.)			25 / 32						
Cassette Grille	Model name		UTG-UKGC-W /UTG-UKGA-B (Black)						
	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.
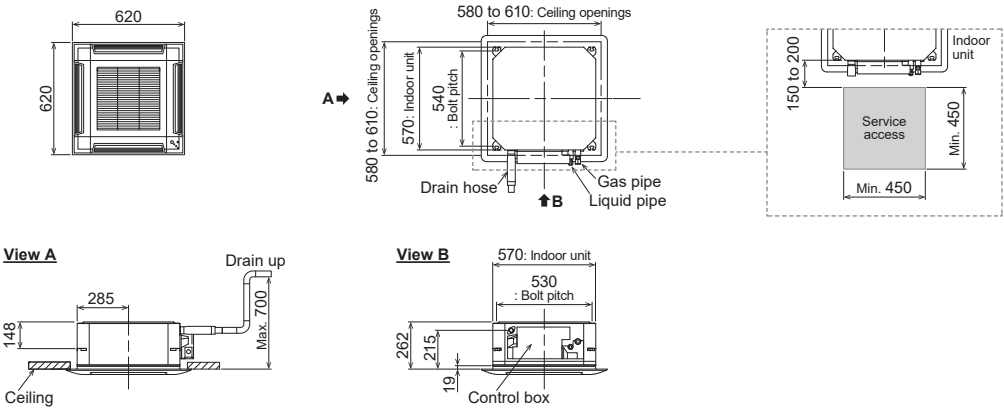Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

Optional parts

Occupancy Sensor Kit:	UTY-SHZXC	Fresh Air Intake Kit:	UTZ-VXRA	Insulation Kit for High Humidity:	UTZ-KXRA
Wide Panel:	UTG-AKXA-W	Air Outlet Shutter Plate:	UTR-YDZK	External Power Supply Unit:	UTZ-GXXC (AUXM***GLEH, AUXK***GLEH)
Panel Spacer:	UTG-BKXA-W	Casette Grille:	UTG-UKGC-W, UTG-UKGA-B (Black)	IR Receiver unit:	UTY-LBHXD

Dimensions (Unit: mm)

950
950
860 to 910: Ceiling openings
860 to 910: Ceiling openings
840: Indoor unit
768: Bolt pitch
Drain hose
Control box
Gas pipe
Liquid pipe

View A
98
420
Drain hose
Ceiling

View B
840: Indoor unit
796: Bolt pitch
298
200
10

View C
237
40
164
40
Fresh air inlet Ø95

INDOOR UNITS

Mini Duct

DC FAN
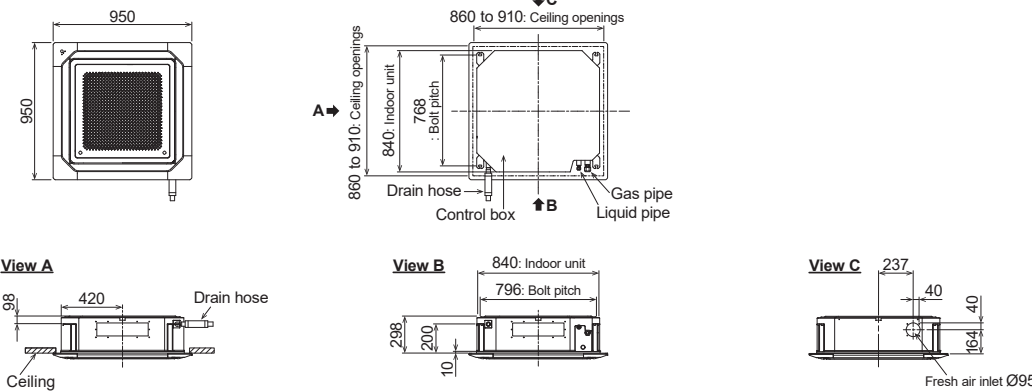
Large living space available

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

(Unit: mm)

450 / 198 / 225* / 600*

*: Minimum installation dimension
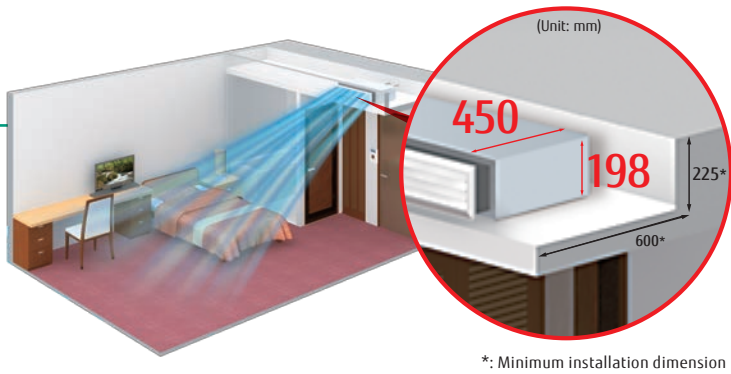
Optimum airflow path and low noise operation

Low noise is realized drastically by stabilized airflow design

Air stabilizer

High-efficiency DC fan motor
Lower power consumption
V-shaped heat exchanger
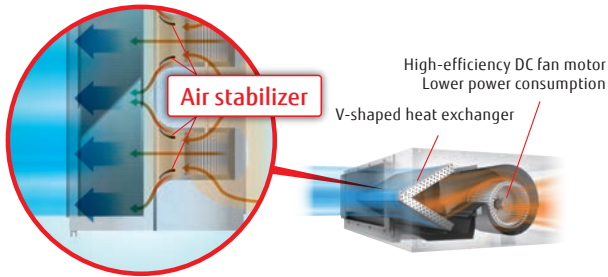
6-speed control*

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

Low noise
21 dB(A)
at 7/9 models

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

High / Med / Low
Med-High / Med-Low / Quiet

* Compatible Remote Controller is as follows:
UTY-RNRGZ5 / UTY-RLRG / UTY-RSRG / UTY-RHRG / UTY-DCGGZ2 / UTY-DTGGZ1 / UTY-ALGXZ1 / UTY-APGXZ1
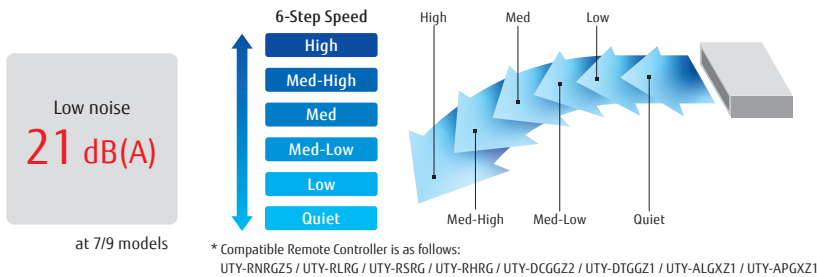
Easy design and maintenance for drain

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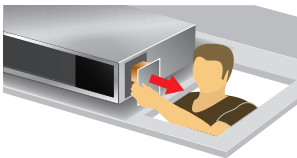
Parts can be replaced from the side of the body where maintenance is easier

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Model: (With drain pump)
ARXK007GLGH / ARXK009GLGH / ARXK012GLGH
ARXK014GLGH / ARXK018GLGH / ARXK024GLGH

ARXK007/009/012/014GLGH | ARXK018GLGH | ARXK024GLGH
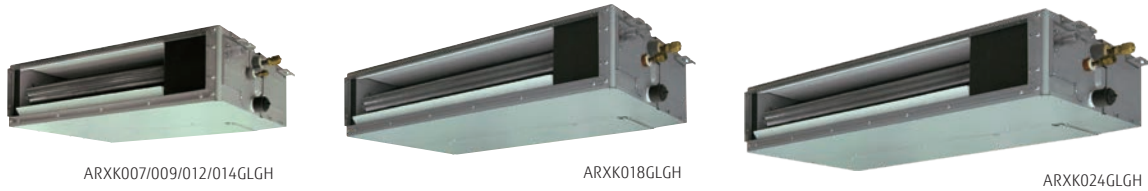
Specifications

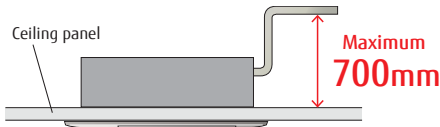| Model name			ARXK007GLGH	ARXK009GLGH	ARXK012GLGH	ARXK014GLGH	ARXK018GLGH	ARXK024GLGH
Power source			Single phase, ~230V, 50Hz					
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating		2.8	3.2	4.0	5.0	6.3	8.0
Input power		W	28	28	35	66	73	80
Airflow rate	High	m³/h	460	460	550	760	930	1,160
	Med-High		440	440	520	660	840	1,060
	Med		420	420	480	560	740	960
	Med-Low		400	400	450	490	640	860
	Low		370	370	410	410	540	750
	Quiet		340	340	340	340	470	610
Static pressure range		Pa	0 to 30	0 to 30	0 to 30	0 to 50	0 to 50	0 to 50
Standard static pressure			10	10	10	15	15	15
Sound pressure level	High	dB (A)	26	26	29	34	33	32
	Med-High		25	25	27	31	30	30
	Med		24	24	26	28	28	28
	Med-Low		23	23	25	26	26	27
	Low		22	22	24	24	24	25
	Quiet		21	21	22	22	22	22
Dimensions (H × W × D)		mm	198 × 700 × 450	198 × 700 × 450	198 × 700 × 450	198 × 700 × 450	198 × 900 × 450	198 × 1,100 × 450
Weight*		kg	15.5 / 15.0	15.5 / 15.0	16.0 / 15.5	16.0 / 15.5	19.0 / 18.5	22.5 / 22.0
Connection pipe diameter	Liquid (Flare)	mm	6.35	6.35	6.35	6.35	6.35	9.52
	Gas (Flare)		9.52	9.52	12.70	12.70	12.70	15.88
Drain hose diameter (I.D./O.D.)			25 / 32					

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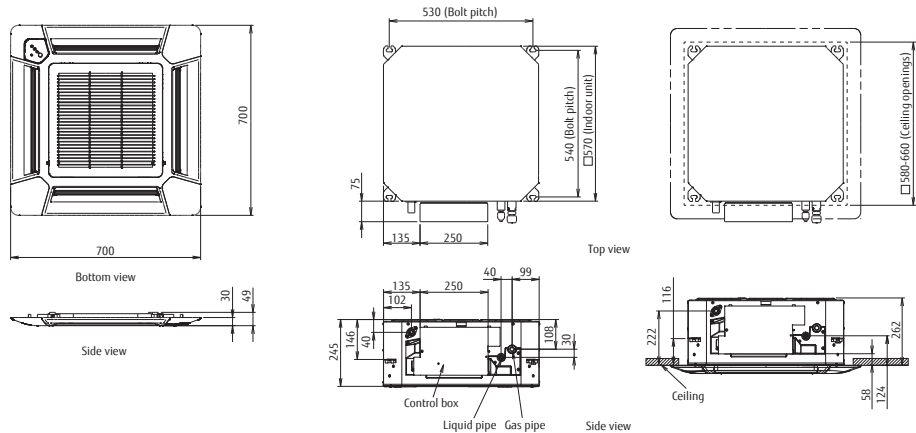Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

Optional parts

Remote Sensor Unit : UTY-XSZXZ1
IR Receiver Unit : UTY-TRHX
Auto Louver Grille Kit : UTD-GXTA-W (for 7/9/12/14 models)
UTD-GXTB-W (for 18 model)
UTD-GXTC-W (for 24 model)
External power supply unit : UTZ-GXXC

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)

Dimensions (Unit: mm)

a / b / Air inlet

c / d / Air / Service access* / Min. 100 / 450 / 295 / 20 / Min. 400 / Control box

Hanger 19

e / f / Drain up / Max. 700 / 150 / 78 / 57 / Air outlet

Drain port / Gas pipe / 198 / Liquid pipe / Drain port
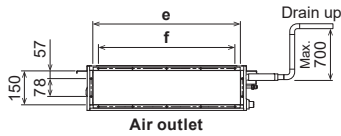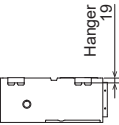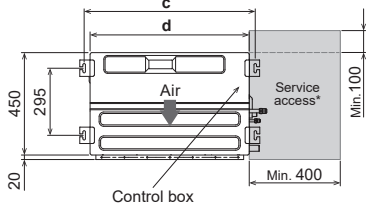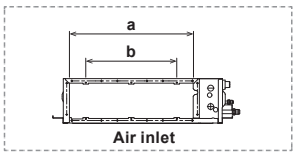
	ARXK 007-014GLGH	ARXK018GLGH	ARXK024GLGH
a	575	775	975
b	P200×2=400	P200×3=600	P200×4=800
c	752	952	1,152
d	700	900	1,100
e	650	850	1,050
f	P100×6=600	P100×8=800	P100×10=1,000

*The design of the service access depends on the installation method. Refer to the installation manual for more information.

INDOOR UNITS

Low Static Pressure Duct / Concealed Floor

DC FAN

Model: ARXB07GALH / ARXB09GALH / ARXB12GALH
ARXB14GALH / ARXB18GALH

Concealed Floor

ARXB07/09GALH

ARXB12/14/18GALH
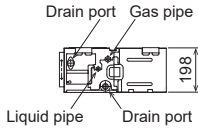
Low noise level

A low noise level has been achieved for each capacity

Model	07	09	12	14	18
Static pressure range	Pa		0 to 50			
Noise level (Low speed)	dB(A)	24	27	25	30	30

Air-intake

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

Bottom side   Back side
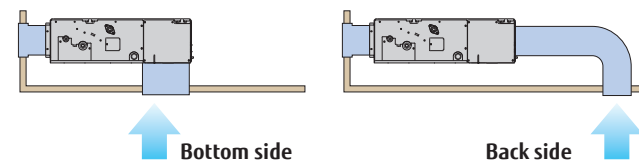
Flexible installation

Ceiling concealed
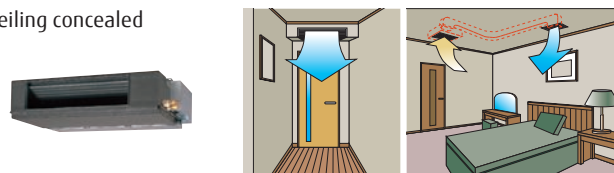
Floor concealed

Two-direction drain piping
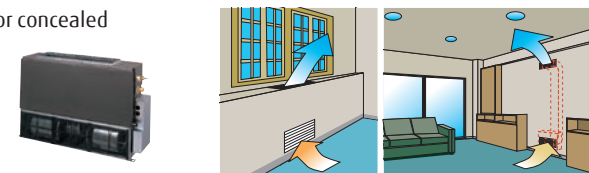
Duct indoor unit
Two-direction drain piping

Filter (Accessory)

ARXB07/09   (2 pcs.)

ARXB12/14/18   (3 pcs.)

Specifications

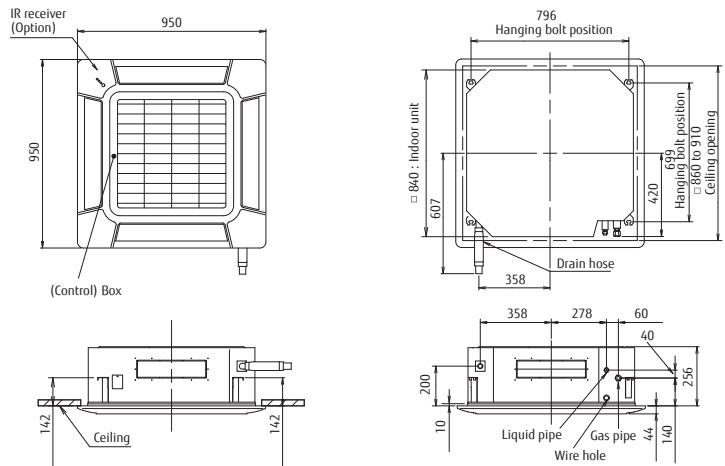| Model name			ARXB07GALH	ARXB09GALH	ARXB12GALH	ARXB14GALH	ARXB18GALH
Power source			Single phase, ~230V, 50Hz				
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6
	Heating		2.8	3.2	4.0	5.0	6.3
Input power		W	46	55	63	90	96
Airflow rate	High	m³/h	370	440	590	800	890
	Med		310	370	500	750	810
	Low		280	340	450	700	730
Static pressure range		Pa	0 to 50	0 to 50	0 to 50	0 to 50	0 to 50
Standard static pressure			25	25	25	25	25
Sound pressure level	High	dB (A)	29	31	30	33	36
	Med		26	29	28	32	34
	Low		24	27	25	30	30
Dimensions (H × W × D)		mm	217 × 663 × 595	217 × 663 × 595	217 × 953 × 595	217 × 953 × 595	217 × 953 × 595
Weight		kg	15	15	22	22	23
Connection pipe diameter	Liquid (Flare)	mm	6.35	6.35	6.35	6.35	9.52
	Gas (Flare)		12.70	12.70	12.70	12.70	15.88
Drain hose diameter (I.D./O.D.)			25 / 32				

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

Optional parts

Remote Sensor Unit : UTY-XSZXZ1
IR Receiver Unit :   UTB-YWC
Drain Pump Unit :   UTZ-PX1BBA

Compact design

Ultra-slim duct air conditioner for easy installation
Slim size (217 mm) allows installation even where the space above the ceiling is narrow.

Height **217** mm
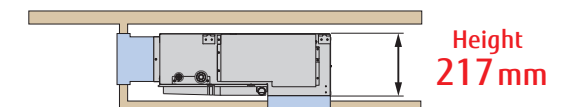
Dimensions (Unit: mm)

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

(   ) : AR07/AR09

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

INDOOR UNITS

Slim Duct / Slim Concealed Floor
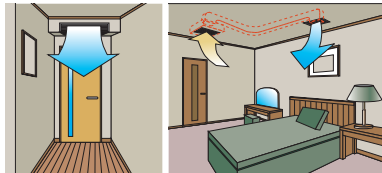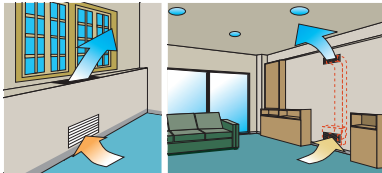
DC FAN

Model: (With drain pump)
ARXD007GLEH / ARXD009GLEH / ARXD012GLEH
ARXD014GLEH / ARXD018GLEH / ARXD024GLEH

ARXD07GATH / ARXD09GATH / ARXD12GATH
ARXD14GATH / ARXD18GATH / ARXD24GATH

Slim Concealed Floor
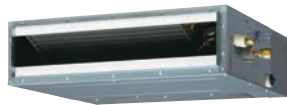
ARXD007/009/012/014GLEH
ARXD07/09/12/14GATH
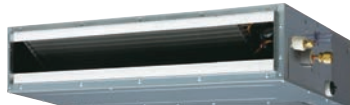
ARXD018GLEH
ARXD18GATH

ARXD024GLEH
ARXD24GATH

Specifications

Model name			ARXD007GLEH ARXD07GATH	ARXD009GLEH ARXD09GATH	ARXD012GLEH ARXD12GATH	ARXD014GLEH ARXD14GATH	ARXD018GLEH ARXD18GATH	ARXD024GLEH ARXD24GATH
Power source			Single phase, ~230V,					
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating		2.8	3.2	4.0	5.0	6.3	8.0
Input power		W	44	50	54	92	83	122
Airflow rate	High	m³/h	550	600	600	800	940	1,330
	Med-High*1		520	510	530	680	820	1,140
	Med		480	460	490	600	730	1,020
	Med-Low*1		410	420	450	520	630	900
	Low		370	370	410	440	540	780
	Quiet*1		320	320	340	340	470	610
Static pressure range		Pa	0 to 90	0 to 90	0 to 90	0 to 90	0 to 90	0 to 50
Standard static pressure			25	25	25	25	25	25
Sound pressure level	High	dB (A)	28	29	30	34	34	35
	Med-High*1		26	27	28	32	31	31
	Med		25	25	27	30	29	29
	Med-Low*1		24	24	26	28	27	27
	Low		22	22	24	25	25	24
	Quiet*1		21	21	22	22	23	21
Dimensions (H × W × D)		mm	198 × 700 × 620	198 × 700 × 620	198 × 700 × 620	198 × 700 × 620	198 × 900 × 620	198 × 1,100 × 620
Weight		kg	17	17	18	18	22	26
Connection pipe diameter	Liquid (Flare)	mm	6.35	6.35	6.35	6.35	6.35 / 9.52*2	9.52
	Gas (Flare)		9.52/12.70*2	9.52/12.70*2	12.70	12.70	12.70 / 15.88*2	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.
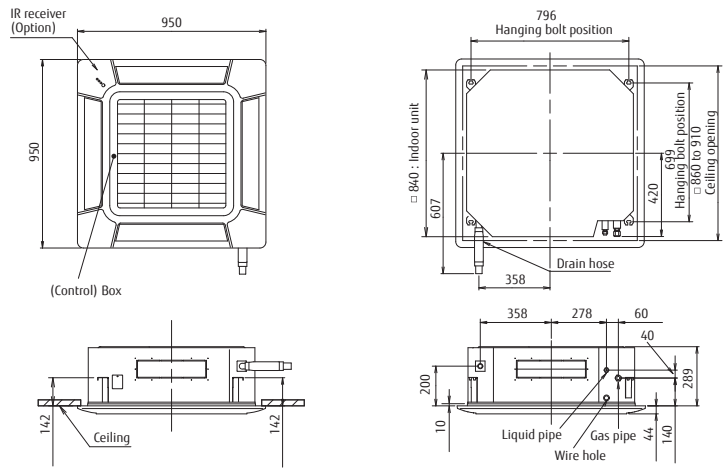Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

*1: ARXD***GLEH only
*2: GLEH / GATH

Slim design

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

Drain port

Height 198 mm
Built-in drain pump

Drain pump

Air-intake

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

Bottom side

Back side

Optional parts

Remote Sensor Unit : UTY-XSZXZ1
IR Receiver Unit : UTB-YWC (For ARXD**GATH), UTY-TRHX (For ARXD***GLEH)
Auto Louver Grille Kit: UTD-GXTA-W (for 7/9/12/14 models), UTD-GXTB-W (for 18 model)
UTD-GXTC-W (for 24 model)
External Power Supply Unit : UTZ-GXXC (ARXD***GLEH)

Drain hose provided as an accessory.

Maximum 850mm

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 90 Pa. The change of static pressure range is possible by remote controller.

Static pressure range

0 to 90 Pa

*24 model is 0 to 50 Pa

Filter (Accessory)

ARXB07/09/14/18

(2 pcs.)

ARXB24

(3 pcs.)

Dimensions (Unit: mm)

Air inlet

Control box
Service access*
Min. 10
Min. 400
Air
620
377

Hanger

Air outlet
Drain up
Max. 700
151 78 55
e
f

	ARXD007-014 ARXD07-14	ARXD018 ARXD18	ARXD024 ARXD24
a	574	774	974
b	P200×2=400	P200×3=600	P200×4=800
c	734	934	1,134
d	700	900	1,100
e	650	850	1,050
f	P100×6=600	P100×8=800	P100×10=1,000

*The design of the service access depends on the installation method. Refer to the installation manual for more information.

Liquid pipe
Gas pipe
Drain port
198
Drain port

INDOOR UNITS

Low / Medium Static Pressure Duct

Model: (Low Static Pressure Duct)
ARXB24GALH / ARXB30GALH
ARXB36GALH / ARXB45GALH

(Medium Static Pressure Duct)
ARXA024GLEH / ARXA030GLEH
ARXA036GLEH / ARXA045GLEH

ARXA24GBTH / ARXA30GBTH
ARXA36GBTH / ARXA45GBTH
ARGB054GTAH

DC FAN

Slim & Compact design

The slim and compact design of the indoor unit, with the control box mounted on the side of the unit, allows installation in narrow spaces.

1,200 → 1,135 mm
270 mm

Control box is now included as part of the main chassis

One touch operating and easy to install long life filter (Optional Parts)

Easy maintenance

See below for the case of rear suction type

Previous model → New model

1. Control box
2. Fan casing
3. Fan
4. Motor

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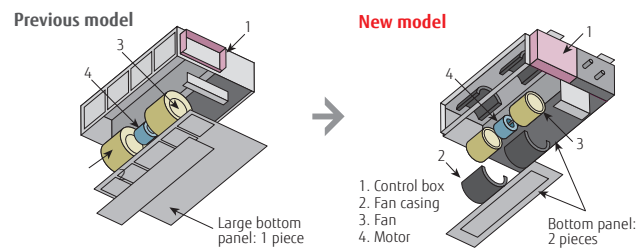
Structural improvement is attained by making the bottom panel two pieces, front and rear. The internal fan casing is also manufactured in two pieces, namely upper and lower. The maintenance of the motor and fan can be easily carried out by removing the rear panel and the lower part of the casing while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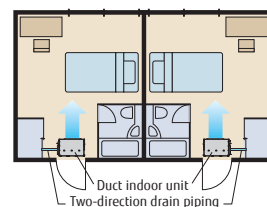
Installation styles

Embedded in Ceiling

Hanging from Ceiling

Two-direction drain piping

Duct indoor unit
Two-direction drain piping

Low energy consumption by high efficiency DC fan motor

Improved motor efficiency from previous model.

24 model
30 / 36 / 45 model
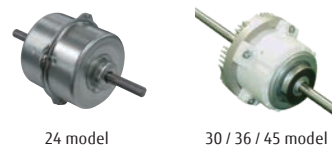
Selectable with a wide range of static pressure

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

Static pressure range
0 to 150 Pa
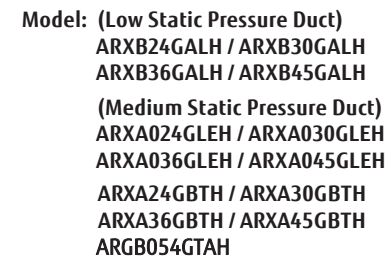
Specifications

Model name			ARXB24GALH	ARXB30GALH	ARXB36GALH	ARXB45GALH	ARGB054GTAH	ARXA024GLEH ARXA24GBTH	ARXA030GLEH ARXA30GBTH	ARXA036GLEH ARXA36GBTH	ARXA045GLEH ARXA45GBTH
Power source			Single phase, ~230V, 50Hz								
Capacity	Cooling	kW	7.1	9.0	11.2	14.0	16.0	7.1	9.0	11.2	14.0
	Heating		8.0	10.0	12.5	16.0	18.0	8.0	10.0	12.5	16.0
Input power		W	145	198	253	338	333	94	108	194	240
Airflow rate	High	m³/h	1,100	1,410	1,710	1,970	2,700	1,280	1,410	1,840	1,970
	Med-High*1		-	-	-	-	-	1,180	1,350	1,750	1,910
	Med		920	1,280	1,600	1,790	2,390	1,090	1,280	1,660	1,860
	Med-Low*1		-	-	-	-	-	1,000	1,240	1,600	1,780
	Low		810	1,150	1,470	1,670	1,470	920	1,190	1,530	1,710
	Quiet*1		-	-	-	-	-	840	1,150	1,470	1,640
Static pressure range		Pa	0 to 80	0 to 80	0 to 80	0 to 80	0 to 100	0 to 150	0 to 150	0 to 150	0 to 150
Standard static pressure			40	50	50	60	100	40	50	50	60
Sound pressure level	High	dB (A)	31	34	37	41	43	31	34	37	41
	Med-High*1		-	-	-	-	-	29	33	36	40
	Med		27	32	35	38	40	27	32	35	38
	Med-Low*1		-	-	-	-	-	26	31	35	38
	Low		25	29	33	36	30	24	30	34	37
	Quiet*1		-	-	-	-	-	23	29	33	36
Dimensions (H × W × D)		mm	270 × 1,135 × 700		270 × 1,135 × 700		300 × 1,400 × 700	270 × 1,135 × 700		270 × 1,135 × 700	
Weight		kg	39	42	42	42	47	36	40	40	40
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	19.05	19.05	19.05	15.88	15.88	15.88 / 19.05*2	15.88 / 19.05*2
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.

*1: ARXA***GLEH only
*2: GLEH / GBTH

Optional parts

Remote Sensor Unit : UTY-XSZXZ1
Long Life Filter : UTD-LF25NA (For ARXA**GLEH, ARXB**GBTH)
Flange (Square) : UTD-SF045T (For ARXA**GLEH, ARXB**GBTH)
Flange (Round) : UTD-RF204 (For ARXA**GLEH, ARXB**GBTH)

IR Receiver Unit UTB-YWC (For ARXB**GALH, ARXA**GBTH), UTY-TRHX (For ARXA**GLEH)
Drain Pump Unit : UTZ-PX1NBA
External Power Supply Unit: UTZ-GXXC (ARXA***GLEH)

Dimensions (Unit: mm)

1,015
Air inlet

Control box
P125×3= 375 120 P125×3= 375
Service access*
Min. 500
Min. 500
Air
1,135
1,177
477
700
40

Gas pipe
Liquid pipe
Hanger
Drain port

160 264 138 Ø205 hole
160
Air outlet

160
Ø160 121 270
Fresh air inlet Ø200
161

*The design of the service access depends on the installation method. Refer to the installation manual for more information.

INDOOR UNITS

High Static Pressure Duct

ARXC036/045/060GTEH

ARXC072/090GTEH

ARXC096GTEH

Model: ARXC036GTEH / ARXC045GTEH / ARXC060GTEH
ARXC072GTEH / ARXC090GTEH
ARXC096GTEH

Static pressure selection

By using DC fan motor, it is possible to change the static pressure range from 0 to 200Pa (036GTEH) / 250Pa (045 / 060GTEH) 300Pa (072 / 090 / 096GTEH).

Maximum **250** Pa (045 / 060GTEH)

Maximum **200** Pa (036GTEH)

Maximum **300** Pa (072 / 090GTEH)

Maximum **300** Pa (096GTEH)

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)

400 / 1,050 / 500 (036 / 045 / 060 models)

450 / 1,587 / 700 (072 / 090 models)

550 / 1,587 / 700 (096 model)
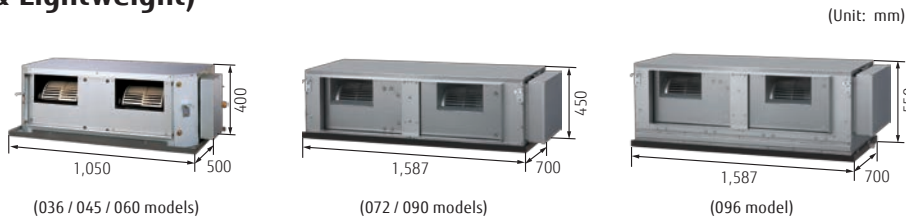
Low noise

036 / 045 / 060 models

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)
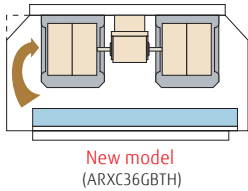
036 model : Plastic fan [42dB(A)]

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

Plastic fan Ø 225mm

Heat exchanger

500mm

Casing (Plastic)

400mm

Low energy consumption by high efficiency DC fan motor

Improved motor efficiency from previous model.

(036 / 045 / 060 models)

(072 / 090 / 096 models)

Specifications

Model name			ARXC036GTEH	ARXC045GTEH	ARXC060GTEH*	ARXC072GTEH*	ARXC090GTEH*	ARXC096GTEH*
Power source			Single phase, ~230V, 50Hz					
Capacity	Cooling	kW	11.2	14.0	18.0	22.4	25.0	28.0
	Heating		12.5	16.0	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 (101)	46 (101)	84	84	105
Connection pipe diameter	Liquid	mm	9.52 (Flare)	9.52 (Flare)	9.52 (Flare)	9.52 (Flare)	9.52(Flare)	9.52 (Brazing)
	Gas		15.88 (Flare)	15.88 (Flare)	15.88 (Flare)	19.05(Flare)	19.05(Flare)	22.22 (Brazing)
Drain hose diameter (I.D./O.D.)			25 / 32					

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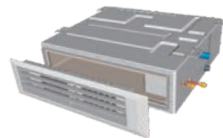Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

* 060 / 072 / 090 / 096 models cannot be connected to J-III / J-IIS Series.

Optional parts

Long-Life Filter : UTD-LF60KA (For 036 / 045 / 060 models)
IR Receiver Unit : UTY-TRHX

Remote Sensor Unit : UTY-XSZXZ1
External Power Supply Unit: UTZ-GXXC

Dimensions (Unit: mm)

Models: ARXC036/ARXC045/ARXC060

1,295
P100×2=1,200
210 / 316 / 53
Air inlet

1,440
1,400
Control box
25
850 / 781
Air
Service access*
Min. 700
25
P100×11=1,100
Min. 500 / Min. 700

*The design of the service access depends on the installation method. Refer to the installation manual for more information.

218
Fresh air inlet
158
139
40
160

1,162
277 / 210 / 25.5
Air outlet
Hanger 280

Liquid pipe
Gas pipe
Drain port
360

Models: ARXC072/ARXC090/ARXC096

1,250
Air inlet
Main Drain port
b

1,587
1,410
Control box
700 / 653
Air
Service access*
Min. 700
75
P5-150×7=1,050
Min. 500

	ARXC 072 / 090 GTEH	ARX C096 GTEH
a	450	550
b	370	470

*The design of the service access depends on the installation method. Refer to the installation manual for more information.
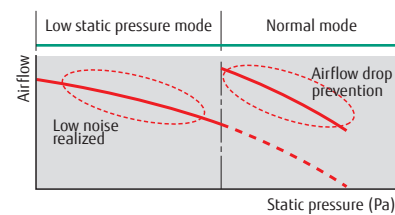
Hanger 65

1,200
350
Air outlet

Liquid pipe
Gas pipe
Safety Drain port

INDOOR UNITS

Floor
Compact

DC FAN

2-Fan & Wide airflow

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

Cooling

Prevents cold air from falling

at operation start

at stable operation

Heating

Prevents cold draft from window

Window

at stable operation
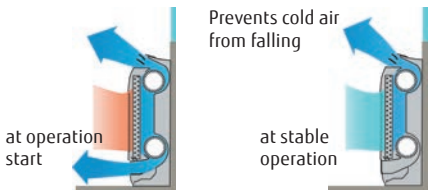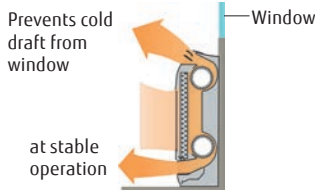
Flexible & easy installation

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
600
740
200
700

Concealed within wall
Min. 900
Min. 700

Wall

Half concealed
(Optional parts necessary)
Min. 590
Min. 730
Max. 80
Max. 150

(Unit: mm)
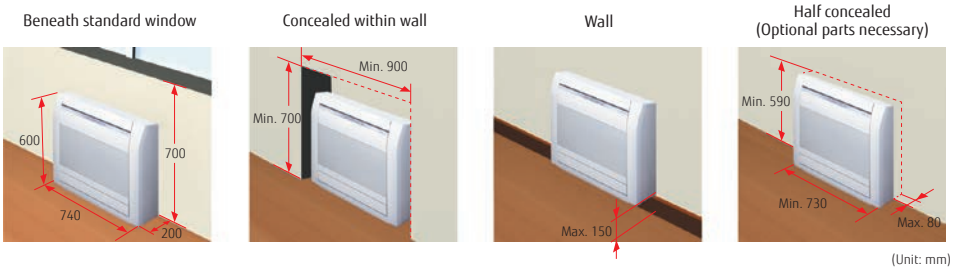
Quiet operation

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

Low noise
22 dB(A)
at 7/9 models

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

* Compatible Remote Controller is as follows:
UTY-RNRGZ5 / UTY-RLRG / UTY-RSRG / UTY-RHRG / UTY-DCGGZ2 / UTY-DTGGZ1 / UTY-ALGXZ1 / UTY-APGXZ1
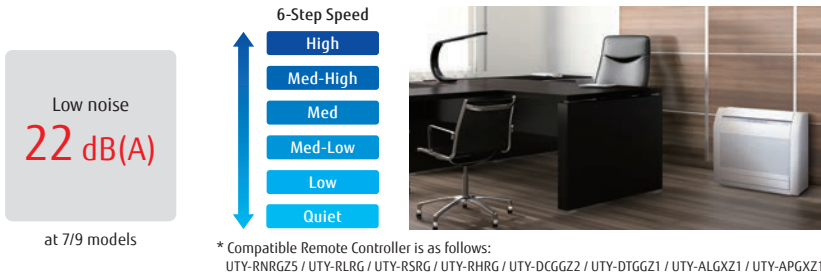
Flexible piping connection
6 direction of drain & piping

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

Back view
1 2 3 Drain hose 4 Piping 5 6
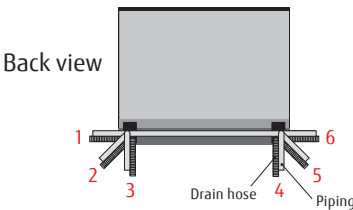
Model: (EEV internal)
AGHA007GCGH / AGHA009GCGH
AGHA012GCGH / AGHA014GCGH

Specifications

| Model name			AGHA007GCGH	AGHA009GCGH	AGHA012GCGH	AGHA014GCGH
Power source			Single phase, ~230V, 50Hz			
Capacity	Cooling	kW	2.2	2.8	3.6	4.0
	Heating		2.8	3.2	4.0	4.5
Input power		W	16	17	22	29
Airflow rate	High	m³/h	470	500	590	670
	Med-High		420	450	520	590
	Med		390	400	470	520
	Med-Low		360	360	420	450
	Low		330	330	390	390
	Quiet		270	270	340	340
Sound pressure level	High	dB (A)	37	38	42	46
	Med-High		35	36	39	42
	Med		33	34	37	39
	Med-Low		31	31	35	36
	Low		29	29	33	33
	Quiet		22	22	30	30
Dimensions (H × W × D)		mm	600 × 740 × 200	600 × 740 × 200	600 × 740 × 200	600 × 740 × 200
Weight		kg	15	15	15	15
Connection pipe diameter	Liquid (Flare)	mm	6.35	6.35	6.35	6.35
	Gas (Flare)		9.52	9.52	12.70	12.70
Drain hose diameter (I.D./O.D.)			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 AGHA007GCGH and AGHA009GCGH are connected to the outdoor unit other than J-IIIL, gas pipe diameter should be Ø12.70.

Optional parts

Half concealed kit: UTR-STA
External Power Supply Unit: UTZ-GXXC

Dimensions (Unit: mm)

Control box
740
600
245
280
48
59 Pipe port Ø65
Pipe port Ø65
59

200
Gas pipe
Liquid pipe
54
18
56
Pipe port

INDOOR UNITS

Floor / Ceiling

DC FAN

Model: ABHA012GTEH / ABHA014GTEH
ABHA018GTEH / ABHA024GTEH

Floor standing
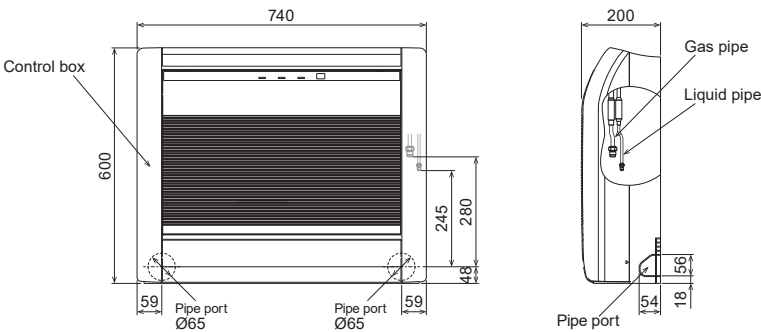
Flexible installation

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.

Left/Right Swing

Up/Down Swing

4 steps selectable
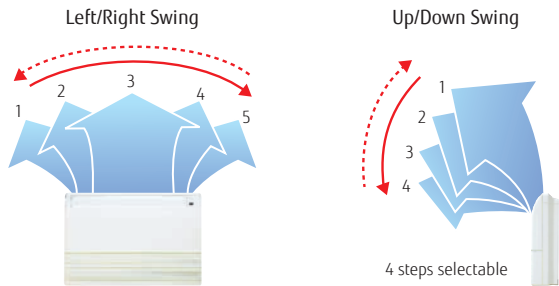
High power DC fan motor

- High power
- Wide rotation range
- High efficiency

Compact design

Symmetrical, slim and compact design.

(Unit: mm)

199

990   655

Specifications

Model name			ABHA012GTEH	ABHA014GTEH	ABHA018GTEH	ABHA024GTEH
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-High		620	740	910	930
	Med		580	690	830	870
	Med-Low		550	640	750	800
	Low		520	600	660	740
	Quiet		490	550	580	680
Sound pressure level	High	dB (A)	36	40	46	47
	Med-High		34	39	44	45
	Med		33	38	42	43
	Med-Low		31	36	40	41
	Low		29	35	37	39
	Quiet		28	34	35	37
Dimensions (H × W × D)		mm	199 × 990 × 655	199 × 990 × 655	199 × 990 × 655	199 × 990 × 655
Weight		kg	25	26	26	27
Connection pipe diameter	Liquid (Flare)	mm	6.35	6.35	6.35	9.52
	Gas (Flare)		12.70	12.70	12.70	15.88
Drain hose diameter (I.D./O.D.)			25 / 32			

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

Optional parts

External Power Supply Unit : UTZ-GXXC

Dimensions (Unit: mm)

900
500
Liquid pipe
Gas pipe
655
190 145 100 13
200 175
47 100
Control box
Pipe port
Hole (Drain hose)
100 20 28
27 56 100
162 199
124 742

134

135

Ceiling

DC FAN

Model: ABHA030GTEH / ABHA036GTEH
ABHA045GTEH / ABHA054GTEH

Installation

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

Double auto swing and wide airflow

Auto airflow direction and auto swing

Left/Right

Up/Down

5 steps selectable

4 steps selectable
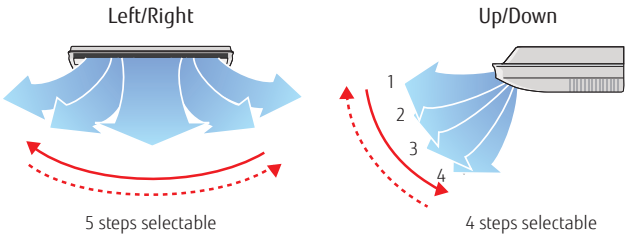
High power DC fan motor

- High power
- Wide rotation range
- High efficiency

Long airflow

Long Airflow ensures comfort to every corner of a large room.
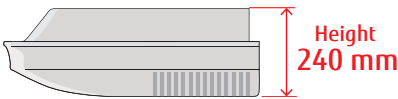
Long distance air-flow

Fresh air intake

Fresh air

Indoor   Outdoor

Slim & Compact design

Height
240 mm

Specifications

Model name			ABHA030GTEH	ABHA036GTEH	ABHA045GTEH	ABHA054GTEH
Power source			Single phase, ~230V, 50Hz			
Capacity	Cooling	kW	9.0	11.2	14.0	16.0
	Heating		10.0	12.5	16.0	18.0
Input power		W	66	85	131	180
Airflow rate	High	m³/h	1,630	1,690	2,010	2,270
	Med-High		1,520	1,560	1,840	2,070
	Med		1,420	1,450	1,690	1,860
	Med-Low		1,320	1,360	1,530	1,660
	Low		1,220	1,270	1,380	1,470
	Quiet		1,140	1,170	1,230	1,280
Sound pressure level	High	dB (A)	42	45	48	51
	Med-High		40	41	46	49
	Med		39	39	45	46
	Med-Low		37	38	41	43
	Low		35	36	38	40
	Quiet		33	34	35	36
Dimensions (H × W × D)		mm	240 × 1,660 × 700	240 × 1,660 × 700	240 × 1,660 × 700	240 × 1,660 × 700
Weight		kg	46	48	48	48
Connection pipe diameter	Liquid (Flare)	mm	9.52	9.52	9.52	9.52
	Gas (Flare)		15.88	15.88	15.88	15.88
Drain hose diameter (I.D./O.D.)			25 / 32			

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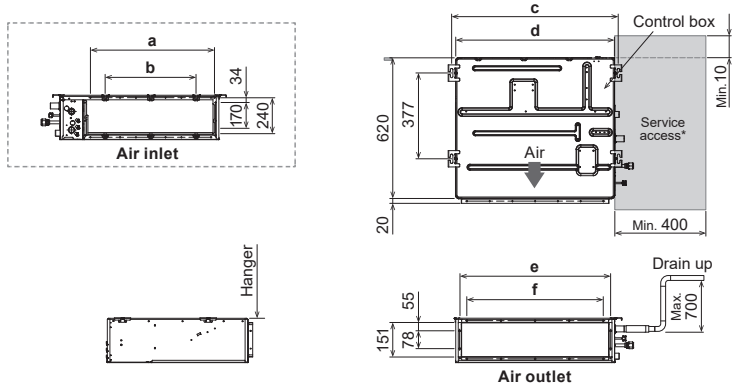Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

Optional parts

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

Maximum
500mm

Dimensions (Unit: mm)

1,660
1,600

Liquid pipe
Gas pipe

Pipe port

Control box   Fresh air inlet Ø200

Pipe port

Drain port   Drain outlet   Drain port

200 160 95 33 88 165 700 300 130 160 96 192

240 65 137 82 135

150 30 115 100

INDOOR UNITS

Wall-mounted type

Model: (EEV internal)
ASHA07GATH / ASHA09GATH
ASHA12GATH / ASHA14GATH

Specifications

Model name			ASHA07GATH	ASHA09GATH	ASHA12GATH	ASHA14GATH
Power source			Single phase, ~230V, 50Hz			
Capacity	Cooling	kW	2.2	2.8	3.6	4.5
	Heating		2.8	3.2	4.1	5.0
Input power		W	17	18	22	34
Airflow rate	High	m³/h	490	500	560	670
	Med		450	450	480	490
	Low		370/420*	370/420*	420	420
Sound pressure level	High	dB (A)	35	36	39	44
	Med		33	33	35	37
	Low		27/31*	27/31*	31	32
Dimensions (H × W × D)		mm	275 × 790 × 215	275 × 790 × 215	275 × 790 × 215	275 × 790 × 215
Weight		kg	9	9	9	9
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			

*: This value is under cooling operation.

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.
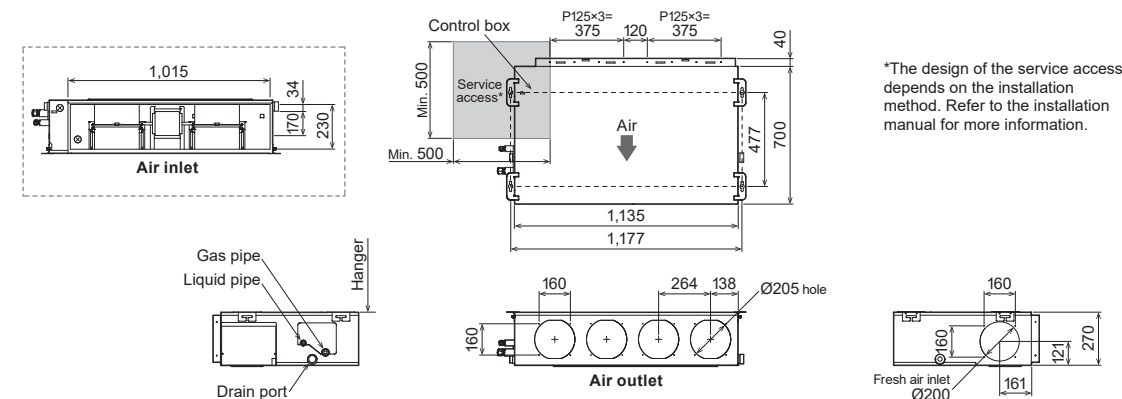Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

Filter features

High performance filter provides high quality air conditioning

Long-life* Ion Deodorization Filter

The filter deodorizes by powerfully decomposing absorbed odors using the oxidizing and reducing effects of ions generated by the ultra-fine-particle ceramic.

(*The filter can be used for approx. 3 years if it is washed under water to restore its surface action when it is dirty.)

Apple-catechin Filter

Fine dust, invisible mold spores, and harmful microorganisms are absorbed onto the filter by static electricity, and further growth is inhibited and deactivated by the polyphenol extracted from apples.

Deodorizing effect (Odor reduction rate)

Ammonia
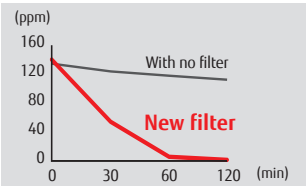
Trimethylamine
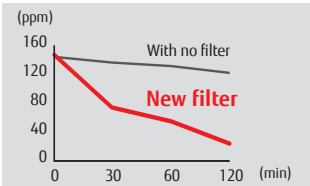
Hydrogen sulfate

High performance filters have been thoroughly tested by the Environmental Sanitary Inspection Center using an advanced Deodorization Test.

Optional parts

Compact size

Powerful output even compact design

Though the indoor unit is compact, it features a large, high pressure cross fan (90 mm diameter) in a centre mounted configuration and a Lambda type heat exchanger to provide plenty of power.

Width
790 mm

790 mm

Dimensions (Unit: mm)

① Refrigerant piping flare connection (Liquid)
② Refrigerant piping flare connection (Gas)
③ Drain piping connection
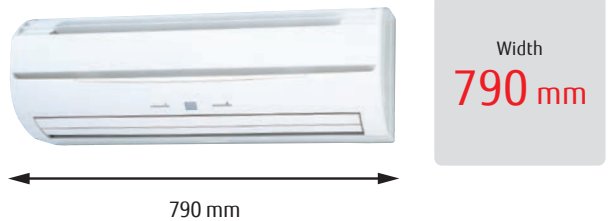
High power DC fan motor

• High power
• Wide rotation range
• High efficiency
• Compact size

Easy maintenance

Easy maintenance has been realized as the front panel can removed for easy access.

Open panel

Wall-mounted type

DC FAN

High efficient compact design

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

High density heat exchanger

$\phi 5$
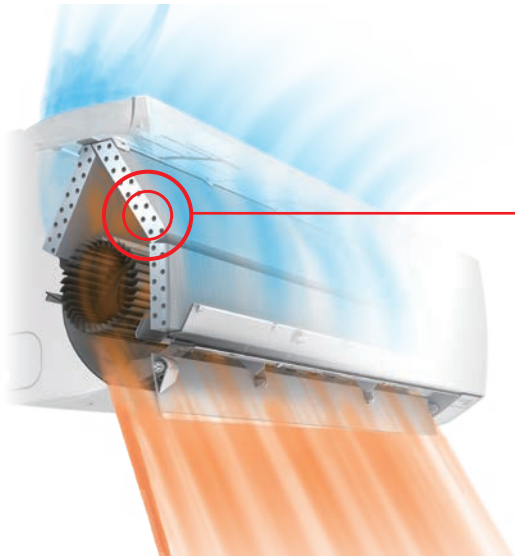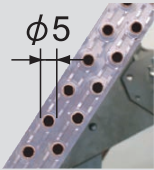
Making the tube thin:

$7\,mm \rightarrow 5\,mm$

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	Low noise
Quiet	22 dB(A)
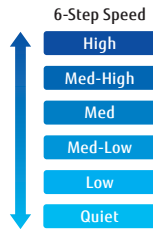
6-Step Speed
- High
- Med-High
- Med
- Med-Low
- Low
- Quiet

* Compatible Remote Controller is as follows:
UTY-RNRGZ5 / UTY-RLRG / UTY-RSRG / UTY-RHRG / UTY-DCGGZ2 / UTY-DTGGZ1 / UTY-ALGXZ1 / UTY-APGXZ1

Easy installation

Communication wiring can be installed easily by only opening the front panel and wire cover.
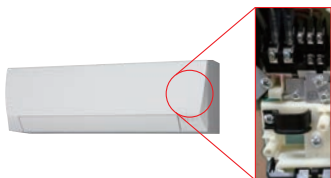
Optimized design matches to a small room

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

Model: (EEV internal)
ASHA007GTEH / ASHA009GTEH

Specifications

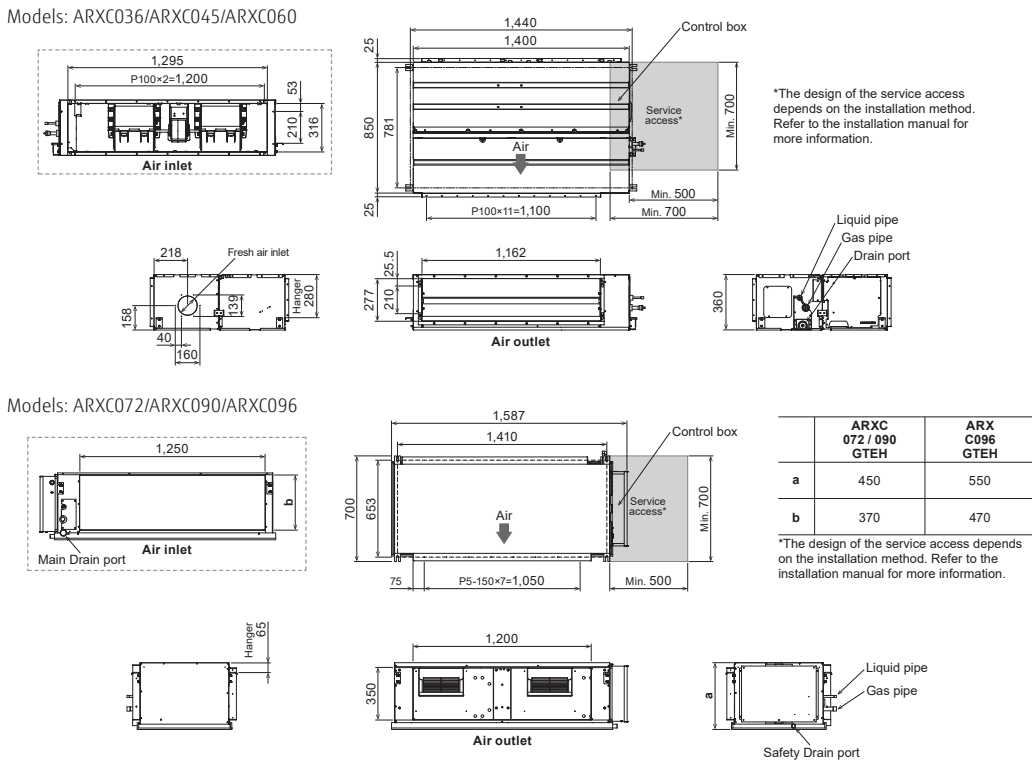| Model name			ASHA007GTEH	ASHA009GTEH
Power source			Single - phase, ~230V,	
Capacity	Cooling	kW	2.2	2.8
	Heating		2.8	3.2
Input power		W	19	34
Airflow rate	High	m³/h	550	720
	Med-H		460	570
	Med		420	500
	Med-L		390	410
	Low		360	360
	Quiet		330	330
Sound pressure level	High	dB (A)	35	43
	Med-H		32	38
	Med		30	34
	Med-L		27	29
	Low		24	24
	Quiet		22	22
Dimensions (H × W × D)		mm	262×820×206	262×820×206
Weight		kg	7.5	7.5
Connection pipe diameter	Liquid (Flare)	mm	6.35	6.35
	Gas (Flare)		9.52	9.52
Drain hose diameter (I.D./O.D.)			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 ASHA007GTEH, ASHA009GTEH are connected to the outdoor unit other than J-IIIL, gas pipe diameter should be Ø12.70.

Optional parts

Dimensions (Unit: mm)

820

206

262

INDOOR UNITS

Wall-mounted type

DC FAN
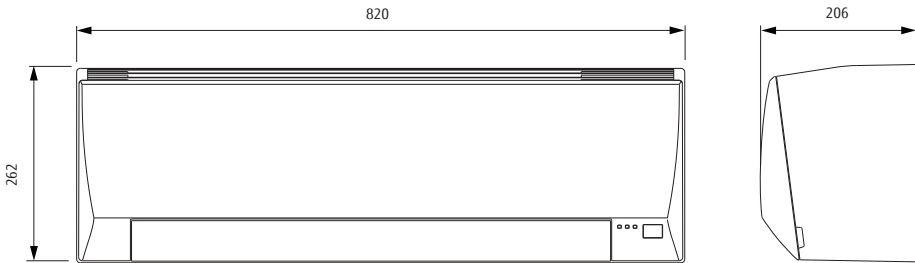
High efficient and compact design

The 007-014 model has a common design.
High efficient compact design is realised by mounting a high density and large heat exchanger.
The compact body makes it possible to install discreetly even in a meeting room or office where comfortable air conditioning is provided.

High-density heat exchanger

φ5

Slim tube design: **5 mm**

Greater heat-exchanging capacity is achieved through the use of a high-density heat exchanger and a sub-heat exchanger.
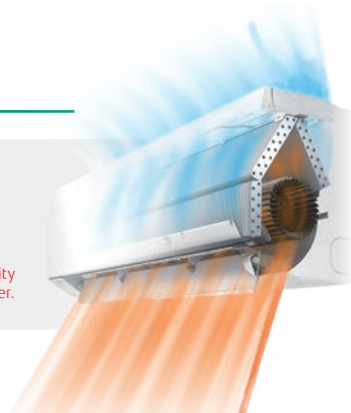
More comfort airflow

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

Heating
Vertical airflow provides powerful floor level heating

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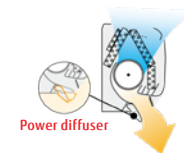
Cooling
Horizontal airflow does not blow cool air directly at the occupants in the room.
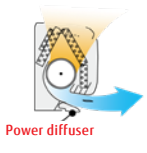
Power diffuser

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.

43 dB(A)
37 dB(A)
-14 %
Current model | New model
(009 model: Hi)
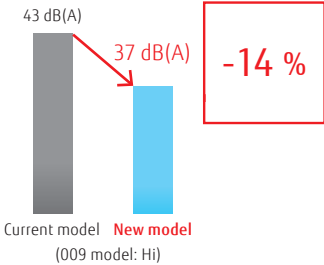
6-Step Speed
High
Med-High
Med
Med-Low
Low
Quiet

* Compatible Remote Controller is as follows:
UTY-RNRGZ5 / UTY-RLRG / UTY-RSRG / UTY-RHRG / UTY-DCGGZ2 / UTY-DTGGZ1 / UTY-ALGXZ1 / UTY-APGXZ1

Human sensor increases energy saving operation

Energy saving operation starts automatically by detecting the motion of a person in the space. There are 2 modes available, an energy saving mode or a auto off mode available.

People go out.
AUTO SAVE
AUTO OFF

People come back.
AUTO RESET
OFF

Model: (EEV internal)
ASHA007GCGH / ASHA009GCGH
ASHA012GCGH / ASHA014GCGH

Specifications

Model name			ASHA007GCGH	ASHA009GCGH	ASHA012GCGH	ASHA014GCGH
Power source			Single phase, ~230V, 50Hz			
Capacity	Cooling	kW	2.2	2.8	3.6	4.0
	Heating		2.8	3.2	4.0	4.5
Input power		W	16	20	25	36
Airflow rate	High	m³/h	550	610	690	800
	Med-High		510	560	610	740
	Med		470	510	560	680
	Med-Low		410	440	530	610
	Low		360	360	470	550
	Quiet		310	310	330	330
Sound pressure level	High	dB (A)	34	37	40	44
	Med-High		32	35	37	42
	Med		30	32	35	40
	Med-Low		28	29	33	37
	Low		26	26	30	34
	Quiet		22	22	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)		9.52	9.52	12.70	12.70
Drain hose diameter (I.D./O.D.)			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 ASHA007GCGH and ASHA009GCGH are connected to the outdoor unit other than J-IIIL, gas pipe diameter should be Ø12.70.

Optional parts

External Power Supply Unit : UTZ-GXXC

Dimensions (Unit: mm)

840
268
203
41
Control box
Pipe port Ø65
Drain hose
Gas pipe: 315
Liquid pipe: 381
Pipe port
321
315
115

Wall-mounted type

DC FAN

Model: ASHA18GACH / ASHA24GACH / ASHA30GACH
ASHA18GATH / ASHA24GATH / ASHA30GATH

Specifications

Model name			ASHA18GACH ASHA18GATH	ASHA24GACH ASHA24GATH	ASHA30GACH ASHA30GATH
Power source			Single phase, ~230V, 50Hz		
Capacity	Cooling	kW	5.6	7.1	8.0
	Heating		6.3	8.0	9.0
Input power		W	32	60	91
Airflow rate	High	m³/h	840	1,100	1,240
	Med		770	910	980
	Low		690	730	770
Sound pressure level	High	dB (A)	41	48	52
	Med		39	43	45
	Low		35	35	35
Dimensions (H × W × D)		mm	320 × 998 × 228	320 × 998 × 228	320 × 998 × 228
Weight		kg	15	15	15
Connection pipe diameter	Liquid (Flare)	mm	9.52	9.52	9.52
	Gas (Flare)		15.88	15.88	15.88
Drain hose diameter (I.D./O.D.)			12 / 16		

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].

More comfort airflow by adopting power diffuser

"Vertical airflow" provides powerful floor level heating
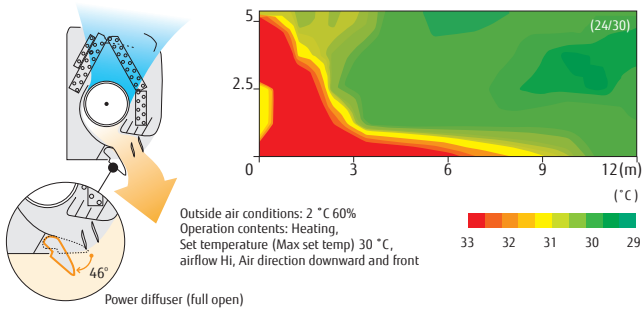
(24/30)

Power diffuser (full open)

Outside air conditions: 2 °C 60%
Operation contents: Heating,
Set temperature (Max set temp) 30 °C,
airflow Hi, Air direction downward and front

33 32 31 30 29

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

(24/30)

Power diffuser

Outside air conditions: 35 °C 40%
Operation contents: Cooling,
Set temperature (Min set temp) 18 °C,
airflow Hi, Air direction downward and front

15 16 17 18
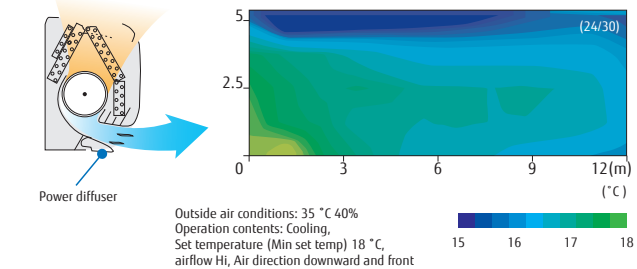
Air conditioner filter features

Ion Deodorization Filter
Organic coating fin used heat exchanger
Apple-catechin Filter
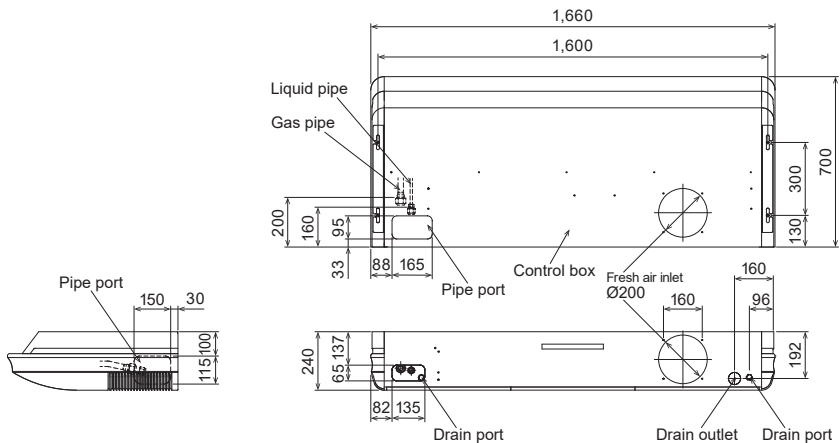Air Filter

High quality air conditioning by incorporation of high performance filter.

Ion Deodorization Filter

The filter deodorizes by powerfully decomposing absorbed odors using the oxidizing and reducing effects of ions generated by the ultra-fine-particle ceramic.

Apple-catechin Filter

Apple-catechin filter uses static electricity to clean fine particles and dust in the air.

Optional parts

Double auto swing

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

5 steps selectable

4 steps selectable

Step
Swing

Compact & Slim design

By using DC fan motor, compact design is realized.

DC fan motor

Width 998 mm

Dimensions (Unit: mm)

998
520
590
721
520
320
228

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

INDOOR UNITS

Wall-mounted type

DC FAN

Powerful & Comfort airflow

Powerful Airflow
(30 model)

Airflow
20% up!
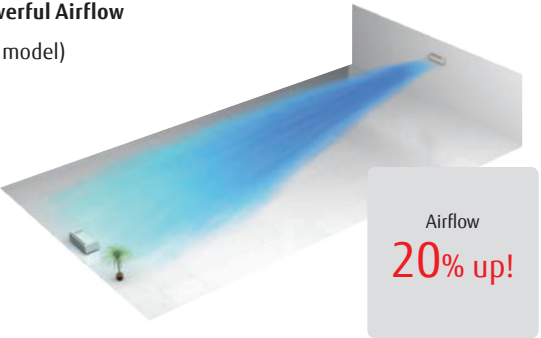
Power diffuser
(18/24 models)

Vertical airflow (24)

33 32 31 30 29(°C)

Horizontal airflow (24)

15 16 17 18(°C)
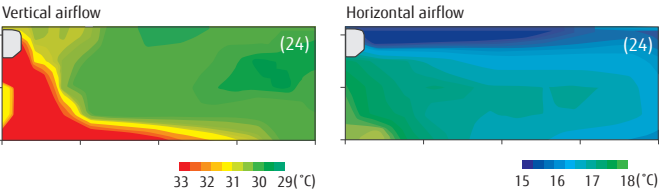
Human sensor (30/34 models only)

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-RNRGZ5 and UTY-DCGGZ2)

Human sensor
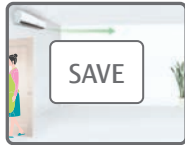
SAVE ▶ AUTO RESET

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.

35 dB(A)
33 dB(A)
-2 dB(A)

Current model   **New model**
(30/34 models)

6-Step Speed
- High
- Med-High
- Med
- Med-Low
- Low
- Quiet
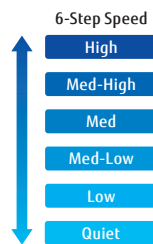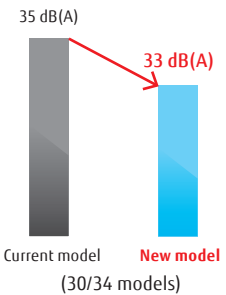
* Compatible Remote Controller is as follows:
UTY-RNRGZ5 / UTY-RLRG / UTY-RSRG / UTY-RHRG / UTY-DCGGZ2 / UTY-DTGGZ1 / UTY-ALGXZ1 / UTY-APGXZ1

Model: ASHA18GBCH / ASHA24GBCH
ASHA030GTEH / ASHA034GTEH

ASHA18/24GBCH

ASHA030/034GTEH

Specifications

Model name			ASHA18GBCH	ASHA24GBCH	ASHA030GTEH	ASHA034GTEH
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-High		-	-	1,200	1,300
	Med		770	910	1,050	1,120
	Med-Low		-	-	940	980
	Low		690	730	890	890
	Quiet		-	-	700	700
Sound pressure level	High	dB(A)	41	48	53	55 / 54
	Med-High		-	-	49	51
	Med		39	43	45	47
	Med-Low		-	-	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).

Optional parts

External Power Supply Unit: UTZ-GXXC (ASYA***GTEH)
Silver ion filter II: UTR-FA16-8 (030/034GTEH)

Dimensions (Unit: mm)

Models: ASHA18/ASHA24

998
238
320
Control box
Pipe port Ø80
Liquid pipe: 418
Gas pipe: 488
Drain hose: 619
Pipe port
56
438   397   102

Models: ASHA030/ASHA034

1,150
280
340
Control box
Pipe port Ø80
Liquid pipe: 513
Gas pipe: 566
Drain hose: 617
Pipe port
50
479   502   108

INDOOR UNITS

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.

Outdoor-air Processing Unit range

Airflow rate (m³/h)	1080	1680	2100
Model code	054	072	096
Outdoor-air Processing Unit	ARXH054GTAH	ARXH072GTAH	ARXH096GTAH

DX Kit
for Air Handling Unit or Fresh Air Handling Unit application

Outdoor-air Processing Unit
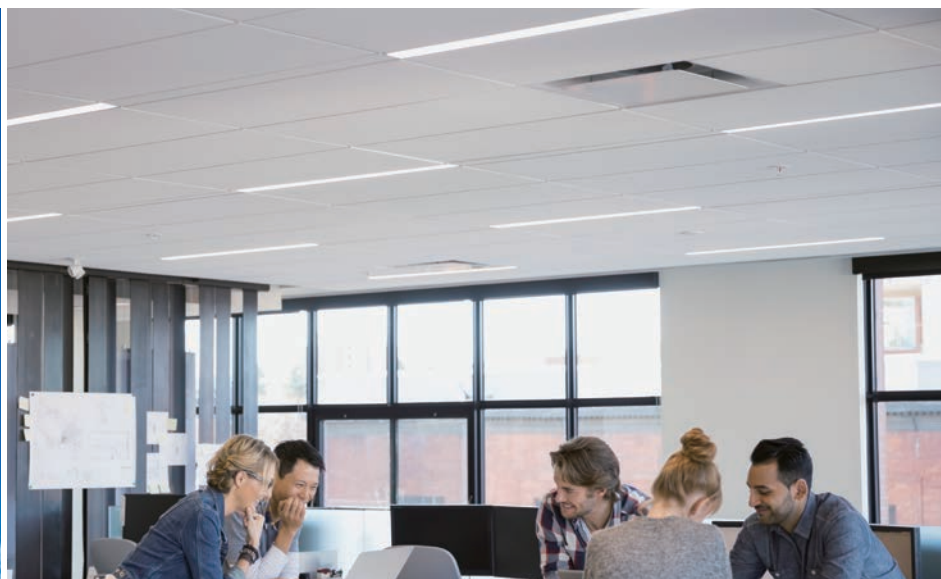
One VRF system can provide air conditioning and air supply at the same time.

Outdoor-air Processing Unit can be connected in a same VRF*1 system as one of indoor unit series and can create fresh and comfortable air supply together from our high advanced technology.

*1. Connectable VRF Series: J-IIS

Outdoor-air Processing Unit

VRF system

Duct

Indoor unit

Indoor unit

Fan

Heat Exchanger

Outdoor Air Unit

Fresh Air

Fresh Air

Wired R.C.

Wired R.C.

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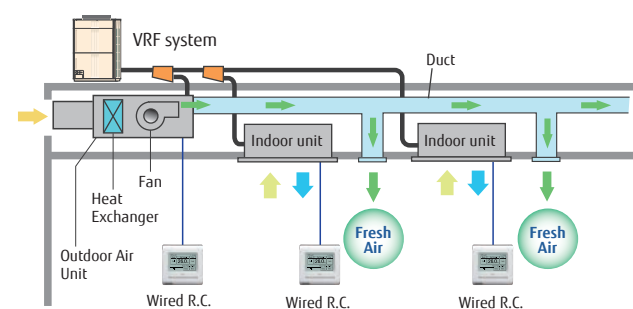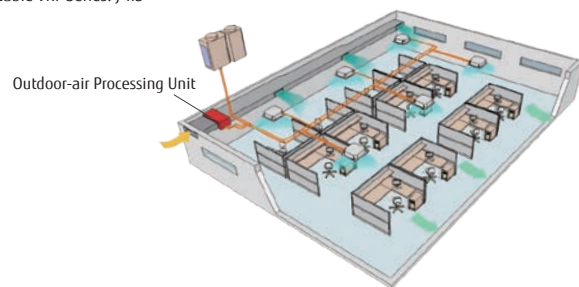
* Make sure the connected capacity is within the range of 50% to 100% of the outdoor unit capacity. In addition, if there are mixed connections with indoor units, make the Outdoor-air Processing Unit connection capacity 30% or less of the outdoor unit capacity.

High energy savings and flexible duct design by using DC motor

- Greatly reduces electricity consumption by adopting permanent magnet compared to when using an AC motor.

054 / 072 type   096 type

- Compared with AC motor, changing the speed makes it possible to respond flexibly to the external static pressure from 50 Pa to 240 Pa. Even if damper equipment is not used, static pressure can be adjusted and duct design is easy.

- Static pressure can be set easily using wired remote controller.

50 to 240 Pa (096 type)

(When external static pressure is small)

(When external static pressure is large)

DC Motor

Low speed

High speed

AC Motor

High speed (Constant)

High speed (Constant)

Damper opening small (Field supplied)

Damper opening large (Field supplied)
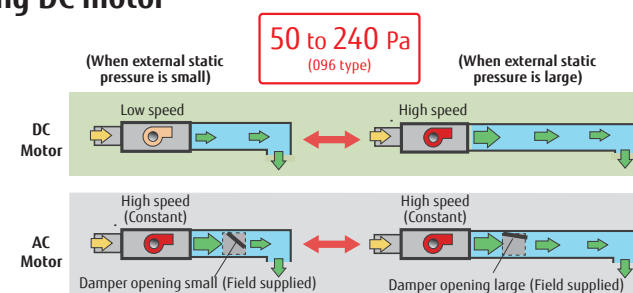
Top class compact design

- Top class lightweight compact design at just 425 mm in height, 55 kg in weight for ARXH072 type. This unit can be installed easily even at narrow space.

55 kg (072 type)

1367 mm

425 mm

572 mm

(ARXH072 type)
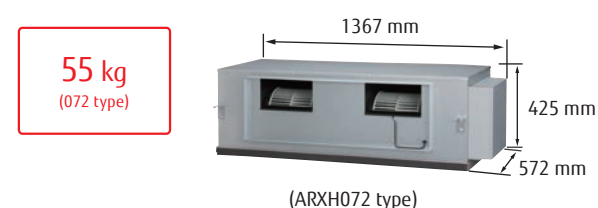
Various Controller

Supplied variety of controllers as options, such as individual controller, central controller, and building management controller.

Individual Controller

Wireless Remote Controller

Simple Remote Controller

Wired Remote Controller

Wired Remote Controller (Touch Panel)

Central Controller

Central Remote Controller

Touch Panel Controller

System Controller System Controller Lite (Software)
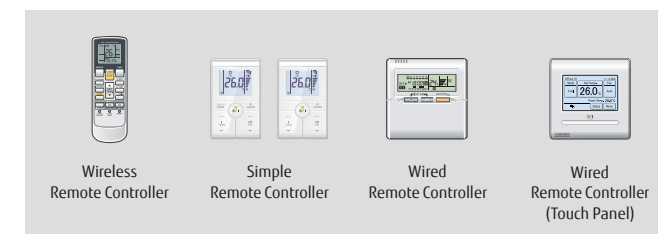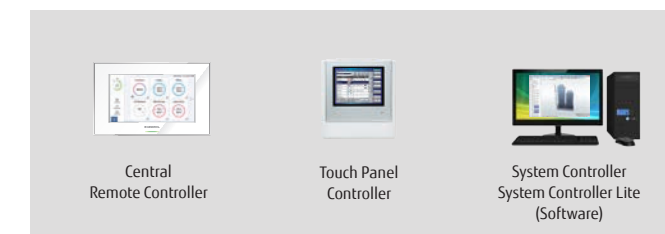
* The temperature setting is discharged air temperature setting.   The air volume is set to a constant speed.

Model:
ARXH054GTAH / ARXH072GTAH / ARXH096GTAH [Production by order]

ARXH054   ARXH072   ARXH096

Specifications

Rated flow rate			1000 m³/h	1500 m³/h	2000 m³/h
Model name			ARXH054GTAH	ARXH072GTAH	ARXH096GTAH
Power source		V/Ø/Hz	220-240V, 50Hz		
Capacity	Cooling	kW	14.0	22.4	28.0
	Heating		8.9	13.9	17.4
Input power	Cooling	W	179	292	370
	Heating		179	292	370
Airflow rate		m³/h	1,080	1,680	2,100
Static Pressure	Standard (range)	Pa	185 (50-185)	200 (50-200)	200 (50-240)
Sound Pressure Level		dB(A)	42	44	47
Dimensions (H × W × D)		mm	425 × 1,367 × 572	425 × 1,367 × 572	450 × 1,583 × 700
Weight		kg	48	55	71
Connection pipe diameter	Small	mm	9.52	12.70	12.70
	Large		19.05	22.22	22.22
Operating range	Cooling	°CDB	5 to 43	5 to 43	5 to 43
	Heating		-7 to 21	-7 to 21	-7 to 21
Refrigerant			R410A	R410A	R410A

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

Dimensions (Unit: mm)

Model: ARXH054
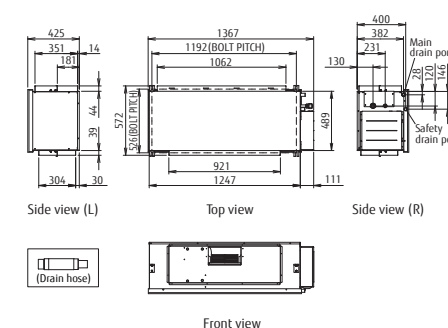
Model: ARXH072

Model: ARXH096

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

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

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

(Drain hose)   Front view

(Drain hose)   Front view

(Drain hose)   Front view

VENTILATION
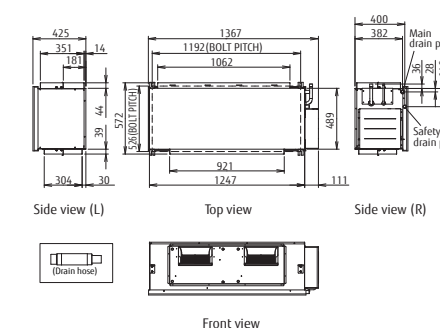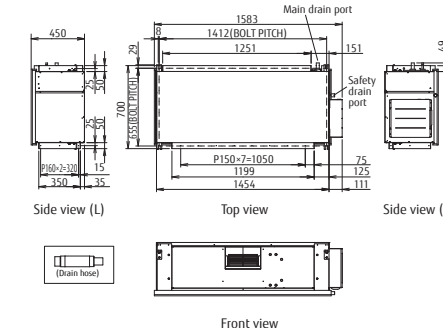
DX kit
for Air handling applications
for VRF Outdoor unit

DC FAN

Multiple temperature sensors optimally control the air handling unit and fan coil unit.
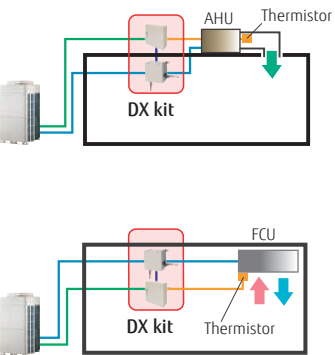
When connected to an Air handling unit, the temperature of supply air is controlled by a discharge air sensor.

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

Application as part of a VRF system
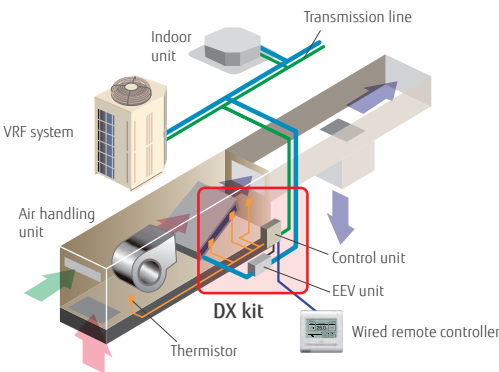
Supports a wide range of capacity classes

• Two EEV units can be connected in parallel to large-capacity units of up to 20 HP (50 kW). (UTP-LX180A separation tube required)
• Connectable capacity range: 5 kW to 50 kW
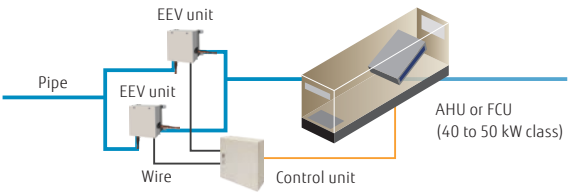
A variety of controls to match the application

• Central control using our VRF controllers or central management controllers

*DDC stands for Direct Digital Controller
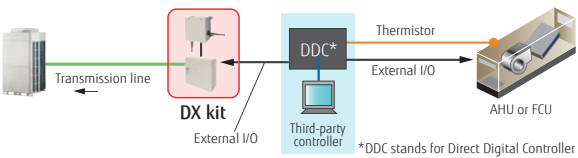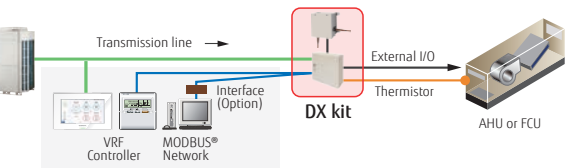
Summary of functions

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 requirements

• 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 indoor units : 30 % or less of the outdoor unit capacity
• 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.

Connectable capacity

• Single connection

50 to 100% of outdoor unit capacity

• Mixed connection

Within 30% of total capacity

50 to 100% of outdoor unit capacity
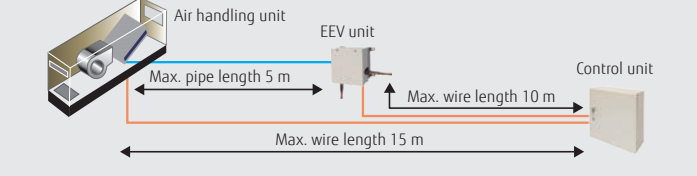
[For 2EEV units connection (option)]
• Separation Tube : UTP-LX180A

Pipe and wire length

Max. pipe length 5 m

Max. wire length 10 m

Max. wire length 15 m

Control unit: UTY-VDGX
EEV unit: UTP-VX30A/UTP-VX60A/UTP-VX90A

EEV unit UTP-VX30A

EEV unit UTP-VX60A

EEV unit UTP-VX90A

Control unit UTY-VDGX
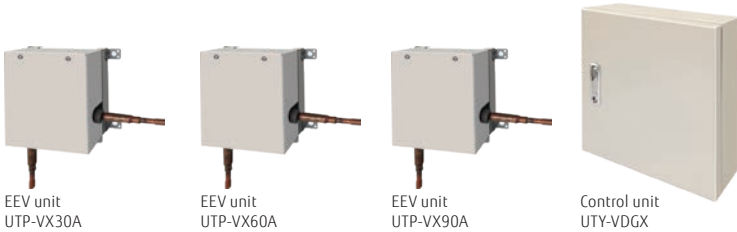
Specifications

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)	8.0 (7.2-9.0)	10.0 (9.1-11.1)	12.5 (11.2-13.2)	14.0 (13.3-18.0)	22.4 (18.1-23.7)	25.0 (23.8-28.0)	40.0 (28.1-44.7)	50.4 (44.8-50.4)
	Heating	kW	6.3 (5.7-6.7)	7.1 (6.8-8.0)	9.0 (8.1-10.0)	11.2 (10.1-12.4)	14.0 (12.5-15.0)	16.0 (15.1-20.0)	25.0 (20.1-26.5)	28.0 (26.6-31.5)	45.0 (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

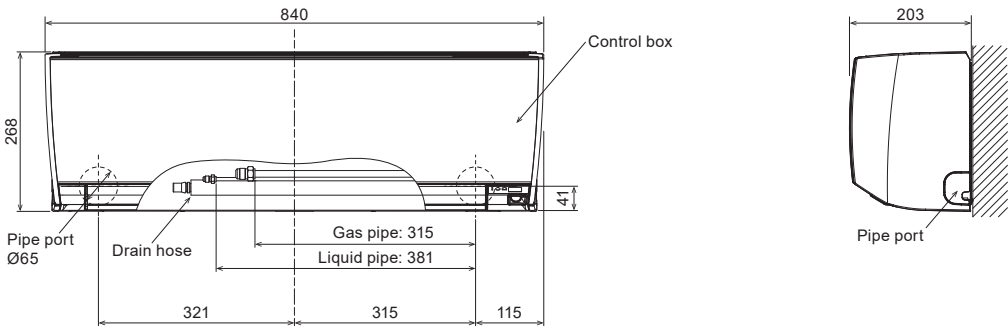| Control unit		UTY-VDGX
Power source	V/Ø/Hz	230 / 1 / 50
Dimensions (H × W × D)	mm	400 × 400 × 120
Weight	kg	10

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].

VENTILATION

VRF CONTROL SYSTEMS

BEST CONTROL SOLUTION FOR EACH PROPERTY

CONTROL SYSTEM OVERVIEW

COMPARISON TABLE OF CONTROLLERS

Individual Controller

Centralized Controller

Converter / Adaptor

User friendly control system provides individual control to centralized control

The VRF 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.

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	Central Remote Controller	Touch Panel Controller	System Controller	Network Converter for LONWORKS™	MODBUS™ Converter	KNX™ Convertor
	UTY-RVRG, UTY-RNRGZ5, UTY-RLRG, UTY-RCRGZ1	UTY-DCGGZ3	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 lead lag 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	Central Remote Controller	Touch Panel Controller	System Controller	BACnet™ Gateway	Network Converter for LONWORKS™	MODBUS™ Converter	KNX™ Convertor	External Switch Controller
	UTY-RVRG, UTY-RNRGZ5, UTY-RLRG, UTY-RCRGZ1	UTY-RSRG, UTY-RHRG	UTY-LNHG	UTY-DCGGZ3	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 lead lag 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	Central Remote Controller	Touch Panel Controller	System Controller	BACnet™ Gateway	Network Converter for LONWORKS™	MODBUS™ Converter	KNX™ Convertor	External Switch Controller
	UTY-RVRG, UTY-RNRGZ5, UTY-RLRG, UTY-RCRGZ1	UTY-RSRG, UTY-RHRG	UTY-LNHG	UTY-DCGGZ3	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 lead lag 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 SYSTEMS

CONTROL SYSTEM OVERVIEW

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

Air Conditioning
Individual Control

NEW Wired Remote Controller
(Design type)
UTY-RVRG

Wired Remote Controller
(Touch panel)
UTY-RNRGZ5

Wired Remote Controller
UTY-RLRG

Compact
Wired Remote Controller
UTY-RCRGZ1
UTY-RCRGZ1K

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

Wireless Remote Controller
UTY-LNHG

IR Receiver Unit
UTB-YWC
For Duct type

UTY-TRHX
For 3D Flow Cassette / Duct

UTY-LRHGB1
For Cassette type

UTY-LBHXD
For Circular Flow Cassette

For Duct   For 3D Flow Cassette / Duct
For Cassette   For Circular Flow Cassette

Air Conditioning
Centralised Control

Internet or Public Telephone Line

USB adapter *1
(Field supplied)

Remote / monitoring side

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

Maximum controllable
1600*
indoor units

* Lite edition is maximum controllable 400 indoor units

Internet or LAN

Remote / monitoring side

Touch Panel Controller
UTY-DTGGZ1

Maximum controllable
400
indoor units

Central Remote Controller
NEW UTY-DCGGZ3

Maximum controllable
100
indoor units

Converter / Adaptor
For external device

BACnet™ Gateway
UTY-ABGXZ1 Software

BACnet™ Gateway
VTY-VBGX Hardware

Network Converter For LONWORKS™
UTY-VLGX

MODBUS™ Converter For VRF
UTY-VMGX

MODBUS™ Converter For Indoor unit
UTY-VMSX

KNX™ Convertor For VRF
UTY-VKGX

KNX™ Convertor For Indoor unit
UTY-VKSX

Wireless LAN Adapter
FJ-RC-WIFI-1 / UTY-TFSXZ2 /
NEW UTY-TFSXJ3

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

Converter / Adaptor
For system expansion

Signal Amplifier
UTY-VSGXZ1

CONTROL SYSTEMS

COMPARISON TABLE OF CONTROLLERS

Item	Wired Remote Controller (Design type)	Wired Remote Controller (Touch panel)	Wired Remote Controller	Compact Wired Remote Controller	Compact Wired Remote Controller	Simple Remote Controller	Simple Remote Controller*1	Wireless Remote Controller	Central Remote Controller	System Controller Lite (Software)	System Controller (Software)
Model name	UTY-RVRG	UTY-RNRGZ5	UTY-RLRG	UTY-RCRGZ1	UTY-RCRGZ1	UTY-RSRG	UTY-RHRG	UTY-LNHGU	UTY-DCGGZ3	UTY-ALGXZ1	UTY-APGXZ1
Max. controllable remote controller groups	1	1	1	1	1	1	1	1	100	400	1600
Max. controllable indoor units	16	16	16	1	1	16	16	16	100	400	1600
Max. controllable groups	−	−	−	−	−	−	−	−	50	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	●	●	−	●	●	−	−	−	●*3	−	−
Group setting	−	−	−	−	−	−	−	−	●	−	●
RC prohibition	−	−	−	−	−	−	−	−	●	●	●
Anti freeze setting	●	●	−	●	●	−	−	−	●	●	●
Set temp. auto return	●	●	●	−	−	−	−	−	−	−	−
Economy mode setting	●	●	●	●	●	−	−	●	●	●	●
Human sensor control	●	●	−	−	−	−	−	−	●	●	●
Display											
Error	●	●	●	●	●	●	●	−	●	●	●
Defrosting	●	●	●	●	●	●	●	−	●	●	●
Current time	●	●	●	●	−	−	●	−	●	●	●
Day of the week	●	●	●	−	−	−	−	−	●	●	●
R.C. prohibition	●	●	●	●	−	●	●	−	●	●	●
Address display	●	●	●	●	●	●	●	−	−	●	●
Room temp	●	●	−	●	●	●	●	−	●*4	●*4	●*4
Multi-language	●	●	−	−	−	−	−	−	●	●	●
Summer time	●	●	−	−	−	−	−	−	●	●	●
Name registration	●	●	−	−	−	−	−	−	●	●	●
Backlight	●	●	−	●	●	●	●	−	●	−	−
2D floor layout / 3D building display	−	−	−	−	−	−	−	−	−	−	●
Refrigerant leakage detection function	−	−	−	−	−	−	−	−	−	●	●
Logo Display	●	−	−	−	−	−	−	−	−	−	−
Timer — Schedule timer — Period	Week	Week	Week	−	−	−	−	−	Week	Year	Year
Schedule timer — ON/OFF, Temp, Low noise mode*5, Times per day	8	8	4	−	−	−	−	−	20	144	144
On/off timer	−	●	●	●(OFF only)	●(OFF only)	−	−	●	−	−	−
Sleep timer	−	−	−	−	−	−	−	●	−	−	−
Program timer	−	−	−	−	−	−	−	●	−	−	−
Auto off timer	●	●	●	−	−	−	−	−	●	−	−
Day off	●	●	●	−	−	−	−	−	●	●	●
Min. unit of timer setting (Minutes)	1 • 10	10 • 30	30	−	−	−	−	5	10	10	10
Control — Status monitoring system	−	−	−	−	−	−	−	−	●	−	●
Electricity charge apportionment	−	−	−	−	−	−	−	−	−	○	●
Error history	●	●	●	−	−	−	−	−	●	●	●
Emergency stop	−	−	−	−	−	−	−	−	●*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
Low noise mode	−	−	−	−	−	−	−	−	●	●	●

*1 "Operation mode" setting is not available for this model. *2 This function is available only through external input control.
*3 Only individual airflow batch reset is mounted. *4 This function is available only when using wired remote controller.   *5 UTY-DCGGZ3 only

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

CONTROL SYSTEMS

NEW **Wired remote controller** (Design type)
UTY-RVRG

Up to
16 indoor units
Up to
1 group

FEATURED FINALIST 2023

GOOD DESIGN AWARD 2022

Simple and stylish design that harmonizes with the space

• The new stylish design controller, UTY-RVRG, enables intuitive operation with touch screen.
  It is compatible with many 2-wired indoor units.

Harmonizes with the Installation Space

When not in use, the controller is a part of the interior décor.
This is achieved by using mirrors, glass, and clear panels, and it appears to be one with the wall.
The sleek and stylish design won the 2022 Good Design Award and was selected as a finalist for the 2023 IDEA award.

Intuitive operation

The touch screen is easily operated by swiping vertically and horizontally, and users can operate the controller without using manuals.

Temp. Setting   Operation Mode

Status LED Colors

When not in use, the operation mode is indicated through LED lamp colors shown under the controller.
The LED lamp can be switched ON and OFF to avoid glare at night.

Blue: Cooling   Red: Heating

Green: Dry   Purple: Auto

Features: Wired remote controller (Design type)

Logo Display

The controller can display hotel logos when not in use. Images are sent via Bluetooth® connection where data is saved in the flash memory built into each controller.

* Color display available

Bluetooth

Smartphone   Wired remote controller

AIRSTAGE Remo Set application (free download)

Set up your new Wired Remote Controller via Bluetooth from your smartphone (or directly at the controller).

Features:

• Initial configuration
• Function setting
• Custom logo import
• Copy settings between controllers

Bluetooth

Smartphone   Wired remote controller

App Store
For iOS

Google Play
For Android
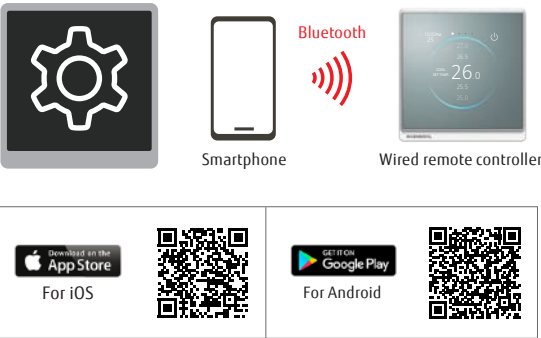
Initial Settings / Indoor Unit Function

The initial controller settings and indoor unit function settings can be sent from a smartphone by pairing with the controller via Bluetooth. It also can read the setting values of a paired controller, and send a copy of them to one or more additional controllers, significantly reducing installation time.

Wired Remote Controller 1   Smartphone   Wired Remote Controller 2

Setting A   Bluetooth   Setting A   Bluetooth   Setting A

Step1:
Read setting values on the remote controller

Step2:
Copy the setting values to a different remote controller
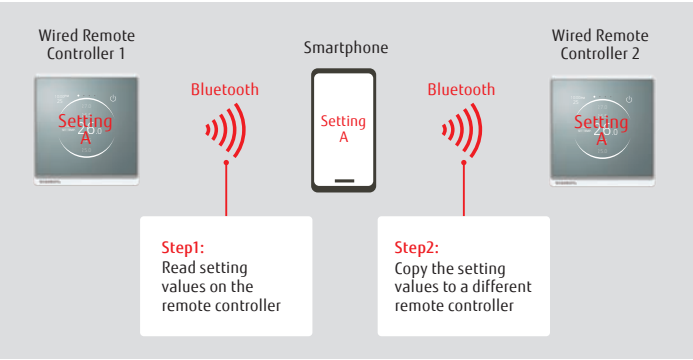
*Smartphone : Wired Remote Controller = 1 : 1

Specifications

Model name		UTY-RVRG
Power Supply		DC 12V
Dimensions (H x W x D)	mm	121.5 × 116 × 26
Weight	g	225

Wired remote controller (with touch panel)
UTY-RNRGZ5

Up to
16 indoor units
Up to
1 group

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

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.
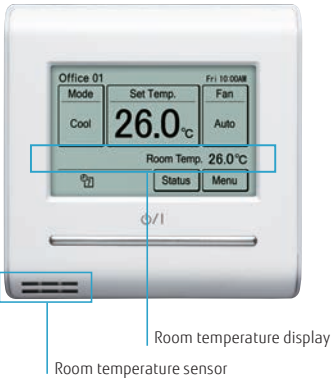
Room temperature display
Room temperature sensor

Various energy saving control

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

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.

Operation Start
Change over
Cooling Set Point
Heating Set Point
Change over
Auto Changeover
Room temperature
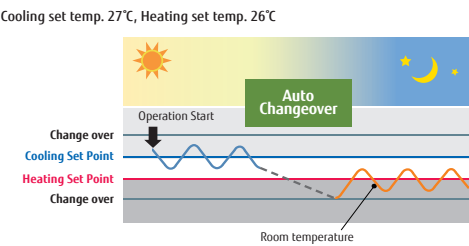
Auto OFF timer

- 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

Set interval time (17:00 to 24:00)
ON   OFF ON Auto OFF   ON Auto OFF
1 hour   1 hour
Normal Time   Over Time
8   17   24
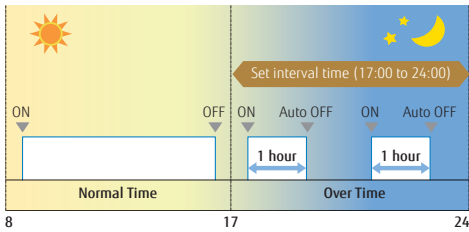
Ex.) At interval time hour (17:00 to 24:00) to prevent forgetting to turn off
Set off time : 1 hour

2 schedules Weekly Timer
Set Temperature Auto Return
Set Temperature Upper and Lower Limit Setting

Specifications

Model name		UTY-RNRGZ5
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
UTY-RLRG

Up to
16 indoor units
Up to
1 group

- 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

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 →

Visually intuitive operation

- The operation mode, set temperature, and fan speed are shown prominently on the top screen.
- Each function to be set is indicated by an icon.
- The control guide makes it simple and straightforward to operate a remote controller.

Settings can be displayed more clearly on a large LCD.

Sophisticated control buttons
Simple operation with easy 4-way navigation pad
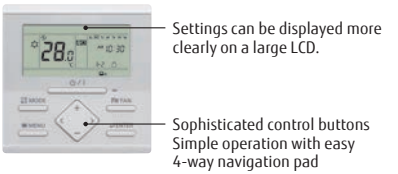
Auto-off timer

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

Operation status
Auto OFF   Auto OFF
ON
OFF
Auto-off timer can be set from 30 to 240 minutes
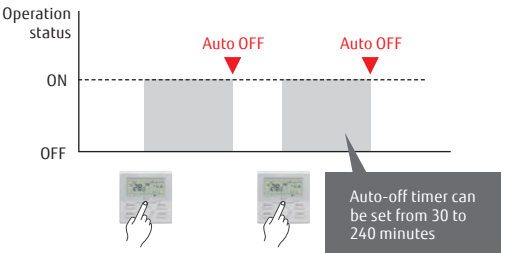
Set temperature auto return

- 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.

Cooling operation
Setting temp.
Set temperature change   Auto return
24℃
22℃
Settable time range 30 to 240 minutes
Time

Heating operation
Setting temp.
Set temperature change   Auto return
25℃
23℃
Settable time range 30 to 240 minutes
Time
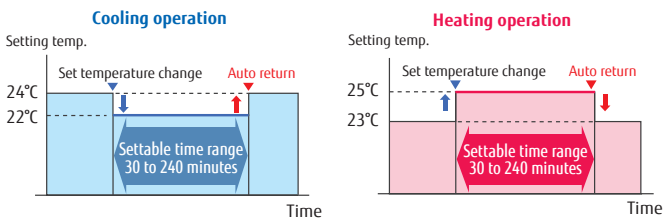
Specifications

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.

CONTROL SYSTEMS

Compact wired remote controller
UTY-RCRGZ1 / UTY-RCRGZ1K
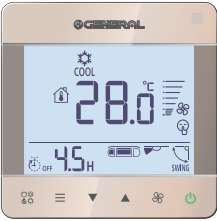
UTY-RCRGZ1

UTY-RCRGZ1K

Up to
1 indoor units
Up to
1 group

• Simple design to match the stylish interior
• Easy to install : Body of controller is designed to fit in European standard junction box
• Can be operated both by wireless and wired remote controller.
• 2-wire type

Large screen and simple display

• Although the size is compact, the screen is large
• Large letters makes it easy to see
• Operation is simple and easy-to-understand

1 Visible large letter
2 Touch key (Frequently-used operation is placed on the direct button)
3 Operation mode
4 Menu
5 Air flow
6 Built in IR reciever
7 LCD with backlight is clearly visible in the dark
8 Easy-to-understand pictograph display
9 LED is mounted for the ON/OFF key (Green light on when R.C. is turned on)
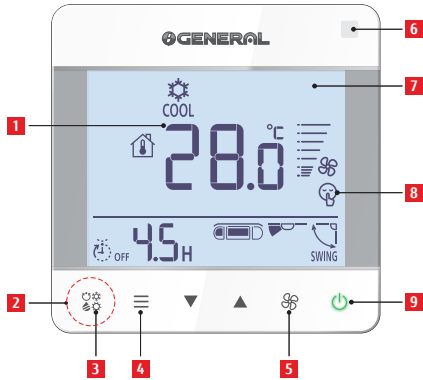
System overview

• VRF connection

One indoor unit and one remote controller are connected in one non-polar and 2-wire remote controller system.
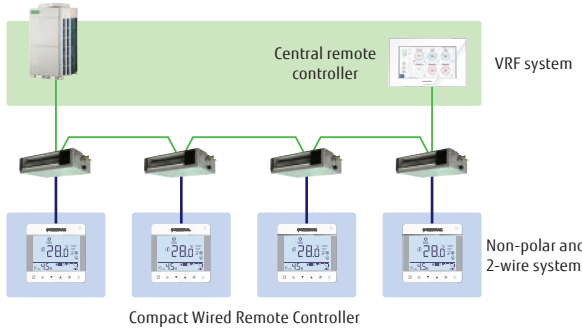
• RAC (Room air conditioner) connection

One indoor unit and one remote controller are connected in one non-polar and 2-wire remote controller system.

Central remote controller   VRF system

RAC system

Non-polar and 2-wire system

Compact Wired Remote Controller

Non-polar and 2-wire system

Compact Wired Remote Controller

Simple remote controller
UTY-RSRG / UTY-RHRG (without operation mode)

UTY-RSRG

UTY-RHRG
(Without operation mode)

Up to
16 indoor units
Up to
1 group

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

Corresponding to various applications

• Vertical louver control:

Vertical airflow 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.

During Cooling
30℃
25℃
18℃

During Heating
30℃
25℃
16℃
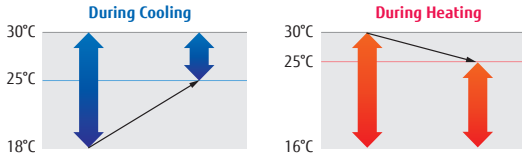
• Built in room temperature sensor:

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

Room temperature sensor

Specifications

Model name	UTY-RCRGZ1		UTY-RCRGZ1K
Power Supply		DC 12V	
Dimensions (H x W x D)	mm	86 × 86 × 44	
Weight	g	135	

DC12V is supplied by indoor unit.
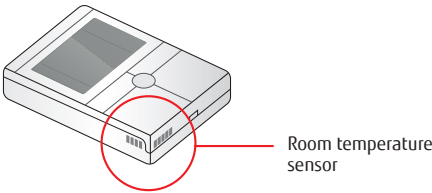
Specifications

Model name	UTY-RSRG		UTY-RHRG
Power Supply		DC 12V	
Dimensions (H x W x D)	mm	120 × 75 × 19.4	
Weight	g	120	

CONTROL SYSTEMS

Wireless remote controller
UTY-LNHG

Up to
16 indoor units
Up to
1 group
Up to
4 different daily timers

Simple and sophisticated operations with a choice of 4 daily timers

• A single controller controls up to 16 indoor units.

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

Timer setting
60min.
1˚C
2˚C

1˚C 2˚C 3˚C 4˚C
30min.
60min.
90min.
Timer setting

Easy installation and operation

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

Wide and precise

Confusion

Code change
A B C D
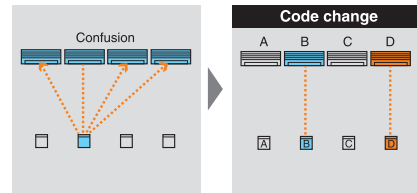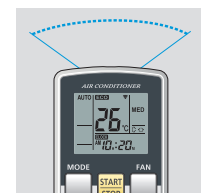
Address setting

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

Transmission line
Outdoor unit
Indoor unit
Wireless Remote Controller
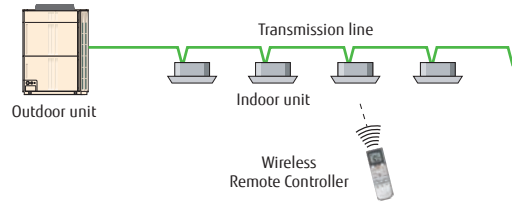
Specifications

Model name	UTY-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 for duct type
UTB-YWC / UTY-TRHX

Duct type indoor units can be controlled with Wireless Remote Controller

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

Wiring connection

Duct type indoor unit
IR Receiver Unit
UTB-YWC
Wireless Remote Controller

Duct type indoor unit
IR Receiver Unit
UTY-TRHX
Wireless Remote Controller
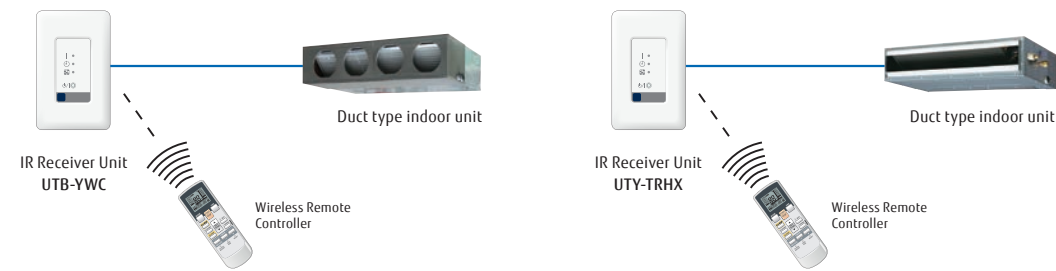
Specifications
< Wireless Remote Controller >

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

< IR Reciver Unit>

Battery		DC 5V	DC 5V
Dimensions (H x W x D)	mm	145 × 90 × 30	145 × 90 × 30
Weight	g	150	150

IR receiver unit for Cassette
UTY-LRHGB1, UTY-LBHXD, UTY-TRHX

Cassette type indoor unit can be controlled with Wireless Remote Controller

* The wireless remote controller (Model: UTY-LNHG) is necessary separately

Wiring connection

IR Receiver Unit
UTY-LRHGB1
Wireless Remote Controller

IR Receiver Unit
UTY-LBHXD
Wireless Remote Controller

IR Receiver Unit
UTY-TRHX
Wireless Remote Controller

Specifications
< Wireless Remote Controller >

Model name		UTY-LRHGB1	UTY-LBHXD	UTY-TRHX
Power Supply		1.5 V (R03/LR03/AAA)	1.5 V (R03/LR03/AAA)	1.5 V (R03/LR03/AAA)
Dimensions (H x W x D)	mm	170 × 56 × 19	170 × 56 × 19	170 × 56 × 19
Weight	g	85	85	85

< IR Reciver Unit>

Battery		DC 5V	DC 5V	DC 5V
Dimensions (H x W x D)	mm	193.9 × 193.9 × 31.2	193.9 × 193.9 × 31.2	145 × 90 × 30
Weight	g	140	140	150

CONTROL SYSTEMS

NEW **Central remote controller**
UTY-DCGGZ3

For tenants in small to midsize commercial premises

• Individual control and monitoring of up to 100 indoor units
• 7.0inch TFT color screen
• Visually intuitive operation
• Room temperature display by indoor unit sensor & remote controller sensor
• 50 Remote Controller Groups Display & remote controller group rename
• Supports 14 languages: Chinese (Simplified/Traditional), Dutch, English, French, German, Greek, Italian, Polish, Portuguese, Russian, Spanish, Turkish, and Thai (Remote Management only)

Up to
100 indoor units
Up to
50 groups

Easy Management

Air conditioning management by detecting room temperatures of each room

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

Not connected wired remote controller
: Indoor Unit Sensor
Thermistor

Connected wired remote controller
: Remote Controller Sensor / other sensors
Thermistor
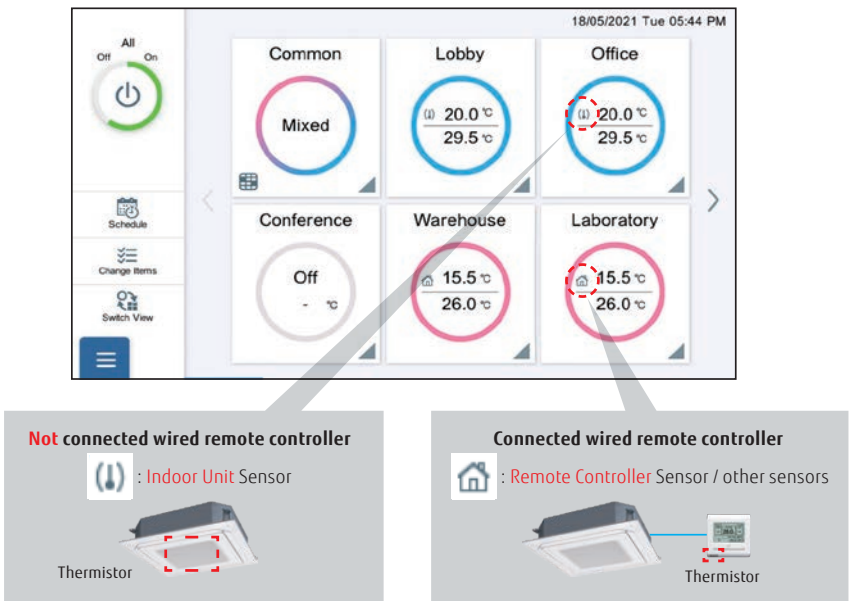
50 Remote Controller Groups Display

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

Group Display

50 Remote Controller Groups Display

One-tap
to switch

Manage & Monitor
by each Groups
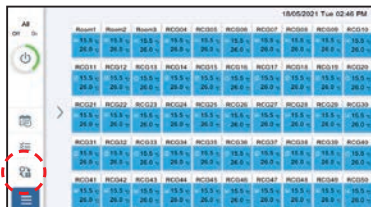
Manage & Monitor
by 50 Remote Controller Groups

Remote Controller Groups Rename

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

The remote controller group name can be changed.
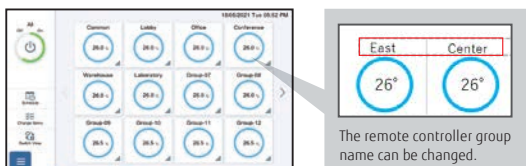
Features: Central Remote Controller

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

Monitoring screen

Individual setting

Added individual wind direction control
Individual wind direction control has been added.
Circular Flow cassette / 3D Flow cassette

Circular flow cassette

Human Sensor Compatible
Human sensor setting
• Auto save
• Auto on / off
• Auto off detection time
• Enable and disable
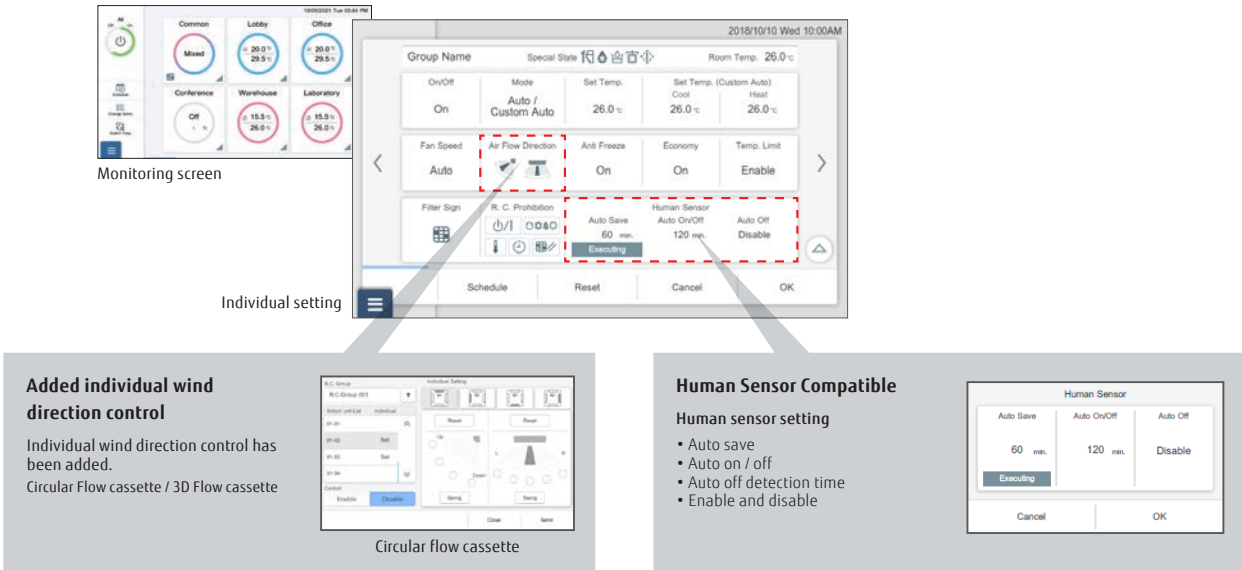
Remote Management

Remote monitoring / Remote operation

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

Increased the Number of Accounts

Maximum
30
accounts

Administrator
(Building owner)

Online users
(Tenant owner)
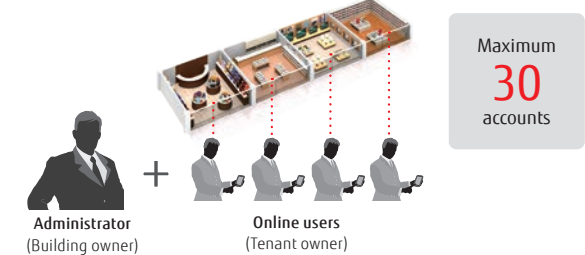
Trouble support function

Display error details
Display descriptive explanation when an error occurs

All indoor unit groups display

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

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

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

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

NEW Remote Management

Annual schedule

• An annual schedule can be arranged for each remote controller group or user-defined group.
• Allows for the programming of special settings for weekends, holidays, and store closings throughout the year.

low noise schedule

Low noise operation of outdoor units can be scheduled.

Automatic return to set temperature
A function that automatically returns the changed temperature to its original value over time.
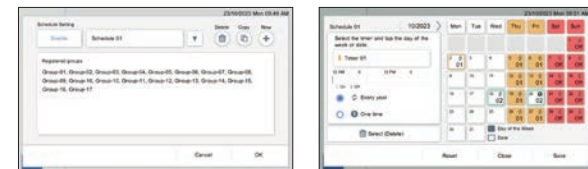
Specifications

Model name		UTY-DCGGZ3
Power Supply		100-240 V 50 / 60 Hz
Dimensions (H x W x D)	mm	134.6 × 216.2 × 37.9
Weight	g	800

CONTROL SYSTEMS

Touch panel controller
UTY-DTGGZ1

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

Up to
400 indoor units
Up to
100 outdoor units
Up to
400 groups

Easy operation
• Wide range of simple-to-understand icons
• Operation can be selected using your finger or the dedicated touch pen by pressing the appropriate on-screen icon.
• Back colour identifies current control operation: blue for monitoring; green for operational control.
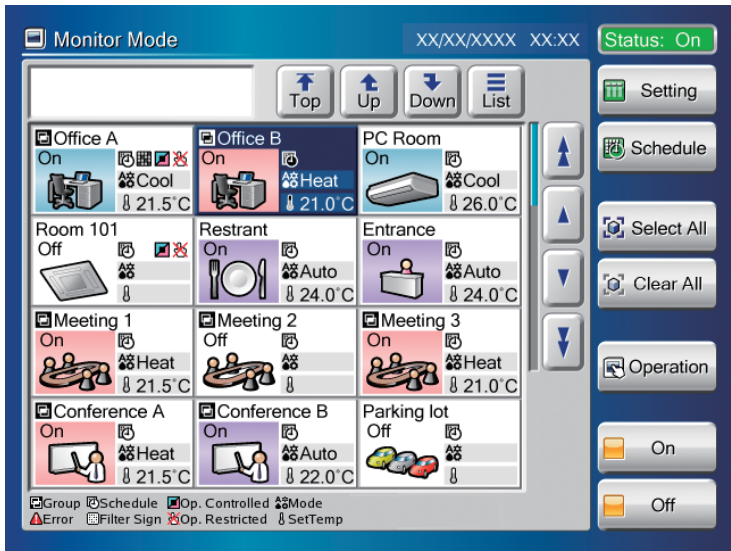
Easy maintenance
• Flat touch screen is easily cleaned
• Non glare coating on touch panel controller minimises fingerprint marking
• Easy to remove front cover

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

Up to 400 indoor units can be controlled

Group A
Group B

It allows multiple indoor unit grouping ability

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

Emergency stop function

172
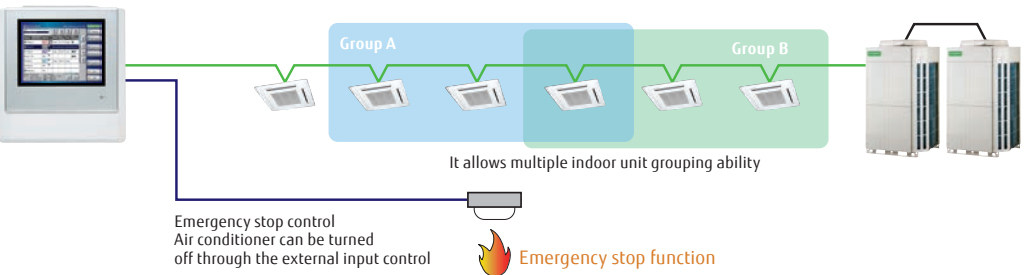
Features: Touch panel controller

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

Operation status monitoring

Tablet

E-mail notification of errors

LAN or Internet

Computer

Operation mode setting

VRF network system
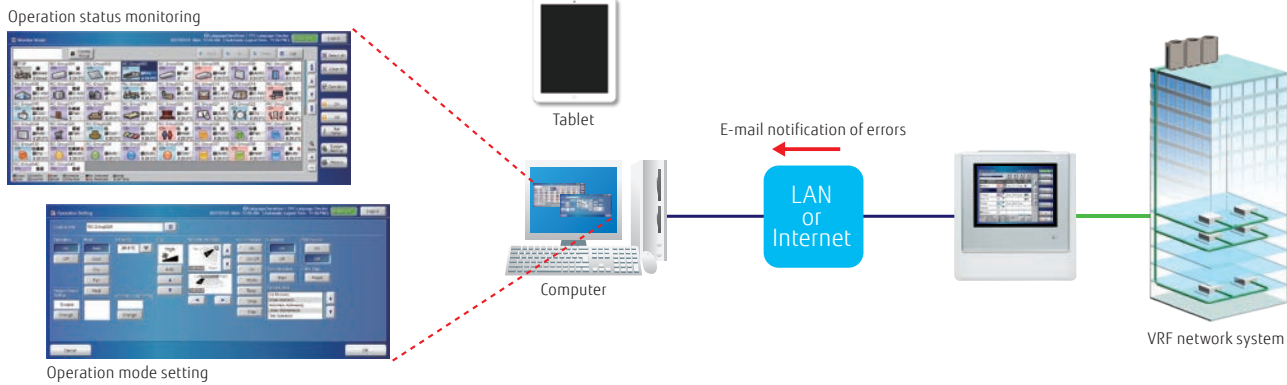
Smartphone
Model name	Browser
Nexus 6P (Android 7.1.1)	Google Chrome 5.5
iPhone 7 (iOS 10.1)	Safari 10

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

Flexible access permissions can be granted to users at each point level.
The administrator can register multiple users and permit them to access any indoor unit and any functions.

Air conditioner administrator

LAN

B User
A Tenant owner

A : Account ID for Tenant owner   B : Account ID for User
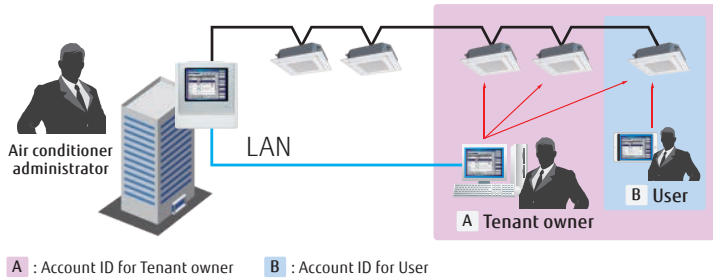
Additional languages
Supports 7 languages as standard: Chinese, English, French, German, Polish, Russian, and Spanish.
Create a language database to integrate additional languages into the remote device.
The added languages will only be displayed on the remote device and cannot be added to the Touch panel controller.

Monitoring from website

Write

Language data

7 languages

7 languages + Other languages
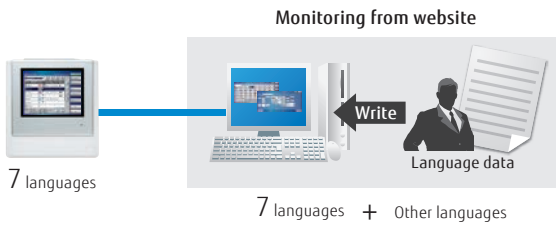
Electricity charge apportionment (Option: UTY-PTGXA)
• Energy cost can be calculated and allocated to each billing user in proportion to the amount of energy used for air conditioning.

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

Electricity meter
Electric power company

VRF network system

Electricity charges

Block (Tenant) A

Signal line*

Block (Tenant) B

LAN cable
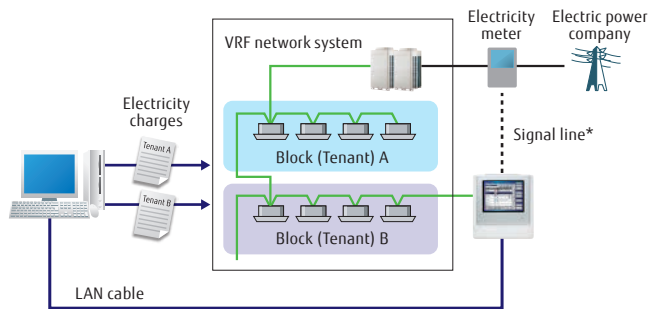
* An electricity usage meter can be connected to an external input connector of the Touch panel controller. In that case, the meter cannot be connected to an outdoor unit at the same time.

CONTROL SYSTEMS

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Features:

Automatic summer time setting

Function overview

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

Automatic clock adjustment

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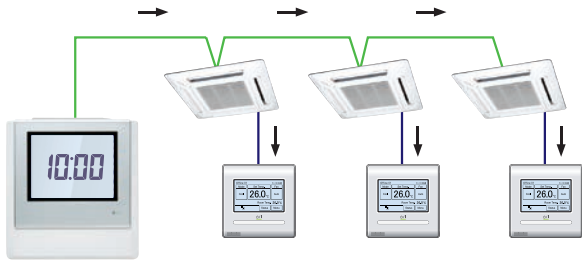
Outdoor low noise operation

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

Block (Tenant) A

Block (Tenant) B

Quiet priority setting

Air conditioning load factor

Heat load

Capacity 100% / 0

down

Operating sound 58dB / 0

time

Quiet priority low noise mode
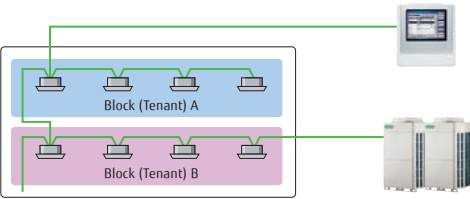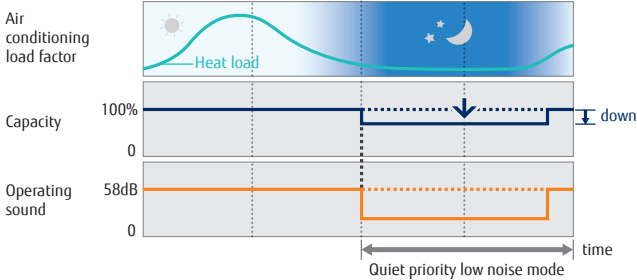
Energy saving control

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℃

Operation Start

Auto changeover

Changeover
Cooling set point
Heating set point
Changeover

Room temperature
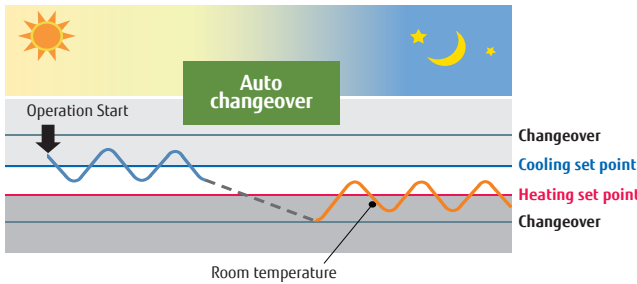
Refrigerant leak detector

Refrigerant leakage status is indicated by the management equipment. A pop-up message is displayed to notify the user, and the refrigerant is shut off.

Pop-up highlighting

FUNCTIONS SUMMARY

	UTY-DTGGZ1	Monitoring side
Air conditioning control functions		
ON/OFF	●	●
Operation mode setting*	●	●
Fan speed control	●	●
Room temperature setting	●	●
Setting temperature range limitation	●	●
Test operation	●	●
Vertical louver setting	●	●
Horizontal louver setting	●	●
Individual louver control	●*1	●
Group setting	●	●
Remote controller prohibition	●	●
Anti-freeze setting	●	●
Set temperature auto return	–	●
Energy-saving controls	–	●
Economy mode setting	●	●
Human sensor control	–	●
Displayed items		
Error	●	●
Defrosting	●	●
Current time	●	●
Day of week	●	●
Remote controller prohibition	●	●
Cooling/heating priority	●	●
Address display	●	●
Room temperature	●*3	●*3
Multiple language support	●	●
Setting for daylight saving time	●	●
Time zone setting	●	●
Name registration	●	●
Backlighting	●	●
Language setting	7	7+other
Filter sign reset	●	●
Memory operations	●	●
Refrigerant leak detector	●	●

		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		●	●
Minimum unit of timer setting (minutes)		10	10
Control			
Remote monitoring management system		●	●
Electricity charge apportionment		○	○
Error history		●	●
Emergency stop		●*2	●*2
Remote monitoring management		–	●
Energy-saving management		–	–
E-mail notification in case of failure		–	●
Key lock		● Password setting	–
Low noise mode		●	●

●: Supported   ○: Optional function   –: Not supported
*1 Only setting cancellation can be operated.
*2 Only available for external input control.
*3 Available only when using a Wired remote controller.

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

UTY-APGXZ1 `Software`

Up to
4 VRF network systems
Up to
400 outdoor units
Up to
1,600 indoor units

System controller enables advanced integrated monitoring and control of VRF network systems operating in small to large buildings.

• Up to 1,600 indoor units and 400 outdoor units on up to 4 VRF network systems can be controlled.
• To accommodate facility management needs, the system controller offers—in addition to precise air conditioning control—remote central control, electricity charge apportionment, schedule management, and energy-saving options for VRF network systems.
• Supports 7 languages: Chinese, English, French, German, Polish, Russian, and Spanish.

System controller lite

UTY-ALGXZ1 `Software`

Up to
1 VRF network systems
Up to
100 outdoor units
Up to
400 indoor units

System controller Lite offers a set of standard functions to manage air conditioners operating in a small or midsize building.

• Up to 400 indoor units and 100 outdoor units on a VRF network system can be controlled.
• In addition to precise air conditioning control, a variety of applications are available as options to offer a wider range of control.
• Supports 7 languages: Chinese, English, French, German, Polish, Russian, and Spanish.

Visually intuitive 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.

Click & Operate the whole building!

You can select from among 4 display options: site, building, floor, and list.

Click & Operate any specified unit(s)!

The display can be easily changed by pressing the button.

Site view

List view

Batched control of freely defined groups

Batched control of freely selected units

Building view

Click & Operate the whole floor!

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

Floor view

Click & Operate the unit!

Note:
2D floor layout or 3D perspective of a building is not available on System controller Lite.

Features: System controller / System controller lite

Third-party devices connected via MODBUS® can be controlled.

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

When a MODBUS® adapter (locally available) is connected to a computer, electrical equipment and devices supported by MODBUS® can be monitored and controlled centrally from the computer. The central control can reduce wasted energy throughout an entire building resulting from a failure to turn equipment off during or after work, as well as reduce the need for on-site patrols.

VRF network

System controller
(System controller Lite)

Remote I/O devices

Supported MODBUS® communication (Locally-purchased)

Electricity meter that supports MODBUS® communication

Electric power company

Facilities

Energy recovery ventilator

Air handling unit (DX kit)

Supply & exhaust fan
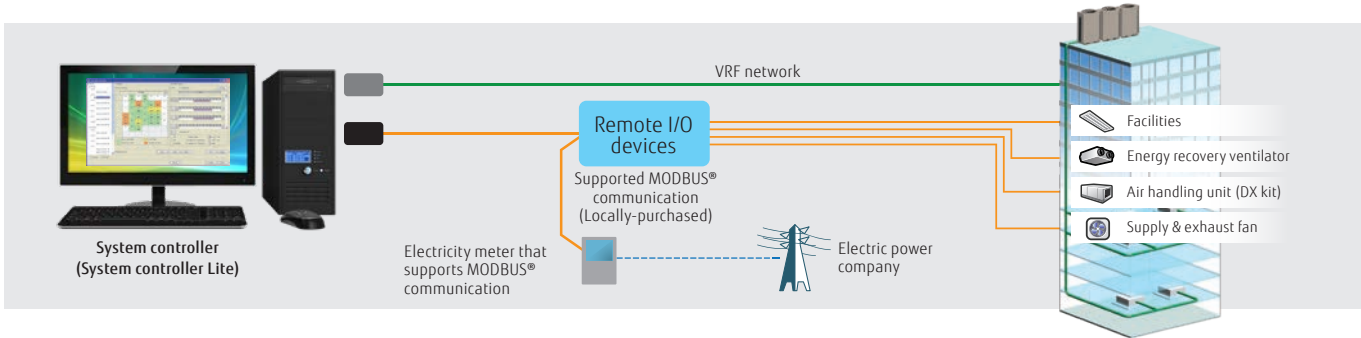
Wide-ranging operation and data management

`Standard` System controller and System controller Lite

Schedule management
• An annual schedule can be arranged for each remote controller group or user-defined group.
• ON/OFF, operation mode, remote controller prohibition, and temperature settings can be programmed for up to 143 times per day at 10-minute intervals and for up to 101 configurations for each remote controller group.
• Settings can be programmed for a period that spans midnight.
• Allows for the programming of special settings for weekends, holidays, and store closings throughout the year.
• Low noise operation of outdoor units can be scheduled.
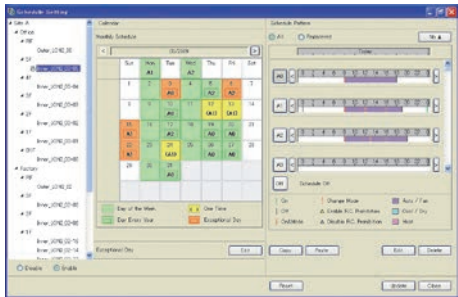
Wide-ranging control of indoor and outdoor units
• The operation status and mode of each indoor unit are displayed.
• Turn on and off each indoor unit and switch its operation mode.
• Setting temperature range limitation
• Low noise setting of outdoor units

Remote controller prohibition
Prohibits the operation mode, temperature setting, or ON/OFF of an indoor unit.

Error alert and e-mail notice
When something goes wrong, an error message is shown in a popup on a computer display with a chime, and an e-mail notice is sent. Errors of the past one year are logged and can be reviewed.

Operation and control history
A history of operation status and control can be maintained and retrieved.

Importing and exporting databases
Only an administrator is authorized to import and export registration, layout, and image data.

Automatic clock adjustment
Time can be set for all controllers in batch automatically.

Electricity charge apportionment

`Standard` on System controller
`Option` System controller Lite UTY-PLGXA2

Electricity charge apportionment method
This is a method to calculate monthly energy costs to be allocated to each tenant based on the amount of energy used by their air conditioners. The first step is to determine exactly how much energy is consumed by air conditioners in each tenant space. The second step is to divide the total energy charge billed by an electric power company based on the amount of energy used by each tenant to determine the energy cost to be allocated to each of them. (See figure on right)

The calculation takes into consideration such factors as the number of unused rooms and nighttime electricity rate, which are shown in detail on an energy cost allocation schedule.

Example of system configuration

Electric power company

Electricity charges (air conditioning)

System controller

RB unit Signal transmission line

Power distribution board

Power distribution board

Outdoor unit

Tenant A-1 | Tenant A-2 | Tenant A-3
Tenant A-4 | Tenant A-5 | Tenant A-6
Tenant B-1 | Tenant B-2 | Tenant B-3
Tenant C-1 | Tenant C-2 | Tenant C-3

3-phase, 4-wire, ~400 V, 50 Hz

Single phase, ~230 V 50Hz
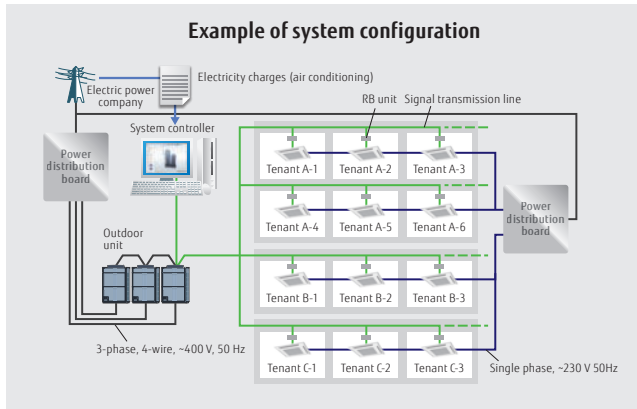
CONTROL SYSTEMS

Features: System controller / System controller lite

Remote monitoring management

`Standard` on System controller
`Option` System controller Lite UTY-PLGXR2

The System controller can be used on site or remotely over networks for remote central control.
The System controller requires 2 software programs working together: The VRF controller runs on site and communicates with the VRF system;
The VRF explorer, which runs at a remote location, provides a user interface and communicates with the VRF controller.
The VRF controller and the VRF explorer run on a single computer or on different computers connected on a network.
A computer running VRF explorer can centrally control up to 10 VRF system sites having up to 20 buildings each.

On site central control

Max. 4 VRF network systems per site

Central monitoring screen for all properties

Detailed monitoring screen for special properties

Remote central control

A maximum of 10 locations, such as offices or factories

Building management company, management center, etc.

1 VRF explorer can control or monitor up to 10 sites.

Building Management Company A (In charge of the day shift)

Building Management Company B (In charge of the night shift)

Office Management Center

1 VRF controller can be monitored from any number of VRF explorers (up to 5 connections simultaneously).

Security company

Headquarters management center

Energy-saving management

`Option` System controller UTY-PEGXZ1
`Option` System controller Lite UTY-PLGXE2

A variety of energy-saving options can be selected depending on the season, weather, and time of day. Excellent energy-saving operation is performed while keeping users comfortable.
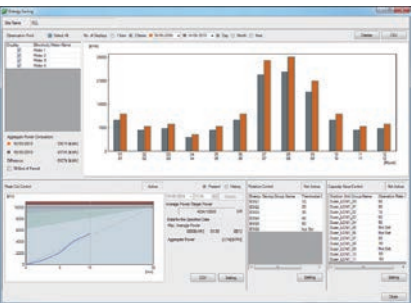
Main screen for energy-saving management

Energy saving graph data: This chart compares the energy consumption for the current month with the previous month and with the same month of the previous year to keep track of the energy-saving performance.

Indoor unit rotation
Indoor units can be automatically rotated to operate within a group in accordance with a predetermined annual schedule to reduce power consumption while keeping users comfortable. The operation stoppage rate can be selected for an indoor unit.

Peak-cut mode
The system controller monitors the connected power meter and controls the energy to maintain the target power consumption set for each time period by changing the set temperature of the indoor units or turning off the thermostat so as to keep the users comfortable. Indoor units to be controlled can be grouped in many ways, and the control level can be set for each group.

Capacity saving for outdoor unit
The upper limit on the capacity of an outdoor unit can be adjusted to reduce power consumption during a hot summer or cold winter by averaging out the power-saving performance of each refrigerant system. The upper limit on capacity can be set at 50% of the rated capacity or more.

Summary of functions

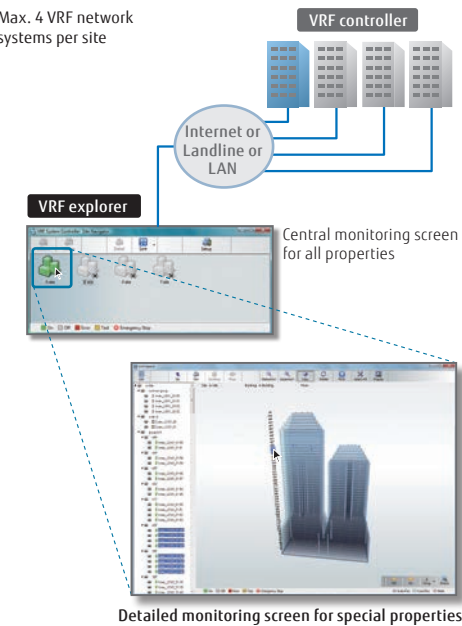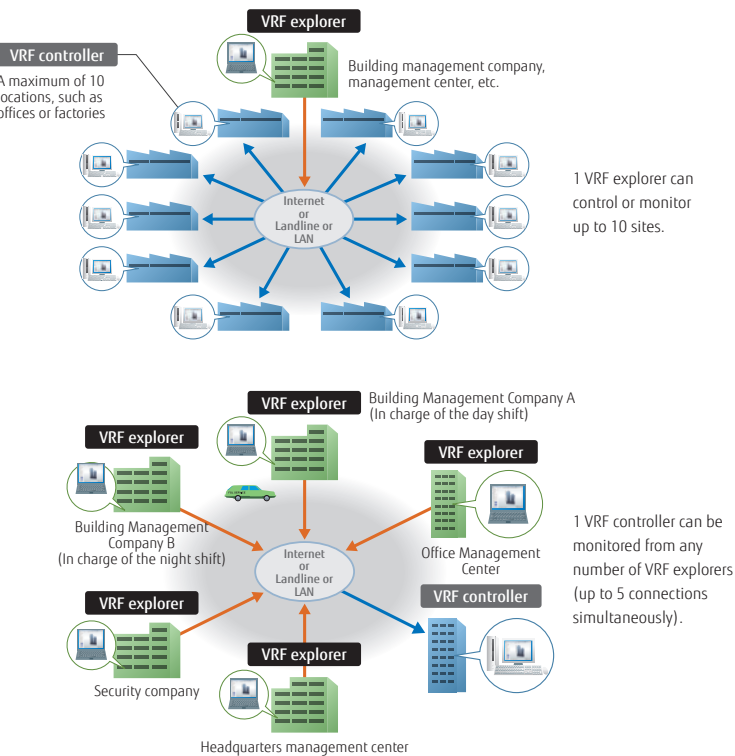| Functions	Type		System controller UTY-APGXZ1	Option UTY-PEGXZ1	System controller Lite UTY-ALGXZ1	Option UTY-PLGXR2	Option UTY-PLGXA2	Option UTY-PLGXE2	Option UTY-PLGXX2
Specifications	Max. number of VRF networks supported		4	–	1	–	–	–	–
	Max. number of indoor unit and remote controller groups per VRF network		400	–	400	–	–	–	–
	Max. number of outdoor units per VRF network		100	–	100	–	–	–	–
	Max. number of indoor units and remote controller groups per System controller		1600	–	400	–	–	–	–
	Max. number of outdoor units per System controller		400	–	100	–	–	–	–
Site supervision	Multiple site display		10	–	10	–	–	–	–
	Number of buildings per site		20	–	–	–	–	–	–
	Number of floors per site		200	–	–	–	–	–	–
	Number of floors per building		50	–	–	–	–	–	–
	3D graphical layout view		●	–	–	–	–	–	–
	2D graphical layout view		●	–	–	–	–	–	–
	List display		●	–	●	–	–	–	–
	Tree display		●	–	–	–	–	–	–
	Group display		●	–	–	–	–	–	–
Error management	Error notification		●	–	●	–	–	–	–
	Audible alarm		●	–	●	–	–	–	–
	E-mail notification of errors		●	–	●	–	–	–	–
History	Error history		●	–	●	–	–	–	–
	Operation history		●	–	●	–	–	–	–
	Control history		●	–	●	–	–	–	–
Operation control	Individual control	ON/OFF	●	–	●	–	–	–	–
		Operation mode*	●	–	●	–	–	–	–
		Room temperature	●	–	●	–	–	–	–
		Fan speed	●	–	●	–	–	–	–
		Airflow direction	●	–	●	–	–	–	–
		Economy mode	●	–	●	–	–	–	–
		Setting temperature range limitation	●	–	●	–	–	–	–
		Anti-freeze	●	–	●	–	–	–	–
		Low noise setting of outdoor units	●	–	●	–	–	–	–
	Individual management	Remote controller prohibition	●	–	●	–	–	–	–
		Setting temperature range limitation	●	–	●	–	–	–	–
		Filter sign reset	●	–	●	–	–	–	–
	Other	memory operations	●	–	●	–	–	–	–
		Pattern operations	●	–	●	–	–	–	–
Schedule	Annual Schedule		●	–	●	–	–	–	–
	Setting for a specific date		●	–	●	–	–	–	–
	ON/OFF per day		72	–	72	–	–	–	–
	ON/OFF per week		504	–	504	–	–	–	–
	Day off		●	–	●	–	–	–	–
	Minimum unit of timer setting (minutes)		10	–	10	–	–	–	–
	Weekly schedule for low noise mode		●	–	●	–	–	–	–
Remote monitoring management	Web Operation		●	–	●	–	–	–	–
	Remote monitoring		●	–	–	●	–	–	–
	Remote operation control		●	–	–	●	–	–	–
	Remote function setting		●	–	–	●	–	–	–
Electricity charge apportionment	Apportionment charge/bill calculation		●	–	–	–	●	–	–
	Tenant (block) setting		●	–	–	–	●	–	–
	Common facilities apportionment setting		●	–	–	–	●	–	–
	Rated power consumption allotment		●	–	–	–	●	–	–
	Individual calculations for cooling and heating		–	●	–	–	●	–	–
	Electricity meter supported		–	●	–	–	●	–	–
Energy-saving management	Indoor unit rotation		–	●	–	–	–	●	–
	Peak cut control		–	●	–	–	–	●	–
	Capacity saving for outdoor unit		–	●	–	–	–	●	–
	Record of energy-saving operation		–	●	–	–	–	●	–
	Information on energy saving		–	●	–	–	–	●	–
	Power consumption monitor		–	●	–	–	–	●	–
	Electricity meter supported		–	●	–	–	–	●	–
Control of external devices	Monitor		●	–	–	–	–	–	●
	Control		●	–	–	–	–	–	●
Others	Importing and exporting databases		●	–	–	–	–	–	–
	Automatic clock adjustment		●	–	●	–	–	–	–
	Multiple language support		7 languages	–	7 languages	–	–	–	–
	Refrigerant leak detector		●	–	●	–	–	–	–
	Power shutdown		●	–	●	–	–	–	–

●●: Available -: Not available

Computer requirements
The specifications required for the computer are shown in the table below:

	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) Supports 7 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], Window：® 8.1, and Windows® 10)	
HDD	40 GB or more of free space	
Displayed items	1024 × 768 or higher resolution	
Interfaces	•Ethernet port (for getting access to the internet using LAN) or a modem (for getting access to the internet via landline) •Up to 6 USB ports (Only required for a server computer working as a VRF controller) - Maximum of 2 USB ports are required to connect to a White-USB-key/WibuKey - Up to 4 USB ports required to connect to an Echelon® U10 USB network interface * Maximum number of required USB ports depends on the applicable system configuration.	•Ethernet port (for getting access to the internet using LAN) or a modem (for getting access to the internet via landline) •Up to 6 USB ports (Only required for a server computer working as a VRF controller) - Maximum of 4 USB ports are required to connect to a White-USB-key/WibuKey - 1 USB port is required for an Ec：helon® U10 USB Network interface * The maximum number of required USB ports depends on the applicable system configuration.
Graphic accelerator	Microsoft® DirectX® 9.0c compatible	
Software	Adobe® Acrobat Reader® 9.0 or later	

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

<PACKING LIST>

Type	For System controller		For System controller Lite				
	System controller	Option Energy manager	System controller Lite	Remote access	Option Electricity charge apportionment	Energy saving	Centralized 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 a WHITE-USB-KEY. However, a WHITE-USB-KEY is not required for remote VRF explorer software.

CONTROL SYSTEMS

BACnet™ gateway
UTY-ABGXZ1 [Software]

**White-USB-key
(Software Protection Key)**

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Up to
4 VRF network systems
Up to
400 outdoor units
Up to
1,600 indoor units

- 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.

Installation example

VRF network system 1
RB unit
Indoor unit Outdoor unit
USB adapter *1 (Locally available)

VRF network system 2
RB unit
Indoor unit Outdoor unit
USB adapter (Locally available)
USB adapter (Locally available)
USB adapter (Locally available)

Max. 4 VRF network systems

BACnet™ Operator Workstation (B-OWS)

BACnet™

BACnet™ gateway (UTY-ABGXZ1)
White-USB-key Software protection key

Lighting facilities
Security system
Automatic fire alarm interface
Ventilation system

━ = USB cable
━ = Transmission line (VRF Network)
━ = Ethernet

*1: U10 USB network interface available from Echelon® Corporation.

Specifications

	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
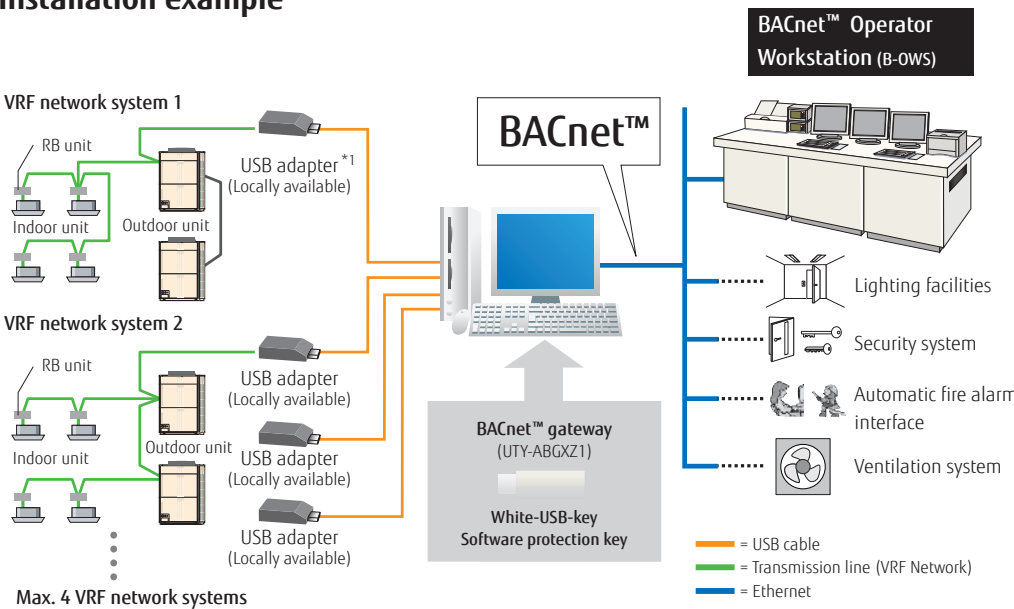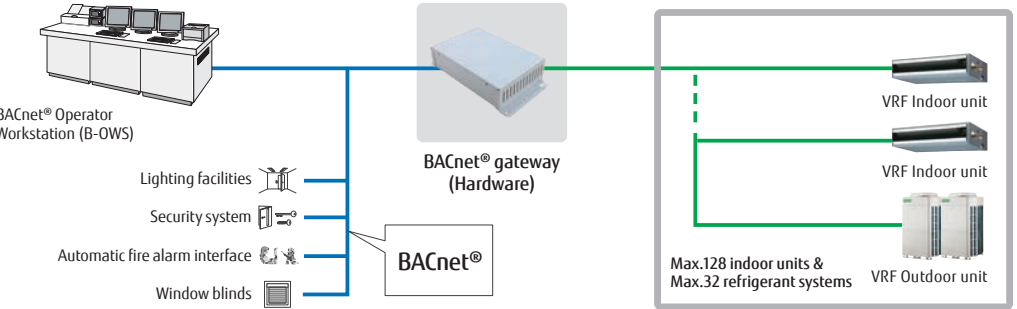**UTY-VBGX** [Hardware]

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Up to
1 VRF network systems
Up to
32 refrigerant systems
Up to
128 indoor units

- BACnet® gateway connects BMS and a Fujitsu General VRF system.
- Up to 128 indoor units and 32 refrigerant systems 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.

Installation example

BACnet® Operator Workstation (B-OWS)
Lighting facilities
Security system
Automatic fire alarm interface
Window blinds

BACnet®

BACnet® gateway (Hardware)

VRF Indoor unit
VRF Indoor unit
Max.128 indoor units & Max.32 refrigerant systems VRF Outdoor unit

Specifications

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

Model name		UTY-VBGX
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 converter for LᴏɴWᴏʀᴋs™
UTY-VLGX
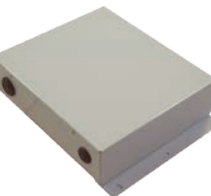
Up to
4 units to BMS
Up to
100 outdoor units
Up to
128 indoor units

- 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 Converter for LONWORKS™

Installation example

General-purpose building control computer (LᴏɴWᴏʀᴋs™ device)
Lighting facilities
Security system
Automatic fire alarm interface
Window blinds

Network converter for LᴏɴWᴏʀᴋs™

LᴏɴWᴏʀᴋs™ Network

VRF Indoor unit
VRF Indoor unit
Max.128 indoor units & Max.100 outdoor units VRF Outdoor unit
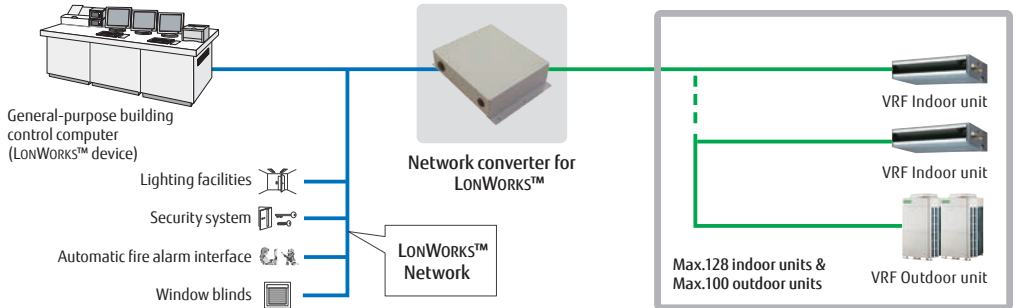
Specifications

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

Transmission specifications (BMS side)

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

CONTROL SYSTEMS

MODBUS™ convertor for VRF
UTY-VMGX (Hardware)

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

• Compact and lightweight design
• Direct connection to MODBUS Network
• Up to 128 indoor units can be controlled in one MODBUS Converter
• The MODBUS Converter permits central monitoring and control of air conditioners from BMS or Central Controller.
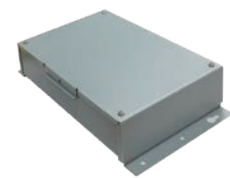
Up to
9 units per VRF system
Up to
100 outdoor units
Up to
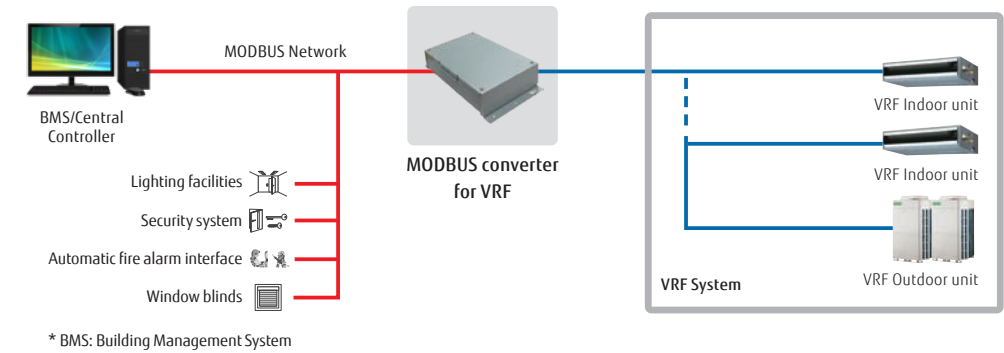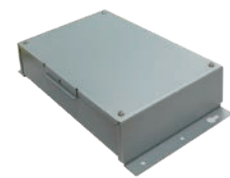**128** indoor units

MODBUS Network

BMS/Central
Controller

Lighting facilities
Security system
Automatic fire alarm interface
Window blinds

MODBUS converter
for VRF

VRF Indoor unit
VRF Indoor unit

VRF System
VRF Outdoor unit

* BMS: Building Management System

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™ converter for indoor unit
UTY-VMSX

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

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

Up to
1 indoor unit

MODBUS Network

BMS/Central/
Home Controller

Lighting facilities
Security system
Automatic fire alarm interface
Window blinds

MODBUS
converter

Specifications

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

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

KNX™ converter for VRF
UTY-VKGX (Hardware)

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.

Up to
100 outdoor units
Up to
128 indoor units

Central/Home
Controller

KNX converter
for VRF
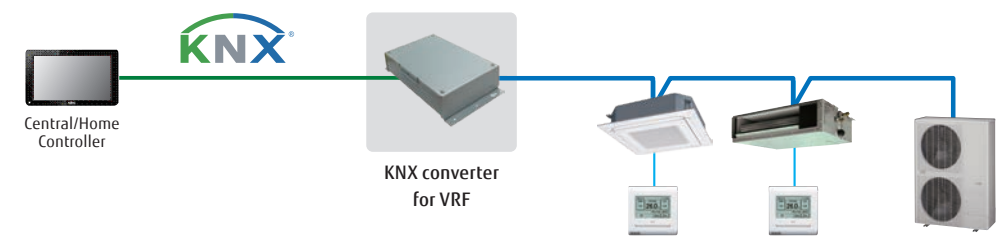
Specifications

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

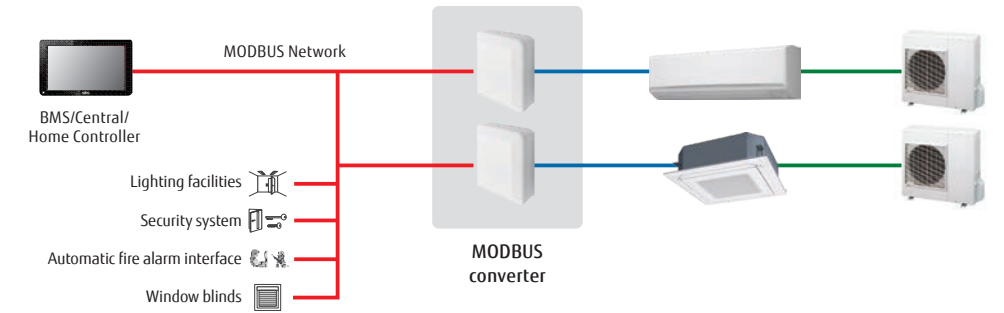# KNX™ converter for indoor unit
UTY-VKSX

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 indoor unit.
• Compact and light weight design

Up to
1 indoor unit

Central/Home
Controller

KNX converter
for indoor unit

Single-split
indoor unit
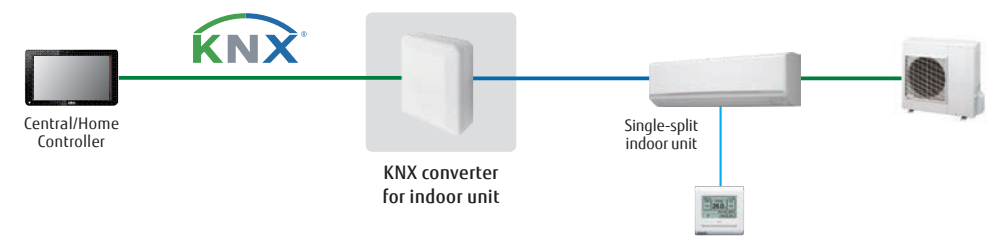
Specifications

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

CONTROL SYSTEMS

NEW WLAN adapter

UTY-TFSXJ3

AIRSTAGE Mobile

"AIRSTAGE Mobile" is an application software that enables you to manage the Fujitsu General's air conditioner(s) with a mobile device from anywhere.

Up to
1 indoor units

• Maximum 5 accounts per 1 indoor unit
• Room / Outdoor temperature display
• Can be used for a Single / Multi and VRF indoor units.
• No separate external power supply required
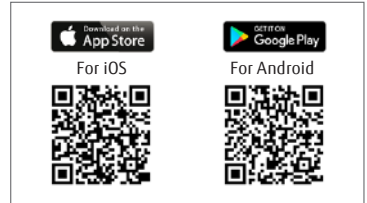• "AIRSTAGE Mobile" is an application software that enables you to operate the Fujitsu General's air conditioners with a mobile device.
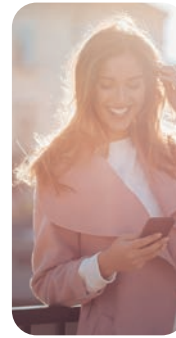
Download on the **App Store** — For iOS
GET IT ON **Google Play** — For Android

User Friendly for Everyone

Enjoy easy-to-use centralized operation of air conditioners via a smartphone anytime, anywhere

Image*

Shop Owner

Commercial Building Owner

House Owner

Main Functions

• ON / OFF
• Operation mode
• Fan speed
• Louver position
• Set temperature control

• Weekly timer
• Room temperature display
• Outdoor temperature display
• Error display

*Contents of display differ depending on the type of indoor unit.

New Design!

Ease of use is pursued to achieve a stylish design.
The more legible and accessible timer UI enables effortless schedule management.
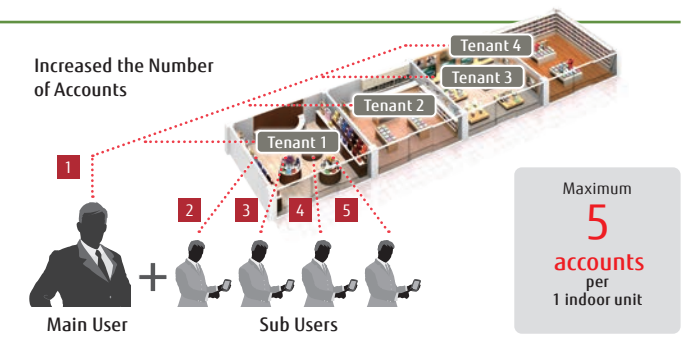
Mode change   Fan speed change   Weekly timer
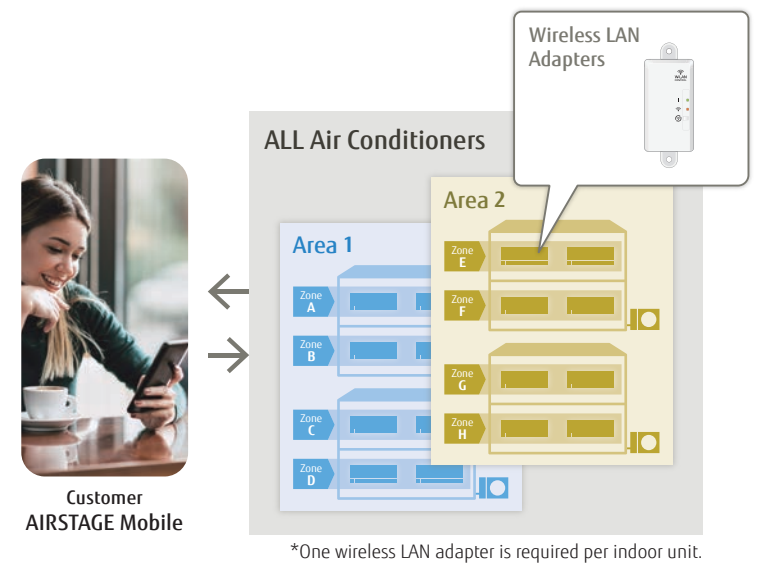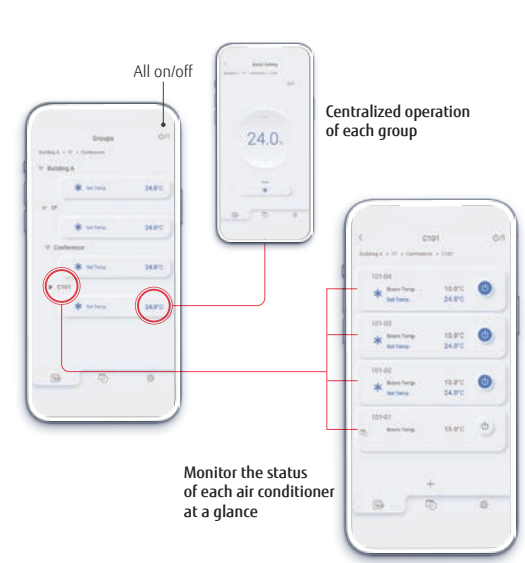

Features: AIRSTAGE Mobile

Centralized operation for flexible remote management of all air conditioners

E\AIRSTAGE Mobile is ideal for a wide range of applications, from large residential buildings to smaller commercial spaces such as offices and stores.
Anyone who has a smartphone and an adapter can easy to manage the system at a low cost.

Increased the Number of Accounts

Tenant 4
Tenant 3
Tenant 2
Tenant 1

Main User   Sub Users

Maximum
5
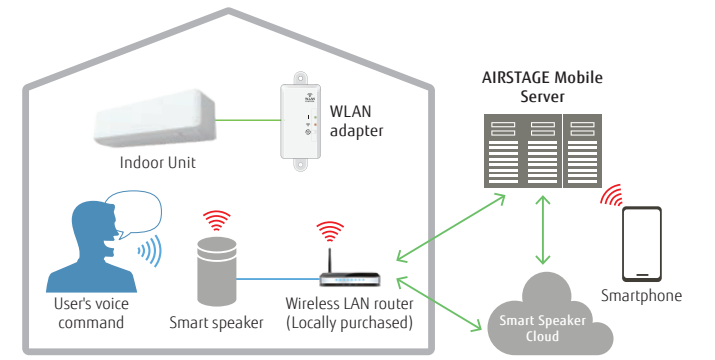**accounts**
per
1 indoor unit

Hierarchical group management

Multiple air conditioners can be combined into a single group for centralized operation.
Several groups can also be organized at once.
Grouping the air conditioners by building, floor, or room makes it easy for users to monitor their operation status and operate them quickly.

All on/off

Centralized operation of each group

Monitor the status of each air conditioner at a glance

Customer AIRSTAGE Mobile

Wireless LAN Adapters

ALL Air Conditioners

Area 1 — Zone A, Zone B, Zone C, Zone D
Area 2 — Zone E, Zone F, Zone G, Zone H

*One wireless LAN adapter is required per indoor unit.

Operate air conditioner and check its operation status just by talking to it

Connecting with a smart speaker allows the user to operate the air conditioner and check its operation status just by talking to it.

Indoor Unit

WLAN adapter

AIRSTAGE Mobile Server

User's voice command   Smart speaker   Wireless LAN router (Locally purchased)   Smart Speaker Cloud   Smartphone

* The new WLAN adapters for AIRSTAGE Mobile are upper compatible for the indoor units that can connect the following WLAN adapters for FGLair.

	CN connector type
for FGLair	UTY-TFSXZ2
for AIRSTAGE Mobile	UTY-TFSXJ3

Specifications

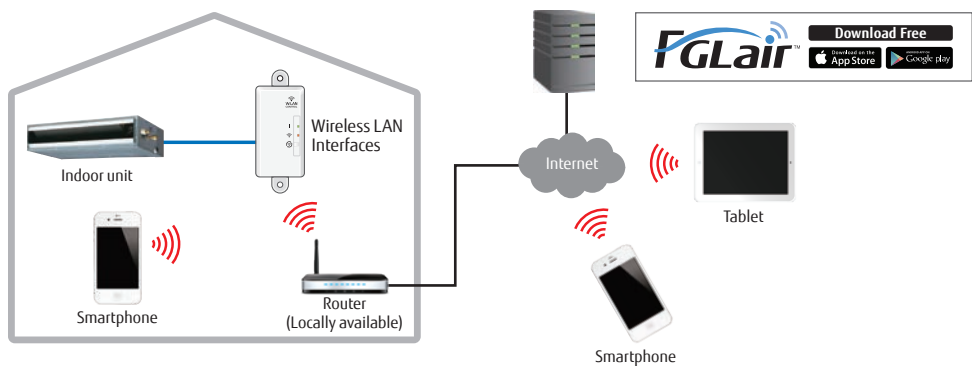| Model name	UTY-TFSXJ3(CN connector type)	
Dimensions (H × W × D)	mm	71 × 38 × 15
Weight	g	35

CONTROL SYSTEMS

WLAN adapter
UTY-TFSXZ2

Up to
1 indoor units

• This interface provides the most advanced solution for the remote management of an air conditioning system by using smartphones, tablets, and computers.
• No separate external power supply required
• Can be used for a Single / Multi and VRF indoor units.

Download Free
App Store   Google play

Indoor unit
Wireless LAN Interfaces
Smartphone
Router (Locally available)
Internet
Tablet
Smartphone

Basic control

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

Multi-split system

Indoor unit
Indoor unit
Router (Locally available)
Internet
Outdoor unit
Smartphone
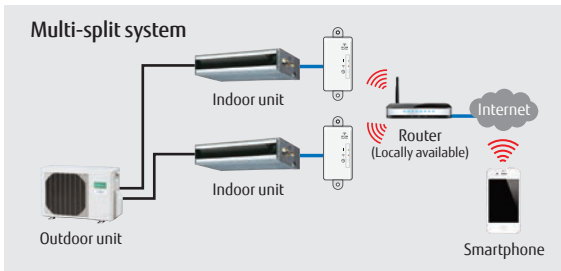
Multiple air conditioning management

• Manage multiple air conditioning systems in different locations.

Internet
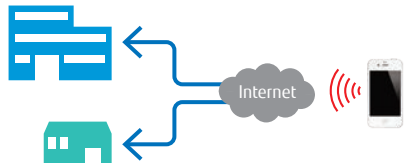
Error alert and e-mail notice

• E-mail notification alerts
• Air conditioning malfunction alert
• Enables quick service response when errors occur.

Indoor unit
Internet
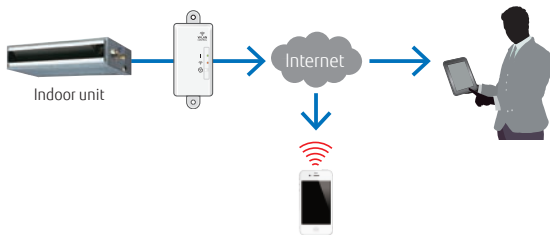
Specifications

| Model name		UTY-TFSXZ2
Dimensions (H x W x D)	mm	71 × 38 × 15
Weight	g	35

Wireless LAN Adapter
FJ-RC-WIFI-1

IntesisHome®

Up to
1 Single indoor unit

• 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

Indoor unit
Wireless LAN Adapter
Router (Field supplied)
Internet
Smartphone
Tablet
IntesisHome®
PC
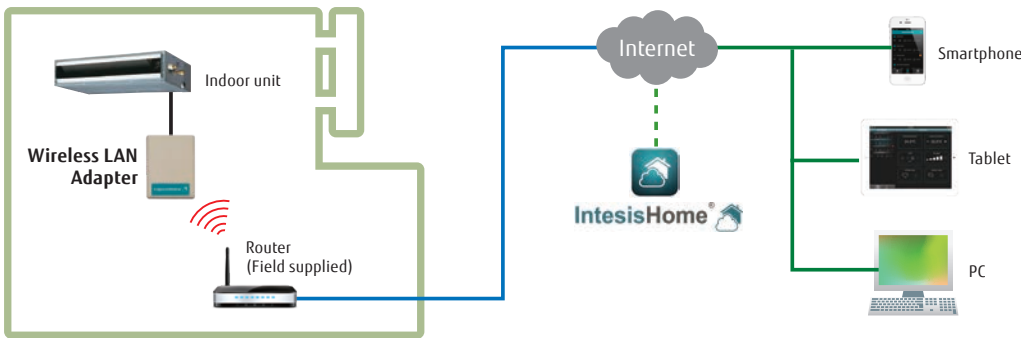
Basic control

• 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)
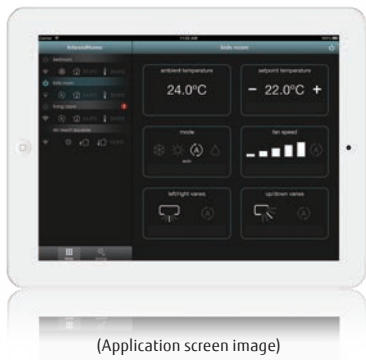
Notifications and History

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

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

Specifications

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

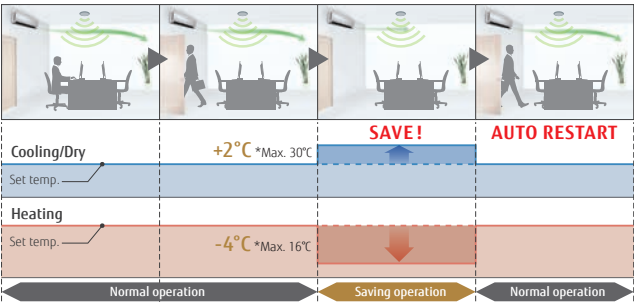CONTROL SYSTEMS

External switch controller
UTY-TERX

Up to
1 group

- 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.
- The set temperature can be specified at two points for cooling and heating individually (4 points).

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.

Cooling/Dry		SAVE!	AUTO RESTART
Set temp.	+2℃ *Max. 30℃		
Heating			
Set temp.	−4℃ *Max. 16℃		
	Normal operation	Saving operation	Normal operation

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.
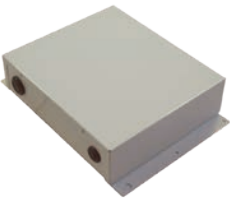
Specifications

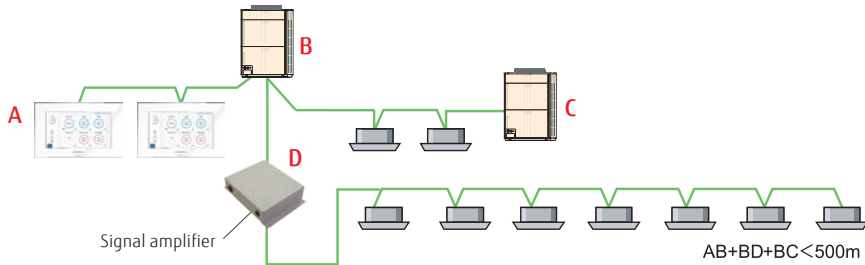| Model name		UTY-TERX
Power Supply		DC 6.5-16V
Dimensions (H x W x D)	mm	140 × 117 × 43
Weight	g	250

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.

Installation example

Signal amplifier

AB+BD+BC＜500m

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

CONTROL SYSTEMS

OPTIONS

External power supply unit

Auto Louver Grille Kit

Gas sensor kit

CONTROL SYSTEM LIST

OPTIONAL PARTS LIST

OPTIONAL PARTS

FUNCTION LIST

SEPARATION TUBE etc.

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

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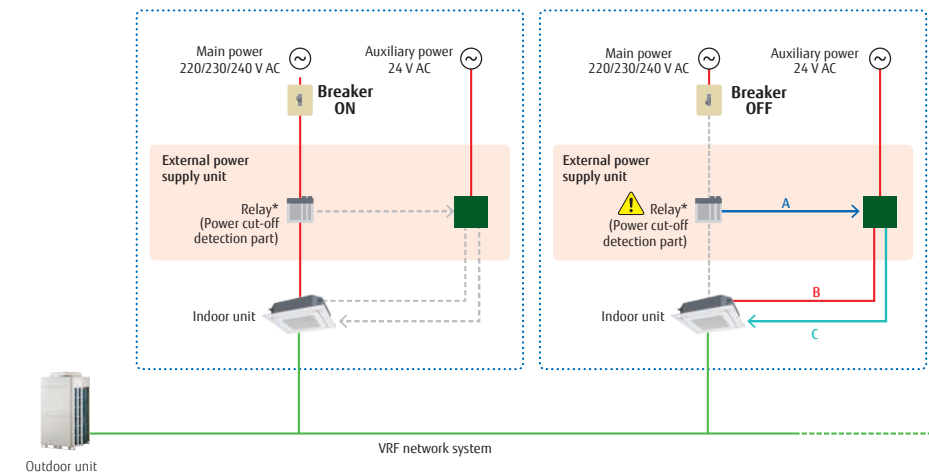
OPTION

External power supply unit
UTZ-GXXC

The External power supply unit protects the increment in the system even if the power supply for some of the indoor units is shut down.

Connects to the External power supply unit to supply power to the indoor unit from the auxiliary power supply. This allows for continuous operation without system errors.
Built-in relays reduce installation time and cost.
The UTY-GXXC has a built-in relay, which reduces installation time and cost.

High reliability

• A: Interruption of the main power supply is detected by the power cut-off detection part.
• B: Supplies power for driving the expansion valve of the indoor unit. (12 V or 5 V DC)
• C: Gives notification of the power supply from the External power supply unit.

Main power 220/230/240 V AC — Auxiliary power 24 V AC — **Breaker ON**

External power supply unit — Relay* (Power cut-off detection part) — Indoor unit

Main power 220/230/240 V AC — Auxiliary power 24 V AC — **Breaker OFF**

External power supply unit — Relay* (Power cut-off detection part) — A — B — C — Indoor unit

Outdoor unit — VRF network system

Note

• When changing the power supply voltage to 24 V AC, use a power transformer with an insulated structure that complies with the regulations* of the installation region.
• A powered-off indoor unit driven by the External power supply unit is treated in the same way as an operation-off unit in the electricity charge appointment function. If standby power is generated, the result of the electricity charge appointment may not be zero.

* UL Class II or IEC 61558 Class III, for example.

Specifications

Model name	UTZ-GXXC
Power Supply	24 V AC 50/60 Hz
Dimensions (H x W x D) mm	97 × 200 × 178
Weight g	800

Auto louver grille kit
UTD-GXTA-W / UTD-GXTB-W / UTD-GXTC-W
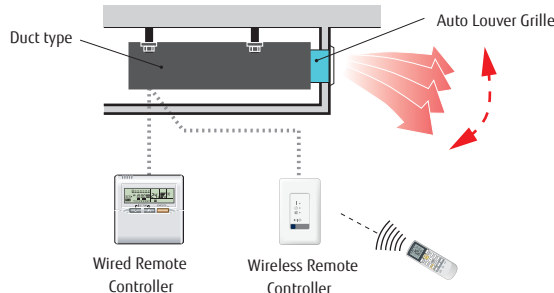
The optional clean-looking flat Auto louver grille kit blends into any interior and provides a comfortable airflow.
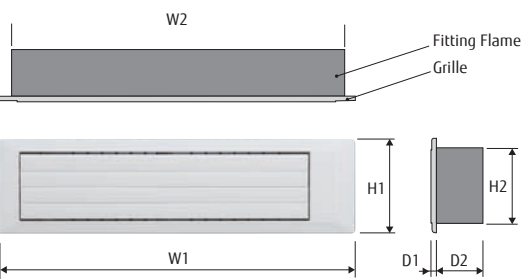
Closed louver   Open louver

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.

Duct type — Auto Louver Grille

Wired Remote Controller   Wireless Remote Controller

Dimensions

W2 — Fitting Flame / Grille

H1 — H2 — W1 — D1 — D2

Unit: mm

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

Specifications

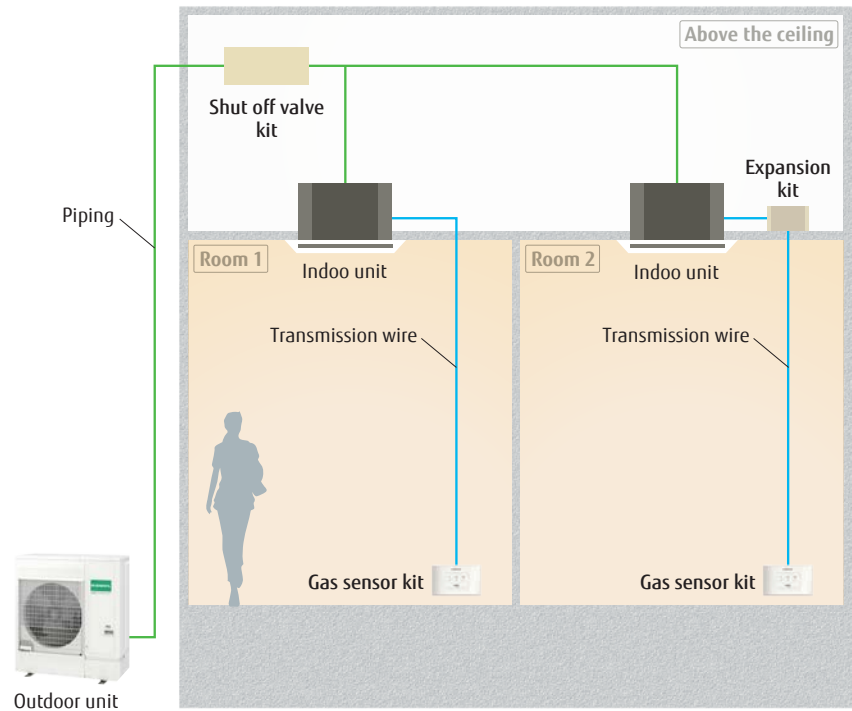| Model name			UTD-GXTA-W	UTD-GXTB-W	UTD-GXTC-W
Applicable Indoor Unit			ARXD007/009/012/014GLEH ARXD07/09/12/14GATH ARXK007/009/012/014GLGH ARXK007/009/012/014GLFH	ARXD018GLEH ARXD18GATH ARXK018GLGH ARXK018GLFH	ARXD024GLEH ARXD24GATH ARXK024GLGH ARXK024GLFH
Power source			Connecting with Control box 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.		
Operating range	Cooling	°C	18 to 32		
		% RH	80% or less		
	Heating	°C	16 to 30		

OPTION

Gas sensor kit

UTY-SGZH

Enhanced disaster safety measures

The system is designed to meet the environmental safety requirements specified in the IEC 603352-40 standard for the use of R32 refrigerant. The environment requiring safety measures is determined by the size of the room in relation to the amount of refrigerant required.
For example, if the system is designed for maximum pipe length and the refrigerant charge is 6 kg, safety measures are required for rooms of 15 m² or less.

For Example: Total pipe length 120m

Above the ceiling

Shut off valve kit

Expansion kit

Piping

Room 1 — Indoo unit

Room 2 — Indoo unit

Transmission wire

Transmission wire

Gas sensor kit

Gas sensor kit

Outdoor unit

Shut off valve kit
UTP-GX027A, UTP-GX060A
Block the path to prevent refrigerant flow in the event of a refrigerant leakage.

Gas sensor kit
UTY-SGZH
Gas Sensor kit Used to ensure standards compliance and safety when R32 VRF products are installed.
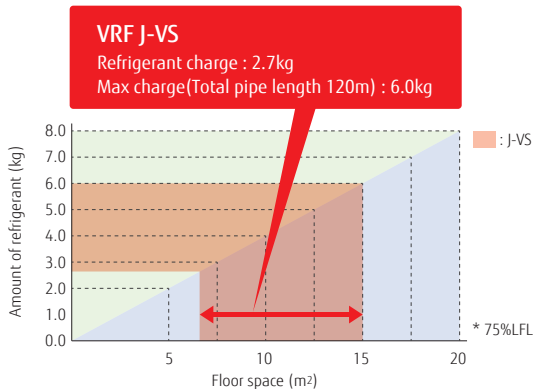
Expansion kit
UTZ-JXXA*
Used to ensure standards compliance and safety when R32 VRF products are installed.
*Connection cable (UTY-XWZXZL) is required.

Conditions requiring safety measures

The graph below will help you determine if a safety design is required when installing R32 VRF products. The amount of refrigerant in a refrigerant system determines the floor area, and if the room to be conditioned by the system is less than that area, a "shut off valve kit" and a "gas sensor kit" must be installed.

VRF J-VS
Refrigerant charge : 2.7kg
Max charge(Total pipe length 120m) : 6.0kg

: J-VS

Amount of refrigerant (kg)

8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0

5   10   15   20

Floor space (m²)

* 75%LFL

194

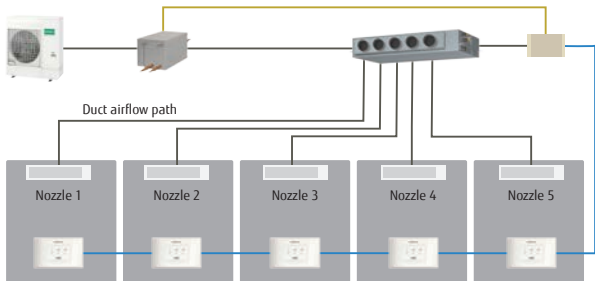## Refrigerant leak detector connection pattern

1) Corresponds to the case where the classification of air conditioner installation differs from property to property.

Installation position of "Shut off valve kit"

A Indoor unit 1~4 in one room
B Indoor units 1, 2 and 3, 4, if they are set up in two separate rooms.
C Indoor units 1~4 are installed in different rooms.

A   B   C

Shut off valve kit

C Room 1   Room 2   Room 3   Room 4

B Room 1   Room 2

A Room 1
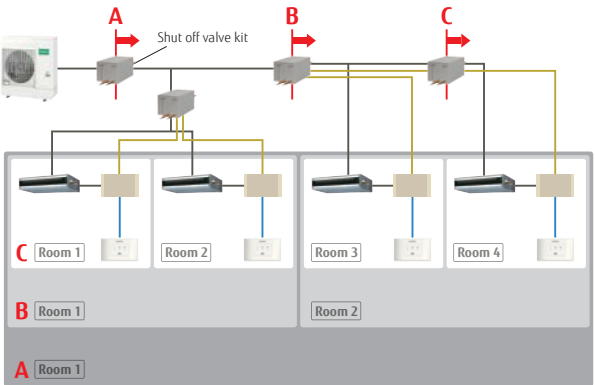
2) Multiple rooms or areas are air conditioned using ducted airflow paths

Duct airflow path

Nozzle 1   Nozzle 2   Nozzle 3   Nozzle 4   Nozzle 5

3) When operating multiple indoor units with a remote control group
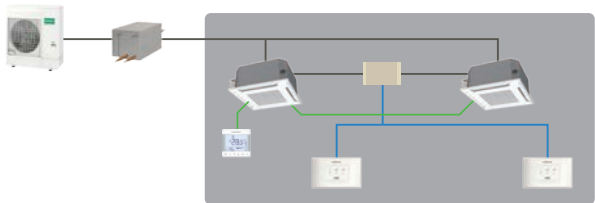
Specifications

Model name		UTY-SGZH
Dimensions (H x W x D)	mm	80 × 130 × 35
Weight	g	500

OPTION

195
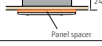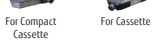
CONTROL SYSTEM LIST

Controllers / Interface

		Refrigerant		Indoor unit															Indoor unit					
						Cassette					Duct		Duct										Wall Mounted		
				1-way Flow	3D Flow	4-way Flow Compact Grid type / Standard type		4-way Flow Slim type/ Large type	Circular Flow Slim type	Circular Flow Large type	Mini (With drain pump)	Low Static Pressure	Slim (With drain pump)		Medium Static Pressure	High Static Pressure	Floor	Ceiling / Floor	Ceiling	–	–	EEV external	–	–
							High Efficiency							High Efficiency										
Type		R32				AUXB 004/005/007/ 009/012/014/ 018HLAH	AUXN 009/012/014 HLAH						ARXD 004/005/007/ 009/012/014/ 018/024 HLAH	ARXP 009/012/014 HLAH								ASHA 004/005/007/ 009/012/014 HCAH	ASHE 004/005/007/ 009/012/014 HCAH	
		R410A		AUXV 007/009/012/ 014/018/024 GLEH	AUXS 018/024GLEH	AUXB 007/009/012/ 014/018/024 GLEH, AUXB 09/12/14/18/24 GATH	AUXD 18/24GALH, AUXA 18/24/30/34/ 36/45/54 GALH	AUXN 009/012/014 GLAH, AUXM 018/024/030 GLEH, AUXM 018/024GTAH	AUXK 018/024/030/ 034/036/045/054 GLEH, AUXK 030/036/045/054 GTAH	ARXK 007/009/012/ 014/018/024 GLGH	ARXB 07/09/12/14/18/ 24/30/36/45 GALH	ARXD 007/009/012/ 014/018/024 GLEH, ARXD 07/09/12/14/18/24 GATH		ARXA 024/030/ 036/045 GLEH, ARXA 24/30/36/45 GBTH	ARXC 036/045/060 GTEH ARXC 072/090/096 GTEH	AGHA 007/009/ 012/014 GCGH	ABHA 012/014/ 018/024 GTEH	ABHA 030/036/ 045/054 GTEH	ASHA 07/09/12/14 GATH	ASHA 007/009 012/014 GCGH		ASHA 18/24GBCH, ASHA 18/24GACH	ASHA 007/009/ 030/034 GTEH

Controllers

Wired Remote Controller	UTY-RVRG				UTY-RVRG
	UTY-RNRGZ5				UTY-RNRGZ5
	UTY-RLRG				UTY-RLRG
	UTY-RCRGZ1, UTY-RCRGZ1K				UTY-RCRGZ1, UTY-RCRGZ1K
Simple Remote Controller	UTY-RSRG, UTY-RHRG				UTY-RSRG, UTY-RHRG
Wireless Remote Controller	UTY-LNHG				UTY-LNHG
Central Remote Controller	UTY-DCGGZ3				UTY-DCGGZ3
Touch Panel Controller	UTY-DTGGZ1				UTY-DTGGZ1
System Controller, System Controller Lite	UTY-APGXZ1, UTY-ALGXZ1				UTY-APGXZ1, UTY-ALGXZ1

Interface

BACnet Gateway	UTY-ABGXZ1, UTY-VBGX	UTY-ABGXZ1, UTY-VBGX
Network Converter for LONWORKS	UTY-VLGX	UTY-VLGX
MODBUS Converter for Indoor unit	UTY-VMSX / UTY-VMSX (GLEH) / UTY-VMSX / UTY-VMSX (GLEH) / UTY-VMSX / UTY-VMSX (GTEH)	UTY-VMSX / UTY-VMSX
MODBUS Converter for VRF	UTY-VMGX	UTY-VMGX
KNX Convertor for Indoor unit	UTY-VKSX / UTY-VKSX (GLEH) / UTY-VKSX / UTY-VKSX (GLEH) / UTY-VKSX / UTY-VKSX (GTEH)	UTY-VKSX / UTY-VKSX
KNX Convertor for VRF	UTY-VKGX	UTY-VKGX
Wireless LAN Adapter	UTY-TFSXJ3 UTY-TFSXZ2 / UTY-TFSXJ3 UTY-TFSXZ2 (GLEH) / UTY-TFSXJ3 UTY-TFSXZ2 / UTY-TFSXJ3 UTY-TFSXZ2 (GLEH) / UTY-TFSXJ3 UTY-TFSXZ2	UTY-TFSXJ3 UTY-TFSXZ2 / UTY-TFSXJ3 UTY-TFSXZ2
	FJ-RC-WIFI-1 (GATH) / FJ-RC-WIFI-1 / FJ-RC-WIFI-1 / FJ-RC-WIFI-1 (GATH) / FJ-RC-WIFI-1 (GBTH)	FJ-RC-WIFI-1 / FJ-RC-WIFI-1
External Switch Controller	UTY-TERX	UTY-TERX

OPTIONAL PARTS LIST

Others

	Refrigerant	Indoor unit																				Outdoor unit	
		Cassette						**Duct**			**Duct**					**Floor**	**Ceiling / Floor**	**Ceiling**	**Wall Mounted**			**V-III, V-III Tropical**	**VC-V**
Type		1-way Flow	3D Flow	4-way Flow Compact Grid type / Standard type		4-way Flow Slim type/ Large type	Circular Flow Slim type	Circular Flow Large type	Mini (With drain pump)	Low Static Pressure	Slim (With drain pump)		Medium Static Pressure	High Static Pressure					–	–	EEV external	–	–
					High Efficiency							High Efficiency											
	R32			AUXB 004/005/007/ 009/012/014/ 018HLAH	AUXN 009/012/014 HLAH						ARXD 004/005/007/ 009/012/014/ 018/024 HLAH	ARXP 009/012/014 HLAH								ASHA 004/005/007/ 009/012/014 HCAH	ASHE 004/005/007/ 009/012/014 HCAH		
	R410A	AUXV 007/009/012/ 014/018/024 GLEH	AUXS 018/024GLEH	AUXB 007/009/012/ 014/018/024 GLEH, AUXB 09/12/14/18/24 GATH		AUXD 18/24GALH, AUXA 18/24/30/34/ 36/45/54 GALH	AUXN 009/012/014 GLAH, AUXM 018/024/030 GLEH, AUXM 018/024GTAH	AUXK 018/024/030/ 034/036/045/054 GLEH, AUXK 030/036/045/054 GTAH	ARXK 007/009/012/ 014/018/024 GLGH	ARXB 07/09/12/14/18/ 24/30/36/45 GALH	ARXD 007/009/012/ 014/018/024 GLEH, ARXD 07/09/12/14/18/24 GATH		ARXA 024/030/ 036/045 GLEH, ARXA 24/30/36/45 GBTH	ARXC 036/045/060 GTEH, ARXC 072/090/096 GTEH		AGHA 007/009/ 012/014 GCGH	ABHA 012/014/ 018/024 GTEH	ABHA 030/036/ 045/054 GTEH	ASHA 07/09/12/14 GATH	ASHA 007/009 012/014 GCGH	ASHA 18/24GBCH, ASHA 18/24GACH	ASHA 007/009/ 030/034 GTEH	AJH***LALBH*1, AJH***LNTCH	AJG 072/090/108/ 126/144/162/180 JATAH
IR Receiver Unit		UTY-TRHX					UTY-LRHGB1		UTY-LBHXD		UTY-TRHX	UTB-YWC			UTY-TRHX (GLEH) UTB-YWC (GATH/GBTH)				UTY-TRHX				
Occupancy Sensor Kit									UTY-SHZXC														
Remote Sensor Unit	New amenity space can be offered by installing the Remote sensor.	UTY-XSZXZ1											UTY-XSZXZ1						UTY-XSZXZ1				
Cassette Grille	UTG-UNGA-W UTG-UNGB-W UTG-USGA-W UTG-UKGC-W UTG-UKGA-B UTG-UGGA-W UTG-UFGE-W UTG-UFGC-W	UTG-UNGA-W (007/009/012) UTG-UNGB-W (014/018/024)	UTG-USGA-W	UTG-UFGE-W UTG-UFGC-W		UTG-UGGA-W	UTG-UKGC-W UTG-UKGA-B																
Auto Louver Grille Kit									UTD-GXTA-W (7/9/12/14) UTD-GXTB-W (18) UTD-GXTC-W (24)		UTD-GXTA-W (7/9/12/14) UTD-GXTB-W (18) UTD-GXTC-W (24)												
Silver ion filter II																						UTR-FA16-8 (30/34)	
Long Life Filter													UTD-LF25NA	UTD-LF60KA (036/045/060)									
Flange													UTD-SF045T UTD-RF204					UTD-RF204					
Drain Pump Unit									UTZ-PX1BBA (07/09/12/14/18) UTZ-PX1NBA (24/30/36/45)				UTZ-PX1NBA					UTR-DPB24T					
Wide Panel							UTG-AKXA-W	UTG-AKXA-W															
Panel Spacer							UTG-BKXA-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																
Half Concealed Kit	This kit is used to half conceal floor type indoor unit into the wall.															UTR-STA							
External Power Supply Unit		UTZ-GXXC		UTZ-GXXC (GLEH)			UTZ-GXXC		UTZ-GXXC		UTZ-GXXC (GLEH)					UTZ-GXXC		UTZ-GXXC (GCGH,GTEH)		UTZ-GXXC			UTZ-GXXC
Pressure Sensor Kit																						UTY-SPWX	
Gas Sensor kit				UTY-SGZH(HLAH) UTY-XWZXZL	UTY-SGZH UTY-XWZXZL								UTY-SGZH(HLAH) UTY-XWZXZL	UTY-SGZH UTY-XWZXZL						UTY-SGZH(HLAH) UTY-XWZXZL			

*1 : Please refer to the detail page of each series for the "***" in the model name.

OPTION

OPTIONAL PARTS

Controllers

For Individual Control

Wired Remote Controller (Design type)
NEW UTY-RVRG

Wired Remote Controller (Touch Panel)
UTY-RNRGZ5

Wired Remote Controller
UTY-RLRG

Compact Wired Remote Controller
UTY-RCRGZ1

Compact Wired Remote Controller
UTY-RCRGZ1K

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, UTY-TRHX
For 3D Flow Cassette, Duct type

IR Receiver Unit
UTY-LRHGB1
For Cassette type

IR Receiver Unit
UTY-LBHXD
For Circular Flow Cassette type

Occupancy Sensor Kit
UTY-SHZXC
For Circular Flow Cassette type

For Centralized Control
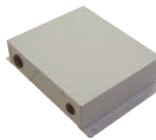
Central Remote Controller
NEW UTY-DCGGZ3

Touch Panel Controller
UTY-DTGGZ1

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

Converters / Adaptors

For External device

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

BACnet™ Gateway Hardware
UTY-VBGX

Network Converter
for LONWORKS™
UTY-VLGX

MODBUS™ Converter Hardware
for VRF
UTY-VMGX

KNX™ Convertor Hardware
for VRF
UTY-VKGX

MODBUS™ Converter
for Indoor unit
UTY-VMSX

KNX™ Convertor
for Indoor unit
UTY-VKSX

Wireless LAN Adapter
FJ-RC-WIFI-1

Wireless LAN Adapter (CN connector type)
UTY-TFSXZ2, NEW UTY-TFSXJ3

For System expansion

External Switch Controller
UTY-TERX

Signal Amplifier
UTY-VSGXZ1

OPTIONAL PARTS

Panels

For Cassette type

Cassette Grille
UTG-UFGE-W
For 4-way Flow Compact Cassette Grid type

Cassette Grille
UTG-UFGC-W
For 4-way Flow Compact Cassette Standard type

Cassette Grille
UTG-UGGA-W
For 4-way Flow Cassette type

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

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

Cassette Grille
UTG-USGA-W
For 3D Flow Cassette type

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

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

Others

For Cassette type

Wide Panel
UTG-AKXA-W
For Cassette type
Indoor unit 950
Panel 600
600 (mm)

Panel Spacer
UTG-BKXA-W
For Cassette type (mm)
50
Panel spacer

Insulation Kit for High Humidity
UTZ-KXRA
For Cassette type

UTZ-KXGC
For Compact Cassette type

Fresh Air Intake Kit
UTZ-VXAA   UTZ-VXRA
For Compact Cassette type   **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.

For Wall Mounted type

Silver ion filter II
UTR-FA16-8

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-XSZXZ1
For All Duct type
New amenity space can be offered by installing the Remote sensor.

Long-Life Filter
UTD-LF25NA   UTD-LF60KA
For Medium Static Pressure Duct type   **For High Static Pressure Duct type**

Auto Louver Grille Kit
UTD-GXTA-W (for ARXD04/07/09/12/14, ARXK04/07/09/12/14)
UTD-GXTB-W (for ARXD18, ARXK18)
UTD-GXTC-W (for ARXD24, ARXK24)
For Slim Duct type / Mini Duct type

Drain Pump Unit
UTZ-PX1BBA
UTZ-PX1NBA

For Indoor Unit

External Power Supply Unit
UTZ-GXXC

For Outdoor Unit

Pressure Sensor Kit
UTY-SPWX
For VC-V, V-III, V-III Tropical

Expansion kit
NEW UTZ-JXXA

Gas Sensor kit
NEW UTY-SGZH

Communication system: External Connect Kit

For Indoor unit

UTY-XWZXZ7

UTY-XWZXZD

UTY-XWZXZC

UTY-XWZXZE

For Outdoor unit

UTY-XWZXZ9

UTY-XWZXZF

For Central Remote Controller

UTY-XWZXZ7

UTY-XWZXZ8

UTY-XWZXZA

For Touch Panel Controller

UTY-XWZXZA

For Expansion kit

NEW UTY-XWZXZL

OPTION

FUNCTION LIST

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

Type		Indoor unit																		Indoor unit								Outdoor unit					Controller	
				Cassette						Duct				Duct										Wall Mounted				J-IIIL	J-III, J-III Tropical	J-IIS	V-III, V-III Tropical	VC-V	Central Remote Controller	Touch Panel Controller
	Refrigerant	One way flow cassette	3D Flow	4-way Flow Compact Grid type / Standard type		4-way Flow Slim type/Large type	Circular Flow Slim type	Circular Flow Large type	Mini (With drain pump)	Low Static Pressure	Slim (With drain pump)		Medium Static Pressure	High Static Pressure	Floor	Ceiling / Floor	Ceiling																	
					High Efficiency							High Efficiency						–	–	EEV external	–	–							
	R32			AUXB 004/005/007/ 009/012/014/ 018HLAH	AUXN 009/012/014 HLAH						ARXD 004/005/007/ 009/012/014/ 018/024 HLAH	ARXP 009/012/014 HLAH							ASHA 004/005/007/ 009/012/014 HCAH	ASHE 004/005/007/ 009/012/014 HCAH									
	R410A	AUXV 007/009/012/ 014/018/024 GLEH	AUXS 018/024GLEH	AUXB 007/009/012/ 014/018/024 GLEH, AUXB 09/12/14/18/24 GATH	AUXD 18/24GALH, AUXA 18/24/30/34/ 36/45/54 GALH	AUXN 009/012/014 GLAH, AUXM 018/024/030 GLEH, AUXM 018/024GTAH	AUXK 018/024/030/ 034/036/045/054 GLEH, AUXK 030/036/045/054 GTAH	ARXK 007/009/012/ 014/018/024 GLGH	ARXB 07/09/12/14/18/ 24/30/36/45 GALH	ARXD 007/009/012/ 014/018/024 GLEH, ARXD 07/09/12/ 14/18/24 GATH		ARXA 024/030/ 036/045 GLEH, ARXA 24/30/36/45 GBTH	ARXC 036/045/ 060/072/ 090/096 GTEH	AGHA 007/009/ 012/014 GCGH	ABHA 012/014/ 018/024 GTEH	ABHA 030/036/ 045/054 GTEH	ASHA 07/09/12/14 GATH	ASHA 007/009 012/014 GCGH		ASHA 18/24GBCH, ASHA 18/24GACH	ASHA 007/009/ 030/034 GTEH	AJH 072/090/108/ 126/144/162 LELAH	AJH***LBLAH*2 AJH***LELAH, AJH***LBTAHN AJH***LETAHN	AJH 040/045/054 LCLAH	AJH***LALBH*2, AJH***LNTCH	AJG 072/090/108/ 126/144/162/180 JATAH	UTY-DCGGZ2	UTY-DTGGZ1

Input

Operation / Stop		● UTY-XWZXZD															● UTY-XWZXZD																	
All On / All Off		● UTY-XWZXZL	●*2																													● UTY-XWZXZ7 ○ UTY-XWZXZ8	●*2 ○*2
Forced Stop		● UTY-XWZXZD															● UTY-XWZXZD																	
Emergency Stop	● UTY-XWZXZL	●*2	● UTY-XWZXZD														● UTY-XWZXZD															● UTY-XWZXZ7 ○ UTY-XWZXZ8	●*2 ○*2
Forced Thermostat off		● UTY-XWZXZE ○ UTY-XWZXZ7															● UTY-XWZXZE ○ UTY-XWZXZ7																
Power Usage Information from Electricity Meter		●*2																					● UTY-XWZXZF										●*2 ○*2

Output

Operation Status		● UTY-XWZXZC															● UTY-XWZXZC																○ UTY-XWZXZA
Error Status		● UTY-XWZXZC															● UTY-XWZXZC																○ UTY-XWZXZA
Indoor Unit Fun Operation Status		● UTY-XWZXZC															● UTY-XWZXZC																
Auxiliary Heater Output							● UTY-XWZXZC																											
Base Heater																										● UTY-XWZXZ9		● UTY-XWZXZ9			

Other

Expansion kit		● UTZ-JXXA+ UTY-XWZXZL (HLAH)							● UTZ-JXXA+ UTY-XWZXZL (HLAH)									● UTZ-JXXA+ UTY-XWZXZL (HLAH)														

*1: 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.

*2: Please refer to the detail page of each series for the "***" in the model name.

● : 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-LX180A for DX Kit

NEW UTP-AX792B

Header

UTR-H0906L / UTR-H1806L

Gas Pipe

Liquid Pipe

UTR-H0908L / UTR-H1808L

Gas Pipe

Liquid Pipe

Outdoor Unit Branch Kit

UTP-CX567A

Gas Pipe

Liquid Pipe

NEW UTP-CX792B

Others

For Outdoor Unit

Shut off valve kit
NEW UTP-GX027A
for R32 VRF indoor unit

Shut off valve kit
NEW UTP-GX060A
for R32 VRF indoor unit

Specifications

Separation tube

Model name		UTP-AX054A	UTP-AX090A	UTP-AX180A	UTP-AX567A	UTP-AX792B
Total cooling capacity of indoor unit	kW	19.6 or less	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

Outdoor unit branch kit

Model name		UTP-CX567A (for V-III / V-III Tropical)	UTP-CX792B (for VC-V)
Number of outdoor units	2 outdoor units	1	
	3 outdoor units	2	

Shut off valve kit

Model name		UTP-GX027A	UTP-GX060A
Power source	V/Ø/Hz	230/1/50	230/1/50
Input power	W	24	24
Number of branches		1	1
Maximum number of connectable Expansion kit	kW	4	4
Maximum capacity of connectable indoor units (Q)	kW	Q ≦ 8.0	Q ≦ 18.0
Maximum capacity of Connectable Indoor Units per Branch (Q)	kW	Q ≦ 8.0	Q ≦ 18.0
Dimensions (H × W × D)	mm	250 × 540 × 267	250 × 540 × 267

OPTION

SUPPORT

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

Support

HVAC system design 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 (Room air conditioner, Packaged air conditioner, 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												●			●	●

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 facilities

Technical information

We provide equipment selection software that facilitates the design of air conditioning systems by providing performance data for the units and estimation for model selection.

Features
- Design & Technical manuals
- Model selection & estimation
- Certification data
- 2D/3D CAD data
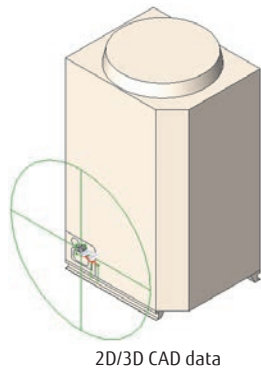
2D/3D CAD data

Product information

Information on new models is provided in the form of documents and movies in a timely manner for release, readily downloadable from the private section of our website. Contact your Fujitsu General representative for access information.

Features
- Product news
- Brochures & manuals
- Promotional movies

https://www.fujitsu-general.com/g-eu/support/downloads/vrf/

Technical support

Technical support is offered at every stage, from design through to installation, to assist in optimizing air conditioning solutions.

Features
- CFD simulation
- Guidelines
- Commissioning support
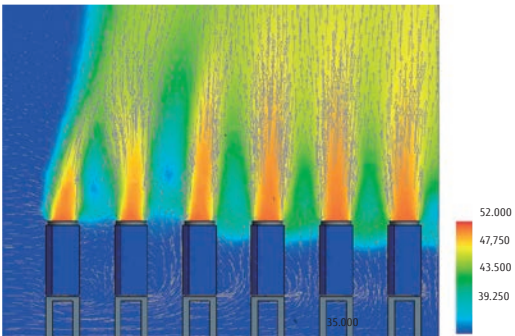
CFD simulation

Commissioning support

Fujitsu General regularly provides professional product, technical and service training at its training facilities worldwide. These research facilities also support the development of human resources with advanced technical skills.

Features
- Designing VRF systems
- On-site training for control systems

1 Head office training center in Japan
2 Training center in China
3 Asia training center in Singapore
4 Europe training center in the United Kingdom
5 Europe training center in Germany
6 America training center in the United States
7 Middle East training center in the UAE
8 Oceania training center in Australia

HVAC system design 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.
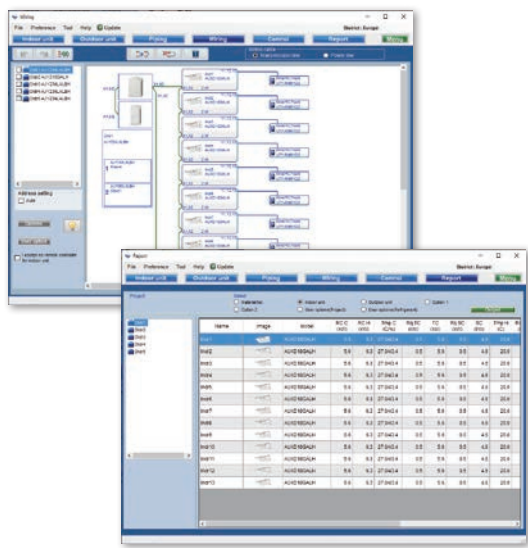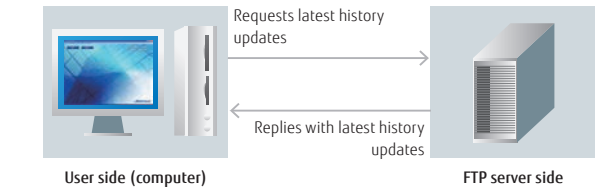
Design simulator

Automatically create model selection information

• The required performance, type, and temperature conditions for each indoor unit are entered and then dragged and dropped onto the outdoor unit to automatically set each unit.

• Creates piping and wiring diagrams automatically to facilitate branching, grouping, and option settings.

• The additional refrigerant charging is automatically calculated when the pipe length is entered.

• Easy configuration of remote controller groups, central controller, and converters.

• The equipment list including the equipment information is created automatically.

Outputs in the format that matches the application

You can export your project information in a number of industry standard file formats.

• Word format (rtf) (doc)
• Excel format (csv)
• Acrobat format (pdf)
• 2D CAD data (DXF)

Requests latest history updates

Replies with latest history updates

User side (computer)　　　FTP server side

Update your Design simulator

The database can be updated easily online with the AutoUpdate function using FTP.

BIM Building information modeling

www.bimobject.com/en

BIM files of Fujitsu General's products are available on BIMobject®

Fujitsu General is releasing BIM files of our products on the BIMobject® website BIMobject.com.

Outline of BIMobject®

BIMobject® is a game changer for the construction industry, offering development, maintenance, and syndication of objects on the world's largest BIM platform.

About BIM files

• BIM files can be viewed in Autodesk Revit® 2018 version or later.
• In each BIM file, the location of the connectors for the refrigerant and drain pipe is different.
• Each BIM file includes several family types.
• A catalog and specification sheet is available in Revit file format for each product.
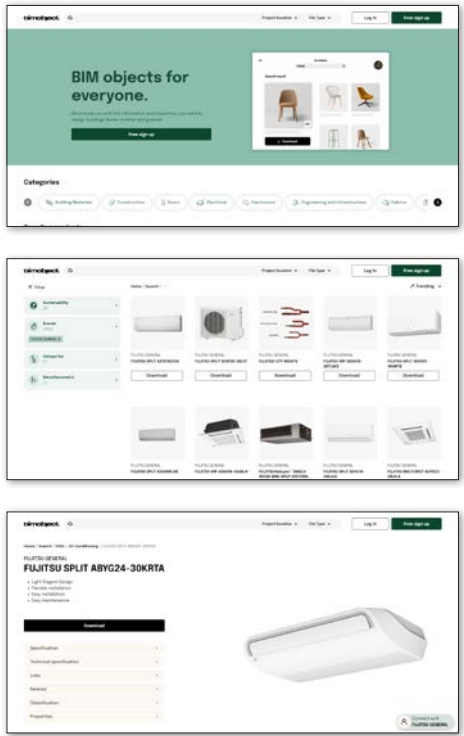
R RFA (Revit data)
A data format available for BIM-designed projects

A DWG
a standard data format used for Autodesk products

Data content
• Shape (Size)
• Drain direction
• Pipe direction
• Power supply location
• It contains information about the above specifications.

Type catalog with product specifications

DXF DXF
Intermediate data commonly available in CAD products

Data content
• Shape (Size)

*To learn more about how to use BIM files, refer to the instructional video on each product page. **youtu.be/wfL-hwFQ7dM**

Quick service & maintenance

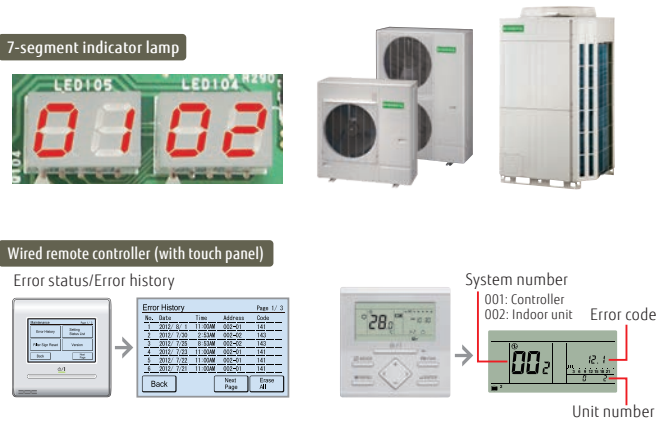If trouble should occur in a unit or system, abundant support tools such as trouble code display at the product, Service Tool that allows checking of the detailed status of the entire system, and remote monitoring tool that uses the internet, etc. support quick service and maintenance anywhere and at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

Easy maintenance & monitoring

Designed for easy maintenance

The operating status of the air conditioner and detailed trouble conditions are displayed on the 7-segment indicator lamp on the outdoor unit printed circuit board (PCB) and on the screen of the remote controller.
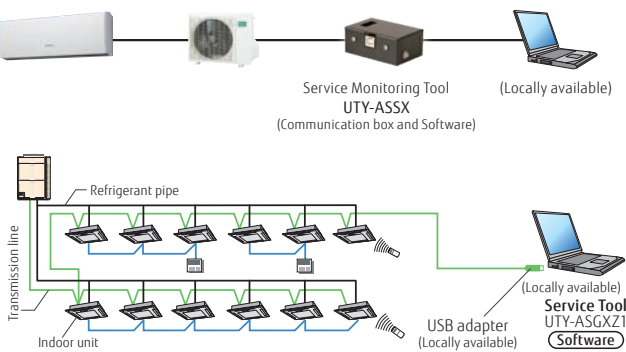Check the status of the unit quickly for a prompt response.

• Display the operation mode at the time.
• Discharge temperature and pressure
• Compressor operation status
• "Address/Type/Number" of the outdoor unit
• Error code

7-segment indicator lamp

Wired remote controller (with touch panel)
Error status/Error history

System number
001: Controller
002: Indoor unit   Error code

Unit number

Error diagnosis by Service tool

Connect Service tool to check the status details of units, from single split to VRF, on a computer screen.
Check the errors quickly for prompt countermeasures.

• Operating status/control
• Monitoring operating conditions
• Monitoring sensor data
• Indicating trend graphs
• Error history
• Indicating refrigerant circuit diagrams (for VRF)

Service Monitoring Tool   (Locally available)
UTY-ASSX
(Communication box and Software)

Refrigerant pipe

Transmission line

Indoor unit

USB adapter
(Locally available)

(Locally available)
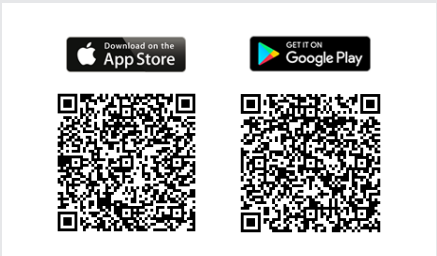Service Tool
UTY-ASGXZ1
Software

Remote monitoring

VRF system operating status and trouble status details can be monitored remotely at any time via the internet.
Prompt coordination is available with service personnel.

Internet or landline

Remote Monitoring
Web Monitoring Tool
UTY-AMGXZ1
Software
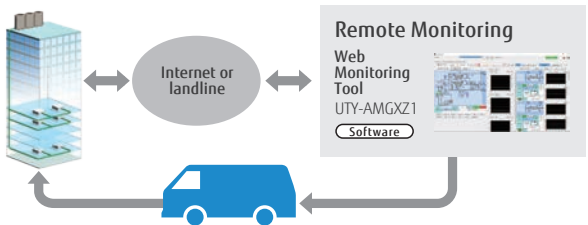
Mobile troubleshooting App for iOS and Android ™ devices

We will release an App for troubleshooting tools for iPhone, iPod touch and other Apple devices, and Android products for Fujitsu General air conditioners (Room air conditioner/ Packaged air conditioners VRF and ATW, "AIRSTAGE Mobile", and R32 calculation of allowable refrigerant capacity)

Use Error Code Check, Troubleshooting, and Sensor Check to understand the status of your air conditioner.

Download on the App Store

GET IT ON Google Play

Mobile Technician   FREE

Service monitoring tool   for Single split, Multi-split & Air to water

• A quick overview of the temperature sensor readings and the electronic expansion valves (EEVs), fans, compressors and other control components
• It is not always easy to read the temperature sensor and know the status of the control components. So let the Service monitoring tool judge them.
• Visualizes protected operations
• Troubleshoots intermittent problems effectively
• Provides proof of normal operation to customers during periodical maintenance

Actual operating conditions   Graphs   Operational histories

	UTY-ASSX
Dimensions (H × W × D) (mm)	60 × 160 × 160
Weight (g)	500

Service tool
UTY-ASGXZ1

Extensive monitoring and analysis functions that make installation and maintenance easier

• The operation status of the system can be monitored and analyzed to detect any malfunctions.
• Data on the operation status of the system can be stored on a computer to allow for remote access.
• Up to 400 indoor units in a single VRF network system can be controlled and monitored for a large building or hotel.
• This software can be connected to any point of transmission line with a USB adapter (locally available).
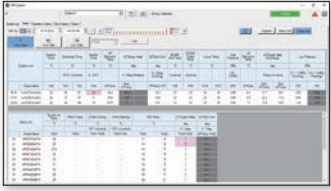
* Saved data can be displayed offline. Note that the data saved by the following software applications cannot be displayed.
  • UTR-YSTB/UTR-YSTC (Service tool)
  • UTR-YMSA (Web monitoring tool)

Automatic operation check for refrigeration cycles

Once installed, the Service tool automatically checks for refrigeration cycles. The self-diagnosis function determines whether each sensor value is normal, which reduces the need for manual checks. The result of a diagnosis can be provided in a report.

These sensor values are checked automatically:
☑ the discharge temperature is normal, "OK"
☑ the super heat volume is normal, "OK"
☑ the high pressure pipe value is normal, "OK"
☑ the low pressure pipe value is normal, "OK"
And the values for other items will also be diagnosed.

Use the result of a self-diagnosis only as a guide and use your own judgment to make a final decision.

Remote technical support and maintenance

On-site check screen can be shared between on-site staff and a service technician in a remote location. When a service technician visits the site for troubleshooting, the system's operation status can be shared in real time with a remote service center for assistance. On-site staff can have an online chat with a remote service center to get further assistance.

Local system error
⚠ ERROR

Distant location
Internet
Technical support   Installer/Administrator
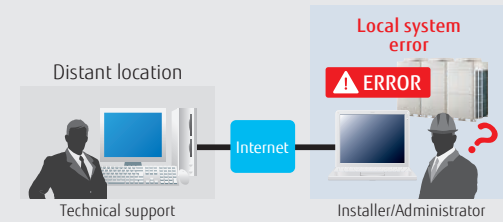
Trend charts

Previous-generation application could display only 3 sets of data from sensors. However, the current generation of the service tool displays multiple charts simultaneously so that refrigeration cycles can be monitored and checked in greater detail.

Computer 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
Screen resolution	1366 × 768 pixels or higher
Interface	• USB port for U10 USB Network interface and software protection key
Software	Internet Explorer® 11 or Microsoft Edge

Packing list

Name	Quantity	Application
White-USB-key (Software protection key)	1	Software protection key to be connected to a USB port on a Service tool-installed computer. This software runs only on a computer with WibuKey.

•Computer requirements
•Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model namer: 75010R) (Required for each VRF Network)
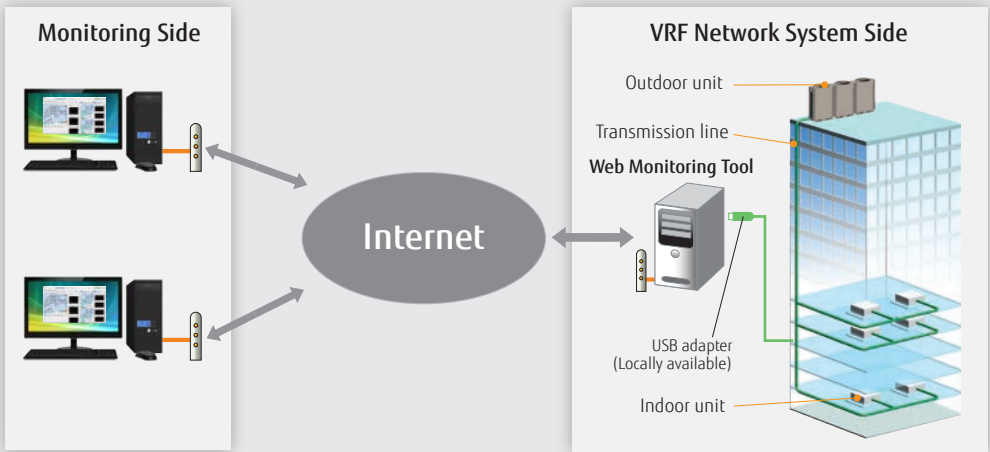
Web monitoring tool
UTY-AMGXZ1

Features

• Troubleshooting is performed by monitoring each air conditioning unit remotely during a periodical system check.
• An error notification is automatically transmitted to several locations via the internet*1.
• Requires either a dedicated internet connection or landline to operate.
• The occurrence of an error can be confirmed through an error alert and equipment status information obtained from a remote location.
• Monitoring data can be downloaded in a remote location. These data can be accessed and displayed even when the service tool is in offline mode.
• Can be viewed on the monitoring computer's Web browser without installing any special software.
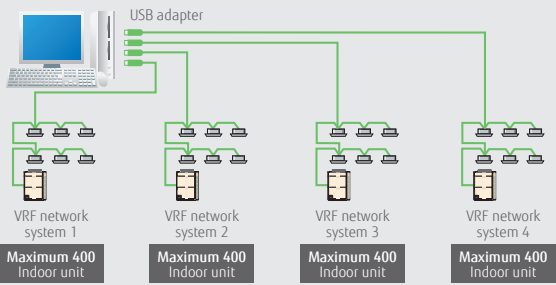
*1: Internet e-mail access required.

Web Monitoring System

Monitoring Side

VRF Network System Side
Outdoor unit
Transmission line
Web Monitoring Tool

Internet

USB adapter
(Locally available)
Indoor unit

Supporting up to 4 VRF network systems

Up to 4 USB adapters can be connected to a computer, enabling the monitoring of up to 1,600 indoor units.

Suitable for use in a large building or hotel.

USB adapter

VRF network system 1 | VRF network system 2 | VRF network system 3 | VRF network system 4
Maximum 400 Indoor unit | Maximum 400 Indoor unit | Maximum 400 Indoor unit | Maximum 400 Indoor unit

Computer 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
Screen resolution	1366 × 768 pixels or higher

Interface	• USB ports (one for U10 USB Network interface and up to 4 ports for software protection keys)
	• Interface for remote connection:
	  - Landline: Modem is required.
	  - Internet using LAN: Ethernet port is required.

Software	Internet Explorer® 11 or Microsoft Edge

Packing list

Name	Quantity	Application
White-USB-key (Software protection key)	1	Software protection key to be connected to a USB port on a Service tool-installed computer. This software runs only on a computer with WibuKey.

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