Refrigerant R410A

INVERTER

AIRSTAGE™
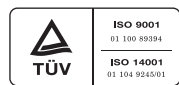
VRF CATALOGUE

Variable Refrigerant Flow System

Heat Pump & Heat Recovery
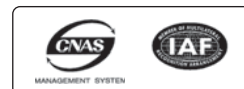
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Distributed by :

FUJITSU GENERAL LIMITED

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http://www.fujitsu-general.com/

FUJITSU GENERAL LIMITED

Creation of Comfort

Fujitsu General have been developing and manufacturing high quality and energy efficient products for more than 35 years. Using the latest Japanese technology and state of the art expertise, our products have been designed in accordance with our policy to "create the most comfortable environment" possible.

HIGH RELIABILITY

HIGH EFFICIENCY

EASY SERVICE & MAINTENANCE

COMFORT & CONVENIENCE

EASY INSTALLATION

DESIGN FLEXIBILITY

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

Simultaneous Heating and Cooling System for Large Capacities

8HP-48HP

34 models

Space saving combination
8HP to 48HP / 21 models

Energy efficiency combination
16HP to 44HP / 13 models

AIRSTAGE VR-II

P34

Heating or Cooling System for Large Capacities

8HP-48HP

33 models

Space saving combination
8HP to 48HP / 21 models

Energy efficiency combination
16HP to 44HP / 12 models

AIRSTAGE V-II

P42

Heat Pump Design for Small Capacities

4HP, 5HP, 6HP

3 models

AIRSTAGE J-IIS

P48

Heat Pump Design for Small Capacities

4HP, 5HP, 6HP

3 models

AIRSTAGE J-II

P52

CONTENTS

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Our History

Overseas Air Conditioning Business since 1971
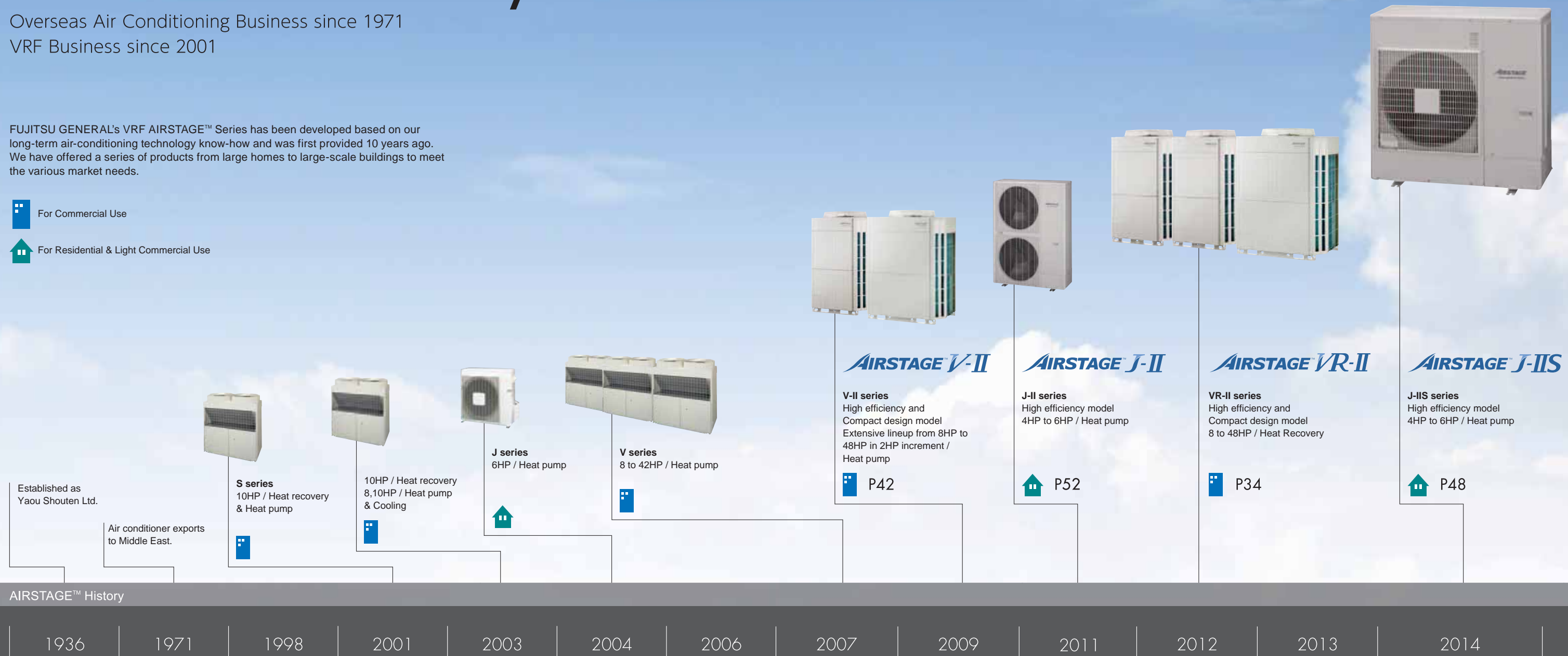## VRF Business since 2001

FUJITSU GENERAL's VRF AIRSTAGE™ Series has been developed based on our long-term air-conditioning technology know-how and was first provided 10 years ago. We have offered a series of products from large homes to large-scale buildings to meet the various market needs.

- For Commercial Use
- For Residential & Light Commercial Use

AIRSTAGE V-II

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

P42

AIRSTAGE J-II

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

P52

AIRSTAGE VR-II

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

P34

AIRSTAGE J-IIS

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

P48

J series
6HP / Heat pump

V series
8 to 42HP / Heat pump

S series
10HP / Heat recovery & Heat pump

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

Established as Yaou Shouten Ltd.

Air conditioner exports to Middle East.

AIRSTAGE™ History

1936	1971	1998	2001	2003	2004	2006	2007	2009	2011	2012	2013	2014

Certification Acquisition of

ISO14001

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

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

Refrigerant R410A

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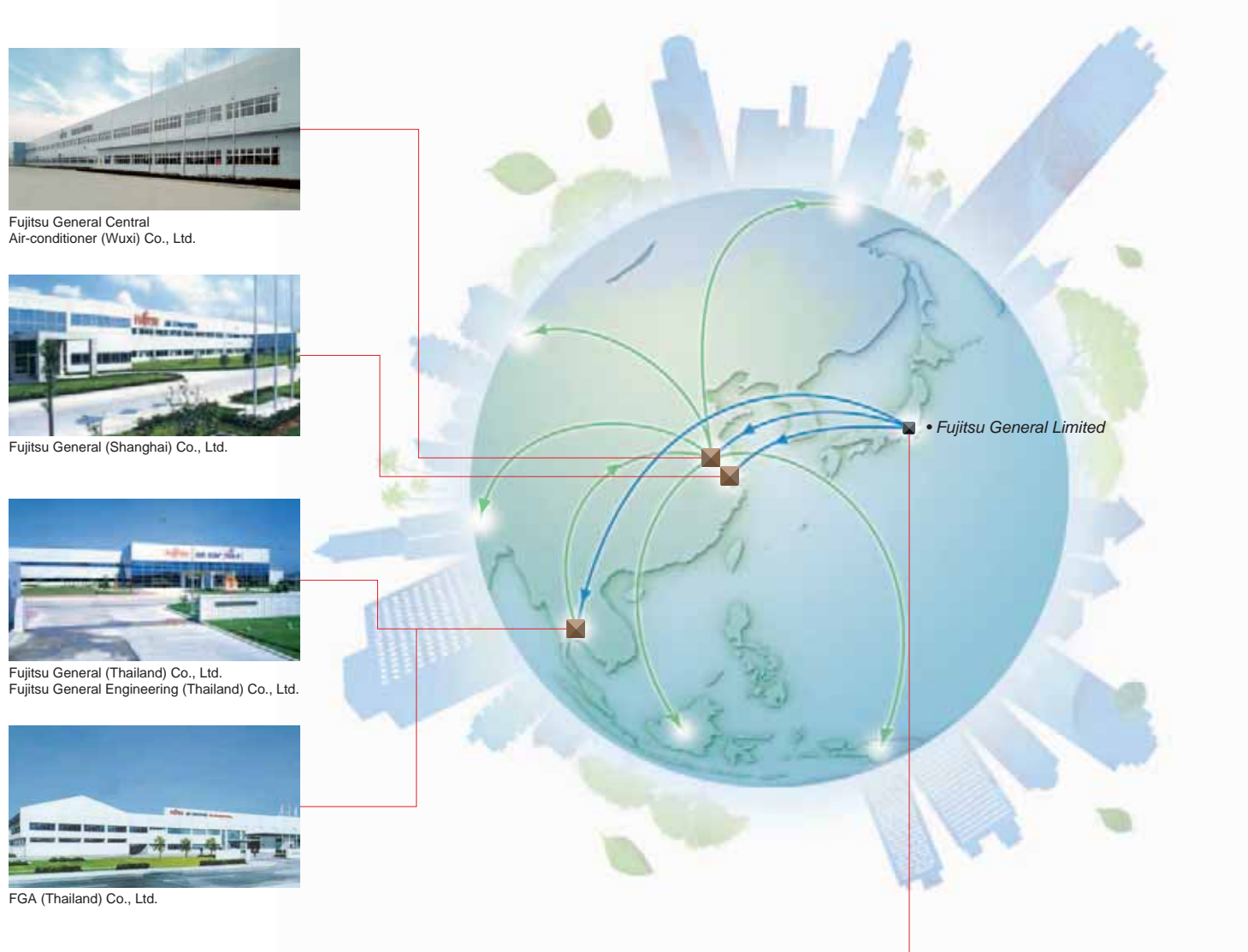
✓RoHS COMPLIANT

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

ALL INVERTER

High Quality Development & Pr oduction Facilities

The Headquarters-R&D Center (Japan) is equipped with a wide range of testing equipment envisioning a variety of operating conditions. This includes a testing tower with a 60m height difference for buildings. We provide high quality & reliable products that meet the customers' needs from all over the world through this advanced R&D Center and 6 factories based in China and Thailand.

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

Fujitsu General (Shanghai) Co., Ltd.

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

FGA (Thailand) Co., Ltd.

**Certifications Acquisition of
ISO 9001 and ISO14001
in each factory**

• Fujitsu General Limited

R&D Center
in JAPAN

FUJITSU GENERAL

Advanced Research Facility and Equipment

Performance testing

Sound testing

Air flow testing

Calorimeter testing

Transportation & Handling

Vibration testing

Compressibility testing

Reliability Testing

Severe environmental testing

Water shower testing

Testing Laboratory

Fujitsu General EMC Laboratory Limited

International Test Site for EMC Regulation

60m Height Difference Testing Tower

Objective is to Confirm
Oil Circulation of
Compressor for Reliability

AIRSTAGE New Products

Small VRF system type

- Small and light weight design
- High seasonal energy efficiency
- Effective air intake grill design
- Adopting high performance twin rotary compressor
- Lineup from 4HP to 6HP

NEW

AIRSTAGE™ J-IIS

Easy-to use Wired Remote Controller

- Various timer (ON/OFF/Weekly)
- Easy one touch operation
- Automatic address setting
- Error code and error history display

Individual & Simple central control

NEW

Wired Remote Controller
UTY-RLR*
R*:RY(FUJITSU), RG(GENERAL)

Flesh air ventilation

- 100% outdoor air intake possible
- Compact size and high static pressure 200 Pa (22.4 kW)
- High energy saving by adopting DC motor

NEW

Outdoor Air Unit: ARXH054GTAH / ARXH072GTAH / ARXH096GTAH

The heat pump method efficiently processes the outdoor air for cooling and heating and supplies 100% fresh air into a room.

ARXH054GTAH   ARXH072GTAH

ARXH096GTAH

DX-Kit for air handling applications

- Possible to connect the air handling unit and the fan coil unit
- Optimial control with multiple temperature sensors
- Support a wide range of capacity classes (from 5 kW to 50 kW)
- Connectable to AIRSTAGE™ (J-IIS, J-II, V-II, VR-II) series

NEW **Future Release**

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

This kit can connect the general-purpose air handling unit (AHU) and the fan coil unit (FCU) to the VRF system.
It enables VRF system to control the operation of both air conditioner and ventilation.

EEV unit
UTP-VX30A

EEV unit
UTP-VX60A

EEV unit
UTP-VX90A

Control unit
UTY-VDGX

AIRSTAGE Line-up

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

Heat Recovery type for simultaneous heating and cooling operation

- Systems compatible with individual operation mode control, as well as large offices, hotels, and large composite facilities
- Extensive lineup from 8HP to 48HP increment connectable indoor unit capacity ratio up to 150%.
- Space saving and Energy efficiecy combinations 34models lineup.

AIRSTAGE VR-II

8HP - 48HP
34 models

Heat Pump type for heating or cooling operation

- Systems for large offices, hotels, and large composite facilities
- Extensive lineup from 8HP to 48HP increment connectable indoor unit capacity ratio up to 150%
- Space saving and Energy efficiecy combinations 33 models lineup

AIRSTAGE V-II

8HP - 48HP
33 models

Heat Pump type for heating or cooling operation

- Systems for large homes to medium sized offices, shops
- Small capacity range from 4HP to 6HP connectable indoor unit capacity ratio up to 130%
- Space saving design 3 models lineup

AIRSTAGE J-IIS

4HP, 5HP, 6HP
3 models

Heat Pump type for heating or cooling operation

- Systems for large homes to medium sized offices, shops
- Small capacity range from 4HP to 6HP connectable indoor unit capacity ratio up to 130%.
- Energy efficiency 3models lineup

AIRSTAGE J-II

4HP, 5HP, 6HP
3 models

Outdoor units range

HP	4	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
kW class	12.1	14.0	15.5	22.4	28.0	33.5	40.0	45.0	50.4	55.9	61.5	67.0	73.5	78.5	85.0	90.0	95.0	100.5	107.0	112.0	118.5	123.5	130.0	135.0
AIRSTAGE VR-II Heat Recovery — Space saving				AJ*A72GALH	AJ*A90GALH	AJ*108GALH	AJ*126GALH	AJ*144GALH	AJ*162GALH	AJ*180GALH	AJ*198GALH	AJ*216GALH	AJ*234GALH	AJ*252GALH	AJ*270GALH	AJ*288GALH	AJ*306GALH	AJ*324GALH	AJ*342GALH	AJ*360GALH	AJ*378GALH	AJ*396GALH	AJ*414GALH	AJ*432GALH
High Efficiency								AJ*144GALHH			AJ*198GALHH	AJ*216GALHH	AJ*234GALHH	AJ*252GALHH	AJ*270GALHH	AJ*288GALHH	AJ*306GALHH	AJ*324GALHH	AJ*342GALHH	AJ*360GALHH	AJ*378GALHH	AJ*396GALHH		
AIRSTAGE V-II Heat Pump — Space saving				AJ*A72LALH	AJ*A90LALH	AJ*108LALH	AJ*126LALH	AJ*144LALH	AJ*162LALH	AJ*180LALH	AJ*198LALH	AJ*216LALH	AJ*234LALH	AJ*252LALH	AJ*270LALH	AJ*288LALH	AJ*306LALH	AJ*324LALH	AJ*342LALH	AJ*360LALH	AJ*378LALH	AJ*396LALH	AJ*414LALH	AJ*432LALH
High Efficiency								AJ*144LALHH			AJ*198LALHH	AJ*216LALHH	AJ*234LALHH	AJ*252LALHH	AJ*270LALHH	AJ*288LALHH	AJ*306LALHH	AJ*324LALHH		AJ*360LALHH	AJ*378LALHH	AJ*396LALHH		
NEW AIRSTAGE J-IIS Heat Pump — Space saving	AJ*040LCLAH	AJ*045LCLAH	AJ*054LCLAH																					
AIRSTAGE J-II Heat Pump — High Efficiency	AJ*A40LALH	AJ*A45LALH	AJ*A54LALH																					

Indoor units range

Comprehensive range of indoor units of variety design and capacity ranges available which can be selected to suit any air conditioning needs.
12 types, 55 models, Capacity range from 1.1kW to 25.0kW

Capacity range (kW)		4	7	9	12	14	18	24	30	36	45	54	60	72	90
Model code		1.1	2.2	2.8	3.6	4.5	5.6	7.1	9.0	11.2	12.5	14.0	18.0	22.4	25.0
Cassette	Compact Cassette	AUXB04GALH	AUXB07GALH	AUXB09GALH	AUXB12GALH	AUXB14GALH	AUXB18GALH	AUXB24GALH							
	Cassette						AUXB18GALH	AUXD24GALH	AUXD30GALH	AUXD36GALH	AUXD45GALH	AUXD54GALH			
Duct	Low Static Pressure Duct		ARXB07GALH	ARXB09GALH	ARXB12GALH	ARXB14GALH	ARXB18GALH								
	Slim Duct (Drain pump internal)	ARXD04GALH	ARXD07GALH	ARXD09GALH	ARXD12GALH	ARXD14GALH	ARXD18GALH	ARXD24GALH							
	Medium Static Pressure Duct							ARXA24GBLH	ARXA30GBLH	ARXA36GBLH	ARXA45GBLH				
	High Static Pressure Duct									ARXC36GATH	ARXC45GATH		ARXC60GATH*	ARXC72GATH*	ARXC90GATH*
Floor	Floor (Same as Ceiling models)				AB*A12GATH	AB*A14GATH	AB*A18GATH	AB*A24GATH							
	Concealed Floor (Same as Low Static pressure Duct models)		ARXB07GALH	ARXB09GALH	ARXB12GALH	ARXB14GALH	ARXB18GALH								
	Slim Concealed Floor (Same as Slim Duct models)	ARXD04GALH	ARXD07GALH	ARXD09GALH	ARXD12GALH	ARXD14GALH	ARXD18GALH	ARXD24GALH							
Ceiling	Ceiling				AB*A12GATH	AB*A14GATH	AB*A18GATH	AB*A24GATH	AB*A30GATH	AB*A36GATH	AB*A45GATH	AB*A54GATH			
Wall Mounted	Wall Mounted	AS*A04GACH	AS*A07GACH	AS*A09GACH	AS*A12GACH	AS*A14GACH	AS*A18GACH	AS*A24GACH	AS*A30GACH						
	Wall Mounted (EEV external)	AS*E04GACH	AS*E07GACH	AS*E09GACH	AS*E12GACH	AS*E14GACH	With this model, connection of EV kit is necessary.								

AB* : ABY(FUJITSU), ABH(GENERAL) AS* : ASY(FUJITSU), ASH(GENERAL)

*: ARXC60/72/90GATH cannot be connected to J-IIS series and J-II series.

Energy Recovery Ventilator range

Energy Recovery Ventilator provides fresh air to maintain a consistent indoor temperature & humidity, and creates more comfortable environment. 5 models

Airflow rate (m³/h)	250	350	500	800	1000
Model code	025	035	050	080	100
Energy Recovery Ventilator	UTZ-BD025B	UTZ-BD035B	UTZ-BD050B	UTZ-BD080B	UTZ-BD100B

Outdoor Air Unit range

The heat pump method efficiently processes the outdoor air for cooling and heating and supplies 100% fresh air into a room.

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

AIRSTAGE Support

Fujitsu General provides a variety of product and technical information to engineers and consultants and also conducts new product research and design support activities.

We provide a wide range of support to maintain high quality from design to installation.

Product information

New product information is provided in the form of documents and movies for every new model released. These can be downloaded from a private section of our website. To access this website, please contact your Fujitsu representative.

Features
- Product News
- Brochures & All Manuals
- Feature Promotion Movie

Training

Fujitsu General has 7 training facilities around the world that regularly conduct specialized product, technical, and service training. These research facilities also support the development of people with high technical capability."

Features
- Designing Airstage Systems
- Control System on-site training

Training for installer   Presentation & training for dealers 2

Technical Information

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

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

Technical Support

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

Features
- CFD Simulation
- Guide line
- Commissioning Support
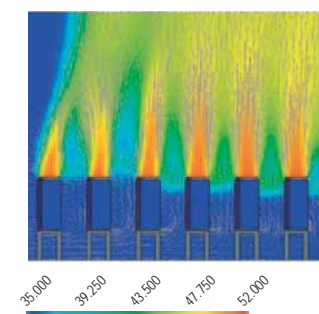
Design Support Tool

Design Simulator

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 or Excel formats, and group the relevant CAD data for your project.

Automatically create model selection information

- Each unit can be automatically set by entering the required performance, type, and temperature conditions for each indoor unit and then dragging and dropping into the outdoor unit.
- Piping and wiring diagrams can be created automatically and it is easy to set branches, grouping, and options.
- The additional refrigerant charging amount is automatically calculated when the pipe length is entered.
- It is also easy to set the remote controller groups, central controller and converters.
- The equipment list including the equipment information is created automatically.
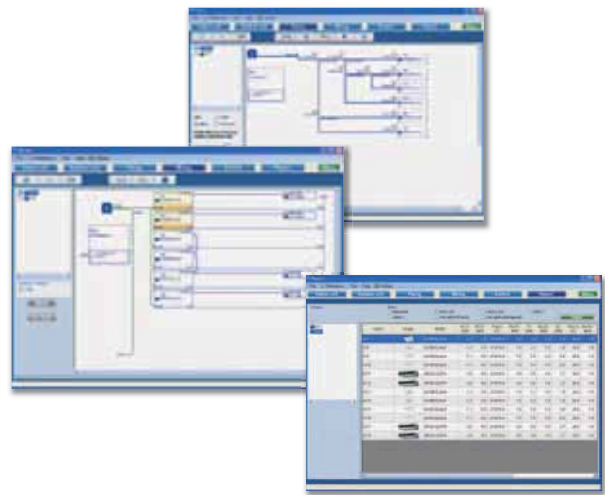
Output the format that matches the application

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

- Word format (rtf)
- Excel format (csv)
- Auto CAD format (DXF)
- 2D Data (DXF)
- 3D Data (RFA)
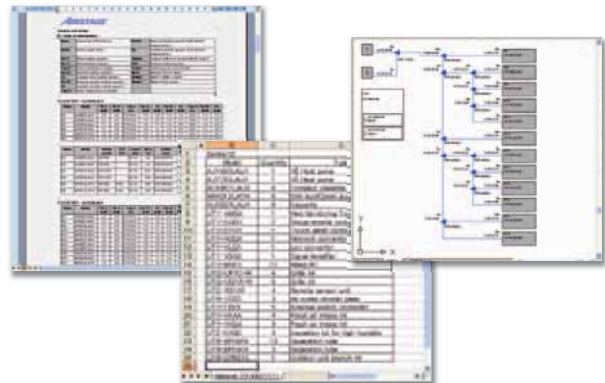
Update your Design Simulator

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

Information on the latest history update is demanded.

Information on the latest history update replied.

User side(PC)   **FTP server side (PC)**
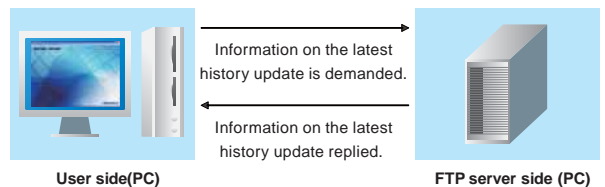
Building Information Modeling (BIM)

FUJITSU GENENRAL provides the Building Information Modeling (BIM) object models and contents for our VRF system and some products to the architect, designer and contractor using Autodesk® Revit® technology from our Website and Autodesk® Seek Website, etc.
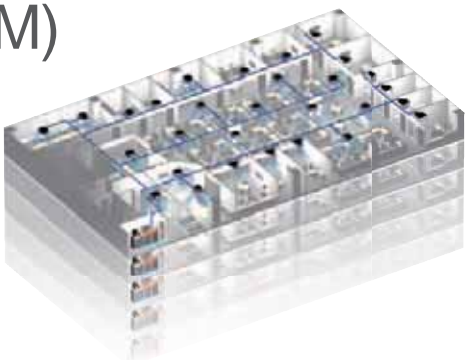
3D and 2D product data

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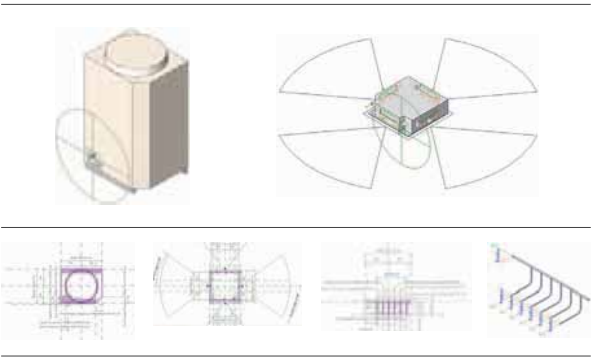
Installation limitation

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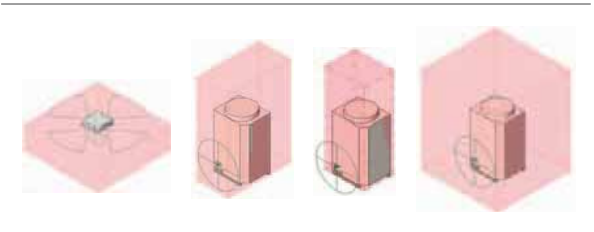
Installation information

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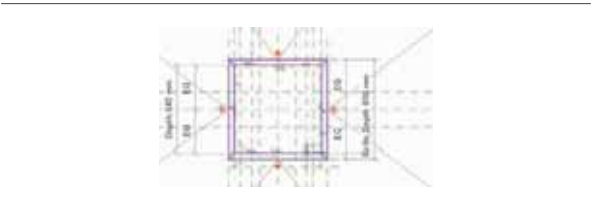
Product specifications & Link information

Contains the basic information required for air conditioner design, including unit size, capacity, input power, noise, and airflow rate.

These data can be procured from the Fujitsu General Website, Design Simulator, and Autodesk® Seek Website.

AIRSTAGE™
SOLUTION

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

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

HIGH ENERGY EFFICIENCY

MORE COMFORT

HIGH RELIABILITY

DESIGN FLEXIBILITY

EASY INSTALLATION

EASY SERVICE & MAINTENANCE

AIRSTAGE™

HIGH ENERGY EFFICIENCY

Highly Energy Efficiency

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

New model
Previous model

EER   COP

Heat Recovery (10HP): 2.98 → 3.94 (32%UP!), 3.15 → 4.3 (37%UP!)
Heat Pump (8HP): 3.2 → 4.07 (27%UP!), 3.7 → 4.37 (18%UP!)
Heat Pump (6HP): 3.2 → 3.45 (8%UP!), 3.4 → 3.95 (16%UP!)
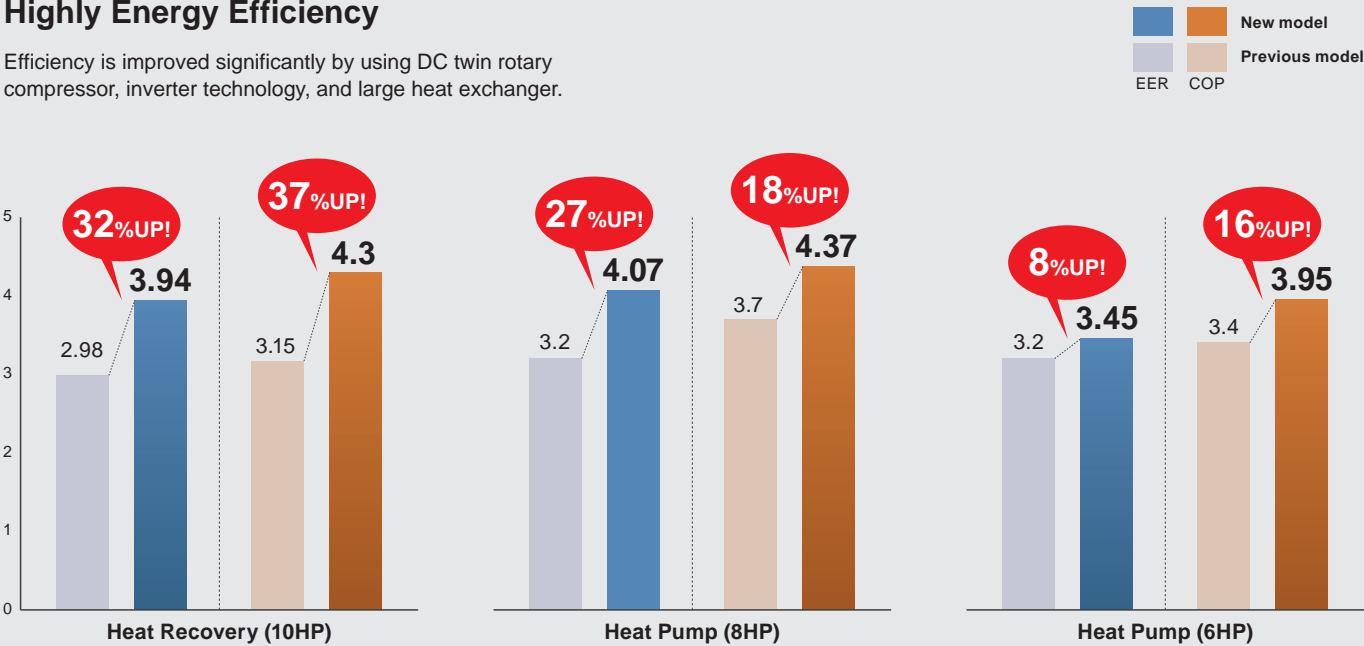
Operation Performance is Effectively Controlled.

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.

(°C)   Heating   Cooling
Original Set Temp   Set point limitation setting
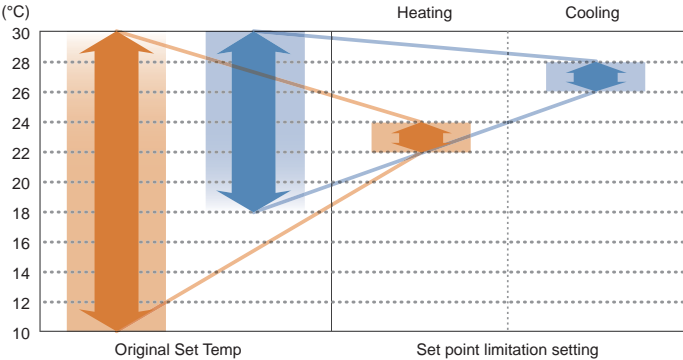
Auto-off timer

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.

Set interval time hour (17:00 to 24:00)
ON   Auto OFF
Set off time (30 to 240 minutes)   OFF
17:00   24:00
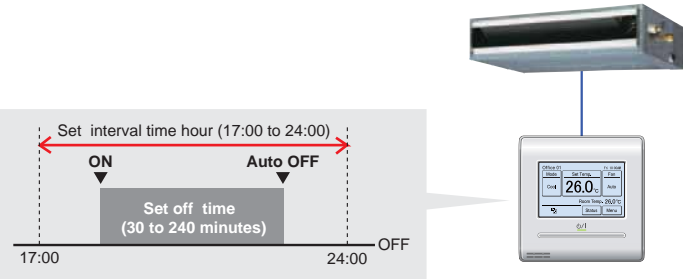
Energy saving management

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
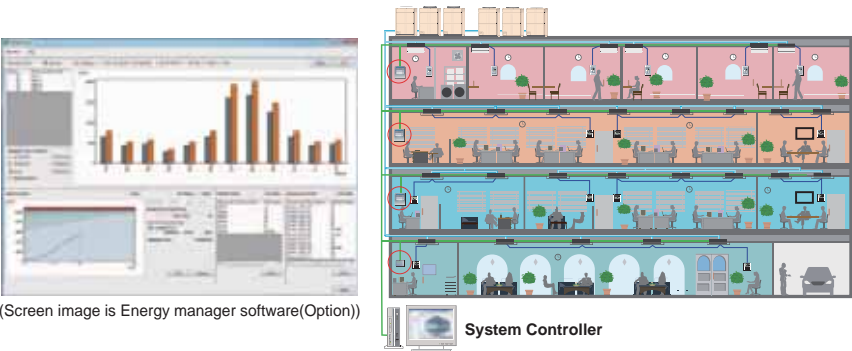
Capacity save operation

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

Setting range
Capacity
100%
80%   Setting level
60%
40%
0%
Capacity save
Time
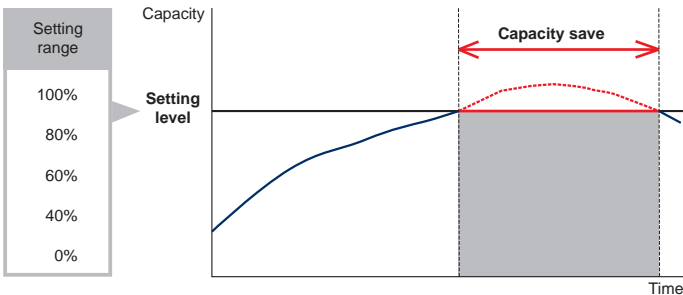
MORE COMFORT

Precision refrigerant flow control

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

±0.5˚C

High

Set temp.   Hot   Hot

Cold

Low

Reach the set temperature quickly

Thermal change of the room
*Simulation in heating operation.

Comfortable operation is achieved due to a small variation of room temperature
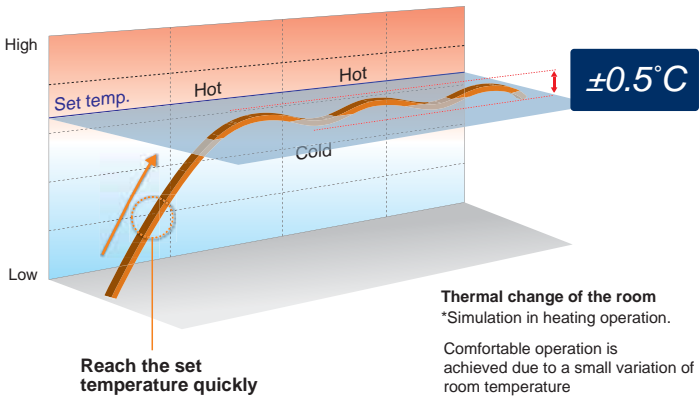
Low sound level design

Small capacity indoor units respond for the demands of several applications.
These models will be able to offer greater audibility comfort by operating at super low sound levels.
Especially, Wall mounted (EEV external) type is 19dB(A) when low mode heating operation.

19dB(A)
At low mode heating operation

Small capacity indoor unit

Quiet operation

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

Quiet priority setting

Air conditioning load factor

Heat load

Capacity   100%

0

Operating sound   58dB

0

down

time

Quiet priority low noise mode

Capacity priority setting

Air conditioning load factor

Heat load

Capacity   100%

0

Operating sound   58dB

0

Alternated automatically

Reset automatically   time

Capacity priority low noise mode
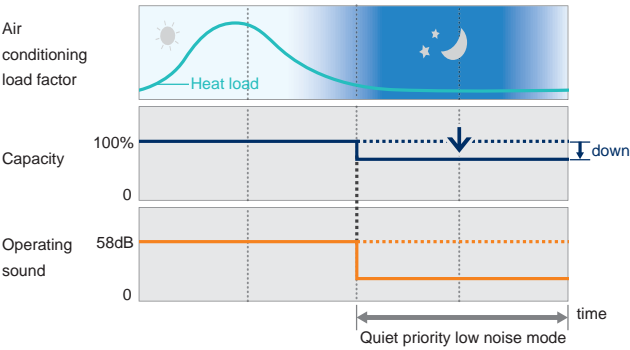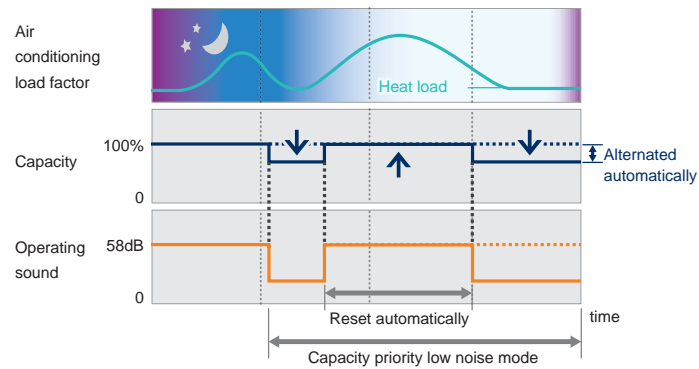
Auto changeover function

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

2°C
0.5°C
Set Temp.
-0.5°C
-2°C
time

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

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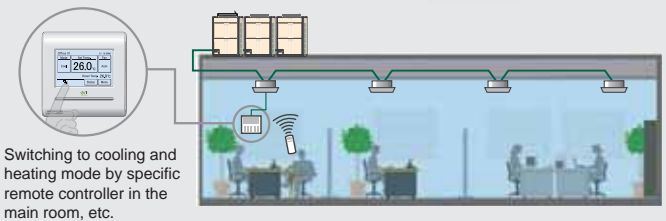
Automatic cooling / heating operation for each room is possible

Heating

Dry

Room A 24°C   Room B 18°C   Cooling

Room C 27°C   Room D OFF   Room E 23°C   Fan

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

Non-stop oil recovery operation

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

*: AIRSTAGE VR-II series is not available.

Previous model

V-II series   (Heating operation)

Operation stopped at oil recovery

Non-stop oil recovery operation

ON
OFF   Time

ON   Time
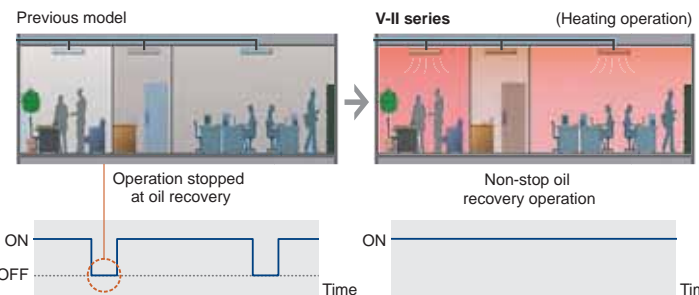
HIGH RELIABILITY

Outdoor unit rotational operation

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

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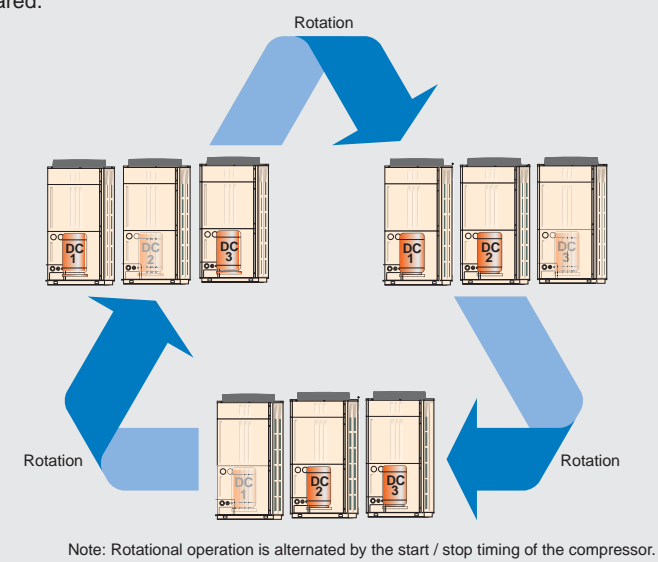
Backup operation

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

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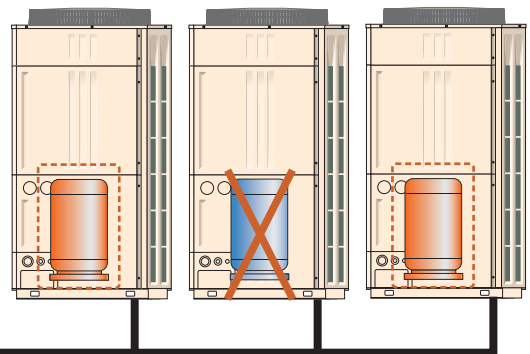
Advanced refrigerant control

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

Master   Slave 1   Slave 2   Load level   Master   Slave 1   Slave 2

Balance operation condition   **Unbalance operation condition**
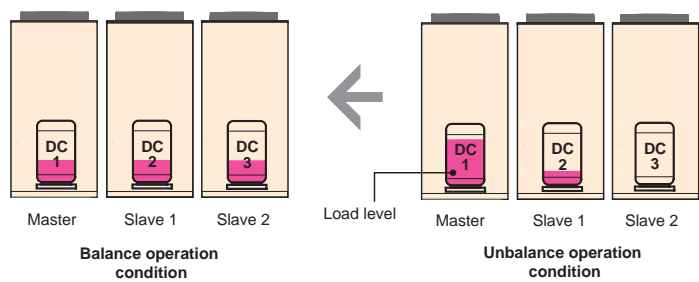
Liquid flow back protection

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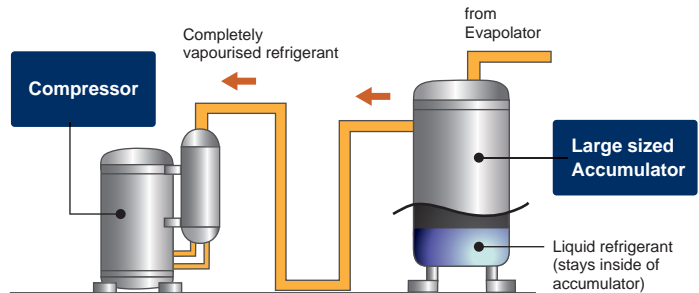
Adoption of blue fin heat exchanger

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

Blue fin heat exchanger
- Cobalt Blue protection
- Standard chromate protection
- Aluminium base material
- Hydrophilic coating
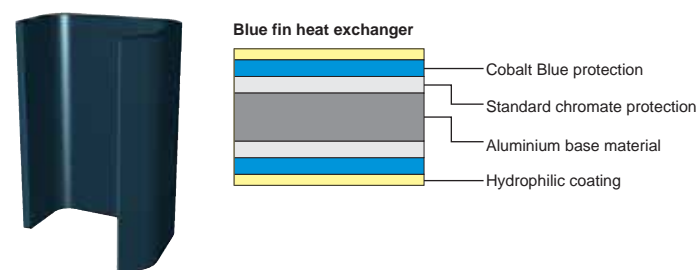
DESIGN FLEXIBILITY

Overall piping length 1,000m

Total pipe length
1,000m max.

Actual pipe length
165m*

*: AIRSTAGE V-II series is up to 150m.

Pipe length from first separation tube to the farthest indoor unit
60m max.

Height difference between outdoor and indoor units
50m max.

For the outdoor unit stated below : 40m max. (Outdoor temp. ≧ -5°C) 5m max. (Outdoor temp. ＜ -5°C)

Height difference between indoor and indoor units
15m max.

High static pressure of 80Pa

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

Powerful discharge air prevents a short-circuit.
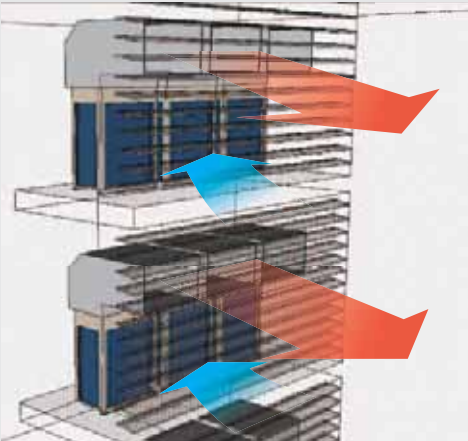
Previous model
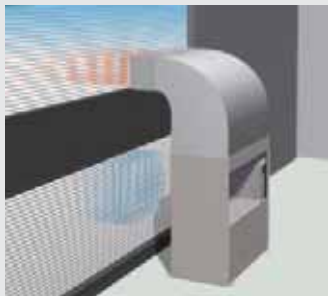
V-II series
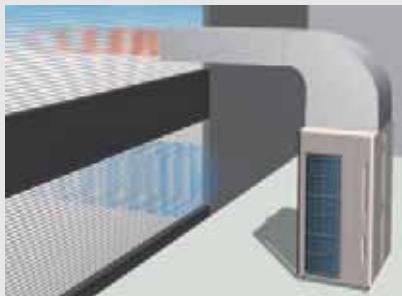
80Pa as standard

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

High capacity connection

4HP-6HP

AIRSTAGE™ J-IIS series Heat Pump type

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

Connectable indoor unit number
up to 8

4HP-6HP

AIRSTAGE™ J-II series Heat Pump type

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

Connectable indoor unit number
up to 9

8HP-48HP

AIRSTAGE™ VR-II series Heat Recovery type

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

Connectable indoor unit number
up to 64

AIRSTAGE™ V-II series Heat Pump type

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

Connectable indoor unit number
up to 48

*1. Conditions of maximum connectable indoor unit capacity ratio is as the chart below.
*2. Only 4HP is 46%

Outdoor unit capacity	Maximum connectable indoor unit capacity ratio	
	Without 1.1kW models	With 1.1kW models*3
8HP-48HP	150%	130%
4HP-6HP	130%	117%(J-IIS), 120%(J-II)

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

Wide operating range

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

AIRSTAGE™ VR-II series Heat Recovery type

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

AIRSTAGE™ V-II series Heat Pump type

(°C)
Cooling 46°C
Heating 21°C
-15°C *4
-20°C

AIRSTAGE™ J-IIS series Heat Pump type

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

AIRSTAGE™ J-II series Heat Pump type

(°C)
Cooling 46°C
Heating 21°C
-5°C
-20°C
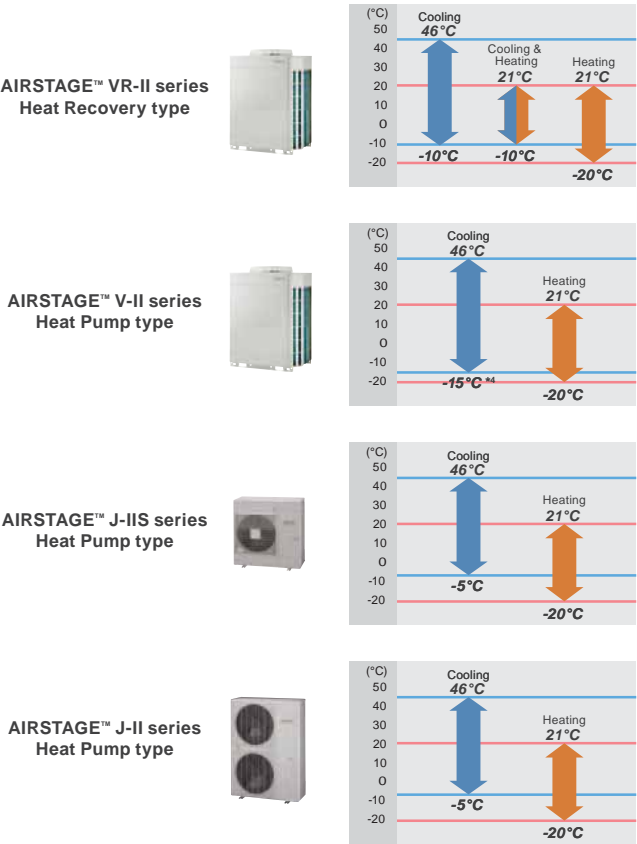
*4. Note : When a multiple outdoor unit connection is used, operating range is from -5°C to 46°C in cooling.

Centralized control

FGL split type air-conditioner can be connected to VRF Network via Network Convertor.
It is possible to manage the operation by using a FUJITSU VRF control system.

System Controller

VRF System

AIRSTAGE VR-II Heat Recovery

RB Unit

AIRSTAGE V-II Heat Pump

AIRSTAGE J-IIS Heat Pump

AIRSTAGE J-II Heat Pump

Single Split System

Network Convertor

Remote controller line
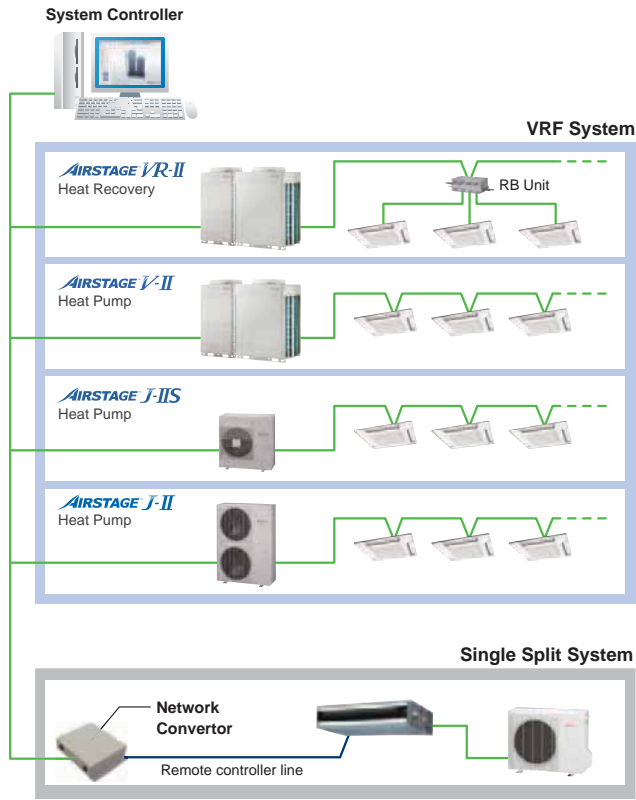
EASY INSTALLATION

Easily transported

Easily craned using lifting belt hooks
Design of outdoor unit allows for lifting straps to be used
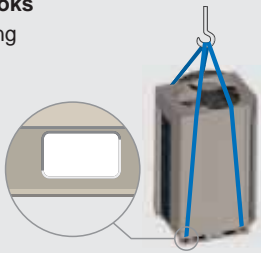
Transporting by forklift
Transport with forklift is possible.
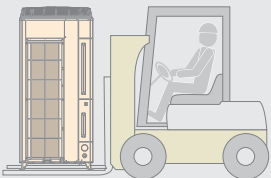
Can be transported in a small elevator

Easy access

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

Expansion of work space
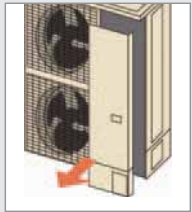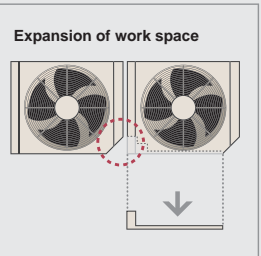
Reduced installation intervals by front access

Flexible piping connection

Piping and wiring are available to the front, left and right, and bottom.
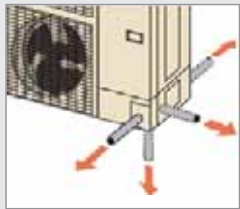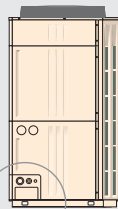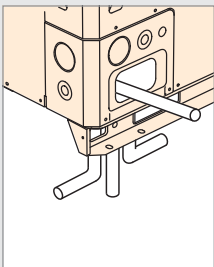
Flexible installation by 4 way pipe direction

Simple wiring work

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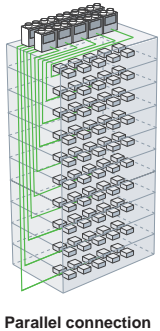
or
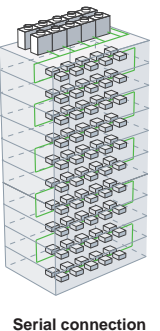
Parallel connection **Serial connection**

Easy evacuation - using vacuum mode function

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

← Air   ← Air

Outdoor unit   Air →   Vacuum pump
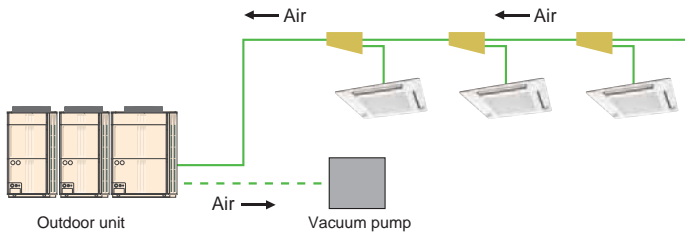
Automatic address setting

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

Automatic address setting is performed at outdoor unit

Addresses are automatically distributed from outdoor unit.

Signal Amplifier

RB unit

Press the push button switch of outdoor unit.

Manual address setting from indoor unit and remote controller is also possible.
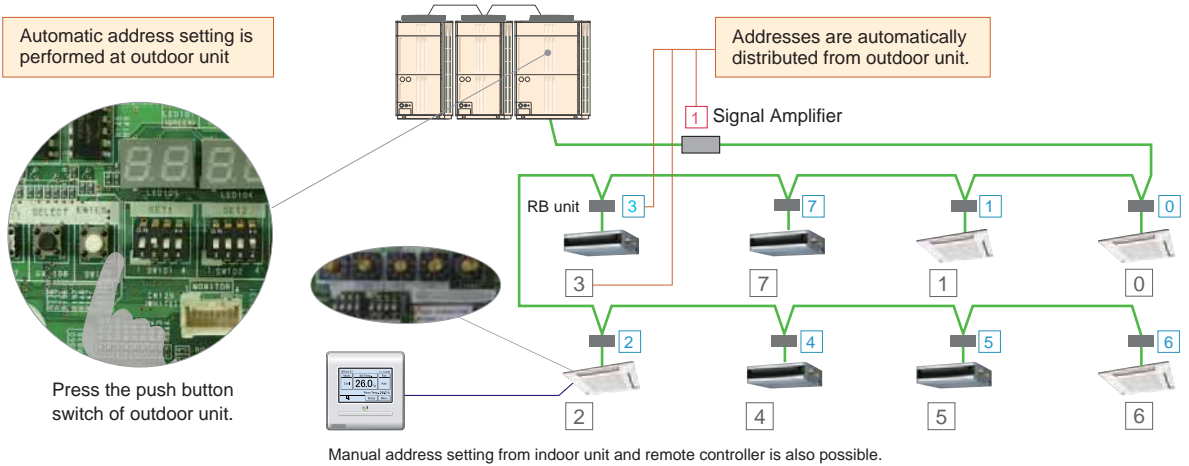
Easy commissioning by Service Tool

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

EASY SERVICE & MAINTENANCE

Design for Easy Maintenance

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

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

7-segment LED

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

Movable PCB panel
Easier for maintenance work behind the PCB

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

An error code is displayed on a liquid crystal screen.

Wired Remote Controller

System number
001: Controller
002: Indoor unit   Error code

Unit number

Simple Remote Controller

Remote controller address
Error code

Wired Remote Controller (Touch panel)

Error status / Error history
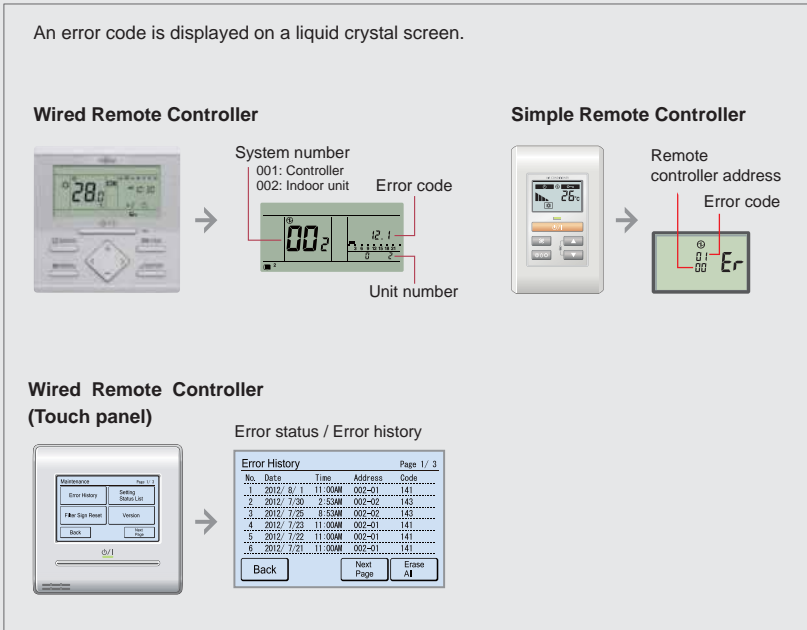
Error status can be cheked easily by outdoor unit display

Error and quantity annunciation

Error code

Abnormal indoor unit address

Mobile trouble shooting tool for iPhone

Mobile Technician *FREE*

We will release an App of troubleshooting tool for iPhone, iPod touch and other Apple products.
This application is a troubleshooting tool for FUJITSU GENERAL air conditioner (RAC / PAC, VRF)
It helps you to check air conditioner condition.
Error code check, Troubleshooting, and Sensor check are available.

Error diagnosis by Service Tool

Necessary maintenance can be carried out after analysing the operation data. The service tool can be connected anywhere in the VRF network.

Service Tool
UTY-ASGX
Software

Outdoor unit

Transmission line

USB adaptor
(Field supplied)

Easy to carry out with USB adaptor

Indoor unit

Equipment Detail (Diagram)   **Equipment Detail (List)**

Remote monitoring

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

Web Monitoring System

Monitoring Side

VRF Network System Side

Outdoor unit

Transmission line

Web Monitoring Tool

Internet
or
Public Telephone Line

USB adapter
(Field supplied)
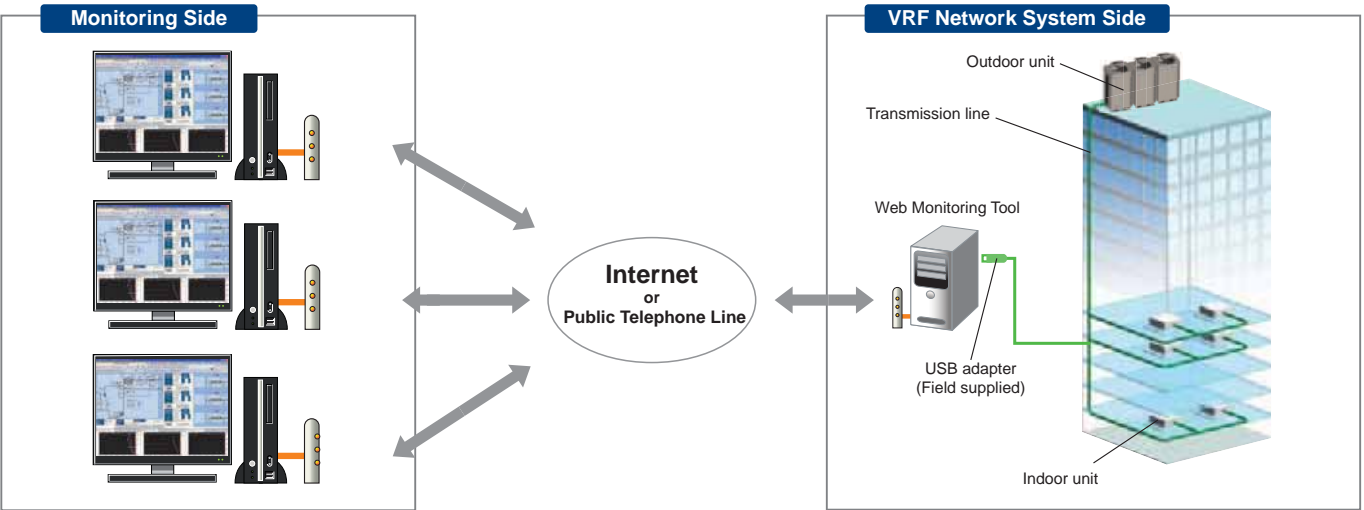
Indoor unit

AIRSTAGE INVERTER

AIRSTAGE SERIES

The AIRSTAGE VRF Range of products is made up of 70 outdoor unit models to help designers meet the needs requirements of projects designers are working on.

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

HEAT RECOVERY TYPE AIRSTAGE VR-II

HEAT PUMP TYPE AIRSTAGE V-II

HEAT PUMP TYPE AIRSTAGE J-IIS

HEAT PUMP TYPE AIRSTAGE J-II

AIRSTAGE™

HEAT RECOVERY TYPE
AIRSTAGE™ VR-II series

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

System Outline

Simultaneous cooling and heating operation using 1 refrigerant system

Cooling and heating can be freely selected for each indoor unit to provide simultaneous cooling and heating in rooms with large temperature differences.

Annual cooling operation

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

Handles changes in the temperature difference

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

Large Building

Heat exchanger
4 way valve
Compressor
Outdoor unit

High pressure liquid
Low pressure gas
High pressure gas

RB unit
Heat exchanger
Indoor unit
EEV
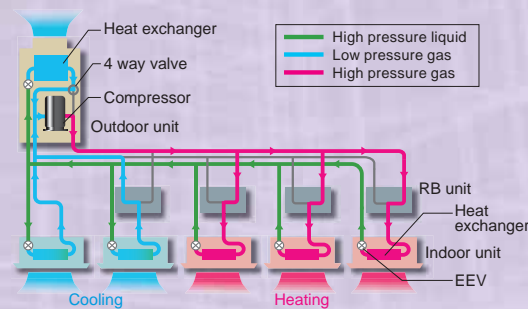
Cooling   Heating

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

Energy saving of the operating systems has been approved as heating and cooling modes can be operated at the same time on the same air conditioning piping system.

High
COP
Heating & Cooling
Mainly Cooling   Mainly Heating
No-Heat Recovery model
0   50   100 (%)
Heating ratio
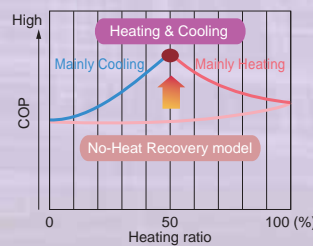
Efficiency in actual operation

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

Space saving combination

(COP)

(HP)	8	10	12	14	16	18	20	22	24*	26	28	30	32	34	36	38	40	42	44	46	48
	4.39	4.30	3.90	4.13	3.92	4.34	4.30	4.07	3.90	4.05	3.91	4.01	3.92	4.01	3.90	4.00	3.91	4.00	3.91	3.98	3.92

Energy efficiency combination

(COP)

(HP)	16	22	24*	26	28	30	32	34	36	38	40	42	44
	4.39	4.22	4.39	4.35	4.32	4.30	4.24	4.23	4.18	4.17	4.08	4.13	4.05

For 24 HP Combination

Space saving   Energy efficiency

COP **12.6%** 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 compressor Large capacity DC inverter compressor
Large capacity high efficient DC twin rotary compressor with excellent intermediate capability.

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

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

All inverter compressor

Large capacity DC inverter compressor

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

High efficient compressor speed control

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

0.1Hz

Capacity

Inverter frequency

Multiple outdoor operation control

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

Compressor Load level

High efficient operation　　　　**Inefficient operation**
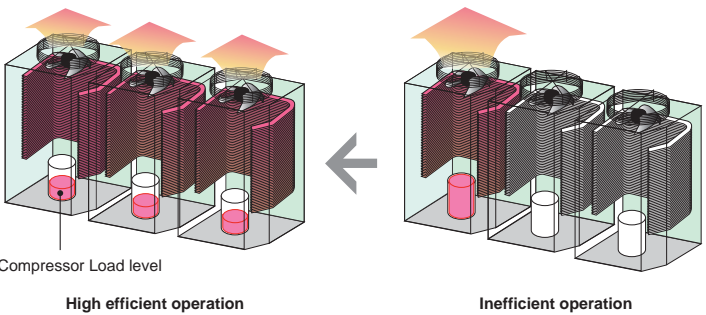
Heat exchanger refrigerant control

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

Fan

Large intake airflow

Small intake airflow

Heat exchanger

Outdoor unit

High efficient refrigerant flow control

Larger refrigerant flow

EEV

Heat exchanger Distributor
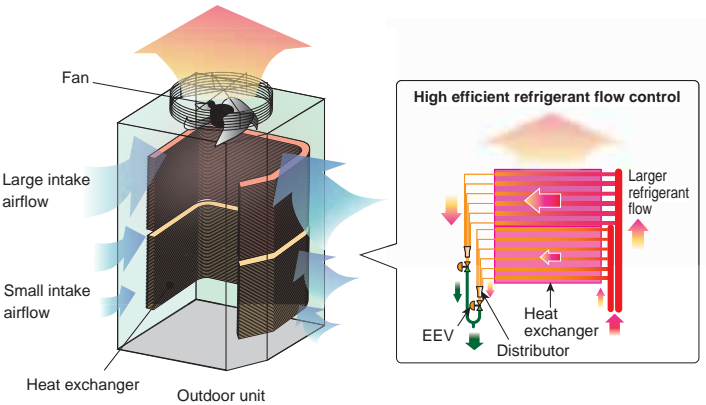
Flexible piping connection

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

Separation tube

RB Unit (Single type)

RB Unit (Multi type)

Max.3 or 8 indoor units

Max. 8 indoor unit

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

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

Flexible installation of RB unit

Height *198mm*

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

Installation possible from either side for freedom of the control box

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

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

•2-way connection

•Up to 2 units can be connected in series.

RB unit (single type)

RB unit (multi type)

Easy to maintenance in a narrow space

• Maintenance can be performed from the side.

• Electrics box can be temporarily fixed by sliding down.
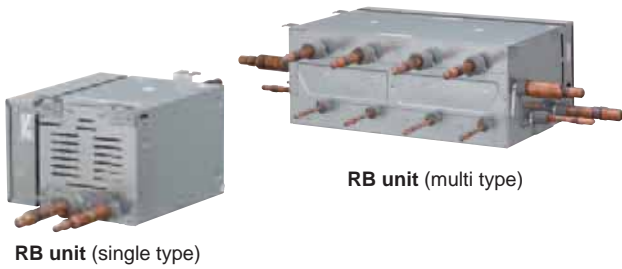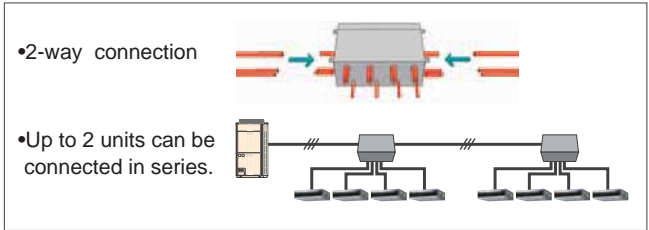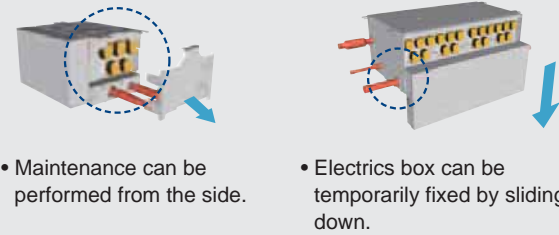
• Parts can be replaced easily even at narrow space in the ceiling.

RB unit　　　Ceiling

Outdoor units lineup

• Combinations other than the followings are not recommended.

Space saving combination

22.4kW (8HP)	28.0kW (10HP)	33.5kW (12HP)	40.0kW (14HP)	45.0kW (16HP)
AJ*A72GALH UNIT : AJ*A72GALH	AJ*A90GALH UNIT : AJ*A90GALH	AJ*108GALH UNIT : AJ*108GALH	AJ*126GALH UNIT : AJ*126GALH	AJ*144GALH UNIT : AJ*144GALH
50.4kW (18HP)	56.0kW (20HP)	61.5kW (22HP)	67.0kW (24HP)	73.0kW (26HP)
AJ*162GALH UNIT : AJ*A90/A72GALH	AJ*180GALH UNIT : AJ*A90/A90GALH	AJ*198GALH UNIT : AJ*108/A90GALH	AJ*216GALH UNIT : AJ*108/108GALH	AJ*234GALH UNIT : AJ*144/90GALH
78.5kW (28HP)	85.0kW (30HP)	90.0kW (32HP)	95.0kW (34HP)	100.5kW (36HP)
AJ*252GALH UNIT : AJ*144/108GALH	AJ*270GALH UNIT : AJ*144/126GALH	AJ*288GALH UNIT : AJ*144/144GALH	AJ*306GALH UNIT : AJ*108/108/A90GALH	AJ*324GALH UNIT : AJ*108/108/108GALH
106.5kW (38HP)	112.0kW (40HP)	118.0kW (42HP)	123.5kW (44HP)	130.0kW (46HP)
AJ*342GALH UNIT : AJ*144/108/A90GALH	AJ*360GALH UNIT : AJ*144/108/108GALH	AJ*378GALH UNIT : AJ*144/144/A90GALH	AJ*396GALH UNIT : AJ*144/144/108GALH	AJ*414GALH UNIT : AJ*144/144/126GALH
135.0kW (48HP)				
AJ*432GALH UNIT : AJ*144/144/144GALH				

Energy efficiency combination

44.8kW (16HP)	62.4kW (22HP)	67.2kW (24HP)	72.8kW (26HP)	78.4kW (28HP)
AJ*144GALHH UNIT : AJ*A72/A72GALH	AJ*198GALHH UNIT : AJ*126/A72GALH	AJ*216GALHH UNIT : AJ*A72/A72/A72GALH	AJ*234LALHH UNIT : AJ*A90/A72/A72LALH	AJ*252GALHH UNIT : AJ*A90/A90/A72GALH
84.0kW (30HP)	90.4kW (32HP)	96.0kW (34HP)	102.4kW (36HP)	108.0kW (38HP)
AJ*270GALHH UNIT : AJ*A90/A90/A90GALH	AJ*288GALHH UNIT : AJ*126/A90/A72GALH	AJ*306GALHH UNIT : AJ*126/A90/A90GALH	AJ*324GALHH UNIT : AJ*126/126/A72GALH	AJ*342GALHH UNIT : AJ*126/126/A90GALH
113.0kW (40HP)	120.0kW (42HP)	125.0kW (44HP)		
AJ*360GALHH UNIT : AJ*144/126/A90GALH	AJ*378GALHH UNIT : AJ*126/126/126GALH	AJ*396GALHH UNIT : AJ*144/126/126GALH		

AJ* : AJY(FUJITSU), AJH(GENERAL)

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Dimensions

8,10,12HP : AJ*A72GALH / AJ*A90GALH / AJ*108GALH

(Unit : mm)

690 (Bolt pitch)
80   530 (Bolt pitch)
8-12 × 17 (Hole)
732 (Bolt pitch)
1576
1690
765
930
1339

B   A C

14,16HP : AJ*126GALH / AJ*144GALH

(Unit : mm)

1000 (Bolt pitch)
80   840 (Bolt pitch)
8-12×7 (Hole)
732 (Bolt pitch)
1690
765
1240

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
10
100
Pipe port
125
199

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

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

AJ* : AJY(FUJITSU), AJH(GENERAL)

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Outdoor units specifications

Space Saving Combination

Rating Capacity range	HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
Model name		AJ*A72GALH	AJ*A90GALH	AJ*108GALH	AJ*126GALH	AJ*144GALH	AJ*162GALH	AJ*180GALH	AJ*198GALH	AJ*216GALH	AJ*234GALH	AJ*252GALH	AJ*270GALH	AJ*288GALH	AJ*306GALH	AJ*324GALH	AJ*342GALH	AJ*360GALH	AJ*378GALH	AJ*396GALH	AJ*414GALH	AJ*432GALH
Unit 1		AJ*A72GALH	AJ*A90GALH	AJ*108GALH	AJ*126GALH	AJ*144GALH	AJ*A90GALH	AJ*A90GALH	AJ*108GALH	AJ*108GALH	AJ*144GALH	AJ*144GALH	AJ*144GALH	AJ*144GALH	AJ*108GALH	AJ*108GALH	AJ*144GALH	AJ*144GALH	AJ*144GALH	AJ*144GALH	AJ*144GALH	AJ*144GALH
Unit 2							AJ*A72GALH	AJ*A90GALH	AJ*A90GALH	AJ*108GALH	AJ*A90GALH	AJ*108GALH	AJ*126GALH	AJ*144GALH	AJ*108GALH	AJ*108GALH	AJ*108GALH	AJ*108GALH	AJ*144GALH	AJ*144GALH	AJ*144GALH	AJ*144GALH
Unit 3															AJ*A90GALH	AJ*108GALH	AJ*A90GALH	AJ*A90GALH	AJ*A90GALH	AJ*108GALH	AJ*126GALH	AJ*144GALH
Maximum Connectable Indoor Unit*1		15	16	17	21	24	32	30	32	35	39	42	45	48	50	53	57	60	63	64	64	64
Indoor unit connectable capacity	Cooling kW	11.2-33.6	14.0-42.0	16.8-50.2	20.0-60.0	22.5-67.5	25.2-75.6	28.0-84.0	30.8-92.2	33.5-100.5	36.5-109.5	39.3-117.7	42.5-127.5	45.0-135.0	47.5-142.5	50.3-150.7	53.3-159.7	56.0-168.0	59.0-177.0	61.8-185.2	65.0-195.0	67.5-202.5
Power source		3-phase 4 wire, 400 V, 50Hz												3-phase 4 wire, 400 V, 50Hz								
Capacity	Cooling kW	22.4	28.0	33.5	40.0	45.0	50.4	56.0	61.5	67.0	73.0	78.5	85.0	90.0	95.0	100.5	106.5	112.0	118.0	123.5	130.0	135.0
	Heating kW	25.0	31.5	37.5	45.0	50.0	56.5	63.0	69.0	75.0	81.5	87.5	95.0	100.0	106.5	112.5	119.0	125.0	131.5	137.5	145.0	150.0
Input power	Cooling kW	5.45	7.11	9.75	11.34	13.61	12.56	14.22	16.86	19.50	20.72	23.36	24.95	27.22	26.61	29.25	30.47	33.11	34.33	36.97	38.56	40.83
	Heating kW	5.70	7.33	9.62	10.90	12.77	13.03	14.66	16.95	19.24	20.10	22.39	23.67	25.54	26.57	28.86	29.72	32.01	32.87	35.16	36.44	38.31
EER	Cooling W/W	4.11	3.94	3.44	3.53	3.31	4.01	3.94	3.65	3.44	3.52	3.36	3.41	3.31	3.57	3.44	3.50	3.38	3.44	3.34	3.37	3.31
COP	Heating W/W	4.39	4.30	3.90	4.13	3.92	4.34	4.30	4.07	3.90	4.05	3.91	4.01	3.92	4.01	3.90	4.00	3.91	4.00	3.91	3.98	3.92
Air flow rate	High m³/h	11,100	11,100	11,100	13,000	13,000	11,100×2	11,100×2	11,100×2	11,100×2	13,000+11,100	13,000+11,100	13,000×2	13,000×2	11,100×3	11,100×3	13,000+11,100×2	13,000+11,100×2	13,000×2+11,100	13,000×2+11,100	13,000×3	13,000×3
Sound pressure level*2	Cooling dB(A)	56	58	59	60	61	60	61	62	62	63	63	64	64	64	63	64	64	64	65	65	66
	Heating dB(A)	58	59	61	61	61	62	62	63	64	63	64	64	64	65	66	65	66	65	66	66	66
Maximum external static pressure	Pa	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Compressor motor output	kW	7.5	7.5	7.5	11.0	11.0	7.5×2	7.5×2	7.5×2	7.5×2	11.0+7.5	11.0+7.5	11.0×2	11.0×2	7.5×3	7.5×3	11.0+7.5×2	11.0+7.5×2	11.0×2+7.5	11.0×2+7.5	11.0×3	11.0×3
Heat exchanger fin		Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
Dimensions	Height mm	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
	Width mm	930	930	930	1,240	1,240	930×2	930×2	930×2	930×2	1,240+930	1,240+930	1,240×2	1,240×2	930×3	930×3	1,240+930×2	1,240+930×2	1,240×2+930	1,240×2+930	1,240×3	1,240×3
	Depth mm	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765
Weight	kg	262	262	262	286	286	262×2	262×2	262×2	262×2	286+262	286+262	286×2	286×2	262×3	262×3	286+262×2	286+262×2	286×2+262	286×2+262	286×3	286×3
Refrigerant charge	kg	11.8	11.8	11.8	11.8	11.8	11.8×2	11.8×2	11.8×2	11.8×2	11.8×2	11.8×2	11.8×2	11.8×2	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3
Connection pipe diameter	Liquid mm	12.70	12.70	12.70	12.70	12.70	15.88	15.88	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	Discharge Gas mm	15.88	19.05	19.05	22.22	22.22	22.22	22.22	28.58	28.58	28.58	28.58	28.58	28.58	28.58	28.58	28.58	34.92	34.92	34.92	34.92	34.92
	Suction 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
Operation range	Cooling °C	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46
	Heating °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
	Cooling/Heating °C	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21

Energy Efficiency Combination

Rating Capacity range	HP	16	22	24	26	28	30	32	34	36	38	40	42	44
Model name		AJ*144GALHH	AJ*198GALHH	AJ*216GALHH	AJ*234GALHH	AJ*252GALHH	AJ*270GALHH	AJ*288GALHH	AJ*306GALHH	AJ*324GALHH	AJ*342GALHH	AJ*360GALHH	AJ*378GALHH	AJ*396GALHH
Unit 1		AJ*A72GALH	AJ*126GALH	AJ*A72GALH	AJ*A90GALH	AJ*A90GALH	AJ*A90GALH	AJ*126GALH	AJ*126GALH	AJ*126GALH	AJ*126GALH	AJ*144GALH	AJ*126GALH	AJ*144GALH
Unit 2		AJ*A72GALH	AJ*A72GALH	AJ*A72GALH	AJ*A72GALH	AJ*A90GALH	AJ*A90GALH	AJ*A90GALH	AJ*A90GALH	AJ*126GALH	AJ*126GALH	AJ*126GALH	AJ*126GALH	AJ*126GALH
Unit 3				AJ*A72GALH	AJ*A72GALH	AJ*A72GALH	AJ*A90GALH	AJ*A72GALH	AJ*A90GALH	AJ*A72GALH	AJ*A90GALH	AJ*A90GALH	AJ*126GALH	AJ*126GALH
Maximum Connectable Indoor Unit*1		24	33	36	39	42	45	48	51	54	57	60	64	64
Indoor unit connectable capacity	Cooling kW	22.4-67.2	31.2-93.6	33.6-100.8	36.4-109.2	39.2-117.6	42.4-126.0	45.2-135.6	48.0-144.0	51.2-153.6	54.0-162.0	56.5-169.5	60.0-180.0	62.5-187.5
Power source		3-phase 4 wire, 400 V, 50Hz						3-phase 4 wire, 400 V, 50Hz						
Capacity	Cooling kW	44.8	62.4	67.2	72.8	78.4	78.4	90.4	90.4	102.4	108.0	113.0	120.0	125.0
	Heating kW	50.0	70.0	75.0	81.5	88.0	88.0	101.5	101.5	115.0	121.5	126.5	135.0	140.0
Input power	Cooling kW	10.90	16.79	16.35	18.01	19.67	19.67	23.90	23.90	28.13	29.79	32.06	34.02	36.29
	Heating kW	11.40	16.60	17.10	18.73	20.36	20.36	23.93	23.93	27.50	29.13	31.00	32.70	34.57
EER	Cooling W/W	4.11	3.72	4.11	4.04	3.99	3.99	3.78	3.78	3.64	3.63	3.52	3.53	3.44
COP	Heating W/W	4.39	4.22	4.39	4.35	4.32	4.32	4.24	4.24	4.18	4.17	4.08	4.13	4.05
Air flow rate	High m³/h	11,100×2	13,000+11,100	11,100×3	11,100×3	11,100×3	11,100×3	13,000+11,100×2	13,000+11,100×2	13,000×2+11,100	13,000×2+11,100	13,000×2+11,100	13,000×3	13,000×3
Sound pressure level*2	Cooling dB(A)	59	61	61	62	62	62	63	63	64	64	65	65	65
	Heating dB(A)	61	63	63	63	63	63	64	64	65	65	65	66	66
Maximum external static pressure	Pa	80	80	80	80	80	80	80	80	80	80	80	80	80
Compressor motor output	kW	7.5×2	11.0+7.5	7.5×3	7.5×3	7.5×3	7.5×3	11.0+7.5×2	11.0+7.5×2	11.0×2+7.5	11.0×2+7.5	11.0×2+7.5	11.0×3	11.0×3
Heat exchanger fin		Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
Dimensions	Height mm	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
	Width mm	930×2	1,240+930	930×3	930×3	930×3	930×3	1,240+930×2	1,240+930×2	1,240×2+930	1,240×2+930	1,240×2+930	1,240×3	1,240×3
	Depth mm	765	765	765	765	765	765	765	765	765	765	765	765	765
Weight	kg	262×2	286+262	262×3	262×3	262×3	262×3	286+262×2	286+262×2	286×2+262	286×2+262	286×2+262	286×3	286×3
Refrigerant charge	kg	11.8×2	11.8×2	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3
Connection pipe diameter	Liquid mm	12.70	15.88	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	Discharge Gas mm	22.22	28.58	28.58	28.58	28.58	28.58	28.58	28.58	28.58	34.92	34.92	34.92	34.92
	Suction Gas mm	28.58	34.92	34.92	34.92	34.92	34.92	34.92	34.92	41.27	41.27	41.27	41.27	41.27
Operation range	Cooling °C	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46
	Heating °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
	Cooling/Heating °C	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21

AJ* : AJY(FUJITSU), AJH(GENERAL)
Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

*1 Minimum connectable indoor unit number is 2.

*2 The noise value is the value when measured in an anechoic room.
When measured in the actual installed state, surrounding noise and reflections are received and the measured value is usually larger than the indicated value.

HEAT PUMP TYPE

AIRSTAGE™ V-II series

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

System Outline

Excellent energy savings
Heat pump type inverter control is used to achieve economic cooling and heating operation for individual air conditioning to entire air conditioning.

High design flexibility for various building air conditioning
The high static pressure design flexibly meets the needs of high rise buildings including easy installation on each floor.

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

Large Office

System configuration example

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

Outdoor unit
Separation tube
Header
Indoor unit
Liquid pipe
Gas pipe
Indoor unit
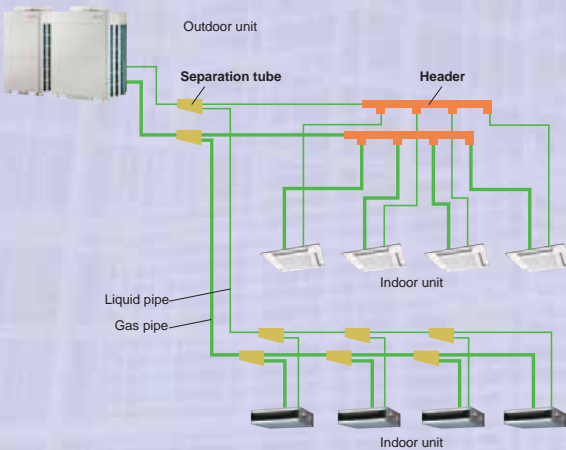
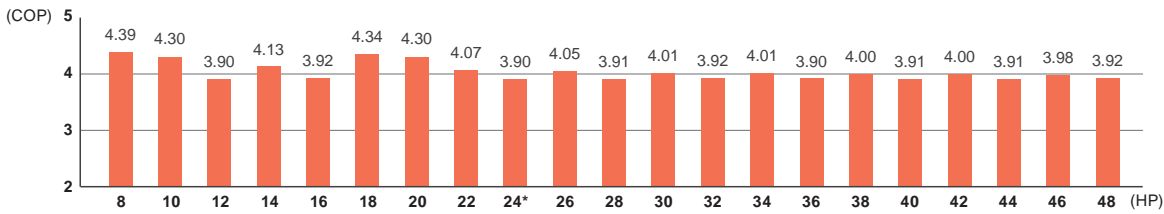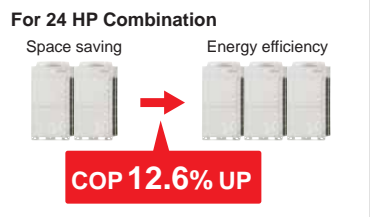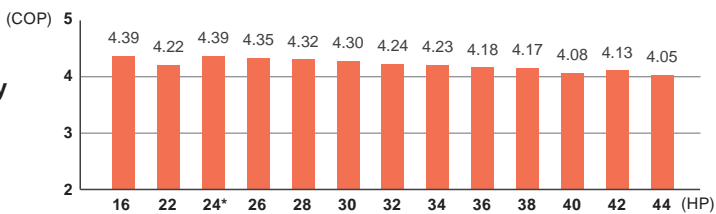## Efficiency in actual operation

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.
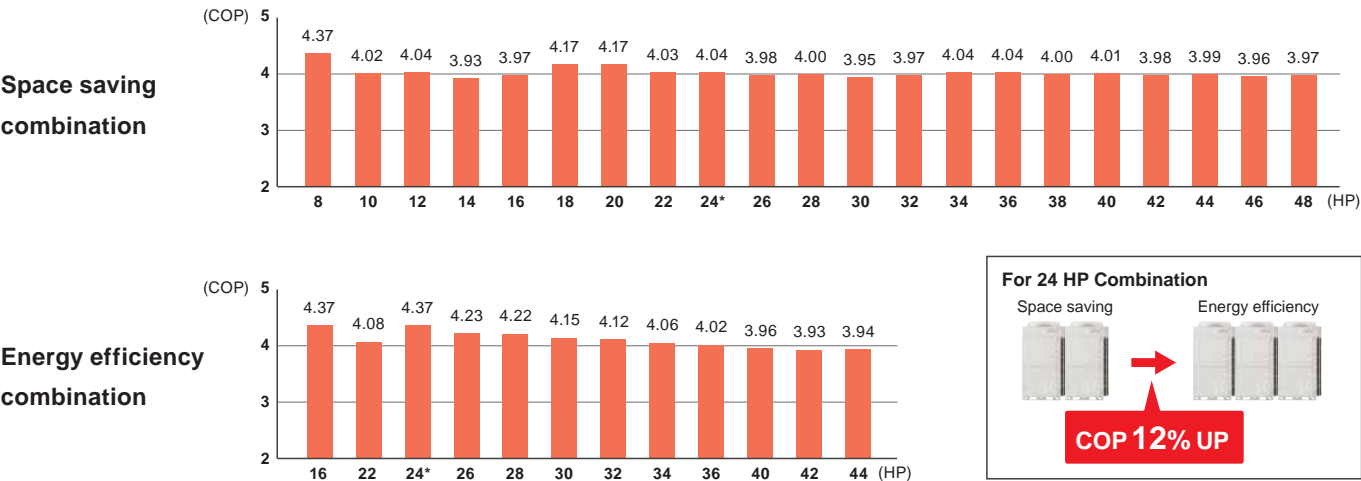
Space saving combination

(COP)

(HP)	COP
8	4.37
10	4.02
12	4.04
14	3.93
16	3.97
18	4.17
20	4.17
22	4.03
24*	4.04
26	3.98
28	4.00
30	3.95
32	3.97
34	4.04
36	4.04
38	4.00
40	4.01
42	3.98
44	3.99
46	3.96
48	3.97

Energy efficiency combination

(COP)

(HP)	COP
16	4.37
22	4.08
24*	4.37
26	4.23
28	4.22
30	4.15
32	4.12
34	4.06
36	4.02
40	3.96
42	3.93
44	3.94

For 24 HP Combination

Space saving → Energy efficiency

COP 12% 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

DC fan motor
Power consumption has been reduced by 25% compared to previous models by using a compact and high performance 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 operation is realized by using a sine wave DC inverter control.

DC twin rotary compressor
Significantly greater efficiency is realized by use of a large capacity DC twin rotary compressor with substantially increased refrigerant intake and compression efficiency.

4-face heat exchanger
Heat exchange efficiency is significantly improved by the introduction of a new 4-face heat exchanger that increases effective surface area.
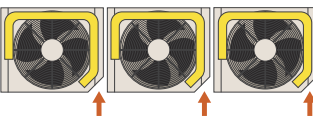
Front intake port
(Corner cut air inhaling structure)
In multiple outdoor unit installations, the unique front intake design improves airflow into the Heat Exchanger.
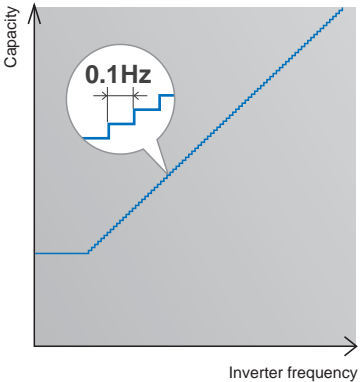
Outdoor units lineup

• Combinations other than the followings are not recommended.

Space saving combination

22.4kW (8HP)	28.0kW (10HP)	33.5kW (12HP)	40.0kW (14HP)	45.0kW (16HP)
AJ*A72LALH UNIT : AJ*A72LALH	AJ*A90LALH UNIT : AJ*A90LALH	AJ*108LALH UNIT : AJ*108LALH	AJ*126LALH UNIT : AJ*126LALH	AJ*144LALH UNIT : AJ*144LALH
50.4kW (18HP)	55.9kW (20HP)	61.5kW (22HP)	67.0kW (24HP)	73.5kW (26HP)
AJ*162LALH UNIT : AJ*A90/A72LALH	AJ*180LALH UNIT : AJ*108/A72LALH	AJ*198LALH UNIT : AJ*108/A90LALH	AJ*216LALH UNIT : AJ*108/108LALH	AJ*234LALH UNIT : AJ*126/108LALH
78.5kW (28HP)	85.0kW (30HP)	90.0kW (32HP)	95.0kW (34HP)	100.5kW (36HP)
AJ*252LALH UNIT : AJ*144/108LALH	AJ*270LALH UNIT : AJ*144/126LALH	AJ*288LALH UNIT :AJ*144/144LALH	AJ*306LALH UNIT : AJ*108/108/A90LALH	AJ*324LALH UNIT : AJ*108/108/108LALH
107.0kW (38HP)	112.0kW (40HP)	118.5kW (42HP)	123.5kW (44HP)	130.0kW (46HP)
AJ*342LALH UNIT : AJ*126/108/108LALH	AJ*360LALH UNIT : AJ*144/108/108LALH	AJ*378LALH UNIT : AJ*144/126/108LALH	AJ*396LALH UNIT : AJ*144/144/108LALH	AJ*414LALH UNIT : AJ*144/144/126LALH
135.0kW (48HP)				
AJ*432LALH UNIT : AJ*144/144/144LALH				

Energy efficiency combination

44.8kW (16HP)	62.4kW (22HP)	67.2kW (24HP)	72.8kW (26HP)	78.3kW (28HP)
AJ*144LALHH UNIT : AJ*A72/A72LALH	AJ*198LALHH UNIT : AJ*126/A72LALH	AJ*216LALHH UNIT : AJ*A72/A72/A72LALH	AJ*234LALHH UNIT : AJ*A90/A72/A72LALH	AJ*252LALHH UNIT : AJ*108/A72/A72LALH
84.8kW (30HP)	89.8kW (32HP)	95.9kW (34HP)	102.4kW (36HP)	113.5kW (40HP)
AJ*270LALHH UNIT : AJ*126/A72/A72LALH	AJ*288LALHH UNIT : AJ*108/108/A72LALH	AJ*306LALHH UNIT : AJ*126/108/A72LALH	AJ*324LALHH UNIT : AJ*126/126/A72LALH	AJ*360LALHH UNIT : AJ*126/126/108LALH
120.0kW (42HP)	125.0kW (44HP)			
AJ*378LALHH UNIT : AJ*126/126/126LALH	AJ*396LALHH UNIT : AJ*144/126/126LALH			

AJ* : AJY(FUJITSU), AJH(GENERAL)

Dimensions

8,10,12HP : AJ*A72LALH / AJ*A90LALH / AJ*108LALH

(Unit : mm)

690 (Bolt pitch)
80 530 (Bolt pitch)
8-12 × 17 (Hole)
732 (Bolt pitch)
765
930
1576
1690
1339

B   A C

14,16HP : AJ*126LALH / AJ*144LALH

(Unit : mm)

1000 (Bolt pitch)
80 840 (Bolt pitch)
8-12×7 (Hole)
732 (Bolt pitch)
765
1240
1690

B   A C

A Front side knockout position
Ø 34.5 Power supply cable port
73
43
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
10
Pipe port
100
125
199

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

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

AJ* : AJY(FUJITSU), AJH(GENERAL)

Space Saving Combination

Rating Capacity range	HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
Model name		AJ*A72LALH	AJ*A90LALH	AJ*108LALH	AJ*126LALH	AJ*144LALH	AJ*162LALH	AJ*180LALH	AJ*198LALH	AJ*216LALH	AJ*234LALH	AJ*252LALH	AJ*270LALH	AJ*288LALH	AJ*306LALH	AJ*324LALH	AJ*342LALH	AJ*360LALH	AJ*378LALH	AJ*396LALH	AJ*414LALH	AJ*432LALH
Unit 1		AJ*A72LALH	AJ*A90LALH	AJ*108LALH	AJ*126LALH	AJ*144LALH	AJ*A90LALH	AJ*108LALH	AJ*A90LALH	AJ*108LALH	AJ*126LALH	AJ*144LALH	AJ*144LALH	AJ*144LALH	AJ*108LALH	AJ*108LALH	AJ*126LALH	AJ*144LALH	AJ*144LALH	AJ*144LALH	AJ*144LALH	AJ*144LALH
Unit 2							AJ*A72LALH	AJ*A72LALH	AJ*A90LALH	AJ*108LALH	AJ*108LALH	AJ*108LALH	AJ*126LALH	AJ*144LALH	AJ*108LALH	AJ*108LALH	AJ*108LALH	AJ*108LALH	AJ*126LALH	AJ*144LALH	AJ*144LALH	AJ*144LALH
Unit 3															AJ*A90LALH	AJ*108LALH	AJ*108LALH	AJ*108LALH	AJ*108LALH	AJ*108LALH	AJ*126LALH	AJ*144LALH
Maximum Connectable Indoor Unit*1		15	16	17	21	24	32	32	32	35	39	42	45	48	48	48	48	48	48	48	48	48
Indoor unit connectable capacity	Cooling kW	11.2-33.6	14.0-42.0	16.8-50.2	20.0-60.0	22.5-67.5	25.2-75.6	28.0-83.8	30.8-92.2	33.5-100.5	36.8-110.2	39.3-117.7	42.5-127.5	45.0-135.0	47.5-142.5	50.3-150.7	53.5-160.5	56.0-168.0	59.3-177.7	61.8-185.2	65.0-195.0	67.5-202.5
Power source		3-phase 4 wire, 400 V, 50Hz									3-phase 4 wire, 400 V, 50Hz											
Capacity	Cooling kW	22.4	28.0	33.5	40.0	45.0	50.4	55.9	61.5	67.0	73.5	78.5	85.0	90.0	95.0	100.5	107.0	112.0	118.5	123.5	130.0	135.0
	Heating kW	25.0	31.5	37.5	45.0	50.0	56.5	62.5	69.0	75.0	82.5	87.5	95.0	100.0	106.5	112.5	120.0	125.0	132.5	137.5	145.0	150.0
Input power	Cooling kW	5.51	7.73	9.62	11.53	14.17	13.24	15.13	17.35	19.24	21.15	23.79	25.70	28.34	26.97	28.86	30.77	33.41	35.32	37.96	39.87	42.51
	Heating kW	5.72	7.83	9.28	11.45	12.60	13.55	15.00	17.11	18.56	20.73	21.88	24.05	25.20	26.39	27.84	30.01	31.16	33.33	34.48	36.65	37.80
EER Cooling	W/W	4.07	3.62	3.48	3.47	3.18	3.81	3.69	3.54	3.48	3.48	3.30	3.31	3.18	3.52	3.48	3.48	3.35	3.36	3.25	3.26	3.18
COP Heating	W/W	4.37	4.02	4.04	3.93	3.97	4.17	4.17	4.03	4.04	3.98	4.00	3.95	3.97	4.04	4.04	4.00	4.01	3.98	3.99	3.96	3.97
Air flow rate	High m³/h	11,100	11,100	11,100	13,000	13,000	11,100 x 2	11,100 x 2	11,100 x 2	11,100 x 2	13,000 + 11,100	13,000 + 11,100	13,000 x 2	13,000 x 2	11,100 x 3	11,100 x 3	13,000 + 11,100 x 2	13,000 + 11,100 x 2	13,000 x 2 + 11,100	13,000 x 2 + 11,100	13,000 x 3	13,000 x 3
Sound pressure level*2	Cooling dB(A)	56	58	58	60	61	60	60	61	61	62	63	64	64	63	63	64	64	65	65	65	66
	Heating dB(A)	58	59	60	61	61	62	62	63	63	64	64	64	64	64	65	65	65	65	65	66	66
Maximum external static pressure	Pa	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Compressor motor output	kW	3.9	3.9	3.9 + 4.5	3.9 + 4.5	3.9 + 4.5	3.9 x 2	3.9 x 2 + 4.5	3.9 x 2 + 4.5	3.9 x 2 + 4.5 x 2	3.9 x 2 + 4.5 x 2	3.9 x 2 + 4.5 x 2	3.9 x 2 + 4.5 x 2	3.9 x 2 + 4.5 x 2	3.9 x 2 + 4.5 x 2	3.9 x 3 + 4.5 x 2	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 3
Heat exchanger fin		Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
Dimensions	Height mm	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
	Width mm	930	930	930	1,240	1,240	930 x 2	930 x 2	930 x 2	930 x 2	930 + 1,240	930 + 1,240	1,240 x 2	1,240 x 2	930 x 3	930 x 3	930 x 2 + 1,240	930 x 2 + 1,240	930 + 1,240 x 2	930 + 1,240 x 2	1,240 x 3	1,240 x 3
	Depth mm	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765
Weight	kg	220	220	275	303	303	220 + 220	275 + 220	275 + 220	275 + 275	303 + 275	303 + 275	303 + 303	303 + 303	275 + 275 + 220	275 + 275 + 275	303 + 275 + 275	303 + 275 + 275	303 + 303 + 275	303 + 303 + 275	303 + 303 + 303	303 + 303 + 303
Refrigerant charge	kg	11.2	11.2	11.8	11.8	11.8	11.2 x 2	11.8 + 11.2	11.8 + 11.2	11.8 x 2	11.8 x 2	11.8 x 2	11.8 x 2	11.8 x 2	11.8 + 11.2	11.8 x 3	11.8 + 11.2 x 2	11.8 x 3	11.8 x 3	11.8 x 3	11.8 x 3	11.8 x 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
	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
Operation range	Cooling °C	-15 to 46	-15 to 46	-15 to 46	-15 to 46	-15 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
	Heating °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

Energy Efficiency Combination

Rating Capacity range	HP	16	22	24	26	28	30	32	34	36	40	42	44
Model name		AJ*144LALHH	AJ*198LALHH	AJ*216LALHH	AJ*234LALHH	AJ*252LALHH	AJ*270LALHH	AJ*288LALHH	AJ*306LALHH	AJ*324LALHH	AJ*360LALHH	AJ*378LALHH	AJ*396LALHH
Unit 1		AJ*A72LALH	AJ*126LALH	AJ*A72LALH	AJ*A90LALH	AJ*108LALH	AJ*126LALH	AJ*108LALH	AJ*126LALH	AJ*126LALH	AJ*126LALH	AJ*126LALH	AJ*144LALH
Unit 2		AJ*A72LALH	AJ*A72LALH	AJ*A72LALH	AJ*A72LALH	AJ*A72LALH	AJ*A72LALH	AJ*A72LALH	AJ*108LALH	AJ*A72LALH	AJ*126LALH	AJ*126LALH	AJ*126LALH
Unit 3				AJ*A72LALH	AJ*A72LALH	AJ*A72LALH	AJ*A72LALH	AJ*A72LALH	AJ*A72LALH	AJ*A72LALH	AJ*108LALH	AJ*126LALH	AJ*126LALH
Maximum Connectable Indoor Unit*1		30	33	36	36	42	45	48	48	48	48	48	48
Indoor unit connectable capacity	Cooling kW	22.4-67.2	31.2-93.6	33.6-100.8	36.4-109.2	39.2-117.4	42.4-127.2	44.7-134.1	48.0-143.8	51.2-153.6	56.8-170.2	60.0-180.0	62.5-187.5
Power source		3-phase 4 wire, 400 V, 50Hz						3-phase 4 wire, 400 V, 50Hz					
Capacity	Cooling kW	44.8	62.4	67.2	72.8	78.3	84.8	89.4	95.9	102.4	113.5	120.0	125.0
	Heating kW	50.0	70.0	75.0	81.5	87.5	95.0	100.0	107.5	115.0	127.5	135.0	140.0
Input power	Cooling kW	11.02	17.04	16.53	18.75	20.64	22.55	24.75	26.66	28.57	32.68	34.59	37.23
	Heating kW	11.44	17.17	17.16	19.27	20.72	22.89	24.28	26.45	28.62	32.18	34.35	35.50
EER Cooling	W/W	4.07	3.66	4.07	3.88	3.79	3.76	3.61	3.60	3.58	3.47	3.47	3.36
COP Heating	W/W	4.37	4.08	4.37	4.23	4.22	4.15	4.12	4.06	4.02	3.96	3.93	3.94
Air flow rate	High m³/h	11,100 x 2	13,000 + 11,100	11,100 x 3	11,100 x 3	11,100 x 3	13,000 + 11,000 x 2	11,100 x 3	13,000 + 11,100 x 2	13,000 x 2 + 11,100	13,000 x 2 + 11,100	13,000 x 3	13,000 x 3
Sound pressure level*2	Cooling dB(A)	59	61	61	62	62	63	62	63	64	64	65	65
	Heating dB(A)	59	62	61	62	63	63	64	64	65	65	66	66
Maximum external static pressure	Pa	80	80	80	80	80	80	80	80	80	80	80	80
Compressor motor output	kW	3.9 x 2	3.9 x 2 + 4.5	3.9 x 3	3.9 x 3	3.9 x 3 + 4.5	3.9 x 3 + 4.5	3.9 x 3 + 4.5 x 2	3.9 x 3 + 4.5 x 2	3.9 x 3 + 4.5 x 2	3.9 x 3 + 4.5 x 2	3.9 x 3 + 4.5 x 3	3.9 x 3 + 4.5 x 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
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
	Width mm	930 x 2	930 + 1,240	930 x 3	930 x 3	930 x 3	930 x 2 + 1,240	930 × 3	930 x 2 + 1,240	930 + 1,240 x 2	930 + 1,240 x 2	1,240 x 3	1,240 x 3
	Depth mm	765	765	765	765	765	765	765	765	765	765	765	765
Weight	kg	220 + 220	303 + 220	220 + 220 + 220	220 + 220 + 220	275 + 220 + 220	275 + 220 + 220	275 + 275 + 220	303 + 275 + 220	303 + 303 + 220	303 + 303 + 275	303 + 303 + 303	303 + 303 + 303
Refrigerant charge	kg	11.2 x 2	11.8 + 11.2	11.2 x 3	11.2 x 3	11.8 + 11.2 x 2	11.8 + 11.2 x 2	11.8 x 2 + 11.2	11.8 x 2 + 11.2	11.8 x 2 + 11.2	11.8 x 3	11.8 x 3	11.8 x 3
Connection pipe diameter	Liquid mm	12.70	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	Gas mm	28.58	34.92	34.92	34.92	34.92	34.92	34.92	34.92	41.27	41.27	41.27	41.27
Operation range	Cooling °C	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
	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

AJ* : AJY(FUJITSU), AJH(GENERAL)
Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

*1 Minimum connectable indoor unit number is 2.
However ARXC72 and ARXC90 can be used signal connection.
*2 The noise value is the value when measured in an anechoic room.

When measured in the actual installed state, surrounding noise and reflections are received and the measured value is usually larger than the indicated value.

HEAT PUMP TYPE
AIRSTAGE™ J-IIS series

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

System Outline

Space saving and low sound level design

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

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

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

Large Homes

System configuration example

Outdoor unit
Separation tube
Header
Indoor unit
Liquid pipe
Gas pipe
Indoor unit
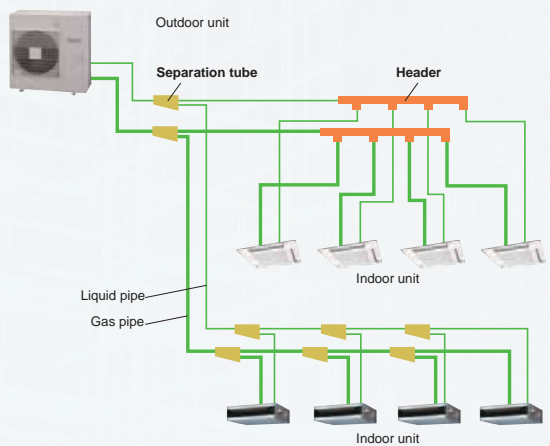
It Can be Easily Carried and Installed Obscure Place

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

NEW Model / 6HP class

Height difference
998 mm
▲25%
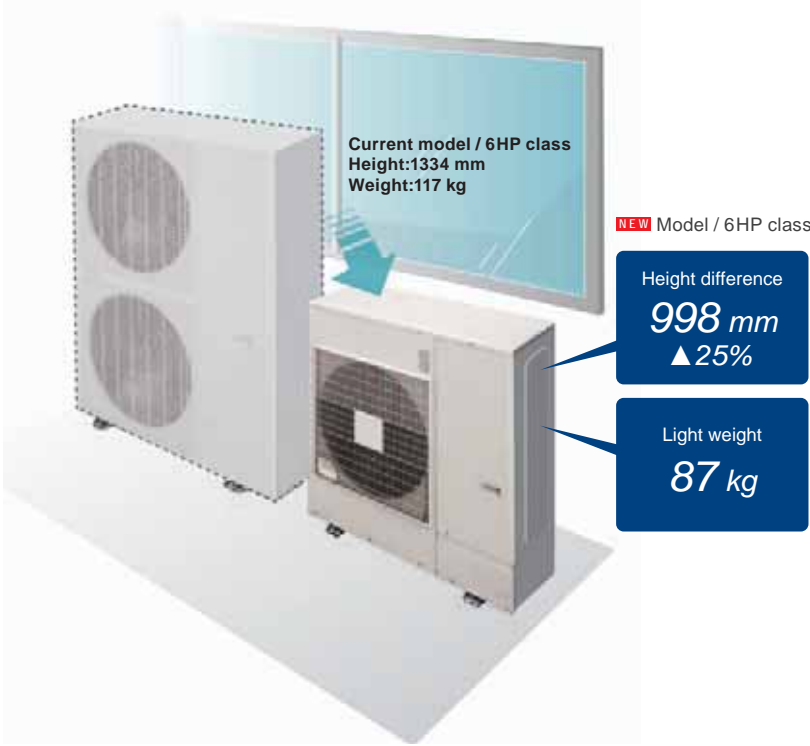
Light weight
87 kg

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
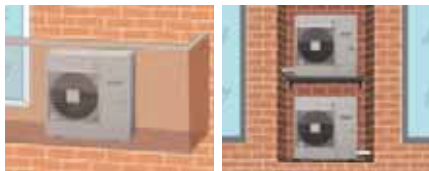
Low sound level design

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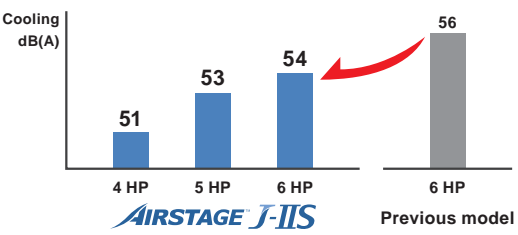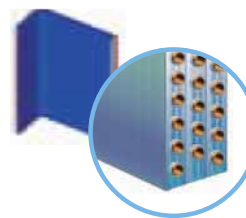
Cooling dB(A)

4 HP	5 HP	6 HP	6 HP
51	53	54	56

AIRSTAGE™ J-IIS   Previous model

Advanced high efficiency technology

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

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

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

High heat transfer
copper tube (Improved
lead angle)
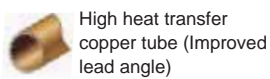
Smooth airflow grille
This grille was aerodynamically designed for
good efficiency with little blow loss.

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

Low noise rubber
High efficiency
compressor motor
Optimized refrigerant
flow design
Highly accurate
parts
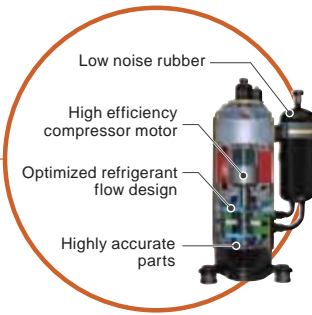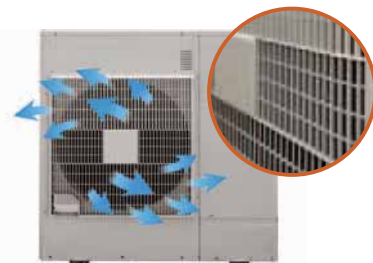
Compact and high performance DC twin rotary compressor

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

High

Compressor efficiency

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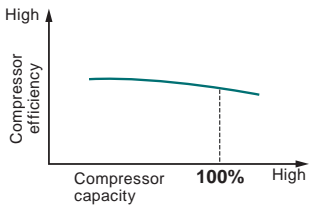
Long Piping Length

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
80m max.

Actual piping length
50m max.

Height difference between outdoor and indoor units
30m max.

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

Height difference between indoor and indoor units
15m max.

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-II 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
Model name			AJ*040LCLAH	AJ*045LCLAH	AJ*054LCLAH
Maximum connectable indoor unit			7	8	8
Power source		V/Ø/Hz	230/1/50	230/1/50	230/1/50
Capacity	Cooling	kW	12.1	14.0	15.1
	Heating		13.6	16.0	16.5
Input power	Cooling	kW	3.44	4.43	5.32
	Heating		3.09	3.93	4.26
EER	Cooling	W/W	3.52	3.16	2.84
COP	Heating		4.40	4.07	3.87
Airflow rate		m³/h	4,040	4,200	4,200
Sound Pressure level	Cooling	dB(A)	51	53	54
	Heating		54	55	56
Heat exchanger fin			Blue fin	Blue fin	Blue fin
Dimensions	Height	mm	998	998	998
	Width	mm	970	970	970
	Depth	mm	370	370	370
Weight		kg	86	86	87
Connection Pipe diameter	Liquid	mm	ø9.52	ø9.52	ø9.52
	Gas		ø15.88	ø15.88	ø15.88
Total pipe length		m	80	80	80
Max. Height difference			30	30	30
Operation Range	Cooling	°C	-5 to 46	-5 to 46	-5 to 46
	Heating		-20 to 21	-20 to 21	-20 to 21

AJ* : AJY(FUJITSU), AJH(GENERAL)
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

Model : AJ*040LCLAH / AJ*045LCLAH / AJ*054LCLAH

(Unit : mm)
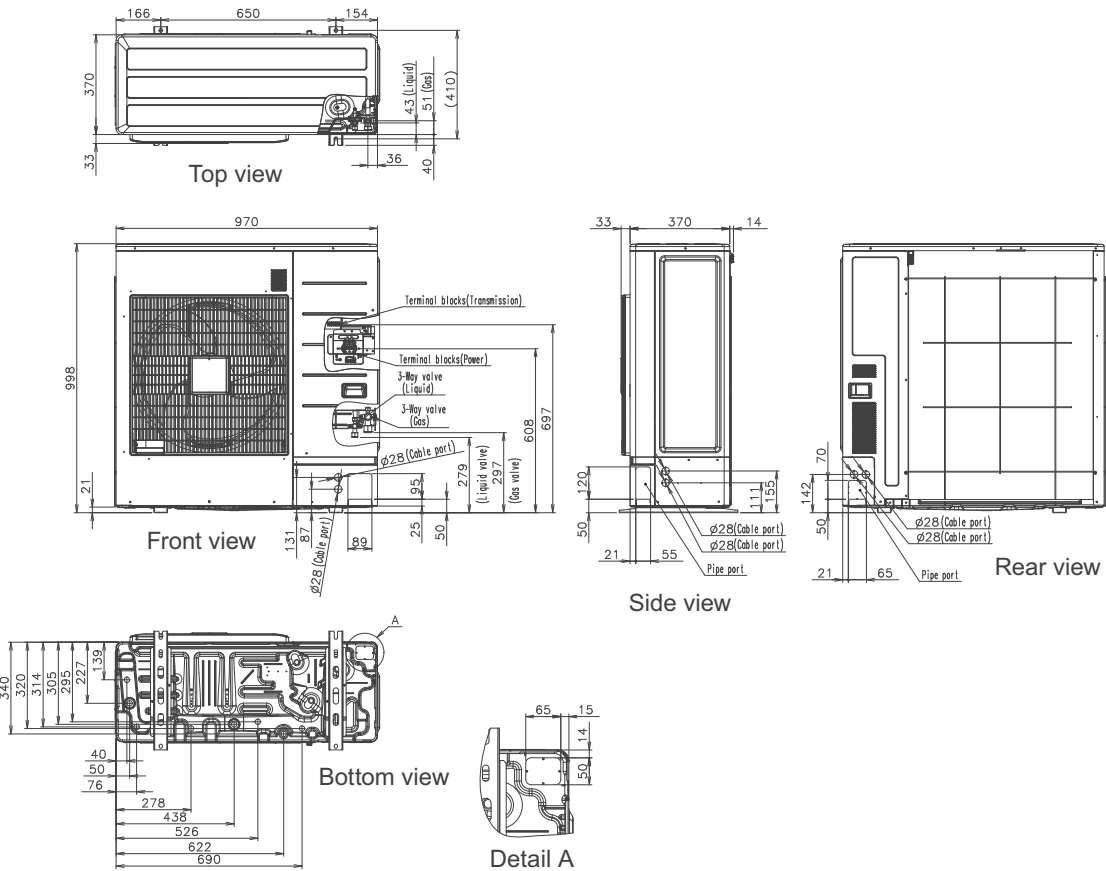
Top view

Front view

Side view

Rear view

Bottom view

Detail A

AJ* : AJY(FUJITSU), AJH(GENERAL)
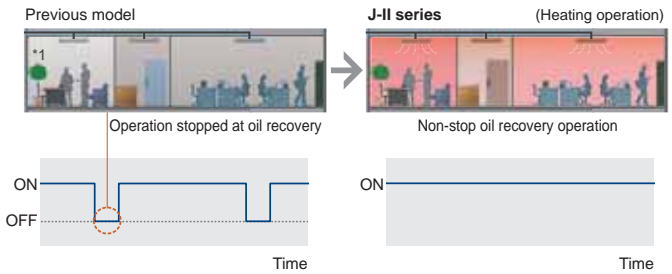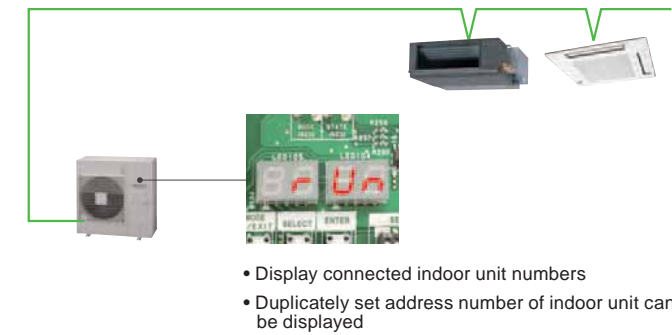
HEAT PUMP TYPE
AIRSTAGE™ J-II series

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

System Outline

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

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

Small Office

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

Outdoor unit
Separation tube
Header
Liquid pipe
Gas pipe
Indoor unit
Indoor unit
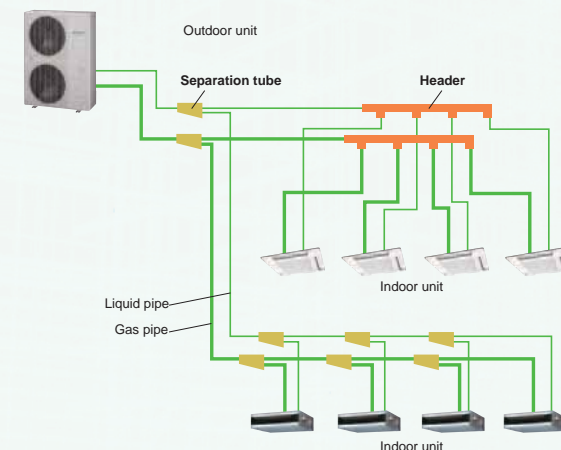
The building load is in the range of 40 % to 80%. Therefore, most air conditioners do not operate at maximum load, but operate at low to medium loads. Especially, for multi system, operation performance at partial load is important because air conditioners do not always operate at full load all the time. Aiming at energy saving performance matched to actual operation, Fujitsu General has developed a high performance air conditioner corresponding not only during the rated performance at 100% load, but also at low to medium load

Load curve (a typical office building)

Building load (%): 100 80 60 40 20 0
Time (h): 0 3 6 9 12 15 18 21 24

High EER / COP

3.72　4.29　3.60　4.20　3.45　3.95

4 HP　5 HP　6 HP
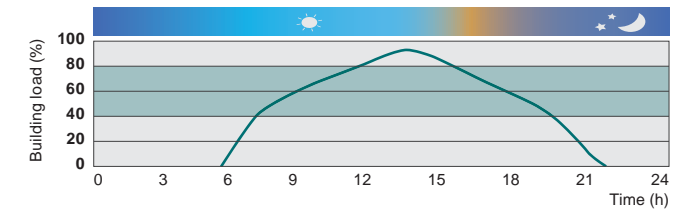
- : EER
- : COP
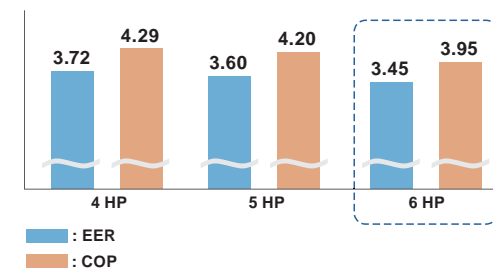
High part load performance (6HP class)

66% UP!　50% 5.73
100% 3.45

46% UP!　50% 5.75
100% 3.95

EER Cooling part load　COP Heating part load
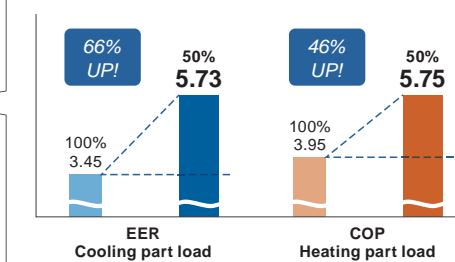
Conditions :
Connected indoor units: AUXA30GALH + AUXD24GALH
Cooling: indoor temp. of 27°CDB / 19°CWB, outdoor temp. of 35°CDB / 24°CWB
Heating: indoor temp. of 20°CDB / 15°CWB, outdoor temp. of 7°CDB / 6°CWB

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.
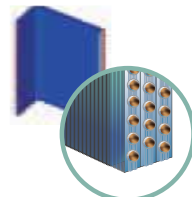
Large heat exchanger
Heat exchange performance is substantially improved by mounting of 3-row large heat exchanger.
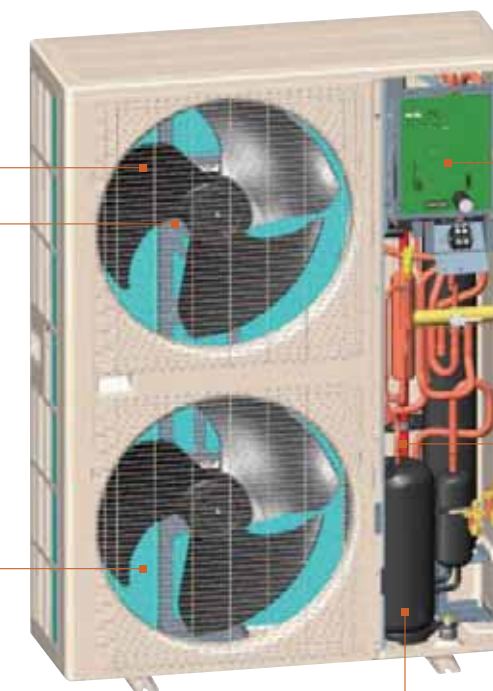
DC inverter control
Efficiency is improved by mounting of new active filter module.

Subcool heat exchanger
Cooling performance is improved by mounting of dual tube heat exchanger.
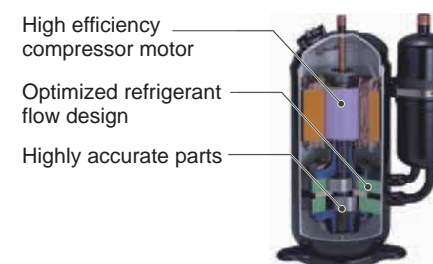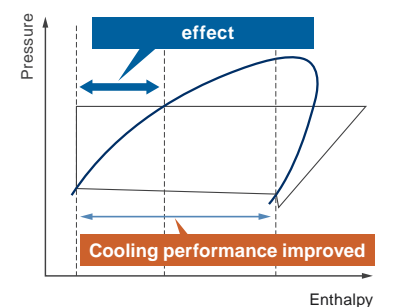
DC twin rotary compressor
Efficiency in all load regions is good. Especially good performance from low to medium at normal operation.

High efficiency compressor motor
Optimized refrigerant flow design
Highly accurate parts

Compressor efficiency
High
DC Twin Rotary compressor
Compressor capacity
High

Pressure
effect
Cooling performance improved
Enthalpy
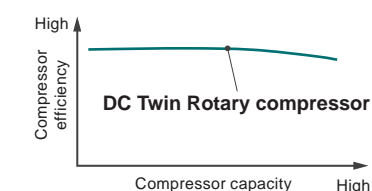
Long Piping Length

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

180m max.

Actual piping length

120m max.

Height difference between outdoor and indoor units

30m max.

Piping length from first separation tube to the farthest indoor unit

40m max.

Height difference between indoor and indoor units

15m max.
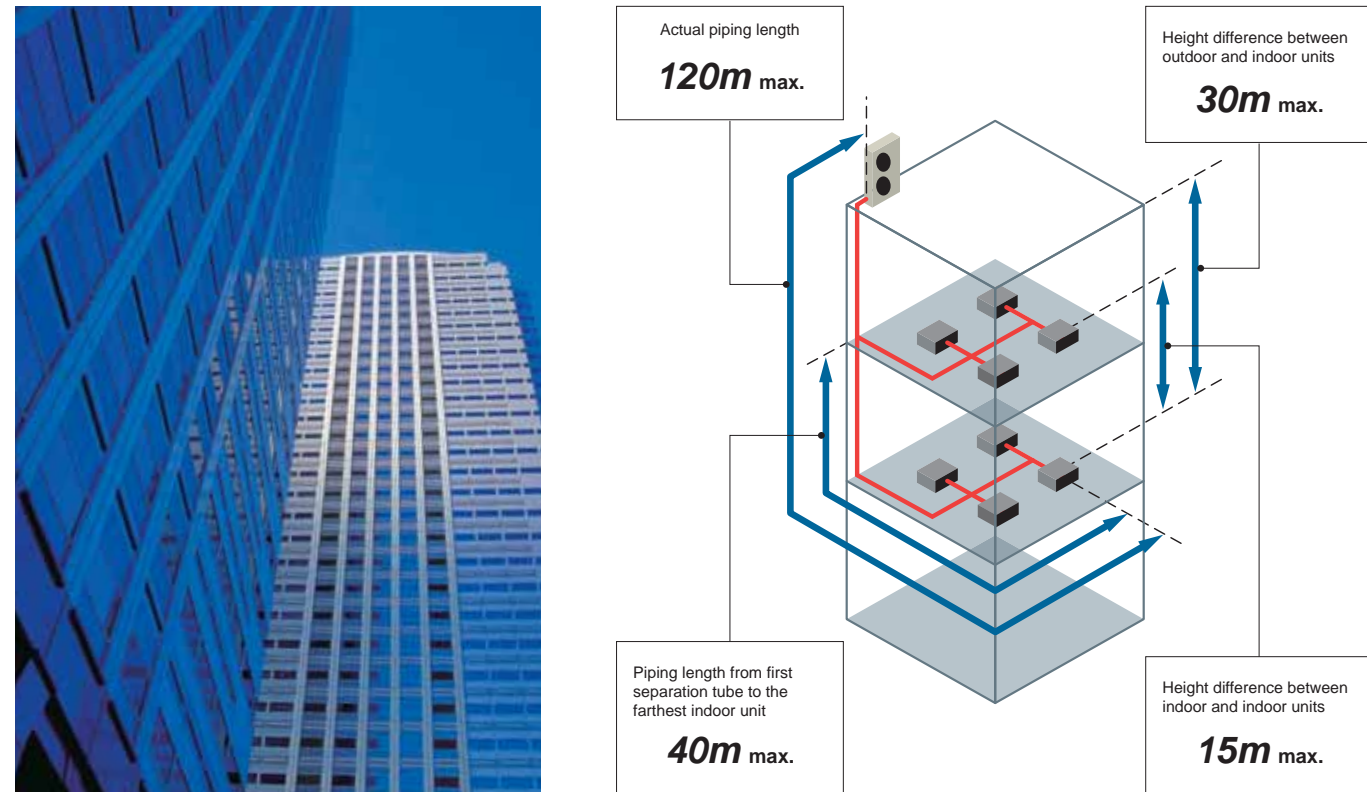
Powerful Heating

Heating capacity is improved at low outdoor temperature by our advanced technology.
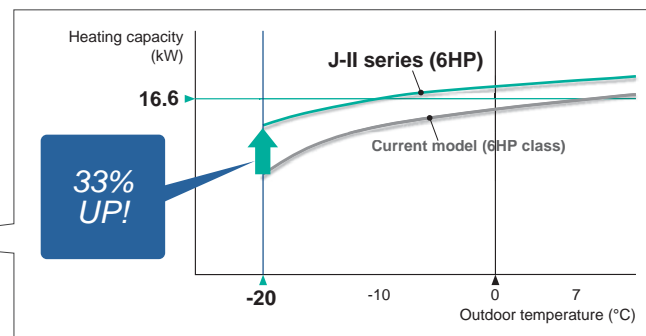
Heating capacity (kW)

J-II series (6HP)

16.6

33% UP!

Current model (6HP class)

-20   -10   0   7

Outdoor temperature (°C)

Easier Installation

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

• Display connected indoor unit numbers

• Duplicately set address number of indoor unit can be displayed
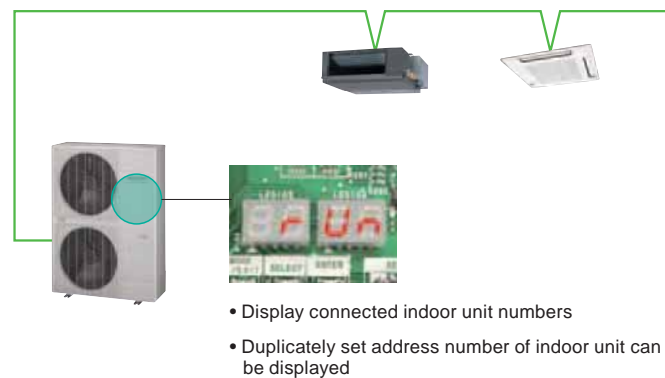
Specifications

Rating Capacity range		HP	4	5	6
Model name			AJ*A40LALH	AJ*A45LALH	AJ*A54LALH
Maximum Connectable Indoor Unit			7	8	9
Power source			Single-phase, ~230V, 50Hz	Single-phase, ~230V, 50Hz	Single-phase, ~230V, 50Hz
Capacity	Cooling	kW	12.1	14.0	15.5
	Heating		13.6	16.0	18.0
Input power	Cooling	kW	3.25	3.89	4.49
	Heating		3.17	3.81	4.56
EER	Cooling	W/W	3.72	3.60	3.45
COP	Heating		4.29	4.20	3.95
Air flow rate		m³/h	6,200	6,400	6,900
Sound pressure level	Cooling	dB (A)	50	51	53
	Heating		52	53	55
Heat exchanger fin			Blue fin	Blue fin	Blue fin
Dimensions	Height	mm	1,334	1,334	1,334
	Width	mm	970	970	970
	Depth	mm	370	370	370
Weight		kg	117	117	117
Refrigerant charge		kg	4.8	5.3	5.3
Connection pipe diameter	Liquid	mm	ø9.52	ø9.52	ø9.52
	Gas		ø15.88	ø15.88	ø19.05
Operation range	Cooling	°C	-5 to 46	-5 to 46	-5 to 46
	Heating		-20 to 21	-20 to 21	-20 to 21

AJ* : AJY(FUJITSU), AJH(GENERAL)

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

Model : AJ*A40LALH / AJ*A45LALH / AJ*A54LALH

(Unit : mm)
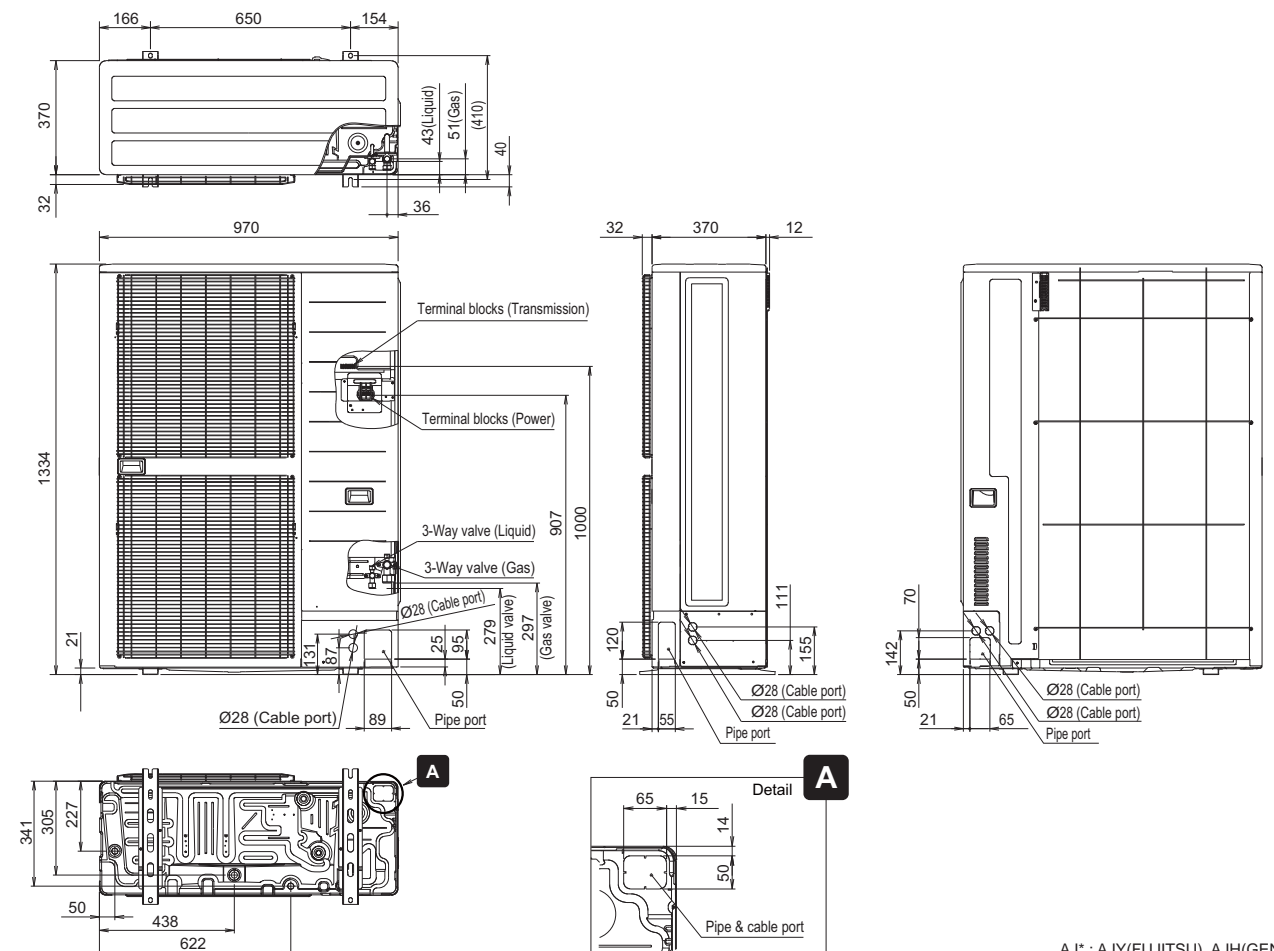
AJ* : AJY(FUJITSU), AJH(GENERAL)

INDOOR UNITS

The AIRSTAGE indoor units were developed to be highly efficient, compact, low noise and to have user friendly operation. With a variety of indoor units and capacities available, Fujitsu General has an indoor unit to match any requirement which is easy to install and maintain.

Further, a variety of options are available to achieve an air conditioning environment that is more desirable from the user's perspective.

COMPACT CASSETTE

LOW STATIC PRESSURE DUCT / CONCEALED FLOOR

SLIM DUCT / SLIM CONCEALED FLOOR

MEDIUM STATIC PRESSURE DUCT

HIGH STATIC PRESSURE DUCT

FLOOR / CEILING

WALL MOUNTED (EEV INTERNAL / EXTERNAL)

AIRSTAGE™

Compact Cassette

Models
AUXB04GALH
AUXB07GALH
AUXB09GALH
AUXB12GALH
AUXB14GALH
AUXB18GALH
AUXB24GALH

Compact size panel design
that fits standard ceiling panel (600x600mm)

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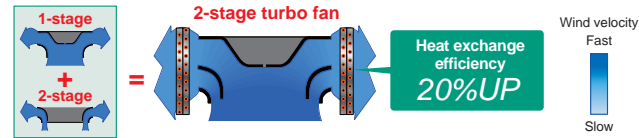
Previous turbo fan
In the case of a previous fan, the air outlet range was narrow as the airflow moved to the motor side which meant the velocity of air passing through the heat exchanger was uneven.

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

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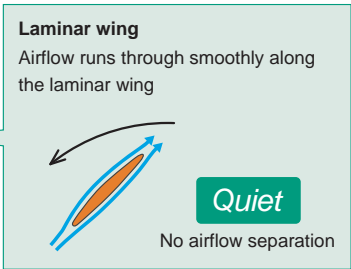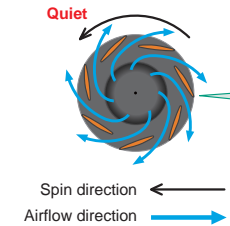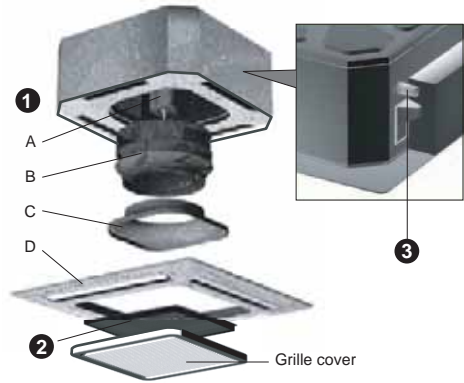
❶ **Maintenance of fan motor and fan**
Maintenance of the fan motor and fan can be done easily after taking off the panel as the bell mouth of the fan can be removed easily.

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

❷ **Air filter** : standard equipment

❸ **Adaptation of transparent drainage parts**
During installation, maintenance and operation, the drain pump and kit can be checked easily.

Compact design

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

570mm
570mm

High lift drain pump

Ceiling panel

Max.
700mm
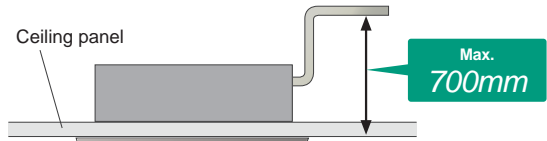
High ceiling mode

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

Model code	The maximum height from floor to ceiling (m)	
	Standard mode	High ceiling mode
04	2.7	—
07	2.7	—
09	2.7	—
12	2.7	3.0
14	2.7	3.0
18	2.7	3.0
24	2.7	3.0

Optional parts

Air Outlet Shutter Plate :   UTR-YDZB
Insulation Kit for High Humidity : UTZ-KXGC
Fresh Air Intake Kit :   UTZ-VXAA

Specifications

Model name			AUXB04GALH	AUXB07GALH	AUXB09GALH	AUXB12GALH	AUXB14GALH	AUXB18GALH	AUXB24GALH
Power source			230V ~, 50Hz						
Capacity	Cooling	kW	1.1	2.2	2.8	3.6	4.5	5.6	7.1
	Heating		1.3	2.8	3.2	4.1	5.0	6.3	8.0
Input power		W	23	25	25	29	35	36	84
Airflow rate	High	m³/h	530	540	550	600	680	710	1,030
	Med		420/450*1	450	450	530	590	580	830
	Low		300/350*1	350	350	390	390	400	450
Sound pressure level	High	dB(A)	34	34	35	37	38	41	50
	Med		28/30*1	30	30	34	34	35	44
	Low		21/25*1	25	25	27	27	27	30
Dimensions (H x W x D)		mm	245 x 570 x 570						
Weight		kg	15					17	
Connection pipe diameter	Liquid (Flare)	mm	ø6.35					ø9.52	
	Gas (Flare)		ø12.70					ø15.88	
	Drain		ø25 (I.D) ; ø32 (O.D.)						
Cassette Grille	Model name		UTG-UF*C-W						
	Dimensions (H x W x D)	mm	50 x 700 x 700						
	Weight	kg	2.6						

F* : FY (FUJITSU) ; FG(GENERAL)
Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating : Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].
*1: This value is under cooling operation.

Dimensions (Unit : mm)

Models: AUXB04 / AUXB07 / AUXB09 / AUXB12 / AUXB14 / AUXB18 / AUXB24

700
700
IR receiver

530
Hanging bolt position
□ 570 : Indoor unit
540 Hanging bolt position
□ 580 to 660 Ceiling openings
370
530
Drain hose

285 285
114 Ceiling 114

146
183 40
215
19 Control Box Gas pipe 30 123 30 262
Liquid pipe
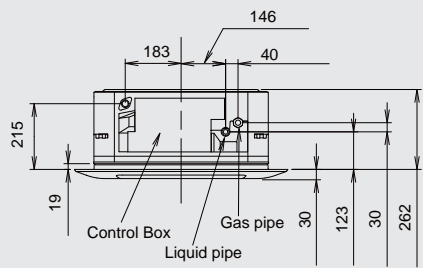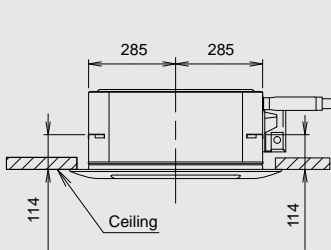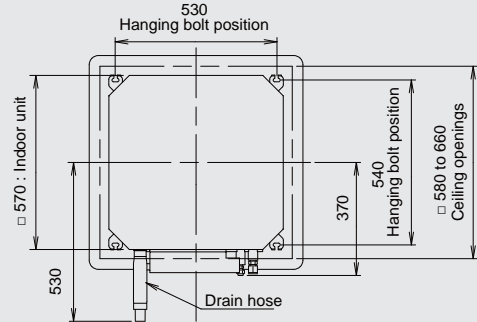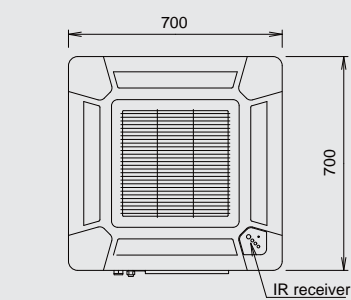
Cassette

Models
AUXD18GALH
AUXD24GALH
AUXA30GALH
AUXA36GALH
AUXA45GALH
AUXA54GALH

Powerful, wide airflow and quiet operation

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.

500mm

3-dimensional blade

Quiet

No airflow separation

Heat exchanger < Motor side >

Wind velocity
Fast
Slow

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

450mm

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

Front part Ceiling

Bottom view

Rear part

Round louvre

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
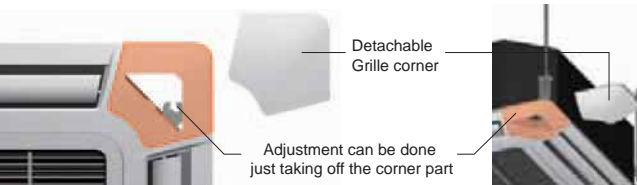
One way aperture installation

Parallel apertures

High lift drain pump

Ceiling panel

Max. 850mm
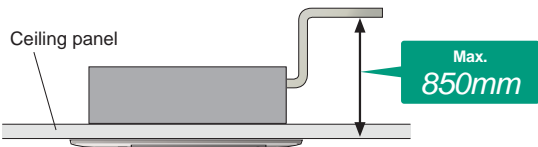
High ceiling mode

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

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

Optional parts

IR Receiver Unit :	UTY-LRH*B1
Air Outlet Shutter Plate :	UTR-YDZC
Panel Spacer :	UTG-BGYA-W
Insulation Kit for High Humidity :	UTZ-KXGA / UTZ-KXGB
Wide Panel :	UTG-AGYA-W
Fresh Air Intake Kit :	UTZ-VXGA

H*: HY(FUJITSU), HG(GENERAL)

Specifications

Model name			AUXD18GALH	AUXD24GALH	AUXA30GALH	AUXA36GALH	AUXA45GALH	AUXA54GALH
Power source			230V ~, 50Hz					
Capacity	Cooling	kW	5.6	7.1	9.0	11.2	12.5	14.0
	Heating		6.3	8.0	10.0	12.5	14.0	16.0
Input power		W	39	46	59	80	99	119
Airflow rate	High	m³/h	1,150	1,280	1,600	1,800	1,900	2,000
	Med		940	1,040	1,300	1,300	1,370	1,370
	Low		870	870	1,100	1,100	1,100	1,100
Sound pressure level	High	dB(A)	36	38	40	44	46	47
	Med		30	33	38	38	39	39
	Low		29	29	33	33	33	33
Dimensions (H x W x D)		mm	246 x 840 x 840		288 x 840 x 840			
Weight		kg	22		27			
Connection pipe diameter	Liquid (Flare)	mm	ø9.52					
	Gas (Flare)		ø15.88		ø19.05			
	Drain		ø25 (I.D.) ; ø32 (O.D.)					
Cassette Grille	Model name		UTG-UG*A-W					
	Dimensions (H x W x D)	mm	50 x 950 x 950					
	Weight	kg	5.5					

G* : GY(FUJITSU) ; GG(GENERAL)
Note : Specifications are based on the following conditions.

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

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

Models: AUXD18 / AUXD24 (Slim type)
       AUXA30 / AUXA36 / AUXA45 / AUXA54

IR receiver (Option)

950
950

(Control) Box

796
Hanging bolt position

□ 840 : Indoor unit

607

699 Hanging bolt position
□ 860 to 910 Ceiling opening

420

Drain hose

358

358   278   60
40

200

298(256)

142   Ceiling   142

10   Liquid pipe   Gas pipe   Wire hole

44   140
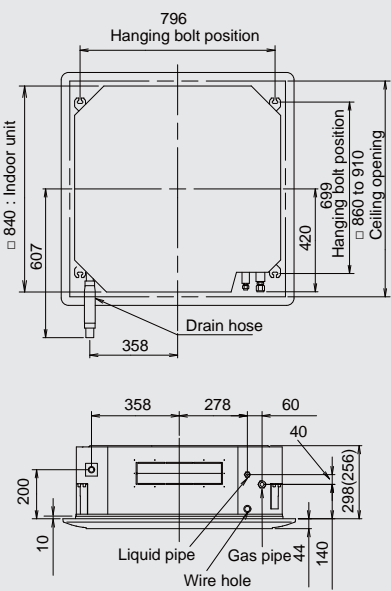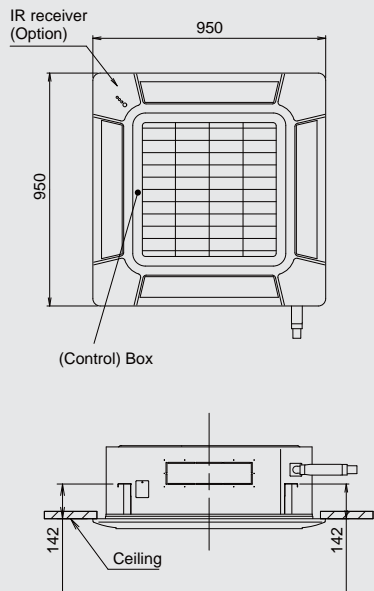
Low Static Pressure Duct / Concealed Floor

Models
ARXB07GALH
ARXB09GALH
ARXB12GALH
ARXB14GALH
ARXB18GALH

Small and compact indoor unit suitable
for many applications

ARXB07GALH
ARXB09GALH

ARXB12GALH
ARXB14GALH
ARXB18GALH

Concealed Floor

Low noise level

A low noise level has been achieved for each capacity

Model		7	9	12	14	18
Static pressure range	Pa			0 to 50		
Noise level (Low speed)	dB(A)	24	27	25	30	30

Low static pressure mode | Normal mode
Airflow
Airflow drop prevention
Low noise realized
Static pressure (Pa)

Compact design

Ultra-slim duct air conditioner for easy installation

Height **217mm**
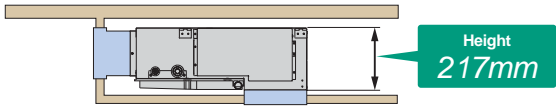
Slim size (217mm) allows installation even where the space
behind the ceiling is narrow.

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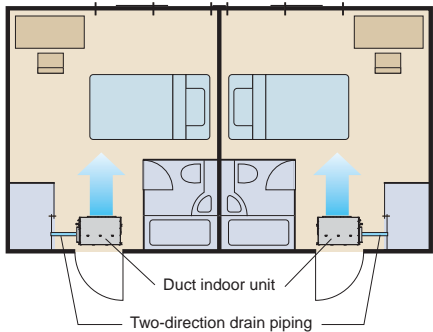
Duct indoor unit
Two-direction drain piping

Air-intake

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

Bottom side | **Back side**
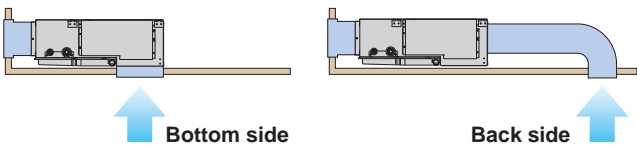
Flexible installation

Ceiling concealed
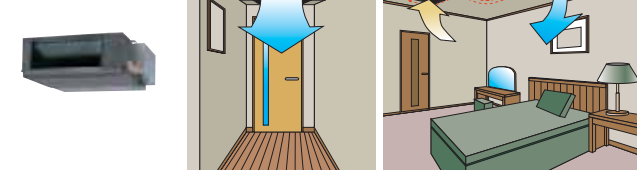
Floor concealed
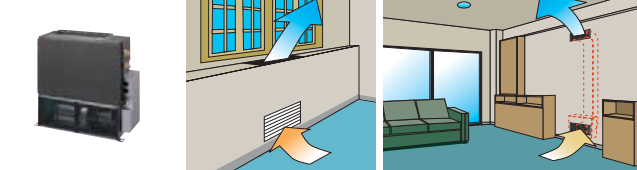
Filter (Accessory)
ARXB07 / ARXB09
Filter (2pcs.)
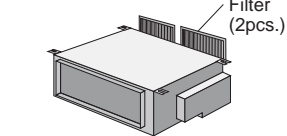
ARXB12 / ARXB14 / ARXB18
Filter (3pcs.)

Optional parts

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

Specifications

Model name			ARXB07GALH	ARXB09GALH	ARXB12GALH	ARXB14GALH	ARXB18GALH
Power source					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 x W x D)		mm	217 x 663 x 595		217 x 953 x 595		
Weight		kg	15		22		23
Connection pipe diameter	Liquid (Flare)	mm	ø6.35				ø9.52
	Gas (Flare)		ø12.70				ø15.88
	Drain		ø25 (I.D.) ; ø32 (O.D.)				

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.

Dimensions (Unit : mm) ( ) : AR7 / AR9

Models: ARXB07 / ARXB09 / ARXB12 / ARXB14 / ARXB18

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

886 (596)
(Bolt pitch)
Control box
595 / 390 (Bolt pitch) / 166 / 20
24
850 (560)
47
85
170
886 (596)
217
194
587
①
③
②
65 / 75
364
150
953 (663)
94 (50)
600 (400)
217
150
10
Brackets
Brackets
Airflow outlet
Control box
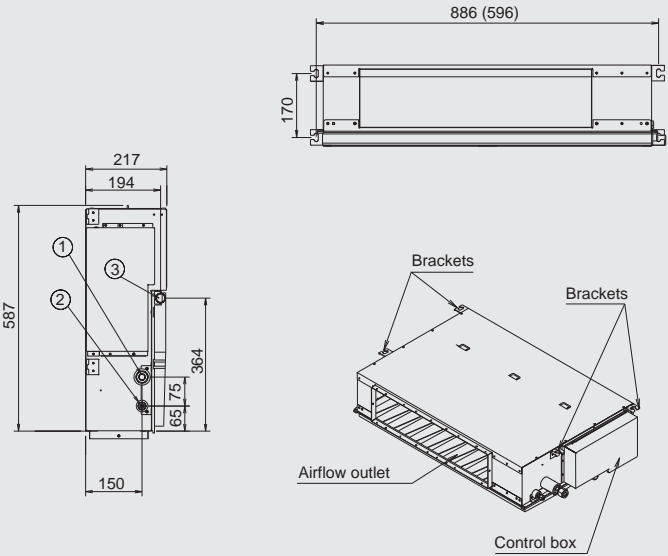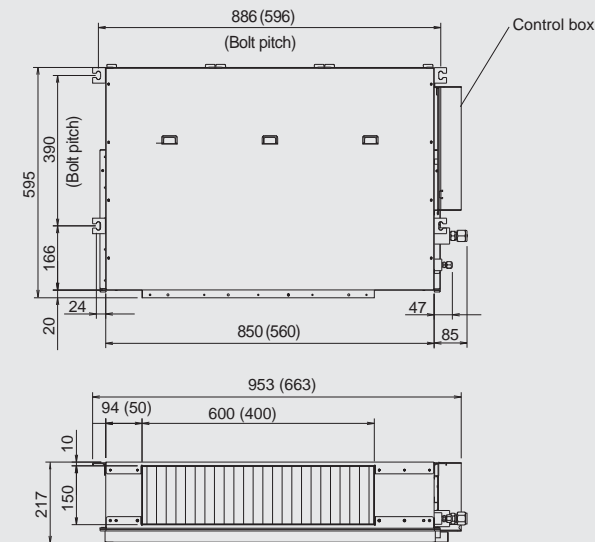
① Refrigerant piping flare connection (Gas)
② Refrigerant piping flare connection (Liquid)
③ Drain piping connection

Slim Duct / Slim Concealed Floor

Models (With drain pump)

ARXD04GALH
ARXD07GALH
ARXD09GALH
ARXD12GALH
ARXD14GALH
ARXD18GALH
ARXD24GALH

Slim design and wide range of
static pressure for flexible installation.

ARXD04GALH ARXD12GALH
ARXD07GALH ARXD14GALH
ARXD09GALH

ARXD18GALH

ARXD24GALH
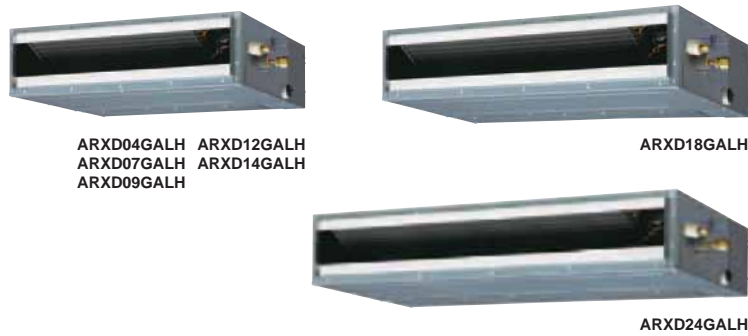
Slim Concealed Floor

Slim design

This model is slim design, it can install
at the place where a ceiling is narrow.
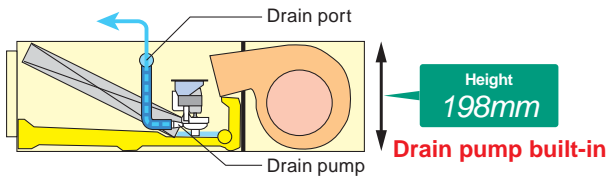
Drain port

Height
198mm

Drain pump built-in

Drain pump

Air-intake

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

Bottom side　　　**Back side**

High lift drain pump

Max.
850mm

Drain hose is standard accessory
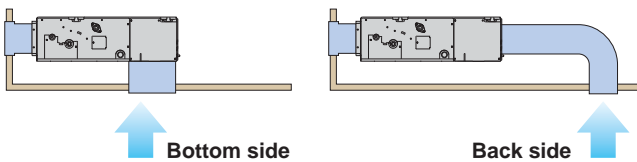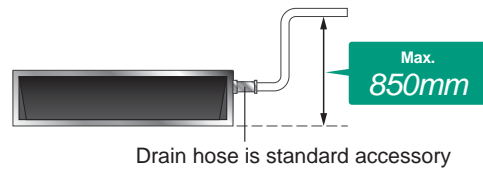
Selectable with a wide range of static pressure

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

Static pressure range
0 to 90 Pa

*24 model is 0 to 50Pa

Flexible installation

Ceiling concealed
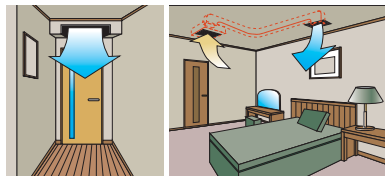
Floor concealed
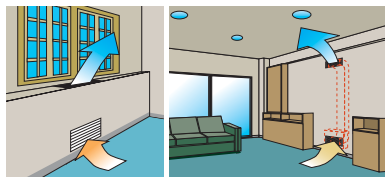
Auto Louver Grille Kit (Option)

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

Slim Duct　Auto Louver Grille

Wired Remote　Wireless Remote
Controller　Controller
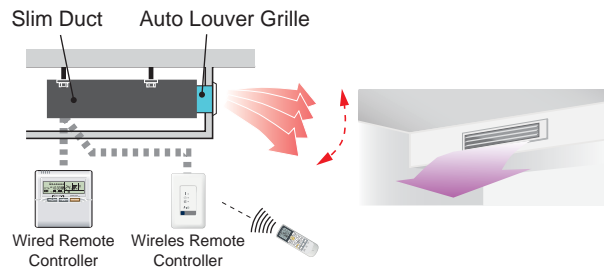
Filter (Accessory)

ARXD04 / 07 / 09 / 12 / 14 / 18　　ARXD24

Filter
(2pcs.)

Filter
(3pcs.)
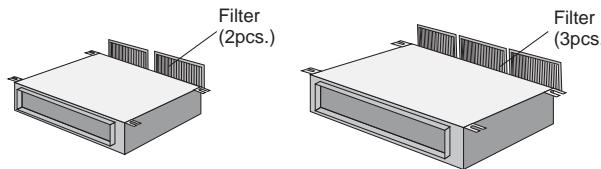
Optional parts

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

Specifications

Model name			ARXD04GALH	ARXD07GALH	ARXD09GALH	ARXD12GALH	ARXD14GALH	ARXD18GALH	ARXD24GALH
Power source			230V ~, 50Hz						
Capacity	Cooling	kW	1.1	2.2	2.8	3.6	4.5	5.6	7.1
	Heating		1.3	2.8	3.2	4.0	5.0	6.3	8.0
Input power		W	38	44	50	54	92	83	122
Airflow rate	High	m³/h	510	550	600	600	800	940	1,330
	Med		400/470*1	490	550	510	710	840	1,240
	Low		320/440*1	440	480	450	610	750	1,100
Static pressure range		Pa	0 to 90	0 to 90	0 to 90	0 to 90	0 to 90	0 to 90	0 to 50
Standard static pressure			25	25	25	25	25	25	25
Sound pressure level	High	dB(A)	26	28	29	30	34	34	35
	Med		21/25*1	25	26	27	32	32	32
	Low		20/22*1	22	24	24	28	28	29
Dimensions (H x W x D)		mm	198 x 700 x 620					198 x 900 x 620	198 x 1,100 x 620
Weight		kg	17			18		22	26
Connection pipe diameter	Liquid (Flare)	mm	ø6.35					ø9.52	
	Gas (Flare)		ø12.70					ø15.88	
	Drain		ø25 (I.D.) ; ø32 (O.D.)						

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: This value is under cooling operation.

Dimensions (Unit : mm)

Models: ARXD04 / ARXD07 / ARXD09 / ARXD12 / ARXD14 / ARXD18 / ARXD24

*Service accessibility must be allowed for when installing the product.
　Please consult the installation manual for the necessary service access size.
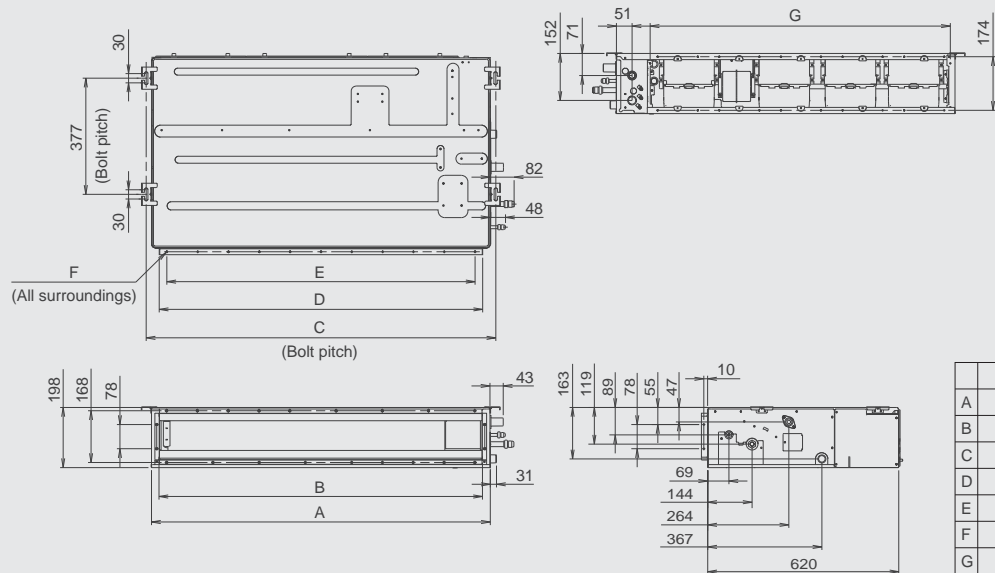
	ARXD04-14	ARXD18	ARXD24
A	700	900	1100
B	650	850	1050
C	734	934	1134
D	650	850	1050
E	P100x6=600	P100x8=800	P100x10=1000
F	18xØ5	22xØ5	26xØ5
G	574	774	974

Medium Static Pressure Duct

Models
ARXA24GBLH
ARXA30GBLH
ARXA36GBLH
ARXA45GBLH

Low energy consumption by DC fan motor.
Selectable with a wide range of static pressure.
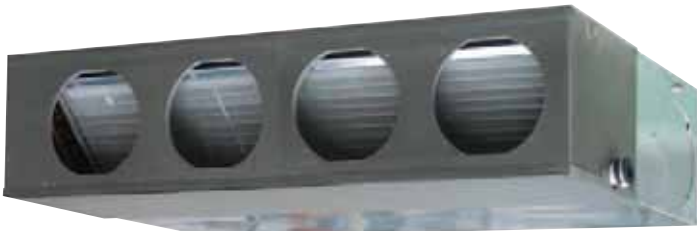
Slim & Compact design

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

1,200 → 1,135mm
270mm

Control box is now included as part of the main chassis

One touch operating and easy to install long life filter (Optional Parts)
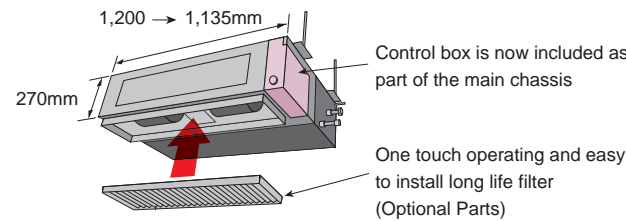
Low energy consumption by high efficiency DC fan motor

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 150Pa.

Static pressure range
0 to 150 Pa

Can be installed for various location

It can be installed in such locations as high-rise condominiums by low static pressure design.
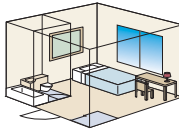
It can also be installed in wide spade when high static pressure is required, such as for offices.

Easy setting by using remote controller

The change of static pressure range is possible by remote controller

Two-direction drain piping

Duct indoor unit
Two-direction drain piping
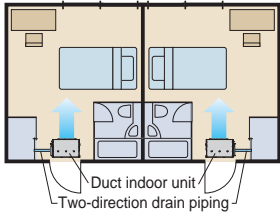
Easy maintenance

See below for the case of rear suction type

New model

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

Bottom panel: 2 pieces
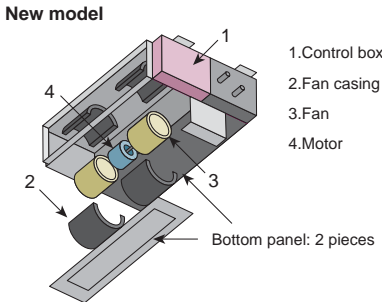
The maintenance of the motor and fan can be easily carried out by removing the rear panel and the lower part of the casing while leaving the main chassis installed.

Installation styles

Embedded in Ceiling   **Hanging from Ceiling**
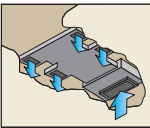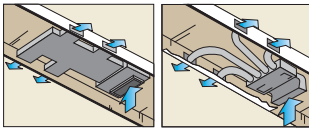
Optional parts

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

Specifications

Model name			ARXA24GBLH	ARXA30GBLH	ARXA36GBLH	ARXA45GBLH
Power source			230V ~, 50Hz			
Capacity	Cooling	kW	7.1	9.0	11.2	12.5
	Heating		8.0	10.0	12.5	14.0
Input power		W	94	108	194	240
Airflow rate	High	m³/h	1,280	1,410	1,840	1,970
	Med		990	1,280	1,600	1,860
	Low		840	1,150	1,470	1,640
Static pressure range		Pa	0 to 150	0 to 150	0 to 150	0 to 150
Standard static pressure			40	50	50	60
Sound pressure level	High	dB(A)	31	34	37	41
	Med		27	32	35	38
	Low		23	29	33	36
Dimensions (H x W x D)		mm	270 x 1,135 x 700			
Weight		kg	36	40		
Connection pipe diameter	Liquid (Flare)	mm	ø9.52			
	Gas (Flare)		ø15.88		ø19.05	
	Drain		ø25 (I.D.) ; ø32 (O.D.)			

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.

Dimensions (Unit : mm)

Models: ARXA24 / ARXA30 / ARXA36 / ARXA45

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

138   264   264   264   82

138

ø205 hole   75

Front view

270   32   1177(Bolt pitch)   Outlet   114   66   32   168

240

ø200 (knock out hole)

447(Bolt pitch)   700   240 281

161   173

P.C.D. ø225

121   1015   107   240 270
1135

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

Rear view

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

High Static Pressure Duct

Models
ARXC36GATH
ARXC45GATH
ARXC60GATH
ARXC72GATH
ARXC90GATH

These indoor units allow for high airflow quantities

ARXC36GATH
ARXC45GATH
ARXC60GATH

ARXC72GATH
ARXC90GATH

Easy installation (Compact size & Lightweight)
Models : ARXC36

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

Volume **47.5%** down

Weight **42%** down

1,050   500
400

ARXC36GATH : **43kg** (unit: mm)
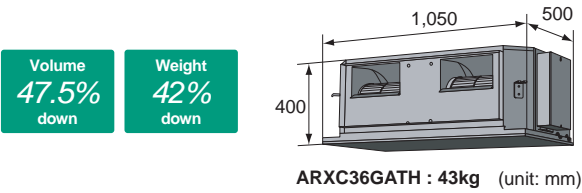
Low noise
Models : ARXC36 / ARXC45 / ARXC60

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

Previous model

New model
(ARXC36GATH)
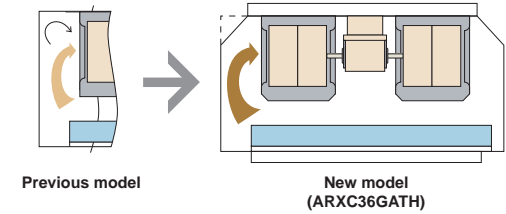
ARXC36GATH : Plastic fan [45dB(A)]
* Model : Material
(At 100Pa : Actual noise measurement value)

Plastic fan ø225mm   Heat exchanger
500mm
400mm
Casing (Plastic)
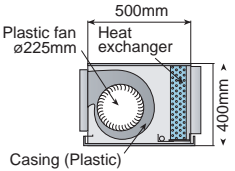
Static pressure selection
Models : ARXC72 / ARXC90

2 Types of static pressure mode are selectable.

Max. **300Pa**

High Static Pressure Duct (ARXC72)

Normal mode   High static pressure mode

Airflow
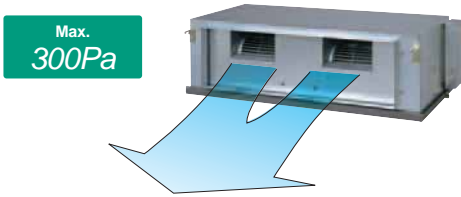
0   Static pressure (Pa)
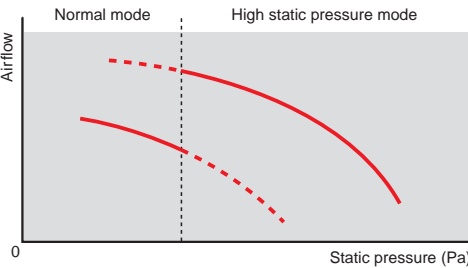
The adoption of a single phase fan motor allows 3 steps fan speed control

Optional parts

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

Specifications

Model name			ARXC36GATH	ARXC45GATH	ARXC60GATH	ARXC72GATH	ARXC90GATH
Power source			230V ~, 50Hz				
Capacity	Cooling	kW	11.2	12.5	18.0	22.4	25.0
	Heating		12.5	14.0	20.0	25.0	28.0
Input power		W	405	715	730	1,110	1,250
Airflow rate	High	m³/h	2,600	3,500	3,500	3,900	4,300
	Med		1,950	3,000	3,000	3,300	4,000
	Low		1,450	2,460	2,460	3,000	3,500
Static pressure range		Pa	100 to 200	100 to 250	100 to 250	50 to 300	100 to 300
Standard static pressure			100	100	100	260	250
Sound pressure level	High	dB(A)	45	49	49	51	53
	Med		38	45	45	48	51
	Low		32	42	42	45	49
Dimensions (H x W x D)		mm	400 x 1,050 x 500			450 x 1,550 x 700	
Weight		kg	43	46		83	85
Connection pipe diameter	Liquid	mm	ø9.52 (Flare)			ø12.70 (Brazing)	
	Gas		ø19.05 (Flare)			ø22.22 (Brazing)	
	Drain		ø25 (I.D.) ; ø32 (O.D.)				

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.
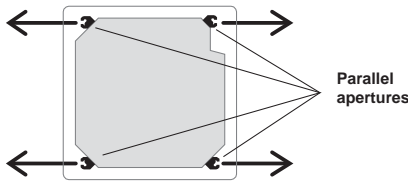Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Dimensions (Unit : mm)

Models: ARXC36 / ARXC45 / ARXC60
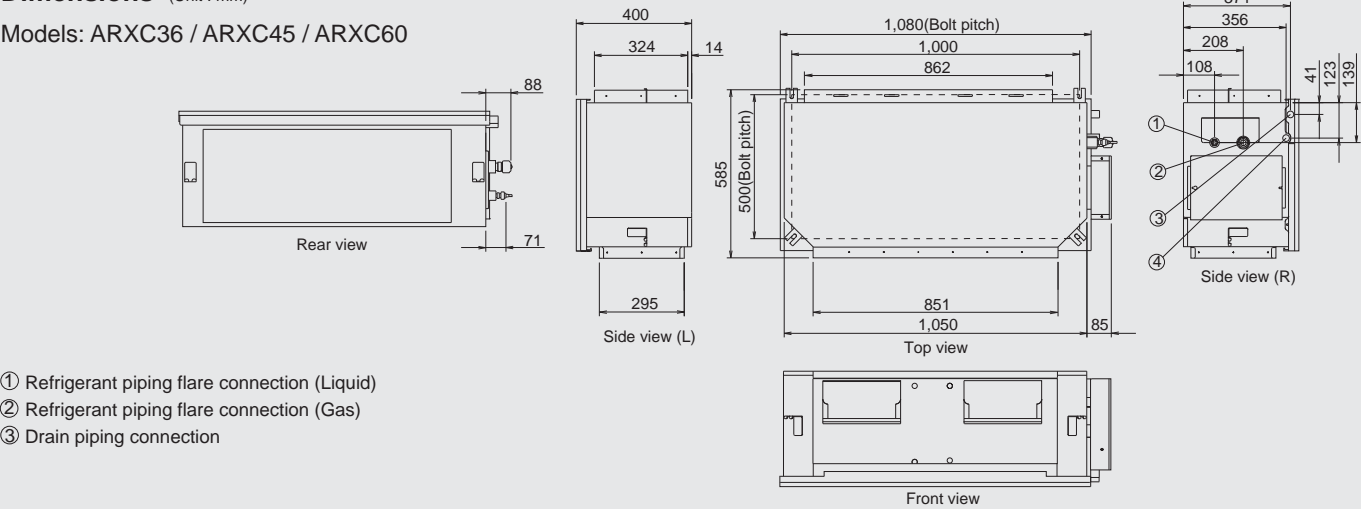
400
324   14
88
Rear view
71
295
Side view (L)

1,080(Bolt pitch)
1,000
862
585(Bolt pitch)
500(Bolt pitch)
851
1,050   85
Top view

371
356
208
108
41
123
139
①
②
③
④
Side view (R)

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

Front view

Models: ARXC72 / ARXC90

1,550
660
713 (MAX)
1,410
Top view

Front view

700
600
450
Side view

Floor / Ceiling

Models
AB*A12GATH
AB*A14GATH
AB*A18GATH
AB*A24GATH

The slim and lightweight design allow the unit to be suspended from the ceiling or installed on the floor.
This type suits many room designs

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.

RIGHT and LEFT SWING

UP and DOWN SWING

4 steps selectable
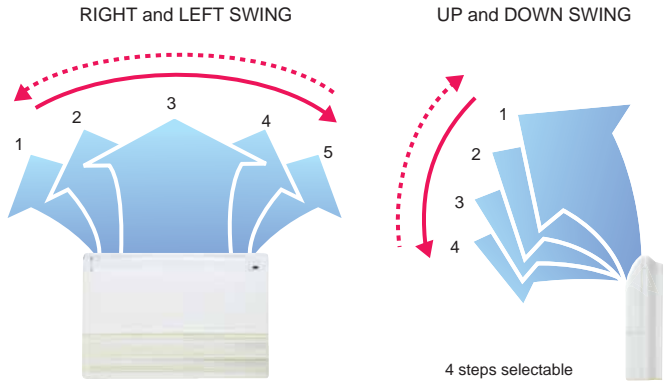
High power DC fan motor

• High power
• Wide rotation range
• High efficiency
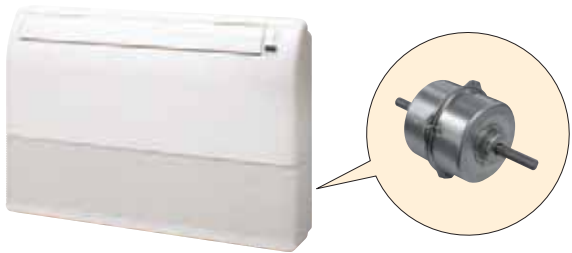
Super vane

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

Auto-closing louvre

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

Compact design

Symmetrical, slim and compact design.

655

990   199   (Unit : mm)
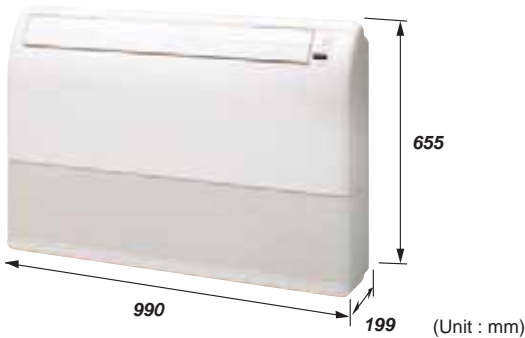
Specifications

Model name			AB*A12GATH	AB*A14GATH	AB*A18GATH	AB*A24GATH
Power source			230V ~, 50Hz			
Capacity	Cooling	kW	3.6	4.5	5.6	7.1
	Heating		4.0	5.0	6.3	8.0
Input power		W	30	42	74	99
Airflow rate	High	m³/h	660	780	1,000	1,000
	Med		570	640	720	820
	Low		490	550	580	680
Sound pressure level	High	dB(A)	36	40	46	47
	Med		32	36	39	42
	Low		28	34	35	37
Dimensions (H x W x D)		mm	199 x 990 x 655			
Weight		kg	25	26	26	27
Connection pipe diameter	Liquid (Flare)	mm	ø6.35		ø9.52	
	Gas (Flare)		ø12.70		ø15.88	
	Drain		ø25 (I.D.) ; ø32 (O.D.)			

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

Dimensions (Unit : mm)

Models: AB*A12 / AB*A14 / AB*A18 / AB*A24
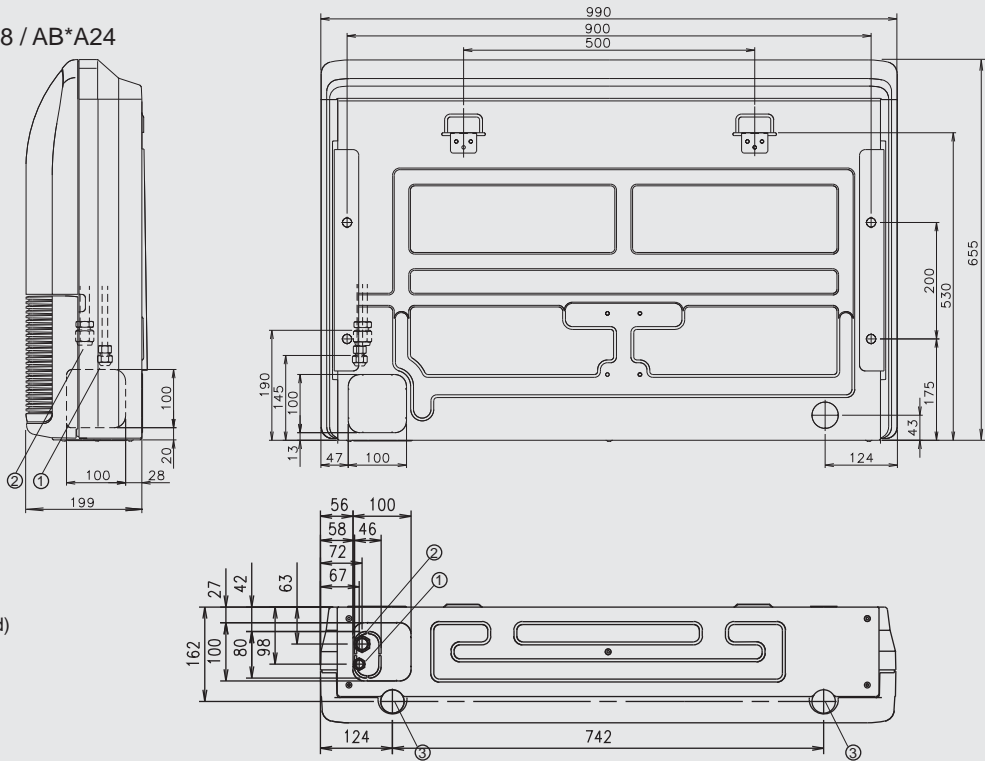
① Refrigerant piping flare connection (Liquid)
② Refrigerant piping flare connection (Gas)
③ Drain piping connection

Ceiling

Models
AB*A30GATH
AB*A36GATH
AB*A45GATH
AB*A54GATH

Easily concealed in any installation

Installation

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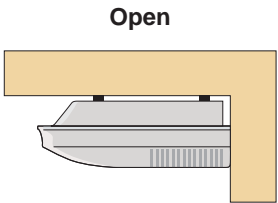
General installation pattern which suspends the indoor unit from the ceiling.

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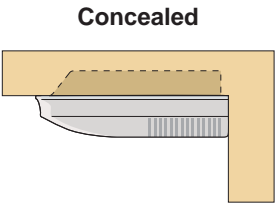
Installation pattern where part of the indoor unit is embedded into the ceiling.

Wall mounted
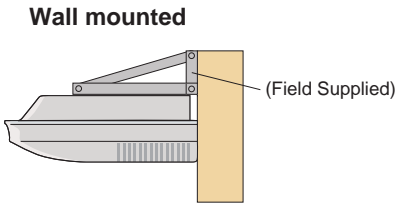
(Field Supplied)

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

Double auto swing and wide airflow

Auto airflow direction and auto swing

Right and left

5 steps selectable

Up and down

1
2
3
4

4 steps selectable
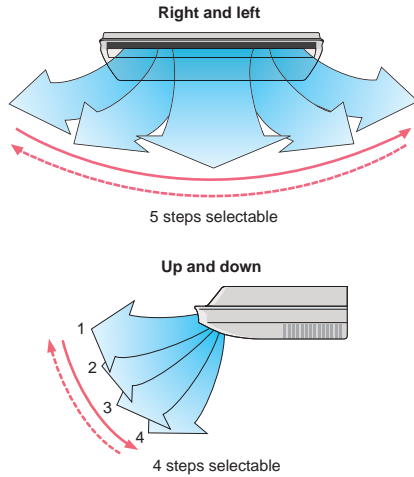
Long airflow

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

Long distance air-flow
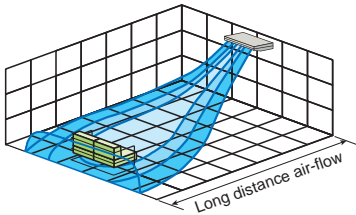
Slim & Compact design

Hight
240mm
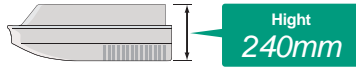
High lift drain pump

Optional drain pump unit allows flexible installation design.

Max.
500mm

Fresh air intake
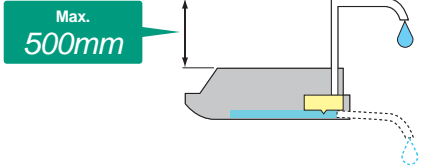
Fresh air
Indoor
Outdoor
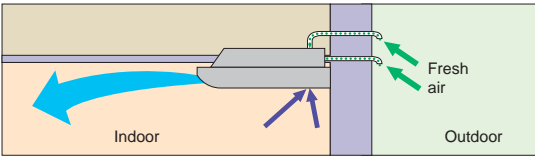
High power DC fan motor

• High power
• Wide rotation range
• High efficiency
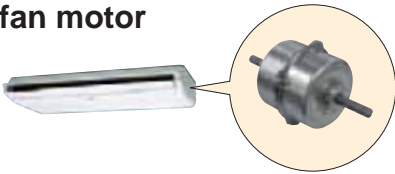
Optional parts

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

Specifications

Model name			AB*A30GATH	AB*A36GATH	AB*A45GATH	AB*A54GATH
Power source			230V ~, 50Hz			
Capacity	Cooling	kW	9.0	11.2	12.5	14.0
	Heating		10.0	12.5	14.0	16.0
Input power		W	66	85	131	180
Airflow rate	High	m³/h	1,630	1,690	2,010	2,270
	Med		1,370	1,400	1,600	1,780
	Low		1,140	1,170	1,230	1,280
Sound pressure level	High	dB(A)	42	45	48	51
	Med		38	38	42	45
	Low		33	34	35	36
Dimensions (H x W x D)		mm	240 x 1,660 x 700			
Weight		kg	46	48		
Connection pipe diameter	Liquid (Flare)	mm	ø9.52	ø9.52		
	Gas (Flare)		ø15.88	ø19.05		
	Drain		ø25 (I.D.) ; ø32 (O.D.)			

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

Dimensions (Unit : mm)

Models: AB*A30 / AB*A36 / AB*A45 / AB*A54
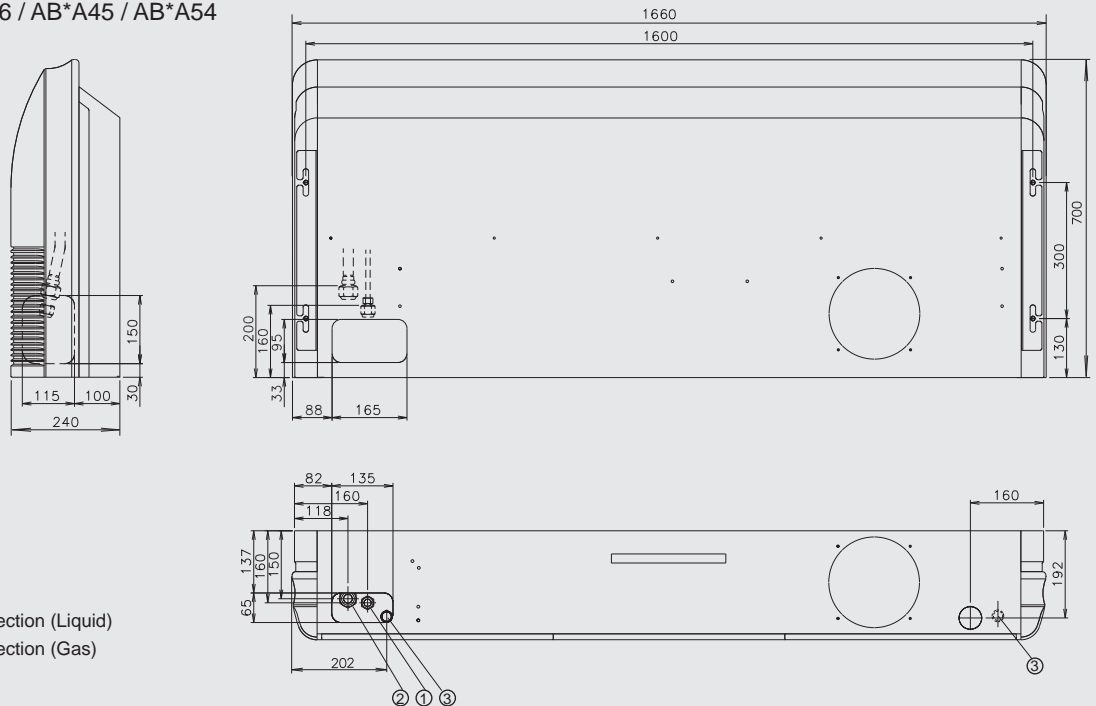
1660
1600
700
300
150
130
200
160
95
33
88
165
115
100
50
240
82
135
160
118
160
137
160
50
65
50
192
202

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

② ① ③

Wall Mounted

Models (EEV internal model)
AS*A04GACH
AS*A07GACH
AS*A09GACH
AS*A12GACH
AS*A14GACH

Models (EEV external model)
AS*E04GACH
AS*E07GACH
AS*E09GACH
AS*E12GACH
AS*E14GACH

Compact and Stylish design indoor

Low sound level design

Low sound mode of 19dB (A) is realized by DC fan motor mounting and PAM inverter control.
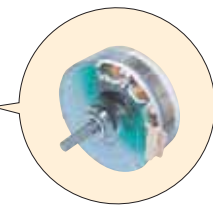
19dB(A)*
At low mode heating operation
(AS*E04GACH only)

* This sound level is the same level as the rustling of leaves.

Compact size

Powerful output even compact design

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

Width
790mm

790mm

Clean filters

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.

Auto swing louvre

The Auto Swing Louvre function ensures that the air direction corresponds to the mode selected.

① ② ③ ④
Swing
Step
Swing
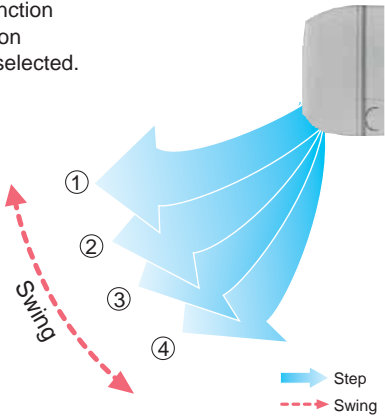
Easy maintenance

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

Open panel

Specifications

| Model name			AS*A04GACH	AS*A07GACH	AS*A09GACH	AS*A12GACH	AS*A14GACH	AS*E04GACH	AS*E07GACH	AS*E09GACH	AS*E12GACH	AS*E14GACH
Power source			230V ~, 50Hz					230V ~, 50Hz				
Capacity	Cooling	kW	1.1	2.2	2.8	3.6	4.5	1.1	2.2	2.8	3.6	4.5
	Heating		1.3	2.8	3.2	4.1	5.0	1.3	2.8	3.2	4.1	5.0
Input power		W	13	17	18	22	34	12	15	16	21	34
Airflow rate	High	m³/h	450	490	500	560	670	450	490	500	560	680
	Med		370/440*1	450	450	480	490	370/440*1	450	450	480	490
	Low		320/420*1	370/420*1	370/420*1	420	420	300/420*1	370/420*1	370/420*1	420	420
Sound pressure level	High	dB(A)	33	35	36	39	44	32	34	35	38	43
	Med		27/32*1	33	33	35	37	26/31*1	32	32	34	35
	Low		22/31*1	27/31*1	27/31*1	31	32	19/30*1	26/30*1	26/30*1	30	30
Dimensions (H x W x D)		mm	275 x 790 x 215					275 x 790 x 215				
Weight		kg	9					9				
Connection pipe diameter	Liquid (Flare)	mm	ø6.35					ø6.35				
	Gas (Flare)		ø12.70					ø12.70				
	Drain		ø13.8(I.D.) ; ø15.8-ø16.7(O.D.)					ø13.8(I.D.) ; ø15.8-ø16.7(O.D.)				
EV Kit (option)			—					UTR-EV09XB			UTR-EV14XB	

AS*: ASY(FUJITSU), ASH(GENERAL)
Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27˚CDB / 19˚CWB, and outdoor temperature of 35˚CDB / 24˚CWB.
Heating : Indoor temperature of 20˚CDB / (15˚CWB), and outdoor temperature of 7˚CDB / 6˚CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.
Voltage : 230 [V].
*1 : This value is under cooling operation.

Dimensions (Unit : mm)

Models: AS*A04 / AS*A07 / AS*A09 / AS*A12 / AS*A14
        AS*E04 / AS*E07 / AS*E09 / AS*E12 / AS*E14

790
275
215
470
530
660
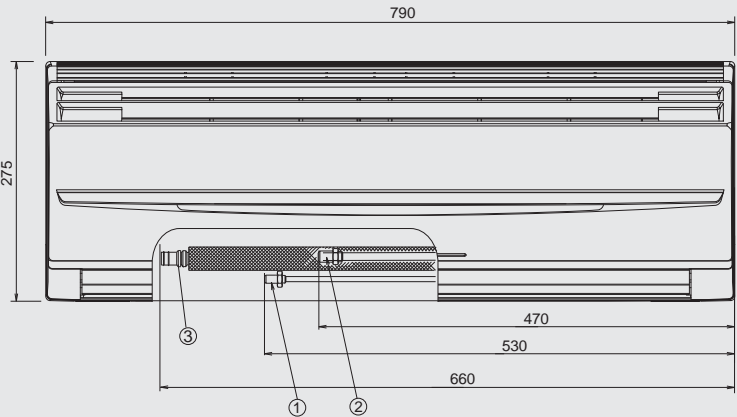
① Refrigerant pipe flare connection (Liquid)
② Refrigerant pipe flare connection (Gas)
③ Drain piping connection
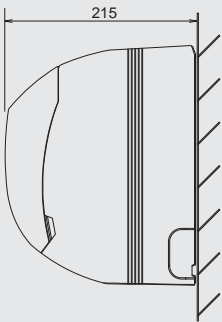
EV kit (UTR-EV09XB/ UTR-EV14XB) Optional parts:
416
222
32 19
65 97 121
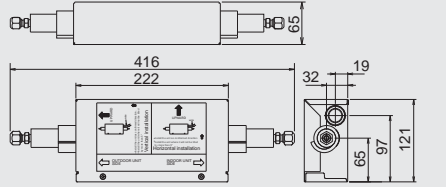
Wall Mounted

Models
AS*A18GACH
AS*A24GACH
AS*A30GACH

Simple & Elegant Appearance Design

More comfort airflow by adopting power diffuser

"Vertical airflow"
provides powerful floor level heating

Power diffuser (full open)
46°

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

(24/30)

| 33 | 32 | 31 | 30 | 29 |
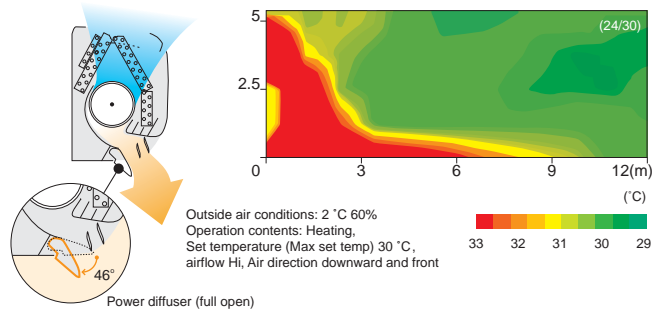
"Horizontal airflow" does not blow cool air
directly at the occupants in the room
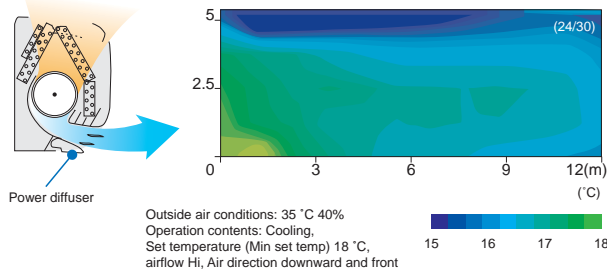
Power diffuser

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

(24/30)

| 15 | 16 | 17 | 18 |

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

① ② ③ ④
Swing
→ Step
--- Swing
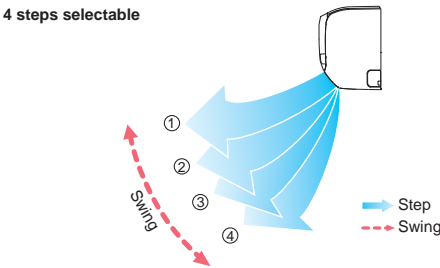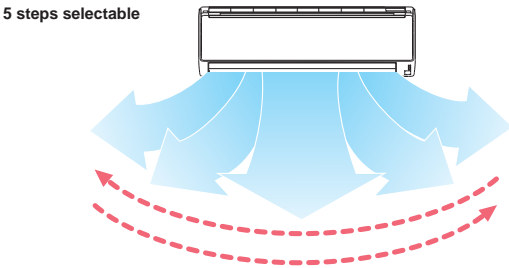
Compact & Slim design

By using DC fan motor, compact design is realized.

998mm

DC fan motor

Air conditioner filter features
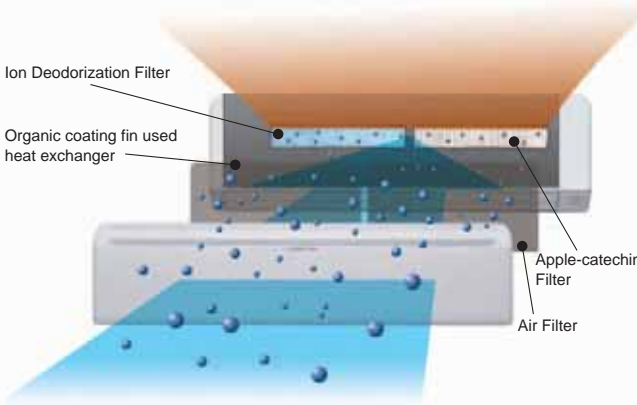
Ion Deodorization Filter

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.

Easy maintenance

Simplification of drain pan cleaning improves maintenance-ability.

Specifications

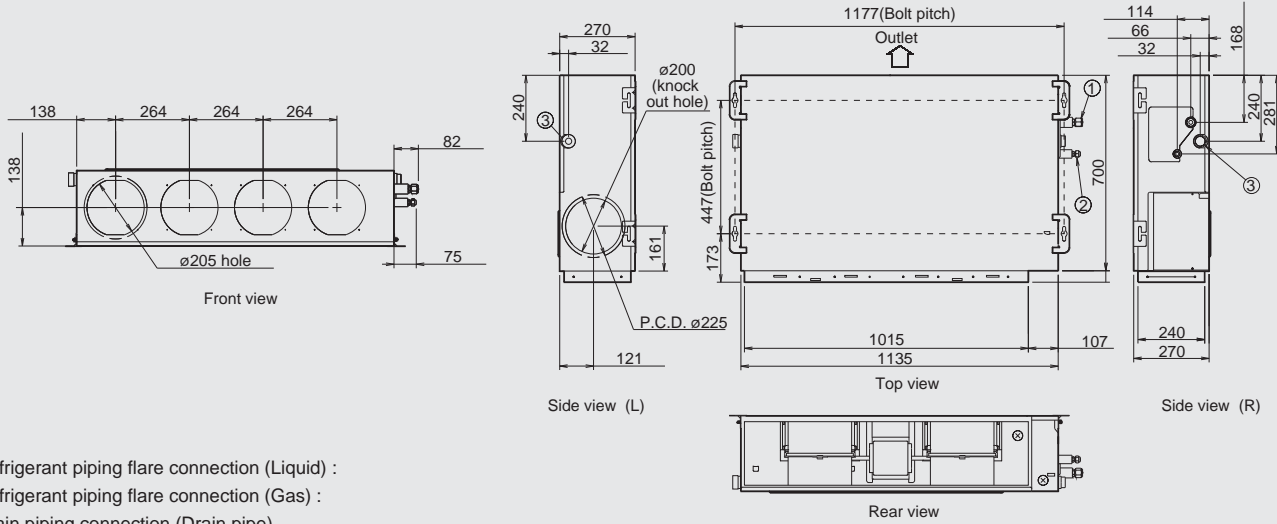| Model name			AS*A18GACH	AS*A24GACH	AS*A30GACH
Power source			230V ~, 50Hz		
Capacity	Cooling	kW	5.6	7.1	8.0
	Heating		6.3	8.0	9.0
Input power		W	32	60	91
Airflow rate	High	m³/h	840	1,100	1,240
	Med		770	910	980
	Low		690	730	770
Sound pressure level	High	dB(A)	41	48	52
	Med		39	43	45
	Low		35	35	35
Dimensions (H x W x D)		mm	320 x 998 x 228		
Weight		kg	15		
Connection pipe diameter	Liquid (Flare)	mm	ø9.52		
	Gas (Flare)		ø15.88		
	Drain		ø12 (I.D.) ; ø16 (O.D.)		

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

Dimensions (Unit : mm)

Models: AS*A18 / AS*A24 / AS*A30
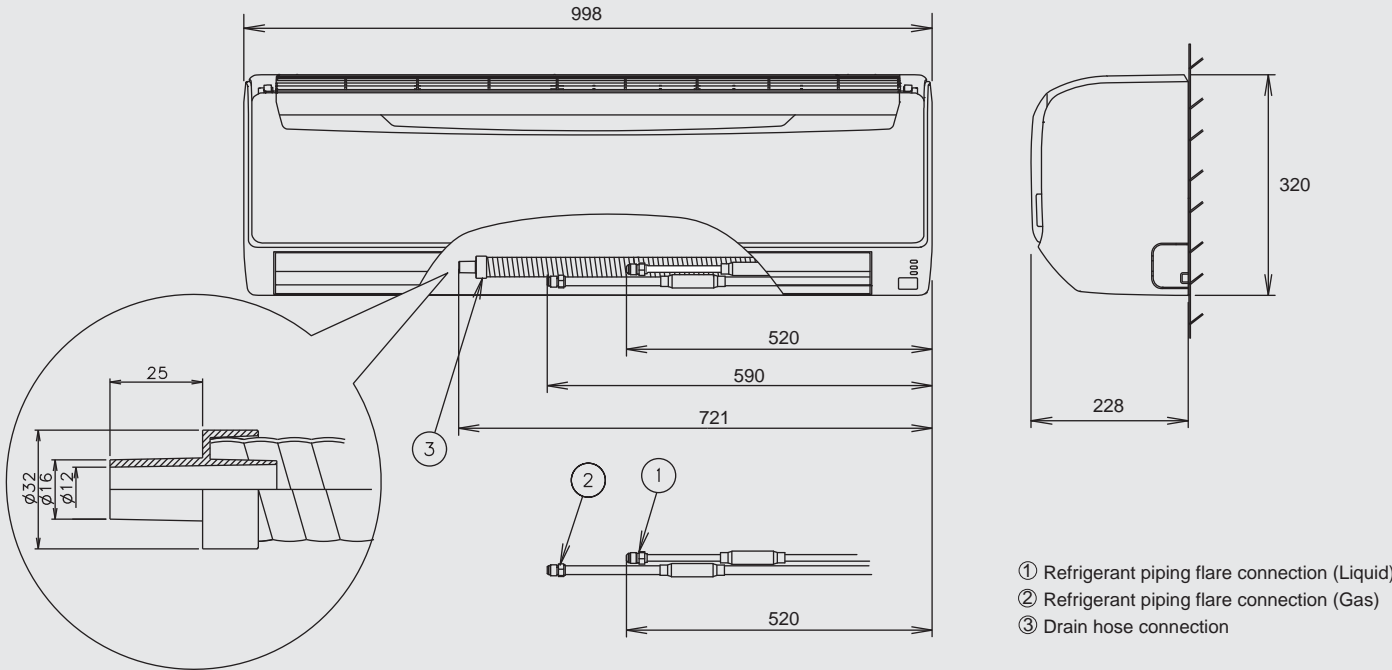
998
320
228
520
590
721
520
25
ø32
ø16
ø12
① ② ③

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

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

CONTROL SYSTEMS

Office 01   Fri 10:00AM

| Mode | Set Temp. | Fan |
| Cool | **26.0**°C | Auto |

Room Temp. 26.0°C

Status   Menu

⏻/|

SYSTEM OVERVIEW

INDIVIDUAL CONTROLLER

CENTRALIZED CONTROLLER

CONVERTOR / ADAPTOR

SERVICE & MAINTENANCE TOOL

AIRSTAGE™

CONTROL SYSTEM OVERVIEW

For All AIRSTAGE™ series

Air Conditioning Individual Control

Wired Remote Controller (Touch panel)
UTY-RNR*

R* RY(FUJITSU), RG(GENERAL)

Wired Remote Controller
NEW UTY-RLR*

R* RY(FUJITSU), RG(GENERAL)

Simple Remote Controller
UTY-RSK*

K* KY(FUJITSU), KG(GENERAL)

Simple Remote Controller
UTY-RHK*
Without operation mode

K* KY(FUJITSU), KG(GENERAL)

Wireless Remote Controller
UTY-LNH*

H*: HY(FUJITSU), HG(GENERAL)
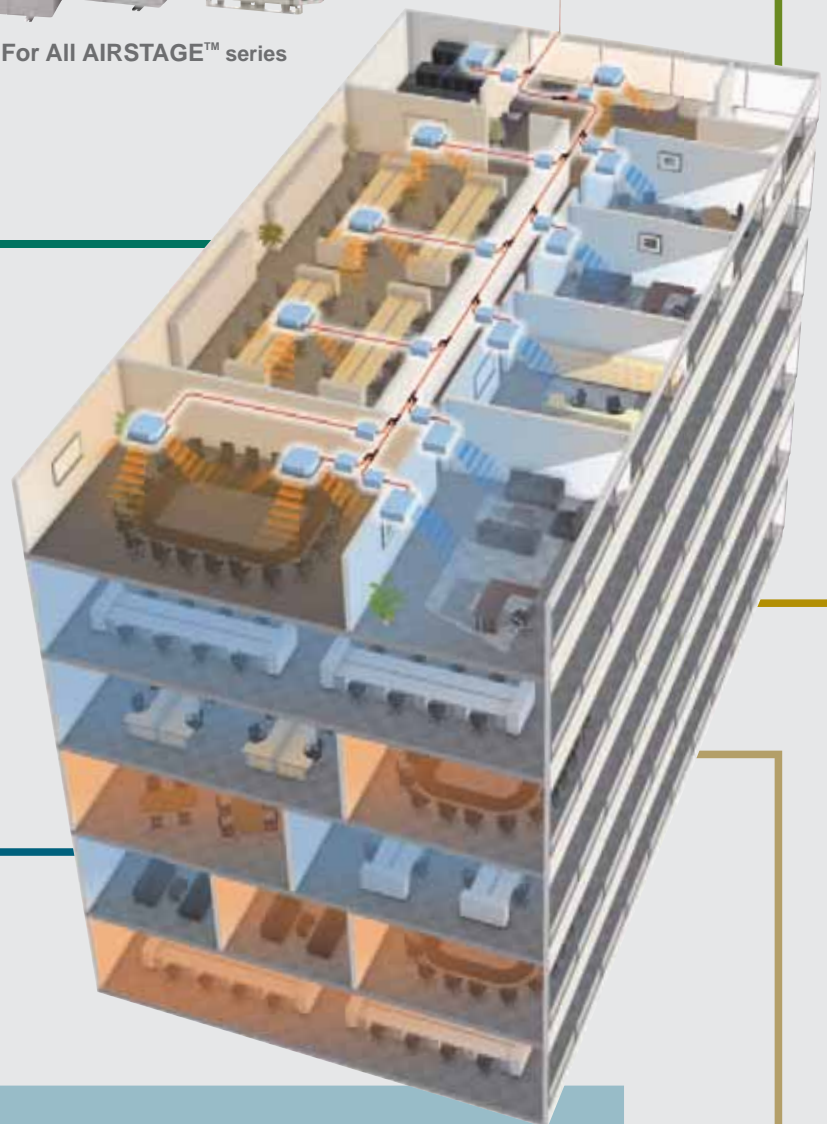
Service & Maintenance Tool

Web Monitoring System Software
UTY-AMGX

Monitoring Side

VRF Network System Side
Outdoor unit
Transmission line
Web Monitoring Tool

Internet or Public Telephone Line

USB adapter
(Field supplied)

Indoor unit

Service Tool Software
UTY-ASGX

USB Adaptor *2
(Field supplied)

Air Conditioning Centralized Control

System Controller Software
UTY-APGX
UTY-ALGX (Lite edition)

USB Adaptor *2
(Field supplied)

Internet or Public Telephone Line

Remote/Monitoring side

Touch Panel Controller
UTY-DTG*

G* GY(FUJITSU), GG(GENERAL)

Central Remote Controller
UTY-DCG*

G* GY(FUJITSU), GG(GENERAL)

Group Remote Controller
UTY-CGGY

Network Convertor
UTY-VGGXZ1

G* GY(FUJITSU), GG(GENERAL)

Convertor / Adaptor (for external device)

BACnet® Gateway Software
UTY-ABGX

USB Adaptor *2
(Field supplied)

Network Convertor (BMS/LONWORKS®)
UTY-VLGX

KNX® Interface
FJ-RC-KNX-1i

MODBUS® Interface
FJ-RC-MBS-1

Wireless LAN Interface
FJ-RC-WIFI-1

External Switch Controller
UTY-TEKX

Card-key
(Field supplied)

BMS/BAS[*1]

BMS, Home automation system

or

Internet device

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

Convertor / Adaptor (for system expansion)

Network Convertor
UTY-VGGXZ1

Single split

Signal Amplifier
UTY-VSGXZ1

Extended VRF network system

Max. transmission line length
3,600m

- Wiring construction of the control system is made of power source wiring, transmission wiring and remote controller wiring.
- Total wiring length (total length of transmission line) can be extended up to 3,600m (by using signal amplifiers).

System Controller UTY-APGX
· Maximum 1,600 indoor units can be controlled.
· Air conditioning control
· Operation monitoring
· Status monitoring system
· Electricity charge calculation

USB Adaptor NW 1
NW 2 / NW 3 / NW 4

Internet or Public Telephone Line

(Remote / Monitoring side)

Touch Panel Controller
One Touch Panel Controller can control up to 400 groups / 400 indoor units.

Central Remote Controller
Maximum 100 indoor units can be controlled.

Refrigerant system 1 / Refrigerant system 2

Network Convertor UTY-VGGXZ1

Group Remote Controller
Maximum 8 remote controller groups can be controlled

Building Management System

BACnet®

BACnet® Gateway UTY-ABGX

USB Adaptor

BACnet®

BACnet® Operator Workstation (B-OWS)

Network Convertor for LONWORKS® UTY-VLGX

LONWORKS®

LONWORKS® Network

Transmission line
line is non-polar 2-conductor.

IR Receiver Unit
Cassette type indoor unit can be controlled with Wireless Remote Controller

Remote Controller line
Maximum 16 units can be controlled

System without Remote Controller
Together with Touch Panel Controller, it is possible to build non remote controller system.

IR Receiver Unit
Duct type indoor unit can be controlled with Wireless Remote Controller.

Card key

2 Remote Controllers
Indoor unit can be controlled from both remote controllers.

External Switch Controller
Indoor units can be controlled by combining with Card-key switch such as hotel room.

Signal Amplifier UTY-VSGXZ1

USB Adaptor

Network Convertor UTY-VGGXZ1

Single system

Web Monitoring Tool
Trouble free operation at all times by remote monitoring system.

Web Monitoring Tool UTY-AMGX

(VRF network system side)

Service Tool UTY-ASGX

Service Tool
Extensive monitoring and analysis functions for installation and maintenance.

Internet or Public Telephone Line

(Monitoring side)

USB Adaptor

(Monitoring side) (Monitoring side)

Legend:
- Outdoor unit
- Touch Panel Controller
- Wired Remote Controller
- External Switch Controller
- Indoor unit (Cassette)
- Central Remote Controller
- Simple Remote Controller
- IR Receiver unit
- Indoor unit (Duct)
- Group Remote Controller
- Simple Remote Controller
- RB unit (Single)
- System Controller
- Wired Remote Controller (Touch panel)
- Wireless Remote Controller
- RB unit (Multi)
- Transmission line
- Module link
- Remote Controller line (2 wires)
- Remote Controller line (3 wires)
- USB cable
- LONWORKS® Network
- Ethernet
- Signal line (single system)
- Group Remote Controller line

Item	Wired Remote Controller (Touch panel)	Wired Remote Controller	Simple Remote Controller	Simple Remote Controller [1]	Wireless Remote Controller	Group Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller Lite (Software)	System Controller (Software)
Model name	UTY-RNR*	UTY-RLR*	UTY-RSK*	UTY-RHK*	UTY-LNH*	UTY-CGG*	UTY-DCG*	UTY-DTG*	UTY-ALGX	UTY-APGX
Max. controllable remote controller groups	1	1	1	1	1	8	100	400	400	1600
Max. controllable indoor units	16	16	16	16	16	128	100	400	400	1600
Max. controllable groups	–	–	–	–	–	–	16	400	400	1600
Air conditioning control function										
On / Off	●	●	●	●	●	●	●	●	●	●
Operation mode setting	●	●	●	–	●	●	●	●	●	●
Fan speed setting	●	●	●	●	●	●	●	●	●	●
Room temp. setting	●	●	●	●	●	●	●	●	●	●
Room temp. set point limitation	●	●	–	–	–	●	●	●	●	●
Test operation	●	●	●	–	●	●	●	●	–	●
Up/down air direction flap setting	●	●	–	●	●	●	●	●	●	●
Right/left air direction flap setting	●	●	–	–	●	●	●	●	●	●
Group setting	–	–	–	–	–	●	●	●	●	●
RC prohibition	–	–	–	–	–	●	●	●	●	●
Anti freeze setting	●	–	–	–	–	–	●	●	●	●
Economy mode setting	●	●	–	–	●	–	●	●	●	●
Display										
Error	●	●	●	●	–	●	●	●	●	●
Defrosting	●	●	●	●	–	●	●	●	●	●
Current time	●	●	–	–	●	●	●	●	●	●
Day of week	●	●	–	–	●	●	–	●	●	●
R.C. prohibition	●	●	●	●	–	●	●	●	●	●
Cooling/heating priority	●	●	–	–	●	●	●	●	●	●
Address display	●	●	●	●	–	●	●	●	●	●
Room temp	●	–	–	–	–	–	–	–	–	–
Multi language	●	–	–	–	–	–	●	●	●	●
Summer time	●	–	–	–	–	–	●	●	●	●
Name registration	●	–	–	–	–	–	●	●	●	●
Backlight	●	–	●	●	–	–	●	●	●	–
2D floor layout / 3D building display	–	–	–	–	–	–	–	–	–	●
Timer										
Schedule timer — Period	Week	Week	–	–	–	Week	Week	Year	Year	Year
Schedule timer — On/off, Temp, Mode, Times per day	8	4	–	–	–	4	20	20	144	144
On/off timer	●	●	–	–	●	–	–	–	–	–
Sleep timer	–	–	–	–	●	–	–	–	–	–
Program timer	–	–	–	–	●	–	–	–	–	–
Auto off timer	●	●	–	–	–	–	–	–	–	–
Day off	●	●	–	–	–	–	●	●	●	●
Min. unit of timer setting (Minutes)	10 • 30	30	30	30	5	10	10	10	10	10
Control										
Status monitoring system	–	–	–	–	–	–	●	●	●	●
Electricity charge apportionment	–	–	–	–	–	–	–	–	○	●
Error history	●	●	●	●	–	●	●	●	●	●
Emergency stop	–	–	–	–	–	–	●*2	●*2	–	–
Remote management	–	–	–	–	–	–	–	–	○	●
Energy saving management	–	–	–	–	–	–	–	–	○	○
E-mail notification for malfunction	–	–	–	–	–	–	–	–	●	●
Key lock	Child lock	Child lock	–	–	–	Child lock	Password setting	Password setting	Password setting	Password setting

R*: RY (FUJITSU), RG (GENERAL)   K*: KY (FUJITSU), KG (GENERAL)   H*: HY (FUJITSU), HG (GENERAL)   G*: GY (FUJITSU), GG (GENERAL)
*1 "Operation mode" setting is not available for this model.
*2 This function is available only through external input control.

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

Wired Remote Controller (Touch Panel)

Max. controllable
16
indoor units

UTY-RNR*

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 7 different languages (English, Chinese, French, German, Spanish, Russian, Polish)
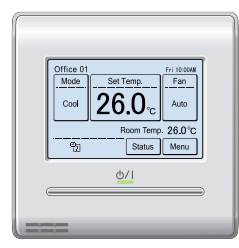
Functions

High performance and compact size

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

Individual control + Thermo sensor + Weekly timer + Auto off timer →

Accurate and comfortable control

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

Room temperature sensor

Room temperature display

Backlight

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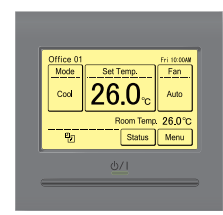
Various energy saving control

Auto OFF Timer

- The indoor unit automatically turns off after a set time has passed.
- The time interval for which auto off works can be set.

Ex) At interval time hour (17:00 to 24:00) to prevent forgetting to turn off

Set interval time hour (17:00 to 24:00)

▼ ON   ▼ Auto OFF

**Set off time
(30 to 240 minutes)**

OFF

17:00   24:00
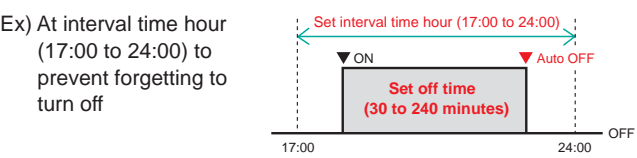
2 schedules Weekly Timer

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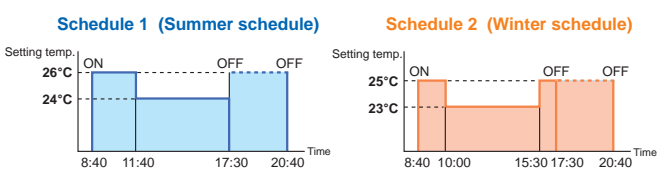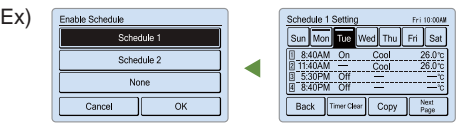
Ex)

Schedule 1 (Summer schedule)

Setting temp.
26°C
24°C

ON   OFF   OFF

8:40 11:40   17:30   20:40
Time

Schedule 2 (Winter schedule)

Setting temp.
25°C
23°C

ON   OFF   OFF

8:40 10:00   15:30 17:30 20:40
Time

Set Temperature Auto Return

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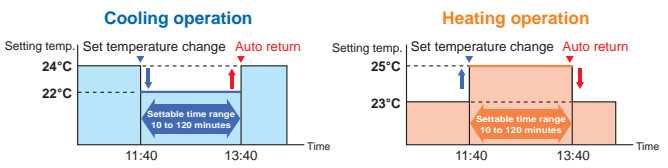
Cooling operation

Setting temp. | Set temperature change | Auto return
24°C
22°C

Settable time range
10 to 120 minutes

11:40   13:40
Time

Heating operation

Setting temp. | Set temperature change | Auto return
25°C
23°C

Settable time range
10 to 120 minutes

11:40   13:40
Time

Set Temperature Upper and Lower Limit Setting

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

During Cooling

30°C
25°C
18°C

Original temp.   **Lower limit
setting range   setting**

During Heating

30°C
25°C
10°C

Original temp.   **Upper limit
setting range   setting**
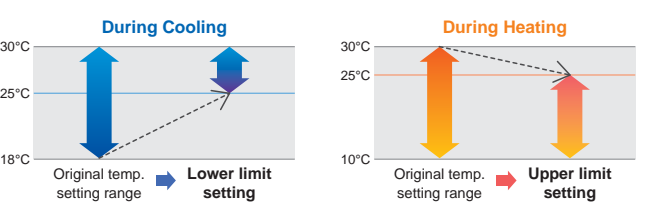
Various convenient functions

Displays setting status and Limitations

- The remote controller settings can be easily checked
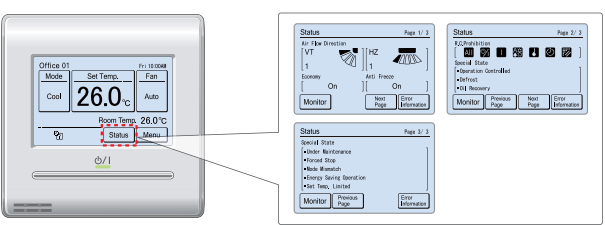
Summer Time display

- This function can be set easily from Menu screen
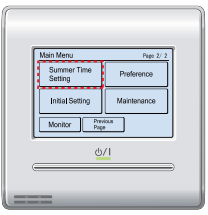
Child lock

- Lock / unlock method: Push the ON/OFF button and the screen (4 seconds)
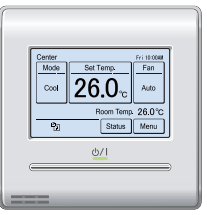
Name Registration

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

Simplified installation

Uses non-polar 2-wire type

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

I.U.   Y1 Y2 Y3   I.U.   Y1 Y2 Y3

non-polar
2-wire

OK   OK

Y1   Y2   Y1   Y2
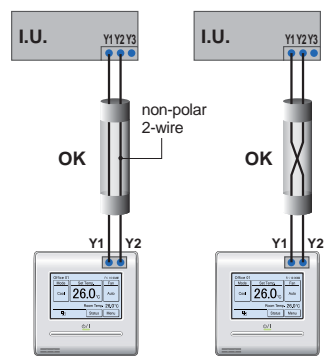
Auto Address Setting/Setting Position Notification

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

Address → 04   03   02   01

05

The appropriate indoor unit performs the air blow and LED lamps blink.
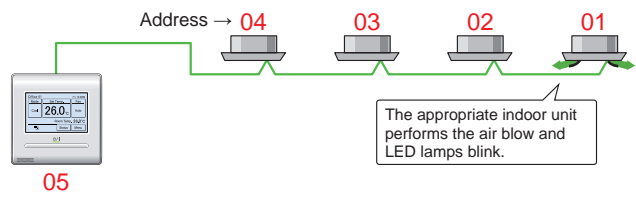
Easy Maintenance

Error History Display

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

Specifications

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

DC12V is supplied by the indoor unit.   R* : RY(FUJITSU), RG(GENERAL)

Wired Remote Controller

UTY-RLR* NEW

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

Functions

High performance and compact size

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

Individual control + Thermo sensor + Weekly timer + Auto OFF timer →

High visibility and easy operation

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

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

Set contents can be displayed clearer with large LCD.

Auto-off timer

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

Operation status

ON

OFF

Auto OFF   Auto 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°C
22°C
Settable time range 30 to 240 minutes
Time

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

Weekly timer function

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

24°C
ON   OFF   ON   OFF
Working hour   Working hour
8:00   12:00 13:00   17:00

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

Set temperature upper and lower limit setting

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

During Cooling
30°C
25°C
18°C
Original temp. setting range → Lower limit setting

During Heating
30°C
25°C
16°C
Original temp. setting range → Upper limit setting

Specifications

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

DC12V is supplied by indoor unit. R* : RY(FUJITSU), RG(GENERAL)

Simple Remote Controller

UTY-RSK* / UTY-RHK* (Without Operation mode)

Compact remote controller provides access to basic functions

- Up to 16 indoor units can be controlled with one remote controller.
- Suitable for hotels or offices as it is easily operated with no complex functions.

UTY-RSK*   UTY-RHK*
Without Operation mode

Functions

User-friendly operation

- Provides access to basic operations, such as Start / Stop, Fan control, Operation mode switching, and Room temperature setting.
- A large On / Off button is provided in the centre of the remote controller for easy operation.
- Can be used jointly with other individual control unit.
- Following an error display, diagnostics can be carried out on the controller.

Simple installation

Can be mounted on the European Mounting Box (Installation dimension: 60mm) or the JIS Built-in Box (Installation dimension: 83.5mm).

European switch box   JIS built-in box

60mm
83.5mm

Backlight

- Backlight enables easy operation in a darkened room.
- Backlight activates during all button operations, and lasts 10 seconds in Operation mode and 5 seconds in stop mode after a button is pressed.

Functions summary

Model	UTY-RSK*	UTY-RHK*
Operation		
On / Off	●	●
Fan control	●	●
Operation mode	●	— *1
Room temp. setting	●	●

*1: "Operation mode" setting is not available.
    It is recommend to use together with other type controller.

Specifications

Model name	UTY-RSK*	UTY-RHK*
Power Supply	DC 12V	
Dimensions (H x W x D) (mm)	120 x 75 x 14	
Weight (g)	90	

DC12V is supplied by the indoor unit.   K* : KY(FUJITSU), KG(GENERAL)

Wireless Remote Controller

Max. controllable
16
indoor units

Selectable
4
daily timers

UTY-LNH*

Simple and sophisticated operations
with a choice of 4 daily timers

• A single controller controls up to 16 indoor units.

Functions

Built-in daily timer

Select from 4 different timer programs :
On / Off / Program / Sleep
Program timer : The program timer operates the ON and OFF
timer once within a 24 hour period.
Sleep timer : The sleep timer function automatically corrects the
set temperature according to the time setting to prevent excessive
cooling or heating during sleep hours.

Cooling operation/dry operation

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

Timer setting
60min.
1˚C
2˚C
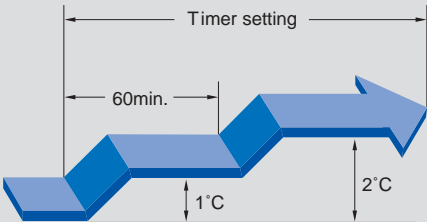
Heating operation

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

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

Easy installation and operation

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

Confusion

Code change

A	B	C	D
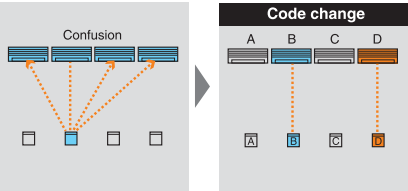
Wide and precise
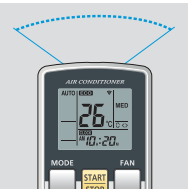
Address setting

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

Outdoor unit
RB unit
Indoor unit
Transmission line
Wireless
Remote Controller

Specifications

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

H* : HY(FUJITSU), HG(GENERAL)
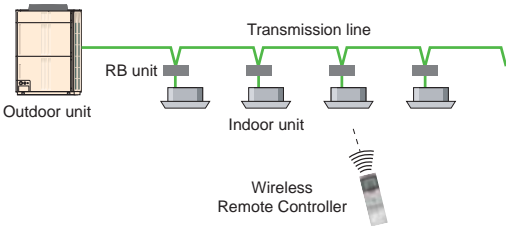
IR Receiver Unit

UTB-YWC

Necessary to control for all duct type by
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.

Wiring connection

Duct Type Indoor Unit
IR Receiver Unit
Wireless
Remote Controller
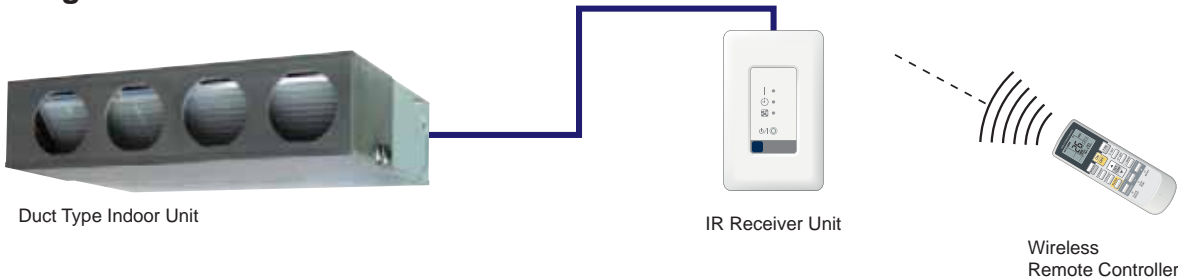
Specifications

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

IR Receiver Unit

UTY-LRH*B1

Cassette type indoor unit can be controlled
with Wireless Remote Controller

Wireless
Remote Controller

Specifications

Model name	UTY-LRH*B1
Power Supply	DC 5V
Dimensions (H x W x D) (mm)	193.9×193.9×31.2
Weight (g)	140

K* : KY(FUJITSU), KG(GENERAL)

Group Remote Controller

UTY-CGG*

Group control of indoor units with simple operation

- Up to 8 remote controller groups can be controlled by one Group Remote Controller.
- Up to 64 Group Remote Controllers can be connected in one VRF network system.
- Network Convertor (UTY-VGGXZ1) is required to connect Group Remote Controllers to a VRF network system.
  (Network Convertor allows up to 4 Group Remote Controllers)
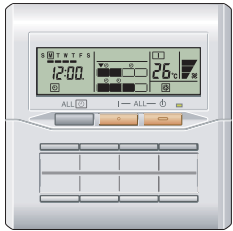
Control up to 8 remote controller groups

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

Refrigerant system 1 / Refrigerant system 2

Guest room
Office room / Lounge
Restaurant
Lobby

Network Convertor

Group Remote Controller

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

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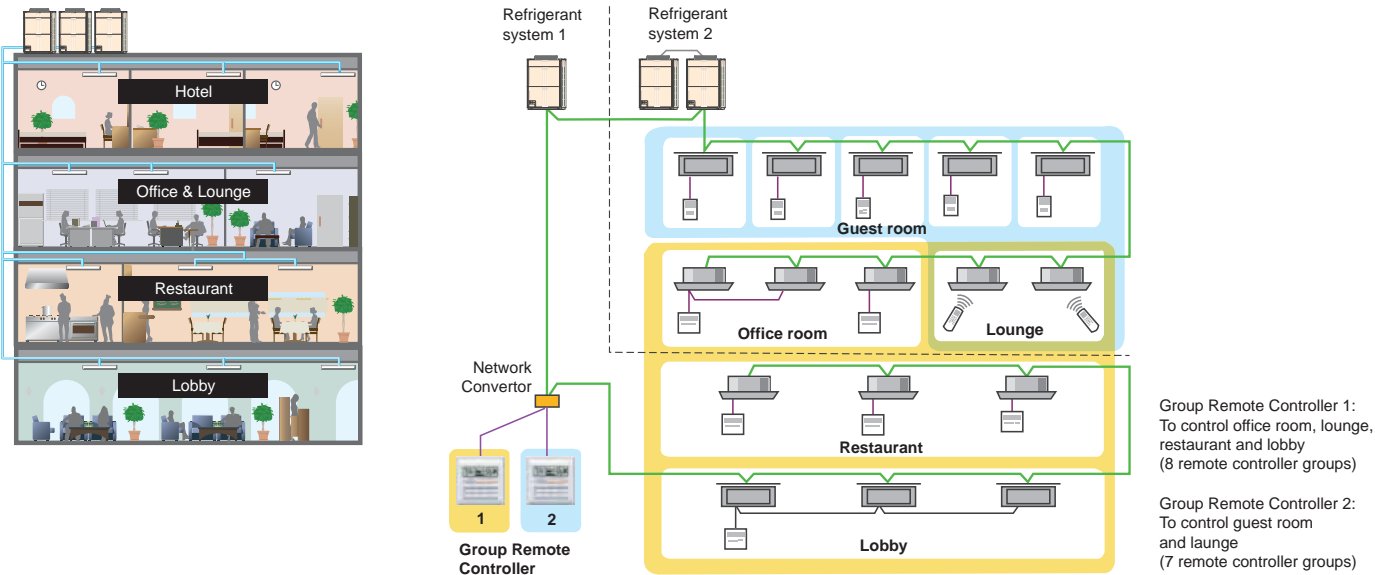
High performance and compact size

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

Central control + **ON/OFF control** + **Weekly timer**
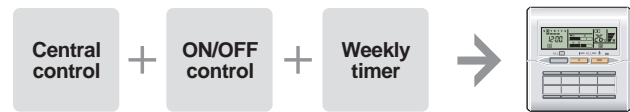
Built-in weekly timers

The weekly timer is provided as a standard function.

1. The timer can be set up for up to 4 times per day.
   (On / Off, operating mode, set temperature)
2. Allows separate settings for each day of the week.

Specifications

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

DC12V is supplied by a network converter.   G* : GY(FUJITSU), GG(GENERAL)

Central Remote Controller

UTY-DCG*

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

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

System overview

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

Group : Hallway
Group : 3F
Group : Division A / Group : Division B / Group : Division C
Group : 2F
Group : Tenant A / Group : Tenant B / Group : Tenant C

Emergency stop function
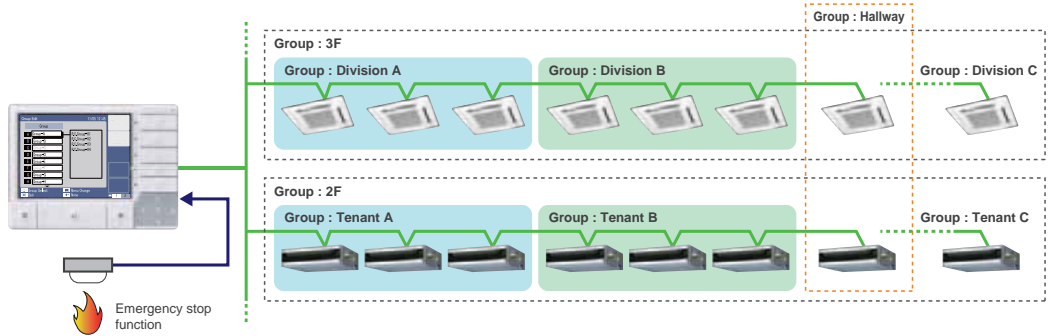
Functions

- Diverse control of indoor units
- Remote controller prohibition (All, On / Off, Mode, Temp, Timer, Filter)
- Weekly timer
- Error history
- Automatic clock adjustment

Easy Installation

- The control panel and power supply unit can be installed separately.
- For flexibility in installation, the Control panel can be built into the wall or fix on the wall.
- Automatic or manual indoor unit registration
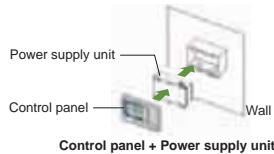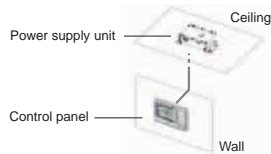
Setting pattern 1
Power supply unit / Control panel / Wall
Control panel + Power supply unit

Setting pattern 2
Ceiling / Power supply unit / Control panel / Wall

Indoor unit registration
RB Unit
Indoor unit registration start
Indoor unit registration finish
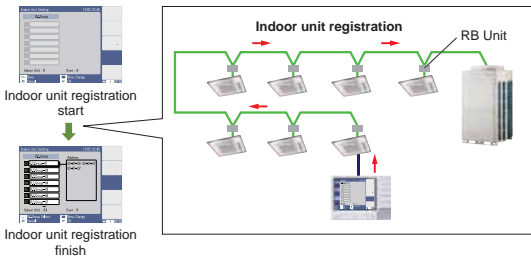
Specifications

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

G* : GY(FUJITSU), GG(GENERAL)

Touch Panel Controller

Max. controllable
400
Indoor units

UTY-DTG*

High visibility and easy operation via high resolution
7.5 inch TFT-LCD touch panel screen

• Large-sized 7.5-inch TFT color
• LCD Easy finger touch operation
• Stylish shape and design to suit all application
• No additional component is required for installation
• Up to 400 indoor units can be controlled
• Selectable 2 display types (Icon / List) in monitoring mode
• Corresponds to 7 different languages, English, Chinese, French, German, Spanish, Russian, Polish.

Up to 400 indoor units can be controlled

RB Unit

Group A

Group B

It allows multiple indoor unit grouping

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

Emergency stop function

Functions

Easy operation

• Large and wide-angled LCD is easily viewable even at a distance
• Easy-to-understand icon-driven Graphical User Interface (GUI)
• 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
• Up-to-date status display
• Background color 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 minimizes fingerprint marking
• Easy-to-remove front cover
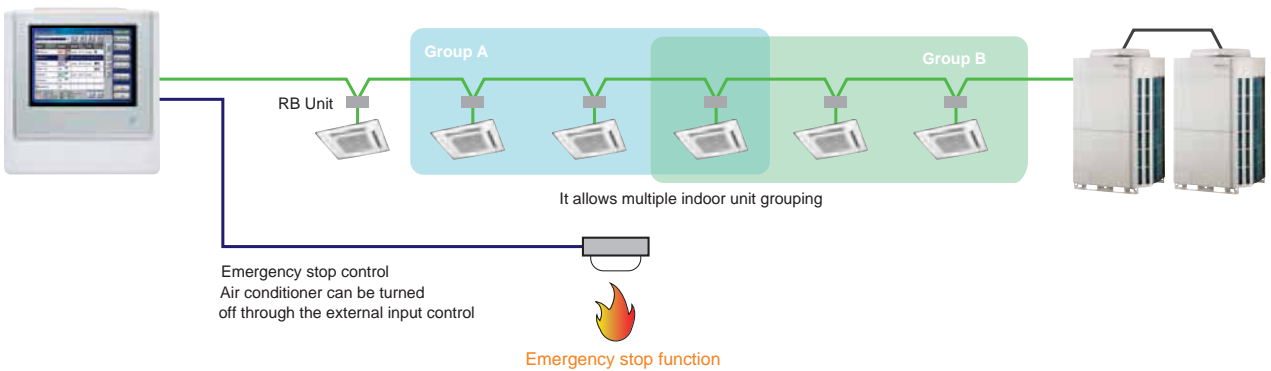
Function

• Up to 400 indoor units can be controlled
• It allows multiple indoor units grouping
• Schedule timer function is standard (20 patterns per day)
• Emergency stop function(through the external input control)
• Temperature upper and lower limit setting
• The clock of each indoor unit correct setting

Individual control

Flexible grouping

Schedule control

Indoor units operation monitoring

Automatic clock adjustment

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

RB Unit
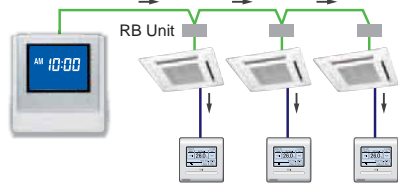
Versatility

CSV format data edited by PC can be imported to
Touch Panel Controller.

Data transfer available
by USB
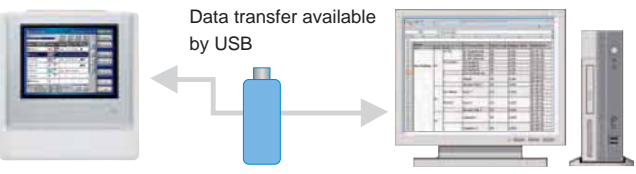
Easy installation

Touch Panel Controller is easily mounted to the wall Flat back
surface allows to be installed wherever it is needed.

• Correctable mechanism for tilting (horizontal)
  after the installation of the body

No additional component is required for installation

• There is no need for the installation space of power supply adaptor and
  transmission adaptor etc.

Specifications

Model name	UTY-DTG*
Power Supply	100-240V 50/60Hz, Single phase
Dimensions (H x W x D) (mm)	260 x 246 x 54
Weight (g)	2,150
Interface	USB 2.0

G* : GY(FUJITSU), GG(GENERAL)

System Controller [Software]

UTY-APGX

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

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

Max. controllable
4
VRF network systems

Max. controllable
400
Outdoor units

Max. controllable
1,600
Indoor units

System Controller Lite [Software]

UTY-ALGX

System Controller Lite has standard functions sufficient for air conditioner management in small and medium scale buildings .

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

Max. controllable
1
VRF network systems

Max. controllable
100
Outdoor units

Max. controllable
400
Indoor units

Functions

User friendly view and operation

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

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

Click & Operate the whole building !

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

Click & Operate any specified unit(s)!

The display is easily changed by pressing the button.

Site view

List view

Batched control of freely defined groups

Batched control of freely selected units

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

Building view

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

Click & Operate the whole floor !

Floor view

Click & Operate the unit !

Batched control of freely selected units

Diverse operation management & Data management [Standard] for System Controller and System Controller Lite

Schedule management

• Annual schedules can be set for each remote controller group / user defined group.
• Start / stop, operating mode, remote controller prohibition, and temperature settings can be set up to 143 times per day at 10 minute intervals for up to 101 configurations for each remote controller group.
• Settings can be made for periods straddling midnight.
• Allows programming of special settings for holidays, including public holidays, for a complete year.
• Low noise operation of outdoor unit can be scheduled.

Diverse control of indoor and outdoor unit

• Indoor unit operation state, operation mode, etc. are displayed
• Indoor unit start / stop and operation mode switching
• Room temperature set point limitation
• Outdoor unit low noise setting

Remote controller prohibition

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

Error display & E-mail notification

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

Operating & control record

Displays the history of operation status and control.

Data base import/export

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

Automatic clock adjustment

The time setting of each controller can be set in batch automatically.
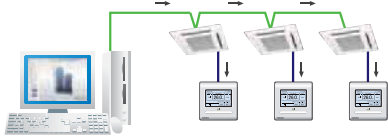
Electricity charge apportionment [Standard] for System Controller [Option] for System Controller Lite UTY-PLGXA1

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

System Configuration Example

Electric power company

Electricity charges (air conditioning)

System Controller

RB Unit   Signal transmission line

Power distribution board

Outdoor unit

Tenant A-1   Tenant A-2   Tenant A-3

Tenant A-4   Tenant A-5   Tenant A-6

Power distribution board

Tenant B-1   Tenant B-2   Tenant B-3

Tenant C-1   Tenant C-2   Tenant C-3

3Ø, 4 wire 400V, 50Hz

1Ø, 2wire 230V, 50Hz
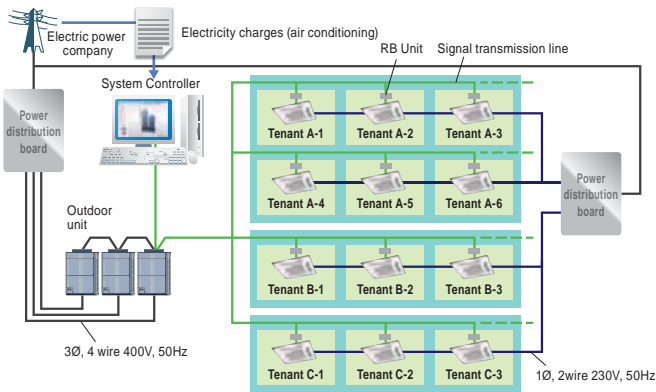
Energy used by each unit is calculated

Tenant A   Tenant B
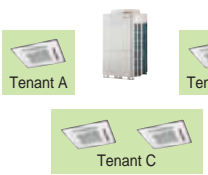
Tenant C

Energy apportioned by the outdoor unit to each indoor unit is calculated

Tenant A   Tenant B
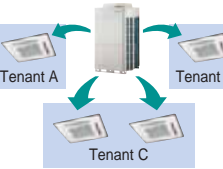
Tenant C

Electricity charges by tenant are calculated

The distribution ratio for energy used by each indoor unit is calculated and the electricity charges for the energy used by each indoor unit are calculated from the total electricity charges.

Tenant A   Tenant B   Tenant C

Electric Bill   Electric Bill   Electric Bill
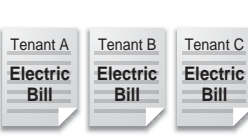
The energy used by each indoor unit and the energy apportioned by the outdoor unit are added together to calculate the total amount of energy used.

Indoor unit energy used
+
Apportioned energy
=
Indoor unit total energy used

Centralized Controller
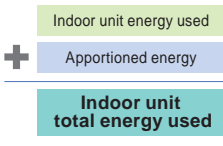
Remote management
(Standard) for System Controller
(Option) for System Controller Lite UTY-PLGXR1

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

On site central control
Max. 4 VRF network systems per site

Central Monitoring Screen for all Properties

Special Property Detailed Monitoring Screen

Remote central control
1 VRF Explorer can control or monitor up to 10 sites.

VRF Controller
A maximum of 10 locations, such as offices or factories

Building management company, management center, etc.

1 VRF Controller can be monitored from any number of VRF Explorers (Up to 5 connections simultaneously).

Building Management Company A (In charge of the day shift)

Building Management Company B (In charge of the night shift)

Office Management Center

Security Company

Headquarters Management Center

Energy saving management
(Option) for System Controller UTY-PEGX
(Option) for System Controller Lite UTY-PLGXE1

A variety of energy saving operations can be set and managed depending on the season, weather, and time period. Excellent energy saving operation is performed while keeping users comfortable.

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

Energy Saving Management Main Screen

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

Forced thermostat off range
Outdoor unit stop range
Target power consumption
Ideal control line (Use of average power consumption)
Shows change in power consumption by time

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

Indoor unit rotation screen

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

Hot day of summer
Cold day of winter
Outdoor unit capacity upper limit
Power consumption
Time
Outdoor unit capacity control screen

FUNCTIONS SUMMARY

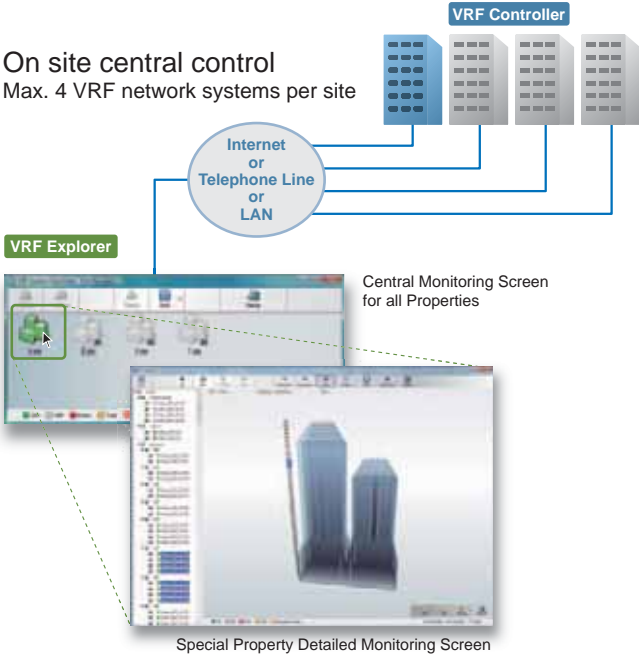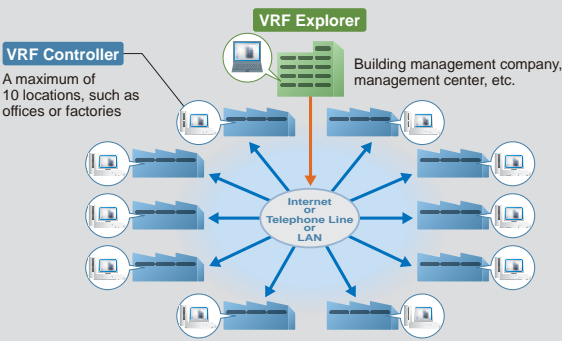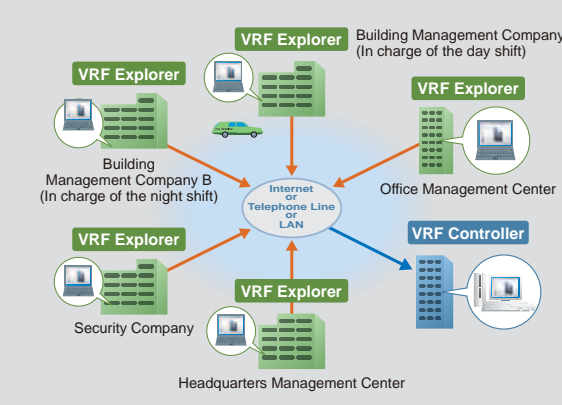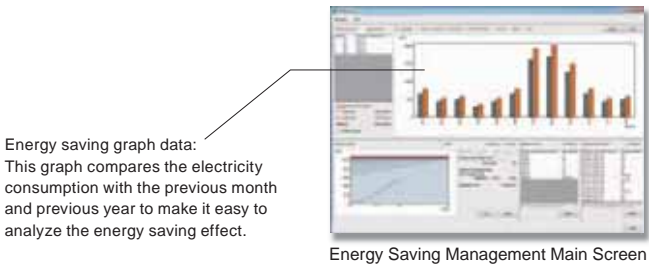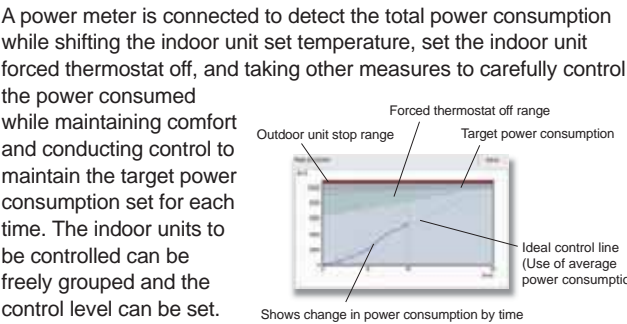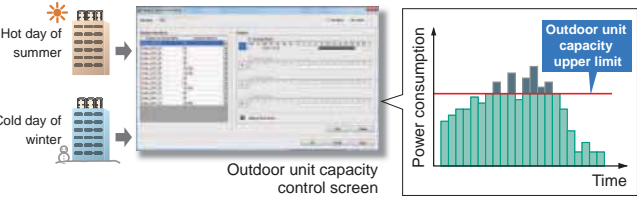| Function	Type	System controller UTY-APGX	System controller (Option) UTY-PEGX	System controller lite UTY-ALGX	System controller lite (Option) UTY-PLGXR1	System controller lite (Option) UTY-PLGXA1	System controller lite (Option) UTY-PLGXE1
System specification	Max. VRF networks supported	4	-	1	-	-	-
	Max. indoor unit / remote controller groups per VRF network	400	-	400	-	-	-
	Max. outdoor units per System controller	100	-	100	-	-	-
	Max. indoor units / remote controller groups per System controller	1600	-	400	-	-	-
	Max. outdoor units per System controller	400	-	100	-	-	-
Site supervision	Multi site display	10	-	10	-	-	-
	Number of building / 1 site	20	-	-	-	-	-
	Number of floor per 1 site	200	-	-	-	-	-
	Number of floor per 1 building	50	-	-	-	-	-
	3D graphical layout view	○	-	-	-	-	-
	2D graphical layout view	○	-	-	-	-	-
	List display	○	-	○	-	-	-
	Tree display	○	-	○	-	-	-
	Group display	○	-	○	-	-	-
Error management	Error notification	○	-	○	-	-	-
	Audible alarm	○	-	○	-	-	-
	Error e-mail notification	○	-	○	-	-	-
History	Error history	○	-	○	-	-	-
	Operation history	○	-	○	-	-	-
	Control history	○	-	○	-	-	-
Operation control	Individual control — On/Off	○	-	○	-	-	-
	Operation mode	○	-	○	-	-	-
	Room temperature	○	-	○	-	-	-
	Fan speed	○	-	○	-	-	-
	Air flow direction	○	-	○	-	-	-
	Economy mode	○	-	○	-	-	-
	Room temperature set point limitation	○	-	○	-	-	-
	Test operation	○	-	○	-	-	-
	Antifreeze	○	-	○	-	-	-
	Outdoor unit low noise setting	○	-	○	-	-	-
	Individual management — Remote control prohibition setting	○	-	○	-	-	-
	Temperature upper and lower limit setting	○	-	○	-	-	-
	Filter sign reset	○	-	○	-	-	-
	Other — Memory operation	○	-	○	-	-	-
	Pattern operation	○	-	○	-	-	-
Schedule	Annual Schedule	○	-	○	-	-	-
	Special day setting	○	-	○	-	-	-
	On /off per day	72	-	72	-	-	-
	On / off per week	504	-	504	-	-	-
	Day off	○	-	○	-	-	-
	Min. unit of timer setting (Minutes)	10	-	10	-	-	-
	Low noise mode Weekly schedule	○	-	○	-	-	-
Remote management	Remote monitoring	○	-	-	○	-	-
	Remote operation control	○	-	-	○	-	-
	Remote function setting	○	-	-	○	-	-
Electricity charge apportionment	Apportionment charge/bill calculation	○	-	-	-	○	-
	Tenant (block) setting	○	-	-	-	○	-
	Common facilities apportionment setting	○	-	-	-	○	-
	Rated power consumption allotment setting	○	-	-	-	○	-
	Individual calculation at cooling and heating	-	○*	-	-	○	-
	Electricity meter supported	-	○	-	-	○	-
Energy saving management	Indoor unit rotation	-	○	-	-	-	○
	Peak cut control	-	○	-	-	-	○
	Outdoor unit capacity save	-	○	-	-	-	○
	Record of energy saving operation	-	○	-	-	-	○
	Energy saving information	-	○	-	-	-	○
	Power consumption monitor	-	○	-	-	-	○
	Electricity meter supported	-	○	-	-	-	○
Others	Database import/export	○	-	○	-	-	-
	Automatic clock adjustment	○	-	○	-	-	-
	Multi language	7 languages	-	7 languages	-	-	-

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

Personal computer system requirements

	System Controller	System Controller Lite
Operating system	• Microsoft® Windows Vista® Home Premium (32-bit) SP2, Windows Vista® Business (32-bit) SP2 • Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8 (32-bit or 64-bit), Windows® 8 Pro (32-bit or 64-bit) • Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit) [Supported languages] English, Chinese, French, German, Russian, Spanish, and Polish	
CPU	Intel® Core™ i3 2 GHz or higher	
Memory	• 2 GB or more (for Windows Vista® and Windows® 7 [32-bit]) • 4 GB or more (for Windows® 7 [64-bit], Windows® 8, and Windows® 8.1)	
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) or Modem (for getting access to the Internet using Public Telephone Line) •USB ports (Maximum of 6 ports) (Required only for the Server PC that works as VRF Controller) - Maximum of 2 USB ports are required for WibuKey connection - Maximum of 4 USB ports are required for Echelon® U10 USB Network Interface * Maximum number of required USB port depends on the applicable system configuration.	•Ethernet port (for getting access to the Internet using LAN) or Modem (for getting access to the Internet using Public Telephone Line) •USB ports (Maximum of 5 ports) (Required only for the Server PC that works as VRF Controller) - Maximum of 4 USB ports are required for WibuKey connection - 1 USB port is required for Echelon® U10 USB Network Interface * The maximum number of required USB port depends on the applicable system configuration.
Graphic accelerator	Microsoft® DirectX® 9.0c compatible	
Software	Adobe® Reader® 9.0 or later	
Optical drive	DVD-ROM drive	

•Personal computer that satisfies the following system requirements
•Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)

<Packing list>

Type	For System controller System controller	For System controller (Option) Energy manager	For System controller Lite System Controller Lite	For System controller Lite (Option) Remote access	For System controller Lite (Option) Electricity charge apportionment	For System controller Lite (Option) Energy saving
Model name	UTY-APGX	UTY-PEGX	UTY-ALGX	UTY-PLGXR1	UTY-PLGXA1	UTY-PLGXE1
DVD-ROM	1	1	1	—	—	—
WibuKey*1(Software protection key)	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 Wibu Key. However, WibuKey is not required for remote VRF Explorer software.
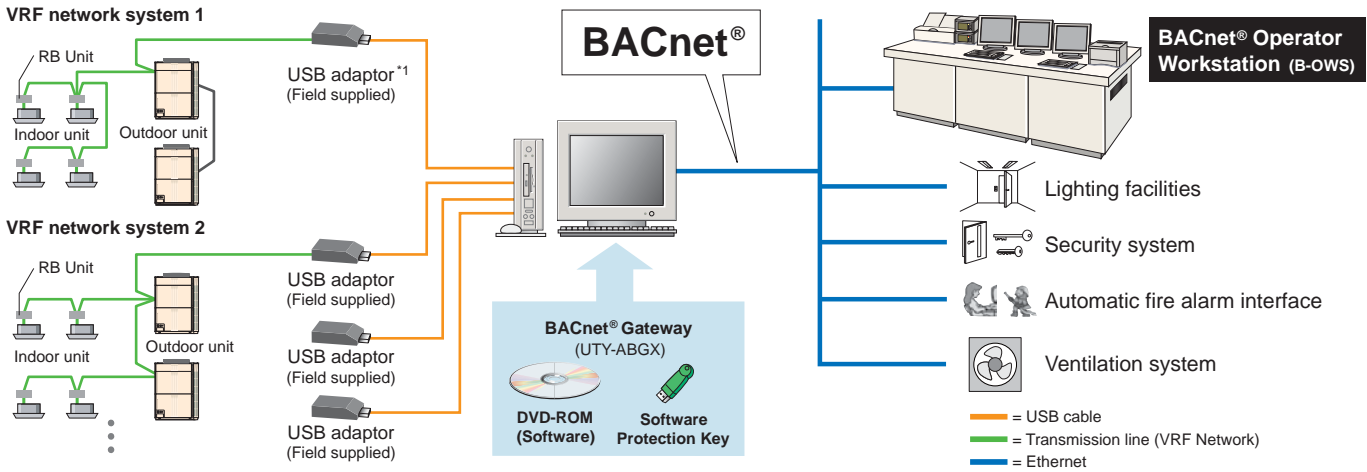
BACnet® Gateway

UTY-ABGX

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

Max. controllable
4
VRF network systems

Max. controllable
400
Outdoor units

Max. controllable
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-135-2004) 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 adaptor*1 (Field supplied)

VRF network system 2

RB Unit
Indoor unit   Outdoor unit

USB adaptor (Field supplied)
USB adaptor (Field supplied)
USB adaptor (Field supplied)

BACnet®

BACnet® Gateway (UTY-ABGX)

DVD-ROM (Software)   Software Protection Key

BACnet® Operator Workstation (B-OWS)

Lighting facilities
Security system
Automatic fire alarm interface
Ventilation system

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

Max. 4 VRF network systems

*1: USB adaptor is U10 USB Network Interface of Echelon® Corporation.

Personal computer system requirements

	UTY-ABGX
Operating system	• Microsoft® Windows Vista® Home Premium (32-bit) SP2, Windows Vista® Business (32-bit) SP2 • Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8 (32-bit or 64-bit), Windows® 8 Pro (32-bit or 64-bit) • Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit) [Supported languages] English, Chinese, French, German, Russian, Spanish, and Polish
CPU	Intel® Core™ i3 2 GHz or higher
Memory	• 2 GB or more (for Windows Vista® and Windows® 7 [32-bit]) • 4 GB or more (for Windows® 7 [64-bit], Windows® 8, and Windows® 8.1)
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 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
Optical drive	DVD-ROM drive

<Packing list>

Name and shape	Quantity	Application
DVD-ROM	1	Includes the software and manuals for BACnet® Gateway.
Wibu Key (Software protection key)	1	Software protection key to be connected to USB port on the BACnet®-installed PC. BACnet® Gateway runs only on a PC with WibuKey.

• Personal computer that satisfies the following system requirements
• Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network).

Network Convertor for LONWORKS®

UTY-VLGX

Max. controllable
4
Units to BMS

Max. controllable
100
Outdoor units

Max. controllable
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 Convertor for LONWORKS®

Installation example

General-purpose building control computer (LONWORKS® device)

Max. 4 Network Convertor

Lighting facilities
Security system
Automatic fire alarm interface
Ventilation system

LONWORKS® Network

Max. 100 outdoor units   Max. 128 indoor units
RB Unit
VRF network system 1

Max. 100 outdoor units   Max. 128 indoor units
RB Unit
VRF network system 2
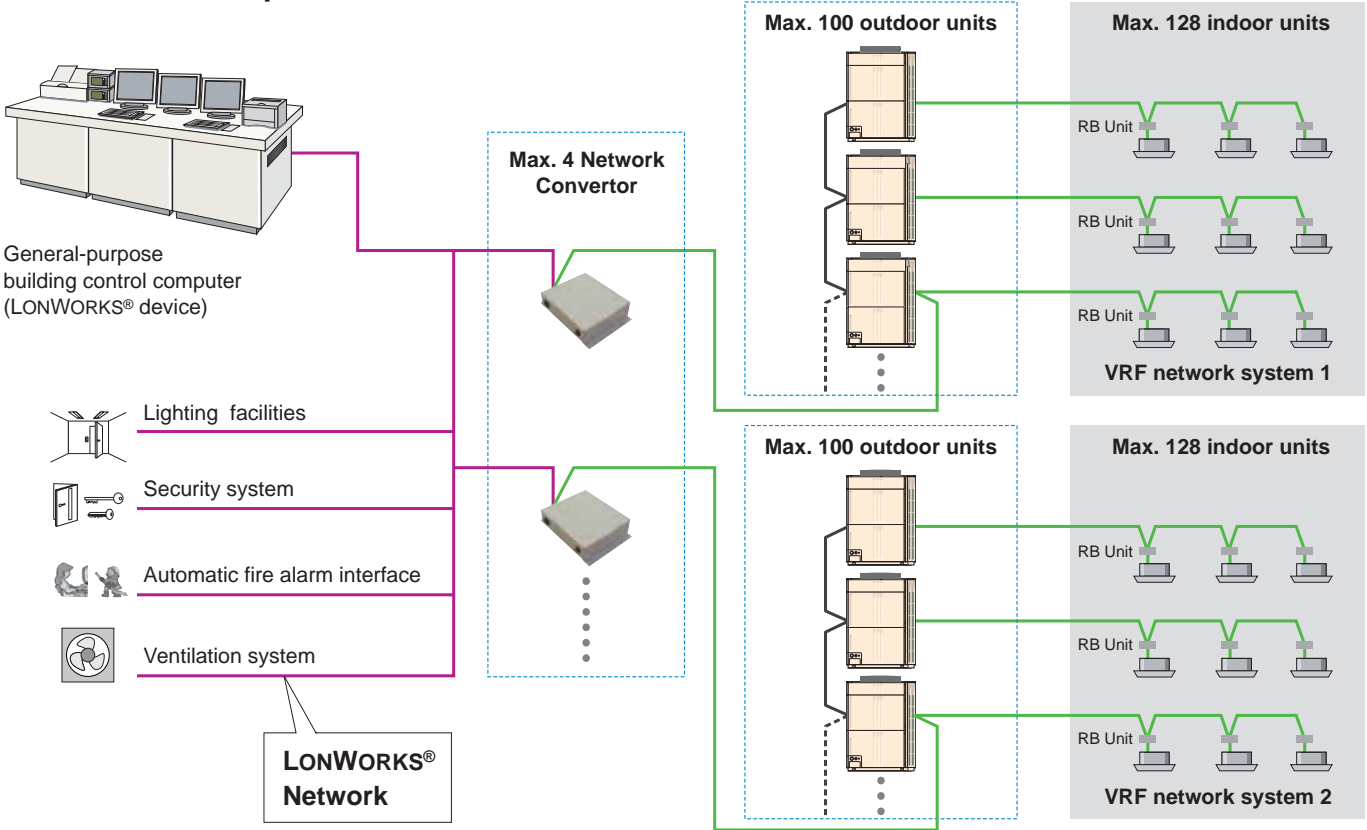
Specifications

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 x 288 x 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.)

Dimensions (Unit : mm)

95 (Hole pitch)
95 (Hole pitch)
2-φ5 For M4×20Lscrews
4-φ5 For M4×20L screws
241.6
272 (Hole pitch)
288
211
67
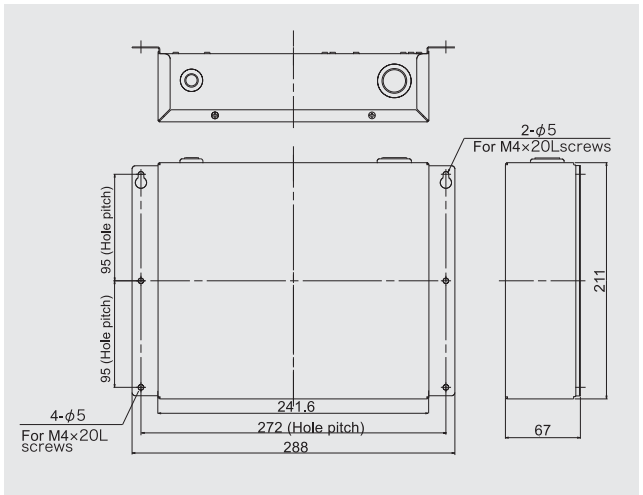
KNX® Interface

FJ-RC-KNX-1i

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

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

KNX Network

- Home Controller
- Lighting facilities
- Security system
- Automatic fire alarm interface
- Windows bind

KNX

The KNX Interface can be used with or without Wired Remote Controller.

or

VRF Indoor unit

Wired Remote Controller

Split Indoor unit

MODBUS® Interface

FJ-RC-MBS-1

The Modbus Interface allows a complete integration of
air conditioners into Modbus Networks.

• Simple installation due to small and compact size.
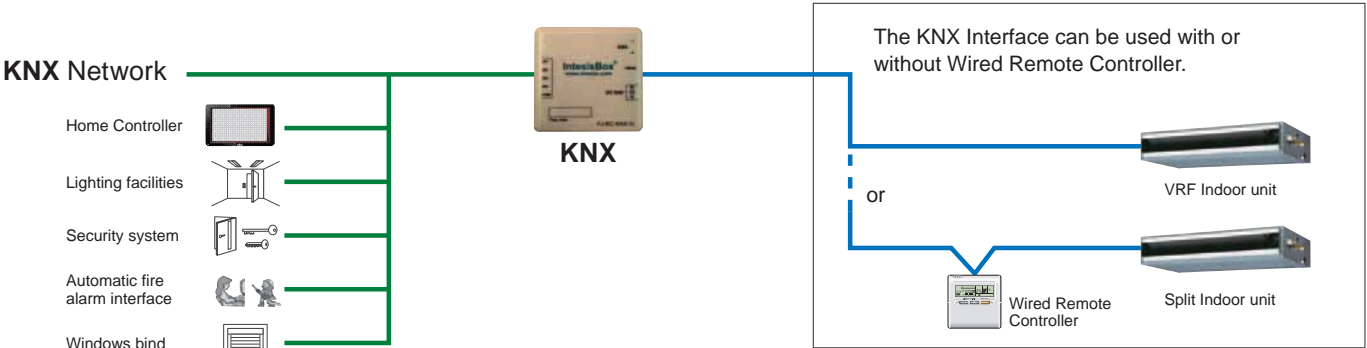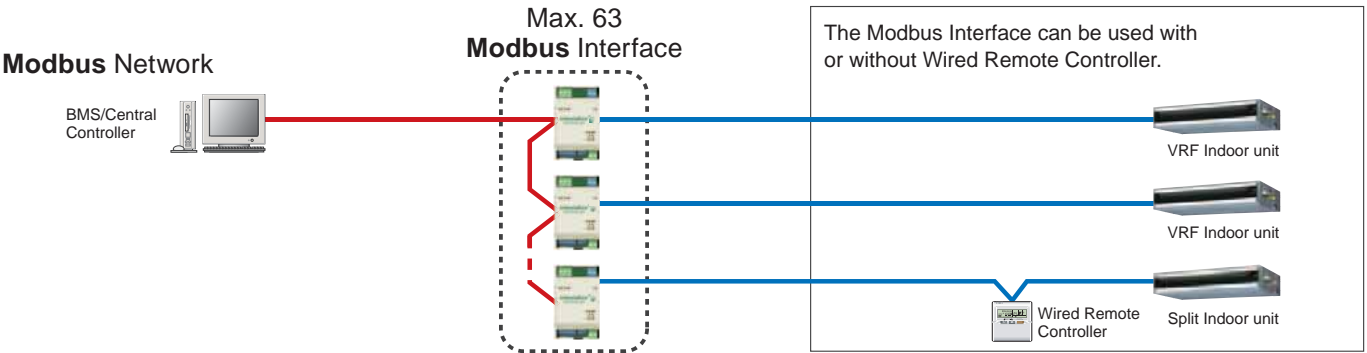• No separate external power supply required.
• The Modbus Interface permits central monitoring and control of air conditioners from BMS, .

Modbus Network

BMS/Central Controller

Max. 63
Modbus Interface

The Modbus Interface can be used with or without Wired Remote Controller.

VRF Indoor unit

VRF Indoor unit

Wired Remote Controller

Split Indoor unit

Specifications

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

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

Wireless LAN Interface IntesisHome®

FJ-RC-WIFI-1

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

Smartphone

Tablet

PC

Internet

IntesisHome®

Wireless LAN Interface

Router
(Field supplied)
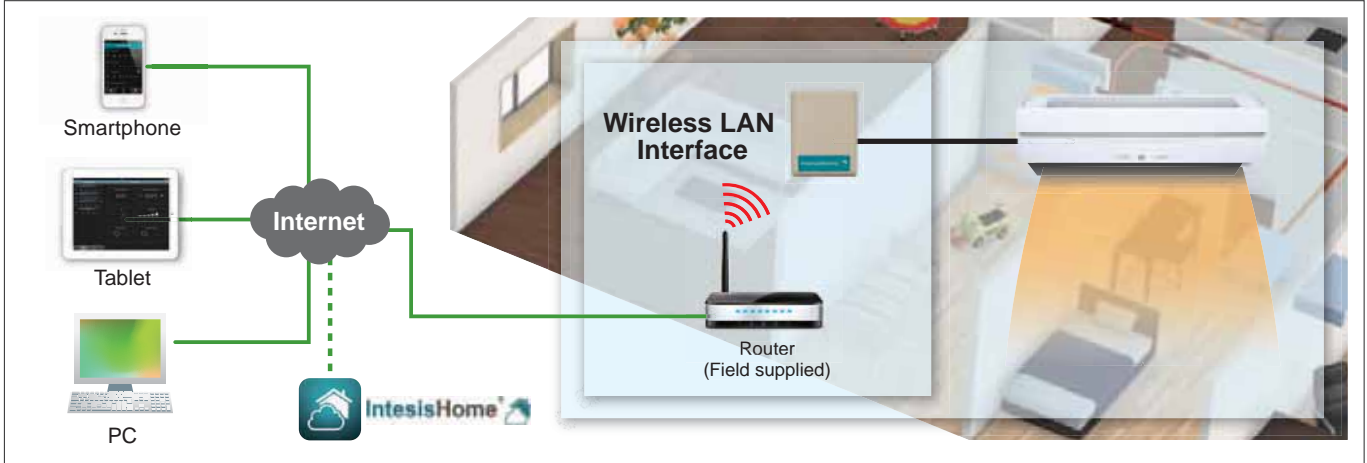
Basic control

• 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

24.0ºC   − 22.0ºC +

(Application screen image)

Advanced control (Optional functions)

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

Notifications and History

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

Specifications

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

External Switch Controller

UTY-TEKX

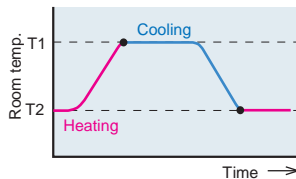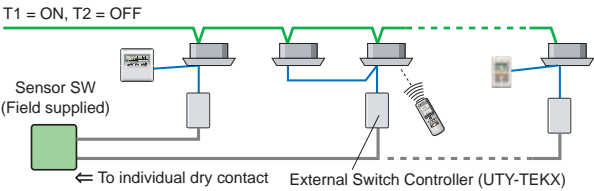Air conditioner switching can be controlled by connecting other sensor switches

- 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 field supplied parts.

Installation example

Auto mode operation, which switches the cooling and the heating automatically, is enabled by using the sensor switch and External Switch Controller.
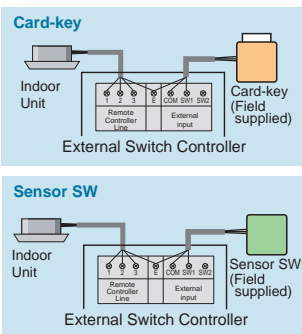Note: All indoor units will operate in the same mode.

T1 = ON, T2 = OFF

Sensor SW (Field supplied)

⇐ To individual dry contact   External Switch Controller (UTY-TEKX)

Room temp.

Cooling

Heating

Time

Note 1.
Please choose a thermosensor switch which can be set up for T1 and T2.

Note 2.
The remote controller's operation is prior to the auto mode operation.

Electrical wiring

Card-key

Indoor Unit

Remote Controller Line   External input

Card-key (Field supplied)

External Switch Controller

Sensor SW

Indoor Unit

Remote Controller Line   External input

Sensor SW (Field supplied)

External Switch Controller

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

A

B

C

D

Signal Amplifier

AB+BD+BC＜500m
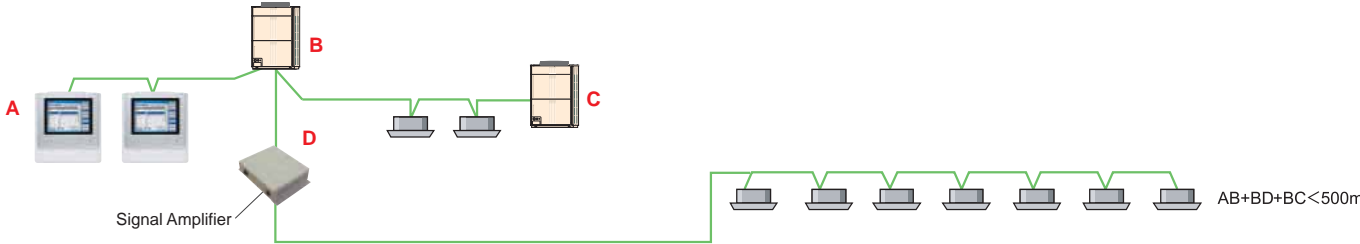
Specifications

Model name	UTY-VSGXZ1
Power Supply	208-240V 50/60Hz, Single phase
Power Consumption (W)	4.5
Dimensions (H x W x D) (mm)	67 x 288 x 211
Weight (g)	1,500

Model name	UTY-TEKX
Power Supply	DC 12V
Dimensions (H x W x D) (mm)	120 x 75 x 30
Weight (g)	100

DC12V is supplied by the indoor unit.

Network Convertor

Max. controllable
*16*
single indoor units

UTY-VGGXZ1

Max. controllable
4
Group Remote Controllers

- This Network Convertor is to be used for connecting single split system or Group Remote Controller (UTY-CGGY / UTY-CGGG) with the VRF network system.
- Please select the function by switching the dip switch during the installation.

Functions

### Used for connecting single split system

- Split type systems can be centrally controlled from Touch Panel Controller or System Controller through connection to the VRF's network convertor.
- On / Off Control, Master control, Room temperature and Fan speed setting via the Network Convertor are available.
- One Network Convertor can be used to connect and control up to 16 single units.

Network Convertor

RB Unit

Single Split

Group of Single Split

VRF network system

USB Adaptor

System Controller

Big Multi
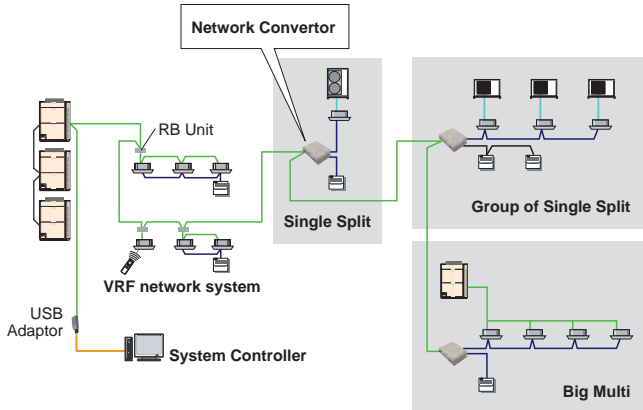
Please consult your distributor for connectable split type air conditioner.
Up to 100 Network Convertors may be connected in single VRF network system.
One Network Convertor is considered as a single refrigerant system, irrespective of the number of connected single models.

Used for connecting Group Remote Controller

4 Group Remote Controllers can be connected to a single Network Convertor (UTY-VGGXZ1).

RB Unit

Group Remote Controller
UTY-CGGY
UTY-CGGG

VRF network system
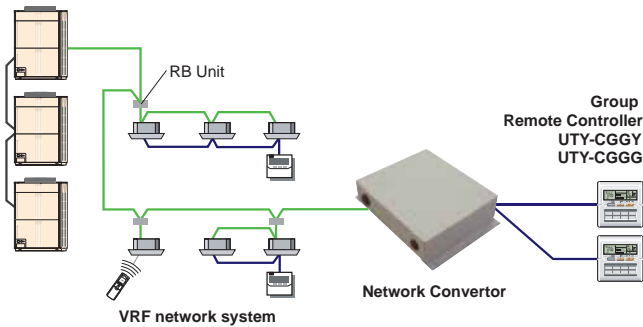
Network Convertor

* 2 refrigerant circuits can be covered by a single Network Convertor (UTY-VGGXZ1) .
  Up to a total of 16 Network Convertors (UTY-VGGXZ1) and System Controller adaptors can be connected in a single VRF network system.

Specifications

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

Service Tool `Software`

UTY-ASGX

Max. Monitor
100
Outdoor units

Max. Monitor and control
400
Indoor units

Extensive monitoring and analysis functions for installation and maintenance.

- Operation status can be checked and analyzed to detect even the small abnormalities.
- Data collected and stored on site can be checked later, off-line, off-site for more detail analysis.
- One VRF network system with maximum number of up to 400 units can be monitored and controlled.
- Operation status and various sensor information can be monitored and checked real time in the form of list, refrigerant circuit diagram, graphs as well.
- Simple operation control functions are useful during maintenance.
- The recent error history can be retrieved from units on demand to perform analysis on the cause of the error, after connecting Service Tool to the VRF network system.
- Commissioning tool supports test runs, data storage for each unit and saving of data as CSV files, which may be formatted to create commissioning report.
- Connectable to any point of transmission line with USB adaptor[*1] (field supplied)
- 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.
- 14 advanced functions are available for the VR-II series for through servicing and through shooting.
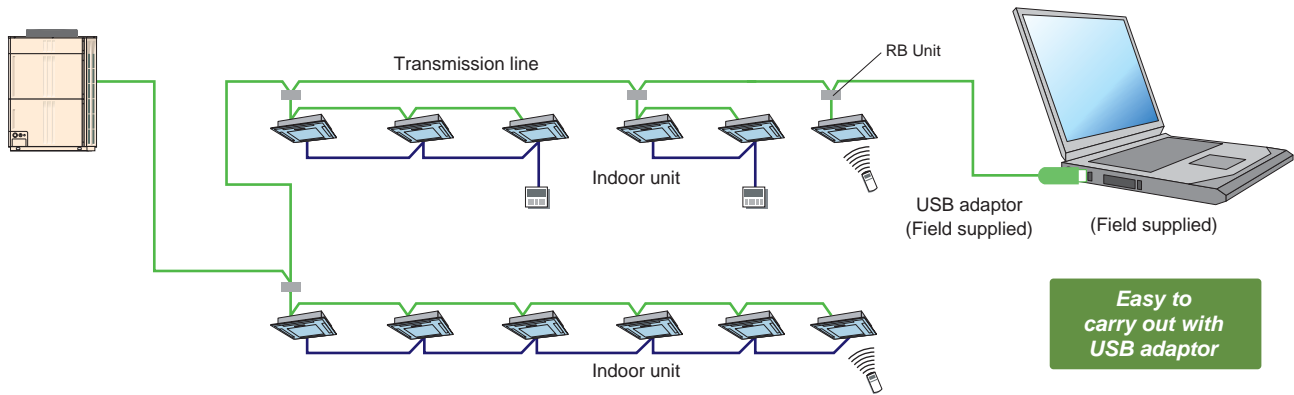- The operating state (Solenoid valve) of RB unit can be checked.

* 1: Service Tool (UTY-ASGX) will only support USB type network adaptor and will not support transmission adaptor of the traditional type(UTR-YTMA)

Wiring connection

Transmission line
RB Unit
Indoor unit
USB adaptor (Field supplied)
(Field supplied)
Indoor unit

Easy to carry out with USB adaptor

*USB Adaptor is U10 USB Network interface of Echelon® Corporation.

Functions

1) System List

Displays the overall operation status of all or specified units in the system in a list form.

2) Equipment Detail (Diagram)

Displays the detail information for sensor values, electrical components etc. for the specified units in schematic. The information here can be used along with the detail information in list form, to check the operation status of units and make detail analysis on the cause, in case an error occurs.

3) Equipment Detail (List)

Displays the detail information for sensor values, electrical components etc. of units in a specified refrigerant system in list form. The information here can be used along with the detail information in diagram form, to check the operation status of units and make detail analysis on the cause, in case an error occurs.
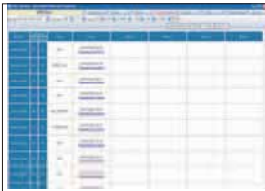
4) Operation History

The indoor units or outdoor unit operation history can be recorded. The displayed operation history can be printed out and saved to a CSV file.

5) Error History

Displays the error information for each unit. The error information can sequentially be displayed up to 50 items as they occur starting with the latest error.

6) Remote File Download

Operation and error history data can be downloaded. Only the required data may be downloaded specifying the refrigerant system, unit and time range.

7) Commissioning Tool

Test run commands can be executed with this tool.
During test running, the outdoor unit / indoor unit sensor data can be saved (commissioning log data).
After the end of test running, this data can be exported in CSV file format.

8) Network Topology Analyzer *

A list of units connected to the VRF system network is displayed in network segments in tree form.

9) Remote Setting *

Function (Field) Setting for indoor unit is realized remotely

10) System Time Setting *

An arbitrary time is set for all the remote controllers within the system.

11) Central Release *

The operation setting restriction function of the indoor units set from the controller can be forcibly released.(remote controller inhibit, temperature upper/lower limit setting)

12) Model Name Writer *

An arbitrary model name can be written to the target unit.

13) Error Memory Reader *

When an error occurs at an outdoor unit, the operation data records before the error are acquired over a network and saved to a CSV file.

Note: To perform "Error Memory Reading", Service Tool and the corresponding outdoor unit must be connected directly with each other. Refer to the Operation Manual of the Service Tool for detail.

14) Time Guard Information *

Reference data for judging the maintenance period of indoor and outdoor units (compressor,FAN, etc. integrated time) is output to a CSV file.

*: Supported by Ver. 1.1 or later

Personal computer system requirements

	UTY-ASGX
Operating system	• Microsoft® Windows Vista® Home Premium (32-bit) SP2, Windows Vista® Business (32-bit) SP2 • Microsoft® Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8 Pro (32-bit or 64-bit)
CPU	1 GHz or higher
Memory	• 1 GB or more (for Windows Vista®, Windows® 7 [32-bit], and Windows® 8 [32-bit]) • 2 GB or more (for Windows® 7 [64-bit] and Windows® 8 [64-bit])
HDD	10 GB or more of free space
Display	1024 x 768 or higher resolution
Interface	• 2 USB ports - 1 USB port is required for WibuKey connection - 1 USB port is required for Echelon® U10 USB Network Interface
Software	Internet Explorer® 8.0 or 9.0 or 10.0 / Adobe® Reader® 9.0 or later
Optical drive	DVD-ROM drive

<Packing list>

Name and shape	Quantity	Application
DVD-ROM	1	Includes the software and manuals
WibuKey (Software protection key)	1	Software protection key to be connected to USB port on the Service Tool-installed PC. These products runs only on a PC with WibuKey.

•Personal computer that satisfies the following system requirements
•Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)

Web Monitoring Tool Software

UTY-AMGX

VRF network systems can be supported
4

Max. Monitor
400
Outdoor units

Max. Monitor and control
1,600
Indoor unit can be monitored

Product features

- Troubleshooting is performed by monitoring each unit remotely during periodical system checks off-site.
- Operation status can be checked and analyzed to detect even the smallest abnormalities.
- Four VRF network systems each with 400 units, with maximum number of up to 1,600 units can be monitored and controlled.
- Operation status and various sensor information can be monitored and checked real time in the form of list, refrigerant circuit diagram, and graphs as well.
- The monitoring data in a remote side can be optionally downloaded. And, this data can be displayed in off-line mode of the Service Tool.
- Error notification can be automatically transmitted to several locations using the internet[1].
- Monitoring side computer is not required to install special software, requires only general web browser.
- Connectable to any point of transmission line with U10 USB interface[2] (field supplied)
- 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.
- The operating state (Solenoid valve) of RB unit can be checked.
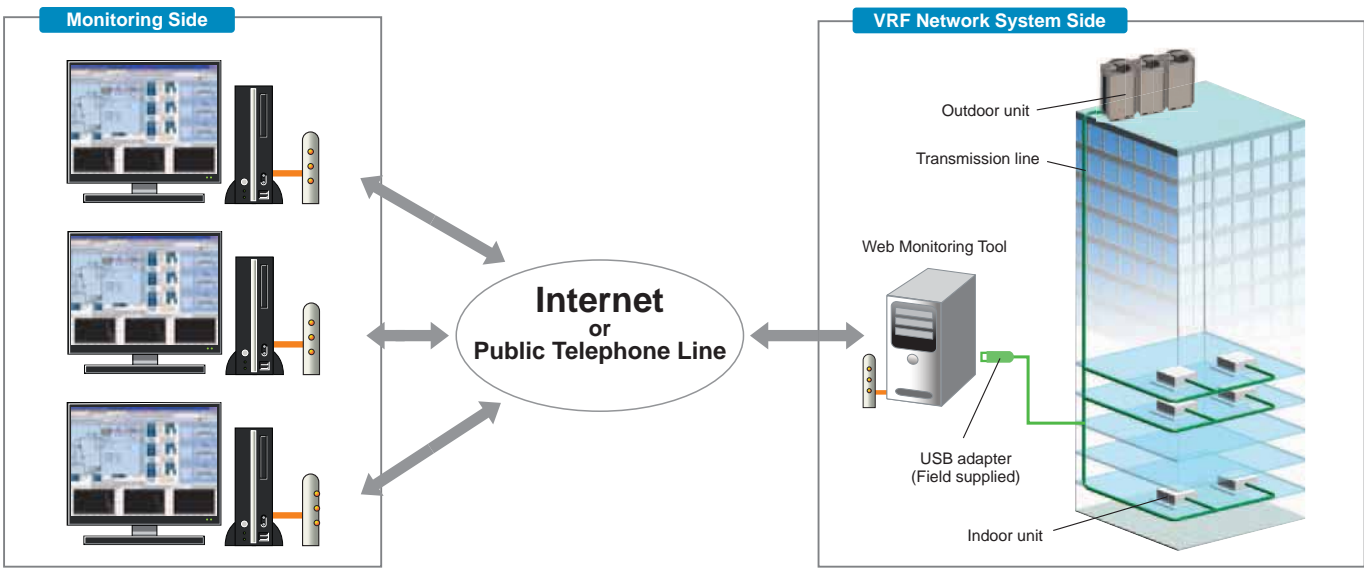
* 1: USB of internet mail system required.
* 2: Web Monitoring Tool (UTY-AMGX) will only support USB type network adaptor and will not support transmission adaptor of the traditional type (UTR-YTMA).
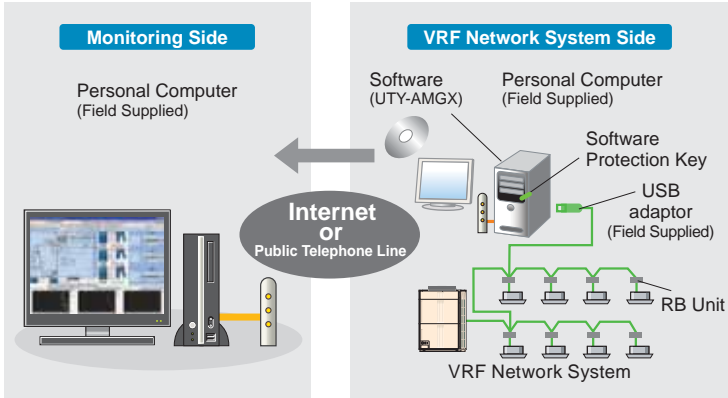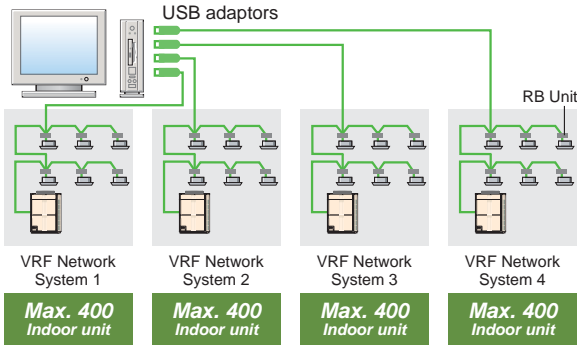
Web Monitoring System

System components

Support 4 VRF network systems

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

COMPARISON TABLE

No.	Item	Service Tool UTY-ASGX	Web Monitoring Tool UTY-AMGX	
			VRF network system Side	Monitoring Side
1	Interchangeability of equipment	●	●	●
2	Indication of equipment list	●	●	●
3	Operation control	●	●	——
4	Indication of refrigerant circuit diagram	●	●	●
5	Commissioning tool	●	●	——
6	Monitoring of equipment information	●	●	●
7	Monitoring of operating condition	●	●	●
8	Monitoring of sensor data	●	●	●
9	Storage and CSV output of operating history (sensor data)	●	●	●
10	Indication of trend graph	●	●	●
11	Printing of trend graph	●	●	●
12	Monitoring and screen display of abnormalities	●	●	●
13	E-mail automatic transmission of abnormalities	——	●[1]	——
14	Setting for user level	——	●	●
15	Network Topology Analyzer *	●	●	——
16	Remote Setting *	●	●	——
17	System Time Setting *	●	●	——
18	Central Release *	●	●	——
19	Model Name Writer *	●	——	——
20	Error Memory Reader *	●	——	——
21	Time Guard Information *	●	●	●

*: Supported by Ver. 1.1 or later
*1: it is available only during a connection to the Internet.

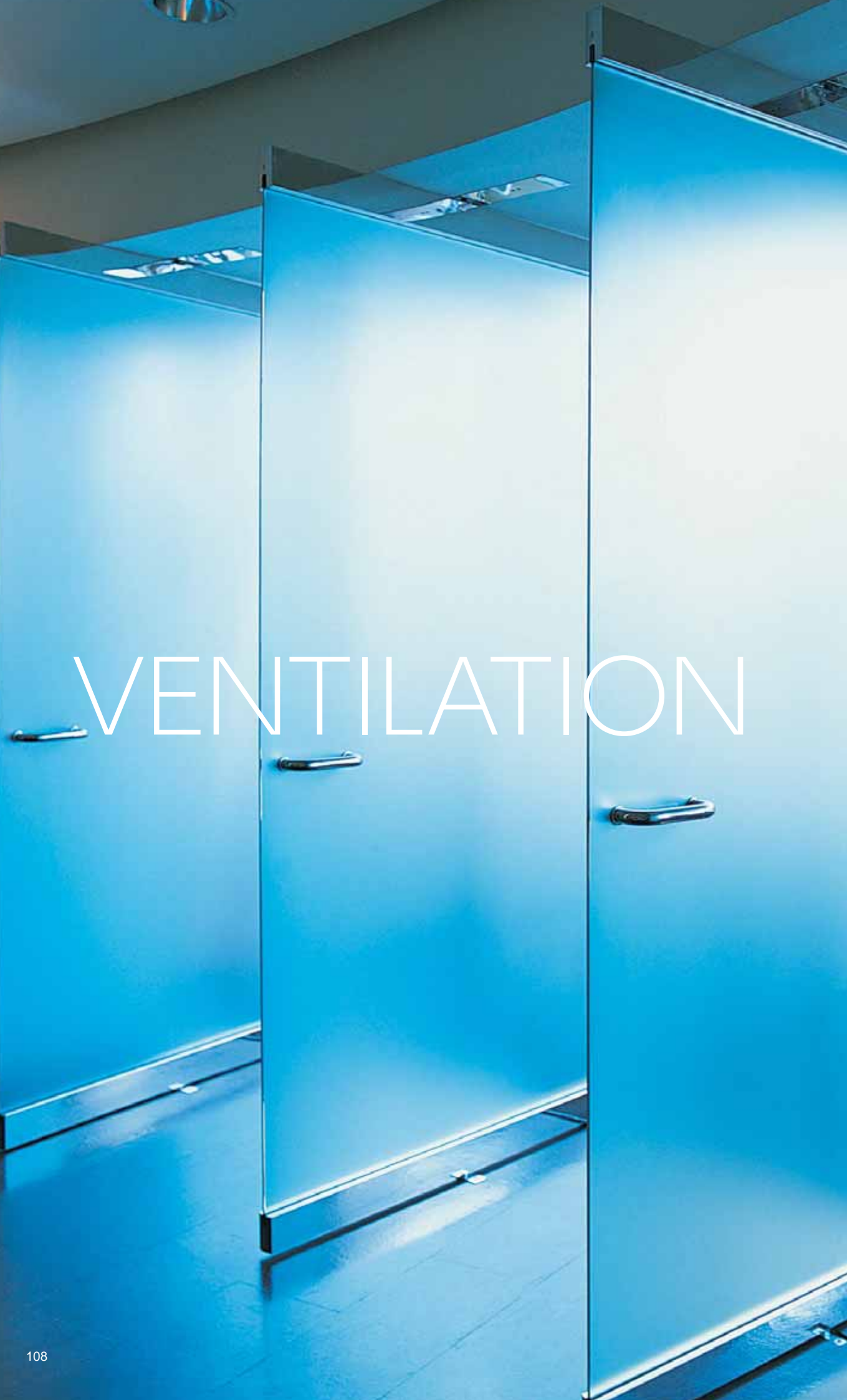## Personal computer system requirements

	UTY-AMGX
Operating system	• Microsoft® Windows Vista® Home Premium (32-bit) SP2, Windows Vista® Business (32-bit) SP2 • Microsoft® Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8 Pro (32-bit or 64-bit)
CPU	1 GHz or higher
Memory	• 1 GB or more (for Windows Vista®, Windows® 7 [32-bit], and Windows® 8 [32-bit]) • 2 GB or more (for Windows® 7 [64-bit] and Windows® 8 [64-bit])
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) or Modem (for getting access to the Internet using Public Telephone Line)
	• USB ports (Maximum of 5 ports)
	  - 1 USB port is required for 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	Internet Explorer® 8.0 or 9.0 or 10.0 / Adobe® Reader® 9.0 or later
Optical drive	DVD-ROM drive

<Packing list>

Name and shape	Quantity	Application
DVD-ROM	1	Includes the software and manuals
Wibu Key (Software protection key)	1	Software protection key to be connected to USB port on the Service Tool-installed PC. These products runs only on a PC with WibuKey.

• Personal computer that satisfies the following system requirements
• Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)

VENTILATION

EFFECTIVE HEAT EXCHANGE AND SIMULTANEOUS FRESH AIR VENTILATION

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

ENERGY RECOVERY VENTILATOR

OUTDOOR AIR UNIT

DX-KIT FOR AIRHANDLING APPLICATIONS

AIRSTAGE™

Energy Recovery Ventilator

Models
UTZ-BD025B
UTZ-BD035B
UTZ-BD050B
UTZ-BD080B
UTZ-BD100B

Energy recovery ventilator unit offers maximum comfort and greater energy savings.

UTZ-BD025B   UTZ-BD035B   UTZ-BD050B

UTZ-BD080B   UTZ-BD100B

Heat exchange ventilation and normal ventilation

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

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

Adopts a highly efficient counter-flow heat exchange element

Exhaust air
Outside air
Heat exchanger
Supply air
Room air

Energy efficiency and ecology

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

20%
Energy saving

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

Other element
(Cross-flow element)

Fujitsu element
(Counter-flow element)
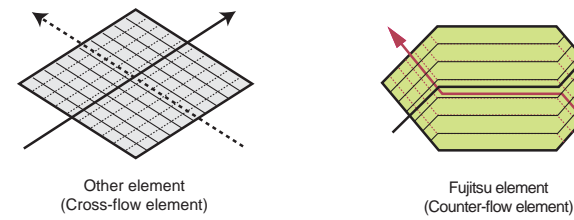
Quiet operation

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

Extended range of an external static pressure

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

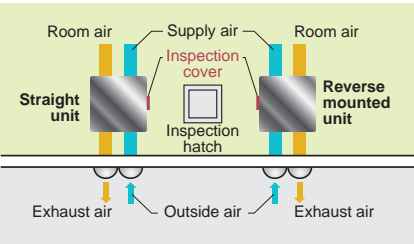## Slim shape and easier installation

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

Height
270mm
UTZ-BD025B

Height
317mm
UTZ-BD035B/BD050B

Height
388mm
UTZ-BD080B/BD100B

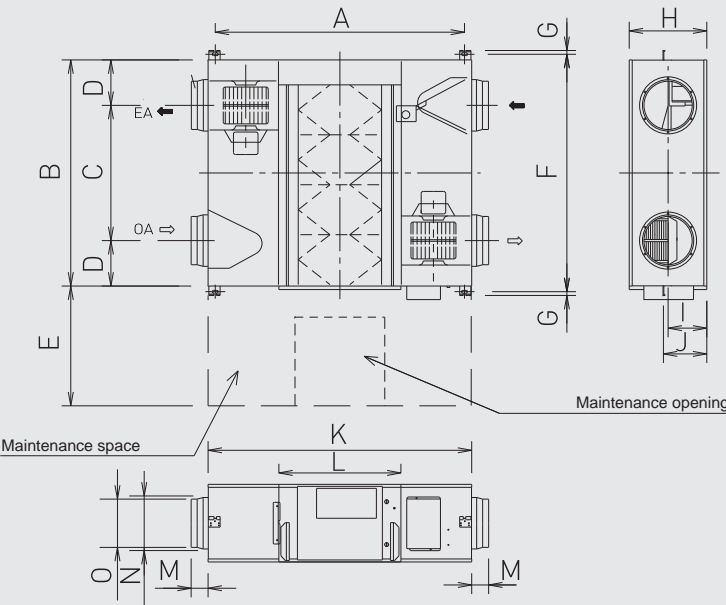## Reverse mountable direct air supply / exhaust system

Adoption of straight air supply / exhaust system: Duct design is simplified because the air supply / exhaust ducts are straight.

Since each unit can be mounted in reverse position, only one inspection hole is needed for two units: Two units can share one inspection hole so duct work is easier and more flexible.

Room air   Supply air   Room air
Inspection cover
Straight unit   **Reverse mounted unit**
Inspection hatch
Exhaust air   Outside air   Exhaust air

Specifications

Rated flow rate				250 m³/h	350 m³/h	500 m³/h	800 m³/h	1000 m³/h
Model No.				UTZ-BD025B	UTZ-BD035B	UTZ-BD050B	UTZ-BD080B	UTZ-BD100B
Power source				220 - 240V, 50Hz				
HEAT EXCHANGE VENTILATION	Input power	Extra high / High / Low	W	128 / 123 / 96	190 / 185 / 168	289 / 225 / 185	418 / 378 / 295	464 / 432 / 311
	Air flow rate	Extra high / High / Low	m³/h	250 / 250 / 190	350 / 350 / 240	500 / 500 / 440	800 / 800 / 630	1000 / 1000 / 700
	External static pressure	Extra high / High / Low	Pa	105 / 95 / 45	140 / 60 / 45	120 / 60 / 35	140 / 110 / 55	105 / 80 / 75
	Temperature Exchange Efficiency	Extra high / High / Low	%	75 / 75 / 77	75 / 75 / 78	75 / 75 / 76	75 / 75 / 76	75 / 75 / 79
	Energy Exchange Efficiency Cooling	Extra high / High / Low	%	63 / 63 / 65	66 / 66 / 71	62 / 62 / 64	65 / 65 / 68	65 / 65 / 70
	Energy Exchange Efficiency Heat pump	Extra high / High / Low	%	70 / 70 / 72	69 / 69 / 73	67 / 67 / 69	71 / 71 / 74	71 / 71 / 76
	Sound pressure level	Extra high / High / Low	dB*	31.5 / 30.5 / 26.5	33 / 31 / 25.5	37.5 / 35.5 / 32.5	37.5 / 37 / 34.5	38.5 / 37.5 / 34.5
NORMAL VENTILATION	Input power	Extra high / High / Low	W	128 / 123 / 96	190 / 185 / 168	289 / 225 / 185	418 / 378 / 295	464 / 432 / 311
	Air flow rate	Extra high / High / Low	m³/h	250 / 250 / 190	350 / 350 / 240	500 / 500 / 440	800 / 800 / 630	1000 / 1000 / 700
	External static pressure	Extra high / High / Low	Pa	105 / 95 / 45	140 / 60 / 45	120 / 60 / 35	140 / 110 / 55	105 / 80 / 75
	Sound pressure level	Extra high / High / Low	dB*	31.5 / 30.5 / 26.5	33 / 31 / 25.5	38.5 / 38 / 32.5	37.5 / 37 / 34.5	40.5 / 39.5 / 36.5
Dimensions (W × D × H)			mm	882 x 599 x 270	1050 x 804 x 317	1090 x 904 x 317	1322 x 884 x 388	1322 x 1134 x 388
Weight			kg	29	49	57	71	83
Outlet duct diameter			mm	150	150	200	250	250
Operation range			°C	-10 ~ 40	-10 ~ 40	-10 ~ 40	-10 ~ 40	-10 ~ 40
Maximum humidity			%	85	85	85	85	85

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

Dimensions (Unit : mm)

Models: UTZ-BD025B / UTZ-BD035B / UTZ-BD050B / UTZ-BD080B / UTZ-BD100B

Maintenance opening
Maintenance space
Maintenance space

	UTZ-BD025B	UTZ-BD035B	UTZ-BD050B	UTZ-BD080B	UTZ-BD100B
A	810	978	1018	1250	1250
B	599	804	904	884	1134
C	315	580	640	428	678
D	142	112	132	228	228
E	600	600	600	600	600
F	655	860	960	940	1190
G	19	19	19	19	19
H	270	317	317	388	388
I	135	159	159	194	194
J	159	182	182	218	218
K	882	1050	1090	1322	1322
L	414	470	470	612	612
M	95	70	127	85	85
N	219	162	210	258	258
O	144	144	194	242	242

Outdoor Air Unit `Production by order`

Models
ARXH054GTAH `NEW`
ARXH072GTAH `NEW`
ARXH096GTAH `NEW`

The heat pump method efficiently processes the outdoor air for cooling and heating and supplies 100% fresh air into a room.

ARXH054GTAH

ARXH072GTAH

ARXH096GTAH

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

Outdoor Air 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, J-II, V-II, VR-II
   In J-II series alone, OAU is prohibit to connect under the ambient temperature of 40°C or higher.

VRF system
Duct
Outdoor Air Unit
Indoor unit
Heat Exchanger
Fan
Outdoor Air Unit
Fresh Air
Wired R.C.
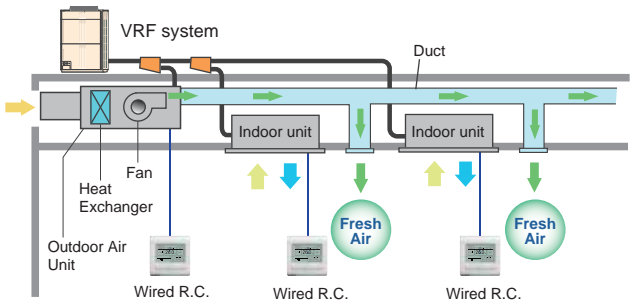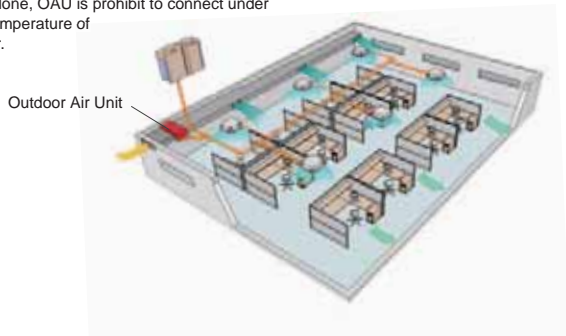
* Make sure the connected capacity is within the range of 50% to 100% of the outdoor unit capacity. In addition, if there are mixed connections with indoor units, make the Outdoor Air Unit connection capacity 30% or less of the outdoor unit capacity.

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.
- 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.

054 / 072 type   096 type

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)
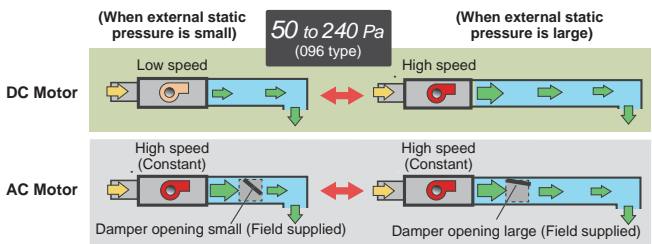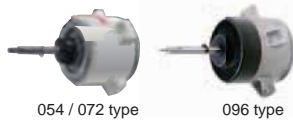
Top class compact design

- 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

`NEW`

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

Central Controller

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

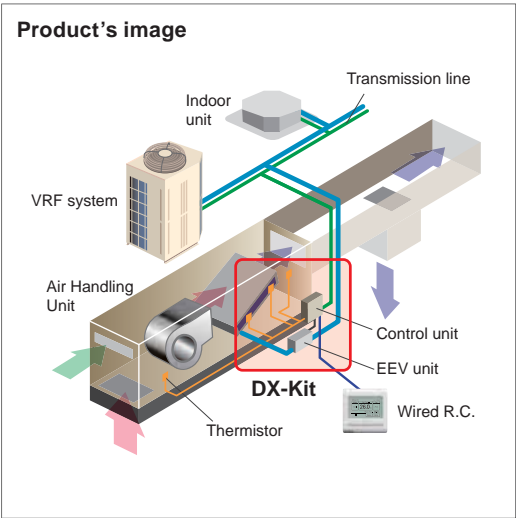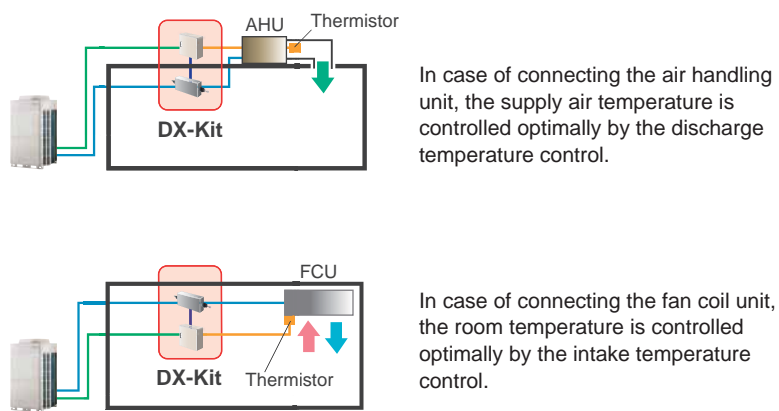* The temperature setting is discharged air temperature setting. The air volume is set to a constant speed.

Specifications

(Tentative)

Rated flow rate			**1000 m³/h**	**1500 m³/h**	**2000 m³/h**
Model No.			ARXH054GTAH	ARXH072GTAH	ARXH096GTAH
Power source			230/1/50	230/1/50	230/1/50
Capacity	Cooling	kW	14.0	22.4	28.0
	Heating		8.9	13.9	17.4
Input Power	Cooling / Heating	W	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 x W x D)		mm	425×1,367×572	425×1,367×572	450×1,583×700
Weight		kg	48	55	71
Connection Pipe Diameter (Small / Large)		mm	Ø9.52/Ø19.05	Ø12.70/Ø22.22	Ø12.70/Ø22.22
Operation 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)

Models: ARXH054GTAH / ARXH072GTAH / ARXH096GTAH

ARXH054GTAH
Side view (L) | Top view | Side view (R)
(Drain hose)
Front view

ARXH072GTAH
Side view (L) | Top view | Side view (R)
(Drain hose)
Front view

ARXH096GTAH
Side view (L) | Top view | Side view (R)
(Drain hose)
Front view

DX-Kit for air handling applications

Future release

Models
Control unit
UTY-VDGX NEW

EEV unit
UTP-VX30A NEW
UTP-VX60A NEW
UTP-VX90A NEW

This kit can connect the general-purpose air handling unit (AHU) and the fan coil unit (FCU) to the VRF system.
It enables VRF system to control the operation of both air conditioner and ventilation.

Control unit
UTY-VDGX

EEV unit
UTP-VX30A

EEV unit
UTP-VX60A
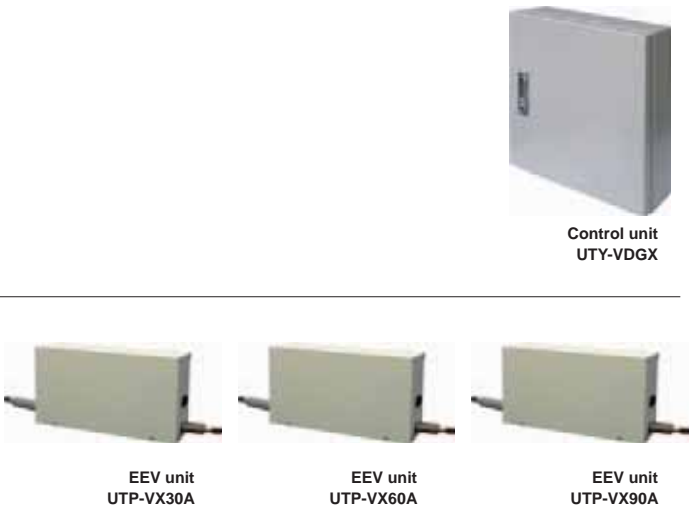
EEV unit
UTP-VX90A

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

AHU Thermistor

DX-Kit

In case of connecting the air handling unit, the supply air temperature is controlled optimally by the discharge temperature control.

FCU

DX-Kit Thermistor

In case of connecting the fan coil unit, the room temperature is controlled optimally by the intake temperature control.

Product's image

Indoor unit

Transmission line

VRF system

Air Handling Unit

Control unit

EEV unit

DX-Kit

Thermistor

Wired R.C.

Supports a wide range of capacity classes

- 2 EEV units can be connected in parallel and up to 20 HP (50 kW) large capacity units can be connected.
- Connectable capacity range: 5 kW to 50 kW

Piping

AHU or FCU
(40–50 kW class)

Wiring   Control unit
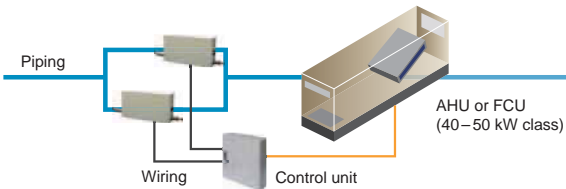
A variety of controls to match the application

- Central control using our VRF controllers or central management controllers

Transmission line

Interface (Option)

External I/O

Thermistor

DX-Kit

VRF Controller Modbus network

AHU or FCU
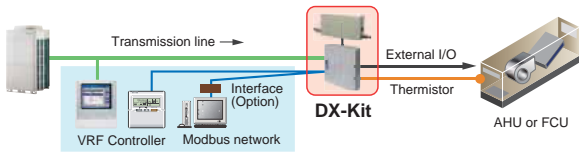
- Central control from external controllers

Transmission line

DDC*

Thermistor

External I/O

DX-Kit

External I/O

3rd party Controller

AHU or FCU

*DDC=Direct Digital Controller
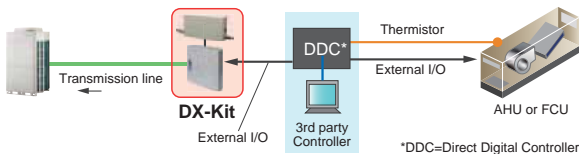
Functions Summary

Inputs

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

Outputs

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

Installation Limitation

- Connectable VRF series : J-IIS, J-II, V-II, VR-II
- 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 : 15 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

DX-KIt

Air Handling Unit

50%–100% of outdoor unit capacity

- Mixed connection

DX-KIt

Air Handling Unit

Within 30% of total capacity

50%–100% of outdoor unit capacity

Piping and wiring length

Air Handling Unit

EEV unit

Control unit

Max. piping length 5 m

Max. wiring length 15 m

Max. wiring length 15 m

Specifications

(Tentative)
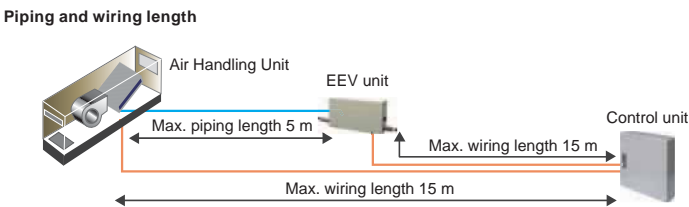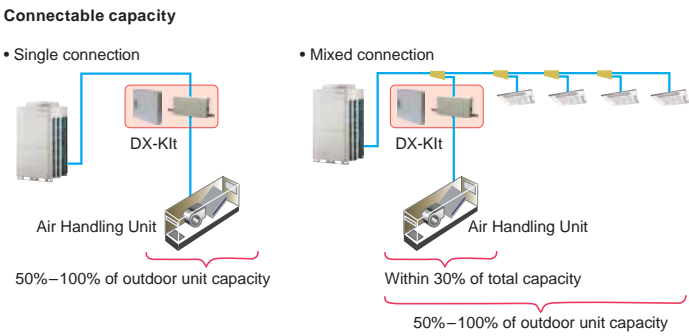
Connectable Capacity class			5.0kW	6.3kW	8.0kW	10.0kW	12.5kW	14.0kW	20.0kW	25.0kW	40.0kW	50.0kW
Capacity	Cooling	kW	5.6	6.3	8.0	10.0	12.5	14.0	22.4	25.0	40.0	50.4
	Heating		6.3	7.1	9.0	11.2	14.0	16.0	25.0	28.0	45.0	56.5

Control unit		UTY-VDGX
Power source	V/Ø/Hz	230 / 1 / 50
Dimensions (H × W × D)	mm	*

EEV unit		UTP-VX30A	UTP-VX60A	UTP-VX90A	UTP-VX90A×2
Connection pipe diameter (Liquid)	mm	Ø9.53	Ø12.7	Ø12.7	Ø12.7
Dimensions (H × W × D)	mm	*	*	*	*

*Data were not available at time of production.
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].
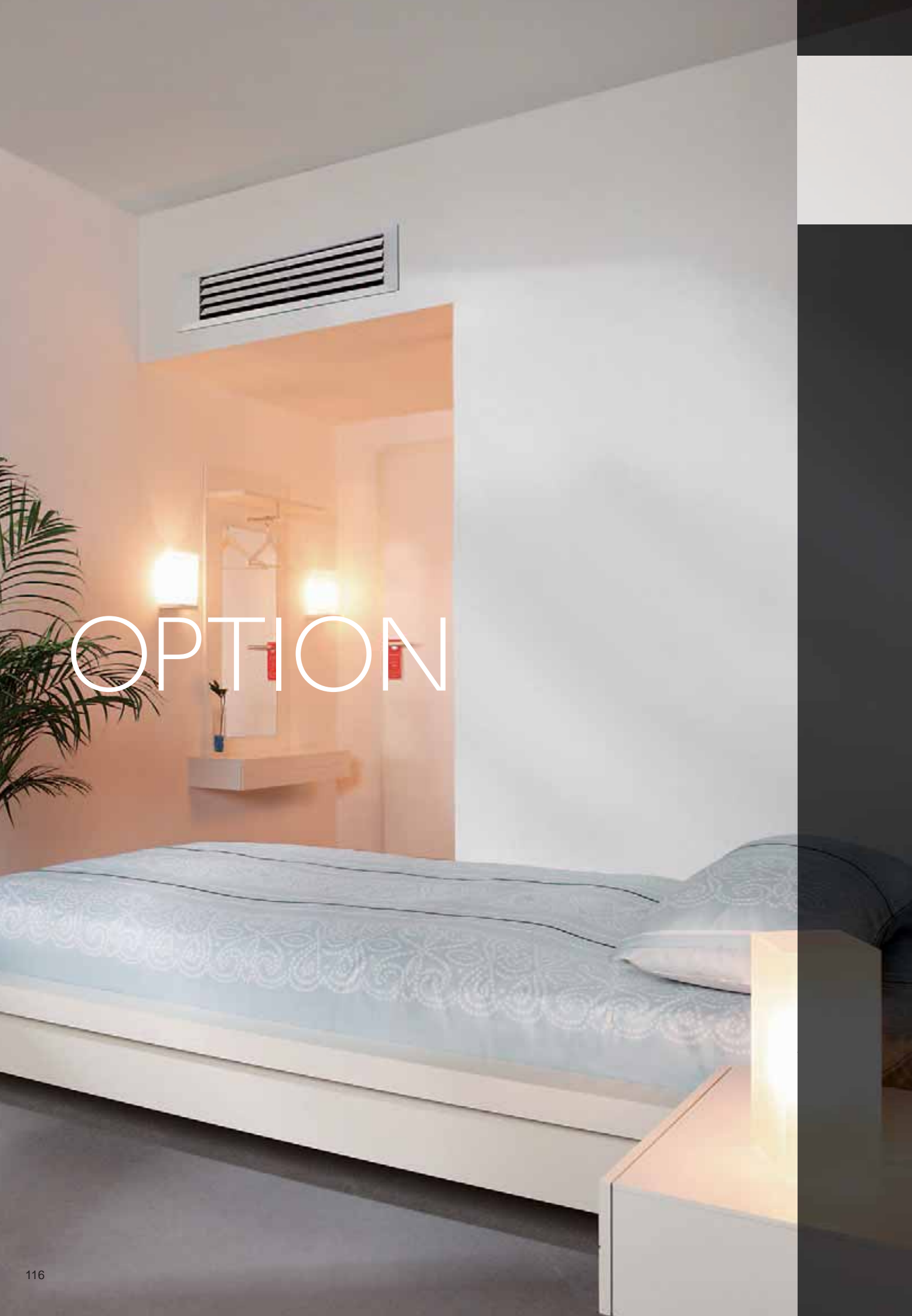
OPTION

Auto Louver Grille Kit (Option)

Models
UTD-GXSA-W
UTD-GXSB-W
UTD-GXSC-W

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

Closed louver

Opened 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

Wireles Remote
Controller

Dimensions

W2

Fitting Flame

Grille

H1   H2

W1   D1 D2
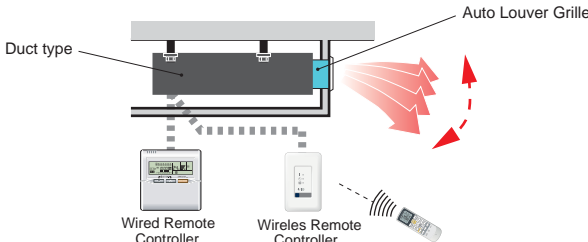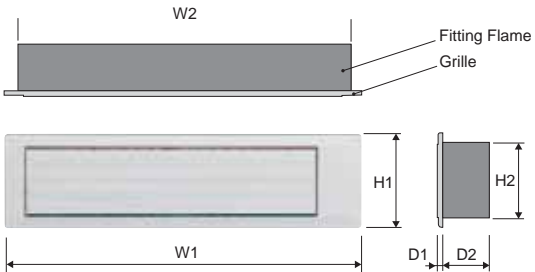
Unit: mm

Model Name	W1	W2	H1	H2	D1	D2
UTD-GXSA-W	683	645				
UTD-GXSB-W	883	845	180	148	9	84
UTD-GXSC-W	1,083	1,045				

Specifications

Model name			UTD-GXSA-W	UTD-GXSB-W	UTD-GXSC-W
Applicable Indoor Unit			ARXD04/07/09/12/14GALH	ARXD18GALH	ARXD24GALH
Power Supply			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)		
Net Dimension (H x W x D)		mm (inch)	180x683x(84+9) [7-3/32x26-7/8x(3-5/16+11/32)]	180x883x(84+9) [7-3/32x34-3/4x(3-5/16+11/32)]	180x1083x(84+9) [7-3/32x42-5/8x(3-5/16+11/32)]
Weight	Net	kg (lb.)	2.0 (4.4)	2.5 (5.6)	3.0 (6.7)
	Gross		3.0 (6.7)	3.5 (7.8)	4.0 (8.9)
Color			White		
Louver Motor			Stepping Motor		
Accessories			Fitting Flame, etc.		
Operation range	Cooling	°C (°F)	18 to 32 (64 to 90)		
		% RH	80% or less		
	Heating	°C (°F)	16 to 30 (60 to 88)		

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

Optional Parts

Connection Units

Separation Tube

Gas Pipe
Liquid Pipe
UTP-AX054A

Gas Pipe
Liquid Pipe
UTP-AX090A

Gas Pipe
Liquid Pipe
UTP-AX180A

Gas Pipe
Liquid Pipe
UTP-AX567A

Suction Gas Pipe
Discharge Gas Pipe
Liquid Pipe
UTP-BX090A

Suction Gas Pipe
Discharge Gas Pipe
Liquid Pipe
UTP-BX180A

Suction Gas Pipe
Discharge Gas Pipe
Liquid Pipe
UTP-BX567A

Header

Gas Pipe
Liquid Pipe
UTR-H0906L / UTR-H1806L

Gas Pipe
Liquid Pipe
UTR-H0908L / UTR-H1808L

Suction Gas Pipe
Discharge Gas Pipe
Liquid Pipe
UTP-J0906A / UTP-J1806A

Suction Gas Pipe
Discharge Gas Pipe
Liquid Pipe
UTP-J0908A / UTP-J1808A

Outdoor Unit Branch Kit

Gas Pipe
Liquid Pipe
UTP-CX567A

Suction Gas Pipe
Discharge Gas Pipe
Liquid Pipe
UTP-DX567A

EV Kit

For Compact Wall Mounted type

Model code ≦ 09 : UTR-EV09XB
Model code ≧ 12 : UTR-EV14XB

RB Unit

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

Multi type
UTP-RX04BH

Specifications

Separation Tube

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

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

Header

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

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

Outdoor unit Branch kit

Model name		UTP-CX567A (for V-II)	UTP-DX567A (for VR-II)
Number of Outdoor unit	2 outdoor units	1	
	3 outdoor units	2	

EV Kit

Model name	UTR-EV09XB	UTR-EV14XB
Application Model	AS*E04GACH AS*E07GACH AS*E09GACH	AS*E12GACH AS*E14GACH

AS* : ASY(FUJITSU), ASH(GENERAL)

RB Unit

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

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

Optional Parts

Controllers

For Individual Control

Wired Remote Controller (Touch Panel)
UTY-RNR*

Wired Remote Controller
NEW UTY-RLR*

Simple Remote Controller
UTY-RSK*
With operation mode

Simple Remote Controller
UTY-RHK*
Without operation mode

Wireless Remote Controller
UTY-LNH*

IR Receiver Unit
UTB-YWC
For All Duct type

IR Receiver Unit
UTY-LRH*B1
For Cassette type

R*: RY (FUJITSU), RG (GENERAL)   K*: KY (FUJITSU), KG (GENERAL)   H*: HY (FUJITSU), HG (GENERAL)   G*: GY (FUJITSU), GG (GENERAL)

For Centralized Control

Group Remote Controller
UTY-CGG*

Central Remote Controller
UTY-DCG*

Touch Panel Controller
UTY-DTG*

System Controller Lite Software
UTY-ALGX

System Controller Software
UTY-APGX

G*: GY (FUJITSU), GG (GENERAL)

Convertors / Adaptors

For External device

BACnet® Gateway Software
UTY-ABGX

DVD-ROM (Software)   Software Protection Key

Network Convertor for LONWORKS®
UTY-VLGX

KNX® Interface
FJ-RC-KNX-1i

MODBUS® Interface
FJ-RC-MBS-1

Wireless LAN Interface
FJ-RC-WIFI-1

External Switch Controller
UTY-TEKX

For System expansion

Network Convertor
UTY-VGGXZ1

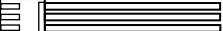**Signal Amplifier**
UTY-VSGXZ1
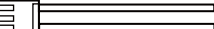
Panels

For Cassette type

Cassette Grille
UTG-UF*C-W
For Compact Cassette type

Cassette Grille
UTG-UG*A-W
For Cassette type

F*: FY(FUJITSU), FG(GENERAL)   G*: GY(FUJITSU), GG(GENERAL)

Option

Optional Parts
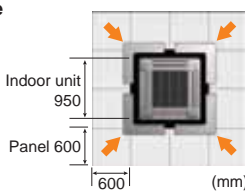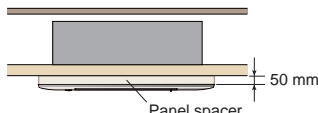
Others

Communication system: External Connect Kit

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

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

Function list

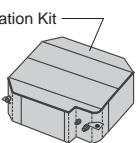|		Indoor unit	Outdoor unit	Controller — Central Remote Controller	Controller — Touch Panel Controller	Other — RB Unit
Input	Operation / Stop	● UTY-XWZXZD ○ UTY-XWZXZB	——	——	——	——
	All On / All Off	——	——	● UTY-XWZXZ7 ○ UTY-XWZXZ8	——	——
	Batch Stop	——	● UTY-XWZXZ6	——	——	——
	Forced Stop	● UTY-XWZXZD ○ UTY-XWZXZB	——	——	——	——
	Emergency Stop	● UTY-XWZXZD ○ UTY-XWZXZB	● UTY-XWZXZ6	● UTY-XWZXZ7 ○ UTY-XWZXZ8	——	——
	Forced Thermostat off	● UTY-XWZXZE ○ UTY-XWZXZ7	——	——	——	——
	Low Noise Mode Operation	——	● UTY-XWZXZ6	——	——	——
	Cooling / Heating Priority	——	● UTY-XWZXZ6*1	——	——	● UTY-XWZXZ6 ○ UTY-XWZXZB
	"Outdoor Unit Operation Peak Control"	——	● UTY-XWZXZ6	——	——	——
	"Power Usage Information from Electricity Meter"	——	● UTY-XWZXZF	——	——	——
Output	Operation Status	● UTY-XWZXZC	○ UTY-XWZXZ6	○ UTY-XWZXZA	○ UTY-XWZXZA	——
	Error Status	● UTY-XWZXZC	○ UTY-XWZXZ6	○ UTY-XWZXZA	○ UTY-XWZXZA	——
	Indoor Unit Fun Operation Status	● UTY-XWZXZC	——	——	——	——
	Auxiliary Heater Output	● UTY-XWZXZC*2	——	——	——	——
	Base Heater	——	● UTY-XWZXZ9	——	——	——

*1. Heat Pump type only   *2. Duct type only

● : Dry Contact   ○ : Apply Voltage

For Duct type

Flange (Round) UTD-RF204	Flange (Square) UTD-SF045T	Remote Sensor Unit UTY-XSZX
For Medium Static Pressure Duct type / Ceiling type	**For Medium Static Pressure Duct type**	**For All Duct type** New amenity space can be offered by installing the Remote sensor.

Long-Life Filter UTD-LF25NA UTD-LF60KA	Auto Louver Grille Kit UTD-GXSA-W (for ARXD04/07/09/12/14GALH) UTD-GXSB-W (for ARXD18GALH) UTD-GXSC-W (for ARXD24GALH)	Drain Pump Unit UTZ-PX1BBA
For Medium Static Pressure Duct type **For High Static Pressure Duct type**	**For Slim Duct type**	**For Low Static Pressure Duct type** UTZ-PX1NBA **For Medium Static Pressure Duct type**

For Cassette type

Wide Panel UTG-AGYA-W	Panel Spacer UTG-BGYA-W	Insulation Kit for High Humidity UTZ-KXGA **For Cassette type** UTZ-KXGB **For Slim Cassette type** UTZ-KXGC **For Compact Cassette type**
For Cassette type Indoor unit 950 Panel 600 600 (mm)	**For Cassette type** 50 mm Panel spacer	Insulation Kit

Fresh Air Intake Kit UTZ-VXAA UTZ-VXGA	Air Outlet Shutter Plate UTR-YDZB	Air Outlet Shutter Plate UTR-YDZC
For Compact Cassette type **For Cassette type**	**For Compact Cassette type** Shuts the air outlet when only using as 3 blow out.	**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

Applications

There are many applications for Airstage VRF systems including such markets as education, healthcare, hospitality, utilities, office buildings, apartment buildings, condominiums, and restaurants.

Note: VRF Heat Recovery system provides simultaneous Heating and Cooling. System operates both Heating mode and Cooling mode.

Medical and Healthcare Facilities

VRF gives each patient individual control of their room temperature. Central control ensures that air conditioning is only delivered to rooms that are occupied.

INDIVIDUAL CONTROL
VRF gives each patient or each room individual control of their room temperature.

CLEAN AIR
VRF systems can use ductless indoor units reducing the time and expense of maintaining a HVAC system and eliminating the risk of duct-borne molds and bacteria.

CENTRAL CONTROL
Powerful central control ensures that heating and cooling are delivered to rooms that are occupied. This provides enormous savings for facilities with revolving occupancy.

MAINTENANCE
Since each refrigerant circuit has the ability to operate independently, a properly designed VRF system can add a layer of security to a HVAC system. If an individual unit needs to be shut down for repairs, the rest of the system can operate normally.

FRESH AIR
VRF systems can be integrated with fresh air systems to ensure that air quality meets the needs of the occupants. VRF provides the most comfortable environment for all occupants.

Educational and Religious Facilities

In a school, an investment in VRF is an investment in your community. VRF is more efficient than conventional systems, providing financial savings to the school for many years. Also, a quiet VRF system creates a much better learning environment for students.

HEALTHIER FACILITY
VRF systems can be integrated with fresh air systems to ensure that air quality meets the needs of the teachers and students.

CENTRAL CONTROL
Powerful central control can monitor and control individual schools, or an entire college campus, from a single location.

ZONING
Save energy by heating and cooling the classrooms that are occupied. Set temperature can pre-programmed to meet the energy budget for the school district.

COMFORT
VRF helps achieve a healthier, quieter, more comfortable and productive learning environment.

Applications

Multi-Tenant Dwellings

VRF improves the quality of multi-tenant buildings while reducing tenant complaints. High quality VRF systems let owners save on energy costs and reduced maintenance costs. With VRF, each tenant has individual control over the temperature setting for the comfort of their home.

QUALITY
By delivering quiet, efficient heating and cooling, VRF improves the quality of multitenant buildings and reduces tenant complaints.

ENERGY SAVINGS
Efficient VRF systems reduce the total energy costs for buildings over most other options. High quality systems reduce maintenance and service costs.

INDIVIDUAL BILLING
Using the Energy Charge Apportionment feature, landlords can easily bill each tenant for the percentage of total energy the individual tenant consumes.

INDIVIDUAL COMFORT
With VRF, each tenant can have their own controller to set their room temperature for their maximum comfort.

CONVENIENT CENTRAL CONTROL
Landlord can monitor and control all indoor units from a central location. Landlord can even troubleshoot or solve tenant complaints remotely.

QUIET
Indoor units ensures a quiet, comfortable living environment for all tenants.

Office Buildings and Retail Spaces

VRF provides a comfortable work environment for all employees. Zoning ensures that energy is only used to cool/heat occupied offices. Quiet indoor units and precise temperature control creates the most comfortable and productive work environment.

QUIET
Indoor units and outdoor units creates a pleasant work environment and reduces noise complaints.

ZONING
Save energy by heating and cooling occupied offices. No more hot/cold calls since each zone or tenant has individual control of the set temperature..

CONTROL
Powerful controls options can manage and monitor entire building from a single location.

EASE OF INSTALLATION
Can be installed in occupied office spaces with minimal disruption to occupants. Can even be installed without disrupting the existing HVAC system.

FLEXIBLE
As tenants and office configurations change, VRF system configurations can also be modified (within original design constraints) to meet the needs of new tenants.

COMFORT
VRF provides a comfortable work environment for all employees. Quiet indoor units and precise temperature control creates the most comfortable and productive work environment.