







FUJITSU GENERAL LIMITED

# CREATION OF COMFORT

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

## For **SMALL** BUILDING



Heat Pump type for heating or cooling operation



**4 HP - 6 HP 6 Models** • Single phase: 4 HP to 6 HP/3 models

• 3 phase: 4 HP to 6 HP/3 models



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# For **LARGE** BUILDING



Heat Pump Modular type for heating or cooling operation

#### 

Production by order

#### 8 HP - 54 HP 39 Models

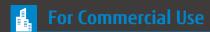
- Space saving combination: 8 HP to 54 HP/24 models
- Energy efficiency combination: 16 HP to 46 HP/15 models

P50~

# OUR HISTORY

Overseas Air Conditioning Business since 1971 VRF Business since 2001

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



2001 10HP / Heat recovery & Heat pump 2003

& Cooling

2003 10HP / Heat recovery 8,10HP / Heat pump



AIRSTAGE S



2009 High efficiency and Compact design model Extensive lineup from 8HP to 48HP in 2HP increment / Heat pump



AIRSTAGE V-∏

2012 High efficiency and Compact design model 8 to 48HP / Heat Recovery



AIRSTAGE  $V\!R$ - $I\!I$ 

### For Residential & Light Commercial Use

<u>2007</u>

8 to 42HP / Heat pump

2004 Small VRF series is released. 6HP / Heat





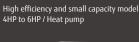
∕AIRSTAGE<sup>°</sup>J-∏

2014 High efficiency and compact design model 4HP to 6HP / Heat pump



Airstage J-∏S

2016





*∕*AIRSTAGE<sup>°</sup> *J*-∭

ARSTAGE<sup>™</sup> History

AIRSTAGE J

1936 Established as Yaou Shouten Ltd. - 2016

1936 Established as Yaou Shouten Ltd.

1971 Air conditioner exports to Middle East.



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.





Tropical spec model High efficiency and compact design model 4HP to 6HP / Heat pump



#### *∕*AIRSTAGE<sup>™</sup>J-ⅢL

High efficiency and compact design model 10HP to 12HP / Heat pump



# 2017

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

2013

Tropical spec model

Extensive lineup from 8HP to 42HP in 2HP increment / Heat pump

∕AIRSTAGE [∕-]] 🌆

2015

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

∕AIRSTAGE ୖV-Ⅲ



#### **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.

2016

Tropical spec model

Extensive lineup from 8HP to 54HP in 2HP increment / Heat pump



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





# WORLD WIDE LOCATIONS

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



**JAPAN Head Office** 

13 Overseas Sales Companies



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



Fujitsu General (Taiwan) Co., Ltd.



Fujitsu General (EURO) GmbH



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



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



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



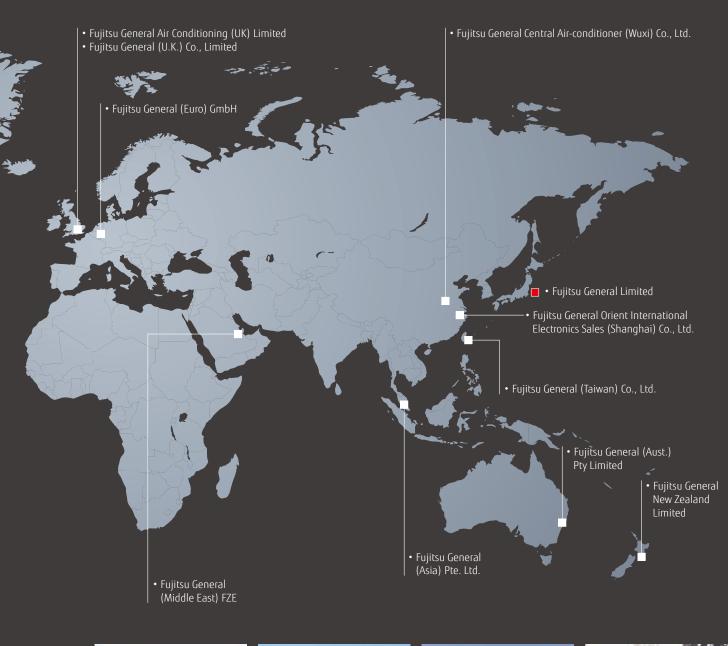
Fujitsu General Air Conditioning (UK) Limited

 Air conditioner solution center "THE AIRSTAGE" in Manhattan, A

u General <mark>America</mark>

• Fujitsu General Do Brasil Ltda.

6 **GENEROL** 





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



Fujitsu General Do Brasil Ltda.(Brasil)



Fujitsu General New Zealand Ltd. (New Zealand)

Fujitsu General America, Inc.





FUJITSU GENERAL SOLUTION CENTER "THE AIRSTAGE"

**∂**GENER∩L 7

# **GLOBAL BUSINESS ACTIVITIES**

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

#### North/South America



AHR Expo





Distributor meeting



## Middle East



Distributor meeti

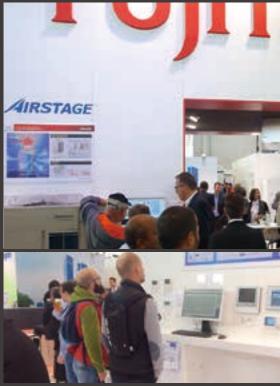


Technical seminar



Training for dealers

#### Еигоре



HVAC trade show in Europe countries



Presentation & training

#### International authoritative design awards



"Dealer Design Awards" of "the NEWS"





HVAC & PLUMBING) in



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





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







### Oceania









Service & Maintenance





New Product Presentation Meeting, Sales store awards







reddot design award winner 2012



Awards "Most Efficient Air



Satisfied Customers Award



Engineering Luban Prize



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

# **PROJECT REFERENCE**

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





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







#### For LIGHT COMMERCIAL

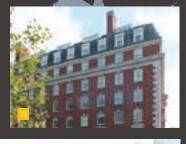
Shop in Asia
 Restaurant in Middle East
 Office in Europe
 Hotel in Oceania
 School in U.S.A.
 Hospital in Asia





#### For COMMERCIAL

7 Office in Europe8 Office in Europe9 Hotel in Asia









#### For RESIDENTIAL

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

# **GLOBAL DEVELOPMENT & PRODUCTION BASES**

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







R&D Center in Fujitsu General (Shanghai)



R&D Center in Fujitsu General Engineering (Thailand)



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



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



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# **HIGH QUALITY DEVELOPMENT & PRODUCTION**

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

## Advanced Research Facility and Equipment

Performance Testing



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



Calorimeter

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



**Silent Room** Measure the operating

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

Reliability Testing



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



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



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

Transportation & Handling



Compressibility testing



Vibration testing

## Testing Laboratory

#### Fujitsu General EMC Laboratory Limited



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

Objective is to confirm oil circulation of compressor for reliability



# FACILITIES



## High Product Quality Assurance

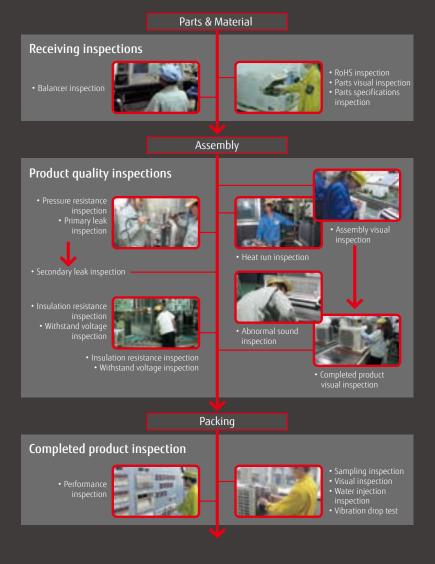
All Fujitsu General factories have acquired ISO 9001, and have built a quality control system common around the world. High quality products are offered to all over the world based on stringent quality inspections.

#### **Receiving inspection**

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

## Stringent product quality inspection

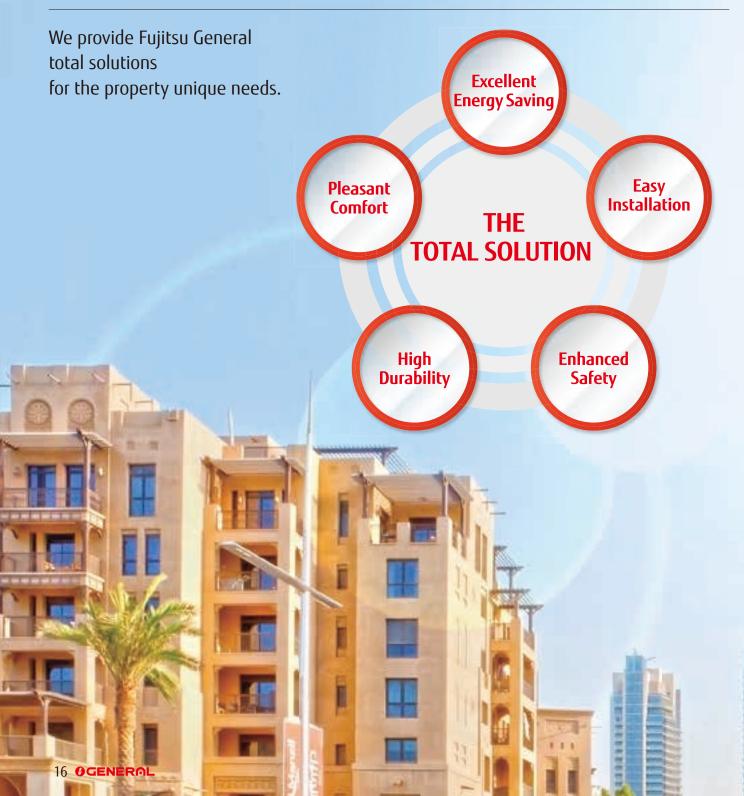
Stringent quality inspection is carried out at all production processes. High quality is maintained by stringent checks by inspectors and repetitive inspection.



# **OUR SOLUTION FOR ALL**

Fujitsu General provides the best solutions suitable for properties.

## Solution Point



# PROPERTIES

## Target Property



#### LIGHT COMMERCIAL

For Small offices, Hotels, School, Shops and Restaurant etc.

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





#### COMMERCIAL

For Large Building

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

**OGENERAL** 17

### **Light Commercial**

# **APARTMENT, VILLA**

Fujitsu General offers the small VRF system to match from large living rooms to bedrooms for apartment and villa.



## **APARTMENT**





## Small space air conditioning

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



Mini Duct

Medium Static Pressure Duct

VILLA

### Large space air conditioning in a family гоот

High Static Pressure Duct



# Small space air conditioning

Various ranges of low capacity indoor units to suit small space such as a guest room



Compact Wall Mounted

# Comfortable dining air conditioning with powerful airflow



Large Wall Mounted

# Light Commercial

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



# Large space air conditioning in the reception and lobby

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



# Simple Remote Controller with sophisticated design

Suitable for hotels or offices as it is easily operated with no complex functions.

Large LCD screen & simple operation buttons White colored backlight on monitor enable easy operation in dark.





### Ventilation of the whole hotel supported

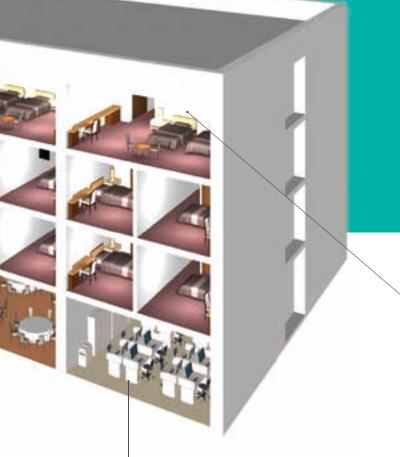
Outdoor air processing is essential in hotel spaces with a high degree of airtightness. The DX-Kit can link up with air conditioners to ensure sufficient ventilation.

This system can be expanded.



EEV unit

Control unit



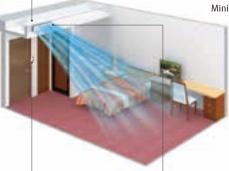


### Guest room air conditioning with excellent comfort, energy saving and easy installation

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







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



Use of an external connect switch

#### Comfortable airflow that switches up and down air directions

The Auto Louver Grille Kit achieves comfortable airflow by adjusting the air direction.



Auto Louver Grille Kit



System controller

### **Centralized** control of air conditioning in shared spaces

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



# Light Commercial SCHOOL

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





Touch Panel Controller UTY-DTGYZ1

### New centralized remote controller with improved operability

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



# Control and monitoring

LAN

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









Mini Duct





Wall Mounted

## Various indoor units

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

Cassette Circular Flow

## Comfortable room air conditioning without airflow feeling

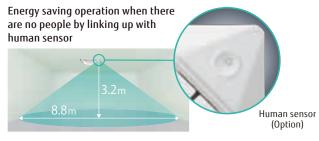
Circular Airflow Cassette blows out in all directions without temperature unevenness



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







## **Light Commercial**

# **RESTAURANT, SHOPS**

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



## RESTAURANT



Cassette Circular Flow Series For ambiences with dim lightings



#### Appropriate air conditioning in the atrium space

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

High Static Pressure Duct





# Color variations by two panels

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





## Uniform temperature air conditioning

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



# Commercial LARGE BUILDING

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





# Individual air conditioning system for large buildings

VRF series lineup to meet various needs such as energy saving-orientated models and models compatible with a high outdoor air temperature of  $52^{\circ}C$ 





#### 8 HP - 54 HP 39 Models

• Space saving combination: 8 HP to 54 HP/24 models

• Energy efficiency combination: 16 HP to 46 HP/ 15 models

# Centralized control of both air conditioning and lighting

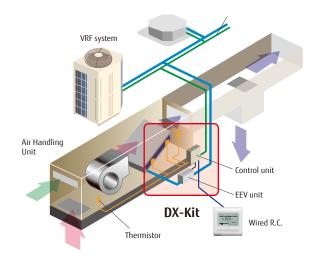
It is possible to perform centralized control to stop the operation of lighting and ventilation equipment in addition to air conditioner. This is useful in energy saving management over the whole building.





### Ventilation(AHU) linked with **VRF** system

Fujitsu General's DX-Kit enable other manufacture's air handling units (AHU) to be incorporated into a Fujitsu VRF system. Possible to control comfortable air conditioning and ventilation.

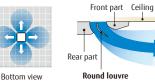


## 4-way Flow Cassette



#### 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.



Round louvre

#### High ceiling mode This cassette can be installed up to a height of 4.2m (36/45/54). 1m Standard mode 3.2m 2m High ceiling mode 4.2m 3m 4m

## Difference in height Up to 110 m

The height difference between the outdoor unit and the indoor unit is usually 50 m for the V-III series, but by installing the pressure sensor kit it is possible to expand it to 110 m. (\*This product can be used connected only V-III tropical series.)



Pressure Sensor Kit

# AIRSTAGE™ CORE TECHNOLOGY

AIRSTAGE<sup>™</sup> 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 HIGH RELIABILITY DESIGN FLEXIBILITY MORE COMFORT EASY INSTALLATION EASY SERVICE & MAINTENANCE

AIRSTAGE

# HIGH ENERGY EFFICIENCY

## Highly Energy Efficiency

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

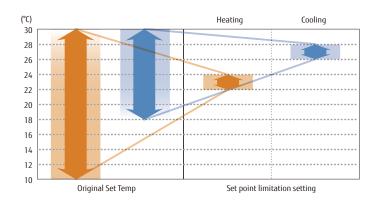




## **Operation Performance is Efficiently Controlled.**

## Room temperature set point limitation

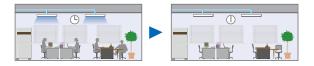
The minimum and maximum temperature ranges can be limited, which provide further energy saving while maintaining the comfort of the occupants.

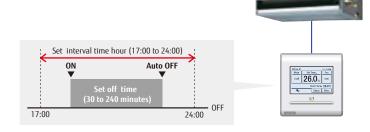


#### Auto-off timer

New wired remote controller is equipped with an OFF timer function that automatically stops operation when a fixed time has elapsed from the start of operation. This prevents waste of energy.

Furthermore a new wired remote controller can set up the interval of time in case operation stops.





#### Energy saving management

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

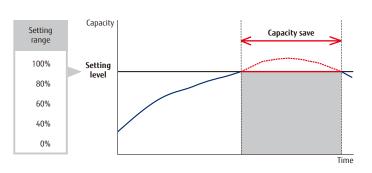


System Controller

(Screen image is Energy manager software(Option))

#### Capacity save operation

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

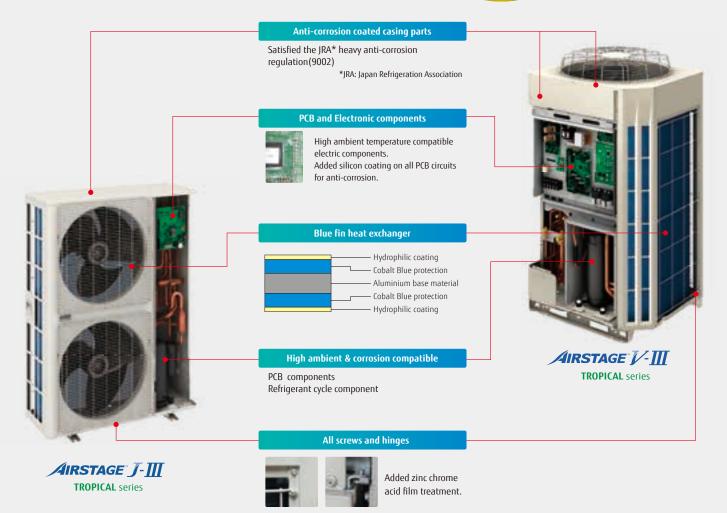




# **HIGH RELIABILITY**

## Heavy anti-corrosion treatment design





#### Take special notice of the following in order to enhance the anti-corrosion effect.

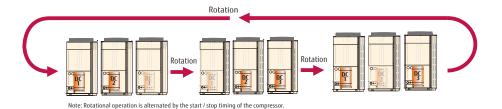
• Keep the unit free of direct sea breeze as much as possible by installing a windshield plate or placing the unit on the leeward side of the building.

- Arrange the unit so that any salt attached to the enclosure can be washed away by rain.
  Any water left on the bottom of the outdoor unit can increase corrosion. To prevent interference with the water drain, be careful of the tilting angle of the unit.
- Wash the enclosure regularly with water to remove any salt attached.
- Repair any damages on the unit (i.e. scratches) caused during installation or maintenance.
  Check the condition of the unit regularly. (If necessary, retreat the unit for anti-corrosion or make parts replacements.)

· Make sure the drainage is secured at the foundation.

#### Life-extending operation

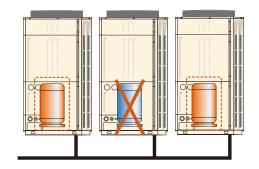
Outdoor unit rotational operation The compressor starting order is rotated so that the running time is shared.



#### **Backup operation**

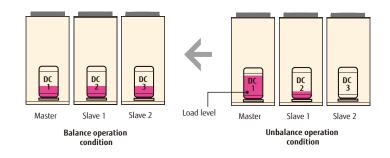
If one compressor fails, backup operation will be performed by the remaining compressors\*.

NOTE: Need to change the Outdoor unit setting in order to perform the Backup Operation



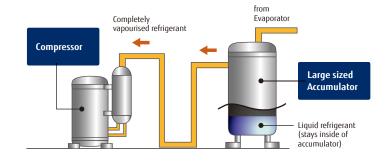
#### Advanced refrigerant control

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



#### Liquid flow back protection

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



#### **Oil Recovery operation**

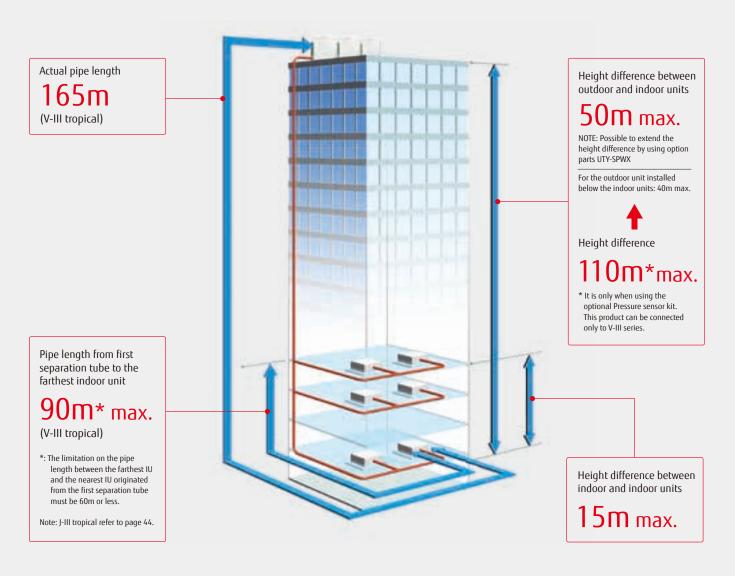
Periodic oil recovery operation is done automatically in order to feed back oil from the indoor unit to compressor.

# DESIGN FLEXIBILITY

## Overall piping length 1,000m

(For V-III tropical)

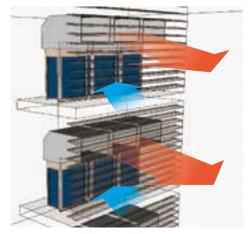
Total pipe length **1,000m** max.



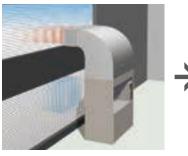
#### High static pressure

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

## Powerful discharge air prevents a short-circuit.



Previous model



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

V-III tropical

#### High capacity connection





**82** Pa

(V-III tropical)

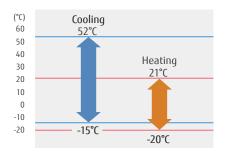
Connectable indoor unit capacity range 50% to 130% Connectable indoor unit number

up to 9

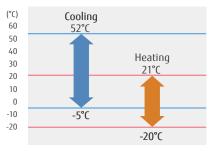
#### High ambient operation design 🥡

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

#### AIRSTAGE V-III TROPICAL series



AIRSTAGE J- TROPICAL series



\*. Note : When a multiple outdoor unit connection is used, operating range is from -5°C to 52°C in cooling.

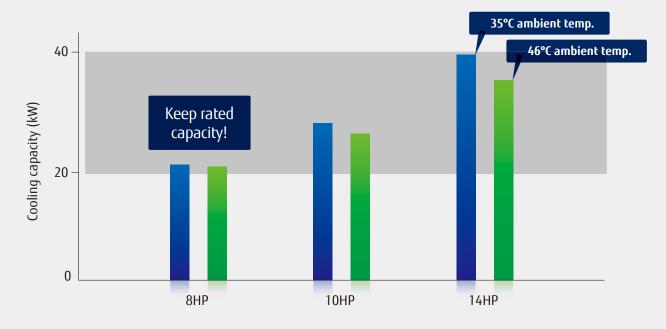
# **MORE COMFORT**



## Powerful cooling capacity design



High cooling power has been realized by adopting large heat exchanger, high capacity DC inverter compressor, sub-cooler equipment, etc.



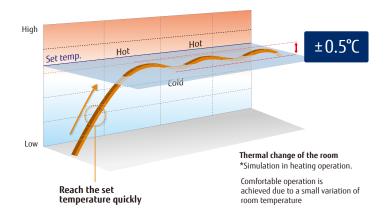
## Touch Panel Wired Remote Controller

The new wired remote controller has an easy to use LCD touch panel. This new controller has a back light function and can easily control the air conditioner which provides a better energy saving operation of the air conditioner.

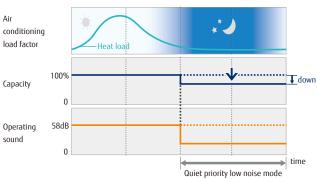


# Precision refrigerant flow control

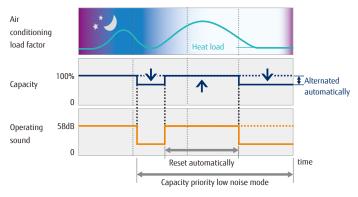
Precise and smooth refrigerant flow control is achieved by using a DC Inverter control in conjunction with individual indoor unit electronic expansion valve control. This allows high precision comfortable temperature control of  $\pm 0.5^{\circ}$ C.



#### Quiet priority setting



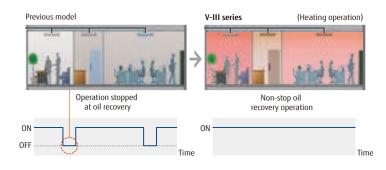




#### Non-stop oil recovery operation

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.



#### **∂GENER∩L** 37

# 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.

# EASY INSTALLATION

# Easily transported

**Easily craned using lifting belt hooks** Design of outdoor unit allows for lifting straps to be used



**Transporting by forklift** Transport with forklift is possible.

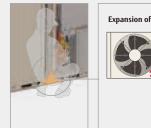


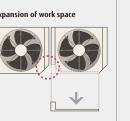
Can be transported in a small elevator



# Easy access

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



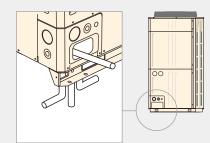




Reduced installation intervals by front access

# Flexible piping connection

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

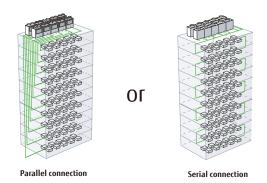




Flexible installation by 4 way pipe direction

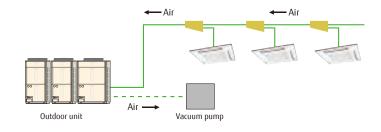
# Simple wiring work

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



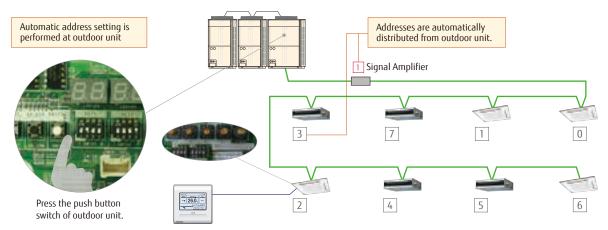
# Easy evacuation - using vacuum mode function

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



# Automatic address setting

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



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

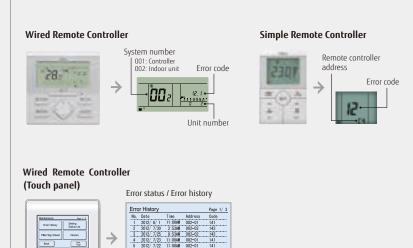


#### Error status can be checked easily by outdoor unit display

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

Back

An error code is displayed on a liquid crystal screen.

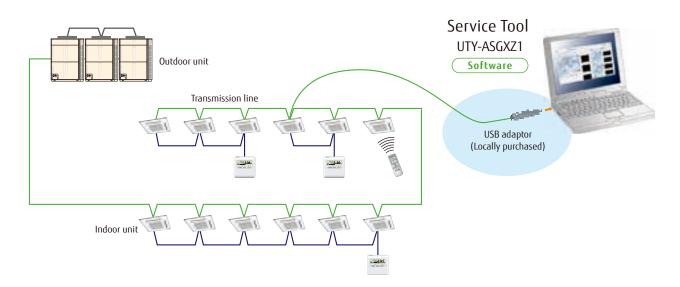




# Error diagnosis by Service Tool

#### **Connection to Service Tool**

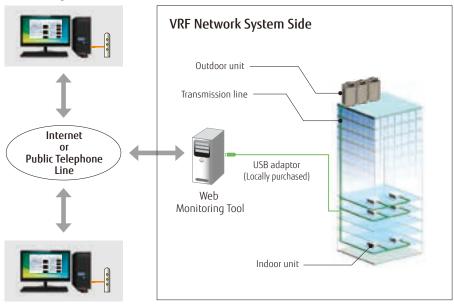
- Detail operation status and recent error history can be checked and analyzed by using the Service Tool.
- Last 5 min. operation memory can be also be recorded.



### **Remote monitoring**

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

**Monitoring Side** 





# AIRSTAGE™ SERIES

# The AIRSTAGE series (V-III tropical & J-III tropical) has a total of 45 models to meet the building Air-conditioning requirement



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

AIRSTAGE™ LINE-UP HEAT PUMP TYPE AIRSTAGE J-III TROPICAL Series HEAT PUMP TYPE AIRSTAGE V-III TROPICAL Series



# AIRSTAGE<sup>™</sup> LINE-UP

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

# Outdoor units range

_														
Н	P		4	5	6	8	10	12	14	16	18	20	22	24
В	STU/h		36,000	45,000	54,000	72,000	90,000	108,000	126,000	144,000	162,000	180,000	198,000	216,000
Т	on		3.0	3.8	4.5	6.0	7.5	9.0	10.5	12.0	13.5	15.0	16.5	18.0
-	AIRSTAGE J- III TROPICAL series Heat Pump	High Efficiency (Single phase)	AJH040LBTAHN	AJH045LBTAHN	AJH054LBTAHN									
		High Efficiency (3 phase)	AJH040LETAHN	AJH045LETAHN	AJH054LETAHN									
-	AIRSTAGE V-III TROPICAL series Heat Pump	Space saving				Ajho72LNTCH	Ajho9olntch	Ajh108LNTCH	Ajh126LNTCH	AjH144LNTCH	Ajh162LNTCH	Ajh180LNTCH	Ajh198LNTCH	Ajh216LNTCH
		High Efficiency								Ajh144LNTCHH	AJH162LNTCHH	Ajh180LNTCHH		AjH216LNTCHH



2	ŝ	28	30	32	34	36	38	40	42	44	46	48	50	52	54
234	000	252,000	270,000	288,000	306,000	324,000	342,000	360,000	378,000	396,000	414,000	432,000	450,000	468,000	486,000
19	.5	21.0	22.5	24.0	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	37.5	39.0	40.5
B	3	29	22	22	22	22	811		889	885	889	888	888	888	
12			100100						10600		DOD:		R R R		TRUCK ON
AJH234	LNTCH	AJH252LNTCH	AJH270LNTCH	AJH288LNTCH	AJH306LNTCH	AJH324LNTCH	AJH342LNTCH	AJH360LNTCH	AJH378LNTCH	AJH396LNTCH	AJH414LNTCH	AJH432LNTCH	AJH450LNTCH	AJH468LNTCH	AJH486LNTCH
3	11		200	331	222	333	222	333	222	333	222				
AJH234	NTCHH	AJH252LNTCHH	AJH270LNTCHH	AJH288LNTCHH	AJH306LNTCHH	AJH324LNTCHH	AJH342LNTCHH	AJH360LNTCHH	AJH378LNTCHH	AJH396LNTCHH	AJH414LNTCHH				



# HEAT PUMP TYPE **AIRSTAGE** J- M Copiecation TROPICAL 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**

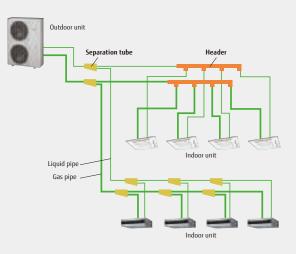
Heat pump inverter control is used to achieve an efficient cooling and heating operation in any indoor unit combination.

# 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 smalland medium-size buildings. Multiple indoor units of various capacities and types can be connected.

#### System configuration example

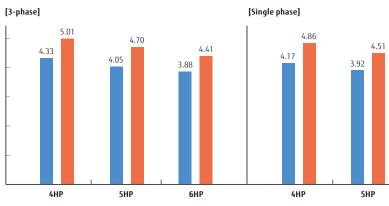
- This system is used for small and medium-sized buildings. 1 refrigerant system is used for each outdoor unit.
- Connection of multiple indoor units using separation tubes and headers.

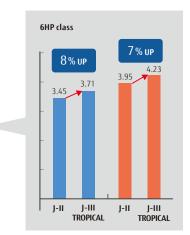


# **Energy efficiency**

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

#### High EER / COP





EER / COP

4.23

3.71

6HP

# Advanced high efficiency technology



#### Large propeller fan

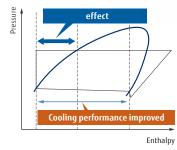
High performance and low noise realized by large propeller and optimization of angle.

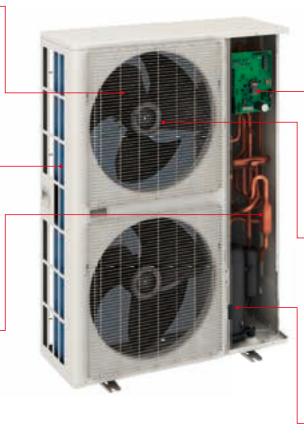


Large heat exchanger Heat exchange performance is substantially improved by mounting of 3-row large heat exchanger.



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





# All Inverter



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



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



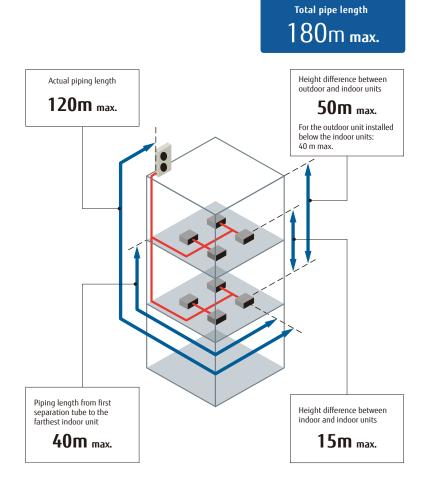
**INVERTER Compressor** Efficiency in all load regions is good. Especially good performance from low to medium at normal operation.

Made in JAPAN

# Long piping capability

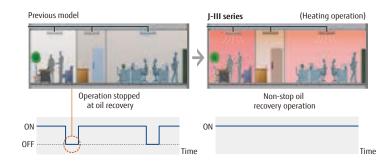
Our advanced refrigerant control technology allows us to achieve a total refrigerant piping length of 180m. This opens up new possibilities in system design.





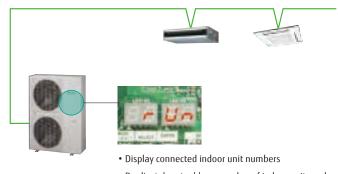
### Non-stop oil recovery operation

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



### **Easier Installation**

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



• Duplicately set address number of indoor unit can be displayed

#### 48 **GENERAL**



#### **Specifications**

		HP	4	5	6	4	5	6
Rating Capacity rar	ige	Btu/h	36,000	45,000	54,000	36,000	45,000	54,000
		Ton	3.0	3.8	4.5	3.0	3.8	4.5
Model name			AJH040LBTAHN	AJH045LBTAHN	AJH054LBTAHN	AJH040LETAHN	AJH045LETAHN	AJH054LETAHN
Maximum Connecta	able Indoor Unit		1-7	1-8	1-9	1-7	1-8	1-9
Power source			(	Single-phase, ~230V, 50H	7		3-phase, ~400V, 50Hz	
	Cooling(T1/T3)		12.1/10.3	14.0/11.1	15.5/11.5	12.1/10.3	14.0/11.1	15.5/11.5
	Heating	kW	13.6	16.0	18.0	13.6	16.0	18.0
Capacity	Cooling(T1/T3)	<b>D</b> 1 <b>1</b>	41,000/35,000	47,500/37,800	52,500/39,000	41,000/35,000	47,500/37,800	52,500/39,000
	Heating	Btu/h	46,000	54,500	61,000	46,000	54,500	61,000
	Cooling(T1/T3)	kW	2.90/3.47	3.57/3.77	4.18/3.92	2.79/3.30	3.46/3.57	3.99/3.71
Input power Heating		KW	2.80	3.55	4.26	2.71	3.40	4.08
Current	Cooling(T1/T3)		12.7/15.2	15.7/16.6	18.4/17.2	5.2/6.2	6.6/6.6	7.7/6.9
Current	Heating	A	12.3	15.6	18.7	5.0	6.5	7.8
EER	Cooling(T1/T3)	W/W	4.17/2.97	3.92/2.95	3.71/2.94	4.33/3.13	4.05/3.11	3.88/3.10
	cooning(11/15)	Btu/h/W	14.15/10.10	13.30/10.05	12.60/9.95	14.70/10.60	13.75/10.60	13.15/10.50
COP	Uastina	W/W	4.86	4.51	4.23	5.01	4.70	4.41
COP	Heating	Btu/h/W	16.45	15.35	14.30	17.00	16.00	14.95
Air flow rate	High	m³/h(l/s)	6,200(1,722)	6,400(1,778)	6,900(1,916)	6,200(1,722)	6,400(1,778)	6,900(1,916)
Sound pressure	Cooling	dB (A)	50	51	53	50	51	53
level	Heating	UD (A)	52	53	55	52	53	55
	Height		1,334	1,334	1,334	1,334	1,334	1,334
Net Dimensions	Width	mm	970	970	970	970	970	970
	Depth		370	370	370	370	370	370
Net Weight ka		kg	120	120	120	120	120	120
Refrigerant		Туре	R410A	R410A	R410A	R410A	R410A	R410A
Connection pipe Liquid		mm	9.52	9.52	9.52	9.52	9.52	9.52
diameter	Gas		15.88	15.88	19.05	15.88	15.88	19.05
Operation range	Cooling	°CDP	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52
Operation range	Heating	°CDB -	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

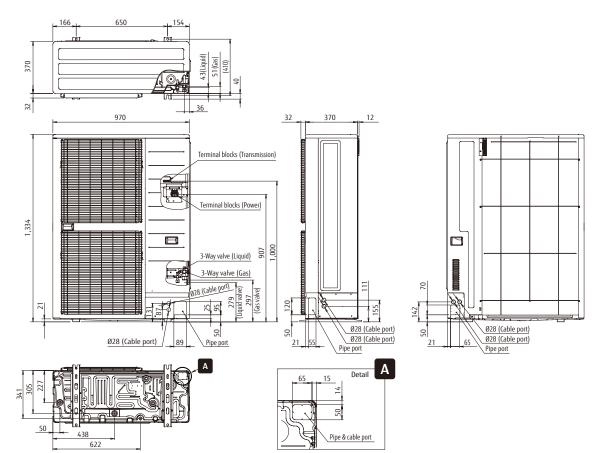
Note: Specifications are based on the following conditions.

Cooling(T1): Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB Cooling(T3): Indoor temperature of 29°CDB / 19°CWB, and outdoor temperature of 46°CDB / 24°CWB Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB. Pipe length: 7.5m. Height difference between outdoor and indoor unit: 0m.

#### **Dimensions**

#### Models : AJH040LBTAHN / AJH045LBTAHN / AJH054LBTAHN / AJH040LETAHN / AJH045LETAHN / AJH054LETAHN

(Unit : mm)





# **TROPICAL** series

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

# System Outline

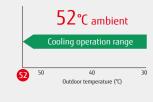
# High ambient operation design

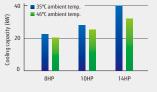
Possible to operate cooling up to 52°C outdoor temperature

# Powerful cooling capacity design

Keeping high cooling power at even high ambient temperature

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

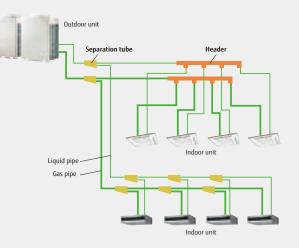






#### System configuration example

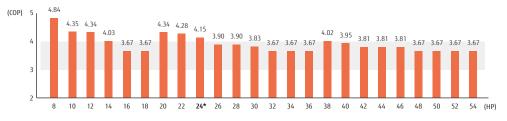
- This system is used for medium-sized and large buildings. Connecting each outdoor unit makes it possible to create a highcapacity system.
- Connection of multiple indoor units using separation tubes and headers.



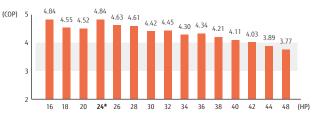
# **Energy efficiency**

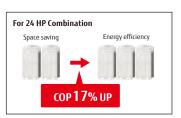
Top class high COP is realized for all combinations by our unique heat exchanger structure, high efficient DC twin compressor, and other our own technologies.

#### Space saving combination



#### **Energy efficiency combination**



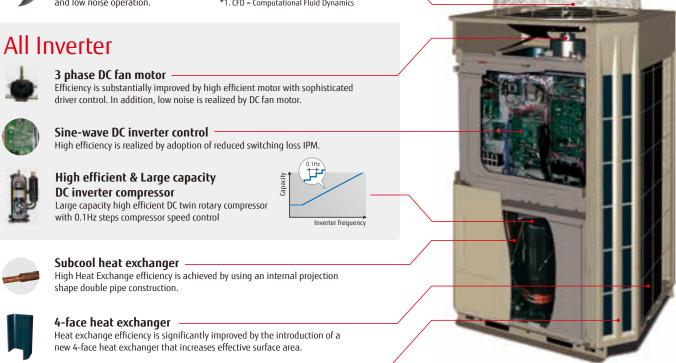


### Energy saving technology that boosted operation efficiency



### 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



Front intake port (corner cut air inhaling structure)

### Advanced energy saving control

#### Multiple outdoor operation control

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



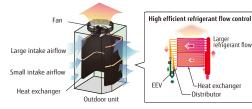
High efficient operation



Inefficient operation

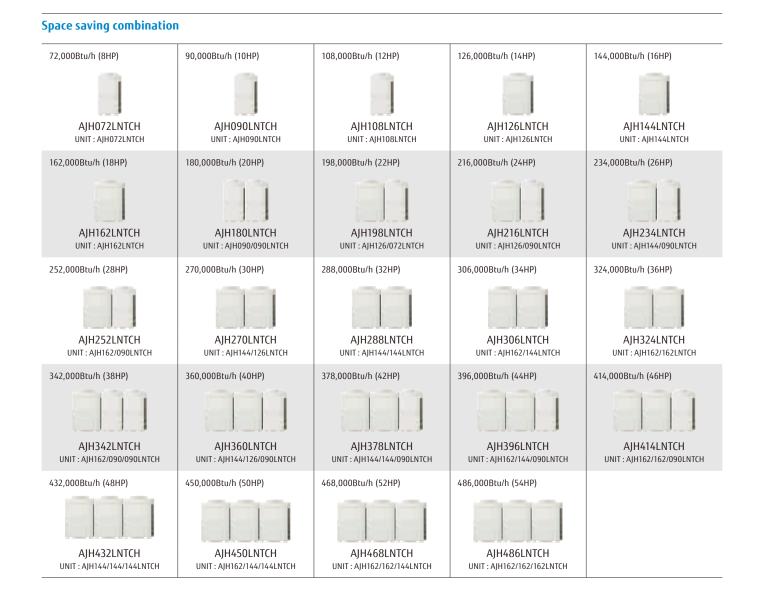
#### Heat exchanger refrigerant control

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



# Outdoor units lineup

• Combinations other than the followings are not recommended.



#### **Energy efficiency combination**

144,000Btu/h (16HP)	162,000Btu/h (18HP)	180,000Btu/h (20HP)	216,000Btu/h (24HP)	234,000Btu/h (26HP)
AJH144LNTCHH	AJH162LNTCHH	AJH180LNTCHH	AJH216LNTCHH	AJH234LNTCHH
UNIT : AJH072/072LNTCH	UNIT : AJH090/072LNTCH	UNIT : AJH108/072LNTCH	UNIT : AJH072/072/072LNTCH	UNIT : AJH090/072/072LNTCH
252,000Btu/h (28HP)	270,000Btu/h (30HP)	288,000Btu/h (32HP)	306,000Btu/h (34HP)	324,000Btu/h (36HP)
AJH252LNTCHH	AJH270LNTCHH	AJH288LNTCHH	AJH306LNTCHH	AJH324LNTCHH
UNIT : AJH108/072/072LNTCH	UNIT : AJH126/072/072LNTCH	UNIT : AJH108/108/072LNTCH	UNIT : AJH126/108/072LNTCH	UNIT : AJH108/108/108LNTCH
342,000Btu/h (38HP)	360,000Btu/h (40HP)	378,000Btu/h (42HP)	396,000Btu/h (44HP)	414,000Btu/h (46HP)
AJH342LNTCHH	AJH360LNTCHH	AJH378LNTCHH	AJH396LNTCHH	AJH414LNTCHH
UNIT : AJH126/108/108LNTCH	UNIT : AJH126/126/108LNTCH	UNIT : AJH126/126/126LNTCH	UNIT : AJH144/126/126LNTCH	UNIT : AJH144/144/126LNTCH

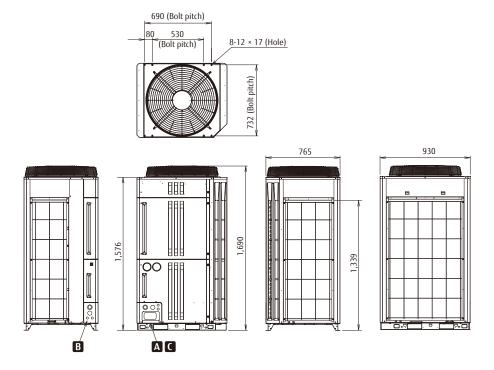
#### 52 ØGENERAL



#### Dimensions

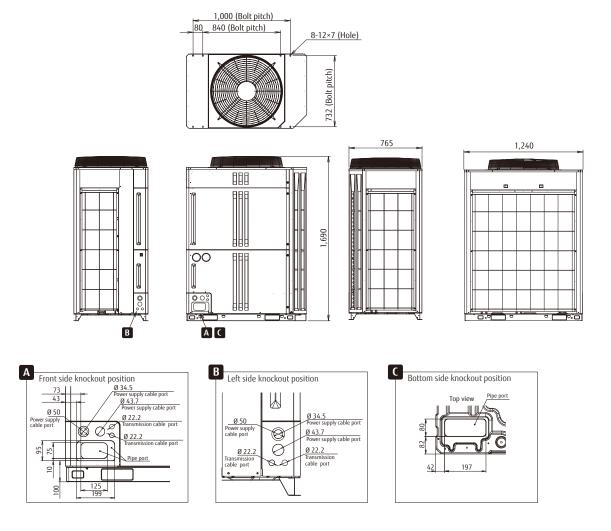
8,10HP: AJH072LNTCH / AJH090LNTCH

(Unit : mm)



#### 12,14,16,18HP: AJH108LNTCH / AJH126LNTCH / AJH144LNTCH / AJH162LNTCH

(Unit : mm)



# Outdoor units specifications

## Space Saving Combination

		,	HP	8	10	12	14	16	18	20	22	24	26	28
Rating Capacit	ty range	ł	Btu/h	72,000	90,000	108,000	126,000	144,000	162,000	180,000	198,000	24 216,000	234,000	252,000
Rating capacit	ylalige	ŀ	Ton	6.0	7.5	9.0	120,000	12.0	13.5	15.0	16.5	18.0	19.5	232,000
Model name			1011	AIH072LNTCH	AIH090LNTCH	AIH108LNTCH	AIH126LNTCH		AIH162LNTCH	AJH180LNTCH	AJH198LNTCH	AJH216LNTCH	AIH234LNTCH	AIH252LNTCH
Unit 1				AIH072LNTCH	AIH090LNTCH	AIH108LNTCH	AIH126LNTCH	AIH144LNTCH	AJH162LNTCH	AJH090LNTCH	AIH126LNTCH	AIH126LNTCH	AIH144LNTCH	AIH162LNTCH
Unit 2			1	AJHU/ZENICI	AJHUJULIIIII	AJHIUOLINICI	AJHIZOLINICH	AJHI44LINICI	AJITIOZENICI	AJH090LNTCH	AJH072LNTCH	AJH090LNTCH	AJH090LNTCH	AIH090LNTCH
Unit 3			1	1	1	1 '	1	1	1	/ ///				Ajnosocaren
	nectable Indoor	Unit		13	16	19	23	26	29	33	36	40	43	46
	nectable capacity	Cooling	kW	11.2-29.1	14-36.4	16.8-43.5	20-52	22.5-58.5	25-65	28-72.8	31.2-81.1	34-88.4	36.5-94.9	39-101.4
Power source		Caslina	·/	22 (	20.0	33.5	1 (0.0		ase 4 wire, 400 V, 50.0	7, 50Hz 56.0	62.4	68.0	72.0	78.0
	1	Cooling	kW	22.4	28.0		40.0	45.0 50.0					73.0	
	Capacity	Heating	<u>⊢</u> ′	25.0	31.5	37.5	45.0		50.0	63.0	70.0	76.5	81.5	81.5
		Cooling	Btu/h	76400	95500	114300	136500	153500	170600	191000	212900	232000	249000	266100
T1		Heating	<u>⊢</u> ′	85300	107500	128000	153500	170600	170600	215000	238800	261000	278100 20.29	278100 23.84
	Input power	Cooling	kW	5.20	7.28	8.96	10.96	13.01	16.56	14.56	16.16	18.24		
T1 condition	<u> </u>	Heating	<b>└───</b> ′	5.17	7.25	8.65	11.17	13.63 20.7	13.63	14.50	16.34	18.42	20.88	20.88
CONDITION	Current	Cooling Heating	A	9.2	12.0	15.0	17.7	20.7	26.1 21.5	-	-	-	-	
	EER	Cooling	<u>بــــــــــــــــــــــــــــــــــــ</u>	9.2	3.85	3.74	3.65	21.5	3.02	- 3.85	- 3.86	- 3.73	- 3.60	- 3.27
	COP		W/W	4.31	4.35	3.74	4.03	3.46	3.02	3.85	4.28	4.15	3.60	3.27
	EER	Heating	<i>'</i>	4.84	4.35	4.34	4.03	3.67		4.34	4.28	4.15	3.90	
	EER	Cooling	Btu/h/W						10.3					11.2
	СОР	Heating	kW	16.5	14.8	14.8	13.7	12.5		14.8	14.6	14.2	13.3	
	Capacity	1 1	kW Btu/h	20.2	25.2	28.5	32	35.1	35.2	50.4	52.2	57.2	60.3	60.4
				68900	86000	97200	109200	119800	120100	172000	178100	195200	205800	206100
T3	Input power	Cooling	kW A	6.73	9.20	9.34	10.70	11.82	12.35	18.39	17.44	19.90	21.02	21.55
condition	Current	1 1		10.8	14.5	14.7	16.9	18.6	19.2	-	-	-	-	-
	EER	1 1	W/W	3.00	2.74	3.05	2.99	2.97	2.85	2.74	2.99	2.87	2.87	2.80
			Btu/h/W	10.23	9.35	10.40	10.20	10.14	9.72	9.35	10.21	9.81	9.79	9.56
Power factor			%	90	92	92	92	92	93	-		-		-
Air flow rate	!	High	m³/h	11100	11100	13000	13000	13700	13700	11100×2	13000+11100	13000+11100	13700+11100	13700+11100
Sound pressure	e level	Cooling	dB (A)	56	58	57	60	62	63	61	61	62	63	64
		Heating		58	59	60	62	64	64	62	63	64	65	65
	c pressure (Max)	]	Pa	82	82	82	82	82	82	82	82	82	82	82
Compressor mo		]	kW	7.5	7.5	11	11	11	11	7.5×2	11.0+7.5	11.0+7.5	11.0+7.5	11.0+7.5
Heat exchange	er fin		/	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
	,	Height	4 /	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690
Dimensions	,	Width	mm	930	930	1240	1240	1240	1240	930×2	1240+930	1240+930	1240+930	1240+930
		Depth	<u> </u>	765	765	765	765	765	765	765	765	765	765	765
Weight kg		kg	255	255	279	279	279	279	255×2	279+255	279+255	279+255	279+255	
Refrigerant		Туре		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Kennyerante		Charge	kg	11.7	11.7	11.8	11.8	11.8	11.8	11.7×2	11.8+11.7	11.8+11.7	11.8+11.7	11.8+11.7
Connection pip	rotomcib co	Liquid	mm	12.70	12.70	12.70	12.70	12.70	15.88	15.88	15.88	15.88	15.88	15.88
Connection pip	eulainetei	Discharge Gas		22.22	22.22	28.58	28.58	28.58	28.58	28.58	34.92	34.92	34.92	34.92
Operation rang		Cooling	*CDB	-15 to 52	-15 to 52	-15 to 52	-15 to 52	-15 to 52	-15 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52
Operation rang	je i	Heating		-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

## Energy Efficiency Combination

		,	HP	16	10	20	24	26	20	20	22
Rating Capacity	51 F2040	ļ	HP Btu/h	16 144.000	18 162.000	180.000	24	26 234.000	28	30 270.000	32 288.000
касту сарасто	yTaliye	ł	Ton	144,000	13.5	15.0	18.0	19.5	252,000	270,000	288,000
Model name				AJH144LNTCHH	AJH162LNTCHH	AJH180LNTCHH	AJH216LNTCHH	AJH234LNTCHH	AJH252LNTCHH	AJH270LNTCHH	AJH288LNTCHH
Unit 1				AIH072LNTCH	AJH090LNTCH	AIH108LNTCH	AIH072LNTCH	AIH090LNTCH	AJH108LNTCH	AJH126LNTCH	AIH108LNTCH
Unit 2			J	AJH072LNTCH	AJH050ENTCH	AJH072LNTCH	AJH072LNTCH	AJH050ENTCH	AJH108LNTCH	AJH072LNTCH	AJH108LNTCH
Unit 3			J.	/gnorzenien g			AJH072LNTCH	AJH072LNTCH	AJH072LNTCH	AJH072LNTCH	AJH072LNTCH
	nectable Indoor	Unit	$\rightarrow$	26	29	33	39	43	46	50	52
	nectable capacity		kW	22.4-58.2	25.2-65.5	28-72.6	33.6-87.3	36.4-94.6	39.2-101.7	42.4-110.2	44.7-116.2
Power source		Caslina	<b> </b>	(/ 0				re, 400 V, 50Hz	70.2	0/0	20 /
	1	Cooling	kW	44.8	50.4	55.9	67.2	72.8	78.3	84.8	89.4
	Capacity	Heating	<b>↓</b>	50.0	56.5	62.5	75.0	81.5	87.5	95.0	100.0
	1 )	Cooling	Btu/h	152800	171900	190700	229200	248300	267100	289300	305000
	ļ]	Heating	+J	170600	192800	213300	255900	278100	298600	324100	341300
	Input power	Cooling	- kW -	10.40	12.48	14.16	15.60	17.68	19.36	21.36	23.12
T1 condition		Heating	<b>ل</b> ــــــا	10.34	12.42	13.82	15.51	17.59	18.99	21.51	22.47
	Current	Cooling	- A -	-	-	-	-	-	-	-	-
		Heating		-	-	-	-	-	-	-	-
	EER	Cooling	w/w	4.31	4.04	3.95	4.31	4.12	4.04	3.97	3.87
	СОР	Heating	J	4.84	4.55	4.52	4.84	4.63	4.61	4.42	4.45
	EER	Cooling	Btu/h/W	14.7	13.8	13.5	14.7	14.0	13.8	13.5	13.2
	СОР	Heating		16.5	15.5	15.4	16.5	15.8	15.7	15.1	15.2
	Capacity		kW	40.4	45.4	48.7	60.6	65.6	68.9	72.4	77.2
	Capacity	1 1	Btu/h	137800	154900	166100	206700	223800	235000	247000	263300
Т3	Input power	Cooling	kW	13.47	15.93	16.08	20.20	22.66	22.81	24.17	25.42
condition	Current	Cooning	A	-	-	-	-	-	-	-	-
	EER	1 1	W/W	3.00	2.85	3.03	3.00	2.89	3.02	3.00	3.04
	EEK		Btu/h/W	10.23	9.72	10.33	10.23	9.87	10.30	10.22	10.36
Power factor			%	· · · · ·	-	-	-	-		-	
Air flow rate		High	m³/h	11100×2	11100×2	13000+11100	11100×3	11100×3	13000+11100×2	13000+11100×2	13000×2+11100
Sound pressure		Cooling	dB (A)	59	60	60	61	62	61	63	61
		Heating		61	62	62	63	63	64	65	64
External static	c pressure (Max)		Pa	82	82	82	82	82	82	82	82
Compressor mo	otor output		kW	7.5×2	7.5×2	11.0+7.5	7.5×3	7.5×3	11.0+7.5×2	11.0+7.5×2	11.0×2+7.5
Heat exchange	er fin			Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
		Height		1690	1690	1690	1690	1690	1690	1690	1690
Dimensions	ŗ	Width	mm	1240×2	1240×2	1240+930	930×3	930×3	1240+930×2	1240+930×2	1240×2+930
	ŗ	Depth	1 F	765	765	765	765	765	765	765	765
Weight		· · · · · · · · · · · · · · · · · · ·	kg	279×2	279×2	279+255	255×3	255×3	279+255×2	279+255×2	279×2+255
	i	Тур	Je I	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant	ŗ	Charge	kg	11.7×2	11.7×2	11.8+11.7	11.7×3	11.7×3	11.8+11.7×2	11.8+11.7×2	11.8×2+11.7
C		Liquid	- í	12.70	15.88	15.88	15.88	15.88	15.88	19.05	19.05
Connection pip	Je diameter	Discharge Gas	- mm -	28.58	28.58	28.58	34.92	34.92	34.92	34.92	34.92
		Cooling		-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52
Operation rang	Je i	Heating	*CDB	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21
										1	201021

## 54 ØGENERAL



30	32	34	36	38	40	42	44	46	48	50	52	54
270,000	288.000	306,000	324.000	342,000	360.000	378,000	396.000	414,000	432,000	450.000	468.000	486,000
22.5	24.0	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	37.5	39.0	40.5
AJH270LNTCH	AJH288LNTCH	AJH306LNTCH	AJH324LNTCH	AJH342LNTCH	AJH360LNTCH	AJH378LNTCH	AJH396LNTCH	AJH414LNTCH	AJH432LNTCH	AJH450LNTCH	AJH468LNTCH	AJH486LNTCH
AIH144LNTCH	AIH144LNTCH	AIH162LNTCH	AIH162LNTCH	AIH162LNTCH	AIH144LNTCH	AIH144LNTCH	AIH162LNTCH	AIH162LNTCH	AIH144LNTCH	AIH162LNTCH	AIH162LNTCH	AIH162LNTCH
AJH126LNTCH	AJH144LNTCH	AJH144LNTCH	AJH162LNTCH	AJH090LNTCH	AJH126LNTCH	AJH144LNTCH	AJH144LNTCH	AJH162LNTCH	AJH144LNTCH	AJH144LNTCH	AJH162LNTCH	AJH162LNTCH
	-		-	AJH090LNTCH	AJH090LNTCH	AJH090LNTCH	AJH090LNTCH	AJH090LNTCH	AJH144LNTCH	AJH144LNTCH	AJH144LNTCH	AJH162LNTCH
50	53	55	55	55	55	55	55	55	55	55	55	55
42.5-110.5	45-117	47.5-123.5	50-130	53-137.8	56.5-146.9	59-153.4	61.5-159.9	64-166.4	67.5-175.5	70-182	72.5-188.5	75-195
					3-ph	ase 4 wire, 400 V,	5047					
85.0	90.0	95.0	100.0	106.0	113.0	118.0	123.0	128.0	135.0	140.0	145.0	150.0
95.0	100.0	100.0	100.0	113.0	126.5	131.5	131.5	131.5	150.0	150.0	150.0	150.0
290000	307000	324100	341200	361600	385500	402500	419600	436700	460500	477600	494700	511800
324100	341200	341200	341200	385600	431600	448700	448700	448700	511800	511800	511800	511800
23.97	26.02	29.57	33.12	31.12	31.25	33.30	36.85	40,40	39.03	42.58	46.13	49.68
24.80	27.26	27.26	27.26	28.13	32.05	34.51	34.51	34.51	40.89	40.89	40.89	40.89
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
3.55	3.46	3.21	3.02	3.41	3.62	3.54	3.34	3.17	3.46	3.29	3.14	3.02
3.83	3.67	3.67	3.67	4.02	3.95	3.81	3.81	3.81	3.67	3.67	3.67	3.67
12.1	11.8	11.0	10.3	11.6	12.3	12.1	11.4	10.8	11.8	11.2	10.7	10.3
13.1	12.5	12.5	12.5	13.7	13.5	13.0	13.0	13.0	12.5	12.5	12.5	12.5
67.1	70.2	70.3	70.4	85.6	92.3	95.4	95.5	95.6	105.3	105.4	105.5	105.6
229000	239600	239900	240200	292100	315000	325600	325900	326200	359400	359700	360000	360300
22.52	23.64	24.17	24.70	30.75	31.72	32.83	33.37	33.90	35.45	35.99	36.52	37.05
-	-	-	-	-	-	-	-	-	-	-	-	-
2.98	2.97	2.91	2.85	2.78	2.91	2.91	2.86	2.82	2.97	2.93	2.89	2.85
10.17	10.14	9.93	9.72	9.50	9.93	9.92	9.77	9.62	10.14	10.00	9.86	9.72
-	-	-	-	-	-	-	-	-	-	-	-	-
13700+13000	13700×2	13700×2	13700×2		13700+13000+11100		13700×2+11100	13700×2+11100	13700×3	13700×3	13700×3	13700×3
64	65	66	66	65	65	66	66	67	67	67	67	68
66	67	67	67	66	67	68	68	68	69	69	69	69
82	82	82	82	82	82	82	82	82	82	82	82	82
11.0×2	11.0×2	11.0×2	11.0×2	11.0+7.5×2	11.0×2+7.5	11.0×2+7.5	11.0×2+7.5	11.0×2+7.5	11.0×3	11.0×3	11.0×3	11.0×3
Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin					
1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690
1240×2	1240×2	1240×2	1240×2	1240+930×2	1240×2+930	1240×2+930	1240×2+930	1240×2+930	1240×3	1240×3	1240×3	1240×3
765	765	765	765	765	765	765	765	765	765	765	765	765
279×2	279×2	279×2	279×2	279+255×2	279×2+255	279×2+255	279×2+255	279×2+255	279×3	279×3	279×3	279×3
R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
11.8×2	11.8×2	11.8×2	11.8×2	11.8+11.7×2	11.8×2+11.7	11.8×2+11.7	11.8×2+11.7	11.8×2+11.7	11.8×3	11.8×3	11.8×3	11.8×3
19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
34.92	34.92	34.92	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27
-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52					
-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21					

21	24	20		12		
34	36	38	40	42	44	46
306,000	324,000	342,000	360,000	378,000	396,000	414,000
AJH306LNTCHH	AJH324LNTCHH	AJH342LNTCHH	AJH360LNTCHH	AJH378LNTCHH	AJH396LNTCHH	AJH414LNTCHH
AJH126LNTCH	AJH108LNTCH	AJH126LNTCH	AJH126LNTCH	AJH126LNTCH	AJH144LNTCH	AJH144LNTCH
AJH108LNTCH	AJH108LNTCH	AJH108LNTCH	AJH126LNTCH	AJH126LNTCH	AJH126LNTCH	AJH144LNTCH
AJH072LNTCH	AJH108LNTCH	AJH108LNTCH	AJH108LNTCH	AJH126LNTCH	AJH126LNTCH	AJH144LNTCH
55	55	55	55	55	55	55
48-124.6	50.3-130.6	53.5-139.1	56.8-147.5	60-156	62.5-162.5	65-169
		3-	phase 4 wire, 400 V, 50	)Hz		
95.9	100.5	107.0	113.5	120.0	125.0	130.0
107.5	112.5	120.0	127.5	135.0	140.0	145.0
327200	342900	365100	387300	409500	426500	443500
366800	384000	409500	435000	460500	477600	494700
25.12	26.88	28.88	30.88	32.88	34.93	36.98
24.99	25.95	28.47	30.99	33.51	35.97	38.43
-	-	-	-	-	-	-
-	-	-	-	-	-	-
3.82	3.74	3.70	3.68	3.65	3.58	3.52
4.30	4.34	4.21	4.11	4.03	3.89	3.77
13.0	12.8	12.6	12.5	12.5	12.2	12.0
14.7	14.8	14.4	12.5	13.7	13.3	12.0
80.7	85.5	89.0	92.5	96.0	99.1	102.2
275300	291600	303600	315600	327600	338200	348800
26.78	28.03	29.39	30.75	32.11	33.22	34.34
-		-	-		-	-
3.01	3.05	3.03	3.01	2.99	2.98	2.98
10.28	10.40	10.33	10.26	10.20	10.18	10.16
-	-	-	-	-	-	-
13000×2+11100	13000×3	13000×3	13000×3	13000×3	13700+13000×2	13700×2+13000
62	63	63	64	65	66	66
65	65	66	66	67	68	68
82	82	82	82	82	82	82
11.0×2+7.5	11.0×3	11.0×3	11.0×3	11.0×3	11.0×3	11.0×3
Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
1690	1690	1690	1690	1690	1690	1690
1240×2+930	1240×3	1240×3	1240×3	1240×3	1240×3	1240×3
765	765	765	765	765	765	765
279×2+255	279×3	279×3	279×3	279×3	279×3	279×3
R410A	R410A	R410A	R410A	R410A	R410A	R410A
11.8×2+11.7	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3
19.05	19.05	19.05	19.05	19.05	19.05	19.05
34.92	41.27	41.27	41.27	41.27	41.27	41.27
-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52
-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21
-201021	-201021	-201021	-201021	-201021	-201021	-201021

Note: Specifications are based on the following conditions.

Cooling(T1): Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB Cooling(T3): Indoor temperature of 29°CDB / 19°CWB, and

outdoor temperature of 46°CDB / 24°CWB Heating: Indoor temperature of 20°CDB / (15°CWB), and

outdoor temperature of 7°CDB / 6°CWB. Pipe length: 7.5m. Height difference between outdoor and indoor unit: 0m.

# AIRSTAGE INDOORUNITS

0

# 14 Type and 124 models available to meet the requirements of any building design.

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

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

# **INDOOR UNITS LINE-UP**

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



AIRSTAGE

# **INDOOR UNITS LINE-UP**

Comprehensive range of indoor units of variety design and capacity ranges available which can be selected to suit any air conditioning needs. 14 types, 124 models, Capacity range from 7,000 Btu/h to 96,000Btu/h

# Indoor units range

Constitution	ipacity range -		7,000	9,000	12,000	14,000	18,000
Capacity range		kW	2.2	2.8	3.6	4.5	5.6
	Compact Cascolto		5	-	E.	1	5
	Compact Cassette		AUXB07GALH AUXB07GATH	AUXB09GALH AUXB09GATH	AUXB12GALH AUXB12GATH	AUXB14GALH AUXB14GATH	AUXB18GALH AUXB18GATH
		(Slim type)					-
	4-way Flow	(, p.c.)					AUXD18GALH
Cassette		(Large type)					AUXA18GALH
	FILEN Circular Flow	(Slim type)					AUXM018GTAH
	NEW Circular Flow	(Large type)					AUXK018GTAH
	Mini Duct (With drain pump)						
			ARXK07GCLH	ARXK09GCLH	ARXK12GCLH	ARXK14GCLH	ARXK18GCLH
	Mini Duct (Without drain pump)		ARXK07GALH	ARXK09GALH	ARXK12GALH	ARXK14GALH	ARXK18GALH
	Slim Duct						-
	(With drain pump)		ARXD07GALH ARXD07GATH	ARXD09GALH ARXD09GATH	ARXD12GALH ARXD12GATH	ARXD14GALH ARXD14GATH	ARXD18GALH ARXD18GATH
Duct	Medium Static Pressure Duct						
	High Static Pressure Duct						
	Large Airflow Duct						ARXN18GATH*2
	Floor (Same as Ceiling models)				ABHA12GATH	ABHA14GATH	ABHA18GATH
Floor	Slim Concealed Floor (Same as Slim Duct models)		ARXD07GALH	ARXD09GALH	ARXD12GALH	ARXD14GALH	ARXD18GALH
			ARXD07GATH	ARXD09GATH	ARXD12GATH	ARXD14GATH	ARXD18GATH
Ceiling	Ceiling				ABHA12GATH	ABHA14GATH	ABHA18GATH
	Wall Mounted						
Wall Mounted	Wall Mounted		ASHA07GACH ASHA07GATH	ASHA09GACH ASHA09GATH	ASHA12GACH ASHA12GATH	ASHA14GACH ASHA14GATH	ASHA18GACH ASHA18GATH
w	Wall Mounted (EEV external)		ASHE07GACH	ASHE09GACH	ASHE12GACH	ASHE14GACH	With this model, connection of EV kit is necessary.
				//3/12030/(01	/isricizonen	none ranch	

24,000	30,000	34,000	36,000	45,000	54,000	60,000	72,000	90,000	96,000
7.1	9.0	10.0	11.2	12.5	14.0	18.0	22.4	25.0	28.0
5									
AUXB24GALH AUXB24GATH									
-									
AUXD24GALH									
-	-	-	-	-	-				
AUXA24GALH	AUXA30GALH	AUXA34GALH	AUXA36GALH	AUXA45GALH	AUXA54GALH				
-									
AUXM024GTAH									
-									
AUXK024GTAH	AUXK030GTAH	AUXK034GTAH	AUXK036GTAH	AUXK045GTAH	AUXK054GTAH				
ARXK24GCLH									
ARXK24GALH									
ARXD24GALH									
ARXD24GATH									
	Culminit:		CUUM	CUUCH					
ARXA24GBLH ARXA24GBTH	ARXA30GBLH ARXA30GBTH		ARXA36GBLH ARXA36GBTH	ARXA45GBLH ARXA45GBTH					
			= =,						
			ARXC36GBTH				ARXC72GBTH*1	ARXC90GBTH*1	ARXC96GATH*1
				ARXC45GATH		ARXC60GATH*1	ARXC72GATH*1	ARXC90GATH*1	
ARXN24GATH*2	ARXN30GATH*2	ARXN34GATH*2	ARXN36GATH*2	ARXN45GATH*2					
ABHA24GATH									
ARXD24GALH									
ARXD24GATH									
ABHA24GATH	ABHA30GATH		ABHA36GATH	ABHA45GATH	ABHA54GATH				
			חואטטנאווטא	TIMUC+ATION	AUIAJ4UAIN				
ASHA24GACH	ASHA30GACH								
ASHA24GATH	ASHA30GATH								

\*1:ARXC60/72/90/96 cannot be connected to J-III tropical series. \*2:Large Airflow Duct can be connected to V-III tropical series only.

# **Compact Cassette**

#### **Models**

AUXB07GATH
AUXB09GATH
AUXB12GATH
AUXB14GATH
AUXB18GATH
AUXB24GATH





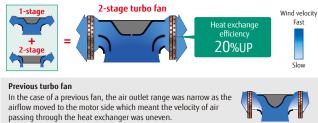
#### Feature

### 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.





# Improvement of the airflow distribution



#### Maintenance of fan motor and fan

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

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

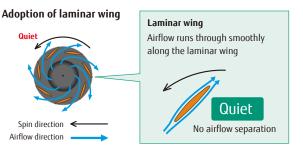
**2** Air filter : standard equipment

#### Adaptation of transparent drainage parts

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

# Quiet quality

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



## 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)					
model code	Standard mode	High ceiling mode				
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				

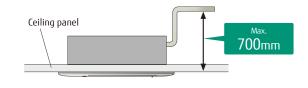


# Compact design

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



# High lift drain pump



#### **Optional parts**

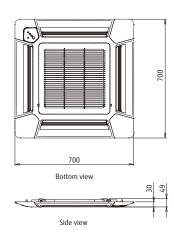
Air Outlet Shutter Plate: UTR-YDZB Insulation Kit for High Humidity: UTZ-KXGC

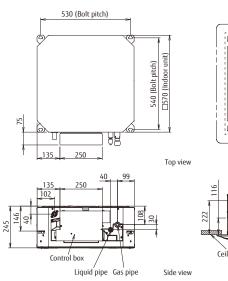
#### **Specifications**

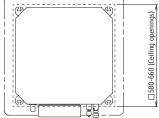
Model name			AUXB07GALH AUXB07GATH	AUXB09GALH AUXB09GATH	AUXB12GALH AUXB12GATH	AUXB14GALH AUXB14GATH	AUXB18GALH AUXB18GATH	AUXB24GALH AUXB24GATH		
Power source				Single - phase, 220-240V, 50Hz						
Capacitu	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1		
Capacity	Heating	KVV	2.8	3.2	4.1	5.0	6.3	8.0		
nput power		W	25	25	29	35	36	84		
	High		540 (150)	550 (153)	600 (167)	680 (189)	710 (197)	1,030 (286)		
Airflow rate	Med	m <sup>3</sup> /h (I/s)	450 (125)	450 (125)	530 (147)	590 (164)	580 (161)	830 (231)		
	Low	(1/3)	350 (97)	350 (97)	390 (108)	390 (108)	400 (111)	450 (125)		
	High		34	35	37	38	41	50		
ound pressure evel	Med	dB (A)	30	30	34	34	35	44		
ever	Low		25	25	27	27	27	30		
)imensions (H ×	W × D)	mm	245 × 570 × 570	245 × 570 × 570	245 × 570 × 570	245 × 570 × 570	245 × 570 × 570	245 × 570 × 570		
Veight		kg(lbs)	15 (33)	15 (33)	15 (33)	15 (33)	17 (37)	17 (37)		
Connection	Liquid (Flare)		6.35	6.35	6.35	6.35	9.52	9.52		
oipe diameter	Gas (Flare)	mm	12.70	12.70	12.70	12.70	15.88	15.88		
Drain hose diameter (I.D./O.D.)			25/32							
	Model na	me	UTG-UFGC-W							
assette Grille	Dimensions (H×W×D)	mm			50 × 70	00 × 700				
	Weight	kg(lbs)			2.6	(6)				

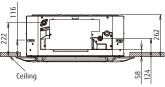
Note : Specifications are based on the following conditions. Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB. Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB. Pipe length : 7.5 m; Height difference between outdoor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

#### Dimensions (Unit: mm)









# 4-way Flow Cassette (Slim type)

Models AUXD18GALH AUXD24GALH

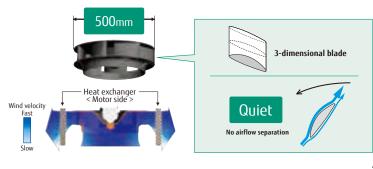




#### Feature

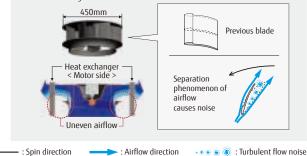
### High efficiency turbo fan with 3-dimensional blade

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



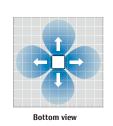
#### Previous turbo fan

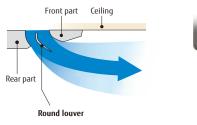
Air passing through the heat exchanger was uneven and the air would only flow close to the ceiling.



### Improvement of the airflow distribution

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







Much less temperature irregularity happens by spreading airflow widely

# Adjustment of hanger position is possible after installation

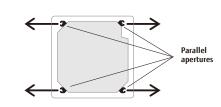


# High ceiling mode

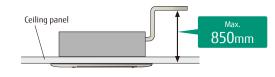
This cassette can be installed up to a height of 3.5m.

Model code	The maximum height from floor to ceiling (m)				
Model code	Standard mode	High ceiling mode			
18	3.0	3.5			
24 3.0		3.5			

# One way installation



# High lift drain pump



#### **Optional parts**

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

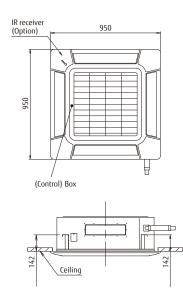
#### **Specifications**

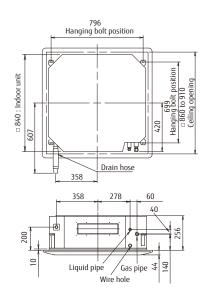
Model name			AUXD18GALH	AUXD24GALH			
Power source			Single - phase, 220-	Single - phase, 220-240V, 50Hz			
(	Cooling	kW	5.6	7.1			
Capacity	Heating	KW	6.3	8.0			
Input power		W	39	46			
	High		1,150 (319)	1,280 (356)			
Airflow rate	Med	m <sup>3</sup> /h (I/s)	940 (261)	1,040 (289)			
	Low	(	870 (242)	870 (242)			
	High		36	38			
Sound pressure level	Med	dB (A)	30	33			
	Low	(,,)	29	29			
Dimensions (H ×	W × D)	mm	246 × 840 × 840	246 × 840 × 840			
Weight		kg(lbs)	22 (48)	22 (48)			
Connection	Liquid (Flare)		9.52	9.52			
pipe diameter	Gas (Flare)	mm	15.88	15.88			
Drain hose diameter (I.D./O.D.)			25/32				
	Model nar	ne	UTG-UGGA-W				
Cassette Grille	Dimensions (H×W×D)	mm	50 × 950 × 9	50			
	Weight	kg(lbs)	5.5 (12)				

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)





# 4-way Flow Cassette (Large type)

#### **Models**

AUXA18GALH AUXA24GALH AUXA30GALH AUXA34GALH AUXA36GALH AUXA45GALH AUXA54GALH

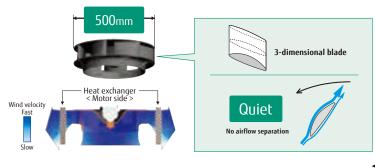




#### Feature

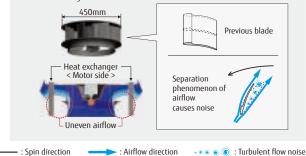
### High efficiency turbo fan with 3-dimensional blade

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



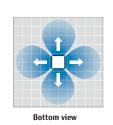
#### Previous turbo fan

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



### Improvement of the airflow distribution

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



# Front part Ceiling Rear part Round louver



Much less temperature irregularity happens by spreading airflow widely

# Adjustment of hanger position is possible after installation

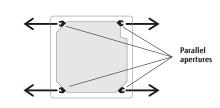


# High ceiling mode

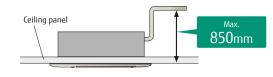
This cassette can be installed up to a height of 4.2m (36/45/54).

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

# One way installation



# High lift drain pump



#### **Optional parts**

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

#### **Specifications**

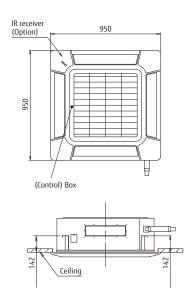
Model name		AUXA18GALH	AUXA24GALH	AUXA30GALH	AUXA34GALH	AUXA36GALH	AUXA45GALH	AUXA54GALH			
Power source			Single - phase, 220-240V, 50Hz								
(ih	Cooling	kW	5.6	7.1	9.0	10.0	11.2	12.5	14.0		
Capacity	Heating	KVV	6.3	8.0	10.0	11.2	12.5	14.0	16.0		
Input power		W	51	51	59	77	80	99	119		
	High	a.1	1,420 (394)	1,420 (394)	1,600 (444)	1,750 (486)	1,800 (500)	1,900 (528)	2,000 (556)		
Airflow rate	Med	m <sup>3</sup> /h (I/s)	1,230 (342)	1,230 (342)	1,300 (361)	1,300 (361)	1,300 (361)	1,370 (381)	1,370 (381)		
	Low	(1.5)	1,100/1,000*1 (306/278)	1,100/1,000*1 (306/278)	1,100 (306)	1,100 (306)	1,100 (306)	1,100 (306)	1,100 (306)		
	High		40	40	40	43	44	46	47		
Sound pressure level	Med	dB (A)	36	36	38	38	38	39	39		
level	Low	(//)	33/31* <sup>1</sup>	33/31* <sup>1</sup>	33	33	33	33	33		
Dimensions (H ×	W × D)	mm	288 × 840 × 840	288 × 840 × 840	288 × 840 × 840	288 × 840 × 840	288 × 840 × 840	288 × 840 × 840	288 × 840 × 84		
Weight		kg(lbs)	27 (59)	27 (59)	27 (59)	27 (59)	27 (59)	27 (59)	27 (59)		
Connection	Liquid (Flare)		9.52	9.52	9.52	9.52	9.52	9.52	9.52		
pipe diameter	Gas (Flare)	mm	15.88	15.88	15.88	15.88	19.05	19.05	19.05		
Drain hose diam	eter (I.D./O.D.)			25/32							
	Model na	me	UTG-UGGA-W								
Cassette Grille	Dimensions (H×W×D)	mm		50 × 950 × 950							
	Weight	kg(lbs)		5.5 (12)							
lote : Specificat	ons are based o	on the fo	llowing conditions.		*1:	This value is under coo	ling operation.				

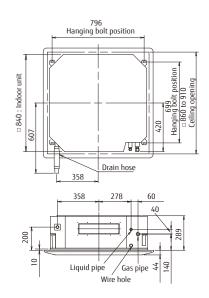
Note : Specifications are based on the following conditions. Cooling : Indoor temperature of 27\*CDB / 19\*CWB, and outdoor temperature of 35\*CDB / 24\*CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

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

#### Dimensions (Unit:mm)





# **Circular Flow Cassette**

Models (Slim type) AUXM018GTAH NEW AUXM024GTAH NEW



Models (Large type) AUXK018GTAH NEW AUXK024GTAH NEW AUXK030GTAH NEW AUXK034GTAH NEW AUXK036GTAH NEW AUXK045GTAH NEW





#### Feature

### **Unique Circular Flow design**

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

Ø7mm high density heat exchanger New DC fan motor High efficient turbo fan Seamless airflow louver



### Uniform temperature air conditioning

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



### Individual louver control

Each louver can be set individually by Touch Panel Wired Remote Controller to enjoy the comfort of different directional airflows according to various room layouts. \* Touch Panel Wired RC (UTY-RNRGZ2) only



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



Efficient air conditioning based on the room layout

#### Human sensor increases more energy saving

Energy saving operation starts automatically by detecting the motion of a person. 2 modes of save operation mode and stop mode can be selected. \*Touch Panel Wired RC (UTY-RNRGZ2) only



2 modes can be selected

Auto saving Power is saved while people are away.

Auto OFF

Operation stops after people go out.

#### Optional parts

Human Sensor Kit:UTY-SHZXIWide Panel:UTG-AKXAPanel Spacer:UTG-BKXAAir Outlet Shutter Plate:UTR-YDZKInsulation Kit for High Humidity:UTZ-KXRACassette Grille:UTG-UKGDIR Receiver Unit:UTY-LBHX

UTY-SHZXC UTG-AKXA-W UTG-BKXA-W UTR-YDZK UTZ-KXRA UTG-UKGD-W, UTG-UKGA-B UTY-LBHXD



#### **Specifications**

Model name			AUXM018 GTAH	AUXM024 GTAH	AUXK018 GTAH	AUXK024 GTAH	AUXK030 GTAH	AUXK034 GTAH	AUXK036 GTAH	AUXK045 GTAH	AUXK054 GTAH
Power source						Single	- phase, 220-240	V, 50Hz			
Concertifier	Cooling	kW	5.6	7.1	5.6	7.1	9.0	10.0	11.2	12.5	14.0
Capacity	Heating	KW	6.3	8.0	6.3	8.0	10.0	11.2	12.5	14.0	16.0
Input power		W	20	25	40	40	47	47	61	89	116
	High		1,050	1,120	1,420	1,420	1,440	1,440	1,620	1,820	2,040
	Med-Hi		930	1,050	1,360	1,360	1,440	1,440	1,500	1,590	1,800
A :- (   h	Med	2/1-	900	930	1,300	1,300	1,340	1,340	1,400	1,500	1,590
Airflow rate	Lo-Hi	m³/h	870	900	1,270	1,270	1,300	1,300	1,340	1,400	1,440
	Low		810	870	1,200	1,200	1,280	1,280	1,280	1,300	1,300
	Quiet	1	780	780	1,150	1,150	1,150	1,150	1,150	1,150	1,150
-	High		33	35	38	38	39	39	41	44	47
	Med-Hi		32	33	37	37	38	38	40	42	45
Sound pressure	Med	dB	31	32	36	36	37	37	38	40	42
level	Lo-Hi	(A)	30	31	35	35	36	36	37	38	39
	Low		29	30	34	34	35	35	36	36	36
	Quiet		28	28	33	33	33	33	33	33	33
Dimensions (H ×	W × D)	mm	246×840×840	246×840×840	288×840×840	288×840×840	288×840×840	288×840×840	288×840×840	288×840×840	288×840×840
Weight		kg	24.0	24.5	26.5	26.5	29.5	29.5	29.5	29.5	29.5
Connection	Liquid (Flare)		6.35	9.52	6.35	9.52	9.52	9.52	9.52	9.52	9.52
pipe diameter	Gas (Flare)	mm	12.70	15.88	12.70	15.88	15.88	15.88	15.88	15.88	15.88
Drain hose diameter (I.D./O.D.)		25/32									
	Model na	me				UTG-	UKGD-W/UTG-UK	GA-B			
Cassette Grille	Dimensions (H×W×D)	mm					53×950×950				
	Weight	kg					6.0				

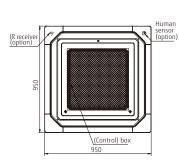
Note : Specifications are based on the following conditions. Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB. Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB. Pipe length : 7.5 m; Height difference between outdoor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

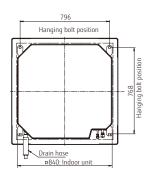
When AUX\*018GTAH is connected to the outdoor unit other than J-IIIL, pipe diameter should be Ø9.52/Ø15.88 (Lig/Gas) When AUXK036GTAH, AUXK045GLAH, and AUXK054GLAH are connected to the outdoor unit

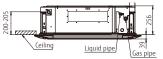
other than J-IIIL, gas pipe diameter should be Ø19.05.

#### Dimensions (Unit: mm)

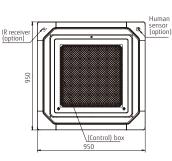
Models: AUXM018 / AUXM024

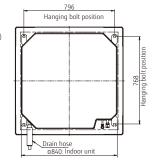


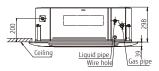












#### **OGENERAL** 67

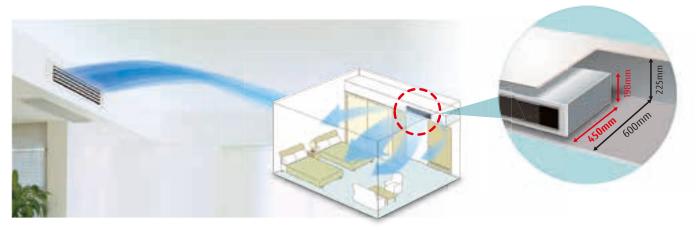
# Mini Duct



#### Feature

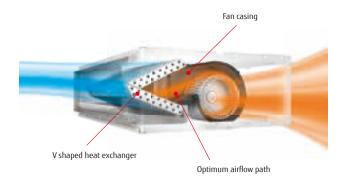
### Optimum design in harmony with interior decoration

Thin and short-depth body makes the clipped ceiling design simple.



# Advanced performance by new shaped heat exchanger and airflow

Air blower is improved so that velocity distribution is optimum in accordance with the heat exchanger shape. Wide range and uniform airflow can be received due to heat exchanger.



### Easy drain design even at narrow ceiling

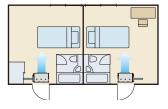
**Models with drain pump**: Drainage to the distant drain port is possible. **Models without drain pump**: Both sides drainage is possible.

ceiling.

#### Models with drain pump



Models without drain pump



For models without drain pump, both sides drainage is possible and drain design is easy.

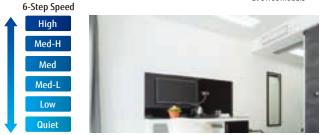
For models with drain pump, drain design is easy even at narrow

# 6-speed control\*

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



at 07/09models



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

#### **Optional parts**

Remote Sensor Unit : UTY-XSZX IR Receiver Unit : UTB-YWC Auto Louver Grille Kit : UTD-GXTA-W (for ARXK07/09/12/14GCLH ARXK07/09/12/14GALH) UTD-GXTB-W (for ARXK18GCLH, ARXK18GALH) UTD-GXTC-W (for ARXK24GCLH, ARXK24GALH)

#### **Specifications**

Model name			ARXK07GCLH ARXK07GALH	ARXK09GCLH ARXK09GALH	ARXK12GCLH ARXK12GALH	ARXK14GCLH ARXK14GALH	ARXK18GCLH ARXK18GALH	ARXK24GCLH ARXK24GALH
Power source					Single - phase,	220-240V, 50Hz		
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
Capacity	Heating	KVV	2.8	3.2	4.0	5.0	6.3	8.0
nput power	GCLH / GALH	W	28 / 21	28 / 21	35 / 28	66 / 59	73/66	80 / 73
	High		460 (128)	460 (128)	550 (153)	760 (211)	930 (258)	1,160 (322)
	Med-H	1	440 (122)	440 (122)	520 (144)	660 (183)	840 (233)	1,060 (294)
Airflow rate	Med	m³/h	420 (117)	420 (117)	480 (133)	560 (156)	740 (206)	960 (267)
AIIIIOW Iate	Med-L	(I/s)	400 (111)	400 (111)	450 (125)	490 (136)	640 (178)	860 (239)
	Low		370 (103)	370 (103)	410 (114)	410 (114)	540 (150)	750 (208)
	Quiet		340 (94)	340 (94)	340 (94)	340 (94)	470 (131)	610 (169)
Static pressure range		Ра	0 to 30	0 to 30	0 to 30	0 to 50	0 to 50	0 to 50
standard static p	ressure	Pd	10	10	10	15	15	15
	High		26	26	29	34	33	32
	Med-H		25	25	27	31	30	30
ound pressure	Med	dB	24	24	26	28	28	28
evel	Med-L	(A)	23	23	25	26	26	27
	Low		22	22	24	24	24	25
	Quiet	]	21	21	22	22	22	22
Dimensions (H ×	W × D)	mm	198 × 700 × 450	198 × 700 × 450	198 × 700 × 450	198 × 700 × 450	198 × 900 × 450	198 × 1,100 × 450
Veight	GCLH / GALH	kg(lbs)	15.5 (34) / 15 (33)	15.5 (34) / 15 (33)	16 (35) / 15.5 (34)	16 (35) / 15.5 (34)	19 (42) / 18.5 (41)	22.5 (50) / 22 (49)
Connection	Liquid (Flare)		6.35	6.35	6.35	6.35	9.52	9.52
oipe diameter	Gas (Flare)	mm	12.70	12.70	12.70	12.70	15.88	15.88
rain hose diam	eter (I.D./O.D.)	1			25	/ 32	~	

Note : Specifications are based on the following conditions.

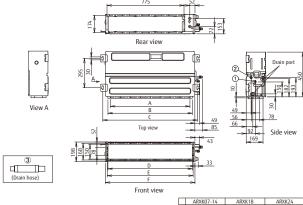
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

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

#### Dimensions (Unit: mm)

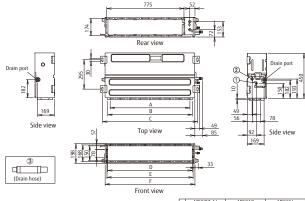
Models: ARXK07GCLH / ARXK09GCLH / ARXK12GCLH / ARXK14GCLH / ARXK18GCLH / ARXK24GCLH



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

_			
	ARXK07-14	ARXK18	ARXK24
AB	P100×6=600	P100×8=800	P100×10=1,000
B	650	850	1,050
C	752	952	1,152
D	650	850	1,050
E	665	864	1,064
E	700	900	1 100

#### Models: ARXK07GALH / ARXK09GALH / ARXK12GALH / ARXK14GALH / ARXK18GALH / ARXK24GALH



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

ſ		ARXK07-14	ARXK18	ARXK24
ſ	A	P100×6=600	P100×8=800	P100×10=1,000
ſ	В	650	850	1,050
ſ	С	752	952	1,152
I	D	650	850	1,050
[	Ε	665	864	1,064
ľ	F	700	900	1,100

# Slim Duct / Slim Concealed Floor

#### Models (With drain pump)

ARXD07GALH	ARXD07GATH
ARXD09GALH	ARXD09GATH
ARXD12GALH	ARXD12GATH
ARXD14GALH	ARXD14GATH
ARXD18GALH	ARXD18GATH
ARXD24GALH	ARXD24GATH





# FAN

#### Feature

### Slim design

Air-intake

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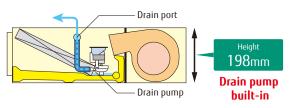
Air intake direction can be selected

Bottom side

to match the installation site.

**Flexible installation** 

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



# 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.



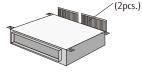
# High lift drain pump

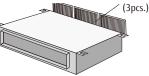
# Max. 850mm Drain hose is standard accessory

### Filter (Accessory)

ARXD07 / 09 / 12 / 14 / 18

ARXD24

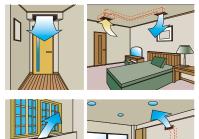




Floor concealed

Ceiling concealed



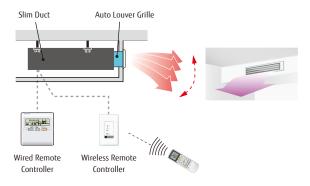


Back side

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# Auto Louver Grille Kit (Option)

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



#### **Optional parts**

Remote Sensor Unit : UTY-XSZX IR Receiver Unit : UTB-YWC Auto Louver Grille Kit : UTD-GXTA-W (for ARXD07/09/12/14GALH ARXD07/09/12/14GATH) UTD-GXTB-W (for ARXD18GALH, ARXD18GATH) UTD-GXTC-W (for ARXD24GALH, ARXD24GATH)

#### **Specifications**

Model name			ARXD07GALH ARXD07GATH	ARXD09GALH ARXD09GATH	ARXD12GALH ARXD12GATH	ARXD14GALH ARXD14GATH	ARXD18GALH ARXD18GATH	ARXD24GALH ARXD24GATH
Power source					Single - phase,	220-240V, 50Hz		
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	KVV	2.8	3.2	4.0	5.0	6.3	8.0
Input power		W	44	50	54	92	83	122
	High		550 (153)	600 (167)	600 (167)	800 (222)	940 (261)	1,330 (369)
Airflow rate	Med	m <sup>3</sup> /h (I/s)	490 (136)	550 (153)	510 (142)	710 (197)	840 (233)	1,240 (344)
	Low	(1/3)	440 (122)	480 (133)	450 (125)	610 (169)	750 (208)	1,100 (306)
Static pressure range		Ра	0 to 90	0 to 50				
Standard static pressure			25	25	25	25	25	25
Sound pressure level	High		28	29	30	34	34	35
	Med	dB (A)	25	26	27	32	32	32
	Low		22	24	24	28	28	29
Dimensions (H × W × D)		mm	198 × 700 × 620	198 × 700 × 620	198 × 700 × 620	198 × 700 × 620	198 × 900 × 620	198 × 1,100 × 620
Weight		kg(lbs)	17 (37)	17 (37)	18 (40)	18 (40)	22 (48)	26 (57)
Connection pipe diameter	Liquid (Flare)		6.35	6.35	6.35	6.35	9.52	9.52
	Gas (Flare)	mm	12.70	12.70	12.70	12.70	15.88	15.88
Drain hose diam	eter (I.D./O.D.)	1			25	/ 32		

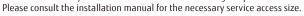
Note : Specifications are based on the following conditions.

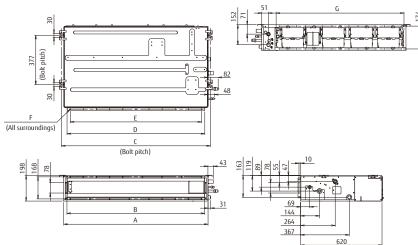
Cooling : Indoor temperature of 20°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB. Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

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

#### **Dimensions** (Unit: mm)

\*Service accessibility must be allowed for when installing the product.





	ARXD07-14	ARXD18	ARXD24
А	700	900	1,100
В	650	850	1,050
С	734	934	1,134
D	650	850	1,050
Е	P100x6=600	P100x8=800	P100x10=1,000
F	18xØ5	22xØ5	26xØ5
G	574	774	974

# Medium Static Pressure Duct

#### **Models**

ARXA24GBLH	ARXA24GBTH
ARXA30GBLH	ARXA30GBTH
ARXA36GBLH	ARXA36GBTH
ARXA45GBLH	ARXA45GBTH

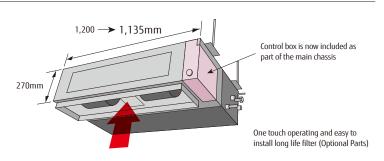




#### Feature

#### Slim & Compact design

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



### Selectable with a wide range of static pressure

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



### 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.



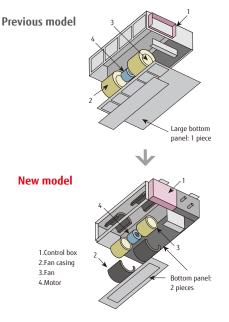
### Easy setting by using remote controller

The change of static pressure range is possible by remote controller



### Easy maintenance

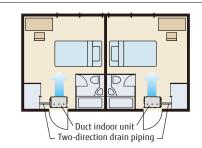
See below for the case of rear suction type



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

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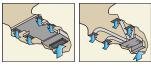
# **Two-direction** drain piping

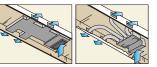


# Installation styles

# Embedded in Ceiling

#### Hanging from Ceiling





#### **Optional parts**

Remote Sensor Unit : UTY-XSZX Long Life Filter : UTD-LF25NA Flange (Square) : UTD-SF045T

Flange (Round) : UTD-RF204 IR Receiver Unit : UTB-YWC Drain Pump Unit : UTZ-PX1NBA

#### **Specifications**

Model name			ARXA24GBLH ARXA24GBTH	ARXA30GBLH ARXA30GBTH	ARXA36GBLH ARXA36GBTH	ARXA45GBLH ARXA45GBTH				
Power source			Single - phase, 220-240V, 50Hz							
(	Cooling	kW -	7.1	9.0	11.2	12.5				
Capacity	Heating	KVV -	8.0	10.0	12.5	14.0				
nput power		W	190	188	312	312				
	High		1,280 (356)	1,280 (356)	1,720 (478)	1,720 (478)				
Airflow rate Med		m <sup>3</sup> /h (I/s)	1,210 (336) 1,210 (336)		1,670 (464)	1,670 (464)				
	Low	(1/3) -	, 1,130 (314) 1,130 (314) 1,600 (444)		1,600 (444)	1,600 (444)				
Static pressure ra	inge Pa 30 to 150 30 to 150 30 to 150		30 to 150	30 to 150						
Standard static p	ressure	Ра –	100 100		100	100				
	High		38 40		43	43				
Sound pressure level	Med	dB (A)	36	36 38 41		41				
level	Low	(~) -	34	36	39	39				
Dimensions (H ×	W × D)	mm	270 × 1,135 × 700	270 × 1,135 × 700	270 × 1,135 × 700	270 × 1,135 × 700				
Weight		kg(lbs)	39 (86)	42 (93)	42 (93)	42 (93)				
Connection Liquid (Fla			9.52	9.52	9.52	9.52				
pipe diameter	Gas (Flare)	mm	15.88 15.88 19.05		19.05	19.05				
Drain hose diameter (I.D./O.D.)				25/32						

Note : Specifications are based on the following conditions.

Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

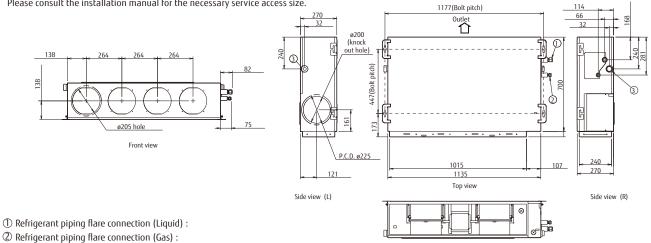
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

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

#### **Dimensions** (Unit: mm)

\*Service accessibility must be allowed for when installing the product.

Please consult the installation manual for the necessary service access size.



Rear view

③ Drain piping connection (Drain pipe)

# **High Static Pressure Duct**

**Models** ARXC36GBTH



Models ARXC72GBTH ARXC90GBTH



Models ARXC96GATH

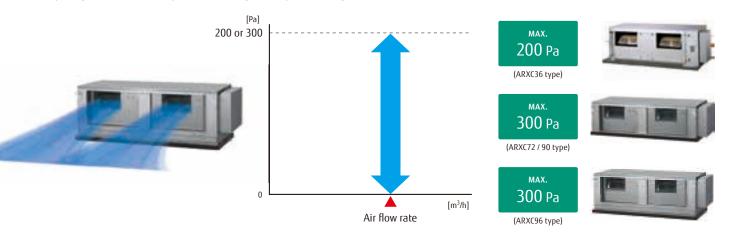




#### Feature

### Static pressure selection

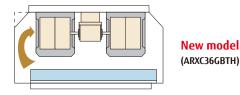
By using DC fan motor, it is possible to change static pressure range from 0 to 200Pa (ARXC36) / 300Pa (ARXC72 / 90 / 96).



#### Low noise

#### Models: ARXC36

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.



# Low energy consumption by high efficiency DC fan motor

Improved motor efficiency from previous model.

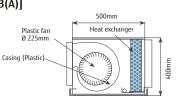




(ARXC36 type)

ARXC36GBTH : Plastic fan [42dB(A)]

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



# Easy installation (Compact size & Lightweight)

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



(ARXC36 type)



1,587 (ARXC96 type)

(Unit:mm)

#### **Optional parts**

Long-Life Filter : UTD-LF60 IR Receiver Unit : UTB-YWC Remote Sensor Unit : UTY-XSZX

UTD-LF60KA (For ARXC36GBTH) UTB-YWC

#### Specifications

Model name			ARXC36GBTH	ARXC72GBTH	ARXC90GBTH	ARXC96GATH	
Power source				Single - phase,	220-240V, 50Hz		
Constant la constant	Cooling	kW	11.2	22.4	25.0	28.0	
Capacity	Heating	KVV	12.5	25.0	28.0	31.5	
Input power		W	207	681	819	838	
	High		1,990 (553)	3,900 (1,083)	4,300 (1,195)	4,850 (1,347)	
Airflow rate	Med	m <sup>3</sup> /h (I/s)			4,000 (1,111)	4,250 (1,181)	
	Low	. (1/3)	1,330 (369)	3,000 (833)	3,500 (972)	3,600 (1,000)	
Static pressure ra	tatic pressure range		0 to 200	0 to 300	0 to 300	0 to 300	
Standard static p	ressure	Pa	100	150	150	150	
	High		42	47	48	48	
Sound pressure level	Med	dB (A)	36	43	46	45	
level	Low		32	40	44	42	
Dimensions (H ×	W × D)	mm	400 × 1,050 × 500	450 × 1,587 × 700	450 × 1,587 × 700	550 × 1,587 × 700	
Weight		kg(lbs)	40 (88)	84(185)	84(185)	105(231)	
Connection	Liquid		9.52 (Flare)	12.70 (Brazing)	12.70 (Brazing)	12.70 (Brazing)	
pipe diameter	Gas	mm	19.05 (Flare) 22.22 (Brazing) 22.22 (Brazing)		22.22 (Brazing)	22.22 (Brazing)	
Drain hose diameter (I.D./O.D.)		] [		25	/ 32		

Note : Specifications are based on the following conditions.

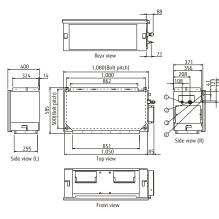
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

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

#### **Dimensions** (Unit: mm)

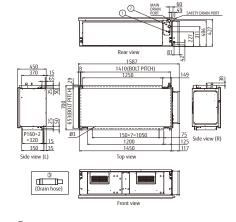




Refrigerant piping flare connection (Liquid)

② Refrigerant piping flare connection (Gas)

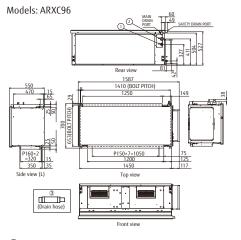
 ${\textcircled{3}}$  Drain piping connection



Models: ARXC72 / ARXC90

Refrigerant pipe flare connection (Liquid)

- ② Refrigerant pipe flare connection (Gas)
- ③ Drain hose



 ${f }{f }$  Refrigerant pipe flare connection (Liquid)

② Refrigerant pipe flare connection (Gas)

③ Drain hose

# **High Static Pressure Duct**

**Models** ARXC45GATH ARXC60GATH



**Models** ARXC72GATH ARXC90GATH





#### Feature

# **Easy installation** (Compact size & Lightweight)

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





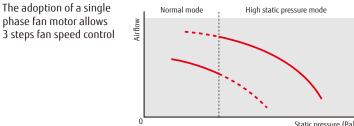
# Static pressure selection

#### Models : ARXC72 / ARXC90

2 Types of static pressure mode are selectable.



#### High Static Pressure Duct (ARXC72)

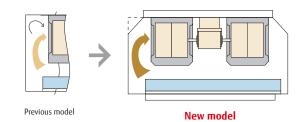


Static pressure (Pa)

# Low noise

#### Models : 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.



Installation styles

#### **Optional parts**

Long-Life Filter : UTD-LF60KA (For ARXC45/60GATH) IR Receiver Unit : UTB-YWC Remote Sensor Unit : UTY-XSZX

# 76 **OGENEROL**



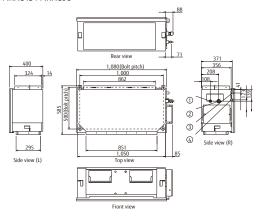
#### **Specifications**

Model name			ARXC45GATH	ARXC60GATH	ARXC72GATH	ARXC90GATH	
Power source			· · · · · ·	Single - phase,	220-240V, 50Hz		
Generalty	Cooling	kW	12.5	18.0	22.4	25.0	
Capacity	Heating	KVV	14.0	20.0	25.0	28.0	
Input power		W	715	730	1,110	1,250	
	High		3,500 (972)	3,500 (972)	3,900 (1,083)	4,300 (1,195)	
Airflow rate	Med	m <sup>3</sup> /h (I/s)	3,000 (833)	3,000 (833)	3,300 (917)	4,000 (1,111)	
	Low	(1/3)	2,460 (683)	2,460 (683)	3,000 (833)	3,500 (972)	
Static pressure ra	ange	D-	100 to 250	100 to 250	50 to 300	100 to 300	
Standard static p	ressure	Ра	100	100	260	250	
	High		49	49	51	53	
Sound pressure level	Med	dB (A)	45	45	48	51	
level	Low	(~)	42	42	45	49	
Dimensions (H ×	W × D)	mm	400 × 1,050 × 500	400 × 1,050 × 500	450 × 1,550 × 700	450 × 1,550 × 700	
Weight		kg(lbs)	46 (101)	46 (101)	83 (-)	85(-)	
Connection Liquid (Flai			9.52 (Flare)	9.52 (Flare)	12.70 (Brazing)	12.70 (Brazing)	
pipe diameter	Gas (Flare)	mm	19.05 (Flare)	05 (Flare) 19.05 (Flare) 22.22 (Brazing)		22.22 (Brazing)	
Drain hose diameter (I.D./O.D.)		1		25	/ 32		

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

#### Dimensions (Unit: mm)

Models: ARXC45 / ARXC60

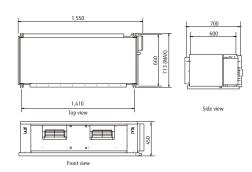


Refrigerant pipe flare connection (Liquid)

 $\ensuremath{\mathbbmath{\mathbb C}}$  Refrigerant pipe flare connection (Gas)

③ Drain hose connection

Models: ARXC72 / ARXC90



# Large Airflow Duct (Large type)

#### Models ARXN18GATH ARXN24GATH

ARXN24GATH ARXN30GATH ARXN34GATH ARXN36GATH ARXN45GATH





#### Feature

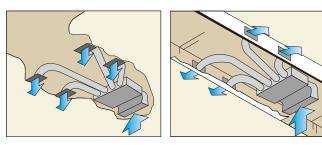
# Large airflow volume

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





# Installation styles



Selectable with a wide range of static pressure



**Optional parts** Remote Sensor Unit : UTY-XSZX



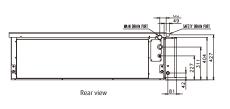
#### **Specifications**

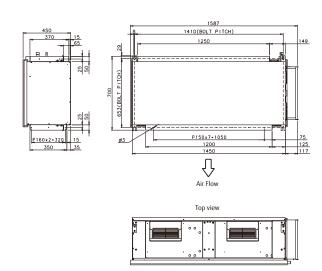
Model name			ARXN18GATH	ARXN24GATH	ARXN30GATH	ARXN34GATH	ARXN36GATH	ARXN45GATH			
Power source					Single - phase,	220-240V, 50Hz					
Constanting of the second seco	Cooling	1.144	5.6	7.1	9.0	10.0	11.2	12.5			
Capacity	Heating	kW	6.3	8.0	10.0	11.2	12.5	14.0			
Input power		W	154	205	306	432	572	572			
	High		2,280 (633)	2,640 (733)	3,200 (889)	3,720 (1,033)	4,120 (1,145)	4,120 (1,145)			
Airflow rate Med		m <sup>3</sup> /h (I/s)	-	-	-	-	-	-			
	Low	(1/5)	_	_	_	-	-	-			
Static pressure range			50 to 100	50 to 150	50 to 250	50 to 250	50 to 300	50 to 300			
Standard static p	oressure	Ра	50	50	50	50	60	60			
	High		35	37	40	43	45	45			
Sound pressure level	Med	dB (A)	-	-	-	-	-	-			
level	Low	(~)	-	-	-	-	-	-			
Dimensions (H ×	W × D)	mm	450 × 1,587 × 700	450 × 1,587 × 700	450 × 1,587 × 700	450 × 1,587 × 700	450 × 1,587 × 700	450 × 1,587 × 700			
Weight		kg(lbs)	84 (185)	84 (185)	84 (185)	84 (185)	84 (185)	84 (185)			
Connection	Liquid (Flare)		9.52	9.52	9.52	9.52	9.52	9.52			
pipe diameter	Gas (Flare)	mm	15.88	15.88	15.88	15.88	19.05	19.05			
Drain hose diameter (I.D./O.D.)				25/32							

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

Large Airflow Duct can be connected to V-III series only.

#### Dimensions (Unit: mm)





Front view

1 T

# Floor / Ceiling

Models ABHA12GATH ABHA14GATH ABHA18GATH ABHA24GATH









#### Feature

# **Flexible installation**

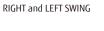
# Example for floor installation

Floor console

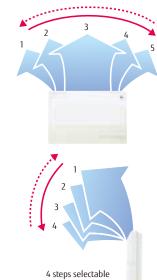


# Double auto swing

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

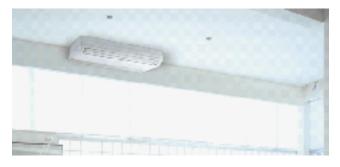


UP and DOWN SWING



### Example for ceiling installation

Under ceiling



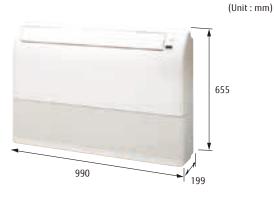
# High power DC fan motor

- High power
- Wide rotation range
- High efficiency



# Compact design

Symmetrical, slim and compact design.



# Auto-closing louver

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

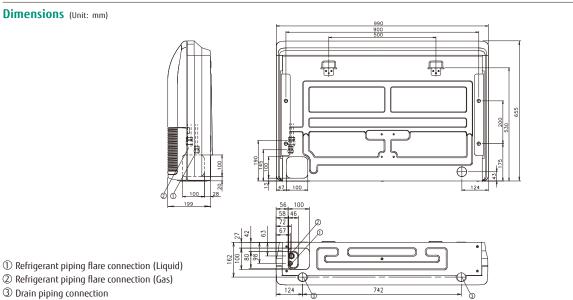
# Super vane

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

#### **Specifications**

Model name			ABHA12GATH	ABHA14GATH	ABHA18GATH	ABHA24GATH			
Power source			· · · · · ·	Single - phase, 220-240V, 50Hz					
Concertition .	Cooling	1.347	3.6	4.5	5.6	7.1			
Capacity	Heating	kW	4.0	5.0	6.3	8.0			
Input power		W	30	42	74	99			
	High		660 (183)	780 (216)	1,000 (277)	1,000 (277)			
Airflow rate	Med	m <sup>3</sup> /h (I/s)	570 (158)	640 (177)	720 (199)	820 (227)			
	Low	(1/5)	490 (136)	550 (152)	580 (161)	680 (188)			
	High		36	40	46	47			
Sound pressure level	Med	dB (A)	32	36	39	42			
ievei	Low	(~)	28	34	35	37			
Dimensions (H ×	W × D)	mm	199 × 990 × 655	199 × 990 × 655	199 × 990 × 655	199 × 990 × 655			
Weight		kg(lbs)	25 (55)	26 (57)	26 (57)	27 (59)			
Connection	Liquid (Flare)		6.35	6.35	9.52	9.52			
pipe diameter	Gas (Flare)	mm	12.70	12.70	15.88	15.88			
Drain hose diam	eter (I.D./O.D.)			25/	32				

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



Ceiling

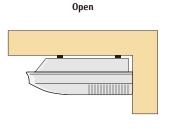
Models ABHA30GATH ABHA36GATH ABHA45GATH ABHA54GATH



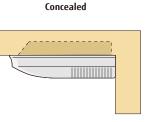


#### Feature

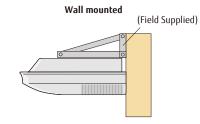
### Installation



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



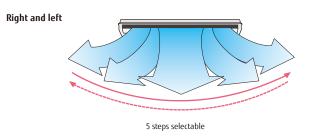
Installation pattern where part of the indoor unit is embedded into the ceiling.

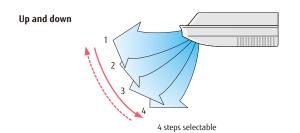


Installation which fixes the indoor unit to the wall by the use of wall brackets (Field supplied). This type of installation can be used when the ceiling space is insufficient.

# Double auto swing and wide airflow

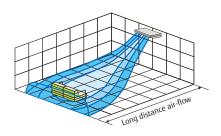
Auto airflow direction and auto swing





# Long airflow

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

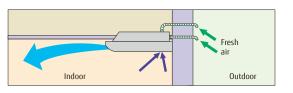


# High power DC fan motor

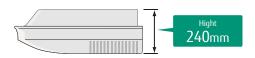
• High power • Wide rotation range • High efficiency



# Fresh air intake

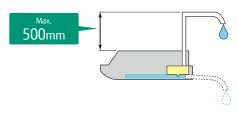


# Slim & Compact design



# High lift drain pump

Optional drain pump unit allows flexible installation design.



#### **Optional parts**

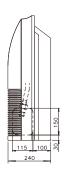
Drain Pump Unit : UTR-DPB24T UTD-RF204 Flange :

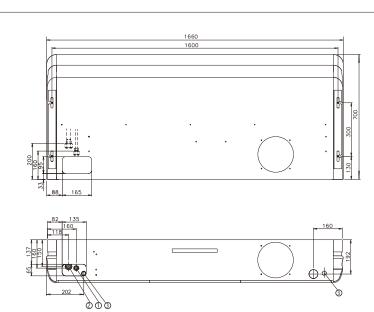
#### **Specifications**

Model name			ABHA30GATH	ABHA36GATH	ABHA45GATH	ABHA54GATH			
Power source				Single - phase, 220-240V, 50Hz					
Concertition	Cooling	kW	9.0	11.2	12.5	14.0			
Capacity	Heating	KVV	10.0	12.5	14.0	16.0			
Input power		W	66	85         131         180           1,690 (469)         2,010 (558)         2,270 (629)           1,400 (389)         1,600 (444)         1,780 (493)           1,170 (325)         1,230 (342)         1,280 (355)					
	High		1,630 (452)	1,690 (469)	2,010 (558)	2,270 (629)			
Airflow rate	Med	m <sup>3</sup> /h (I/s)	1,370 (379)	1,400 (389)	1,600 (444)	1,780 (493)			
	Low	(1/3)	1,140 (316)	1,170 (325)	1,230 (342)	1,280 (355)			
	High		42	45	48	51			
Sound pressure level	Med	dB (A)	38	38	42	45			
icvei	Low	(~)	33	34	35	36			
Dimensions (H ×	W × D)	mm	240 × 1,660 × 700	240 × 1,660 × 700	240 × 1,660 × 700	240 × 1,660 × 700			
Weight		kg(lbs)	46 (101)	48 (106)	48 (106)	48 (106)			
Connection	Liquid (Flare)		9.52	9.52	9.52	9.52			
pipe diameter	Gas (Flare)	mm	15.88	19.05	19.05	19.05			
Drain hose diam	eter (I.D./O.D.)			25	/ 32				

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

#### Dimensions (Unit: mm)





1 Refrigerant piping flare connection (Liquid)

O Refrigerant piping flare connection (Gas)

③ Drain piping connection

# Wall Mounted

Models (EEV internal)	Models (EEV internal)	Models (EEV external)
ASHA07GACH	ASHA07GATH	ASHE07GACH
ASHA09GACH	ASHA09GATH	ASHE09GACH
ASHA12GACH	ASHA12GATH	ASHE12GACH
ASHA14GACH	ASHA14GATH	ASHE14GACH





#### Feature

### Filter features

High performance filter provides high quality air conditioning



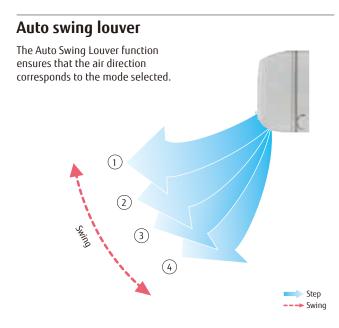
#### Long-life\* Ion Deodorization Filter

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

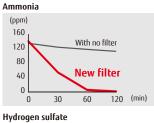
(\*The filter can be used for approx. 3 years if it is washed under water to restore its surface action when it is dirty.)

### Apple-catechin Filter

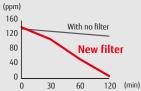
Fine dust, invisible mold spores, and harmful microorganisms are absorbed onto the filter by static electricity, and further growth is inhibited and deactivated by the polyphenol extracted from apples.



#### Deodorizing effect (Odor reduction rate)







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

#### **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 790 mm



790mm

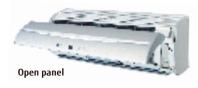
# High power DC fan motor

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



# Easy maintenance

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



# Symmetrical design

Symmetrical, clean design that suits all interiors.

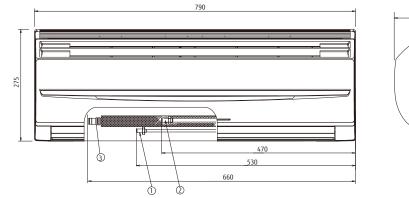
#### **Specifications**

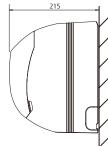
Model name			ASHA07GACH ASHA07GATH	ASHA09GACH ASHA09GATH	ASHA12GACH ASHA12GATH	ASHA14GACH ASHA14GATH	ASHE07GACH	ASHE09GACH	ASHE12GACH	ASHE14GACH
Power source				Single - phase, 2	220-240V, 50Hz	·	İ	Single - phase,	220-240V, 50Hz	
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	2.2	2.8	3.6	4.5
Capacity	Heating	KVV	2.8	3.2	4.1	5.0	2.8	3.2	4.1	5.0
Input power		W	17	18	22	34	15	16	21	34
High			490 (136)	500 (139)	560 (156)	670 (186)	490 (136)	500 (139)	560 (156)	680 (189)
Airflow rate Med		m <sup>3</sup> /h (I/s)	450 (125)	450 (125)	480 (133)	490 (136)	450 (125)	450 (125)	480 (133)	490 (136)
	Low	(1/3)	370/420*1 (103/117*1)	370/420*1 (103/117*1)	420 (117)	420 (117)	370/420*1 (103/117*1)	370/420*1 (103/117*1)	420 (117)	420 (117)
	High		35	36	39	44	34	35	38	43
Sound pressure level	Med	dB (A)	33	33	35	37	32	32	34	35
level	Low	(~)	27 / 31* <sup>1</sup>	27 / 31* <sup>1</sup>	31	32	26 / 30*1	26 / 30* <sup>1</sup>	30	30
Dimensions (H ×	W × D)	mm	275 × 790 × 215	275 × 790 × 215	275 × 790 × 215	275 × 790 × 215	275 × 790 × 215	275 × 790 × 215	275 × 790 × 215	275 × 790 × 215
Weight		kg(lbs)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)
Connection	Liquid (Flare)		6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35
pipe diameter Gas (Flare)		mm	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70
Drain hose diameter (I.D./O.D.)			13.8 / 15.	8 to 16.7			13.8 / 15.	5.8 to 16.7		
EV Kit (option)			-	_	-	-	UTR-EV09XB	UTR-EV09XB	UTR-EV14XB	UTR-EV14XB
			llowing conditions.			*1 : This value	is under cooling ope	ration.		

Note : Specifications are based on the following conditions. Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

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

#### Dimensions (Unit: mm)





1 Refrigerant piping flare connection (Liquid)

O Refrigerant piping flare connection (Gas)

③ Drain piping connection

# Wall Mounted

#### **Models**

ASHA18GACH ASHA18GATH ASHA24GACH ASHA24GATH ASHA30GACH ASHA30GATH

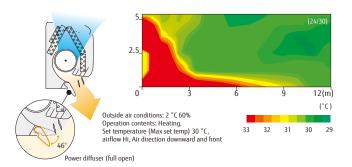




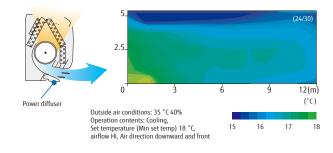
#### Feature

### More comfort airflow by adopting power diffuser

"Vertical airflow" provides powerful floor level heating

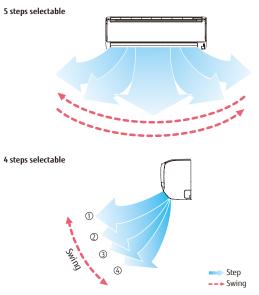


"Horizontal airflow" does not blow cool air directly at the occupants in the room

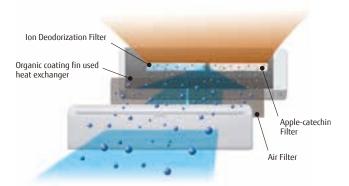


# Double auto swing

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



# Air conditioner filter features



High quality air conditioning by incorporation of high performance filter.



• Ion Deodorization Filter

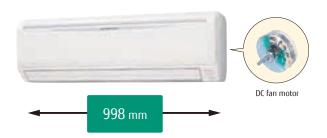
The filter deodorizes by powerfully decomposing absorbed odors using the oxidizing and reducing effects of ions generated by the ultra-fine-particle ceramic.



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

# Compact & Slim design

By using DC fan motor, compact design is realized.



# Easy maintenance

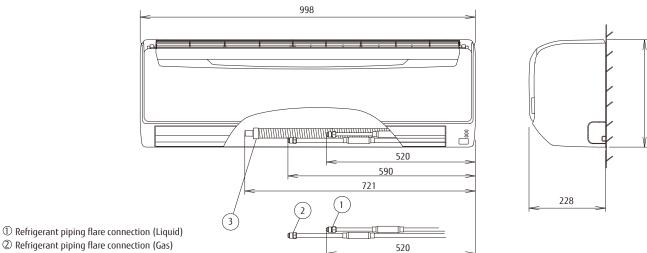
Simplification of drain pan cleaning improves maintenance-ability.

### **Specifications**

Model name			ASHA18GACH ASHA18GATH	ASHA24GACH ASHA24GATH	ASHA30GACH ASHA30GATH					
Power source				Single - phase, 220-240V, 50Hz						
Cooling Like		kW	5.6	7.1	8.0					
Capacity Heating		KVV	6.3	8.0	9.0					
Input power		W	32	60	91					
	High		840 (233)	1,100 (305)	1,240 (343)					
Airflow rate Med		m <sup>3</sup> /h (I/s)	770 (213)	910 (252)	980 (271)					
	Low	(1.5)	690 (191)	730 (202)	770 (213)					
	High		41	48	52					
Sound pressure level	Med	dB (A)	39	43	45					
ievei	Low	(~)	35	35	35					
Dimensions (H ×	W × D)	mm	320 × 998 × 228	320 × 998 × 228	320 × 998 × 228					
Weight		kg(lbs)	15 (33)	15 (33)	15 (33)					
Connection	Liquid (Flare)		9.52	9.52	9.52					
pipe diameter Gas (Flare)		mm	15.88	15.88	15.88					
Drain hose diameter (I.D./O.D.)				12 / 16						

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

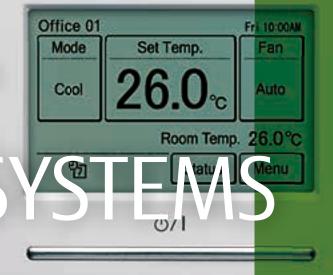
#### Dimensions (Unit: mm)



③ Drain piping connection

320

# AIRSTAGE<sup>TM</sup> CONTROL S



# User friendly control system provides individual control to centralized control



The AIRSTAGE control system can perform air conditioning control of individual room, centralized control by floor or by building, or centralized energy saving air conditioning control for large buildings.

A variety of air conditioning management schemes are available to match the application, such as linking with the building control system, linking with a single split models, and using various interfaces.

BEST CONTROL SOLUTION FOR EACH PROPERTY CONTROL SYSTEM OVERVIEW COMPARISON TABLE OF CONTROLLERS Individual Controller Centralised Controller Convertor / Adaptor

AIRSTAGE

# **BEST CONTROL SOLUTION FOR EACH PROPERTY**

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

### SHOP

Туре	Individual Control		Centralize	ed Control		Inte	egrating Control (Interf	ace)
Contraction of the				=		$\sim$	<b></b>	$\sim$
A state	Wired Remote Controller	Group Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller	Network Convertor for LonWorks®	MODBUS® Convertor	KNX® Convertor
A.	UTY-RNRGZ2, UTY-RLRG	UTY-CGGG	UTY-DCGG	UTY-DTGGZ1	UTY-APGXZ1, UTY-ALGXZ1	UTY-VLGX	UTY-VMGX	UTY-VKGX
Automatic control of A/C (Schedule timer, Weekly timer etc.)	•	•	•	•	•			
Limited control for staff (RC Prohibition, Room temp set point limitation etc.)			•	•	•	•	•	•
Group Control		•	•	•	•			
Advanced Energy Saving (Peak cut, Indoor unit rotation operation etc.)					•			
Remote Management				•	•			
Manage multiple sites				•	•			
Monitor energy consumption					•			
Control third party products					•			
Integrate FGL A/C into BMS						•	•	•

#### HOTEL

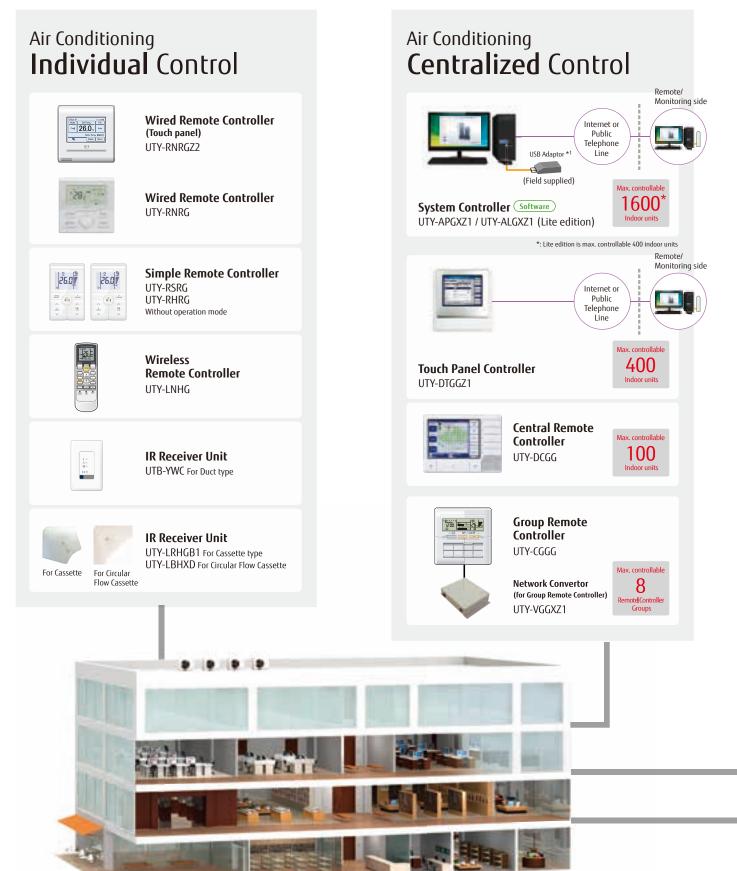
Туре		Individual Control			Centralize	ed Control			Integra	ting Control (In	terface)	
						8		Ø.	$\checkmark$	$\checkmark$	$\checkmark$	
	Wired Remote Controller	Simple Remote Controller	Wireless Remote Controller	Group Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller	BACnet® Gateway	Network Convertor for LonWorks®	MODBUS® Convertor	KNX® Convertor	External Switch Controller
- BAR	UTY-RNRGZ2, UTY-RLRG	UTY-RSRG, UTY-RHRG	UTY-LNHG	UTY-CGGG	UTY-DCGG	UTY-DTGGZ1	UTY-APGXZ1, UTY-ALGXZ1	UTY-ABGXZ1, UTY-VBGX	UTY-VLGX	UTY-VMGX	UTY-VKGX	UTY-TERX
Local control for hotel guest	•	•	•									
Centralized A/C control for common space				•	•	٠	•	٠	•	•	•	
Limited control for hotel guests					•	•	•	•	•	•	•	
Remote Management						•	•					
Advanced Energy Saving (Peak cut, Indoor unit rotation operation etc.)							•	•				
Monitor energy consumption							•					
Control third party products							•					
Integrate FGL A/C into BMS								•	•	•	•	
Interlock with window contact												•
Interlock with key-card												•

#### OFFICE

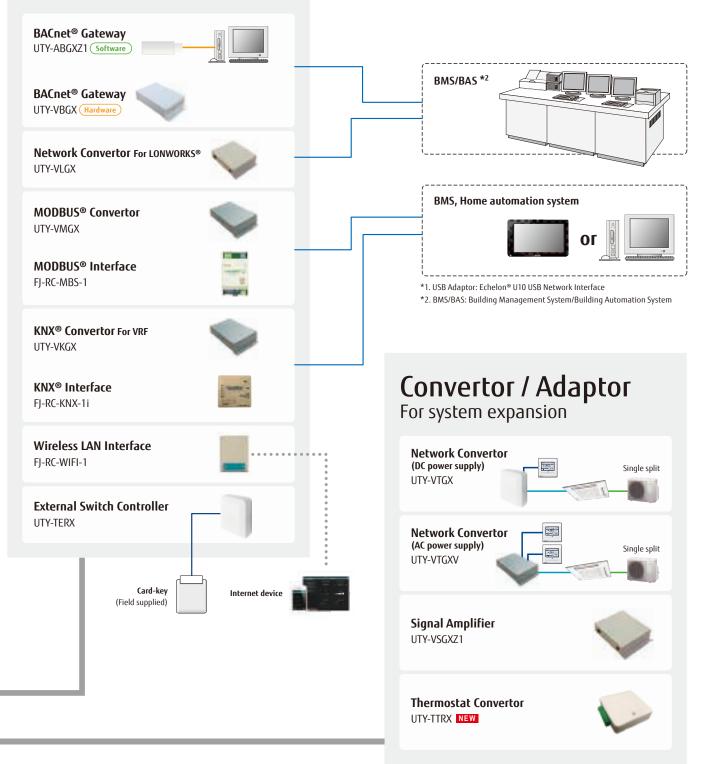
Туре		Individual Control			Centralize	ed Control			Integra	ting Control (In	terface)	
a street						8		0	$\checkmark$	$\checkmark$	$\checkmark$	
19 Lantin Pro	Wired Remote Controller	Simple Remote Controller	Wireless Remote Controller	Group Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller	BACnet® Gateway	Network Convertor for LonWorks®	MODBUS® Convertor	KNX® Convertor	External Switch Controller
Car	UTY-RNRGZ2, UTY-RLRG	UTY-RSRG, UTY-RHRG	UTY-LNHG	UTY-CGGG	UTY-DCGG	UTY-DTGGZ1	UTY-APGXZ1, UTY-ALGXZ1	UTY-ABGXZ1, UTY-VBGX	UTY-VLGX	UTY-VMGX	UTY-VKGX	UTY-TERX
Local control for office staff	•	•	•	•	•							
Automatic control of A/C (Schedule timer, Weekly timer etc.)	•		•	•	•	•	•	•				
Centralized A/C control for management					•	•	•	•	•	•	•	
Limited control for office staff (RC Prohibition, Room temp set point limitation etc.)					•	•	•	•	•	•	•	
Advanced Energy Saving (Peak cut, Indoor unit rotation operation etc.)							•	•				
Remote Management						•	•					
Energy Charge Apportionment						•	•	•				
Monitor energy consumption							•					
Control third party products							•					
Integrate FGL A/C into BMS								•	•	•	•	
Interlock with door contact												•
Interlock with human sensor for meeting room												•

# **CONTROL SYSTEM OVERVIEW**

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



# **Convertor / Adaptor** For external device



# **COMPARISON TABLE OF CONTROLLERS**

					1	1	
ltem				1			
			Wired Remote Controller	Wired Remote	Simple Remote	Simple Remote Controller*1	
Model n	2000		(Touch panel) UTY-RNRGZ2	Controller UTY-RLRG	Controller UTY-RSRG	UTY-RHRG	
	ntrollable remote co	ontroller aroups	1	1	1	1	
	ntrollable indoor un		16	16	16	16	
	ntrollable groups			_		_	
	On / Off		•	•	•	•	
	Operation mode setting		•	•	•	_	
	Fan speed setting		•	•	•	•	
5	Room temp. setting		•	•	•	•	
Air conditioning control function	Room temp. set p		•	•	•	•	
fer	Test operation		•	•	•	•	
trol	Up/down air direc	King flag cotting	•	•	•	•	
COD			•	•	-		
ing	Right/left air direc		•	-		-	
tion		controi				-	
ndi	Group setting		-	_	-	-	
<u> </u>	RC prohibition		-	-	-	-	
À	Anti freeze setting	-	•	-	-	-	
	Set temp. auto rel		•	•	-	-	
	Economy mode se		•	•	-	-	
	Human sensor co	ntrol	•	-	-	-	
	Error		•	٠	•	•	
	Defrosting		•	٠	•	•	
	Current time		•	•	-	-	
	Day of week		•	٠	-	-	
	R.C. prohibition		•	•	•	•	
	Cooling/heating p	riority	•	٠	•	•	
play	Address display		•	٠	•	•	
Display	Room temp		•	-	•	•	
	Multi language		•	_	-	_	
	Summer time		•	-	-	_	
	Name registration	1	•	-	-	-	
	Backlight		•	_	•	•	
	2D floor layout / 3	D building display	_	_	-	_	
		ge detection function	-	-	-	_	
	-	Period	Week	Week	-	_	
	Schedule timer	On/off, Temp, Mode,	8	4			
		Times per day			-	=	
-	On/off timer		•	٠	-	-	
Timer	Sleep timer		-	-	-	-	
	Program timer		-	-	-	-	
	Auto off timer		•	٠	-	-	
	Day off		•	٠	-	-	
	Min. unit of timer		10 • 30	30	-	-	
	Status monitoring		-	-	-	-	
	Electricity charge	apportionment	-	-	-	-	
	Error history		•	٠	-	-	
	Emergency stop		-	-	-	-	
Control	Remote managen	nent	-	-	-	-	
Cor	Energy saving ma	nagement	-	-	-	-	
	E-mail notification		-	-	-	-	
	Key lock		Child lock	Child lock	_	_	
	Low noise mode		-	-	-	-	
			1			<u>I</u>	

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Wireless Remote Controller	Group Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller Lite Software	System Controller
UTY-LNHG	UTY-CGGG	UTY-DCGG	UTY-DTGGZ1	UTY-ALGXZ1	UTY-APGXZ1
1	8	100	400	400	1600
16	128	100	400	400	1600
		16	400	400	1600
-	•	10	400	400	•
•	•	•	•	•	•
٠	•	•	•	•	•
•	•	•	•	•	•
-	-	•	•	•	•
•	-	•	•	-	-
٠	-	•	•	•	•
•	-	•	•	•	•
-	-	_	•	-	_
_	-	•	•	•	•
_	_	•	•	•	•
	_	•	•	•	•
	_	_	•	_	
•	_	•	•	•	•
			•	•	•
	-	-			
_	•	•	•	•	•
-	-	•	•	•	•
•	•	•	•	•	•
-	•	-	•	•	•
-	•	•	•	•	•
-	٠	•	•	•	•
-	٠	•	•	•	•
_	-	-	•	-	-
_	-	•	•	•	•
_	_	•	•	•	•
_	_	•	•	•	•
_		•	•	_	
_	_	_	_	_	•
_	_	_	•	•	•
	Week	Week	Year	Year	Year
_	4	20	20	144	144
•	-	-	-	-	-
•	-	-	_	-	_
•	_	_	_	_	_
	_	_	•	-	-
_	_	•	•	•	•
5	10	10	10	10	10
-	-		•	•	•
_	-	-	0	0	•
_	•	•	•	•	٠
_	-	•*2	•*2	-	-
-	-	-	•	0	•
-	-	-	-	0	0
-	-	-	٠	•	٠
	•	•	•	•	•

\*1 "Operation mode" setting is not available for this model.

\*2 This function is available only through external input control. •: Supported O: Optional function -: Not supported yet

# Wired Remote Controller (Touch Panel)

# UTY-RNRGZ2

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

- Easy finger touch operation with LCD panel
- Built-in weekly/Daily timer (ON/OFF, Temp., Mode)
- Backlight enables easy operation in a darkened room
- Room temperature display
- Control up to 16 indoor units
- Corresponds to 12 different languages
- (English, Chinese, French, German, Spanish, Russian, Polish, Italian, Greek, Portuguese, Turkish and Dutch)
- 2-wire type

#### Functions

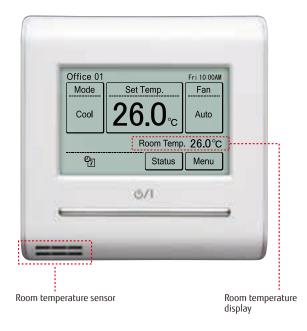
# High performance and compact size

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



# Accurate and comfortable control

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



# Backlight

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



### Various convenient functions Displays setting status and Limitations

# • The remote controller settings can be

 Status
 Page 1/3
 Status
 Page 2/3

 Ar / Pa Smellin
 I/2
 Status
 Page 2/3

 VT
 V
 I/2
 Status
 Page 2/3

 trong
 Monter
 Page 3/3
 Status
 Page 3/3

 Monter
 Page 3/3
 Page 3/3
 Page 3/3

 Frende State
 - Interview
 Page 3/3

 Frende State
 - Interview
 Page 3/3

 Horner
 Page 1/3
 Page 3/3

 Horner
 - Page 3/3
 Page 3/3

 Horner
 - Page 3/3
 Page 3/3

 Horner
 - Page 3/3
 Page 3/3



#### Summer Time display

easily checked

• This function can be set easily from Menu screen



#### Child lock

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



#### Name Registration

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



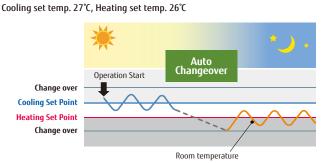




### Various energy saving control

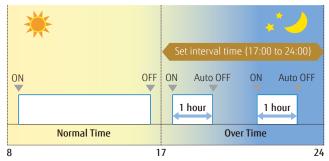
#### **Custom Auto**

- Maintains 2 separate set points for heating and cooling.
- Automatically changes mode between heating and cooling.
- \* This function is not available for some models.



#### Auto OFF timer

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



Ex.) At interval time hour (17:00 to 24:00) to prevent forgetting to turn off Set off time : 1 hour

#### 2 schedules Weekly Timer

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



#### Set Temperature Auto Return

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

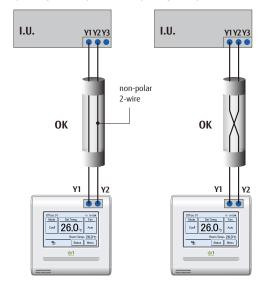
#### Set Temperature Upper and Lower Limit Setting

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

### **Simplified installation**

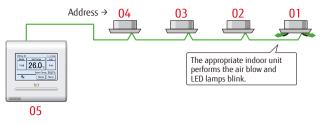
#### Uses non-polar 2-wire type

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



#### Auto Address Setting/Setting Position Notification

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



# **Easy Maintenance**

#### **Error History Display**

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



#### Specifications

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

DC12V is supplied by indoor unit.

# Wired Remote Controller

#### **UTY-RLRG**

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



Max. controllable

16 indoor units

#### **Functions**

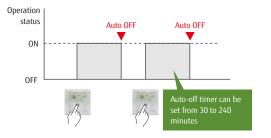
#### High performance and compact size

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



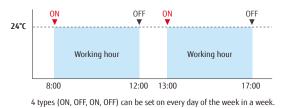
# Auto-off timer

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



# 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.



### High visibility and easy operation

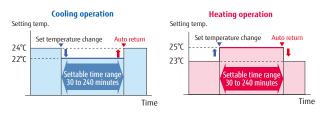
- "Mode", "Set Temp", and "Fan" are displayed at large size on the top screen.
- Each function to be set is indicated by an icon.
- Control guide is displayed and operation is simple and straightforward.



- Sophisticated control buttons Simple operation with easy 4-way navigation pad
- Set contents can be displayed clearer with large LCD.

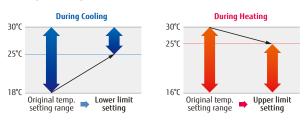
#### Set temperature auto return

- 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.



# Set temperature upper and lower limit setting

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



#### Specifications

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

DC12V is supplied by indoor unit.

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# Simple Remote Controller

#### **UTY-RSRG**

#### UTY-RHRG (Without Operation mode)

Compact remote controller provides access to basic functions

- Up to 16 indoor units can be controlled with one remote controller.
- Suitable for hotels or offices as it is easily operated with no complex functions.
- Stylish design: Simple design to match the stylish interior.
- Large LCD screen & simple operation buttons
- Backlight: White colored backlight on monitor enable easy operation in dark.
- 2-wire type

#### **Functions**

# Corresponding to various applications

#### • Vertical louver control:

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





#### • Room temperature set point limitation:

• Built in room temperature sensor:

controls room climate accuracy.

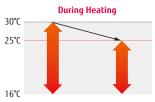
The Simple Remote Controller can manage to energy saving operation in small buildings without the central control unit.

The Simple Remote Controller detects actual room temperature and



**During Cooling** 

30°C





Room temperature sensor

#### Specifications

Specifications				
Model name		UTY-RSRG	UTY-RHRG	
Power Supply		DC 12V		
Dimensions (H x W x D)	mm	120 × 7	5 × 19.4	
Weight	g	12	20	

DC12V is supplied by indoor unit.





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UTY-RHRY Without Operation mode



# Wireless Remote Controller

#### UTY-LNHG

Simple and sophisticated operations with a choice of 4 daily timers

• A single controller controls up to 16 indoor units.



Selectable

4 daily timers

Max. controllable

16

indoor units

#### Functions

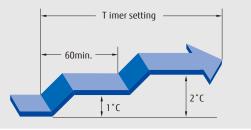
### **Built-in daily timer**

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.

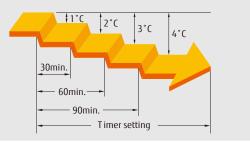
#### Cooling operation/dry operation

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



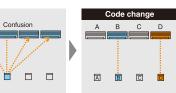
#### Heating operation

When the sleep timer is set, the set temperature automatically drops  $1\,{}^{\circ}C$  every 30 minutes. The set temperature can drop to a max. of  $4\,{}^{\circ}C$ .



# Easy installation and operation

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

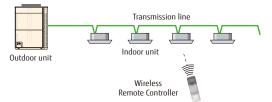


Wide and precise



# Address setting

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



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

#### 

# IR Receiver Unit

#### **UTB-YWC**

Duct type\* indoor units can be controlled with Wireless Remote Controller \*Only Large Airflow Duct cannot be connected to IR Receiver Unit.

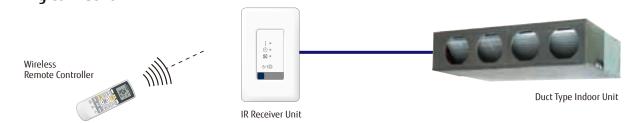
• Up to 16 indoor units can be controlled with one remote controller.

• Suitable for hotels or offices as it is easily operated with no complex functions.

#### Functions



### Wiring connection



#### Specifications

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

# **IR Receiver Unit**

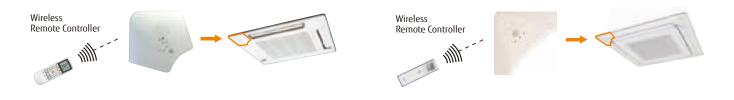
UTY-LRHGB1 (For Cassette) UTY-LBHXD (For Circular Flow Cassette)

Cassette type indoor unit can be controlled with Wireless Remote Controller



#### Functions

# Wiring connection



#### Specifications

Model name		UTY-LRHGB1 UTY-LBHXD			
Power Supply		DC 5V			
Dimensions (H x W x D)	mm	193.9 × 19	3.9 × 31.2		
Weight	g	14	0		

# Group Remote Controller / Network Convertor

# UTY-CGGG / UTY-VGGXZ1

Group control of indoor units with simple operation

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



Max. controllable

8

rei

Group Remote Controllers UTY-CGGG



Max. controllable

2

refrigeran circuits

Max. controllable

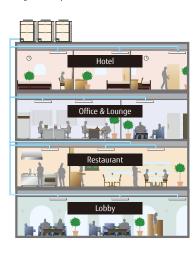
97 indoor units in

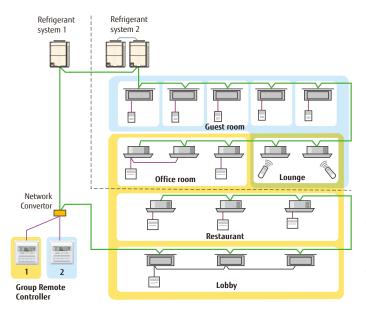
Network Convertor UTY-VGGXZ1 For Group Remote Controller

#### **Functions**

#### Control up to 8 remote controller groups

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





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

Group Remote Controller 2: To control guest room and lounge (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.



# **Built-in weekly timers**

The weekly timer is provided as a standard function.

#### **Specifications**

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

DC12V is supplied by indoor unit.

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

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# **Central Remote Controller**

### **UTY-DCGG**

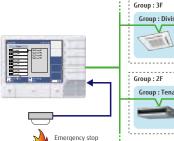
Central control of small- and medium-sized buildings and tenants. The operation status of all connected indoor units can be viewed at a glance on a large LCD monitor to simplify individual control to batched control.

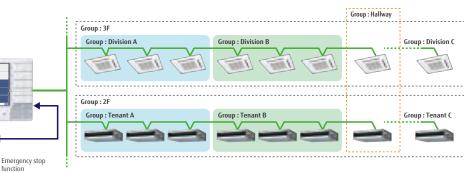
- Individual control and monitor of 100 indoor units
- 5 inch TFT color screen
- User friendly view and easy operation
- External input / output contact
- Detachable power supply unit
- Corresponds to 7 different languages (English, Chinese, French, German, Spanish, Russian, Polish)

#### **Functions**

#### System overview

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





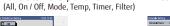
### **Functions**

• Diverse control of indoor units





• Remote controller prohibition

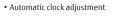




• Weekly time



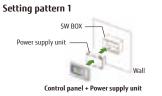
Error history

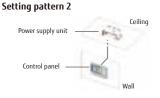




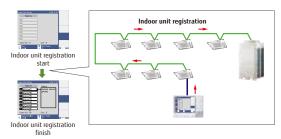
# **Easy Installation**

- 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



#### **Specifications**

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



Max. controllable

100

indoor unit

Max. controllable

16

group

# **Touch Panel Controller**

#### UTY-DTGGZ1

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



Max. controllable

100

outdoor units

Max. controllable

400

#### **Functions**

# Control & monitoring from anywhere

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



Max. controllable

400

indoor units

#### Easy maintenance

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

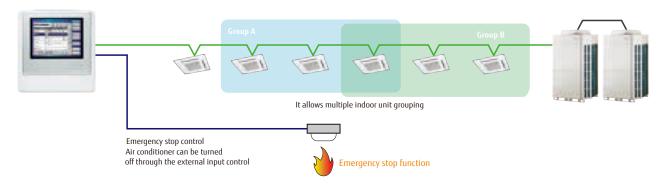


#### **Easy installation**

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

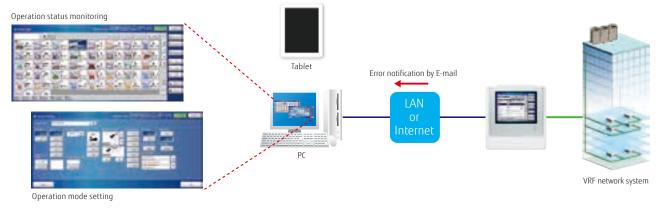


# Up to 400 indoor units can be controlled



# **Control & monitoring**

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



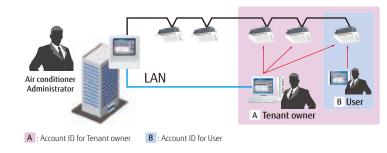
#### **Smart Phone**

Smart Filone		lablet		
Model name	Browser	Model name	Browser	
Nexus 6P (Android 7.1.1)	Google Chrome 5.5	ipad Pro 9.7inch (iOS 10.2.1)	Safari 10	
iphone7 (iOS 10.1)	Safari 10			

Tablat

### Flexible access permission for Point each level user.

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



# Additional languages function

Corresponds to 7 different languages, English, Chinese, French, German, Spanish, Russian, Polish as standard.

Additional language can be integrated on remote device by creating language database.

Additional language is displayed on only the remote device, and Touch Panel Controller cannot be added other languages.

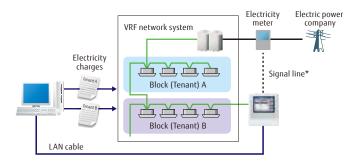


7 Languages

7 Languages + Other languages

### Electricity charge apportionment

- Electricity charge apportionment can be performed easily for the power consumed when billing users for air conditioning power charges.
  - Apportionment charge/bill calculation
  - Tenant (block) setting
  - Common facilities apportionment setting
  - Rated power consumption allotment setting
  - Individual calculation at cooling and heating
  - Electricity meter supported



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

**Option** UTY-PTGXA

### Automatic summer time setting

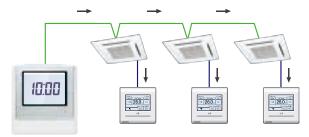
#### **Providing function**

1) Schedule setting of summer time setting

• It prevents the user from forgetting to set summer time. In addition, it reduces the time and labor of user.

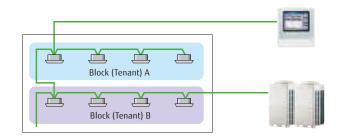
#### Automatic clock adjustment

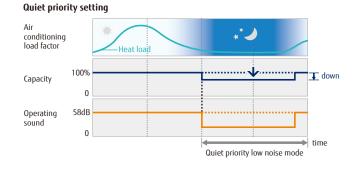
2) The time setting of each controller can be set in batch automatically.



# Outdoor low noise operation

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





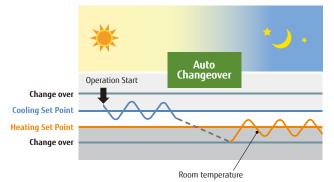
### NEW Various energy saving control

#### Custom Auto

- Maintains 2 separate set points for heating and cooling.
- Automatically changes mode between heating and cooling.
- \* This function is not available for some models.



#### Cooling set temp. 28°C, Heating set temp. 18°C



#### **FUNCTIONS SUMMARY**

1000 million (1000 million)	

	UTY-DTGGZ1	Monitoring side		
Air conditioning control function				
On / Off	•	•		
Operation mode setting*	•	•		
Fan speed setting	•	•		
Room temp. setting	•	•		
Room temp. set point limitation	•	•		
Test operation	•	•		
Up/down air direction flap setting	•	•		
Right/left air direction flap setting	•	•		
Individual louver control	•*1	•		
Group setting	•	•		
RC prohibition	•	•		
Anti freeze setting	•	•		
Set temp. auto return	-	•		
Various energy saving control	-	•		
Economy mode setting	•	•		
Human sensor control	-	•		
Display				
Error	•	•		
Defrosting	•	•		
Current time	•	•		
Day of week	•	•		
R.C. prohibition	•	•		
Cooling/heating priority	•	•		
Address display	•	•		
Room temp	•	•		
Multi language	•	•		
Summer time	•	•		
Time zone setting	•	•		
Name registration	•	•		
Backlight	•	•		
Language setting	7	7+other		
Filter sign reset	•	•		
Memory operation	•	•		

		UTY-DTGGZ1	Monitoring side
Timer		·	` 
Schedule timer	Period	Year	Year
	On/off, Temp, Mode, Times per day	20	20
On/off timer		-	-
Sleep timer		-	-
Program timer		-	-
Auto off timer		-	•
Day off		•	•
Min. unit of timer setting (Minutes)		10	10
Control			
Status monitoring	j system	•	•
Electricity charge apportionment		0	0
Error history		•	•
Emergency stop		•*2	•*2
Remote management		-	•
Energy saving management		-	-
E-mail notificatio	n for malfunction	-	•
Key lock		• Password setting	_
Low noise mode		•	•

•: Supported O: Optional function -: Not supported yet

\*1 Only setting cancellation can be operated. \*2 This function is available only through external input control.

#### **Specifications** Model name UTY-DTGGZ1 100-240V 50/60Hz, Single phase Power Supply Dimensions (H x W x D) mm 260 × 246 × 54 Weight 2,150 g Interface Transmission / LAN / USB / EXT IN / EXT OUT / Reset SW

# System Controller Goftware

#### UTY-APGXZ1

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

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

# System Controller Lite Goftware

#### UTY-ALGXZ1

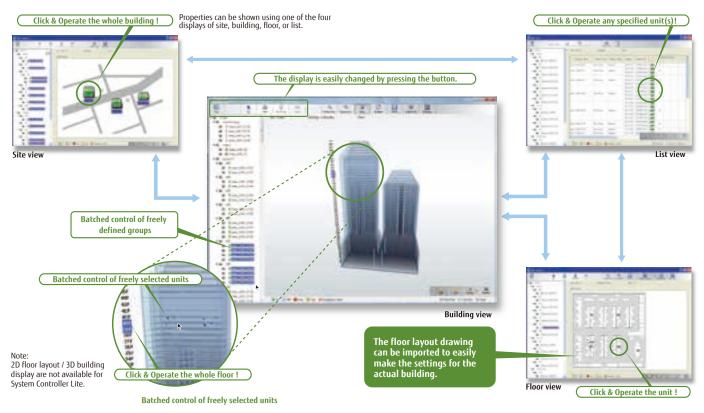
System Controller Lite has standard functions sufficient for air conditioner management in small and medium scale buildings.

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

#### **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.







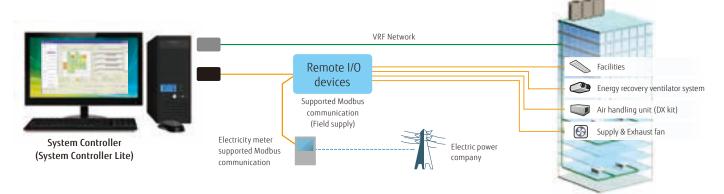




# 3rd party devices connected by Modbus can be controlled.

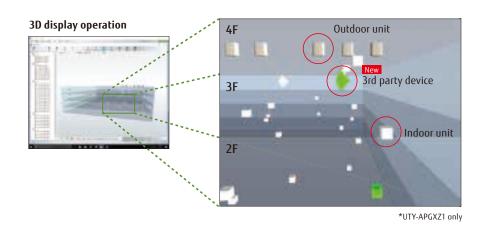
(Standard) for System Controller (Option) for System Controller Lite UTY-PLGXX2

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



#### 3D display of external equipment

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



Diverse operation management & Data management

#### Schedule management

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

#### Diverse control of indoor and outdoor unit

- Indoor unit operation state, operation mode, etc. are displayed
- Indoor unit start / stop and operation mode switching
- Room temperature set point limitation

#### Remote controller prohibition

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

#### Automatic clock adjustment

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

#### Error display & E-mail notification

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

#### Data base import/export

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

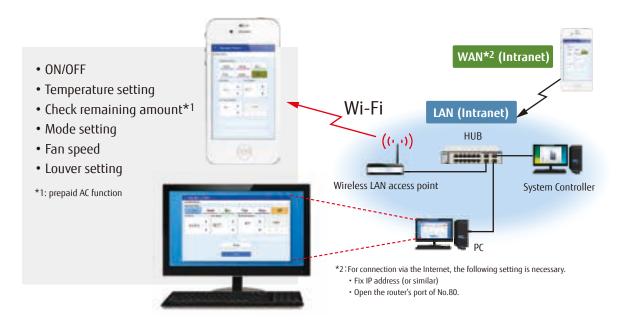
#### **Operating & control record**

Displays the history of operation status and control.

### Functions

# Web Operation

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

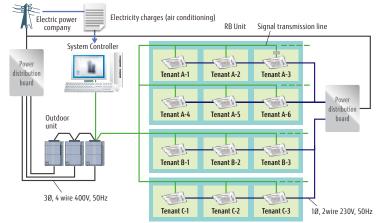


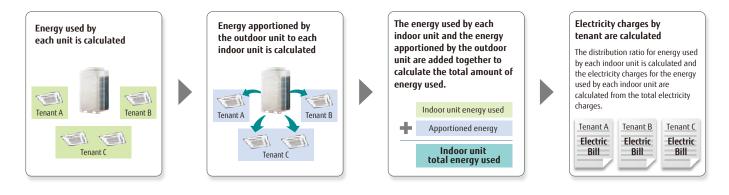
# Electricity charge apportionment

#### 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. **Standard** for System Controller **Option** for System Controller Lite UTY-PLGXA2

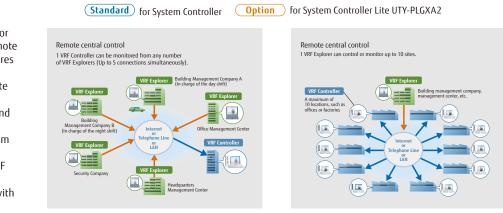
#### System Configuration Example





# **Remote management**

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.

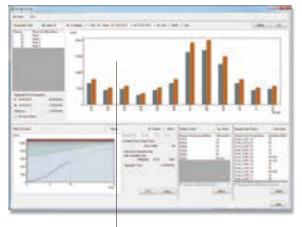


**Option** for System Controller UTY-PEGXZ1

# Energy saving management

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

Energy Saving Management Main Screen



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

# Indoor unit rotation operation

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

**Option** for System Controller Lite UTY-PLGXE2

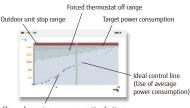


Indoor unit rotation screen

# Peak cut operation

A power meter is connected to detect the total power consumption while shifting the indoor unit set temperature, set the indoor unit forced thermostat off, and taking other measures to carefully control

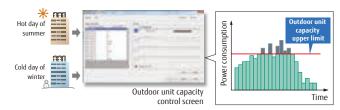
the power consumed while maintaining comfort and conducting control to maintain the target power consumption set for each time. The indoor units to be controlled can be freely grouped and the control level can be set.



Shows change in power consumption by time

# Outdoor unit capacity save

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

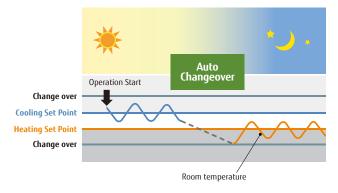


## **Functions**

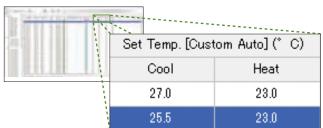
# **Custom Auto Function**

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

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



#### Custom Auto operation display



Custom Auto operation display



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

### **FUNCTIONS SUMMARY**

		_	System	controller		System controller lite			
Function	Туре		UTY-APGXZ1	UTY-PEGXZ1	UTY-ALGXZ1	Option UTY-PLGXR2	Option UTY-PLGXA2	Option UTY-PLGXE2	Option UTY-PLGXX
	Max. VRF networks su		4	-	1	-	-	-	-
System specification		note controller groups per VRF network	400	-	400	-	-	-	-
	Max. outdoor units pe		100	-	100	-	-	-	-
centerion		mote controller groups per System controller	1600	-	400	-	-	-	-
	Max. outdoor units pe	er System controller	400	-	100	-	-	-	-
	Multi site display		10	-	10	-	-	-	-
	Number of building /		20	-	-	-	-	-	-
	Number of floor per 1		200	-	-	-	-	-	-
te	Number of floor per 1		50	-	-	-	-	-	-
ipervision	3D graphical layout v		•	-	-	-	-	-	-
	2D graphical layout v	ew .	•	-		-	-	-	-
	List display		•	-	•	-	-	-	-
	Tree display		-	-	-	-	-	-	-
	Group display		•	-	•	-	-	-	-
101	Error notification		•	-	•	-	-	-	-
anagement	Audible alarm		•	-	•	-	-	-	-
J	Error e-mail notificati	on	•	-	•	-	-	-	
	Error history		•	-	•	-	-	-	-
istory	Operation history		•	-	•	-	-	-	-
	Control history	0.10//	•	-	•	-	-	-	
		On/Off	•	-	•	-	-	-	
		Operation mode	•	-	•	-	-	-	-
		Room temperature	•	-	•	-	-	-	-
	Individual	Fan speed	•	-	•	-	-	-	-
	control	Air flow direction	•	-	•	-	-	-	-
		Economy mode	•	-	•	-	-	-	-
peration		Room temperature set point limitation	•	-	•	-	-	-	-
ontrol		Antifreeze	•	-	•	-	-	-	-
		Outdoor unit low noise setting	•	-	•	-	-	-	-
	Individual management	Remote control prohibition setting	•	-	•	-	-	-	-
		Temperature upper and lower limit setting	•	-	•	-	-	-	-
		Filter sign reset	•	-	•	-	-	-	-
		Memory operation	•	-	•	-	-	-	-
	Other	Pattern operation	•	-	•	-	-	-	-
	Web operation		•	-	•	-	-	-	-
	Annual Schedule		•	-	•	-	-	-	-
	Special day setting		72	-	•	-	-	-	-
		On /off per day		-	72	-	-	-	-
chedule	On / off per week		504	-	504	-	-	-	-
	Day off		10	-	•	-	-	-	-
		Min. unit of timer setting (Minutes)		-	10	-	-	-	-
	Low noise mode Wee	kly schedule	•	-	•	-	-	-	-
	Web Operation		•		•	-			
emote	Remote monitoring		•	-	-	•	-	-	-
anagemment	Remote operation co		•	-	-	•	-	-	-
	Remote function sett		•	-	-	•	-	-	-
	Apportionment charg		•	-	-	-	•	-	-
ectricity	Tenant (block) setting		•	-	-	-	•	-	-
arge	Common facilities ap	portionment setting	۲	-	-	-	•	-	-
	Rated power consum	otion allotment setting	•	-	-	-	•	-	-
oportionment		at cooling and heating	-	•*	-	-	•	-	-
	Electricity meter supported		-	•	-	-	٠	-	-
	Indoor unit rotation			•	-	-	-	•	-
	Peak cut control		-	•	-	-	-	•	-
nergy	Outdoor unit capacity	Outdoor unit capacity save		•	-	-	-	•	-
iving	Record of energy savi		-	•	-	-	-	•	-
anagement	Energy saving inform		-	•	-	-	-	•	-
	Power consumption n		-	•	-	-	-	•	-
	Electricity meter supp		-	•	-	-	-	•	-
xternal Device	Monitor		•	-	- 1	-	-	-	•
ontrol	Control		•	-	-	-	-	-	•
	Database import/exp	nrt	•	-	•	-	-	_	_
at	Automatic clock adjust		•	_	•	-	-	-	-
thers									

• •: Available. -: Not available. \*: Power calculation application software is necessary, please contact the local FGL representative.

**Personal computer system requirements** The required PC specifications are shown in the following table.

	System Contro	ller	System Controller Lite			
Operating system	<ul> <li>Microsoft<sup>®</sup> Windows<sup>®</sup> 8.1 (32-bit or 64-bit</li> <li>Microsoft<sup>®</sup> Windows<sup>®</sup> 10 Home (32-bit or 64)</li> </ul>	<ul> <li>Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1</li> <li>Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit)</li> <li>Microsoft® Windows® 10 Home (32-bit or 64-bit), Windows® 10 Pro (32-bit or 64-bit)</li> <li>[Supported languages] English, Chinese, French, German, Russian, Spanish, and Polish</li> </ul>				
СРИ	Intel <sup>®</sup> CoreTM i3 2 GHz or higher					
Memory	• 2 GB or more (for Windows® 7 [32-bit])	• 4 GB or more (for Windows® 7	64-bit], Windows® 8.1, and Windows® 10)			
HDD	40 GB or more of free space355	40 GB or more of free space355				
Display	1024 x 768 or higher resolution	1024 x 768 or higher resolution				
Interface	•Ethernet port (for getting access to the Interr Modem (for getting access to the Internet usi •USB ports (Maximum of 6 ports) (Required only for the Server PC that works as •Maximum of 2 USB ports are required for WH • Maximum of 4 USB ports are required for Ech * Maximum number of required USB port depends on th	ng Public Telephone Line) s VRF Controller) ITE-USB-KEY/WibuKey connection elon® U10 USB Network 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 4 USB ports are required for WHITE-USB-KEY/WibuKey connection 1 USB port is required for Echelon® U10 USB Network Interface * The maximum number of required USB port depends on the applicable system configuration.			
Graphic accelerator	Microsoft <sup>®</sup> DirectX <sup>®</sup> 9.0c compatible	Microsoft® DirectX® 9.0c compatible				
Software	Adobe <sup>®</sup> Reader <sup>®</sup> 9.0 or later	Adobe® Reader® 9.0 or later				
• Echelon® U10 USB Network	Interface – TP/FT-10 Channel (Model number: 75010R) (F	Required for each VRF Network.)re				
<packing list=""></packing>						
	For System controller		For System controller Lite			

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

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

# BACnet<sup>®</sup> Gateway

### UTY-ABGXZ1

- It is possible to connect medium to large sized BMS to VRF network system via BACnet®, a global standard for open networks.
- A maximum of 1600 indoor units with 4 VRF network systems (a maximum of 400 indoor units & 100 outdoor units for one network system) can be connected to one BACnet® Gateway.
- It is possible to control or monitor VRF network system from BMS via BACnet® Gateway.
- Compatible with BACnet® (ANSI / ASHRAE-135-2014) application specific controller (B-ASC). • Compatible with BACnet®/IP over Ethernet.
- Scheduling function, Alarm & Event functions as well as Electricity Change Apportionment function are provided in BACnet<sup>®</sup> 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.



Max. controllable

4

/RF network system

- - WHITE-USB-KEY (Software Protection Key)

Max. controllable

1,600

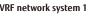
Max. controllable

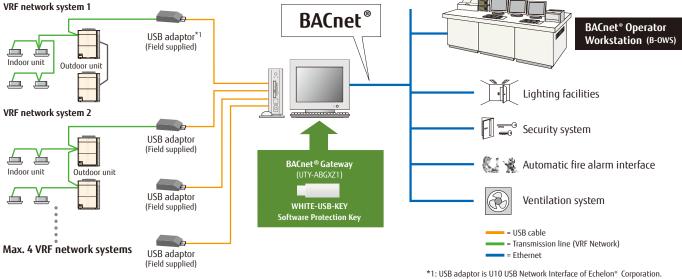
400

outdoor units

#### Functions

# Installation example





#### Personal computer system requirements

		UTY-ABGXZ1	
Operating system		Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1     Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit)     Microsoft® Windows® 10 Home (32-bit or 64-bit), Windows® 10 Pro (32-bit or 64-bit) [Supported languages] English, Chinese, French, German, Russian, Spanish, and Polish	
CPU		Intel® CoreTM i3 2 GHz or higher	
Memory		2 GB or more (for Windows® 7 [32-bit])     4 GB or more (for Windows® 7 [64-bit], Windows® 8.1, and Windows® 10)	
HDD		40 GB or more of free space	
Display		1024 x 768 or higher resolution	
Interface		Ethernet port (for getting access to the Internet using LAN)     USB ports (Maximum of 5 ports)     USB port is required for WHITE-USB-KEY/WibuKey connection     Maximum of 4 USB ports are required for Echelon® U10 USB Network Interface     * Maximum number of required USB ports depends on the applicable system configurations.	
Software		Adobe® Reader® 9.0 or later	
•Echelon® U10 USB Net	work Interface –	TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)	
<packing list=""></packing>			
Name and shape	Quantity	Application	

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

# 114 **OGENEROL**

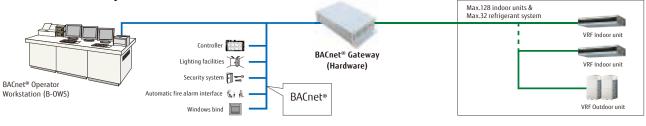
# BACnet<sup>®</sup> Gateway (Hardware)

### UTY-VBGX

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

### Functions

# Installation example



#### **Specifications**

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

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

Max. controllable

4

Units to BMS

Max. controllable

128

Max. controllable

100

Max. controllable

VRF network syste

Max. controllable

32

efrigerant syste

10 million

Max. controllable

128

indoor units

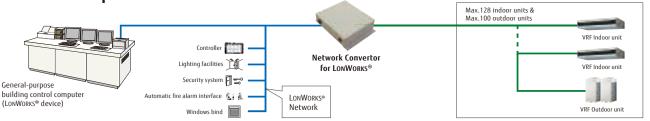
# Network Convertor for LONWORKS®

### UTY-VLGX

- For connection between VRF network system and a LONWORKS<sup>®</sup> open network for management of small to medium-sized BMS and VRF network system.
- The UTY-VLGX permits central monitoring and control of a VRF network system from a BMS through a LONWORKS® interface.
- Up to 128 Indoor units can be connected to one Network Convertor for LONWORKS®

### Functions

# Installation example



#### **Specifications**

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

### Transmission specifications (BMS side)

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

# **Ogeneral** 115

# MODBUS<sup>®</sup> Convertor

### UTY-VMGX

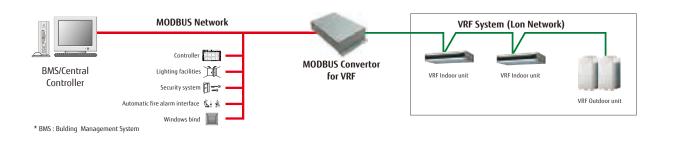
The MODOBUS Convertor allows a complete integration of air conditioners into MODBUS Networks.

#### • Compact and lightweight design

- Direct connection to MODBUS Network
- Up to 128 indoor units can be controlled in one MODBUS Convertor

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

#### **Functions**



#### **Specifications**

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

# MODBUS<sup>®</sup> Interface

#### FJ-RC-MBS-1

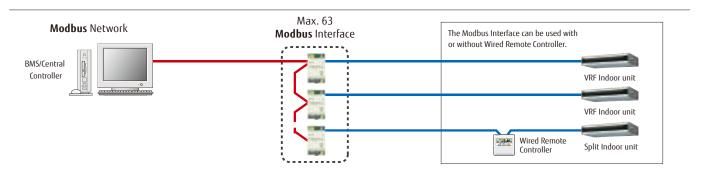
The Modbus Interface allows a complete integration of air conditioners into Modbus Networks.

• 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.

#### **Functions**



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







# KNX<sup>®</sup> Convertor (for VRF)

### UTY-VKGX

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

• New KNX Convertor enables to connect central/home controller and FG VRF system.

• A maximum of 128 indoor units and 100 outdoor units can be connected to single KNX Convertor.

#### Functions



#### **Specifications**

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

# KNX<sup>®</sup> 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



Max. controllable

Max. controllable

128

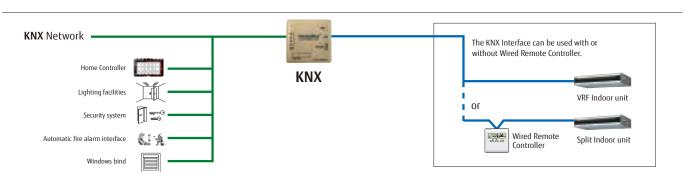
indoor unit

Max. controllable

100

outdoor units

#### **Functions**



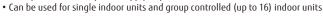
-		
Model name		FJ-RC-KNX-1i
Dimensions (H x W x D)	mm	70 × 70 × 28
Weight	q	70

# Wireless LAN Interface IntesisHome



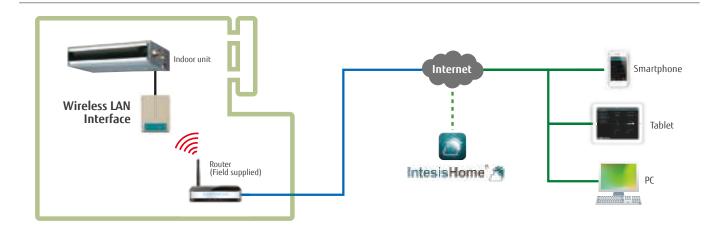
### FJ-RC-WIFI-1

- 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





#### Functions



### **Basic control**

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



# 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)

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

# Network Convertor

# UTY-VTGX (DC power supply type) UTY-VTGXV (AC power supply type)

Compact remote controller provides access to basic functions

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



DC power supply type



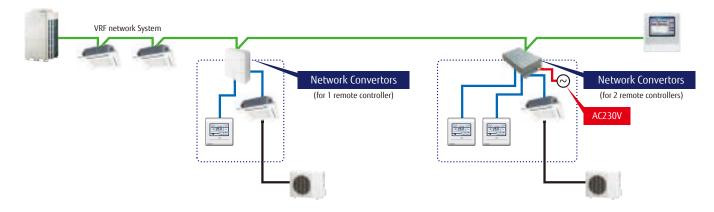


AC power supply type

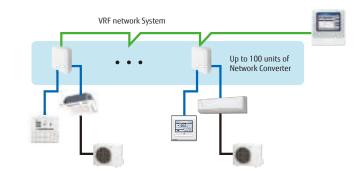
#### **Functions**

# Installation example

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



- 2-wire and 3-wire type of the wired remote controller can be connectable.
- A central control can be provided for the single split systems. (Up to 100 units of Network Convertor is connectable in one VRF network system)



#### **Specifications**

VRF network System

26.0

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

# **External Switch Controller**

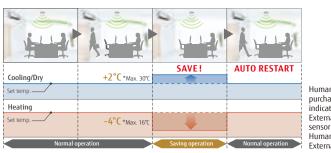
### **UTY-TERX**

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

#### **Functions**

### Installation example

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



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

Max. controllable

#### Specifications

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

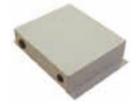
DC12V is supplied by indoor unit.

# Signal Amplifier

# UTY-VSGXZ1

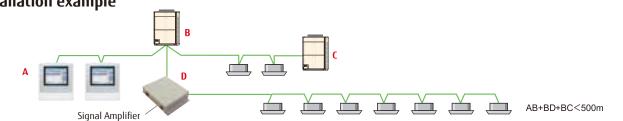
- Transmission Line length can be extended up to 3,600m with multiple Signal Amplifiers.
- Up to 40 signal amplifiers can be installed in a VRF network system.
- A signal amplifier is required,

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



#### **Functions**

# Installation example



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



# Thermostat Convertor



Control air conditioner using third party thermostat

• Thermostat convertor can control Fujitsu General products using a third party thermostat. Up to 16 indoor unit can be connected with one thermostat convertor.

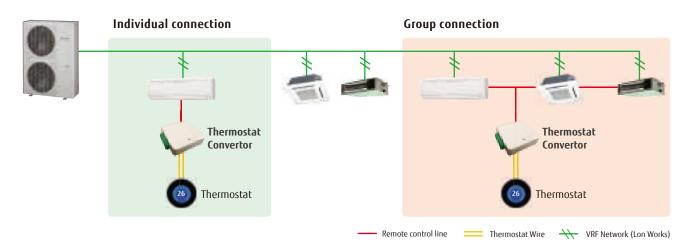


Max. controllable

16 Indoor units

**Functions** 

# Installation example



# Function

	ON/OFF
	Operation mode
Air Conditioning Control	Room Temperature
	Fan Speed
	Delay OFF

Air Canditioning Control	Indoor unit Error notification*
Air Conditioning Control	Convertor Error notification*
*Thes	e function are displayed on the convertor's PCB board.

Model name		UTY-TTRX
Max. Connectable Indoor Un	it	16
Input power (Max.)	W	0.6
Dimensions (H x W x D)	mm	27 × 86.7 × 86.7
Weight	g	220



TID

# EFFECTIVE HEAT EXCHANGE AND SIMULTANEOUS FRESH AIR VENTILATION



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

Outdoor Air Unit

DX-Kit for airhandling applications

# Outdoor Air Unit range

Airflow rate (m <sup>3</sup> /h)	1080	1680	2100
Model code	054	072	096
Outdoor Air Unit	ARXH054GTAH	ARXH072GTAH	ARXH096GTAH



# **Outdoor Air Unit**

**Models** ARXH054GTAH ARXH072GTAH ARXH096GTAH





ARXH054

ARXH072





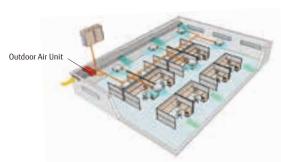
ARXH096

### Feature

# 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



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

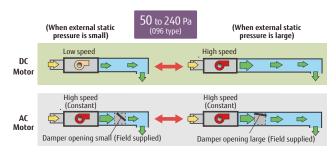
 Greatly reduces electricity consumption by adopting permanent magnet compared to when using an AC motor.

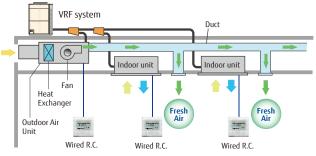


096 type

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

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





\* 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.

# 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.



# **Various Controller**

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

#### Individual Controller



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

Model: ARXH096

#### **Specifications**

Rated flow rate Model name			1000 m <sup>3</sup> /h	1500 m <sup>3</sup> /h	2000 m <sup>3</sup> /h			
			ARXH054GTAH	ARXH072GTAH	ARXH096GTAH			
Power source V/Ø/Hz		V/Ø/Hz	220-240V, 50Hz					
Capacitu	Cooling	kW -	14.0	22.4	28.0			
Capacity	Heating	KVV	8.9	13.9	17.4			
Input power	Cooling	w	179	292	370			
Heating		vv –	179	292	370			
Airflow rate m <sup>3</sup> /h		m³/h	1,080	1,680	2,100			
Static Pressure	Standard (range)	Pa	185 (50-185)	200 (50-200)	200 (50-240)			
Sound Pressure	evel	dB(A)	42	44	47			
Dimensions (H ×	W × D)	mm	425 × 1,367 × 572	425 × 1,367 × 572	450 × 1,583 × 700			
Weight		kg	48	55	71			
Connection	Small		9.52	12.70	12.70			
pipe diameter Large		mm –	19.05	22.22	22.22			
Operation	Cooling		5 to 43	5 to 43	5 to 43			
Range	Heating	°CDB –	-7 to 21	-7 to 21	-7 to 21			
Refrigerant			R410A	R410A	R410A			

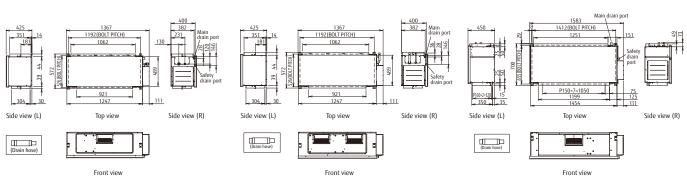
Note : Specifications are based on the following conditions.

Cooling : Outdoor temperature of 33°CDB / 28°CWB.

Heating : Outdoor temperature of 0°CDB / -2.9°CWB. Pipe length : 7.5 m Voltage : 230 [V].

#### Dimensions (Unit: mm)

Model: ARXH054



Model: ARXH072

# DX-Kit for air handling applications

Models Control unit UTY-VDGX

EEV unit UTP-VX30A UTP-VX60A UTP-VX90A

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

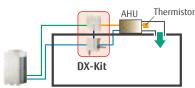


Control unit UTY-VDGX

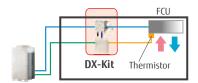
## EEV unit UTP-VX30A EEV unit UTP-VX60A EEV unit UTP-VX90A

### Feature

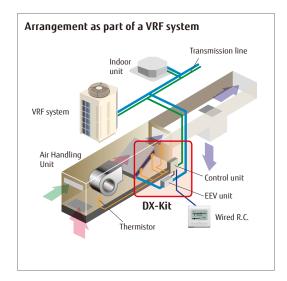
# Multiple temperature sensors optimally control the air handling unit and fan coil unit.



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

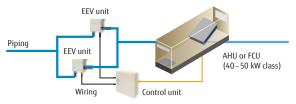


When connecting to a fan coil unit, the room temperature is controlled by the return air temperature sensor.



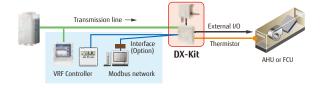
# Supports a wide range of capacity classes

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

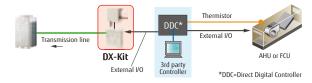


# A variety of controls to match the application

Central control using our VRF controllers or central management controllers



Central control from external controllers



### **Functions Summary**

# Inputs

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

# Outputs

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

# **Modbus Control**

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

#### Installation Limitation

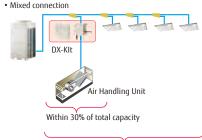
- Connectable VRF series : All VRF
- Connectable DX-Kit system capacity range : 50 to 100% of the outdoor unit capacity
- Connectable DX-Kit system capacity range with AHU or FCU : 30% or less of the outdoor unit capacity (Mixed connection)
- Max. wiring length from control unit : 10 m
- Max. piping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

#### [For 2EEV units connection (option)]

• Separation Tube : UTP-LX180A



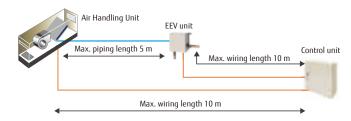
**Connectable capacity** 



50% – 100% of outdoor unit capacity



#### Piping and wiring length



#### **Specifications**

EEV unit UTP-VX30A			UTP-VX60A		UTP-VX90A		UTP-VX90A×2					
Power source		V/Ø/Hz		230/1/50						~		
Connectable cap	acity class	kW	5.0	6.3	8.0	10.0	12.5	14.0	20.0	25.0	40.0	50.0
Generality	Cooling	1.007	5.6 (5.1-5.9)	6.3 (6.0-7.1)	8 (7.2-9.0)	10 (9.1-11.1)	12.5 (11.2-13.2)	14 (13.3-18.0)	22.4 (18.1-23.7)	25 (23.8-28.0)	40 (28.1-44.7)	50.4 (44.8-50.4)
Capacity Heating	Heating	- kW	6.3 (5.7-6.7)	7.1 (6.8-8.0)	9 (8.1-10.0)	11.2 (10.1-12.4)	14 (12.5-15.0)	16 (15.1-20.0)	25 (20.1-26.5)	28 (26.6-31.5)	45 (31.6-49.9)	56.5 (50.0-56.5)
Airflow Rate(Ref	erence value)	m³/h	1,060	1,200	1,520	1,600	2,000	2,240	3,560	4,000	6,400	8,000
Dimensions (H × W × D) mm		mm		160 × 220 × 90					(160 × 220 × 90)× 2			
Weight kg				2					2 × 2			
Connection pipe diameter	Liquid	mm	9.52	9.52	9.52	9.52	9.52	9.52	12.70	12.70	12.70	12.70

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

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

# AIRSTAGE<sup>TM</sup> OPTION

T

# Diverse building air conditioning control functions can be controlled easily by AIRSTAGE<sup>™</sup> options.

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

Pressure Sensor Kit Auto Louvre Grille Kit CONTROL SYSTEM LIST OPTIONAL PARTS LIST OPTIONAL PARTS FUNCTION LIST SEPARATION TUBE etc.



AIRSTAGE

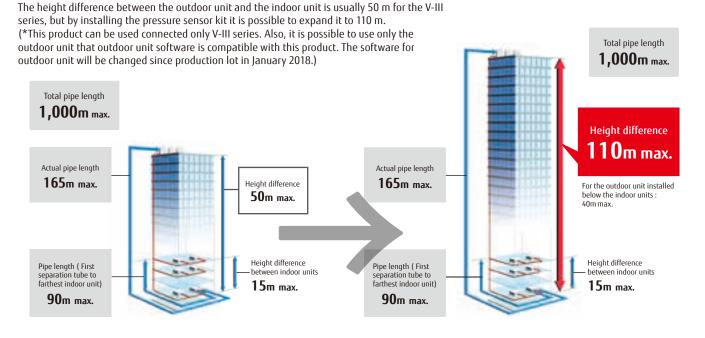
# Pressure Sensor Kit

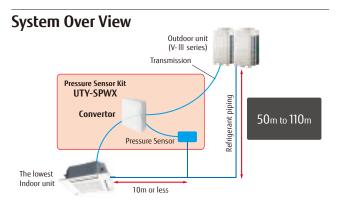
Models UTY-SPWX NEW



Features

# **Design Flexibility**





# **Pressure Sensor Kit**

Pressure sensor kit (Convertor)	
Refrigerant pressure sensor	<u>E</u>
Joint pipe	

Model name		UTY-SPWX					
Power Supply		DC16-9					
Dimensions (H x W x D)	mm	140×117×43					
Weight	g	200					

# Auto Louver Grille Kit

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





#### Feature

# **Flexible Control**

# Operation with indoor unit

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

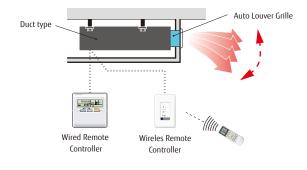
### • UP and Down auto swing

• Auto airflow direction and auto swing

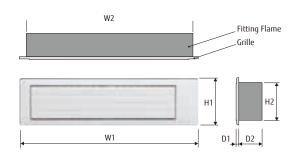
4 steps selectable

### • Auto-closing louver

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



# Dimensions



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

### **Specifications**

Model name			UTD-GXTA-W	UTD-GXTB-W	UTD-GXTC-W					
Applicable Indo	or Unit		ARXD07/09/12/14GALH ARXD07/09/12/14GATH ARXK07/09/12/14GCLH ARXK07/09/12/14GALH	ARXD07/09/12/14GATH ARXD18GATH ARXK07/09/12/14GCLH ARXK18GCLH						
Power source				Connecting with Control box of indoor unit						
Fixing of Auto L	ouver Grille			Screw fixing to Flange or Square Duct						
Extension Squa	re Duct Limit		1.0m (Max. duct length between indoor unit and Grille)							
Dimensions (H	× W × D)	mm	180 × 683 × (84+9)	180 × 683 × (84+9) 180 × 883 × (84+9) 180 × 1083						
M/-:	Net	L.	2.0	2.5	3.0					
Weight	Gross	- kg	3.0	3.5	4.0					
Color				White						
Louver Motor			Stepping Motor							
Accessories			Fitting Flame, etc.							
	Cooling	°C		18 to 32						
Operation Range	Cooling	% RH		80% or less						
Nange	Heating	°C		16 to 30						

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

# **CONTROL SYSTEM LIST**

Controllers / Interface

Controllers / Interrace												
					Cassette			D	Duct			
			4-way Compact	4-1	way	Circula	ar Flow	Mini (With drain pump)	Mini (Without drain pump)			
Туре	2		AUXB 07/09/12/14/18/24 GALH, AUXB 07/09/12/14/18/24 GATH	AUXD 18/24GALH	AUXA 18/24/30/34/ 36/45/54 GALH	AUXM 018/024GTAH	AUXK 018/024/030/034/ 036/045/054 GTAH	ARXK 07/09/12/14/18/24 GCLH	ARXK 07/09/12/14/18/24 GALH			
	Wired Remote		UTY-RNRGZ2									
12	Controller	(AL)	UTY-RLRG									
	Simple Remote Controller	2-wire type										
	Wireless Remote Controller			UTY-LNHG								
	Group Remote Controller					• UTY-CGGG + UTY-VGGXZ1						
	Central Remote Controller					• UTY-DCGG						
	Touch Panel Controller			UTY-DTGGZ1								
	System Controller, System Controller Lite					UTY-APGXZ1, UTY-ALGXZ	1					
	IR Receiver Unit				RHGB1		BHXD		-уwс			
	BACnet Gateway	19				UTY-ABGXZ1, UTY-VBGX						
	Network Convertor for LONWORKS	$\checkmark$				UTY-VLGX						
	MODBUS Convertor					UTY-VMGX						
	MODBUS Interface			● FJ-RC-MBS-1					MBS-1			
	KNX Convertor	$\sim$				UTY-VKGX						
	KNX Interface			● FJ-RC-KNX-1i					KNX-1i			
	Wireless LAN Interface	_		● FJ-RC-WIFI-1				FJ-RC-	WIFI-1			
	External Switch Controller		UTY-TERX									
	Network Convertor for single split	DC Power Supply Type Supply Type				• UTY-VTGX, UTY-VTGXV						
	Thermostat convertor					UTY-TTRX						

We way									
Start S		 Di	ıct		Indoor unit			Wall Mounted	
MANDAR BARAN SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOLUTION SOL	Slim (With drain pump)	Medium		ic Pressure	Ceiling / Floor	Ceiling	-		-
IF YOULD         IF YOULD <td>ARXD 07/09/12/14/18/24 GALH, ARXD 07/09/12/14/18/24</td> <td>24/30/36/45 GBLH, ARXA 24/30/36/45</td> <td>36/72/90 GBTH, ARXC</td> <td>45/60/72/90</td> <td>12/14/18/24</td> <td>30/36/45/54</td> <td>07/09/12/14 GACH, ASHA 07/09/12/14</td> <td>07/09/12/14</td> <td>18/24/30 GACH, ASHA 18/24/30</td>	ARXD 07/09/12/14/18/24 GALH, ARXD 07/09/12/14/18/24	24/30/36/45 GBLH, ARXA 24/30/36/45	36/72/90 GBTH, ARXC	45/60/72/90	12/14/18/24	30/36/45/54	07/09/12/14 GACH, ASHA 07/09/12/14	07/09/12/14	18/24/30 GACH, ASHA 18/24/30
UTVRUE         UTVRUE <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>									
Alex Cut Palais, UT Pal									
UPLNIKE         UPLN				UTY-RSI		UTY-RHKG			
URX.66GE- IRX MODER         IRX.665.677.93056.641 model)         IRX.665.667.679.9306.641 model)         IRX.665.667.930966.641 model)									
UIT-9664 UIT-9667 UIT-9667 UIT-9667 UIT-9667 UIT-9667 UIT-9667 UIT-9667 UIT-9667 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UIT-967 UI									
UTY NEGCI UTY AGCCI, UTY AGCCI UTY AGCCI									
UTFARCZI, UTFALCZI       UTFARCZI, U									
UTB-WW         Image: Constraint of the constraint o						1			
UTY-ABGXZI, UTY-YBGX           UTY-AGGXZI, UTY-YBGX           UTY-VGX									
UTY-VLGX UTY-VMGX FF,RC-MBS-1 (AXXC45/G0/72909GGATH only) FF,RC-MBS-1 FF,RC-KNX-1i (AXXC45/G0/72909GGATH only) FF,RC-KNX-1i FF,RC-KNX-1i (AXXC45/G0/72909GGATH only) FF,RC-KNX-1i FF,RC-WIF-1 (AXXC45/G0/72909GGATH only) FF,RC-WIF-1 FF,RC-WIF-1 UTY-TGXV UTY-VTGX, UTY-TGXV									
UTY-VMGX FJ-RC-MBS-1 (дХХС45/60/72/90/96GATH only) FJ-RC-MBS-1 UTY-VGCX FJ-RC-KNX-1i FJ-RC-KNX-1i FJ-RC-KNX-1i FJ-RC-KNX-1i FJ-RC-KNF1 (дХХС45/60/72/90/96GATH only) FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1-1 FJ-RC-WIF1									
FJ-RC-MBS-1       KRXXC45/60/72/90/96GATH only)       FJ-RC-MBS-1         UTV-VKGX         FJ-RC-KNX-1i       Image: Second S									
UTY-VKGX         UTY-VKGX           Fj-Rc-KNX-1i         Fj-Rc-KNX-1i           Fj-Rc-WIFI-1         Fj-Rc-WIFI-1           Fj-Rc-WIFI-1         Fj-Rc-WIFI-1           Fj-Rc-WIFI-1         Fj-Rc-WIFI-1           UTY-VTGXV         UTY-VTGXV			FJ-RC	-MBS-1					
FJ-RC-KNX-1i         FJ-RC-KNX-1i (ARXC65/60/72/90/96GATH only)         FJ-RC-WIFI-1           FJ-RC-WIFI-1         (ARXC65/60/72/90/96GATH only)         FJ-RC-WIFI-1           UTY-TERX         UTY-TERX         UTY-VTGX, UTY-VTGXV									
Fj-Rc-WiFl-1         Fj-Rc-WiFl-1           (ARXC45/60/72/90/96GATH only)         Fj-RC-WiFl-1			FI-RC-	KNX-1i					
UTY-TERX UTY-VTGX, UTY-VTGXV			FI-RC	-WIFI-1					
UTY-VTGX, UTY-VTGXV									

# **OPTIONAL PARTS LIST**

Others

Others									
					Cassette	Indoor unit			ıct
			4-way Compact	4-1	vay	Circula	ar Flow	Mini (With drain pump)	Mini (Without drain pump)
Тур	e		AUXB 07/09/12/14/18/24 GALH, AUXB 07/09/12/14/18/24 GATH	AUXD 18/24GALH	AUXA 18/24/30/34/ 36/45/54 GALH	AUXM 018/024GTAH	AUXK 018/024/030/034/ 036/045/054 GTAH	ARXK 07/09/12/14/18/24 GCLH	ARXK 07/09/12/14/18/24 GALH
Others	Human Sensor Kit	0					5HZXC		
	Remote Sensor Unit	New amenity space can be offered by installing the Remote sensor.							XSZX
	Cassette Grille UTG-UFGC-W UTG-UGGA-W UTG-UKGD-W UTG-UKGA-B		UTG-UFGC-W	UTG-U	GGA-W	UTG-UKGD-W UTG-UKGA-B			
l	Auto Louver Grille Kit							UTD-GXTA-W UTD-GXTB-W(18) UTD-GXTC-W(24)	
l	Long Life Filter								
l	Flange	0							
l	Drain Pump Unit	1							
	Wide Panel	Indeer unit 950 Panel		UTG-A	KXA-W GYA-W		KXA-W		
l	Panel Spacer	(mm) [242 Panel spacer		UTG-B	KXA-W GYA-W		► KXA-W		
l	Air Outlet Shutter Plate	For Compact Cassette	UTR-YDZB	UTR-YDZK			YDZK		
	Insulation for High Humidity	For Compact Cassette type / Cassette type	UTZ-KXGC			UTZ-KXRA			
	Pressure Sensor Kit for V-III series*								

				Indeed with					Outdaarusit
	Du	ıct		Indoor unit			Wall Mounted		Outdoor unit
Slim (With drain pump)	Medium Static Pressure		ic Pressure	Ceiling / Floor	Ceiling	-	EEV external	-	V-III Tropical
ARXD 07/09/12/14/18/24 GALH, ARXD 07/09/12/14/18/24 GATH	ARXA 24/30/36/45 GBLH, ARXA 24/30/36/45 GBTH	ARXC 36/72/90 GBTH, ARXC 96GATH	ARXC 45/60/72/90 GATH	ABHA 12/14/18/24 GATH	ABHA 30/36/45/54 GATH	ASHA 07/09/12/14 GACH, ASHA 07/09/12/14 GATH	ASHE 07/09/12/14 GACH	ASHA 18/24/30 GACH, ASHA 18/24/30 GATH	AJH 072/090/108/ 126/144/162 LNTCH
	UTY-								
UTD-GXTA-W UTD-GXTB-W(18) UTD-GXTC-W(24)									
	UTD-LF25NA		A(36/45/60)						
	UTD-SF045T UTD-RF204				UTD-RF204				
	• UTZ-PX1NBA				UTR-DPB24T				
									• UTY-SPWX

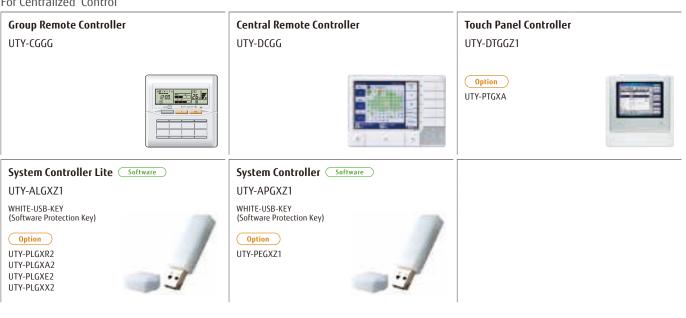
# **OPTIONAL PARTS**

### Controllers

For Individual Control

Wired Remote Controller (Touch Panel ) UTY-RNRGZ2	Wired Remote Controller UTY-RLRG	Simple Remote Controller UTY-RSRG With operation mode
Simple Remote Controller	Wireless Remote Controller	IR Receiver Unit
UTY-RHRG	UTY-LNHG	UTB-YWC
Without operation mode		For All Duct types except Large Airflow Duct
IR Receiver Unit	IR Receiver Unit	Human Sensor Kit
UTY-LRHGB1	UTY-LBHXD	UTY-SHZXC
For Cassette type	For Circular Flow Cassette type	For Circular Flow Cassette type
	50	0

#### For Centralized Control



# Convertors / Adaptors

For External device / System expansion

BACnet® Gateway Software UTY-ABGXZ1 WHITE-USB-KEY (Software Protection Key)	Network Convertor for LONWORKS® UTY-VLGX	MODBUS® Convertor for VRF UTY-VMGX
MODBUS® Interface FJ-RC-MBS-1	KNX® Convertor for VRF UTY-VKGX	KNX® Interface FJ-RC-KNX-1i
Wireless LAN Interface FJ-RC-WIFI-1	Network Convertor for single split UTY-VTGX DC power supply type	Network Convertor for single split UTY-VTGXV AC power supply type
Network Convertor for Group Remote Controller UTY-VGGXZ1	External Switch Controller UTY-TERX	Signal Amplifier UTY-VSGXZ1
Thermostat convertor NEW UTY-TTRX	Pressure Sensor Kit for V-III tropical series* NEW UTY-SPWX	

# **OPTIONAL PARTS**

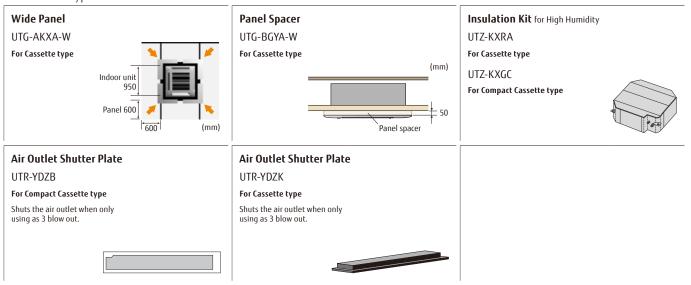
### Panels

For Cassette type



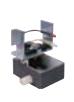
#### Others

For Cassette type



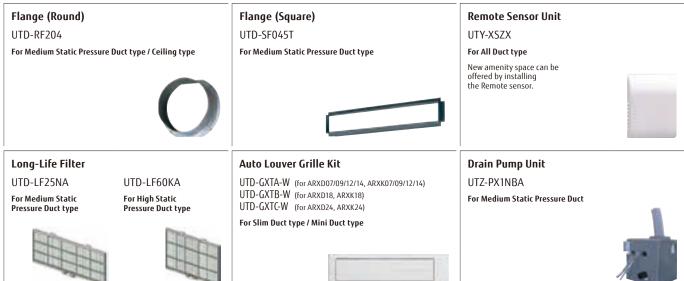
#### For Ceiling type

Drain Pump Unit UTR-DPB24T For Ceiling type



### Others

For Duct type



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 Central Remot	te Controller	For Touch Panel	Controller		
For Central Remo	te Controller	For Touch Panel ( UTY-XWZXZA	Controller		
	_				

# **FUNCTION LIST**

		Indoor unit										
				Cassette	T.		Duct					
		4-way Compact	4-v	vay	Circula	ar Flow	Mini (With drain pump)	Mini (Without drain pump)	Slim (With drain pump)	Medium Static Pressure	High Static Pressure	
Туре		AUXB 07/09/12/14/18/24 GALH, AUXB 07/09/12/14/18/24 GATH	AUXD 18/24GALH	AUXA 18/24/30/34/ 36/45/54 GALH	AUXM 018/024GTAH	AUXK 018/024/030/034/ 036/045/054 GTAH	ARXK 07/09/12/14/18/24 GCLH	ARXK 07/09/12/14/18/24 GALH	ARXD 07/09/12/14/18/24 GALH, ARXD 07/09/12/14/18/24 GATH	ARXA 24/30/36/45 GBLH, ARXA 24/30/36/45 GBTH	ARXC 36/72/90 GBTH, ARXC 96GATH	
Input	Operation / Stop	●UTY-XWZXZD ○UTY-XWZXZB										
	All On / All Off											
	Batch Stop											
	Forced Stop	●UTY-XWZXZD OUTY-XWZXZB										
	Emergency Stop	●UTY-XWZXZD OUTY-XWZXZB										
	Forced Thermostat off	●UTY-XWZXZE OUTY-XWZXZ7										
	Low Noise Mode Operation											
	Cooling/ Heating Priority											
	Outdoor Unit Operation Peak Control											
	Power Usage Information from Electricity Meter											
Output	Operation Status					●UTY->	(WZXZC					
	Error Status					● UTY-2	(WZXZC					
	Indoor Unit Fun Operation Status					●UTY-2	(WZXZC					
	Auxiliary Heater Output								●UTY-XWZXZC			
	Base Heater											

		Indoo	Outdoor unit Controller								
Duct				Wall Mounted							
High Static Pressure	Ceiling / Floor	Ceiling	_	EEV external	-	J-III Tropical	V-III Tropical	Central Remote Controller	Touch Panel Controller		
ARXC 45/60/72/90 GATH	ABHA 12/14/18/24 GATH	ABHA 30/36/45/54 GATH	ASHA 07/09/12/14 GACH, ASHA 07/09/12/14 GATH	ASHE 07/09/12/14 GACH	ASHA 18/24/30 GACH, ASHA 18/24/30 GATH	AJH 040/045/054 LBTAHN, AJH 040/045/054 LETAHN	AJH 072/090/108/ 126/144/162 LNTCH	UTY-DCGG	UTY-DTGGZ1		
								●UTY-XWZXZ7 ○UTY-XWZXZ8	●*2 ○*2		
							●UTY-XWZXZ6				
			(WZXZD (WZXZB								
		●UTY-> ○UTY->	(WZXZD (WZXZB				●UTY-XWZXZ6	●UTY-XWZXZ7 ○UTY-XWZXZ8	●*2 ○*2		
		● UTY-> ○ UTY->	XWZXZE XWZXZ7								
							●UTY-XWZXZ6				
							●UTY-XWZXZ6				
							● UTY-XWZXZF		●*2 ○*2		
		● UTY->	XWZXZC				○UTY-XWZXZ6	outy-)	WZXZA		
			⊖UTY-XWZXZ6	OUTY->	⊖UTY-XWZXZA						
●UTY-XWZXZC											
							●UTY-XWZXZ9				

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

•: Dry Contact O: Apply Voltage

**Connection Units** 

# SEPARATION TUBE etc.

Separation Tube		
UTP-AX054A	UTP-AX090A	UTP-AX180A
Gas Pipe	Gas Pipe	Gas Pipe
Liquid Pipe	Liquid Pipe	Liquid Pipe
UTP-AX567A	UTP-LX180A for DX-Kit	
Gas Pipe		
Liquid Pipe		
Header		
UTR-H0906L / UTR-H1806L	UTR-H0908L / UTR-H1808L	
Gas Pipe	Gas Pipe	
	Liquid Pipe	
Outdoor Unit Branch Kit		Г
UTP-CX567A		
Gas Pipe		
Liquid Pipe		
EV Kit		
Model code $\leq$ 09 : UTR-EV09XB Model code $\geq$ 12 : UTR-EV14XB For Compact Wall Mounted type		

142 **OGENEROL** 

# Specifications

# Separation Tube

Model name	UTP-AX054A		UTP-AX090A	UTP-AX180A		UTP-AX567A			
Total cooling capacity of indoor unit	kW	19.6 or less		28.0 or less	28.1 to 56.0		56.1 or more		
Model name		UTP-BX090A		UTP-B	X180A	UTP-BX567A			
Total cooling capacity of indoor unit	kW	28.0 or less		28.1 t	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		kW	28.0 or less	28.1 to 56.0					
Model name	3-6 Branches		UTP-J0906A	UTP-J1806A					
Model name	3-8 Branches		UTP-J0908A	UTP-J1808A					
Total cooling capacity of indoor unit kW		kW	28.0 or less	28.1 to 56.0					

### Outdoor unit Branch kit

Model name		UTP-CX567A (for V-III Tropical)
Model name	2 outdoor units	1
	3 outdoor units	2

### EV Kit

Model name	UTR-EV09XB	UTR-EV14XB
Application Codel	ASHE007GTAH ASHE009GTAH	ASHE012GCAH ASHE014GCAH

# Reducer kit

Model name	UTP-NX18A	UTP-NX54A
Applicable Model	AUXK018GTAH AUXM018GTAH AUGK018GTAH AUGM018GTAH	AUXK036/045/054GTAH AUXM036/045/054GTAH

# SUPPORT

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

AIRSTAGE<sup>™</sup> SUPPORT AIRSTAGE<sup>™</sup> / RAC SUPPORT TOOL QUICK SERVICE & MAINTENANCE SERVICE TOOL WEB MONITORING TOOL

Category		Information Material									Тс	Tool				
	Product Sales Training Material	Product Technical Training Material	Product news	Brochures	Feature Promotion Movie	Operating Manual	Design & Technical Manual	Certificate Data	2D CAD Data	3D CAD (Revit) Data	Installation Manual	Service Manual	Design Simulator (RAC, PAC, VRF)	CFD Simulation	Service Tool / Web Monitoring Tool	Mobile Technician
Product Training	•	•														
Product Information Seek			•	•	•	•	•									
Technical Information Seek							•	•								
Model Selection							•						•			
Design							•		•	•						
Verification														•		
Installation							•				•					
After sales and Service												•			•	•



## AIRSTAGE™ SUPPORT

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

#### Training

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

#### Features

- Designing AIRSTAGE<sup>™</sup> Systems
- Control System on-site training



Head Office Training Center: Japan









America Training Center: U.S.A

China Training Center: China



Middle East Training Center: UAE

Asia Training Center: Singapore

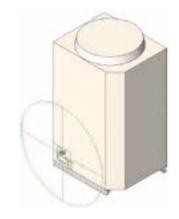


#### **Technical information**

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

#### Features

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



#### **Product information**

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

#### Features

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

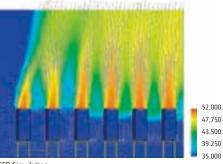


#### **Technical support**

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

#### Features

- CFD Simulation
- Guide line
- Commissioning Support







Commissioning Support

## AIRSTAGE™ /RAC SUPPORT TOOL

Put the charts and pens away and design your projects on your computer with ease using the Design Simulator. Everything from selecting indoor and outdoor units, allocating controls and optional parts to designing the piping and wiring systems is made easier using the program's built-in features.

Once your project is designed take advantage of the Export functions to easily get materials lists, product specifications, refrigerant calculations and more - it'll even export to Word, Excel, or Acrobat formats, and group the relevant CAD data for your project.

### **Design Simulator**

## Automatically create model selection information

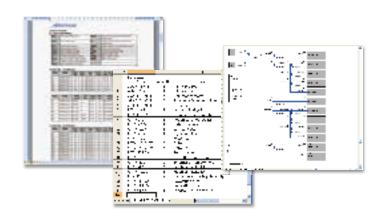
- Each unit can be automatically set by entering the required performance, type, and temperature conditions for each indoor unit and then dragging and dropping into the outdoor unit.
- Piping and wiring diagrams can be created automatically and it is easy to set branches, grouping, and options.
- The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

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## Output the format that matches the application

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

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



#### Update your Design Simulator

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



Information on the latest history update is demanded.

Information on the latest history update replied.

User side (PC)



FTP server side (PC)



### BIM Building Information Modeling

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

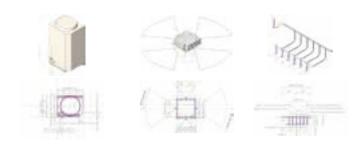
#### 3D and 2D product data

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



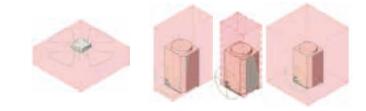
#### Installation limitation

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



#### Update your Design Simulator

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



#### Product specifications & link information

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



# **QUICK SERVICE & MAINTENANCE**

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

### Mobile troubleshooting tool for iPhone & Android



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

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



Mobile Technician FREE



### Easy maintenance & monitoring

#### Design for easy maintenance

Design for easy maintenance

The air conditioner operating status and trouble status of the detailed are displayed at the 7-segment of the outdoor unit PCB or on the remote controller screen.

The unit status can be checked rapidly and quick response is also possible.

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





Wired Remote Controller (Touch panel) Error status/Error history



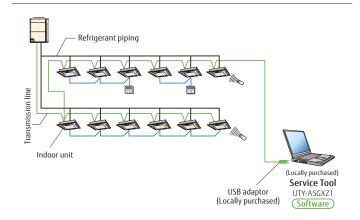


Unit number

#### Error diagnosis by Service Tool

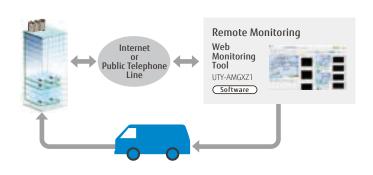
Error diagnosis by Service Tool The unit status details for VRF system can be checked on PC screen by connecting Service Tool. Quick countermeasures can be taken

- Operation status/control
- Monitoring operating condition
- Monitoring sensor data
- Indication of trend graph
- Error history
- Indication of refrigerant circuit diagram
- Automatic operation check for refrigeration cycle



#### Remote monitoring

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



# SERVICE TOOL

#### UTY-ASGXZ1

#### Extensive monitoring and analysis functions for installation and maintenance

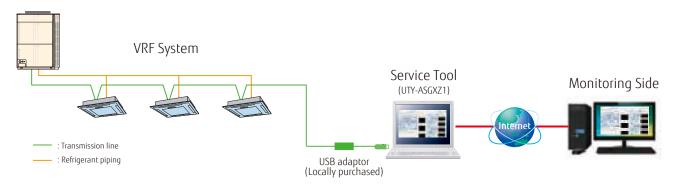
- Operation status can be checked and analyzed to detect even the smallest abnormalities
- Storage of data on system operation status on a PC allows access even from off site.
- Up to 400 indoor units (a single VRF network system) can be controlled and monitored for large scale buildings or hotels
- This software can be connected to any point of transmission line with USB adaptor (locally purchased)

\* The saved data can be displayed offline. However, the data saved by the following model cannot be displayed.

- UTR-YSTB/UTR-YSTC (Service Tool)
- UTR-YMSA (Web Monitoring Tool)

#### Functions

#### System Over View



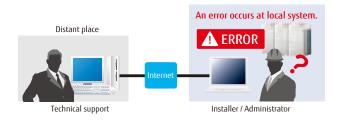
#### Automatic operation check for refrigeration cycle

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



#### Remote technical support & maintenance

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

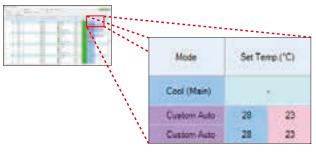


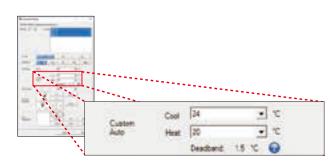
#### Various trend graph display

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



#### **NEW** Custom Auto Function





Custom Auto operation display



#### Function summary

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

#### Personal computer system requirements

	UTY-ASGXZ1
Operating system	<ul> <li>Microsoft<sup>®</sup> Windows<sup>®</sup> 7 Professional (32-bit or 64-bit) SP1</li> <li>Microsoft<sup>®</sup> Windows<sup>®</sup> 8.1 Pro (32-bit or 64-bit)</li> <li>Microsoft<sup>®</sup> Windows<sup>®</sup> 10 Pro (32-bit or 64-bit)</li> </ul>
СРИ	1 GHz or higher
Memory	<ul> <li>1 GB or more (for Windows<sup>®</sup> 7 [32-bit], Windows<sup>®</sup> 8.1 [32-bit], and Windows<sup>®</sup> 10 [32-bit])</li> <li>2 GB or more (for Windows<sup>®</sup> 7 [64-bit], Windows<sup>®</sup> 8.1 [64-bit], and Windows<sup>®</sup> 10 [64-bit])</li> </ul>
HDD	40 GB or more of free space
Display	1366 x 768 or higher resolution
Interface	USB port for U10 USB Network Interface and Software protection key
Software	Internet Explorer® 11 or Microsoft Edge
•Echelon® U10 USB Network In	terface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)

#### <PACKING LIST>

Name and shape	Quantity	Application	
WHITE-USB-KEY (Software protection key)	1	Software protection key to be connected to USB port on the Service Tool-installed PC. These products run only on a PC with WibuKey.	
Description of the state of the			

Personal computer that satisfies the following system requirements

# WEB MONITORING TOOL

#### UTY-AMGXZ1

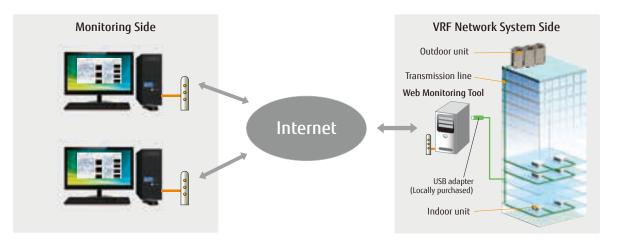
#### **Product features**

- Troubleshooting is performed by monitoring each air conditioning unit remotely during periodical system checks.
- Error notification can be automatically transmitted to several locations using the internet \*1.
- Requires either a dedicated internet connection or public telephone line.
- Determination of an error occurrence can be made through error warnings and equipment status information obtained from a remote location.
- The monitoring data in a remote side can be optionally downloaded. And, this data can be displayed in offline mode of the service tool.
- Monitoring side computer is not required to install special software, requires only general web browser.

\*1: Use of internet mail system required.

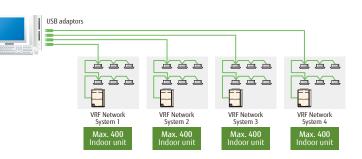
#### Functions

#### Web Monitoring System



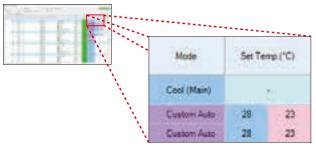
#### Support 4 VRF network systems

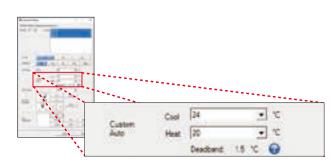
USB adaptor (max. 4 adaptors per PC) permit, monitoring of up to 1,600 indoor units. Suitable for large-scale buildings or hotels.





#### **NEW** Custom Auto Function





Custom Auto operation display



#### Function summary

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

#### Personal computer system requirements

	UTY-AMGXZ1	
Operating system	Microsoft <sup>®</sup> Windows <sup>®</sup> 7 Professional (32-bit or 64-bit) SP1     Microsoft <sup>®</sup> Windows <sup>®</sup> 8.1 Pro (32-bit or 64-bit)     Microsoft <sup>®</sup> Windows <sup>®</sup> 10 Pro (32-bit or 64-bit)	
СРИ	1 GHz or higher	
Memory	<ul> <li>1 GB or more (for Windows<sup>®</sup> 7 [32-bit], Windows<sup>®</sup> 8.1 [32-bit], and Windows<sup>®</sup> 10 [32-bit])</li> <li>2 GB or more (for Windows<sup>®</sup> 7 [64-bit], Windows<sup>®</sup> 8.1 [64-bit], and Windows<sup>®</sup> 10 [64-bit])</li> </ul>	
HDD	40 GB or more of free space	
Display	1366 x 768 or higher resolution	
Interface	<ul> <li>USB port (for 10 USB Network Interface Max.4, Software protection key)</li> <li>Either of the following interface is required for remote connection:</li> <li>Public Telephone Line: Modem is required</li> <li>Internet using LAN: Ethement port is required</li> </ul>	
Software	Internet Explorer® 11 or Microsoft Edge	

#### <PACKING LIST>

Name and shape	Quantity	Application	
WHITE-USB-KEY (Software protection key)	1	Software protection key to be connected to USB port on the Service Tool-installed PC. These products run only on a PC with WibuKey.	
Development of the track of the state of the			









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ISO 9001 Certified number: 15917Q20073R5M

ISO 14001 Certified number: 15915E10020R4M Fujitsu General Central Air-conditioner (Wuxi) Co., Ltd.

ISO 14001 Certified number: 01 104 9245 ISO 9001 Certified number: 01 100 075229 Fujitsu General (Thailand) Co., Ltd.

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