

#### τüv ISO 14001 BUREAU VER



GENERAL and "AIRSTAGE" are worldwide trademarks of FUJITSU GENERAL LIMITED and are registered trademarks in Japan and other

\* FGLair is a worldwide trademark of FUJITSU GENERAL LIMITED.
 • iPhone and iPad are trademarks of Apple Inc., registered in the U.S. and other countries.

"BACnet" is a trademark or registered trademark of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.
 "MODBUS" is a registered trademark of Schneider Electric.

Other company and product names mentioned herein may be registered trademarks, trademarks or trade names of their respective owners.
Actual products' colors may be different from the colors shown in this

Distributed by



## **O**GENERAL



**VERAL LIMITED** 

### FUJITSU GENERAL LIMITED

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



### HEAT PUMP VRF CATALOGUE 2024

for Middle East

FUJITSU GENERAL LIMITED

**FUJITSU GENERAL Way** 

Our Mission

### Living together for our future

Through innovation and technology, we deliver a brighter future with the peace of mind to our customers and societies around the world.

#### **Our Philosophy**

#### Act Spontaneously

We embrace new challenges by investing in ourselves for personal growth, and through continuous creativity with a spontaneous attitude.

#### Develop Our Team

We respect and value our people, and optimize their abilities through fostering culture and diversity, and utilizing a collaborative effort focused on communication.

#### Value Integrity

To achieve our goals, we always act with integrity and shared ethics.

#### CONTENTS

#### OUR MESSAGE

| OUR HISTORY                           | 4  |
|---------------------------------------|----|
| WORLDWIDE LOCATIONS                   |    |
| GLOBAL BUSINESS ACTIVITIES            | 8  |
| PROJECT REFERENCE                     | 10 |
| GLOBAL DEVELOPMENT & PRODUCTION BASES | 12 |
| HIGH QUALITY DEVELOPMENT &            |    |
| PRODUCTION FACILITIES                 |    |

#### **VRF** Solutions

| OUR SOLUTION FOR ALL PROPERTIES 1 | 1 |
|-----------------------------------|---|
| Light Commercial Solutions        | 1 |
| Commercial Solutions              | 2 |

#### **VRF CORE TECHNOLOGY**

| HIGH ENERGY EFFICIENCY     | 30 |
|----------------------------|----|
| HIGH RELIABILITY           | 32 |
| DESIGN FLEXIBILITY         | 34 |
| MORE COMFORT               | 36 |
| EASY INSTALLATION          | 38 |
| EASY SERVICE & MAINTENANCE | 40 |
|                            |    |

**VRF OUTDOOR UNITS** 

VRF LINE-UP ...... 44

### For SMALL BUILDING

VRF **J-IIII Tropical Series** 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



### 50

46

VRF V-III Tropical Series Troduction by order

Heat Pump Modular type for heating or cooling operation 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



#### **VRF INDOOR UNITS**

| INDOOR UNITS LINE-UP                   | . 58 |
|--|------|
| Compact Cassette                       | . 60 |
| 4-way Flow Cassette                    | . 62 |
| Circular Flow Cassette                 | . 66 |
| Mini Duct                              | . 68 |
| Slim Duct / Slim Concealed Floor       | . 70 |
| Medium Static Pressure Duct            | . 72 |
| High Static Pressure Duct              | . 74 |
| Large Airflow Duct                     | . 78 |
| Floor / Ceiling                        | . 80 |
| Ceiling                                | . 82 |
| Wall Mounted (EEV Internal / external) | . 84 |
|  |      |

#### **VRF CONTROL SYSTEMS**

| BEST CONTROL SOLUTION FOR EACH PROPERTY | 90  |
|---|-----|
| CONTROL SYSTEM OVERVIEW                 | 92  |
| COMPARISON TABLE OF CONTROLLERS         |     |
| Individual Controller                   | 96  |
| Centralized Controller                  | 104 |
| Converter / Adaptor                     | 110 |
|   |     |

#### VENTILATION

| Outdoor-air Processing Unit   | 120 |
|---|-----|
| DX Kit for Air Handling Unit or Fresh Air Handling Unit application | 122 |

#### **VRF OPTION**

| Pressure Sensor Kit    | 126 |
|------------------------|-----|
| Auto Louver Grille Kit | 127 |
| CONTROL SYSTEM LIST    | 128 |
| OPTIONAL PARTS LIST    | 130 |
| OPTIONAL PARTS         | 132 |
| FUNCTION LIST          | 136 |
| SEPARATION TUBE etc    | 138 |
|                        |     |

#### SUPPORT

| VRF SUPPORT                     | 142 |
|---------------------------------|-----|
| HVAC SYSTEM DESIGN SUPPORT TOOL | 144 |
| QUICK SERVICE & MAINTENANCE     | 146 |
| SERVICE TOOL                    | 148 |
| WEB MONITORING TOOL             | 149 |



**OGENERAL** 3

## **OUR HISTORY**

Overseas Air Conditioning Business since 1971 VRF Business since 2001

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

#### For Commercial Use

2001 10HP / Heat recovery & Heat pump 2003

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

S

& Cooling

8 to 42HP / Heat pump

2007

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

2012 High efficiency and Compact design model 8 to 48HP / Heat Recovery 2013 Tropical spec model Extensive lineup from 8HP to 42HP in 2HP

increment / Heat pump

2015

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



VRF V-II 뒚



VRF **V-III** 

#### For Residential & Light Commercial Use ....

2004 Small VRF Series is released. 6HP / Heat pump

2011 High efficiency and small capacity model 4HP to 6HP / Heat pump

VRF J-II

VRF **V** 



VRF J-IIS

VRF **V-II** 

2016 High efficiency and small capacity model 4HP to 6HP / Heat pump

VRF VR-II



VRF J-III

2017 Tropical spec model High efficiency and compact design model 4HP to 6HP / Heat pump

#### 2017 High efficiency and compact design model 10HP to 12HP / Heat pump



VRF **J-III** 🌆



VRF J-IIL

VRF 🤳



1936 Established as Yaou Shouten Ltd.

1971 Air conditioner exports to Middle East. **Certification Acquisition of** 

1998 : Fujitsu General (Shanghai) Co.,Ltd. 1999 : Fujitsu General (Thailand) co.,Ltd. 2002 : FGA (Thailand) Co., Ltd. 2006 : Fujitsu General Central Air-conditioner (Wuxi) co.,Ltd. **New Product Initiatives** Fujitsu introduced inverter technology which used R410A refrigerant.





electronic equipment.





#### 2016

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



an EU directive on the restriction of the use of certain hazardous substances in all consumer electrical and



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



## WORLDWIDE LOCATIONS

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



JAPAN Head Office



Technology research building (Japan)





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



Co., Ltd. (Taiwan)



Fujitsu General (EURO) GmbH (Germany)

(UK) Ltd. (U.K.)

Bangkok Office (Thailand)





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

• Fujitsu General America, Inc.



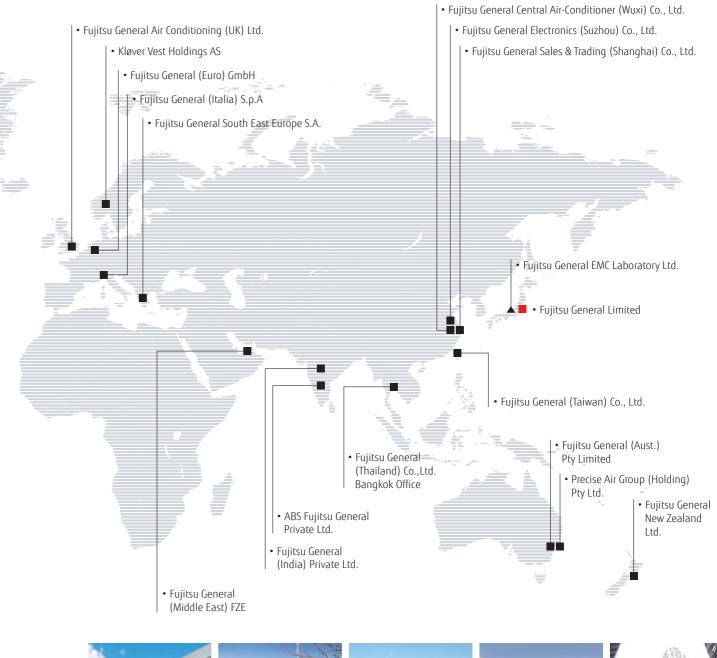


• Fujitsu General Do Brasil Ltda

East Europe S.A. (Greece)



Fujitsu General (India) Private Ltd. (India)





(Australia)



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

Ltd. (New Zealand)





ABS Fujitsu General Private Ltd. (India) (Brasil)

Fujitsu General Do Brasil Ltda.

(U.S.A.)

6 **OGENERAL** 



Fujitsu General New Zealand

Fujitsu General America, Inc.



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



Kløver Vest Holdings AS (Norway)



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



## **GLOBAL BUSINESS ACTIVITIES**

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

#### North and South Americas





HVAC trade shows in Bra:





Call center



Middle East







New product seminar in UAE

Europe



HVAC trade show in Germany



Training in Germany

-

2012

is given annually by iF





HVAC trade show in Australia



Launch event in New Zealand

Oceania



Launch event in New Zealand

International authoritative design awards





The NEWS Dealer Design Awards



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



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



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



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



reddot winner 2020

A product design competition One of the famous design that has been held since award in the world. Designs 1955. Products that win the are judged on innovation award are given the "Red Dot" and aesthetics, as well seal, a sign of international recognition of quality. as their benefit to users, clients/brands, and society.



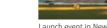
ProductReview.com.au's annual awards are selected from products and services that have been well-rated by the ProductReview community.



























#### Asia



Thanksgiving party in Taiwan







New product presentation seminar in Singapore



Service training in Vietnam



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



China State Construction Engineering Luban Prize



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



## **PROJECT REFERENCES**

# Introduced in over 50 countries worldwide

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











#### For Light commercial use

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









#### For Commercial use

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



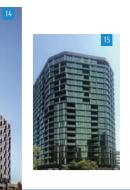


















#### For Residential use

Villa in the Africa
Residence in Oceania
Residence in the United States
Villa in the 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.



#### Overseas manufacturing companies



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



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



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



Fujitsu General Electronics Ltd. (Japan)



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



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

## **HIGH-QUALITY DEVELOPMENT & PRODUCTION**

### Advanced Research Facilities and Equipment

Calorimete

Measure the temperature,

inlet and outlet of the air

conditioner to evaluate its

cooling and heating capacity.

humidity, and airflow at the

#### Performance tests





Airflow measurement room Measure the airflow of air conditioners, from compact room air conditioner models to variable refrigerant flow (VRF) systems.

#### **Reliability tests**



Constant temperature room Verify product performance in cooling and heating operations under various temperature and humidity conditions.

Practical test room Check whether the performance of the air conditioner can be



Measure the operating sounds

of air conditioners on walls and

ceilings with reduced sound

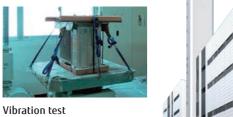
reflection.

Shower test room Check if the electrical box of the outdoor unit is protected from sustained under the conditions of strong wind and rain, such as the actual housing environment. during a typhoon.





Compressibility test





#### 60-m Height Difference testing tower

Tests oil circulation in a compressor for reliability.

Fujitsu General is one

centers in Japan. The

research and development

conducted in these facilities

contributes to providing our

customers with the highest

quality and performance.

of Japan's leading manufacturers with R&D



## FACILITIES

### Certification of ISO 9001 and ISO 14001

ISO 9001 ISO 14001 () Number of compa



### **Product Quality** Assurance

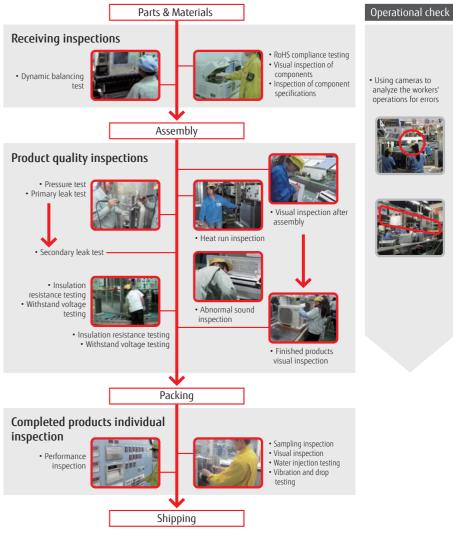
All Fujitsu General plants are ISO 9001 certified and operate under a unified quality control system. We deliver to customers all over the world high-quality products that have passed stringent quality inspections.

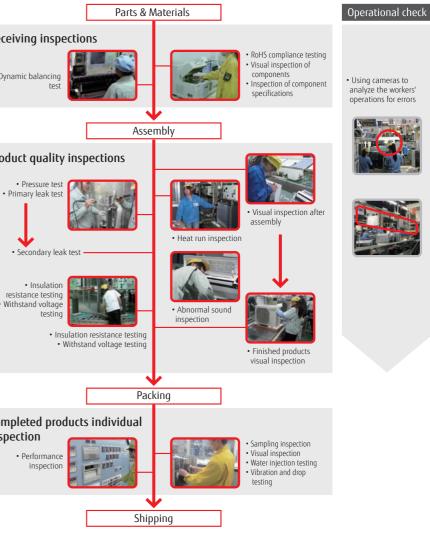
#### **Receiving inspection**

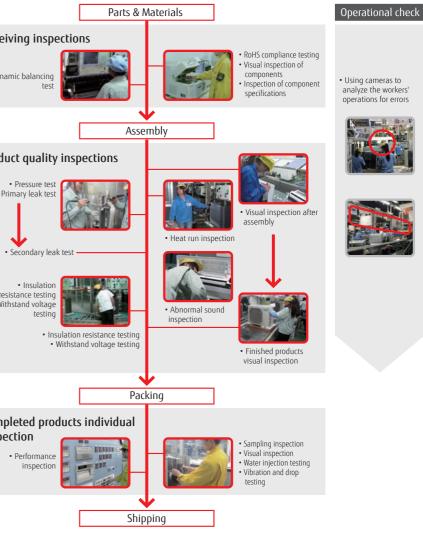
We require all our parts suppliers to submit test reports to ensure that all parts we receive from them meet our quality standards. Our in-house test department inspects incoming parts to ensure their compliance with RoHS as required by the EU. We also conduct 100% inspection of main parts to prevent defective parts from making it to assembly lines.

#### Quality inspection of products

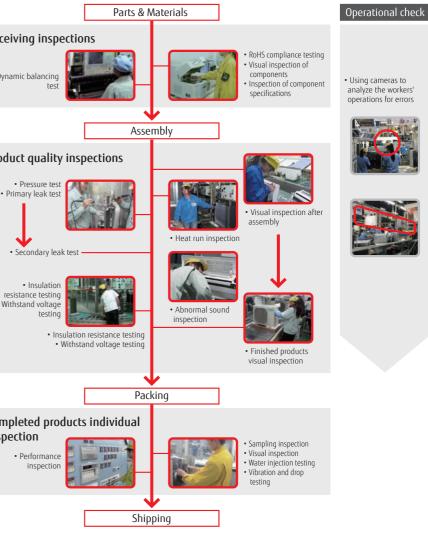
We carry out stringent quality inspections in all production processes performed in our plants. To keep the quality of our products high, inspectors check their quality from start to finish on production lines.







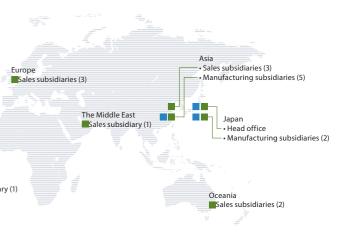
**OGENEROL** 15







14 **OGENEROL** 



# **OUR SOLUTION FOR ALL**

Fujitsu General provides the best solutions suitable for properties.

# **PROPERTIES**



# **Light Commercial APARTMENT, VILLA**

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

### **APARTMENT**





Medium Static Pressure Duct

### 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



Large space air conditioning in a family поол





### 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** HOTELS

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

#### 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.



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.





230

७/۱

~

1788 FAN

CO&O MODE

~

I TEMP.





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

#### Space saving

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



Mini Duct



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

# 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.



Central Remote Controller UTY-DCGGZ3

LAN

### Central remote controller with improved operability

Controls the temperature of each room easily, and manages and sets the operation control for a week. Energy-saving management by setting upper and lower temperature limits and operating prohibitions.





### Control and monitoring

РС

You can operate the main unit from your desk. Non-administrators can also operate the air conditioners with a computer, smartphone or tablet PC.



iOS, Android and/or Windows



Mini Duc





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

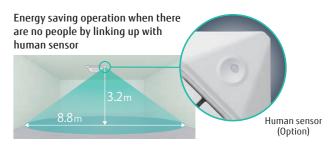
Circular Airflow Cassette blows out in all directions without temperature unevenness



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







# Light Commercial RESTAURANT, SHOPS

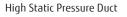
Fujitsu General provides perfect total air conditioning systems that offer smooth support by tenant, by purpose and by customer visit frequency in shops and restaurants with multiple lighting and a high density of customers.

### RESTAURANT



# Appropriate air conditioning in the atrium space

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





For ambiences with dim lightings

Cassette Circular Flow Series



## 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)



**SHOPS** 

J**ni** Achiev





### 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°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.



### Difference in height Up to 110 m

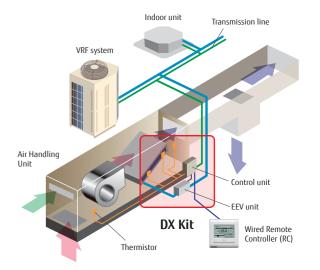
The height difference between the outdoor unit and the indoor unit is usually 50 m for the V-III Series, but by installing the pressure sensor kit it is possible to expand it to 110 m. (\*This product can be used connected only V-III tropical Series.)



Pressure Sensor Kit

# Ventilation(AHU) linked with VRF system

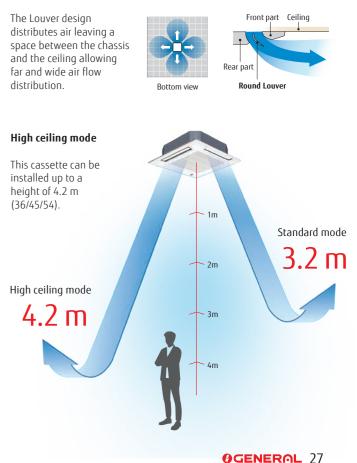
Fujitsu General's DX Kit enable other manufacture's air handling units (AHU) to be incorporated into a Fujitsu VRF system. Possible to control comfortable air conditioning and ventilation.



### 4-way Flow Cassette



#### Improvement of the airflow distribution



# **VRF CORE TECHNOLOGY**

HIGH ENERGY EFFICIENCY HIGH RELIABILITY DESIGN FLEXIBILITY MORE COMFORT EASY INSTALLATION EASY SERVICE & MAINTENANCE

VRF systems can be designed to create an air conditioning solution to suit most buildings requirements.

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

### **HIGH ENERGY EFFICIENCY**

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

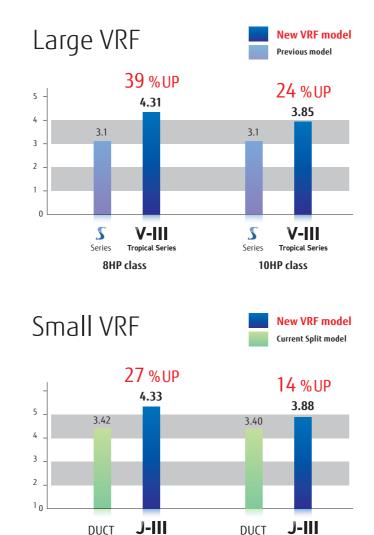
#### Room temperature set point limitation

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

### Highly Energy Efficiency

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





DUCT

Split

Tropical Series

**6HP class** 

DUCT

Split

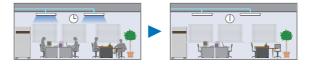
**4HP class** 

Tropical Series

#### 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.



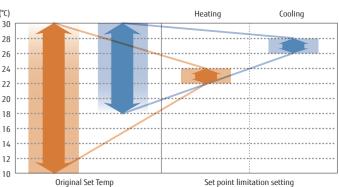
#### Energy saving management

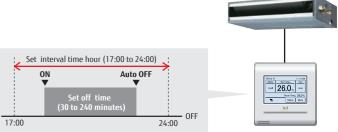
A variety energy saving operations can be set and managed depending on the season, weather, and time period. Excellent energy saving operation is performed by using System Controller.

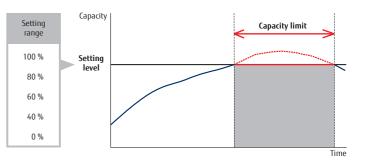


#### Capacity limit operation

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







#### **VRF CORE TECHNOLOGY**

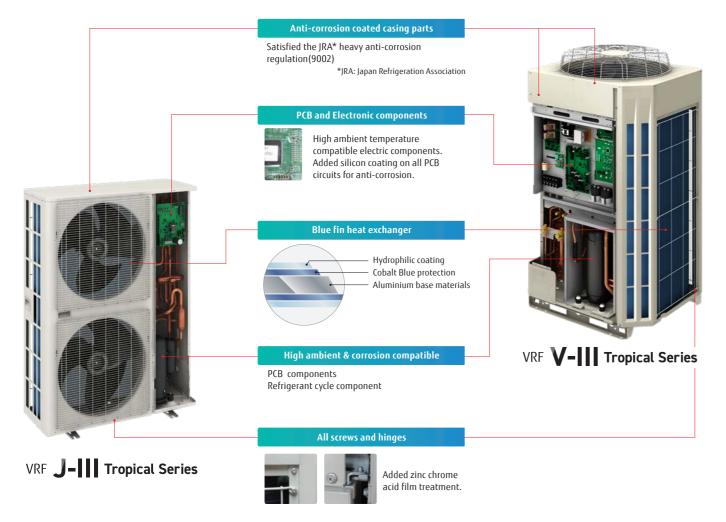


#### Life-extending operation

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

### 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.

#### **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

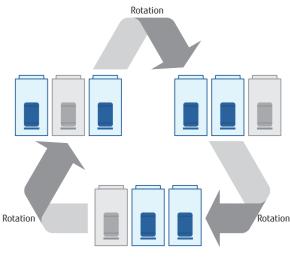
Innovative compressor control logic has been introduced in order to balance the refrigerant mass flow rate of each outdoor unit by controlling the inverter speed.

#### Liquid flow back protection

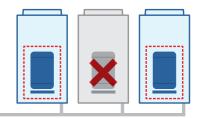
By adopting a large sized accumulator, the not completely vapourised refrigerant stays inside of the accumulator to ensure no liquid refrigerant is being fed into the compressor.

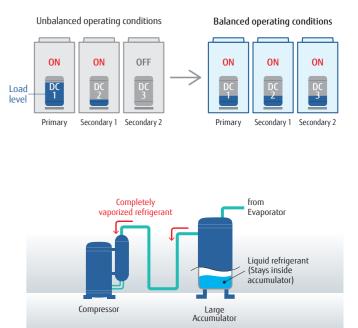
#### **Oil Recovery operation**

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



The start and stop timings are alternated among connected compressors.





### **DESIGN FLEXIBILITY**



Overall piping length 1,000 m (For V-III tropical)

Total pipe length 1,000 m maximum

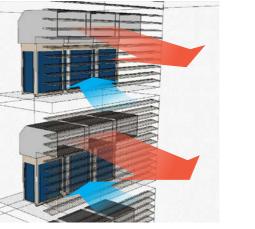
#### Actual pipe length Height difference between outdoor and indoor units 165 m 50 m maximum (V-III tropical) NOTE: Possible to extend the height difference by using option parts UTY-SPWX For the outdoor unit installed below the indoor units: 40m maximum Т Height difference 110 m\* maximum \* It is only when using the optional Pressure sensor kit. This product can be connected only to V-III Series. Pipe length from first

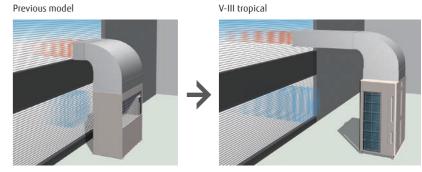
# separation tube to the 90 m<sup>\*</sup> maximum \*: The limitation on the pipe length between the farthest IU and the nearest IU originated Height difference between from the first separation tube indoor and indoor units 15 m maximum Note: J-III tropical refer to page 44.

#### 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.





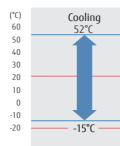
#### High capacity connection



High ambient operation design 🌆

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





34 **∂GENER∩L** 

must be 60m or less.

farthest indoor unit

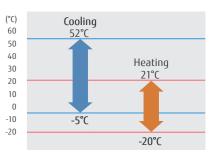
(V-III tropical)



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.



#### VRF J-III Tropical Series



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

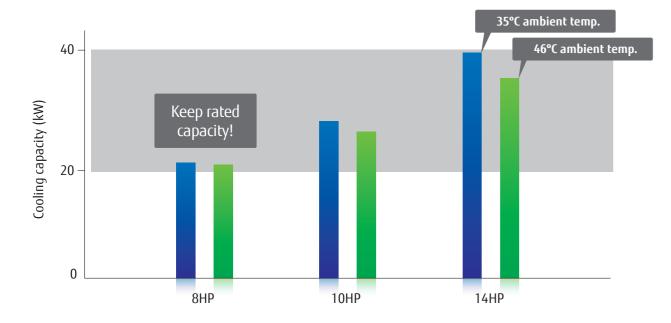
#### **VRF CORE TECHNOLOGY**



### 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 ±0.5°C.

#### Quiet operation

#### Low noise mode

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

Non-stop oil recovery operation

the cooling or heating operation.

\*: VRF VR-II Series is not available

A comfortable room condition is maintained during oil recovery

mode because the product continues to operate without stopping

Air

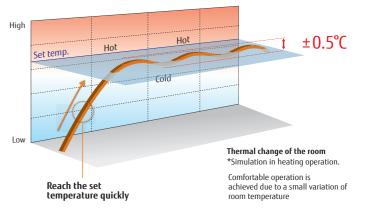
sound

Air

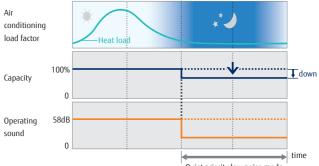
sound



OFF

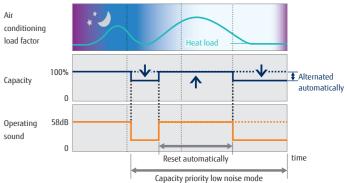


#### Quiet priority setting



Quiet priority low noise mode

#### Capacity priority setting



Previous mod V-III Series (Heating operation Operation stopped Non-stop oil at oil recovery recovery operation

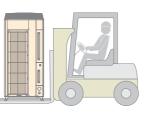


### Easily transported

A lifting strap can be hooked onto an outdoor unit Design of outdoor unit allows for lifting straps to be used



Transportable by forklift The outdoor unit can be lifted and transported by forklift.



Fits into a small elevator.



### Easy access

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



installation intervals

### Flexible piping connection

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

#### Simple wiring work

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

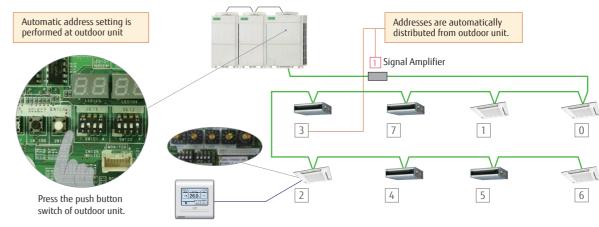
#### Easy evacuation - using vacuum mode function

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



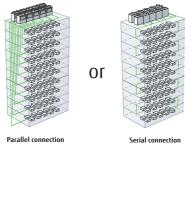
Manual address setting from indoor unit and remote controller is also possible.

#### Easy commissioning by Service Tool

#### Service Tool (UTY-ASGXZ1)

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

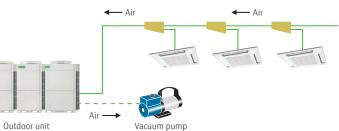


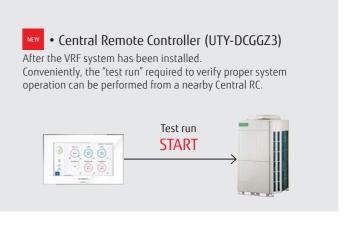


3.600 Note: The automatic address setting i

Maximum wiring length:

not available on a serially connected multiple refrigerant system.





#### **VRF CORE TECHNOLOGY**

### **EASY SERVICE &** MAINTENANCE

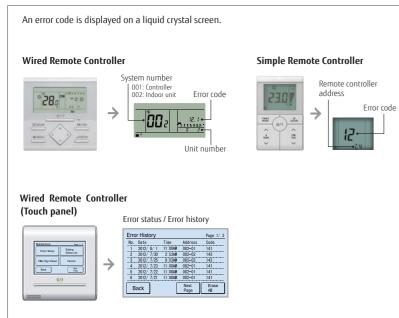


### Design for Easy Maintenance

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 selfdiagnostics.



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



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



7-segment LED

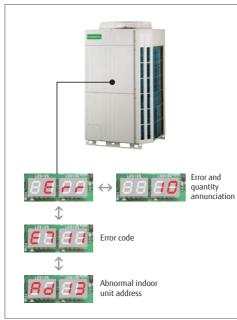
• Operation mode status • Discharge temperature/Pressure status

 Compressor operation indication • Address/type/number of outdoor unit

Movable PCB panel Easier for maintenance work behind the PCB



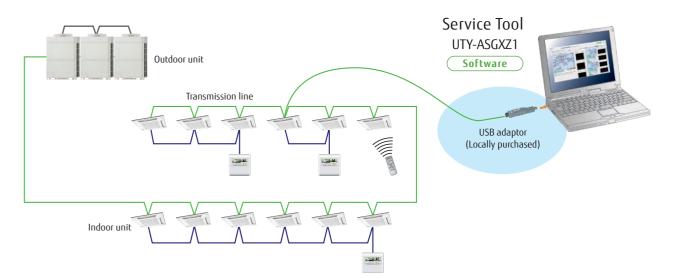
Error status can be checked easily by outdoor unit display



#### Error 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**

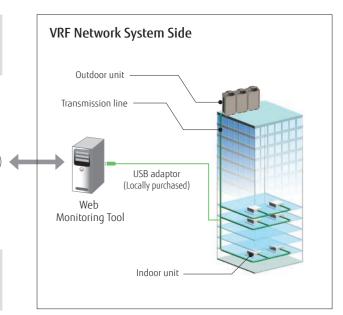
The Web Monitoring system allows you to view system operation anytime over the internet, ensuring issue free operation. The operating VRF network system in the building can be monitored real time over the Internet.

#### Monitoring Side



10 Public Telephone Line





# **VRF OUTDOOR UNITS**

VRF LINE-UP HEAT PUMP TYPE J-III TROPICAL Series HEAT PUMP TYPE V-III TROPICAL Series



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

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

### **VRF LINE-UP**

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

#### Outdoor units range

| НР   |  | 4            | 5            | 6            | 8               | 10              | 12          | 14          | 16           | 18           | 20           | 22          | 24           | 26           | 28          | 30          | 32            | 34          | 36      | 38          | 40      | 42      | 44           | 46           | 48      | 50          | 52          | 54          |
|--|--|--------------|--------------|--------------|-----------------|-----------------|-------------|-------------|--------------|--------------|--------------|-------------|--------------|--------------|-------------|-------------|---------------|-------------|---------|-------------|---------|---------|--------------|--------------|---------|-------------|-------------|-------------|
| BTU/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      | 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     |
| Ton  |  | 3.0          | 3.8          | 4.5          | 6.0             | 7.5             | 9.0         | 10.5        | 12.0         | 13.5         | 15.0         | 16.5        | 18.0         | 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        |
| VRF <b>J-   </b> Tropical Serie<br>Heat Pump | High<br>Efficiency<br>(Single phase)<br>25 | Ajh040LBTBHN | Ajh045LBTBHN | AJH054LBTBHN |                 |                 |             |             |              |              |              |             |              |              |             |             |               |             |         |             |         |         |              |              |         |             |             |             |
|  | High<br>Efficiency<br>(3 phase)            | Ajh040LETBHN | AjH045LETBHN | AJH054LETBHN |                 |                 |             |             |              |              |              |             |              |              |             |             |               |             |         |             |         |         |              |              |         |             |             |             |
|  | Space<br>saving                            |              |              |              | <br>Ajh072LN★★H | <br>Ajho9oln∗*h | AJH108LN**H | AJH126LN**H | AjH144LN**H  | Ajh162LN**H  | Ajh180LN**H  | Ajh198LN**H | AjH216LN**H  | AjH234LN**H  | AjH252LN**H | Ajh270LN**H | Ajh288LN**H   | Ajh306lN**H |         | AjH342LN**H |         |         |              |              |         | Ajh450lN**H | AJH468LN**H | AJH486LN**H |
| Heat Pump                                    | High<br>Efficiency                         |              |              |              |                 |                 |             |             | AJH144LN**HH | AJH162LN**HH | AJH180LN**HH |             | AjH216LN**HH | AjH234LN**HF |             |             | HAJH288LN**HH |             |         |             |         |         | AjH396LN**HF | AJH414LN**HH |         |             |             |             |



AJH\_\_LN\*\*H(H) : AJH\_\_LNTDH(H), AJH\_\_LNLBH(H)

#### **ØGENEROL** 45

#### Features

# HEAT PUMP TYPE VRF J- 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

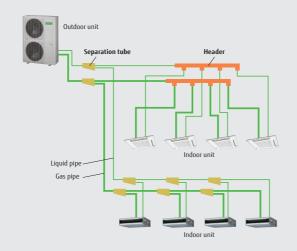
Space saving design and long piping design allow for flexible installation on the roofs or balconies of smalland medium-size buildings. Multiple indoor units of various capacities and types can be connected.

#### System configuration example

• This system is used for small and medium-sized buildings. 1

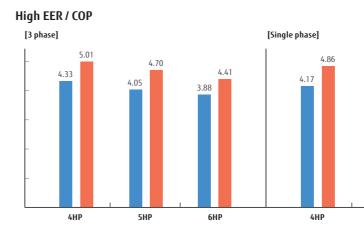
refrigerant system is used for each outdoor unit.

• Connection of multiple indoor units using separation tubes and headers.



#### **Energy efficiency**

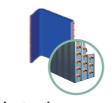
Top class high COP is achieved for all models by large heat exchanger, high efficient DC twin compressor, and our own technologies.



#### Advanced high efficiency technology



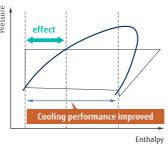
Large propeller fan High performance and low noise realized by large propeller and optimization of angle.

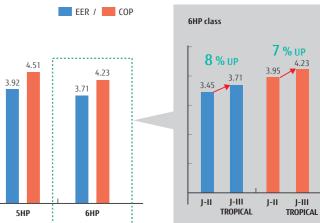


Large heat exchanger Heat exchange performance is substantially improved by mounting of 3-row large heat exchanger.



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

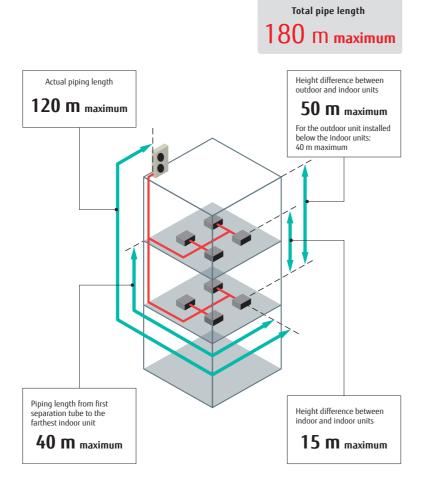


**OGENEROL** 47

#### Long piping capability

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



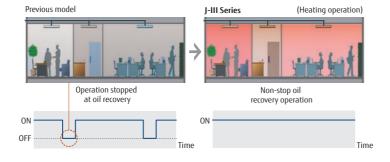


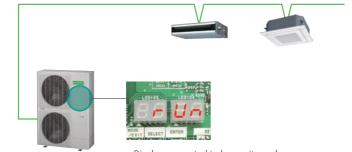
#### Non-stop oil recovery operation

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

#### **Easier Installation**

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





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

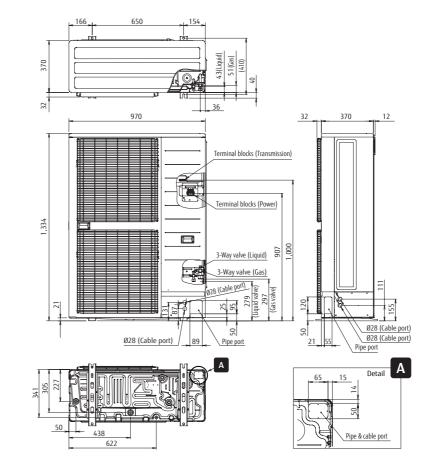
#### Specifications

|                     |                  |                        |               |                          |               | 4             |                      |               |
|---------------------|------------------|------------------------|---------------|--------------------------|---------------|---------------|----------------------|---------------|
| Rating Capacity rai | nge              | 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          |                  |                        | AJH040LBTBHN  | AJH045LBTBHN             | AJH054LBTBHN  | AJH040LETBHN  | AJH045LETBHN         | AJH054LETBHN  |
| Maximum Connect     | able Indoor Unit |                        | 1-7           | 1-8                      | 1-9           | 1-7           | 1-8                  | 1-9           |
| Power source        |                  |                        |               | Single phase, ~230V, 50H | Z             |               | 3 phase, ~400V, 50Hz |               |
|                     | Cooling(T1/T3)   | 1.111                  | 12.1/10.3     | 14.0/11.1                | 15.5/11.5     | 12.1/10.3     | 14.0/11.1            | 15.5/11.5     |
| <i>c</i>            | Heating          | - kW                   | 13.6          | 16.0                     | 18.0          | 13.6          | 16.0                 | 18.0          |
| Capacity            | Cooling(T1/T3)   | Btu/h                  | 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          |                        | 46,000        | 54,500                   | 61,000        | 46,000        | 54,500               | 61,000        |
| 1                   | 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          |                        | 2.80          | 3.55                     | 4.26          | 2.71          | 3.40                 | 4.08          |
| Course              | 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                 |                  | 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     |
|                     | Cooling(T1/T3)   | 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   |
| СОР                 | Heathea          | 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             | m <sup>3</sup> /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          |                        | 50            | 51                       | 53            | 50            | 51                   | 53            |
| level               | Heating          | dB (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            | 1 1                    | 370           | 370                      | 370           | 370           | 370                  | 370           |
| Net Weight          |                  | kg                     | 120           | 120                      | 120           | 120           | 120                  | 120           |
| Refrigerant         |                  | Туре                   | R410A         | R410A                    | R410A         | R410A         | R410A                | R410A         |
| Connection pipe     | Liquid           |                        | 9.52          | 9.52                     | 9.52          | 9.52          | 9.52                 | 9.52          |
| diameter            | Gas              | mm                     | 15.88         | 15.88                    | 19.05         | 15.88         | 15.88                | 19.05         |
| Operation ranges    | Cooling          | °CDB                   | -5 to 52      | -5 to 52                 | -5 to 52      | -5 to 52      | -5 to 52             | -5 to 52      |
| Operating range     | Heating          |                        | -20 to 21     | -20 to 21                | -20 to 21     | -20 to 21     | -20 to 21            | -20 to 21     |

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

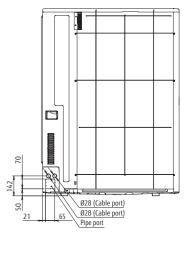
#### Dimensions

Models: AJH040LBTBHN / AJH045LBTBHN / AJH054LBTBHN / AJH040LETBHN / AJH045LETBHN / AJH054LETBHN



### J-III Tropical Series Tropical Series

(Unit : mm)



# HEAT PUMP TYPE VRF V-II 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%

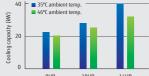
### System Outline

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





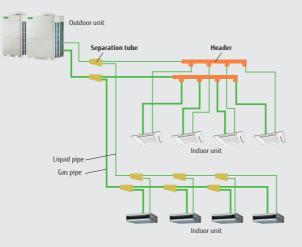




#### System configuration example

• 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.



#### **Features**

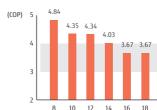
#### Energy efficiency Top class high COP is realized for

all combinations by our unique

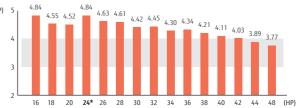
heat exchanger structure, high

efficient DC twin compressor, and other our own technologies.

#### Space saving combination







#### Energy 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.

### All Inverter

#### 3 phase DC fan motor



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



#### Sine-wave DC inverter control

High efficiency is realized by adoption of reduced switching loss IPM.



#### High efficient & Large capacity

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



11

#### Subcool heat exchanger

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



#### 4-face heat exchanger

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

Front intake port (corner cut air inhaling structure)

#### Advanced energy saving control

#### Multiple outdoor operation control

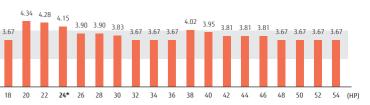
This control method operates all compressors at part load and distributes refrigerant to all heat exchangers to improve the overall system efficiency.

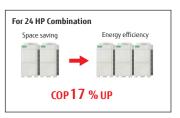


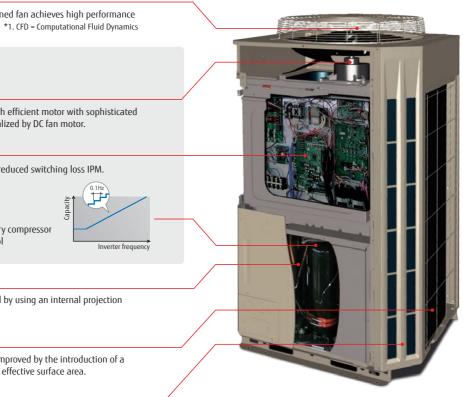


High efficient operation

Inefficient o

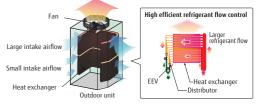






#### Heat exchanger refrigerant control

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

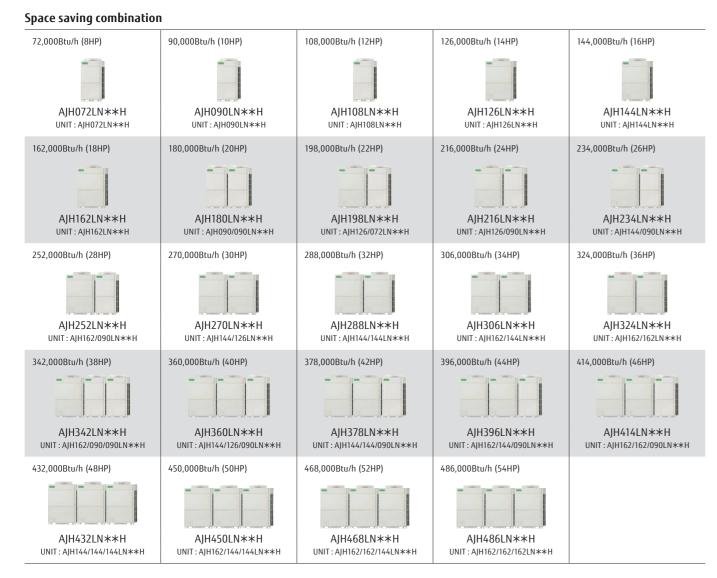


**Outdoor units lineup** 

• Combinations other than the followings are not recommended.

#### 8,10HP :AJH072LN\*\*H / AJH090LN\*\*H 12,14,16,18HP : AJH108LN\*\*H / AJH126LN\*\*H / AJH144LN\*\*H / AJH162LN\*\*H

AJH\_\_LN\*\*H : AJH\_\_LNTDH, AJH\_\_LNLBH



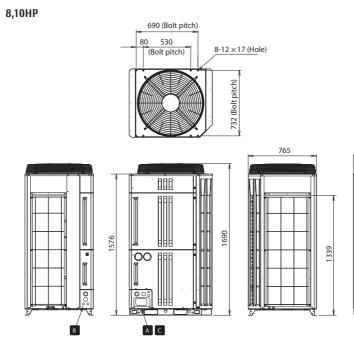
AJH\_\_LN\*\*H : AJH\_\_LNTDH, AJH\_\_LNLBH



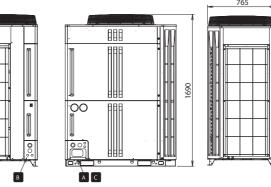
#### **Energy efficiency combination**

AJH\_\_LN\*\*H(H) : AJH\_\_LNTDH(H), AJH\_\_LNLBH(H)





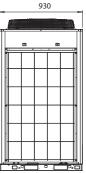
1000 (Bolt pitch) 12,14,16,18HP 80 840 (Bolt pitch) 8-12 × 7 (Hole)

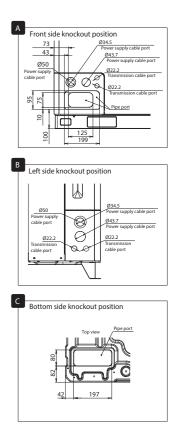






(Unit : mm)







#### Space Saving Combinations

|                             |               | HP                | 8           | 10          | 12            | 14         | 16            | 18                | 20          | 22            | 24          | 26            | 28            |   | 30          | 32          | 34          | 36          | 38            | 40                | 42                 | 44            | 46            | 48          | 50          | 52          | 54          |
|-----------------------------|---------------|-------------------|-------------|-------------|---------------|------------|---------------|-------------------|-------------|---------------|-------------|---------------|---------------|---|-------------|-------------|-------------|-------------|---------------|-------------------|--------------------|---------------|---------------|-------------|-------------|-------------|-------------|
| Rating Capacity range       |               | Btu/h             | 72,000      | 90,000      | 108,000       | 126,000    | 144,000       | 162,000           | 180,000     | 198,000       | 216,000     | 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     |
|                             |               | Ton               | 6.0         | 7.5         | 9.0           | 10.5       | 12.0          | 13.5              | 15.0        | 16.5          | 18.0        | 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        |
| Model name                  |               |                   | AJH072LN**H | AJH090LN**H | I AJH108LN**H | AJH126LN** | H AJH144LN**H | AJH162LN**H       | AJH180LN**H | I AJH198LN**H | AJH216LN**H | AJH234LN**H   | I AJH252LN**H |   | AJH270LN**H | AJH288LN**H | AJH306LN**H | AJH324LN**H | AJH342LN**H   | AJH360LN**H       | AJH378LN**H        | AJH396LN**H   | AJH414LN**H   | AJH432LN**H | AJH450LN**H | AJH468LN**H | AJH486LN**H |
| Unit 1                      |               |                   | AJH072LN**H | AJH090LN**H | AJH108LN**H   | AJH126LN** | H AJH144LN**H | H AJH162LN**H     | AJH090LN**F | I AJH126LN★★H | AJH126LN**F | AJH144LN**F   | H AJH162LN**H |   | AJH144LN**H | AJH144LN**H | AJH162LN**H | AJH162LN**H | AJH162LN**H   | AJH144LN**H       | AJH144LN**H        | AJH162LN**H   | AJH162LN**H   | AJH144LN**H | AJH162LN**H | AJH162LN**H | AJH162LN**H |
| Unit 2                      |               |                   |             |             |               |            |               |                   | AJH090LN**F | I AJH072LN**H | AJH090LN**I | I AJH090LN**I | H AJH090LN**H |   | AJH126LN**H | AJH144LN**H | AJH144LN**H | AJH162LN**H | AJH090LN**H   | AJH126LN**H       | AJH144LN**H        | AJH144LN**H   | AJH162LN**H   | AJH144LN**H | AJH144LN**H | AJH162LN**H | AJH162LN**H |
| Unit 3                      |               |                   |             |             |               |            |               |                   |             |               |             |               |               |   |             |             |             |             | AJH090LN**H   | AJH090LN**H       | AJH090LN**H        | AJH090LN**H   | AJH090LN**H   | AJH144LN**H | AJH144LN**H | AJH144LN**H | AJH162LN**H |
| Maximum Connectable In      | ndoor Unit    |                   | 13          | 16          | 19            | 23         | 26            | 29                | 33          | 36            | 40          | 43            | 46            |   | 50          | 53          | 55          | 55          | 55            | 55                | 55                 | 55            | 55            | 55          | 55          | 55          | 55          |
| Indoor unit connectable cap | acity Cooling | kW                | 11.2-29.1   | 14-36.4     | 16.8-43.5     | 20-52      | 22.5-58.5     | 25-65             | 28-72.8     | 31.2-81.1     | 34-88.4     | 36.5-94.9     | 39-101.4      |   | 42.5-110.5  | 45-117      | 47.5-123.5  | 50-130      | 53-137.8      | 56.5-146.9        | 59-153.4           | 61.5-159.9    | 64-166.4      | 67.5-175.5  | 70-182      | 72.5-188.5  | 75-195      |
| Power source                |               | 1                 |             | 1           | 1             | 1          | 3 ph          | ase 4 wire, 400 \ | /, 50Hz     | 1             | 1           |               |               |   |             |             |             |             |               | 3 ph              | ase 4 wire, 400 V, | 50Hz          |               |             |             |             | 1           |
|                             | Cooling       |                   | 22.4        | 28.0        | 33.5          | 40.0       | 45.0          | 50.0              | 56.0        | 62.4          | 68.0        | 73.0          | 78.0          | 1 | 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       |
|                             | Heating       | kW                | 25.0        | 31.5        | 37.5          | 45.0       | 50.0          | 50.0              | 63.0        | 70.0          | 76.5        | 81.5          | 81.5          |   | 95.0        | 100.0       | 100.0       | 100.0       | 113.0         | 126.5             | 131.5              | 131.5         | 131.5         | 150.0       | 150.0       | 150.0       | 150.0       |
| Capacity                    | Cooling       | D: 1              | 76400       | 95500       | 114300        | 136500     | 153500        | 170600            | 191000      | 212900        | 232000      | 249000        | 266100        |   | 290000      | 307000      | 324100      | 341200      | 361600        | 385500            | 402500             | 419600        | 436700        | 460500      | 477600      | 494700      | 511800      |
|                             | Heating       | Btu/h             | 85300       | 107500      | 128000        | 153500     | 170600        | 170600            | 215000      | 238800        | 261000      | 278100        | 278100        |   | 324100      | 341200      | 341200      | 341200      | 385600        | 431600            | 448700             | 448700        | 448700        | 511800      | 511800      | 511800      | 511800      |
|                             | Cooling       |                   | 5.20        | 7.28        | 8.96          | 10.96      | 13.01         | 16.56             | 14.56       | 16.16         | 18.24       | 20.29         | 23.84         |   | 23.97       | 26.02       | 29.57       | 33.12       | 31.12         | 31.25             | 33.30              | 36.85         | 40.40         | 39.03       | 42.58       | 46.13       | 49.68       |
| T1 Input pov                | Heating       | kW                | 5.17        | 7.25        | 8.65          | 11.17      | 13.63         | 13.63             | 14.50       | 16.34         | 18.42       | 20.88         | 20.88         |   | 24.80       | 27.26       | 27.26       | 27.26       | 28.13         | 32.05             | 34.51              | 34.51         | 34.51         | 40.89       | 40.89       | 40.89       | 40.89       |
| condition                   | Cooling       |                   | 9.2         | 12.0        | 15.0          | 17.7       | 20.7          | 26.1              | -           | -             | -           | -             | -             |   | -           | -           | -           | -           | -             | -                 | -                  | -             | -             | -           | -           | -           | -           |
| Current                     | Heating       | A                 | 9.2         | 12.2        | 14.6          | 18.2       | 21.5          | 21.5              | -           | -             | -           | -             | -             |   | -           | -           | -           | -           | -             | -                 | -                  | -             | -             | -           | -           | -           | -           |
| EER                         | Cooling       |                   | 4.31        | 3.85        | 3.74          | 3.65       | 3.46          | 3.02              | 3.85        | 3.86          | 3.73        | 3.60          | 3.27          |   | 3.55        | 3.46        | 3.21        | 3.02        | 3.41          | 3.62              | 3.54               | 3.34          | 3.17          | 3.46        | 3.29        | 3.14        | 3.02        |
| COP                         | Heating       | W/W               | 4.84        | 4.35        | 4.34          | 4.03       | 3.67          | 3.67              | 4.34        | 4.28          | 4.15        | 3.90          | 3.90          |   | 3.83        | 3.67        | 3.67        | 3.67        | 4.02          | 3.95              | 3.81               | 3.81          | 3.81          | 3.67        | 3.67        | 3.67        | 3.67        |
| EER                         | Cooling       | Btu/h/W           | 14.7        | 13.1        | 12.8          | 12.5       | 11.8          | 10.3              | 13.1        | 13.2          | 12.7        | 12.3          | 11.2          |   | 12.1        | 11.8        | 11.0        | 10.3        | 11.6          | 12.3              | 12.1               | 11.4          | 10.8          | 11.8        | 11.2        | 10.7        | 10.3        |
| COP                         | Heating       | DLU/II/W          | 16.5        | 14.8        | 14.8          | 13.7       | 12.5          | 12.5              | 14.8        | 14.6          | 14.2        | 13.3          | 13.3          |   | 13.1        | 12.5        | 12.5        | 12.5        | 13.7          | 13.5              | 13.0               | 13.0          | 13.0          | 12.5        | 12.5        | 12.5        | 12.5        |
| Capacity                    |               | kW                | 20.2        | 25.2        | 28.5          | 32         | 35.1          | 35.2              | 50.4        | 52.2          | 57.2        | 60.3          | 60.4          |   | 67.1        | 70.2        | 70.3        | 70.4        | 85.6          | 92.3              | 95.4               | 95.5          | 95.6          | 105.3       | 105.4       | 105.5       | 105.6       |
| Capacity                    |               | Btu/h             | 68900       | 86000       | 97200         | 109200     | 119800        | 120100            | 172000      | 178100        | 195200      | 205800        | 206100        |   | 229000      | 239600      | 239900      | 240200      | 292100        | 315000            | 325600             | 325900        | 326200        | 359400      | 359700      | 360000      | 360300      |
| T3 Input pov                | ver Coolina   | kW                | 6.73        | 9.20        | 9.34          | 10.70      | 11.82         | 12.35             | 18.39       | 17.44         | 19.90       | 21.02         | 21.55         |   | 22.52       | 23.64       | 24.17       | 24.70       | 30.75         | 31.72             | 32.83              | 33.37         | 33.90         | 35.45       | 35.99       | 36.52       | 37.05       |
| condition Current           | cooning       | A                 | 10.8        | 14.5        | 14.7          | 16.9       | 18.6          | 19.2              | -           | -             | -           | -             | -             |   | -           | -           | -           | -           | -             | -                 | -                  | -             | -             | -           | -           | -           | -           |
| FER                         |               | W/W               | 3.00        | 2.74        | 3.05          | 2.99       | 2.97          | 2.85              | 2.74        | 2.99          | 2.87        | 2.87          | 2.80          |   | 2.98        | 2.97        | 2.91        | 2.85        | 2.78          | 2.91              | 2.91               | 2.86          | 2.82          | 2.97        | 2.93        | 2.89        | 2.85        |
| EEK                         |               | Btu/h/W           | 10.23       | 9.35        | 10.40         | 10.20      | 10.14         | 9.72              | 9.35        | 10.21         | 9.81        | 9.79          | 9.56          |   | 10.17       | 10.14       | 9.93        | 9.72        | 9.50          | 9.93              | 9.92               | 9.77          | 9.62          | 10.14       | 10.00       | 9.86        | 9.72        |
| Power factor                |               | %                 | 90          | 92          | 92            | 92         | 92            | 93                | -           | -             | -           | -             | -             |   | -           | -           | -           | -           | -             | -                 | -                  | -             | -             | -           | -           | -           | -           |
| Air flow rate               | High          | m <sup>3</sup> /h | 11100       | 11100       | 13000         | 13000      | 13700         | 13700             | 11100×2     | 13000+11100   | 13000+11100 | 13700+11100   | 13700+11100   |   | 13700+13000 | 13700×2     | 13700×2     | 13700×2     | 13700+11100×2 | 13700+13000+11100 | 13700×2+11100      | 13700×2+11100 | 13700×2+11100 | 13700×3     | 13700×3     | 13700×3     | 13700×3     |
| Sound pressure level        | Cooling       | dB (A)            | 56          | 58          | 57            | 60         | 62            | 63                | 61          | 61            | 62          | 63            | 64            |   | 64          | 65          | 66          | 66          | 65            | 65                | 66                 | 66            | 67            | 67          | 67          | 67          | 68          |
|                             | Heating       | 00 (/ 1)          | 58          | 59          | 60            | 62         | 64            | 64                | 62          | 63            | 64          | 65            | 65            |   | 66          | 67          | 67          | 67          | 66            | 67                | 68                 | 68            | 68            | 69          | 69          | 69          | 69          |
| Maximum external static     | pressure      | Pa                | 82          | 82          | 82            | 82         | 82            | 82                | 82          | 82            | 82          | 82            | 82            |   | 82          | 82          | 82          | 82          | 82            | 82                | 82                 | 82            | 82            | 82          | 82          | 82          | 82          |
| Compressor motor output     | t             | kW                | 7.5         | 7.5         | 11            | 11         | 11            | 11                | 7.5×2       | 11.0+7.5      | 11.0+7.5    | 11.0+7.5      | 11.0+7.5      |   | 11.0×2      | 11.0×2      | 11.0×2      | 11.0×2      | 11.0+7.5×2    | 11.0×2+7.5        | 11.0×2+7.5         | 11.0×2+7.5    | 11.0×2+7.5    | 11.0×3      | 11.0×3      | 11.0×3      | 11.0×3      |
| Heat exchanger fin          |               |                   | Blue fin    | Blue fin    | Blue fin      | Blue fin   | Blue fin      | Blue fin          | Blue fin    | Blue fin      | Blue fin    | Blue fin      | Blue fin      |   | Blue fin      | Blue fin          | Blue fin           | Blue fin      | Blue fin      | Blue fin    | Blue fin    | Blue fin    | Blue fin    |
|                             | Height        |                   | 1690        | 1690        | 1690          | 1690       | 1690          | 1690              | 1690        | 1690          | 1690        | 1690          | 1690          |   | 1690        | 1690        | 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      |   | 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      |
|                             | Depth         |                   | 765         | 765         | 765           | 765        | 765           | 765               | 765         | 765           | 765         | 765           | 765           |   | 765         | 765         | 765         | 765         | 765           | 765               | 765                | 765           | 765           | 765         | 765         | 765         | 765         |
| Weight                      |               | kg                | 255         | 255         | 279           | 279        | 279           | 279               | 255×2       | 279+255       | 279+255     | 279+255       | 279+255       |   | 279×2       | 279×2       | 279×2       | 279×2       | 279+255×2     | 279×2+255         | 279×2+255          | 279×2+255     | 279×2+255     | 279×3       | 279×3       | 279×3       | 279×3       |
| Refrigerant                 | Тур           | pe .              | R410A       | R410A       | R410A         | R410A      | R410A         | R410A             | R410A       | R410A         | R410A       | R410A         | R410A         |   | R410A       | R410A       | R410A       | R410A       | R410A         | R410A             | R410A              | R410A         | R410A         | R410A       | R410A       | R410A       | R410A       |
|                             | 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     |   | 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      |
| Connection pipe diamete     | Liquid        | mm                | 12.70       | 12.70       | 12.70         | 12.70      | 12.70         | 15.88             | 15.88       | 15.88         | 15.88       | 15.88         | 15.88         |   | 19.05       | 19.05       | 19.05       | 19.05       | 19.05         | 19.05             | 19.05              | 19.05         | 19.05         | 19.05       | 19.05       | 19.05       | 19.05       |
|                             | Discharge Gas |                   | 22.22       | 22.22       | 28.58         | 28.58      | 28.58         | 28.58             | 28.58       | 34.92         | 34.92       | 34.92         | 34.92         |   | 34.92       | 34.92       | 34.92       | 41.27       | 41.27         | 41.27             | 41.27              | 41.27         | 41.27         | 41.27       | 41.27       | 41.27       | 41.27       |
| Operating range             | 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      |   | -5 to 52      | -5 to 52          | -5 to 52           | -5 to 52      | -5 to 52      | -5 to 52    | -5 to 52    | -5 to 52    | -5 to 52    |
|                             | Heating       |                   | -20 to 21   | -20 to 21   | -20 to 21     | -20 to 21  | -20 to 21     | -20 to 21         | -20 to 21   | -20 to 21     | -20 to 21   | -20 to 21     | -20 to 21     |   | -20 to 21     | -20 to 21         | -20 to 21          | -20 to 21     | -20 to 21     | -20 to 21   | -20 to 21   | -20 to 21   | -20 to 21   |

#### Energy Efficiency Combination

|                 |                    |                    | HP                | 16                    | 18                    | 20                    | 24                    | 26             | 28                    | 30                    | 32                    | 34                    | 36                    | 38             | 40                      | 42                    | 44                    | 46                    |
|-----------------|--------------------|--------------------|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|-------------------------|-----------------------|-----------------------|-----------------------|
| Rating Capaci   | ity range          |                    | Btu/h             | 144,000               | 162,000               | 180,000               | 216,000               | 234,000        | 252,000               | 270,000               | 288,000               | 306,000               | 324,000               | 342,000        | 360,000                 | 378,000               | 396,000               | 414,000               |
|                 |                    |                    | Ton               | 12.0                  | 13.5                  | 15.0                  | 18.0                  | 19.5           | 21.0                  | 22.5                  | 24.0                  | 25.5                  | 27.0                  | 28.5           | 30.0                    | 31.5                  | 33.0                  | 34.5                  |
| Model name      |                    |                    |                   | AJH144LN**HH          | AJH162LN**HH          | AJH180LN**HH          | AJH216LN**HH          | AJH234LN**HH   | AJH252LN**HH          | AJH270LN**HH          | AJH288LN**HH          | AJH306LN**HH          | AJH324LN**HH          | AJH342LN**HH   | AJH360LN**HH            | AJH378LN**HH          | AJH396LN**HH          | AJH414LN**HH          |
| Unit 1          |                    |                    |                   | AJH072LN**H           | AJH090LN**H           | AJH108LN**H           | AJH072LN**H           | AJH090LN**H    | AJH108LN**H           | AJH126LN**H           | AJH108LN**H           | AIH126LN**H           | AJH108LN**H           | AJH126LN**H    | AJH126LN**H             | AJH126LN**H           | AJH144LN**H           | AJH144LN**H           |
| Unit 2          |                    |                    |                   | AJH072LN**H           | AJH072LN**H           | AJH072LN**H           | AJH072LN**H           | AJH072LN**H    | AJH072LN**H           | AJH072LN**H           | AJH108LN**H           | AJH108LN**H           | AJH108LN**H           | AJH108LN**H    | AJH126LN**H             | AJH126LN**H           | AJH126LN**H           | AJH144LN**H           |
| Unit 3          |                    |                    |                   |                       |                       |                       | AJH072LN**H           | AJH072LN**H    | AJH072LN**H           | AJH072LN**H           | AJH072LN**H           | AJH072LN**H           | AJH108LN**H           | AJH108LN**H    | AJH108LN**H             | AJH126LN**H           | AJH126LN**H           | AJH144LN**H           |
| Maximum Co      | nnectable Indoo    | or Unit            |                   | 26                    | 29                    | 33                    | 39                    | 43             | 46                    | 50                    | 52                    | 55                    | 55                    | 55             | 55                      | 55                    | 55                    | 55                    |
| Indoor unit con | nnectable capacity | y Cooling          | kW                | 22.4-58.2             | 25.2-65.5             | 28-72.6               | 33.6-87.3             | 36.4-94.6      | 39.2-101.7            | 42.4-110.2            | 44.7-116.2            | 48-124.6              | 50.3-130.6            | 53.5-139.1     | 56.8-147.5              | 60-156                | 62.5-162.5            | 65-169                |
| Power source    | 1                  |                    |                   |                       |                       |                       | 3 phase 6 wir         | e. 400 V. 50Hz |                       |                       |                       |                       |                       | 3              | phase 4 wire, 400 V. 50 | )H <sub>7</sub>       |                       |                       |
| i ower source   |                    | Cooling            |                   | 44.8                  | 50.4                  | 55.9                  | 67.2                  | 72.8           | 78.3                  | 84.8                  | 89.4                  | 95.9                  | 100.5                 | 107.0          | 113.5                   | 120.0                 | 125.0                 | 130.0                 |
|                 |                    | Heating            | kW                | 50.0                  | 56.5                  | 62.5                  | 75.0                  | 81.5           | 87.5                  | 95.0                  | 100.0                 | 107.5                 | 112.5                 | 120.0          | 127.5                   | 135.0                 | 140.0                 | 145.0                 |
|                 | Capacity           | Cooling            |                   | 152800                | 171900                | 190700                | 229200                | 248300         | 267100                | 289300                | 305000                | 327200                | 342900                | 365100         | 387300                  | 409500                | 426500                | 443500                |
|                 |                    | Heating            | Btu/h             | 170600                | 192800                | 213300                | 255900                | 278100         | 298600                | 324100                | 341300                | 366800                | 384000                | 409500         | 435000                  | 460500                | 477600                | 494700                |
|                 | Input power        | Cooling            |                   | 10.40                 | 12.48                 | 14,16                 | 15.60                 | 17.68          | 19.36                 | 21.36                 | 23.12                 | 25.12                 | 26.88                 | 28.88          | 30.88                   | 32.88                 | 34.93                 | 36.98                 |
| T1              | Input power        | Heating            | kW                | 10.34                 | 12.42                 | 13.82                 | 15.51                 | 17.59          | 18.99                 | 21.51                 | 22.47                 | 24.99                 | 25.95                 | 28.47          | 30.99                   | 33.51                 | 35.97                 | 38.43                 |
| condition       |                    | Cooling            |                   | -                     | -                     | -                     | -                     | -              | -                     | -                     | -                     | -                     | -                     | -              | -                       | -                     | -                     | -                     |
|                 | Current            | Heating            | A                 | -                     | -                     | -                     | -                     | -              | -                     | -                     | -                     | -                     | -                     | -              | -                       | -                     | -                     | -                     |
|                 | EER                | Cooling            |                   | 4.31                  | 4.04                  | 3.95                  | 4.31                  | 4.12           | 4.04                  | 3.97                  | 3.87                  | 3.82                  | 3.74                  | 3.70           | 3.68                    | 3.65                  | 3.58                  | 3.52                  |
|                 | COP                | Heating            | W/W               | 4.84                  | 4.55                  | 4.52                  | 4.84                  | 4.63           | 4.61                  | 4.42                  | 4.45                  | 4.30                  | 4.34                  | 4.21           | 4.11                    | 4.03                  | 3.89                  | 3.77                  |
|                 | EER                | Cooling            | Btu/h/W           | 14.7                  | 13.8                  | 13.5                  | 14.7                  | 14.0           | 13.8                  | 13.5                  | 13.2                  | 13.0                  | 12.8                  | 12.6           | 12.5                    | 12.5                  | 12.2                  | 12.0                  |
|                 | COP                | Heating            | Btu/n/W           | 16.5                  | 15.5                  | 15.4                  | 16.5                  | 15.8           | 15.7                  | 15.1                  | 15.2                  | 14.7                  | 14.8                  | 14.4           | 14.0                    | 13.7                  | 13.3                  | 12.9                  |
|                 | Canadibu           |                    | kW                | 40.4                  | 45.4                  | 48.7                  | 60.6                  | 65.6           | 68.9                  | 72.4                  | 77.2                  | 80.7                  | 85.5                  | 89.0           | 92.5                    | 96.0                  | 99.1                  | 102.2                 |
|                 | Capacity           |                    | Btu/h<br>kW       | 137800                | 154900                | 166100                | 206700                | 223800         | 235000                | 247000                | 263300                | 275300                | 291600                | 303600         | 315600                  | 327600                | 338200                | 348800                |
| T3              | Input power        | wer Cooling        | kW                | 13.47                 | 15.93                 | 16.08                 | 20.20                 | 22.66          | 22.81                 | 24.17                 | 25.42                 | 26.78                 | 28.03                 | 29.39          | 30.75                   | 32.11                 | 33.22                 | 34.34                 |
| condition       | Current            | cooning            | A                 | -                     | -                     | -                     | -                     | -              | -                     | -                     | -                     | -                     | -                     | -              | -                       | -                     | -                     | -                     |
|                 | EER                |                    | W/W               | 3.00                  | 2.85                  | 3.03                  | 3.00                  | 2.89           | 3.02                  | 3.00                  | 3.04                  | 3.01                  | 3.05                  | 3.03           | 3.01                    | 2.99                  | 2.98                  | 2.98                  |
|                 | LEK                |                    | Btu/h/W           | 10.23                 | 9.72                  | 10.33                 | 10.23                 | 9.87           | 10.30                 | 10.22                 | 10.36                 | 10.28                 | 10.40                 | 10.33          | 10.26                   | 10.20                 | 10.18                 | 10.16                 |
| Power factor    |                    |                    | %                 | -                     | -                     | -                     | -                     | -              | -                     | -                     | -                     | -                     | -                     | -              | -                       | -                     | -                     | -                     |
| Air flow rate   |                    | High               | m <sup>3</sup> /h | 11100×2               | 11100×2               | 13000+11100           | 11100×3               | 11100×3        | 13000+11100×2         | 13000+11100×2         | 13000×2+11100         | 13000×2+11100         | 13000×3               | 13000×3        | 13000×3                 | 13000×3               | 13700+13000×2         | 13700×2+13000         |
| Sound pressu    | ire level          | Cooling            | dB (A)            | 59                    | 60                    | 60                    | 61                    | 62             | 61                    | 63                    | 61                    | 62                    | 63                    | 63             | 64                      | 65                    | 66                    | 66                    |
|                 |                    | Heating            |                   | 61                    | 62                    | 62                    | 63                    | 63             | 64                    | 65                    | 64                    | 65                    | 65                    | 66             | 66                      | 67                    | 68                    | 68                    |
|                 | ternal static pres | ssure              | Pa                | 82                    | 82                    | 82                    | 82                    | 82             | 82                    | 82                    | 82                    | 82                    | 82                    | 82             | 82                      | 82                    | 82                    | 82                    |
| Compressor n    |                    |                    | kW                | 7.5×2                 | 7.5×2                 | 11.0+7.5              | 7.5×3                 | 7.5×3          | 11.0+7.5×2            | 11.0+7.5×2            | 11.0×2+7.5            | 11.0×2+7.5            | 11.0×3                | 11.0×3         | 11.0×3                  | 11.0×3                | 11.0×3                | 11.0×3                |
| Heat exchang    | ger fin            |                    |                   | Blue fin              | Blue fin              | Blue fin              | Blue fin              | Blue fin       | Blue fin              | Blue fin              | Blue fin              | Blue fin              | Blue fin              | Blue fin       | Blue fin                | Blue fin              | Blue fin              | Blue fin              |
|                 |                    | Height             | _                 | 1690                  | 1690                  | 1690                  | 1690                  | 1690           | 1690                  | 1690                  | 1690                  | 1690                  | 1690                  | 1690           | 1690                    | 1690                  | 1690                  | 1690                  |
| Dimensions      |                    | Width              | mm                | 1240×2                | 1240×2                | 1240+930              | 930×3                 | 930×3          | 1240+930×2            | 1240+930×2            | 1240×2+930            | 1240×2+930            | 1240×3                | 1240×3         | 1240×3                  | 1240×3                | 1240×3                | 1240×3                |
|                 |                    | Depth              |                   | 765                   | 765                   | 765                   | 765                   | 765            | 765                   | 765                   | 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             | 279×2+255             | 279×3                 | 279×3          | 279×3                   | 279×3                 | 279×3<br>R410A        | 279×3                 |
| Refrigerant     |                    | - /                | /pe               | R410A                 | R410A                 | R410A                 | R410A                 | R410A          | R410A                 | R410A                 | R410A                 | R410A                 | R410A                 | R410A          | R410A                   | R410A                 |                       | R410A                 |
| -               |                    | 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           | 11.8×2+11.7           | 11.8×3                | 11.8×3         | 11.8×3                  | 11.8×3                | 11.8×3                | 11.8×3                |
| Connection pi   | ipe diameter       | Liquid             | mm                | 12.70                 | 15.88                 | 15.88<br>28.58        | 15.88                 | 15.88          | 15.88                 | 19.05                 | 19.05                 | 19.05                 | 19.05                 | 19.05<br>41.27 | 19.05<br>41.27          | 19.05                 | 19.05<br>41.27        | 19.05                 |
|                 | -                  | Discharge Gas      | >                 | 28.58                 | 28.58                 | 28.58<br>-5 to 52     | 34.92<br>-5 to 52     | 34.92          | 34.92                 | 34.92                 | 34.92                 | 34.92                 | -                     |                | 41.27<br>-5 to 52       |                       |                       |                       |
| Operating ran   | nge                |                    | *CDB              | -5 to 52<br>-20 to 21 | -5 to 52       | -5 to 52<br>-20 to 21 | -5 to 52       | -5 to 52<br>-20 to 21   | -5 to 52<br>-20 to 21 | -5 to 52<br>-20 to 21 | -5 to 52<br>-20 to 21 |
|                 | -                  | Cooling<br>Heating |                   | -2U [0 2 I            | -20 to 21             | -20 to 21             | -20 to 21             | -20 to 21      | -20 to 21             | -20 to 21             | -20 to 21             | -20 to 21             | -20 to 21             | -20 to 21      | -20 to 21               | -20 to 21             | -20 to 21             | -20 to 21             |

### VRF V-III Tropical Series **Equal**

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

Cooling(T3): Indoor temperature of 29°CDB / 19°CWB, and outdoor temperature of 46°CDB / 24°CWB Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

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

AJH\_\_LN\*\*H(H) : AJH\_\_LNTDH(H), AJH\_\_LNLBH(H)

**ØGENERAL** 55



# **VRF INDOOR UNITS**

### 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 Wall Mounted (EEV Internal / external)



### 13 Type and 111 models available to meet the requirements of any building design.

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

## **INDOOR UNITS LINE-UP**

Comprehensive range of indoor units of variety design and capacity ranges available which can be selected to suit any air conditioning needs. 14 types, 105 models, Capacity range from 7,000 Btu/h to 96,000 Btu/h

#### Indoor units range

|                |  | Btu/h        | 7,000                    | 9,000                    | 12,000                   | 14,000                   | 18,000  | 24,000                   | 30,000                   | 34,000       | 36,000       | 45,000                   |   |
|----------------|--|--------------|--------------------------|--------------------------|--------------------------|--------------------------|---|--------------------------|--------------------------|--------------|--------------|--------------------------|---|
| Capacity range |  | kW           | 2.2                      | 2.8                      | 3.6                      | 4.5                      | 5.6   | 7.1                      | 9.0                      | 10.0         | 11.2         | 12.5                     |   |
|                | Compact Cassette                                   |              | AUXB07GALH               | AUXB09GALH<br>AUXB09GATH | AUXB12GALH<br>AUXB12GATH | AUXB14GALH<br>AUXB14GATH | AUXB18GALH<br>AUXB18GATH                                  | AUXB24GALH<br>AUXB24GATH |                          |              |              |                          |   |
|                |  | (Slim type)  |                          | AUXDU9GAIH               | AUXD12GATH               | AUXD14GATH               | AUXDIGGAIH  | AUXD24GALH               |                          |              |              |                          |   |
| Cassette       | 4-way Flow   | (Large type) |                          |                          |                          |                          | AUXA18GALH  | AUXA24GALH               | AUXA30GALH               | AUXA34GALH   | AUXA36GALH   | AUXA45GALH               |   |
|                |  | (Slim type)  |                          |                          |                          |                          | AUXM018GTAH   | AUXM024GTAH              |                          |              |              |                          | Γ |
|                | Circular Flow                                      | (Large type) |                          |                          |                          |                          | AUXK018GTAH   | AUXK024GTAH              | AUXKO30GTAH              | AUXK034GTAH  | AUXK036GTAH  | AUXK045GTAH              |   |
|                | Mini Duct<br>(With drain pump)                     |              | ARXK07GCLH               | ARXK09GCLH               | ARXK12GCLH               | ARXK14GCLH               | ARXK18GCLH  | ARXK24GCLH               |                          |              |              |                          |   |
|                | Mini Duct<br>(Without drain pump)                  |              | ARXK07GALH               | ARXK09GALH               | ARXK12GALH               | ARXK14GALH               | ARXK18GALH  | ARXK24GALH               |                          |              |              |                          |   |
|                | Slim Duct<br>(With drain pump)                     |              | ARXD07GALH<br>ARXD07GATH | ARXD09GALH<br>ARXD09GATH | ARXD12GALH<br>ARXD12GATH | ARXD14GALH<br>ARXD14GATH | ARXD18GALH<br>ARXD18GATH                                  | ARXD24GALH<br>ARXD24GATH |                          |              |              |                          |   |
| Duct           | Medium Static Pressure Duct                        |              |                          |                          |                          |                          |   | ARXA24GBLH               | ARXA30GBLH               |              | ARXA36GBLH   | ARXA45GBLH<br>ARXA45GBTH | ſ |
|                |  |              |                          |                          |                          |                          |   | ARXA24GBTH               | ARXA30GBTH               |              | ARXA36GBTH   | ARXA45GBTH               |   |
|                | High Static Pressure Duct                          |              |                          |                          |                          |                          |   |                          |                          |              | ARXC36GBTH   | ARXC45GATH               |   |
|                | Large Airflow Duct                                 |              |                          |                          |                          |                          | ARXN18GATH*2  | ARXN24GATH*2             | ARXN30GATH*2             | ARXN34GATH*2 | ARXN36GATH*2 | ARXN45GATH*2             |   |
|                | Floor<br>(Same as Ceiling models)                  |              |                          |                          | ABHA12GATH               | ABHA14GATH               | ABHA18GATH  | ABHA24GATH               |                          |              |              |                          |   |
| Floor          | Slim Concealed Floor<br>(Same as Slim Duct models) |              | ARXD07GALH<br>ARXD07GATH | ARXD09GALH<br>ARXD09GATH | ARXD12GALH<br>ARXD12GATH | ARXD14GALH<br>ARXD14GATH | ARXD18GALH<br>ARXD18GATH                                  | ARXD24GALH<br>ARXD24GATH |                          |              |              |                          |   |
| Ceiling        | Ceiling  |              |                          |                          | ABHA12GATH               | ABHA14GATH               | ABHA18GATH  | ABHA24GATH               | ABHA30GATH               |              | ABHA36GATH   | ABHA45GATH               |   |
| Wall Mounted   | Wall Mounted                                       |              | ASHA07GACH<br>ASHA07GATH | ASHA09GACH<br>ASHA09GATH | ASHA12GACH<br>ASHA12GATH | ASHA14GACH<br>ASHA14GATH | ASHA18GACH<br>ASHA18GATH                                  | ASHA24GACH<br>ASHA24GATH | ASHA30GACH<br>ASHA30GATH |              |              |                          |   |
| wan mounteo    | Wall Mounted<br>(EEV external)                     |              | ASHEO7GACH               | ASHEO9GACH               | ASHE12GACH               | ASHA14GATH<br>ASHE14GACH | With this model,<br>connection of<br>EV kit is necessary. | roinziolii               |                          |              |              |                          | - |

\*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.

| 54,000      | 60,000       | 72,000       | 90,000       | 96,000       |
|-------------|--------------|--------------|--------------|--------------|
| 14.0        | 18.0         | 22.4         | 25.0         | 28.0         |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
| AUXA54GALH  |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
| AUXK054GTAH |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              | ARXC72GBTH*1 | ARXC90GBTH*1 | ARXC96GATH*1 |
|             | -            |              |              |              |
|             | ARXC60GATH*1 | ARXC72GATH*1 | ARXC90GATH*1 |              |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
| ABHA54GATH  |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |
|             |              |              |              |              |





### DC FAN

#### 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.



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

#### Improvement of the airflow distribution



#### 1. Maintenance of fan motor and fan

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

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

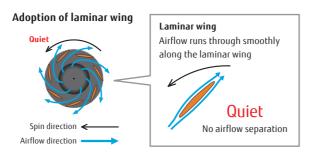
2. Air filter : standard equipment

#### 3. Adaptation of transparent drainage parts

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

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



#### Model: AUXB07GALH / AUXB09GALH / AUXB12GALH AUXB14GALH / AUXB18GALH / AUXB24GALH AUXB09GATH / AUXB12GATH / AUXB14GATH AUXB18GATH / AUXB24GATH

#### Specifications AUXB07GALH AUXB09GALH Power source 2.2 2.8 Cooling Capacity kW 2.8 3.2 Heating Input power 25 25 W 540 (150) 550 (153) High m3/h 450 (125) 450 (125) Airflow rate Med (1/s)Low 350 (97) 350 (97) High 34 35 Sound pressure level dB Med 30 30 (A) Low 25 25 Dimensions (H × W × D) mm 245 × 570 × 570 245 × 570 × 570 245 15 (33) Weight kg(lbs) 15 (33) Liquid (Flare) 6.35 6.35 Connection pipe diameter 12.70 12.70 Gas (Flare) mm Drain hose diameter (I.D./O.D.) Model name Cassette Grille Dimensions (H×W×D) mm Weight kg(lbs)

Note : Specifications are based on the following conditions.

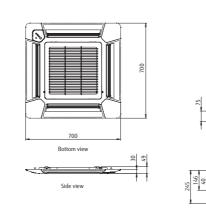
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

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

#### **Optional parts**

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

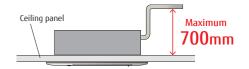
#### Dimensions (Unit: mm)

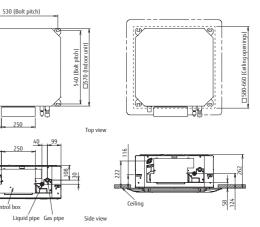


250



| UXB12GALH<br>UXB12GATH | AUXB14GALH<br>AUXB14GATH | AUXB18GALH<br>AUXB18GATH | AUXB24GALH<br>AUXB24GATH |
|------------------------|--------------------------|--------------------------|--------------------------|
| Single phase, 2        | 20-240V, 50Hz            |                          |                          |
| 3.6                    | 4.5                      | 5.6                      | 7.1                      |
| 4.1                    | 5.0                      | 6.3                      | 8.0                      |
| 29                     | 35                       | 36                       | 84                       |
| 600 (167)              | 680 (189)                | 710 (197)                | 1,030 (286)              |
| 530 (147)              | 590 (164)                | 580 (161)                | 830 (231)                |
| 390 (108)              | 390 (108)                | 400 (111)                | 450 (125)                |
| 37                     | 38                       | 41                       | 50                       |
| 34                     | 34                       | 35                       | 44                       |
| 27                     | 27                       | 27                       | 30                       |
| 5 × 570 × 570          | 245 × 570 × 570          | 245 × 570 × 570          | 245 × 570 × 570          |
| 15 (33)                | 15 (33)                  | 17 (37)                  | 17 (37)                  |
| 6.35                   | 6.35                     | 9.52                     | 9.52                     |
| 12.70                  | 12.70                    | 15.88                    | 15.88                    |
| 25                     | / 32                     |                          |                          |
| UTG-U                  | FGC-W                    |                          |                          |
| 50 × 70                | 0 × 700                  |                          |                          |
| 2.6                    | (6)                      |                          |                          |
|                        |                          |                          |                          |



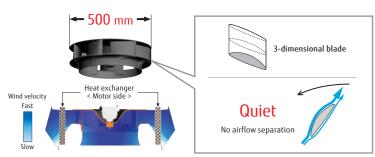


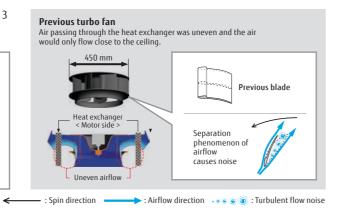


DC FAN

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

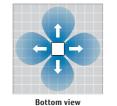
High efficiency airflow distribution has been achieved by the introduction of a 3 dimensional blade which increases the air passing over the heat exchanger.



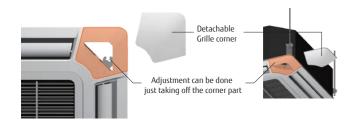


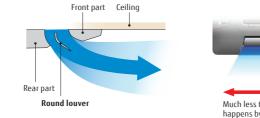
#### Improvement of the airflow distribution

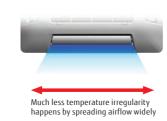
The louver design distributes air leaving a space between the chassis and the ceiling allowing far and wide air flow distribution.



#### Adjustment of hanger position is possible after installation







#### High ceiling mode

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

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

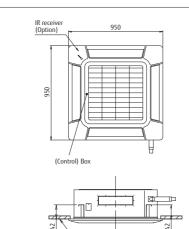
| Model name             |                    |                            | AUXD18GALH        | AUXD24GALH                   |  |  |  |  |
|------------------------|--------------------|----------------------------|-------------------|------------------------------|--|--|--|--|
| Power source           |                    |                            | Single phase, 220 | Single phase, 220-240V, 50Hz |  |  |  |  |
|                        | Cooling            | 1.1.1                      | 5.6               | 7.1                          |  |  |  |  |
| Capacity               | Heating            | kW                         | 6.3               | 8.0                          |  |  |  |  |
| nput power             |                    | W                          | 39                | 46                           |  |  |  |  |
|                        | High               |                            | 1,150 (319)       | 1,280 (356)                  |  |  |  |  |
| Airflow rate           | Med                | m <sup>3</sup> /h<br>(I/s) | 940 (261)         | 1,040 (289)                  |  |  |  |  |
|                        | Low                | (1/5)                      | 870 (242)         | 870 (242)                    |  |  |  |  |
|                        | High               |                            | 36                | 38                           |  |  |  |  |
| Sound pressure<br>evel | Med                | dB<br>(A)                  | 30                | 33                           |  |  |  |  |
| CVCI                   | Low                | (~)                        | 29                | 29                           |  |  |  |  |
| Dimensions (H >        | « W × D)           | mm                         | 246 × 840 × 840   | 246 × 840 × 840              |  |  |  |  |
| Neight                 |                    | kg(lbs)                    | 22 (48)           | 22 (48)                      |  |  |  |  |
| Connection             | Liquid (Flare)     |                            | 9.52              | 9.52                         |  |  |  |  |
| pipe diameter          | Gas (Flare)        | mm                         | 15.88             | 15.88                        |  |  |  |  |
| Drain hose diam        | eter (I.D./O.D.)   |                            | 25/32             | 2                            |  |  |  |  |
|                        | Model na           | ne                         | UTG-UGGA-W        |                              |  |  |  |  |
| Cassette Grille        | Dimensions (H×W×D) | mm                         | 50 × 950 ×        | × 950                        |  |  |  |  |
|                        | Weight             | kg(lbs)                    | 5.5 (12           | 2)                           |  |  |  |  |

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

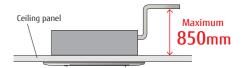
#### **Optional parts**

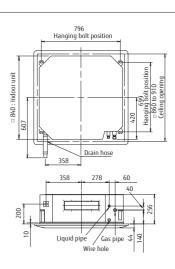
|                                    | UTY-LRHGB1<br>UTR-YDZK |
|------------------------------------|------------------------|
| Panel Spacer :                     | UTG-BKXA-W             |
| Insulation Kit for High Humidity : | UTZ-KXRA               |
| UTG-AKXA-W                         | UTG-AKXA-W             |

#### Dimensions (Unit: mm)







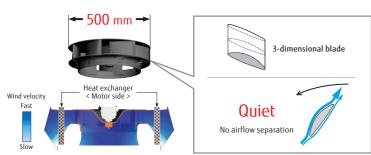




DC FAN

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

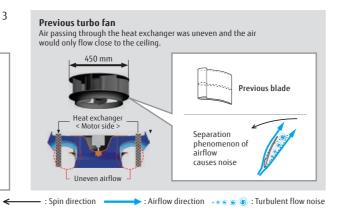
High efficiency airflow distribution has been achieved by the introduction of a 3 dimensional blade which increases the air passing over the heat exchanger.



Detachable

Grille corner

Adjustment can be done just taking off the corner part

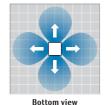


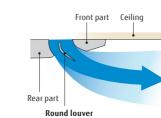
#### Improvement of the airflow distribution

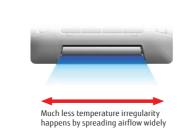
The louver design distributes air leaving a space between the chassis and the ceiling allowing far and wide air flow distribution.

Adjustment of hanger position is

possible after installation







#### High ceiling mode

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

| Model code | The maximum height f | rom 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                      |

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

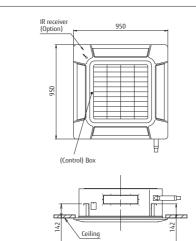
| Model name  |                    |                            | AUXA18GALH              | AUXA24GALH              | AUXA30GALH      | AUXA34GALH             | AUXA36GALH      | AUXA45GALH  | AUXA54GALH      |  |
|---|--------------------|----------------------------|-------------------------|-------------------------|-----------------|------------------------|-----------------|---|-----------------|--|
| Power source  |                    |                            |                         |                         | Sin             | gle phase, 220-240V, 5 | 0Hz             | '   |                 |  |
| Specificatio<br>Model name<br>Power source<br>Capacity<br>Input power<br>Airflow rate<br>Sound pressure<br>level<br>Dimensions (H 2 | 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               |                            | 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<br>(I/s) | 1,230 (342)             | 1,230 (342)             | 1,300 (361)     | 1,300 (361)            | 1,300 (361)     | 1,370 (381)   | 1,370 (381)     |  |
|   | Low                | (1/3)                      | 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              |  |
|   | Med                | dB<br>(A)                  | 36                      | 36                      | 38              | 38                     | 38              | 39  | 39              |  |
|   | Low                | 0.0                        | 33/31* <sup>1</sup>     | 33/31* <sup>1</sup>     | 33              | 33                     | 33              | 12.5<br>14.0<br>99<br>1,900 (528)<br>1,370 (381)<br>1,100 (306)<br>46   | 33              |  |
| Dimensions (H >   | «W×D)              | mm                         | 288 × 840 × 840         | 288 × 840 × 840         | 288 × 840 × 840 | 288 × 840 × 840        | 288 × 840 × 840 | 288 × 840 × 840   | 288 × 840 × 840 |  |
| Weight  |                    | kg(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         |                 | 12.5           14.0           99           1,900 (528)         2,           1,370 (381)         1,           1,100 (306)         1,           46         39           33         288 × 840 × 840         288           27 (59)         9.52 |                 |  |
|   | 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].

#### **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   |
| UTG-AKXA-W                         | UTG-AKXA-W |
|                                    | 0.0.000    |

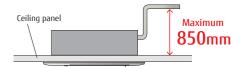
#### Dimensions (Unit: mm)

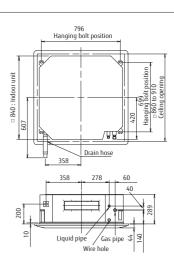


64 **OGENERAL** 



\*1: This value is under cooling operation.



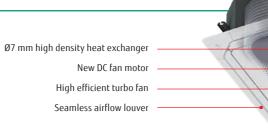






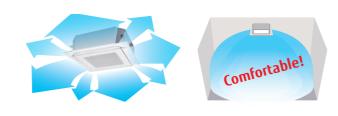
#### Unique Circular Flow design

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



#### Uniform temperature air conditioning

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



#### Individual louver control

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

Occupancy sensor increases more energy saving

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

\* Touch Panel Wired RC (UTY-RNRGZ5) and Central Remote Controller(UTY-DCGGZ2) only

\* Touch Panel Wired RC (UTY-RNRGZ5) and Central Remote Controller(UTY-DCGGZ2) only

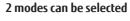


Comfortable air conditioning by preventing direct blowing of cold air and by providing swinging air flow simultaneously.

Human sensor (Optional)



room layout



Power is saved while

Auto saving people are away.

Operation stops after Auto OFF people go out.

Model: (Slim type) AUXM018GTAH / AUXM024GTAH

(Large type) AUXK018GTAH / AUXK024GTAH / AUXK030GTAH AUXK034GTAH / AUXK036GTAH / AUXK045GTAH AUXK054GTAH



Specifications

| Model name      |                    |      | AUXM018<br>GTAH | AUXM024<br>GTAH | AUXK018<br>GTAH | AUXK024<br>GTAH | AUXK030<br>GTAH | AUXK034<br>GTAH | AUXK036<br>GTAH | AUXK045<br>GTAH | AUXK054<br>GTAH |
|-----------------|--------------------|------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Power source    |                    |      |                 |                 |                 | Single          | phase, 220-240V | , 50Hz          |                 |                 |                 |
| Constitut       | 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-High           |      | 930             | 1,050           | 1,360           | 1,360           | 1,440           | 1,440           | 1,500           | 1,590           | 1,800           |
| A :- (]         | Med                | m3/h | 900             | 930             | 1,300           | 1,300           | 1,340           | 1,340           | 1,400           | 1,500           | 1,590           |
| Airflow rate    | Med-Low            | m3/n | 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               | dB   | 33              | 35              | 38              | 38              | 39              | 39              | 41              | 44              | 47              |
|                 | Med-High           |      | 32              | 33              | 37              | 37              | 38              | 38              | 40              | 42              | 45              |
| Sound pressure  | Med                |      | 31              | 32              | 36              | 36              | 37              | 37              | 38              | 40              | 42              |
| Sound pressure  | Med-Low            | (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     | 288×840×84      |
| 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 diam | eter (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             |                 |                 |                 |                 |

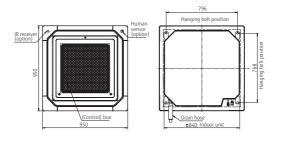
Note : Specifications are based on the following conditions. Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB. Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB. Pipe length : 7.5 m; Height difference between outdoor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

#### **Optional parts**

| Human Sensor Kit: | UTY-SHZXC  | Cassette Grille:  | UTG-UKGD-W | Air Outlet Shut  |
|-------------------|------------|-------------------|------------|------------------|
| Wide Panel:       | UTG-AKXA-W |                   | UTG-UKGA-B | Insulation Kit f |
| Panel Spacer:     | UTG-BKXA-W | IR Receiver Unit: | UTY-LBHXD  |                  |
|                   |            |                   |            |                  |

Dimensions (Unit: mm)

Models: AUXM018 / AUXM024



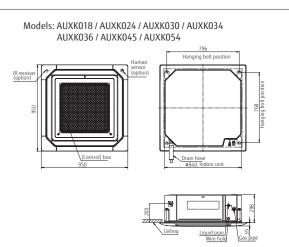


selected.

Large type AUXK018/024/030/034/03/045/054GTAH

When AUX\*018GTAH is connected to the outdoor unit other than J-IIIL, pipe diameter should be Ø9.52/Ø15.88 (Liq/Gas) When AUXK036GTAH is connected to the outdoor unit other than J-IIIL, gas pipe diameter should be Ø19.05.

utter Plate: UTR-YDZK for High Humidity: UTZ-KXRA



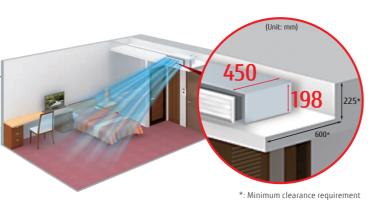
**Mini Duct** 





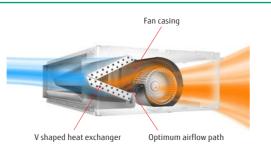
#### Optimum design in harmony with interior decoration

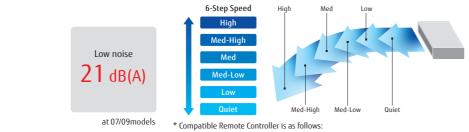
Thin and short-depth body makes the clipped ceiling design



#### 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.





UTY-RNRGZ5 / UTY-RLRG / UTY-RSRG / UTY-RHRG / UTY-DCGGZ2 / UTY-ALGXZ1 / UTY-APGXZ1

#### 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.

6-speed control\*

Multistep airflow speed control allows

this model to install in a quiet location.

#### Models with drain pump or models with drain oump, drain design is easy even at narrow eilina.

#### Models without drain pump



#### Model: (With drain pump) ARXK07GCLH / ARXK09GCLH ARXK12GCLH / ARXK14GCLH ARXK18GCLH / ARXK24GCLH



(Without drain pump) ARXK07GALH / ARXK09GALH ARXK12GALH / ARXK14GALH ARXK18GALH / ARXK24GALH

ARXK07/09/12/14GCLH



ARXK07/09/12/14GALH

Specifications

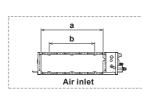
| Model name                      |                    |                   | ARXK07GCLH<br>ARXK07GALH     | ARXK09GCLH<br>ARXK09GALH | ARXK12GCLH<br>ARXK12GALH | ARXK14GCLH<br>ARXK14GALH | ARXK18GCLH<br>ARXK18GALH | ARXK24GCLH<br>ARXK24GALH |
|---------------------------------|--------------------|-------------------|------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 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                      |
| Input 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-High           | ] [               | 440 (122)                    | 440 (122)                | 520 (144)                | 660 (183)                | 840 (233)                | 1,060 (294)              |
| Airflow rate                    | Med                | m <sup>3</sup> /h | 420 (117)                    | 420 (117)                | 480 (133)                | 560 (156)                | 740 (206)                | 960 (267)                |
| AIIIIOWIale                     | Med-Low            | (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                 | oressure           | Pd                | 10                           | 10                       | 10                       | 15                       | 15                       | 15                       |
|                                 | High               |                   | 26                           | 26                       | 29                       | 34                       | 33                       | 32                       |
|                                 | Med-High           |                   | 25                           | 25                       | 27                       | 31                       | 30                       | 30                       |
| Sound pressure                  | Med                | dB                | 24                           | 24                       | 26                       | 28                       | 28                       | 28                       |
| level                           | Med-Low (A)<br>Low | (A)               | 23                           | 23                       | 25                       | 26                       | 26                       | 27                       |
|                                 |                    |                   | 22                           | 22                       | 24                       | 24                       | 24                       | 25                       |
|                                 | Quiet              | 1                 | 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 × 45         |
| Weight                          | 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                     |
| pipe 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                    |                          |                          |                          |                          |

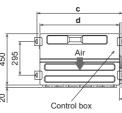
Note : Specifications are based on the following conditions. Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB. Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB. Pipe length : 7.5 m; Height difference between outdoor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

#### **Optional parts**

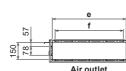
Auto louvre grille kit: UTD-GXTA-W (for ARXK07 - 14) UTD-GXTB-W (for ARXK18) UTD-GXTC-W (for ARXK24) Remote Sensor Unit : UTY-XSZX IR Receiver Unit : IUTB-YWC

#### Dimensions (Unit: mm)













ARXK24GCLH



ARXK18GALH

ARXK18GCLH



ARXK24GALH

#### Auto Louver Grille Kit (Option)

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





|   | ARXK07-14  | ARXK18     | ARXK24        |
|---|------------|------------|---------------|
|   |            |            |               |
| а | 575        | 775        | 975           |
| b | P200×2=400 | P200×3=600 | P200×4=800    |
| С | 752        | 952        | 1,152         |
| d | 700        | 900        | 1,100         |
| е | 650        | 850        | 1,050         |
| f | P100×6=600 | P100×8=800 | P100×10=1,000 |
|   |            |            | 1             |

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



| Drain po                              | ort Gas pip | e        |
|---------------------------------------|-------------|----------|
|                                       | <u> </u>    | _        |
| i i i i i i i i i i i i i i i i i i i |             | Ω<br>Ω   |
| 4                                     | Щ <u></u>   | <u> </u> |
| Liquid pipe                           | Drain po    | rt       |

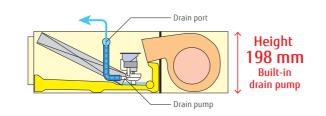
Slim Duct/ Slim Concealed Floor (With drain pump)

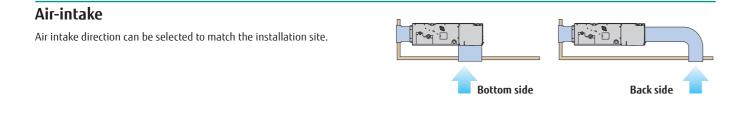


DC FAN

#### Slim design

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







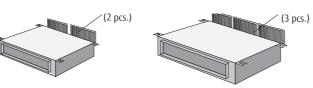
### Selectable with a wide range of static pressure

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





ARXD07 / 09 / 12 / 14 / 18



ARXD24

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



ARXD07/09/12/14

Specifications

| Model name                      |                |               | ARXD07GALH<br>ARXD07GATH     | ARXD09GALH<br>ARXD09GATH | ARXD12GALH<br>ARXD12GATH | ARXD14GALH<br>ARXD14GATH | ARXD18GALH<br>ARXD18GATH | ARXD24GALH<br>ARXD24GATH |
|---------------------------------|----------------|---------------|------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Power source                    |                |               | Single phase, 220-240V, 50Hz |                          |                          |                          |                          |                          |
| Capacity                        | Cooling        | kW            | 2.2                          | 2.8                      | 3.6                      | 4.5                      | 5.6                      | 7.1                      |
| Capacity                        | Heating        |               | 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            | m3/h<br>(I/s) | 490 (136)                    | 550 (153)                | 510 (142)                | 710 (197)                | 840 (233)                | 1,240 (344)              |
|                                 | Low            | 1 (113)       | 440 (122)                    | 480 (133)                | 450 (125)                | 610 (169)                | 750 (208)                | 1,100 (306)              |
| Static pressure range           |                | Pa            | 0 to 90                      | 0 to 90                  | 0 to 90                  | 0 to 90                  | 0 to 90                  | 0 to 50                  |
| Standard static pressure        |                |               | 25                           | 25                       | 25                       | 25                       | 25                       | 25                       |
|                                 | High           |               | 28                           | 29                       | 30                       | 34                       | 34                       | 35                       |
| Sound pressure<br>level         | Med            | dB<br>(A)     | 25                           | 26                       | 27                       | 32                       | 32                       | 32                       |
|                                 | Low            |               | 22                           | 24                       | 24                       | 28                       | 28                       | 29                       |
| Dimensions (H 3                 | < 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                      | Liquid (Flare) |               | 6.35                         | 6.35                     | 6.35                     | 6.35                     | 9.52                     | 9.52                     |
| pipe diameter                   | Gas (Flare)    | mm            | 12.70                        | 12.70                    | 12.70                    | 12.70                    | 15.88                    | 15.88                    |
| Drain hose diameter (I.D./O.D.) |                | 1 1           | 25/32                        |                          |                          |                          |                          |                          |

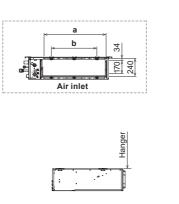
Note : Specifications are based on the following conditions.

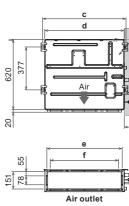
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB. Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB. Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

#### Optional parts

Auto louvre grille kit: UTD-GXTA-W (for ARXD07 - 04) UTD-GXTB-W (for ARXD18) UTD-GXTE-W (for ARXD24) Remote Sensor Unit : UTY-XSZX IR Receiver Unit : UTB-YWC

Dimensions (Unit: mm)





\*24 model is 0 to 50 Pa

70 OGENERAL

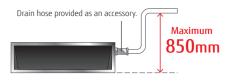


ARX18



ARXD24

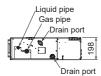
Slim Concealed Floor





|   | ARXD07-14  | ARXD18     | ARXD24        |  |  |  |  |  |
|---|------------|------------|---------------|--|--|--|--|--|
| а | 574        | 774        | 974           |  |  |  |  |  |
| b | P200×2=400 | P200×3=600 | P200x4=800    |  |  |  |  |  |
| С | 734        | 934        | 1,134         |  |  |  |  |  |
| d | 700        | 900        | 1,100         |  |  |  |  |  |
| е | 650        | 850        | 1,050         |  |  |  |  |  |
| f | P100×6=600 | P100×8=800 | P100×10=1,000 |  |  |  |  |  |

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



**OGENERAL** 71

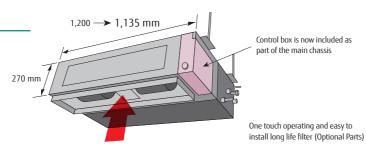
## Medium Static Pressure Duct



DC FAN

#### Slim & Compact design

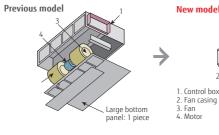
The slim and compact design of the indoor unit, with the control box mounted on the side of the unit, allows installation in narrow spaces.



om panel:

#### Easy maintenance

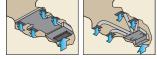
See below for the case of rear suction type



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.

#### Installation styles

## Embedded in Ceiling



# Hanging from Ceiling

#### Easy setting by using remote controller

The change of static pressure range is possible by remote controller

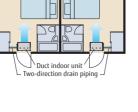


#### Selectable with a wide range of static pressure

**Two-direction** 

drain piping

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



## range

Static pressure 0 to 150 Pa

#### Model: ARXA24GBLH / ARXA30GBLH ARXA36GBLH / ARXA45GBLH ARXA24GBTH / ARXA30GBTH ARXA36GBTH / ARXA45GBTH

Specifications

| Model name              |                  |               | ARXA24GBLH<br>ARXA24GBTH     | ARXA30GBLH<br>ARXA30GBTH |                   |                   |  |  |  |  |
|-------------------------|------------------|---------------|------------------------------|--------------------------|-------------------|-------------------|--|--|--|--|
| Power source            |                  |               | Single phase, 220-240V, 50Hz |                          |                   |                   |  |  |  |  |
| Capacity                | Cooling          | kW            | 7.1                          | 9.0                      | 11.2              | 12.5              |  |  |  |  |
| Capacity                | Heating          | KWV -         | 8.0                          | 10.0                     | 12.5              | 14.0              |  |  |  |  |
| Input power             |                  | W             | 94                           | 108                      | 194               | 240               |  |  |  |  |
| High                    |                  |               | 1,280 (356)                  | 1,410 (392)              | 1,840 (511)       | 1,970 (547)       |  |  |  |  |
| Airflow rate            | Med              | m3/h<br>(I/s) | 990 (275)                    | 1,280 (356)              | 1,600 (444)       | 1,860 (517)       |  |  |  |  |
|                         | Low              | (1/3)         | 840 (233)                    | 1,150 (319)              | 1,470 (408)       | 1,640 (456)       |  |  |  |  |
| Static pressure range   |                  | D-            | 0 to 150                     | 0 to 150                 | 0 to 150          | 0 to 150          |  |  |  |  |
| Standard static         | oressure         | Pa            | 40 50                        |                          | 50                | 60                |  |  |  |  |
|                         | High             |               | 31                           | 34                       | 37                | 41                |  |  |  |  |
| Sound pressure<br>level | Med              | dB<br>(A)     | 27                           | 32                       | 35                | 38                |  |  |  |  |
|                         | Low              | 0.0           | 23                           | 29                       | 33                | 36                |  |  |  |  |
| Dimensions (H >         | W × D)           | mm            | 270 × 1,135 × 700            | 270 × 1,135 × 700        | 270 × 1,135 × 700 | 270 × 1,135 × 700 |  |  |  |  |
| Weight                  |                  | kg(lbs)       | 39 (86)                      | 42 (93)                  | 42 (93)           | 42 (93)           |  |  |  |  |
| Connection              | Liquid (Flare)   |               | 9.52                         | 9.52                     | 9.52              | 9.52              |  |  |  |  |
| pipe diameter           | Gas (Flare)      | mm            | 15.88                        | 15.88                    | 19.05             | 19.05             |  |  |  |  |
| Drain hose diam         | eter (I.D./O.D.) | ľ             | 25/32                        |                          |                   |                   |  |  |  |  |

Note : Specifications are based on the following conditions.

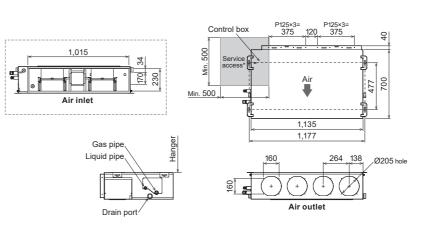
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB. Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB. Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

#### **Optional parts**

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

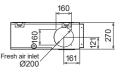
Flange (Round): UTD-RF204 IR Receiver Unit : UTB-YWC Drain Pump Unit : UTZ-PX1NBA

Dimensions (Unit: mm)





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





#### Static pressure selection

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

Maximum 200 Pa 



Maximum



Maximum

(ARXC72 / 90 type)



(Unit: mm)

#### 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)

(ARXC36 type)







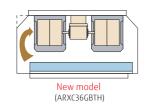
(ARXC72 / 90 type)

1,587 700 (ARXC96 type)

Low noise

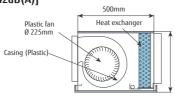
#### Models : ARXC36

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.



#### ARXC36GBTH : Plastic fan [42dB(A)]

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





(ARXC72 / 90 / 96 type)

Model: ARXC36GBTH ARXC72GBTH / ARXC90GBTH ARXC96GATH





ARXC36GBTH

| Model name            |                  |                            | ARXC36GBTH        | ARXC72GBTH        | ARXC90GBTH        | ARXC96GATH        |  |  |  |  |
|-----------------------|------------------|----------------------------|-------------------|-------------------|-------------------|-------------------|--|--|--|--|
| ower source           |                  |                            |                   | Single phase, 2   | 220-240V, 50Hz    |                   |  |  |  |  |
|                       | Cooling          | kW                         | 11.2              | 22.4              | 25.0              | 28.0              |  |  |  |  |
| Capacity              | Heating          | KW                         | 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<br>(I/s) | 1,680 (467)       | 3,300 (917)       | 4,000 (1,111)     | 4,250 (1,181)     |  |  |  |  |
|                       | Low              | (113)                      | 1,330 (369)       | 3,000 (833)       | 3,500 (972)       | 3,600 (1,000)     |  |  |  |  |
| Static pressure range |                  | Pa                         | 0 to 200          | 0 to 300          | 0 to 300          | 0 to 300          |  |  |  |  |
| Standard static p     | oressure         |                            | 100               | 150               | 150               | 150               |  |  |  |  |
|                       | High             |                            | 42                | 47                | 48                | 48                |  |  |  |  |
| ound pressure<br>evel | Med              | dB<br>(A)                  | 36                | 43                | 46                | 45                |  |  |  |  |
| ever                  | 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)   |  |  |  |  |
| Drain hose diam       | eter (I.D./O.D.) |                            | ·                 | 25/32             |                   |                   |  |  |  |  |

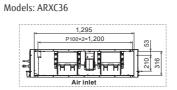
Note : Specifications are based on the following conditions.

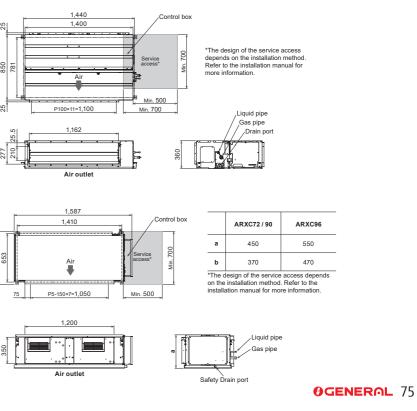
Cooling: Indoor temperature of 27\*CDB / 19\*CWB, and outdoor temperature of 35\*CDB / 24\*CWB. Heating : Indoor temperature of 20\*CDB / (15\*CWB), and outdoor temperature of 7\*CDB / 6\*CWB. Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

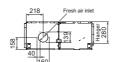
#### **Optional parts**

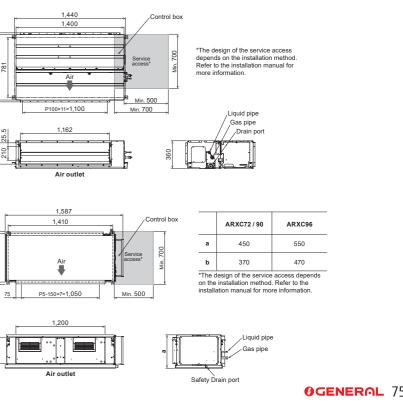
Long-Life Filter : UTD-LF60KA (For ARXC36) Remote Sensor Unit : UTY-XSZX IR Receiver Unit : UTB-YWC

Dimensions (Unit: mm)

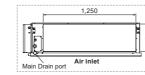


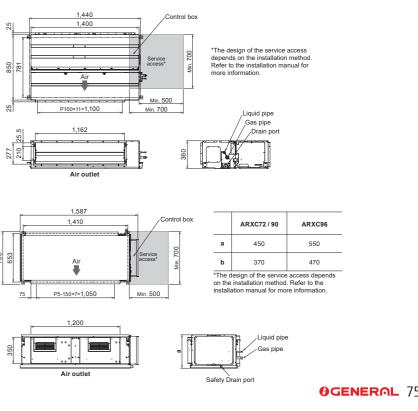




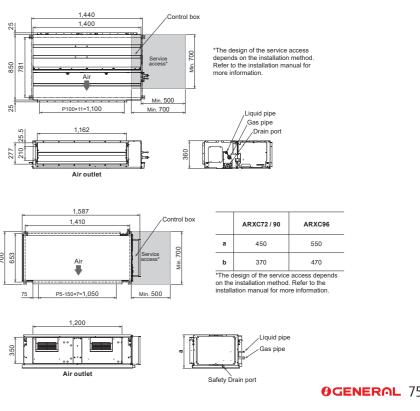


Models: ARXC72 / ARXC90 / ARXC96









Low energy consumption by high efficiency DC fan motor

Improved motor efficiency from previous model.







ARXC72/90GBTH

ARXC96GATH

High Static Pressure Duct

AC FAN

#### 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

Low noise

Models : ARXC45 / ARXC60

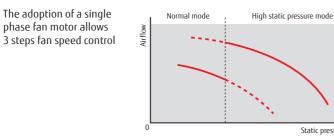
by adopting a plastic case and a plastic fan.

2 Types of static pressure mode are selectable.

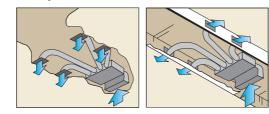


Cutting off the corners of the conventional indoor unit front panel and fan casing, has enabled less turbulent air flow. Low noise is realized

#### High Static Pressure Duct (ARXC72)



#### Installation styles



(Unit: mm)

Static pressure (Pa)

Model: ARXC45GATH / ARXC60GATH ARXC72GATH / ARXC90GATH



| Model name            |                  |                            | ARXC45GATH        | ARXC60GATH        | ARXC72GATH        | ARXC90GATH        |
|-----------------------|------------------|----------------------------|-------------------|-------------------|-------------------|-------------------|
| ower source           |                  |                            |                   | Single phase, 2   | 220-240V, 50Hz    |                   |
|                       | Cooling          | kW -                       | 12.5              | 18.0              | 22.4              | 25.0              |
| apacity               | Heating          | KWV -                      | 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<br>(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 range |                  | Pa                         | 100 to 250        | 100 to 250        | 50 to 300         | 100 to 300        |
| itandard static       | oressure         | Pa                         | 100               | 100 260           |                   | 250               |
|                       | High             |                            | 49                | 49                | 51                | 53                |
| ound pressure<br>evel | Med              | dB<br>(A)                  | 45                | 45                | 48                | 51                |
|                       | Low              |                            | 42                | 42                | 45                | 49                |
| )imensions (H         | W × D)           | mm                         | 400 × 1,050 × 500 | 400 × 1,050 × 500 | 450 × 1,550 × 700 | 450 × 1,550 × 700 |
| Veight                |                  | kg(lbs)                    | 46 (101)          | 46 (101)          | 83 (-)            | 85(-)             |
| onnection             | Liquid (Flare)   |                            | 9.52 (Flare)      | 9.52 (Flare)      | 12.70 (Brazing)   | 12.70 (Brazing)   |
| pipe diameter         | Gas (Flare)      | mm                         | 19.05 (Flare)     | 19.05 (Flare)     | 22.22 (Brazing)   | 22.22 (Brazing)   |
| Drain hose diam       | eter (I.D./O.D.) |                            |                   | 25                | / 32              |                   |

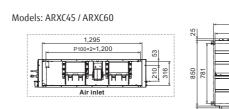
Note : Specifications are based on the following conditions.

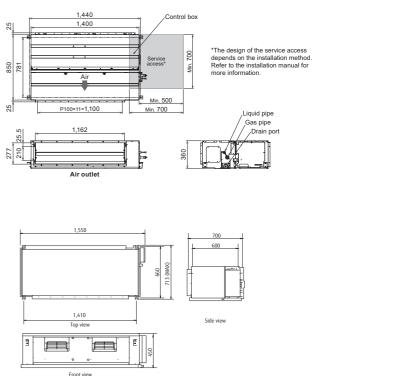
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB. Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB. Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m. Voltage : 230 [V].

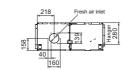
#### **Optional parts**

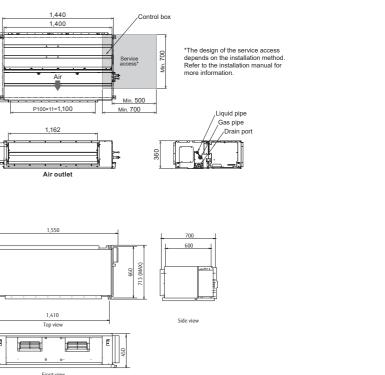
Long-Life Filter : UTD-LF60KA (ARXC45/60) IR Receiver Unit : UTB-YWC Remote Sensor Unit : UTY-XSZX

Dimensions (Unit: mm)

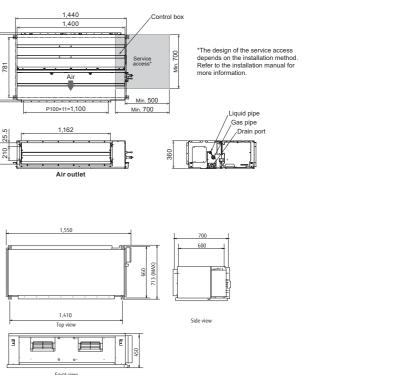








Models: ARXC72 / ARXC90



#### Previous model







ARXC45/60GATH

ARXC72/90GATH



#### Large airflow volume

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

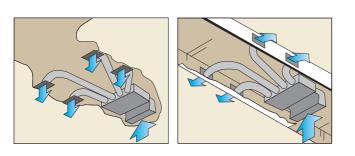




#### Selectable with a wide range of static pressure

Static pressure Static pressure range range 50 to 300 Pa 50 to 250 Pa (30 / 34class) (36 / 45class)

#### Installation styles



#### Model: ARXN18GATH / ARXN24GATH / ARXN30GATH ARXN34GATH / ARXN36GATH / ARXN45GATH

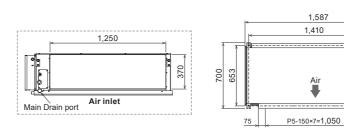
| Model name              |                                 |                            | ARXN18GATH        | ARXN24GATH        | ARXN30GATH        | ARXN34GATH        | ARXN36GATH        | ARXN45GATH        |
|-------------------------|---------------------------------|----------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Power source            |                                 |                            |                   |                   | Single phase, 2   | 20-240V, 50Hz     |                   |                   |
| (ih.)                   | Cooling                         | kW                         | 5.6               | 7.1               | 9.0               | 10.0              | 11.2              | 12.5              |
| Capacity                | Heating                         |                            | 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<br>(I/s) | -                 | -                 | -                 | -                 | -                 | -                 |
|                         | Low                             | 1 (1/3)                    | -                 | -                 | -                 | -                 | -                 | -                 |
| Static pressure range   |                                 | Pa                         | 50 to 100         | 50 to 150         | 50 to 250         | 50 to 250         | 50 to 300         | 50 to 300         |
| Standard static         | pressure                        | Pa                         | 50                | 50                | 50                | 50                | 60                | 60                |
|                         | High                            | dB                         | 35                | 37                | 40                | 43                | 45                | 45                |
| Sound pressure<br>level | pressure Med                    |                            | -                 | -                 | -                 | -                 | -                 | -                 |
|                         | Low                             | (A)                        | -                 | -                 | -                 | -                 | -                 | -                 |
| 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 dian         | Drain hose diameter (I.D./O.D.) |                            |                   |                   | 25                | / 32              | ~                 |                   |

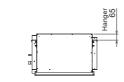
Note : Specifications are based on the following conditions. Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB. Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB. Pipe length : 7.5 m; Height difference between outdoor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

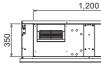
#### Optional parts

Remote Sensor Unit : UTY-XSZX

#### Dimensions (Unit: mm)



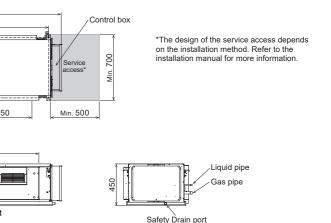




Air outlet



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



## Floor/Ceiling



## DC FAN

#### Flexible installation

Example for floor installation Floor console



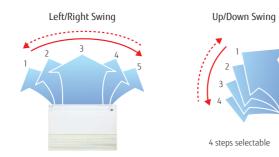
#### Example for ceiling installation

Under ceiling



#### Double auto swing

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



#### High power DC fan motor

- High power
- Wide rotation range
- High efficiency



#### Compact design

Symmetrical, slim and compact design.



Model: ABHA12GATH / ABHA14GATH ABHA18GATH / ABHA24GATH

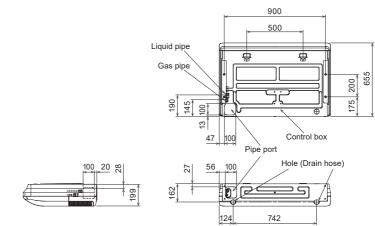
#### Specifications ABHA12GATH ABHA14G Power source 4.5 Cooling 3.6 Capacity kW Heating 4.0 5.0 42 Input power 30 W High 660 (183) 780 (210 m³/h Airflow rate 640 (17) Med 570 (158) (I/s) Low 490 (136) 550 (152 High 36 40 Sound pressure level dB (A) 36 Med 32 34 Low 28 199 × 990 × 655 199 × 990 > Dimensions (H × W × D) mm Weight kg(lbs) 25 (55) 26 (57) Liquid (Flare) 6.35 6.35 Connection pipe diameter Gas (Flare) mm 12.70 12.70 Drain hose diameter (I.D./O.D.)

Note : Specifications are based on the following conditions.

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

**Optional parts** 

#### Dimensions (Unit: mm)



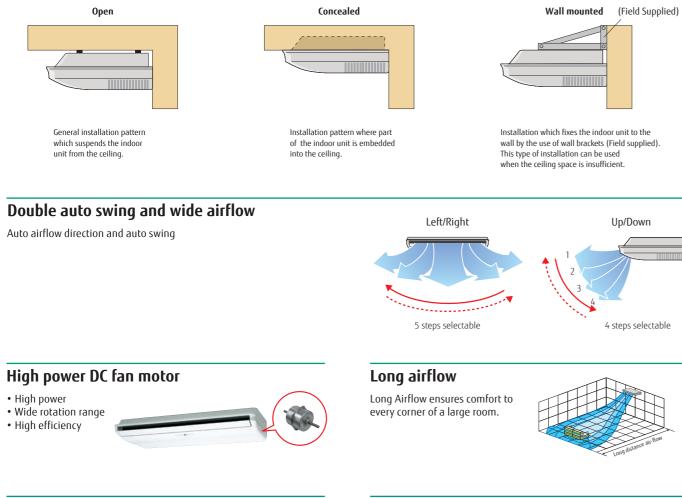




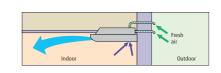
| GATH            | ABHA18GATH      | ABHA24GATH      |
|-----------------|-----------------|-----------------|
| Single phase, 2 | 20-240V, 50Hz   |                 |
| ;               | 5.6             | 7.1             |
| )               | 6.3             | 8.0             |
|                 | 74              | 99              |
| 16)             | 1,000 (277)     | 1,000 (277)     |
| 77)             | 720 (199)       | 820 (227)       |
| 52)             | 580 (161)       | 680 (188)       |
|                 | 46              | 47              |
|                 | 39              | 42              |
|                 | 35              | 37              |
| ) × 655         | 199 × 990 × 655 | 199 × 990 × 655 |
| 7)              | 26 (57)         | 27 (59)         |
| 5               | 9.52            | 9.52            |
| 0               | 15.88           | 15.88           |



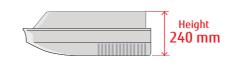
#### Installation



## Fresh air intake



#### Slim & Compact design



#### Model: ABHA30GATH / ABHA36GATH ABHA45GATH / ABHA54GATH



#### Specifications ABHA30GATH ABHA360 Power source Cooling 11.2 9.0 Capacity kW Heating 10.0 12.5 85 Input power 66 W High 1,630 (452) 1,690 (46 m³/h 1,400 (38 Airflow rate Med 1,370 (379) (I/s) 1,140 (316) 1,170 (32 Low High 42 45 Sound pressure level dB 38 Med 38 (A) 34 Low 33 240 × 1,660 × 700 240 × 1,660 Dimensions (H × W × D) mm Weight kg(lbs) 46 (101) 48 (106 Liquid (Flare) 9.52 9.52 Connection pipe diameter Gas (Flare) mm 15.88 19.05 Drain hose diameter (I.D./O.D.)

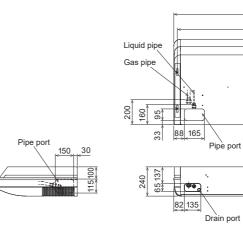
Note : Specifications are based on the following conditions.

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

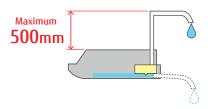
#### **Optional parts**

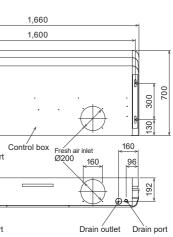
Drain Pump Unit : UTR-DPB24T Flange : UTD-RF204

#### Dimensions (Unit: mm)



| GATH             | ABHA45GATH        | ABHA54GATH        |  |  |  |  |
|------------------|-------------------|-------------------|--|--|--|--|
| Single phase, 22 | 0-240V, 50Hz      |                   |  |  |  |  |
| 2                | 12.5              | 14.0              |  |  |  |  |
| 5                | 14.0              | 16.0              |  |  |  |  |
|                  | 131               | 180               |  |  |  |  |
| 469)             | 2,010 (558)       | 2,270 (629)       |  |  |  |  |
| 389)             | 1,600 (444)       | 1,780 (493)       |  |  |  |  |
| 325)             | 1,230 (342)       | 1,280 (355)       |  |  |  |  |
|                  | 48                | 51                |  |  |  |  |
|                  | 42                | 45                |  |  |  |  |
|                  | 35                | 36                |  |  |  |  |
| 0 × 700          | 240 × 1,660 × 700 | 240 × 1,660 × 700 |  |  |  |  |
| 06)              | 48 (106)          | 48 (106)          |  |  |  |  |
| 2                | 9.52              | 9.52              |  |  |  |  |
| 5                | 19.05             | 19.05             |  |  |  |  |





**GENERAL** 83



#### 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.

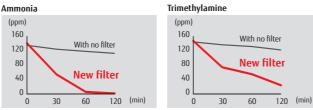
. (\*The filter can be used for approx. 3 years if it is washed under water to restore its surface action when it is dirty.)



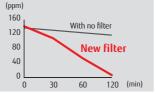
#### Apple-catechin Filter

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)



Hydrogen sulfate



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



Model: (EEV internal) ASHA07GACH / ASHA09GACH ASHA12GACH / ASHA14GACH (EEV internal) ASHA07GATH / ASHA09GATH ASHA12GATH / ASHA14GATH

> (EEV External) ASHE07GACH / ASHE09GACH ASHE12GACH / ASHE14GACH

#### Specifications

| Model name              |                   |                            | ASHA07GACH<br>ASHA07GATH | ASHA09GACH<br>ASHA09GATH | ASHA12GACH<br>ASHA12GATH | ASHA14GACH<br>ASHA14GATH | ASHE07GACH                   | ASHE09GACH            | ASHE12GACH      | ASHE14GACH      |  |  |
|-------------------------|-------------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------------------|-----------------------|-----------------|-----------------|--|--|
| Power source            |                   |                            |                          | Single phase, 2          | 20-240V, 50Hz            |                          | Single phase, 220-240V, 50Hz |                       |                 |                 |  |  |
| (                       | Cooling           | kW                         | 2.2                      | 2.8                      | 3.6                      | 4.5                      | 2.2                          | 2.8                   | 3.6             | 4.5             |  |  |
| Capacity                | Heating           | KW                         | 2.8                      | 3.2                      | 4.1                      | 5.0                      | 2.8                          | 3.2                   | 4.1             | 5.0             |  |  |
| Input power W           |                   | 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<br>(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<br>level | Med               | dB<br>(A)                  | 33                       | 33                       | 35                       | 37                       | 32                           | 32                    | 34              | 35              |  |  |
| ievei                   | Low               |                            | 27 / 31* <sup>1</sup>    | 27 / 31* <sup>1</sup>    | 31                       | 32                       | 26 / 30* <sup>1</sup>        | 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 dian         | neter (I.D./O.D.) | 1                          |                          | 13.8 / 15.               | 8 to 16.7                |                          |                              | 13.8 / 15.            | 8 to 16.7       |                 |  |  |
| EV Kit (option)         |                   |                            | -                        | -                        | -                        | -                        | UTR-EV09XB                   | UTR-EV09XB            | UTR-EV14XB      | UTR-EV14XB      |  |  |

Note : Specifications are based on the following conditions.

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

**Optional parts** 

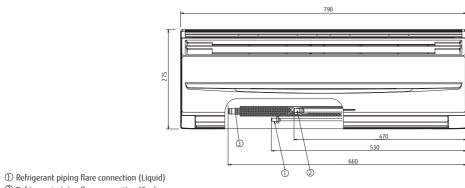
#### Compact size

#### Powerful output even compact design

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



Dimensions (Unit: mm)



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

#### High power DC fan motor

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



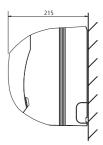
#### Easy maintenance

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





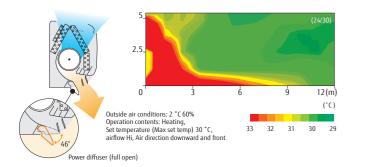
\*1 : This value is under cooling operation.





#### 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

Ion Deodorization Filter

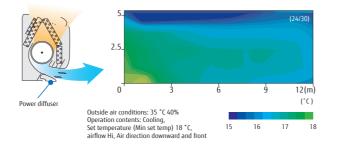
Apple-catechin Filter

particle ceramic.

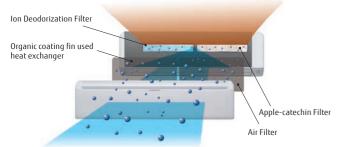
dust in the air.

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

Apple-catechin filter uses static electricity to clean fine particles and



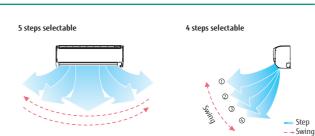
#### Air conditioner filter features



High quality air conditioning by incorporation of high performance filter.

#### Double auto swing

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



#### Model: (EEV internal) ASHA18GACH / ASHA24GACH / ASHA30GACH ASHA18GATH / ASHA24GATH / ASHA30GATH

#### Specifications ASHA18GACH ASHA18GATH Power source 5.6 Cooling Capacity kW Heating 6.3 Input power W 32 840 (233) High m3/h (I/s) Airflow rate Med 770 (213) Low 690 (191) High 41 Sound pressure level dB (A) Med 39 Low 35 Dimensions ( $H \times W \times D$ ) mm 320 × 998 × 228 kg(lbs) 15 (33) Weight Liquid (Flare) 9.52 Connection pipe diameter Gas (Flare) 15.88 mm Drain hose diameter (I.D./O.D.)

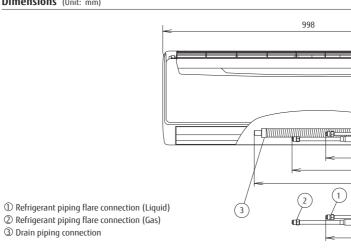
Note : Specifications are based on the following conditions.

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

**Optional parts** 

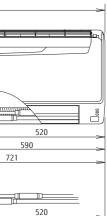
Dimensions (Unit: mm)

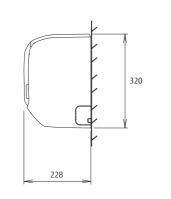
③ Drain piping connection





| ASHA24GACH<br>ASHA24GATH     | ASHA30GACH<br>ASHA30GATH |  |  |  |  |  |
|------------------------------|--------------------------|--|--|--|--|--|
| Single phase, 220-240V, 50Hz |                          |  |  |  |  |  |
| 7.1                          | 8.0                      |  |  |  |  |  |
| 8.0                          | 9.0                      |  |  |  |  |  |
| 60                           | 91                       |  |  |  |  |  |
| 1,100 (305)                  | 1,240 (343)              |  |  |  |  |  |
| 910 (252)                    | 980 (271)                |  |  |  |  |  |
| 730 (202)                    | 770 (213)                |  |  |  |  |  |
| 48                           | 52                       |  |  |  |  |  |
| 43                           | 45                       |  |  |  |  |  |
| 35                           | 35                       |  |  |  |  |  |
| 320 × 998 × 228              | 320 × 998 × 228          |  |  |  |  |  |
| 15 (33)                      | 15 (33)                  |  |  |  |  |  |
| 9.52                         | 9.52                     |  |  |  |  |  |
| 15.88                        | 15.88                    |  |  |  |  |  |
| 12 / 16                      |                          |  |  |  |  |  |





## **VRF CONTROL SYSTEMS**

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



#### User friendly control system provides individual control to centralized control

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



## **BEST CONTROL SOLUTION FOR EACH PROPERTY**

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

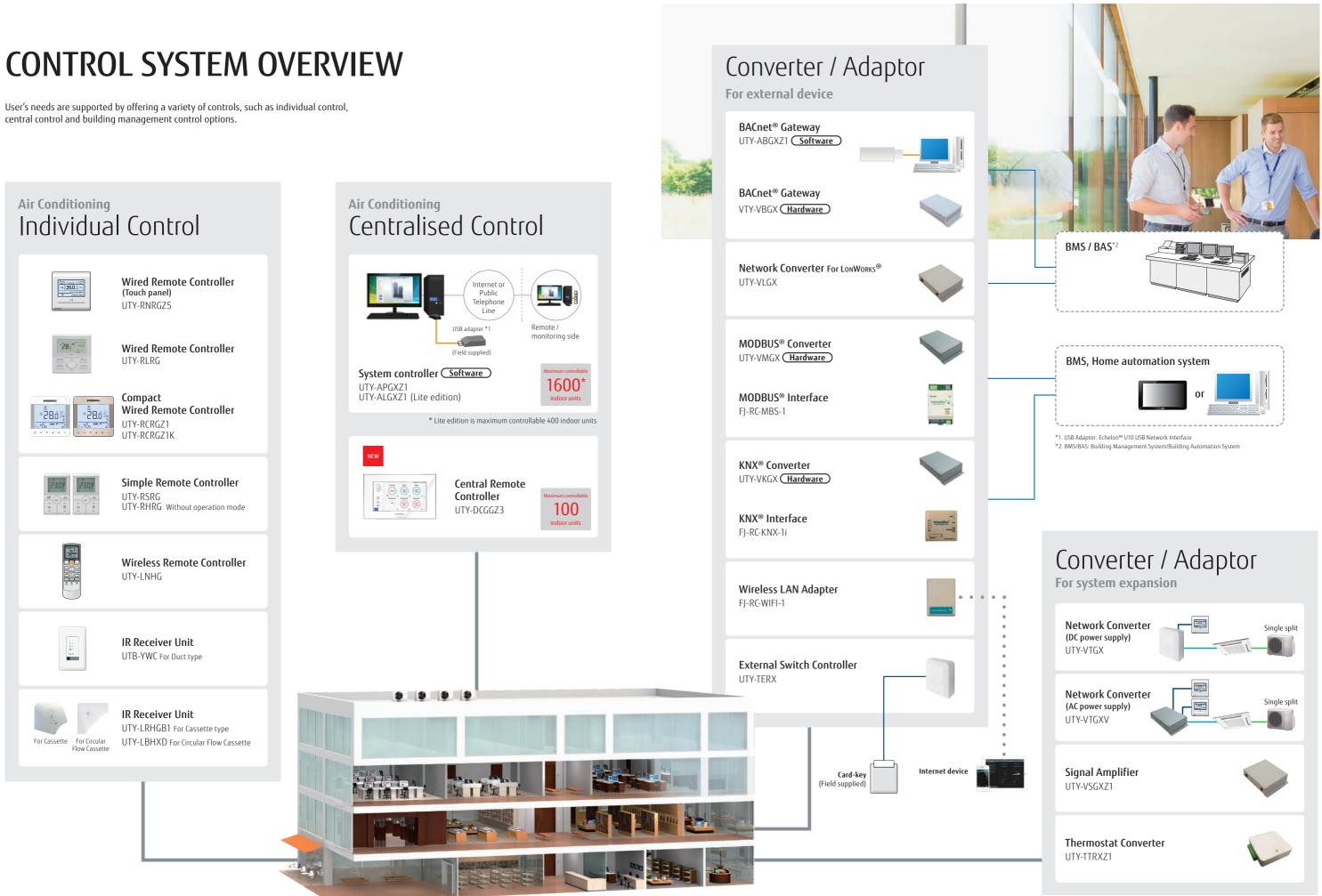
| SHOP  |   |                              |                           |                                       |                                 |                   |
|---|---|------------------------------|---------------------------|---------------------------------------|---------------------------------|-------------------|
| Туре  | Individual<br>Control                           | Centraliz                    | ed Control                |                                       | Integrating Control (Interface) |                   |
|   |   |                              |                           | •                                     | -                               |                   |
| 1 Carlos Anno 1   | Wired Remote<br>Controller                      | Central Remote<br>Controller | System<br>Controller      | Network<br>Converter<br>for LonWorks® | MODBUS®<br>Converter            | KNX®<br>Convertor |
|   | UTY-RNRGZ5, UTY-RLRG<br>UTY-RCRGZ1, UTY-RCRGZ1K | UTY-DCGGZ3                   | UTY-APGXZ1,<br>UTY-ALGXZ1 | UTY-VLGX                              |                                 | UTY-VKGX          |
| Automatic control of A/C<br>(Schedule timer, Weekly timer etc.)                       | •   | •                            | •                         |                                       |                                 |                   |
| Limited control for staff<br>(RC Prohibition, Room temp<br>set point limitation etc.) |   | •                            | •                         | •                                     | •                               | •                 |
| Group Control   |   | •                            | •                         |                                       |                                 |                   |
| Advanced Energy Saving<br>(Peak cut, Indoor unit lead lag<br>operation etc.)          |   |                              | •                         |                                       |                                 |                   |
| Remote Management   |   |                              | •                         |                                       |                                 |                   |
| Manage multiple sites   |   |                              | •                         |                                       |                                 |                   |
| Monitor energy consumption  |   |                              | •                         |                                       |                                 |                   |
| Control third party products  |   |                              | •                         |                                       |                                 |                   |
| Integrate FGL A/C into BMS  |   |                              |                           | •                                     | •                               | •                 |

#### HOTEL

| Туре   |   | lividual<br>ontrol          |                               | Centralize                   | ed Control                |                         | Integr                                | ating Control (Int   | erface)           |                                  |
|--|---|-----------------------------|-------------------------------|------------------------------|---------------------------|-------------------------|---------------------------------------|----------------------|-------------------|----------------------------------|
| The second second  |   |                             |                               |                              |                           | -                       |                                       |                      |                   |                                  |
|  | Wired Remote<br>Controller                      | Simple Remote<br>Controller | Wireless Remote<br>Controller | Central Remote<br>Controller | System<br>Controller      | BACnet®<br>Gateway      | Network<br>Converter<br>for LonWorks® | MODBUS®<br>Converter | KNX®<br>Convertor | External<br>Switch<br>Controller |
| and the second s | UTY-RNRGZ5, UTY-RLRG<br>UTY-RCRGZ1, UTY-RCRGZ1K | UTY-RSRG,<br>UTY-RHRG       | UTY-LNHG                      | UTY-DCGGZ3                   | UTY-APGXZ1,<br>UTY-ALGXZ1 | UTY-ABGXZ1,<br>UTY-VBGX | UTY-VLGX                              | UTY-VMGX             | UTY-VKGX          | UTY-TERX                         |
| Local control for hotel guest  | •   | •                           | •                             |                              |                           |                         |                                       |                      |                   |                                  |
| Centralized A/C control for<br>common space  |   |                             |                               | •                            | •                         | •                       | •                                     | ٠                    | •                 |                                  |
| Limited control for hotel guests   |   |                             |                               | •                            | •                         | •                       | •                                     | ٠                    | •                 |                                  |
| Remote Management  |   |                             |                               |                              | •                         |                         |                                       |                      |                   |                                  |
| Advanced Energy Saving<br>(Peak cut, Indoor unit lead lag<br>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   | Ind<br>Cr                                       | lividual<br>ontrol          |                               | Centraliz                    | ed Control                |                         | Integra                               | ating Control (Int   | erface)           |                                  |
|  |   |                             |                               |                              |                           | -                       |                                       | -                    |                   |                                  |
| Per la   | Wired Remote<br>Controller                      | Simple Remote<br>Controller | Wireless Remote<br>Controller | Central Remote<br>Controller | System<br>Controller      | BACnet®<br>Gateway      | Network<br>Converter<br>for LonWorks® | MODBUS®<br>Converter | KNX®<br>Convertor | External<br>Switch<br>Controller |
| Contraction of the second  | UTY-RNRGZ5, UTY-RLRG<br>UTY-RCRGZ1, UTY-RCRGZ1K | UTY-RSRG,<br>UTY-RHRG       | UTY-LNHG                      | UTY-DCGGZ3                   | UTY-APGXZ1,<br>UTY-ALGXZ1 | UTY-ABGXZ1,<br>UTY-VBGX | UTY-VLGX                              |                      | UTY-VKGX          | UTY-TERX                         |
| Local control for office staff   | •   | •                           | •                             | •                            |                           |                         |                                       |                      |                   |                                  |
| Automatic control of A/C<br>(Schedule timer, Weekly<br>timer etc.)                           | •   |                             | •                             | •                            | •                         | •                       |                                       |                      |                   |                                  |
| Centralized A/C control for<br>management  |   |                             |                               | •                            | •                         | •                       | •                                     | •                    | •                 |                                  |
| Limited control for office staff<br>(RC Prohibition, Room temp<br>set point limitation etc.) |   |                             |                               | •                            | •                         | •                       | •                                     | ٠                    | •                 |                                  |
| Advanced Energy Saving<br>(Peak cut, Indoor unit lead lag<br>operation etc.)                 |   |                             |                               |                              | •                         | •                       |                                       |                      |                   |                                  |
| Remote Management  |   |                             |                               |                              | •                         |                         |                                       |                      |                   |                                  |
| Energy Charge Apportionment  |   |                             |                               |                              | •                         | •                       |                                       |                      |                   |                                  |
| Monitor energy consumption   |   |                             |                               |                              | •                         |                         |                                       |                      |                   |                                  |
| Control third party products   |   |                             |                               |                              | •                         |                         |                                       |                      |                   |                                  |
| Integrate FGL A/C into BMS   |   |                             |                               |                              |                           | •                       | •                                     | ٠                    | •                 |                                  |
| Interlock with door contact  |   |                             |                               |                              |                           |                         |                                       |                      |                   | •                                |
| Interlock with human sensor<br>for meeting room  |   |                             |                               |                              |                           |                         |                                       |                      |                   | •                                |

## **CONTROL SYSTEM OVERVIEW**



## COMPARISON TABLE OF CONTROLLERS

|   | Wired Remote Controller<br>(Touch panel) | Wired Remote<br>Controller | Compact Wired Remote<br>Controller | Compact Wired Remote<br>Controller | Simple Remote<br>Controller | Simple Remote<br>Controller*1 | Wireless Remote<br>Controller | Central Remote<br>Controller | System Controller Lite | System Controlle<br>Software |
|---|--|----------------------------|------------------------------------|------------------------------------|-----------------------------|-------------------------------|-------------------------------|------------------------------|------------------------|------------------------------|
| name  | UTY-RNRGZ5                               | UTY-RLRG                   | UTY-RCRGZ1                         | UTY-RCRGZ1                         | UTY-RSRG                    | UTY-RHRG                      | UTY-LNHG                      | UTY-DCGGZ3                   | UTY-ALGXZ1             | UTY-APGXZ1                   |
| ontrollable remote controller groups  | 1  | 1                          | 1                                  | 1                                  | 1                           | 1                             | 1                             | 100                          | 400                    | 1600                         |
| ontrollable indoor units  | 16                                       | 16                         | 1                                  | 1                                  | 16                          | 16                            | 16                            | 100                          | 400                    | 1600                         |
| ontrollable groups  | -  | -                          | -                                  | -                                  | _                           | -                             | -                             | 50                           | 400                    | 1600                         |
| On / Off  | •  | ٠                          | •                                  | •                                  | ٠                           | •                             | •                             | •                            | •                      | •                            |
| Operation mode setting  | •  | •                          | •                                  | •                                  | •                           | -                             | •                             | •                            | •                      | •                            |
| Fan speed setting   | •  | ٠                          | •                                  | •                                  | ٠                           | •                             | •                             | •                            | •                      | •                            |
| Room temp. setting  | •  | ٠                          | •                                  | •                                  | ٠                           | •                             | •                             | •                            | •                      | •                            |
| Room temp. set point limitation   | •  | •                          | -                                  | -                                  | •                           | •                             | -                             | •                            | •                      | •                            |
| Test operation  | •  | •                          | •                                  | •                                  | •                           | •                             | •                             | -                            | -                      | -                            |
| Up/down air direction flap setting  | •  | •                          | •                                  | •                                  | •                           | •                             | •                             | •                            | •                      | •                            |
| Right/left air direction flap setting   | •  | •                          | •                                  | •                                  | _                           | -                             | •                             | •                            | •                      | •                            |
| Individual louver control   | •  | -                          | •                                  | •                                  | _                           | -                             | -                             | •*4                          | -                      | -                            |
| Group setting   | -  | -                          | -                                  | -                                  | -                           | -                             | -                             | •                            | •                      | •                            |
| RC prohibition  | -  | -                          | -                                  | -                                  | -                           | -                             | -                             | •                            | •                      | •                            |
| Anti freeze setting   | •  | -                          | •                                  | •                                  | _                           | -                             | -                             | •                            | •                      | •                            |
| Set temp. auto return   | •  | •                          | -                                  | -                                  | _                           | -                             | -                             | -                            | -                      | -                            |
| Economy mode setting  | •  | ٠                          | •                                  | •                                  | -                           | -                             | •                             | •                            | •                      | •                            |
| Human sensor control  | •  | -                          | -                                  | -                                  | -                           | -                             | -                             | •                            | •                      | •                            |
| Error   | •  | •                          | •                                  | •                                  | •                           | •                             | -                             | •                            | •                      | •                            |
| Defrosting  | •  | •                          | •                                  | •                                  | •                           | •                             | -                             | •                            | •                      | •                            |
| Current time  | •  | ٠                          | -                                  | -                                  | _                           | -                             | •                             | •                            | •                      | •                            |
| Day of the week   | •  | •                          | -                                  | -                                  | _                           | -                             | -                             | •                            | •                      | •                            |
| R.C. prohibition  | •  | •                          | •                                  | •                                  | •                           | •                             | -                             | •                            | •                      | •                            |
| Address display   | •  | •                          | •                                  | •                                  | •                           | •                             | -                             | -                            | •                      | •                            |
| Room temp   | •  | -                          | •                                  | •                                  | ٠                           | •                             | -                             | •* <sup>3</sup>              | •* <sup>3</sup>        | •* <sup>3</sup>              |
| Multi-language  | •  | -                          | -                                  | -                                  | _                           | -                             | -                             | •                            | •                      | •                            |
| Summer time   | •  | -                          | -                                  | -                                  | _                           | -                             | -                             | •                            | •                      | •                            |
| Name registration   | •  | -                          | -                                  | -                                  | -                           | -                             | -                             | •                            | •                      | •                            |
| Backlight   | •  | -                          | •                                  | •                                  | •                           | •                             | -                             | •                            | -                      | -                            |
| 2D floor layout / 3D building display   | -  | -                          | -                                  | -                                  | _                           | -                             | -                             | -                            | -                      | •                            |
| Refrigerant leakage detection function  | -  | -                          | -                                  | -                                  | _                           | -                             | -                             | •                            | •                      | •                            |
| Period  | Week                                     | Week                       | -                                  | -                                  | _                           | -                             | -                             | Week                         | Year                   | Year                         |
| Schedule timer On/off, Temp, Mode,<br>Low noise mode <sup>*5</sup> ,<br>Times per day | 8  | 4                          | -                                  | _                                  | _                           | -                             | -                             | 20                           | 144                    | 144                          |
| On/off timer  | •  | ٠                          | <ul> <li>(OFF only)</li> </ul>     | <ul> <li>(OFF only)</li> </ul>     | -                           | -                             | •                             | -                            | -                      | -                            |
| Sleep timer   | -  | -                          | -                                  | -                                  | _                           | -                             | •                             | -                            | -                      | -                            |
| Program timer   | -  | -                          | -                                  | -                                  | -                           | -                             | •                             | -                            | -                      | -                            |
| Auto off timer  | •  | ٠                          | -                                  | -                                  | -                           | -                             | -                             | •                            | _                      | -                            |
| Day off   | •  | •                          | -                                  | _                                  | _                           | -                             | -                             | •                            | •                      | •                            |
| Min. unit of timer setting (Minutes)  | 10 • 30                                  | 30                         | -                                  | -                                  | -                           | -                             | 5                             | 10                           | 10                     | 10                           |
| Status monitoring system  | _  | -                          | -                                  | _                                  | _                           | -                             | -                             | •                            | •                      | •                            |
| Electricity charge apportionment  | -  | -                          | -                                  | -                                  | _                           | -                             | -                             | -                            | 0                      | •                            |
| Error history   | •  | •                          | _                                  | -                                  | _                           | -                             | -                             | •                            | •                      | •                            |
| Emergency stop  | -  | -                          |                                    | _                                  | _                           | -                             | -                             | •*2                          | -                      | _                            |
| Remote management   | _  | _                          | _                                  | _                                  |                             | _                             | _                             | •                            | 0                      | •                            |
| Energy saving management  |  | _                          |                                    |                                    |                             | _                             | -                             | _                            | 0                      | 0                            |
| E-mail notification for malfunction   | _  | _                          | _                                  |                                    |                             | _                             | -                             | •                            | •                      | •                            |
| Key lock  | Child lock                               | Child lock                 | -                                  | _                                  | -                           | _                             | -                             | Password setting             | Password setting       | Password set                 |
| Low noise mode  | _  | _                          | _                                  | -                                  | -                           | _                             | _                             | _                            | •                      | •                            |

 \*1 "Operation mode" setting is not available for this model.
 \*2 This function is available only through external input control.

 \*3 This function is available only when using wired remote controller.
 \*4 Equipped only with individual air volume batch reset.
 \*5 UTY-DCGGZ3 only

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

#### Wired remote controller (with touch panel) IITY-RNRG75



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

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



#### High performance and compact size

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



#### Accurate and comfortable control

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



#### 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.

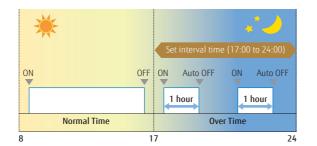
#### Auto OFF timer

- 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

Set Temperature Upper and Lower Limit Setting

2 schedules Weekly Timer

Set Temperature Auto Return



Cooling set temp. 27°C, Heating set temp. 26°C

Change over

Change over

**Cooling Set Point** 

Heating Set Poin

Operation Star

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

Features: Wired remote controller (with touch panel)

#### Various energy saving control

#### Displays setting status and Limitations

• The remote controller settings can be easily checked



#### Summer Time display

Air Fle

Monitor

• This function can be set easily from Menu screen

| Main Menu<br>Summer Time<br>Setting | Page 2/ 2<br>Preference |
|-------------------------------------|-------------------------|
| Initial Setting                     | Maintenance             |
| Monitor                             | Prevideax<br>Page       |
|                                     | 6/1                     |

#### Child lock

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

| Child Look |  |
|------------|--|
| <u>6/1</u> |  |
| <br>-      |  |

#### 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.



#### 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.



#### Specifications Power Supply Dimensions (H x W x D) mm Weight q DC12V is supplied by indoor unit.

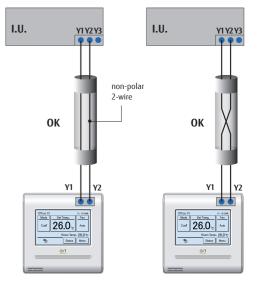
96 **∂GENER∩L** 



#### Simplified installation

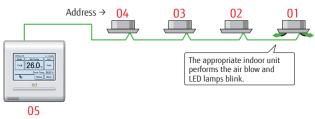
#### Uses non-polar 2-wire type

• 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.

| Error H |                | kilmas       | Fage 1/ 3<br>Eade | Ĩ |
|---------|----------------|--------------|-------------------|---|
|         | 2/8/1 11:004   |              | 141               |   |
|         | 2/ 7/20 2.534  |              | 163               |   |
| 3 201   |                |              | 143               |   |
| 4 234   | 2/ 7/23 11:004 | 005-01       | 141               |   |
| 5 200   |                |              | 141               |   |
| 6 200   | 2/7/21 11:00M  | 002-01       | 141               |   |
| Back    |                | Nont<br>Page | Ense<br>All       | J |
|         | <u>0</u>       | /1           |                   |   |
|         |                |              |                   | ∍ |

| UTY-RNRGZ5       |  |
|------------------|--|
| DC 12V           |  |
| 120 × 120 × 20.4 |  |
| 220              |  |
|                  |  |

#### Wired remote controller UTY-RLRG

## °**28**.0



#### • Various timer setup (ON / OFF / WEEKLY) are possible.

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

#### High performance and compact size

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



#### Visually intuitive operation

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

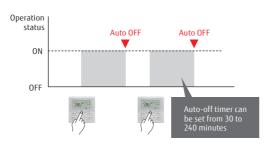




#### Simple operation with easy 4-way navigation pad

#### Auto-off timer

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



#### Set temperature auto return

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

|          | Setting      | Cooling operation<br>temp.         | Heating operation<br>Setting temp.  |    |
|----------|--------------|------------------------------------|---|----|
| et<br>is | 24°C<br>22°C | Set temperature change Auto return | 25°C<br>23°C<br>Set temperature change Auto return<br>Set table time range<br>30 to 240 minutes |    |
|          |              | Tir                                | me T  | im |

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

• 2-wire type







## Large screen and simple display

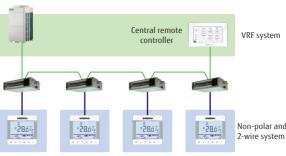
- Although the size is compact, the screen is large • Large letters makes it easy to see
- Operation is simple and easy-to-understand

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

#### System overview

#### • VRF connection

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



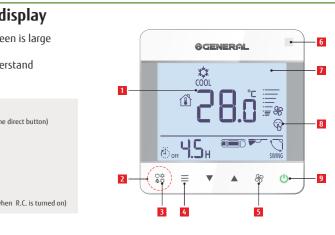
Compact Wired Remote Controller

#### Specifications DC 12V Power Supply 120 × 120 × 17 Dimensions (H x W x D) mm Weight 170 q

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

DC12V is supplied by indoor unit.

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



#### • RAC (Room air conditioner) connection

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



Compact Wired Remote Controlle

Non-polar and 2-wire system

#### Simple remote controller

UTY-RSRG / UTY-RHRG (without operation mode)

| 23   | IQ I | 23   | UĮ.  |
|------|------|------|------|
|      |      |      |      |
| 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

• Vertical louver control:



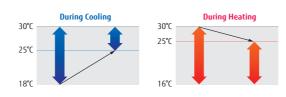


#### • Room temperature set point limitation:

types, which are installed in hotels and

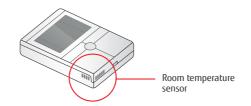
conference rooms, can be adjusted.

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



#### • Built in room temperature sensor:

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



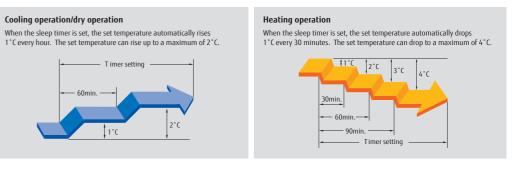
Wireless remote controller UTY-LNHG



• A single controller controls up to 16 indoor units.

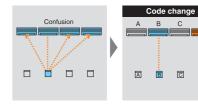
#### **Built-in daily timer**

Select from 4 different timer programs : On / Off / Program / Sleep prevent excessive cooling or heating during sleep hours.



#### Easy installation and operation

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



#### Address setting

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

| Specifications         |    |                   |          |
|------------------------|----|-------------------|----------|
| Model name             |    | UTY-RSRG          | UTY-RHRG |
| Power Supply           |    | DC 12V            |          |
| Dimensions (H x W x D) | mm | n 120 × 75 × 19,4 |          |
| Weight                 | g  | 120               |          |

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

#### 100 **OGENEROL**

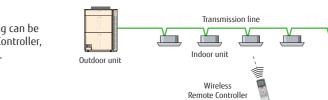
#### Simple and sophisticated operations with a choice of 4 daily timers

- 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

D

#### Wide and precise





## IR receiver unit for duct type

#### 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.



#### Specifications

| < Wireless Remote Contr | oller > |                      |  |
|-------------------------|---------|----------------------|--|
| Model name              |         | UTB-YWC              |  |
| Power Supply            |         | 1.5 V (R03/LR03/AAA) |  |
| Dimensions (H x W x D)  | mm      | 170 × 56 × 19        |  |
| Weight                  | g       | 85                   |  |
| < IR Reciver Unit>      |         |                      |  |
| Battery                 |         | DC 5V                |  |
| Dimensions (H x W x D)  | mm      | 145 × 90 × 30        |  |
| Weight                  | g       | 150                  |  |
| weight                  | 9       | 001                  |  |

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

. ...

Cassette type indoor unit can be controlled with Wireless Remote Controller

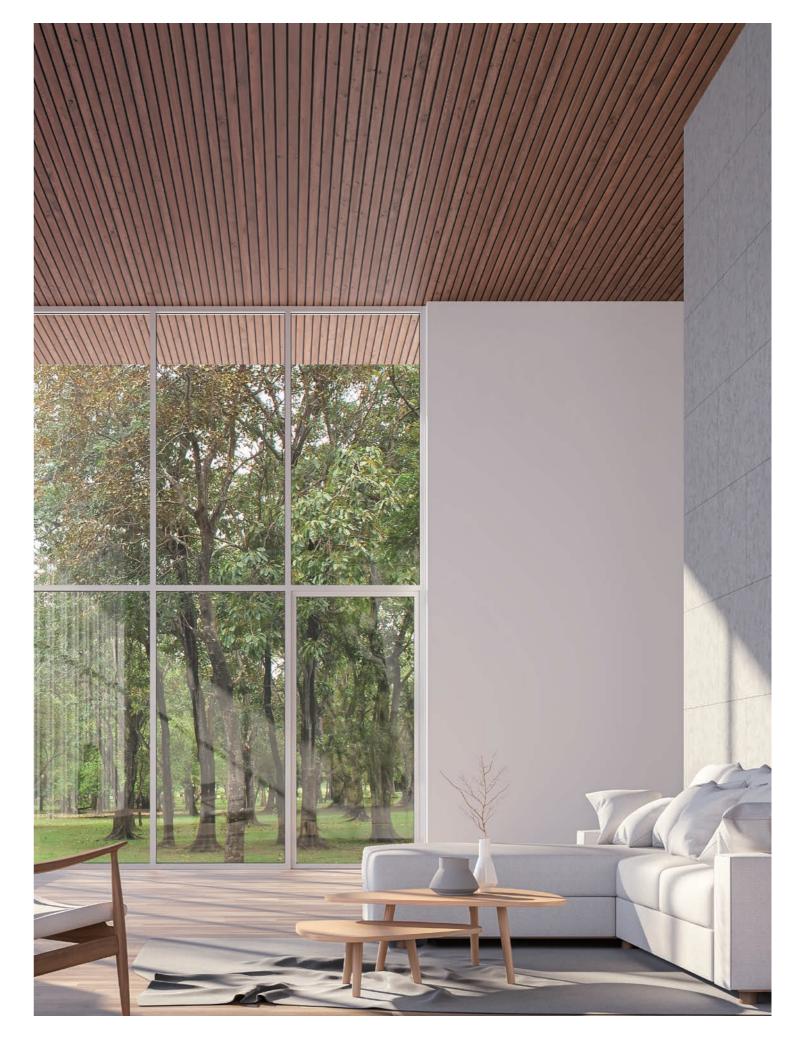
#### Wiring connection





#### Specifications

| Model name                    |    | UTY-LRHGB1           | UTY-LBHXD            |
|-------------------------------|----|----------------------|----------------------|
| Power Supply                  |    | 1.5 V (R03/LR03/AAA) | 1.5 V (R03/LR03/AAA) |
| Dimensions (H x W x D)        | mm | 170 × 56 × 19        | 170 × 56 × 19        |
| Weight                        | g  | 85                   | 85                   |
| < IR Reciver Unit><br>Battery |    | DC 5V                | DC 5V                |
|                               | mm | 193.9 × 193.9 × 31.2 | 193.9 × 193.9 × 31.2 |
| Dimensions (H x W x D)        |    |                      |                      |







100 indoor units

50 groups

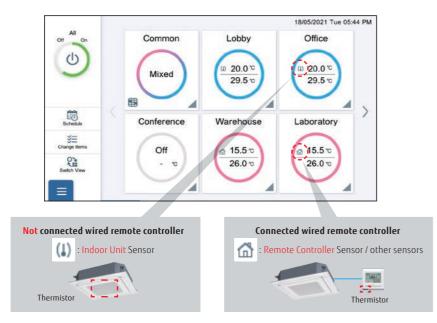
#### For tenants in small to midsize commercial premises

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

#### **Easy Management**

#### Air conditioning management by detecting room temperatures of each room

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



to switch

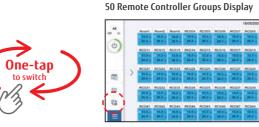
S

#### 50 Remote Controller Groups Display

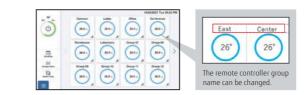
The group display and the 50 remote controller groups display can be switched easily. Users can choose which display is better, depending on the situation.

#### Group Display



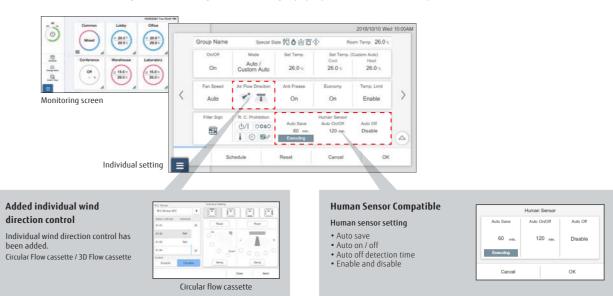


Manage & Monitor by 50 Remote Controller Groups



#### Features: Central Remote Controller

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



#### **Remote Management**

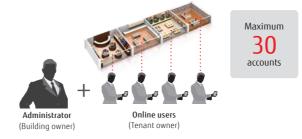
#### **Remote monitoring / Remote operation**

New central remote controller can control your tenant's air

conditioner anytime and anywhere.

When the central remote controller manages the indoor units of some tenants, air conditioning of each tenants can be managed separately online.

Increased the Number of Accounts



#### Remote Management

#### Annual schedule

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

|  |            |               | - 25           | 10/0125 | Mon CO.45 AM |   | -   | -   | -   |      | 75400     | 125.86 | -   |
|--|------------|---------------|----------------|---------|--------------|---|-----|-----|-----|------|-----------|--------|-----|
| Particle Service   |            |               | See            | -       | -            | Bulwalak bi 102823 >  | -   | 1.0 | Red | The  | 90.       | 341    | 5.0 |
| 2 and  | Stratus 21 | *             |                |         | ۲            | Seniel for their and log for day of the<br>week of date.  |     |     |     |      |           |        |     |
|  |            |               |                |         |              | 1 Tear 61   | 14  | •   | *   | 1.00 | * et      | i di   | ۰.  |
| Grand N. Grand R. Grand R. Grand N. Gra |            | 0.00 0 0.00 0 | *              |         | -            | 1.0   |     | 1   |     |      |           |        |     |
|  |            |               | · C Burry year | •       | *            | * 1   | * # | - 0 | 1   |      |           |        |     |
|  |            |               |                |         |              | 0 0 0 m in .  | 1   | -   | -   | * #  | # 2<br>01 | 1      |     |
|  |            |               |                |         | _            | C Seed Desei  |     |     |     |      | -         |        |     |
|  |            |               |                |         |              | The second se |     |     |     |      |           |        |     |

#### Specifications

| Model name             | Model name |  |  |  |
|------------------------|------------|--|--|--|
| Power Supply           |            |  |  |  |
| Dimensions (H x W x D) | . ,        |  |  |  |
| Weight                 |            |  |  |  |

**Remote Controller Groups Rename** The remote controller group names can be

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



|   | om Temp. 26.0 c      | Ro                  |
|---|----------------------|---------------------|
|   | Custom Auto)<br>Heat | Set Temp. (<br>Cool |
|   | 26.0 v               | 26.0 v              |
|   | Temp. Limit          | Economy             |
| > | Enable               | On                  |
|   |                      | Human Sensor        |
|   | Auto Off             | Auto On/Off         |
|   | Disable              | 120 mp.             |
|   | ок                   | Cancel              |

#### Trouble support function

#### Display error details

Display descriptive explanation when an error occurs



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

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

#### Notify room temperature by email\*

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

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

#### low noise schedule

Low noise operation of outdoor units can be scheduled.

| No. Tue     | The | The   | 81     | Set | Ser . |
|-------------|-----|-------|--------|-----|-------|
| front front |     | 70410 | Trac N |     |       |
|             |     |       |        |     |       |
|             |     |       |        |     |       |
|             |     |       |        |     |       |

| Timer 01   | 1 8       |               | (a) (a) (a) |
|------------|-----------|---------------|-------------|
| Start Time | 814 Tata  | Low Note Love | Pranky      |
|            |           |               | Life Tests  |
| 1 11.01.00 | 10.00     |               | Performance |
|            | 10.00.000 |               | Partometer  |
| 4 1000.000 | 12.00.446 |               |             |

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

| UTY-DCGGZ3           |  |
|----------------------|--|
| 100-240 V 50 / 60 Hz |  |
| 134.6 × 216.2 × 37.9 |  |
| 800                  |  |

#### System controller UTY-APGXZ1 (Software)





integrated monitoring and control of VRF network systems operating in small to large buildings.

- Up to 1.600 indoor units and 400 outdoor units on up to 4 VRF network systems can be controlled. • To accommodate facility management needs, the system controller offers-in addition to precise air conditioning control-remote central control, electricity charge apportionment, schedule management, and energy-saving options for VRF network systems.
- Supports 7 languages: Chinese, English, French, German, Polish, Russian, and Spanish.

#### System controller lite UTY-ALGXZ1 Software





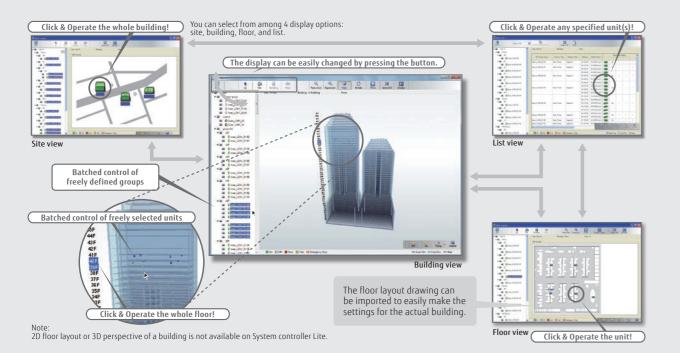
#### System controller Lite offers a set of standard functions to manage air conditioners operating in a small or midsize building.

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

#### Visually intuitive operation

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

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

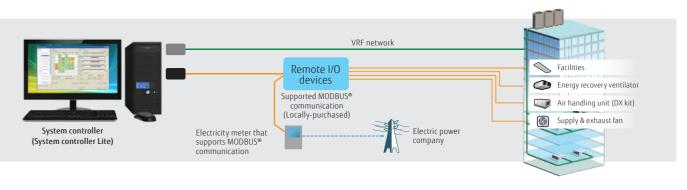


Features: System controller / System controller lite

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

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

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



#### Wide-ranging operation and data management

Standard System controller and System controller Lite

#### Schedule management

- An annual schedule can be arranged for each remote controller group or user-defined group.
- ON/OFF, operation mode, remote controller prohibition, and temperature settings can be programmed for up to 143 times per day at 10-minute intervals and for up to 101 configurations for each remote controller group.
- Settings can be programmed for a period that spans midnight.
- Allows for the programming of special settings for weekends, holidays, and store closings throughout the year.
- Low noise operation of outdoor units can be scheduled.



#### Electricity charge apportionment

Standard on System controller Option System controller Lite UTY-PLGXA2

#### Electricity charge apportionment method

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

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

#### Wide-ranging control of indoor and outdoor units

- The operation status and mode of each indoor unit are displayed.
- Turn on and off each indoor unit and switch its operation mode.
- Setting temperature range limitation
- Low noise setting of outdoor units

#### Remote controller prohibition

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

#### Error alert and e-mail notice

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

#### Operation and control history

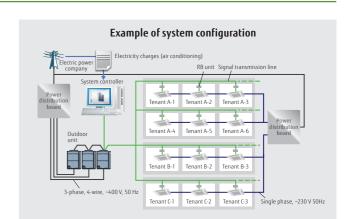
A history of operation status and control can be maintained and retrieved

#### Importing and exporting databases

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

#### Automatic clock adjustment

Time can be set for all controllers in batch automatically.



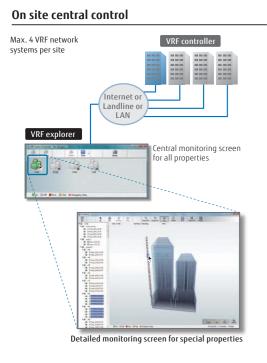
#### **OGENEROL** 107

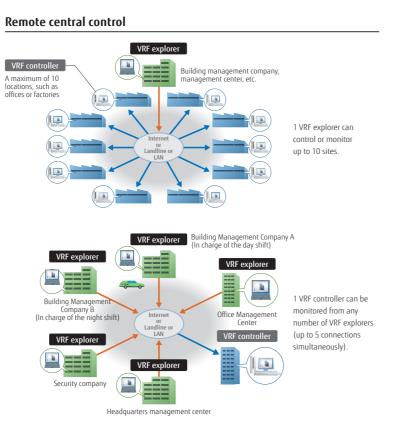
#### Features: System controller / System controller lite

#### Remote monitoring management

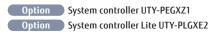
Standard on System controller Option System controller Lite UTY-PLGXR2

The System controller can be used on site or remotely over networks for remote central control. The System controller requires 2 software programs working together: The VRF controller runs on site and communicates with the VRF system; The VRF explorer, which runs at a remote location, provides a user interface and communicates with the VRF controller. The VRF controller and the VRF explorer run on a single computer or on different computers connected on a network. A computer running VRF explorer can centrally control up to 10 VRF system sites having up to 20 buildings each.





#### Energy-saving management



A variety of energy-saving options can be selected depending on the season, weather, and time of day. Excellent energy-saving operation is performed while keeping users comfortable.



Main screen for energy-saving management

Energy saving graph data: This chart compares the energy consumption for the current month with the previous month and with the same month of the previous year to keep track of the energysaving performance.

#### Indoor unit rotation

Indoor units can be automatically rotated to operate within a group in accordance with a predetermined annual schedule to reduce power consumption while keeping users comfortable. The operation stoppage rate can be selected for an indoor unit.

#### Peak-cut mode

The system controller monitors the connected power meter and controls the energy to maintain the target power consumption set for each time period by changing the set temperature of the indoor units or turning off the thermostat so as to keep the users comfortable. Indoor units to be controlled can be grouped in many ways, and the control level can be set for each group.

#### Capacity saving for outdoor unit

The upper limit on the capacity of an outdoor unit can be adjusted to reduce power consumption during a hot summer or cold winter by averaging out the power-saving performance of each refrigerant system. The upper limit on capacity can be set at 50% of the rated capacity or more.

#### Summary of functions

|                  |  |  | System      | controller           |             | S                    | ystem controller Li  | te                   |                     |  |
|------------------|--|--|-------------|----------------------|-------------|----------------------|----------------------|----------------------|---------------------|--|
|                  |  |  | UTY-APGXZ1  | Option<br>UTY-PEGXZ1 | UTY-ALGXZ1  | Option<br>UTY-PLGXR2 | Option<br>UTY-PLGXA2 | Option<br>UTY-PLGXE2 | Option<br>UTY-PLGXX |  |
|                  |  | RF networks supported  | 4           | -                    | 1           | -                    | -                    | -                    | -                   |  |
|                  | Max. number of in                          | door unit and remote controller groups per VRF network       | 400         | -                    | 400         | -                    | -                    | -                    | -                   |  |
| pecifications    |  | door units per VRF network                                   | 100         | -                    | 100         | -                    | -                    | -                    | -                   |  |
|                  |  | oor units and remote controller groups per System controller | 1600        | -                    | 400         | -                    | -                    | -                    | -                   |  |
|                  |  | utdoor units per System controller                           | 400         | -                    | 100         | -                    | -                    | -                    | -                   |  |
|                  | Multiple site displa                       |  | 10          | -                    | 10          | -                    | -                    | -                    | -                   |  |
|                  | Number of buildin<br>Number of floors p    | gs per site  | 20 200      | -                    | -           | -                    |                      | -                    | -                   |  |
|                  | Number of floors                           |  | 50          | -                    | -           | -                    | -                    | -                    |                     |  |
| te               | 3D graphical layou                         |  | 0           |                      |             | _                    |                      |                      |                     |  |
| ipervision       | 2D graphical layou                         |  | •           | _                    | _           | -                    | _                    | -                    | _                   |  |
|                  | List display                               |  | •           | -                    | •           | -                    | _                    | -                    | -                   |  |
|                  | Tree display                               |  | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
|                  | Group display                              |  | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
|                  | Error notification                         |  | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
| ror<br>anagement | Audible alarm                              |  | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
| anagement        | E-mail notification of errors              |  | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
|                  | Error history                              |  | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
| istory           | Operation history                          |  | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
|                  | Control history                            | ON/OFF   | •           |                      | •           | -                    |                      |                      | -                   |  |
|                  |  | ON/OFF<br>Operation mode*                                    | •           | -                    | •           |                      |                      | _                    | -                   |  |
|                  |  | Room temperature   |             |                      |             | -                    | -                    | -                    | -                   |  |
|                  |  | Fan speed  | •           |                      | •           |                      |                      |                      |                     |  |
|                  | Individual control                         | Airflow direction  | •           | _                    | •           | _                    | _                    | _                    | _                   |  |
|                  |  | Economy mode   | •           | -                    | •           | _                    | _                    | -                    | -                   |  |
| peration         |  | Setting temperature range limitation                         | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
| ontrol           |  | Anti-freeze  | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
|                  |  | Low noise setting of outdoor units                           | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
|                  | Individual                                 | Remote controller prohibition                                | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
|                  | management                                 | Setting temperature range limitation                         | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
|                  | Indiagement                                | Filter sign reset  | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
|                  | Other                                      | memory operations  | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
|                  |  | Pattern operations   | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
|                  | Annual Schedule                            | 6 I.   | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
|                  | Setting for a speci                        | fic date   | -           | -                    | -           | -                    | -                    | -                    | -                   |  |
| chedule          | ON/OFF per day<br>ON/OFF per week          |  | 72<br>504   | -                    | 72 504      | -                    | -                    | -                    |                     |  |
| criedule         | Day off                                    |  | 504         | -                    | 504         | -                    | -                    | -                    |                     |  |
|                  |  | imer setting (minutes)                                       | 10          |                      | 10          | _                    | _                    | _                    | _                   |  |
|                  | Weekly schedule f                          |  | •           | _                    | •           | _                    | _                    | _                    | -                   |  |
|                  | Web Operation                              |  | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
| emote            | Remote monitorin                           | q  | •           | -                    | -           | •                    | -                    | -                    | -                   |  |
| onitoring        | Remote operation                           |  | •           | -                    | -           | ٠                    | -                    | -                    | -                   |  |
| anagement        | Remote function s                          | etting   | •           | -                    | -           | •                    | -                    | -                    | -                   |  |
|                  |  | arge/bill calculation  | •           | -                    | -           | -                    | •                    | -                    | -                   |  |
|                  | Tenant (block) set                         |  | •           | -                    | -           | -                    | •                    | -                    | -                   |  |
| ectricity charge | Lommon facilities                          | apportionment setting  | •           | -                    |             | -                    | •                    | -                    | -                   |  |
| portionment      |  | umption allotment  | •           | -                    |             | -                    | •                    | -                    | -                   |  |
|                  |  | ions for cooling and heating                                 |             | •                    |             | -                    | •                    | -                    | -                   |  |
|                  | Electricity meter s<br>Indoor unit rotatio |  | + -         | •                    | -           | -                    |                      | -                    | -                   |  |
|                  | Peak cut control                           |  | -           | •                    |             | _                    | _                    | •                    | _                   |  |
| nergy-saving     | Capacity saving fo                         | r outdoor unit   | -           | •                    | -           | -                    | _                    | •                    | _                   |  |
| anagement        | Record of energy-s                         |  | -           | •                    | -           | - 1                  | -                    | •                    | _                   |  |
|                  | Information on en                          |  | -           | •                    | -           | _                    | -                    | •                    | -                   |  |
|                  | Power consumption                          |  | -           | •                    | -           | -                    | -                    | •                    | -                   |  |
|                  | Electricity meter s                        |  |             | •                    |             | -                    | -                    | •                    | -                   |  |
| ontrol of        | Monitor                                    |  | •           | -                    | -           | -                    | -                    | -                    | ٠                   |  |
| xternal devices  |  |  | •           | -                    | _           | -                    | -                    | -                    | ۲                   |  |
|                  | Importing and exp                          | orting databases   | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
|                  | Automatic clock a                          |  | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
| )thers           | Multiple language                          |  | 7 languages | -                    | 7 languages | -                    | -                    | -                    | -                   |  |
|                  | Refrigerant leak d<br>Power shutdown       | etector  | •           | -                    | •           | -                    | -                    | -                    | -                   |  |
|                  |  |  |             |                      |             | _                    |                      |                      | 1                   |  |

#### Computer requirements The specifications required for the computer are shown in the table below:

|                     | System controller   | System controller Lite  |
|---------------------|---|---|
| Operating system    | <ul> <li>Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Profession</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>Supports 7 languages: English, Chinese, French, German, Russian, Spanish, and Polish</li> </ul>   |   |
| CPU                 | Intel® CoreTM i3 2 GHz or higher  |   |
| Memory              | <ul> <li>2 GB or more (for Windows<sup>®</sup> 7 [32-bit])</li> <li>4 GB or more (for Windows<sup>®</sup> 7 [64-bit], Window;<sup>®</sup> 8.1, and Windows<sup>®</sup> 10)</li> </ul>   |   |
| HDD                 | 40 GB or more of free space   |   |
| Displayed items     | 1024 × 768 or higher resolution   |   |
| Interfaces          | Ethernet port (for getting access to the internet using LAN) or a modem (for getting access to the internet via landline)     Up to 6 USB ports     (Only required for a server computer working as a VRF controller)     Maximum of 2 USB ports are required to connect to a White-USB-key/WibuKey     Up to 4 USB ports required to connect to an Echelon® U10 USB network interface     * Maximum number of required USB ports depends on the applicable system     configuration. | <ul> <li>Ethernet port (for getting access to the internet using LAN) or a modem (for getting access to the internet via landline)</li> <li>Up to 6 USB ports</li> <li>(Only required for a server computer working as a VRF controller)</li> <li>Maximum of 4 USB ports are required to connect to a White-USB-key/WibuKey</li> <li>1 USB port is required for an Ec; : helon<sup>®</sup> U10 USB Network interface</li> <li>* The maximum number of required USB ports depends on the applicable system configuration.</li> </ul> |
| Graphic accelerator | Microsoft® DirectX® 9.0c compatible   |   |
| Software            | Adobe® Acrobat Reader® 9.0 or later   |   |

• Echelon® U10 USB Network interface - TP/FT-10 Channel (Model name: 75010R) (Required for each VRF Network) <PACKING LIST>

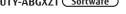
#### Option System co; n System controller Energy manager Lite Model name UTY-APGXZ1 UTY-PEGXZ1 UTY-ALGXZ White-USB-key

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

|                 | System controller Lite   |
|-----------------|--|
| ession          | al (32-bit or 64-bit) SP1  |
| 4-bit)<br>olish |  |
|                 |  |
|                 |  |
|                 |  |
|                 |  |
| ting            | •Ethernet port (for getting access to the internet using LAN) or a m |

| For System controller Lite |               |                                     |               |                     |  |  |  |  |  |
|----------------------------|---------------|-------------------------------------|---------------|---------------------|--|--|--|--|--|
| roller                     | Option        |                                     |               |                     |  |  |  |  |  |
| roller                     | Remote access | Electricity charge<br>apportionment | Energy saving | Centralized control |  |  |  |  |  |
| <u>7</u> 1                 | UTY-PLGXR2    | UTY-PLGXA2                          | UTY-PLGXE2    | UTY-PLGXX2          |  |  |  |  |  |
|                            | 1             | 1                                   | 1             | 1                   |  |  |  |  |  |

## BACnet<sup>®</sup> gateway



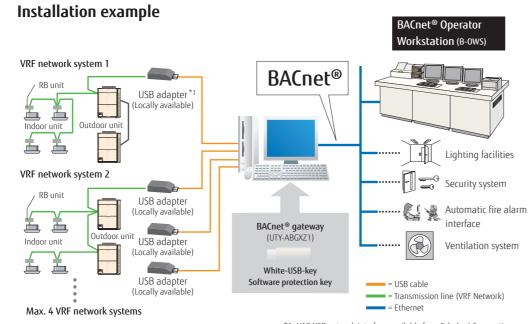
100

White-USB-key

(Software Protection Key)

ΒĪ

- 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<sup>®</sup> 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.

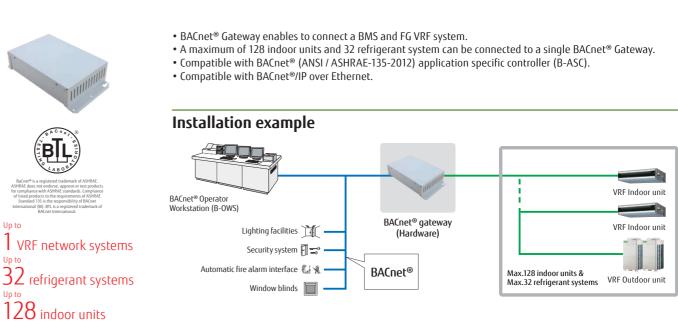


\*1: U10 USB network interface available from Echelon® Corporation.

#### Specifications

|                             | UTY-ABGXZ1  |
|-----------------------------|---|
| Operating system            | <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]</li> <li>English, Chinese, French, German, Russian, Spanish, and Polish</li> </ul> |
| CPU                         | Intel® CoreTM i3 2 GHz or higher  |
| Memory                      | <ul> <li>2 GB or more (for Windows<sup>®</sup> 7 [32-bit])</li> <li>4 GB or more (for Windows<sup>®</sup> 7 [64-bit], Windows<sup>®</sup> 8.1, and Windows<sup>®</sup> 10)</li> </ul>   |
| HDD                         | 40 GB or more of free space   |
| Display                     | 1024 x 768 or higher resolution   |
| Interface                   | <ul> <li>Ethernet port (for getting access to the Internet using LAN)</li> <li>USB ports (Maximum of 5 ports)</li> <li>1 USB port is required for WHITE-USB-KEY/WibuKey connection</li> <li>Maximum of 4 USB ports are required for Echelon™ U10 USB Network Interface</li> <li>* Maximum number of required USB ports depends on the applicable system configurations.</li> </ul>  |
| Software                    | Adobe® Reader™ 9.0 or later   |
| •Echelon™ U10 USB Ne        | twork Interface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)  |
| <packing list=""></packing> |   |
| Name and chane              | Quantity Application  |

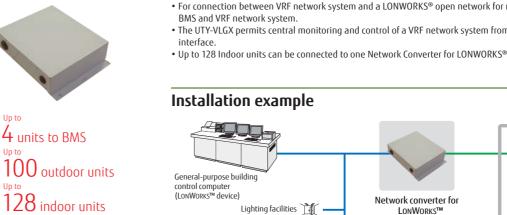
| Name and shape | Quantity | Application   |  |  |  |  |  |  |
|----------------|----------|---|--|--|--|--|--|--|
| WHITE-USB-KEY  | 1        | Includes the software and manuals, license for BACnet™ Gateway. |  |  |  |  |  |  |



| 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        |

BACnet<sup>®</sup> gateway

#### Network converter for LONWORKS<sup>TM</sup> UTY-VLGX



control computer (LONWORKS<sup>™</sup> device) Lighting facilities Security system 🗐 🛫 Automatic fire alarm interface 🖏 🐒 Window blinds

#### Specifications

| 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                          |  |

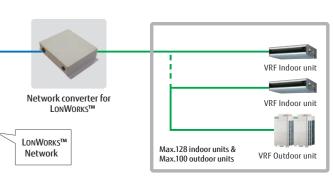
4 VRF network systems

Up to

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

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

• The UTY-VLGX permits central monitoring and control of a VRF network system from a BMS through a LONWORKS®



#### Transmission specifications (BMS side)

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

## MODBUS<sup>®</sup> convertor for VRF

W

mm

g

**MODBUS®** Interface

UTY-VMGX (Hardware)



Specifications Model na

Dimensions (H x W x D)

Power Supply

Input power

UTY-VKGX

Up to

000

1 indoor unit

IntesisBox a

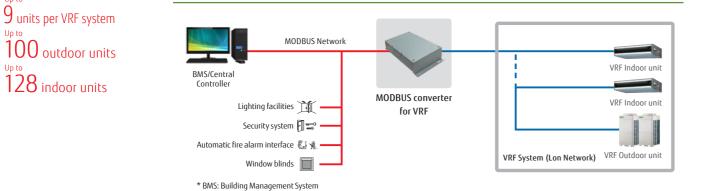
A 8

Weight

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

- Compact and lightweight design
- Direct connection to MODBUS Network
- Up to 128 indoor units can be controlled in one MODBUS Converter

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



UTY-VMGX

220-240V 50/60Hz

Max. 2

54 × 260 × 150

1,100





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





| Specifications         |    |  |
|------------------------|----|--|
| Model name             |    |  |
| Power Supply           |    |  |
| Input power            | W  |  |
| Dimensions (H x W x D) | mm |  |
| Weight                 | g  |  |

**KNX®** Interface FI-RC-KNX-1i



Up to

1 indoor unit

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

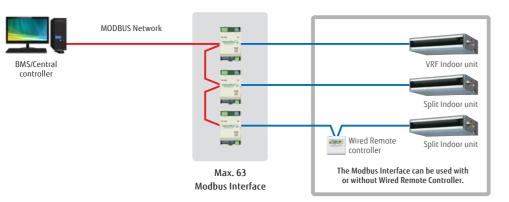
• Simple installation due to small and compact size. • No separate external power supply required (just KNX bus power).



| • Simple installation due to small and compact size.  |
|---|
| <ul> <li>No separate external power supply required.</li> </ul>                             |
| • The Modbus Interface permits central monitoring and control of air conditioners from BMS. |
|   |

The Modbus Interface allows a complete integration of

air conditioners into Modbus Networks.

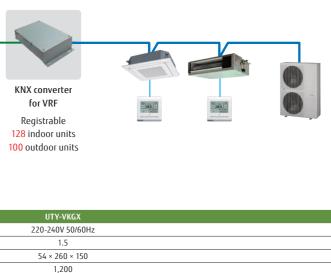


#### Specifications

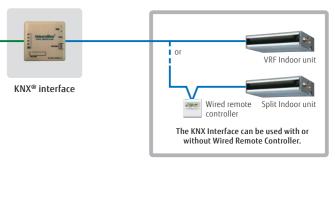
| specifications         |    |              |
|------------------------|----|--------------|
| Model name             |    | FJ-RC-MBS-1  |
| Dimensions (H x W x D) | mm | 93 × 53 × 58 |
| Weight                 | g  | 85           |

| Specifications         |    |  |
|------------------------|----|--|
| Model name             |    |  |
| Dimensions (H x W x D) | mm |  |
| Weight                 | a  |  |

• 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.



• Can be used for single indoor units and group controlled (up to 16) indoor units



| FJ-RC-KNX-1i |  |
|--------------|--|
| 70 × 70 × 28 |  |
| 70           |  |
|              |  |

### Wireless LAN Adapter

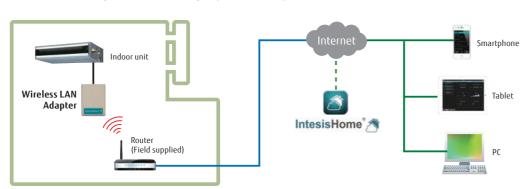
FJ-RC-WIFI-1





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





#### **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



# UTY-VTGX DC power supply type

Network converter

UTY-VTGX / UTY-VTGXV



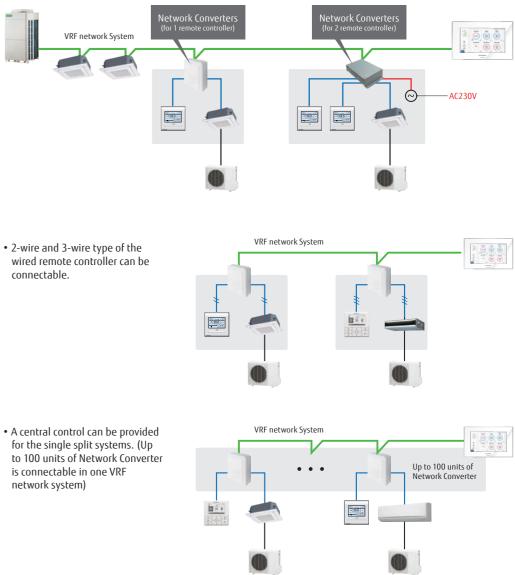
Up to

Up to

Up t

- Compact and light weight design
- Connectable to both types of 2-wire and 3-wire remote controllers

#### Installation example



wired remote controller can be connectable.

#### **Notifications and History**

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

• History (future release)

#### Advanced control (Optional functions)

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

#### Specifications

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

#### Specifications FJ-RC-WIFI-Dimensions (H x W x D) mm 108 × 70 × 28 80 Weight g

#### Compact remote controller provides access to basic functions

• The network converters are required when connecting single split system to VRF network system.

#### • 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.

#### **OGENEROL** 115

#### **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.
- The set temperature can be specified at two points for cooling and heating individually (4 points).

#### Installation example

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

| Cooling/Dry | +2°C *Max. 30°C | SAVE!            | AUTO RESTART     |
|-------------|-----------------|------------------|------------------|
| Set temp.   | · 2 C Wax 30 C  |                  |                  |
| Heating     |                 |                  |                  |
| Set temp.   | -4°C *Max. 16℃  | <b>V</b>         |                  |
| Normal o    | peration        | Saving operation | Normal operation |

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

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

DC12V is supplied by indoor unit.

## Signal amplifier

1 group

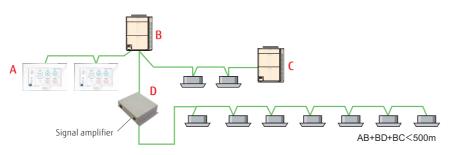


• Transmission Line length can be extended up to 3,600m with multiple Signal Amplifiers.

- Up to 40 signal amplifiers can be installed in a VRF network system.
- A signal amplifier is required,

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

#### Installation example



#### Specifications

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

#### Specifications

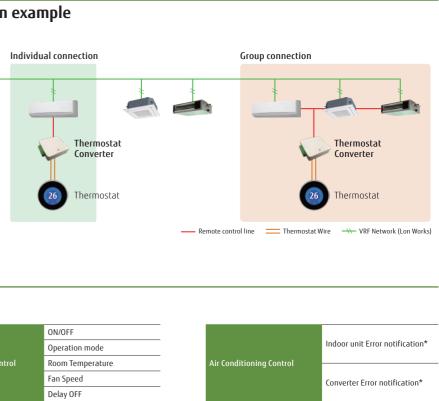
| specifications               |    |                  |
|------------------------------|----|------------------|
| Model name                   |    | UTY-TTRXZ1       |
| Max. Connectable Indoor Unit |    | 16               |
| Input power (Max.)           | W  | 0.6              |
| Dimensions (H x W x D)       | mm | 27 × 86.7 × 86.7 |
| Weight                       | g  | 220              |

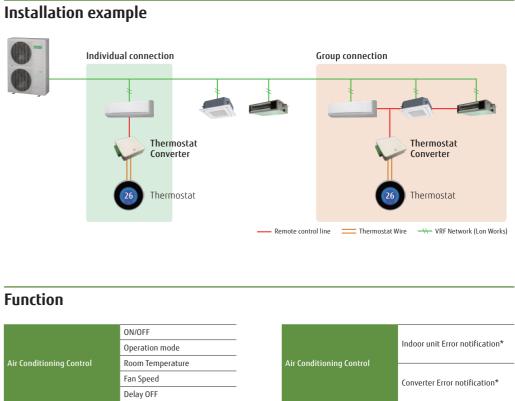


UTY-TTRXZ1

**Thermostat Converter** 

16 indoor unit





#### Control air conditioner using third party thermostat

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

\*These function are displayed on the converter's PCB board.

## VENTILATION

#### Outdoor-air Processing Unit range

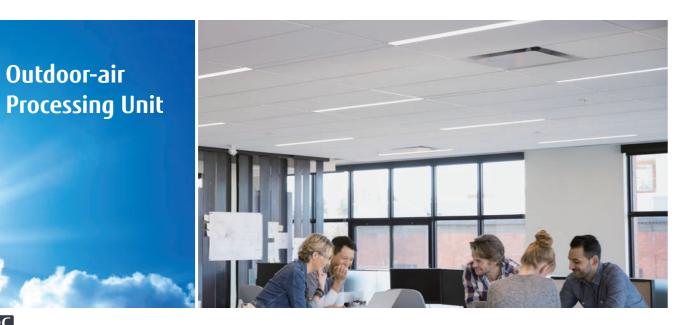
| Airflow rate (m <sup>3</sup> /h) | 1080        | 1680        | 2100        |
|----------------------------------|-------------|-------------|-------------|
| Model code                       | 054         | 072         | 096         |
| Outdoor-air Processing Unit      | ARXH054GTAH | ARXH072GTAH |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

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

Cimmin Commence

#### 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.

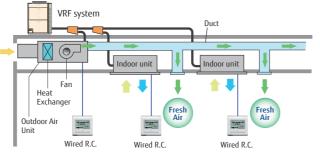


#### One VRF system can provide air conditioning and air supply at the same time.

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

\*1. Connectable VRF Series: J-IIS





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

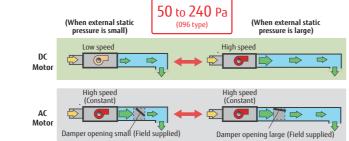
#### High energy savings and flexible duct design by using DC motor

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



• 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.



#### 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



#### Model: ARXH054GTAH / ARXH072GTAH / ARXH096GTAH



ARXH054

#### Specifications

| Rated flow rate                  |         |        | 1000 m³/h         | 1500 m <sup>3</sup> /h | 2000 m <sup>3</sup> /h |  |  |
|----------------------------------|---------|--------|-------------------|------------------------|------------------------|--|--|
| Model name                       |         |        | ARXH054GTAH       | ARXH072GTAH            | ARXH096GTAH            |  |  |
| Power source                     |         | V/Ø/Hz |                   | 220-240V, 50Hz         |                        |  |  |
| Capacity                         | 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 | w      | 179               | 292                    | 370                    |  |  |
| Airflow rate                     |         | m³/h   | 1,080             | 1,680                  | 2,100                  |  |  |
| Static Pressure Standard (range) |         | Pa     | 185<br>(50-185)   | 200<br>(50-200)        | 200<br>(50-240)        |  |  |
| Sound Pressure                   | Level   | dB(A)  | 42                | 44                     | 47                     |  |  |
| Dimensions (H >                  | W × D)  | mm     | 425 × 1,367 × 572 | 425 × 1,367 × 572      | 450 × 1,583 × 700      |  |  |
| Weight                           |         | kg     | 48                | 55                     | 71                     |  |  |
| Connection                       | Small   |        | 9.52              | 12.70                  | 12.70                  |  |  |
| pipe diameter                    | Large   | mm –   | 19.05             | 22.22                  | 22.22                  |  |  |
| Operating                        | Cooling | 0CDD   | 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 Side view (L) Side view (L) Top view Side view (R) Top view (Drain hose) (Drain hose) Front view Front view

120 **OGENEROL** 

#### **Central Controller** 9 <u>0</u> 0 ō ē Touch Panel Wired System Controller ote Controlle Controller System Controller Lite (Touch Panel) (Software)

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

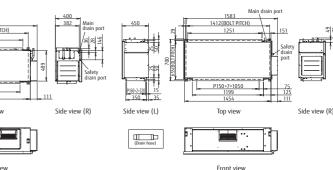


ARXH072



ARXH096



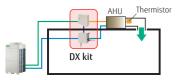


#### Ventilation

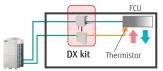


DC FAN

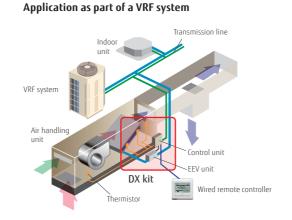
#### Multiple temperature sensors optimally control the air handling unit and fan coil unit.



When connected to an Air handling unit, the temperature of supply air is controlled by a discharge air sensor.



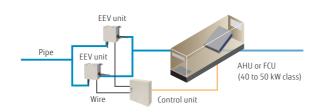
#### When connected to a fan coil unit, the room temperature is controlled by the discharge air sensor



#### Supports a wide range of capacity classes

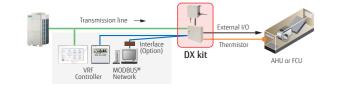
• Two EEV units can be connected in parallel to large-capacity units of up to 20 HP (50 kW). (UTP-LX180A separation tube required)

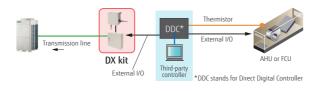
• Connectable capacity range: 5 kW to 50 kW



#### A variety of controls to match the application

• Central control using our VRF controllers or central management controllers





## Summary of functions Inputs ON/OFF • Setting temperature Capacity demand • Heating / Cooling operation mode Fault information Installation requirements • Connectable VRF Series : All VRF • Connectable DX Kit system capacity range : 50 to 100 % of the outdoor unit capacity • Connectable DX Kit system capacity range with indoor units : 30 % or less of the outdoor unit capacity • Max. wiring length from control unit : 10 m • Max. piping length between EEV unit and indoor unit : 5 m • Outdoor installation : Control unit (IP54 class) and EEV unit can be installed at an outdoor space. [For 2EEV units connection (option)] • Separation Tube : UTP-LX180A Control unit: UTY-VDGX EEV unit: UTP-VX30A/UTP-VX60A/UTP-VX90A



#### Specifications

| <u> </u>                 | •              |                   |                  |                  |                   |                     |                     |                     |                     |                     |                     |                     |  |  |  |
|--------------------------|----------------|-------------------|------------------|------------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--|--|--|
| EEV unit                 |                |                   |                  | UTP-VX30A        |                   | UTP-VX60A           |                     |                     | UTP-\               | /X90A               | UTP-VX90A×2         |                     |  |  |  |
| Power source             |                | V/Ø/Hz            |                  | 230/1/50         |                   |                     |                     |                     |                     |                     |                     |                     |  |  |  |
| Connectable cap          | pacity class   | kW                | 5.0              | 6.3              | 8.0               | 10.0                | 12.5                | 14.0                | 20.0                | 25.0                | 40.0                | 50.0                |  |  |  |
| Capacity                 | Cooling        |                   | 5.6<br>(5.1-5.9) | 6.3<br>(6.0-7.1) | 8.0<br>(7.2-9.0)  | 10.0<br>(9.1-11.1)  | 12.5<br>(11.2-13.2) | 14.0<br>(13.3-18.0) | 22.4<br>(18.1-23.7) | 25.0<br>(23.8-28.0) | 40.0<br>(28.1-44.7) | 50.4<br>(44.8-50.4) |  |  |  |
|                          | Heating        | kW                | 6.3<br>(5.7-6.7) | 7.1<br>(6.8-8.0) | 9.0<br>(8.1-10.0) | 11.2<br>(10.1-12.4) | 14.0<br>(12.5-15.0) | 16.0<br>(15.1-20.0) | 25.0<br>(20.1-26.5) | 28.0<br>(26.6-31.5) | 45.0<br>(31.6-49.9) | 56.5<br>(50.0-56.5) |  |  |  |
| Airflow Rate(Rel         | ference value) | m <sup>3</sup> /h | 1,060            | 1,200            | 1,520             | 1,600               | 2,000               | 2,240               | 3,560               | 4,000               | 6,400               | 8,000               |  |  |  |
| Dimensions (H >          | × W × D)       | mm                |                  | 160 × 220 × 90   |                   |                     |                     |                     |                     |                     |                     | (160 × 220 × 90)× 2 |  |  |  |
| Weight kg                |                |                   |                  | 2                |                   |                     |                     |                     |                     |                     | 2 × 2               |                     |  |  |  |
| Connection pipe diameter |                |                   | 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].

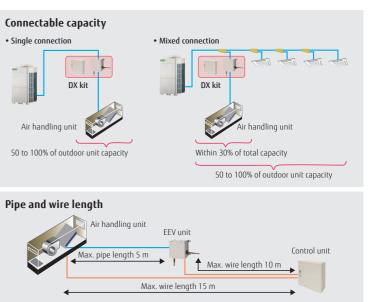




- ON/OFF indication
- Fan ON/OFF indication
- Thermo ON/OFF indication
- Defrost indication
- Fault indication

#### **Modbus Control**

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





## **VRF OPTION**

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





#### Diverse building air conditioning control functions can be controlled easily by VRF options.

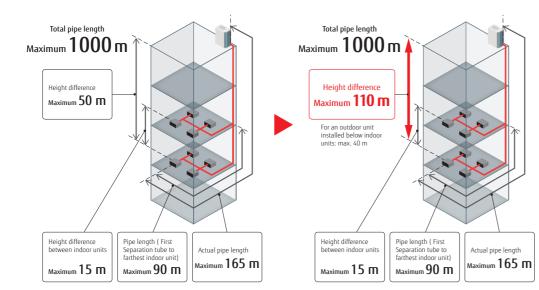
Various kinds of optional parts are provided such as controllers, adaptors and converters to meet the needs of every user.

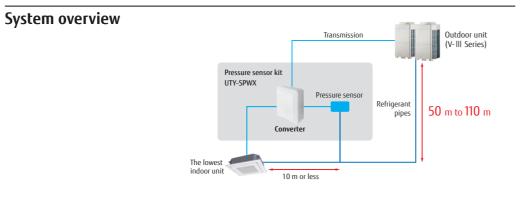
#### Pressure sensor kit UTY-SPWX

#### **Design Flexibility**

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 series. Also, it is possible to use only the outdoor unit that outdoor unit software is compatible with this product. The software for outdoor unit will be changed since production lot in January 2018.)





| Pressure sensor kit | Pressure sensor kit<br>(Converter) | Refrigerant<br>pressure sensor | Joint pipe |
|---------------------|------------------------------------|--------------------------------|------------|
|                     |                                    | <u></u>                        |            |

#### Specifications

| 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 utd-gxta-w/utd-gxtb-w/utd-gxtc-w

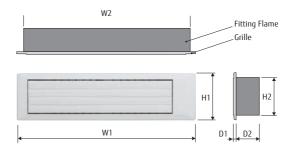


The optional clean-looking flat Auto louver grille kit blends into any interior and provides a comfortable airflow.

#### **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

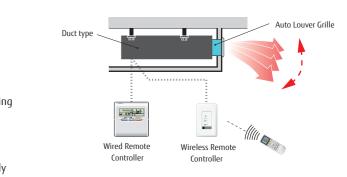


#### Specifications

| Model name                |                |      | UTD-GXTA-W   | UTD-GXTB-W   | UTD-GXTC-W   |  |  |  |  |  |
|---------------------------|----------------|------|--|--|--|--|--|--|--|--|
| Applicable Ind            | loor Unit      |      | ARXD07/09/12/14GALH<br>ARXD07/09/12/14GATH<br>ARXK07/09/12/14GCLH<br>ARXK07/09/12/14GALH | ARXD18GALH<br>ARXD18GATH<br>ARXK18GCLH<br>ARXK18GALH | ARXD24GALH<br>ARXD24GATH<br>ARXK24GCLH<br>ARXK24GALH |  |  |  |  |  |
| Power source              |                |      |  | Connecting with Control box of indoor unit           |  |  |  |  |  |  |
| Fixing of Auto            | Louver Grille  |      |  | Screw fixing to Flange or Square Duct                |  |  |  |  |  |  |
| Extension Squ             | are Duct Limit |      | 1.0  | Om (Max. duct length between indoor unit and Grille) |  |  |  |  |  |  |
| Dimensions (H × W × D) mm |                | mm   | 180 × 683 × (84+9)   | 180 × 883 × (84+9)                                   | 180 × 1083 × (84+9)                                  |  |  |  |  |  |
| W-:                       | Net            |      | 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.                                  |  |  |  |  |  |  |
|                           | Castina        | °C   |  | 18 to 32   |  |  |  |  |  |  |
| Operating                 | Cooling        | % RH |  | 80% or less  |  |  |  |  |  |  |
| range                     | Heating        | °C   |  | 16 to 30   |  |  |  |  |  |  |

\*: The Auto Louver Grille Kit can also be installed to ARGD07/09/12/14/18/24GATH revision code B models. Please refer to the Design & Technical manual for "revision code" details.





| Uni | t: | mm |
|-----|----|----|

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

## **CONTROL SYSTEM LIST**

Controllers / Interface

| COIII      | rollers / Int                                   | enace   |  |                   |  |                               |   |                           |                                   |  |  |   |   |                             |                                |                             |   |                             |   |
|------------|---|---|--|-------------------|--|-------------------------------|---|---------------------------|-----------------------------------|--|--|---|---|-----------------------------|--------------------------------|-----------------------------|---|-----------------------------|---|
|            |   |   | Indoor unit Cassette   |                   |  |                               |   |                           | uct                               |  |  | Du  | act.  |                             | Indoor unit                    |                             |   | Wall Mounted                |   |
|            |   |   | 4-way Compact  | 4-way             | Cassette                                 | Circula                       | Flow  | Mini<br>(With drain pump) | Mini<br>(Without drain pump)      |  | Slim<br>(With drain pump)  | Slim Medium us Lick as D                                    |   |                             |                                |                             |   | EEV external                | -   |
| Туре       |   |   | AUXB<br>07/09/12/14/18/24<br>GALH,<br>AUXB<br>09/12/14/18/24<br>GATH | AUXD<br>18/24GALH | AUXA<br>18/24/30/34/<br>36/45/54<br>GALH | AUXM<br>018/024GTAH           | AUXK<br>018/024/030/034/<br>036/045/054<br>GTAH |                           | ARXK<br>07/09/12/14/18/24<br>GALH |  | ARXD<br>07/09/12/14/18/24<br>GALH,<br>ARXD<br>07/09/12/14/18/24<br>GATH      | ARXA<br>24/30/36/45<br>GBLH,<br>ARXA<br>24/30/36/45<br>GBTH | ARXC<br>36/72/90<br>GBTH,<br>ARXC<br>96GATH | ARXC<br>45/60/72/90<br>GATH | ABHA<br>12/14/18/24<br>GATH    | ABHA<br>30/36/45/54<br>GATH | ASHA<br>07/09/12/14<br>GACH,<br>ASHA<br>07/09/12/14<br>GATH | ASHE<br>07/09/12/14<br>GACH | ASHA<br>18/24/30<br>GACH,<br>ASHA<br>18/24/30<br>GATH |
| Controller | Vired<br>Remote –<br>Controller                 |   |  |                   |  | •<br>UTY-RNRGZ5               |   |                           | UTY-RNRGZ5                        |  |  |   |   |                             |                                |                             |   |                             |   |
| 5          | Controller                                      |   |  |                   |  | UTY-RLRG                      |   |                           |                                   |  |  |   |   |                             | •<br>UTY-RLRG                  |                             |   |                             |   |
|            | Compact<br>Vired<br>Remote<br>Controller        | 1000 1000 1000 1000 1000 1000 1000 100  |  |                   | ι  | •<br>ITY-RCRGZ1, UTY-RCRGZ1K  |   |                           |                                   |  |  |   |   |                             | UTY-RCRGZ1, UTY-RCRGZ1k        | (                           |   |                             |   |
| :          | imple<br>Remote<br>Controller                   | 2-wire type   |  |                   | UTY-RSRC                                 | •<br>i, UTY-RHRG, UTY-RSKG, U | TY-RHKG   |                           |                                   |  |  |   |   | UTY-RSF                     | •<br>RG, UTY-RHRG, UTY-RSKG, U | TY-RHKG                     |   |                             |   |
|            | Vireless<br>Remote<br>Controller                |   |  |                   |  | UTY-LNHG                      |   |                           |                                   |  |  |   |   |                             | •<br>UTY-LNHG                  |                             |   |                             |   |
|            | Central<br>Remote<br>Controller                 | $= \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$ |  |                   |  | •<br>UTY-DCGGZ3               |   |                           |                                   |  | ●<br>UTY-DCGGZ3  |   |   |                             |                                |                             |   |                             |   |
|            | ystem<br>ontroller,<br>system<br>ontroller Lite | -   | UTY-APGXZ1, UTY-ALGXZ1   |                   |  |                               |   |                           |                                   |  | UTY-APGXZ1, UTY-ALGXZ1   |   |   |                             |                                |                             |   |                             |   |
|            | R Receiver<br>Jnit                              |   |  | UTY-LRHGB1        | 1  | UTY-LI                        |   |                           | •<br>I-YWC                        |  | UTB-YWC  |   |   |                             |                                |                             |   |                             |   |
| Interface  | BACnet<br>Gateway                               |   |  |                   |  | •<br>UTY-ABGXZ1, UTY-VBGX     |   |                           |                                   |  | UTY-ABGXZ1, UTY-VBGX   |   |   |                             |                                |                             |   |                             |   |
|            | Vetwork<br>Converter<br>or<br>LONWORKS          | $\checkmark$  |  |                   |  | UTY-VLGX                      |   |                           |                                   |  | UTY-VLGX   |   |   |                             |                                |                             |   |                             |   |
|            | MODBUS<br>Converter                             |   |  |                   |  | UTY-VMGX                      |   |                           |                                   |  |  |   |   |                             | UTY-VMGX                       |                             |   |                             |   |
|            | MODBUS<br>nterface                              |   |  | ●<br>FJ-RC-MBS-1  |  |                               |   |                           | •<br>MBS-1                        |  | FJ-RC-   | •<br>MBS-1  | FJ-RC-<br>(ARXC45/60/72/                    | MBS-1<br>90/96GATH only)    |                                |                             | ●<br>FJ-RC-MBS-1  |                             |   |
|            | (NX<br>Convertor                                |   |  |                   |  | UTY-VKGX                      |   | 1                         |                                   |  |  |   |   |                             | UTY-VKGX                       |                             |   |                             |   |
|            | KNX<br>nterface                                 |   |  | ●<br>FJ-RC-KNX-1i |  |                               |   |                           | KNX-1i                            |  | FJ-RC-   | •<br>KNX-1i   | FJ-RC-                                      | KNX-1i<br>90/96GATH only)   |                                |                             | •<br>FJ-RC-KNX-1i   |                             |   |
|            | Vireless<br>AN<br>nterface                      | _   |  | FJ-RC-WIFI-1      |  |                               |   |                           |                                   |  | FJ-RC-WIFI-1         FJ-RC-WIFI-1<br>(ARXC45/60/72/90/96GATH only)         ● |   |   |                             |                                |                             |   |                             |   |
|            | External<br>Switch<br>Controller                |   |  |                   |  | UTY-TERX                      |   |                           |                                   |  |  |   |   |                             | UTY-TERX                       |                             |   |                             |   |
| -          | Network Converter<br>for single split           | DC Power<br>Supply Type AC Power<br>Supply Type   |  |                   |  | UTY-VTGX, UTY-VTGXV           |   |                           |                                   |  |  |   |   |                             | UTY-VTGX, UTY-VTGXV            |                             |   |                             |   |
|            | Thermostat<br>Converter                         |   |  |                   |  | UTY-TTRXZ1                    |   |                           |                                   |  |  |   |   |                             | UTY-TTRXZ1                     |                             |   |                             |   |

## **OPTIONAL PARTS LIST**

Others Indoor unit Indoor unit Cassette Slim (With drain pump) ARXD 07/09/12/14/18/24 GALH, ARXD 07/09/12/14/18/24 GATH Ceiling / Floor Medium Static Pressure Mini (With drain purr Mini (Without drain pun AUXB 07/09/12/14/18/2 GALH, AUXB 09/12/14/18/24 GATH ARXA 24/30/36/45 GBLH, ARXA 24/30/36/45 GBTH Туре ARXC 36/72/90 GBTH, ARXC 96GATH AUXA 18/24/30/34/ 36/45/54 GALH AUXK 018/024/030/034 036/045/054 GTAH ARXK 07/09/12/14/ GCLH ARXK 07/09/12/14/18/2 GALH ARXC 45/60/72/90 GATH ABHA 12/14/18/24 GATH AUXM 018/024GTAH Others Human Sensor Kit 0 ۲ UTY-SHZXC Remote Sensor Unit New amenity space can be offered by installing the Remote sensor. • • UTY-XSZX UTY-XSZX UTG-UFGC-W UTG-UGGA-W ٠ • ٠ Cassette Grille UTG-UKGD-W UTG-UKGA-B UTG-UGGA-W UTG-UFGC-W UTG-UKGD-W UTG-UKGA-E • • Auto Louver Grille Kit UTD-GXTA-W UTD-GXTB-W(18) UTD-GXTC-W(24) UTD-GXTA-W UTD-GXTB-W(18) UTD-GXTC-W(24) Long Life Filter • • UTD-LF25NA UTD-LF60KA(36/45/60) •  $0 \square$ Flange UTD-SF045T UTD-RF204 Drain Pump Unit a 🐝 • UTZ-PX1NBA Panel 600 (mm) • Wide Panel • UTG-AKXA-W UTG-AGYA-W UTG-AKXA-W • 242 ٠ Panel Spacer UTG-BKXA-W UTG-BGYA-W UTG-BKXA-W Panel snaces For Compact Cassette Air Outlet Shutter Plate • UTR-YDZK ٠ • For Cassette UTR-YDZB UTR-YDZK For Compact Cassette type / Cassette type Insulation for High Humidity • • • UTZ-KXGC UTZ-KXRA UTZ-KXRA **S** Pressure Sensor Kit for V-III Series\*

#### AJH\_\_LN\*\*H : AJH\_\_LNTDH, AJH\_\_LNLBH

**OGENEROL** 131

Outdoor unit

|                             |   |                              |   | Outdoor unit                                |
|-----------------------------|---|------------------------------|---|---|
| Ceiling                     | -   | Wall Mounted<br>EEV external | -   | V-III<br>Tropical                           |
| ABHA<br>30/36/45/54<br>GATH | ASHA<br>07/09/12/14<br>GACH,<br>ASHA<br>07/09/12/14<br>GATH | ASHE<br>07/09/12/14<br>GACH  | ASHA<br>18/24/30<br>GACH,<br>ASHA<br>18/24/30<br>GATH | AJH<br>072/090/108/<br>126/144/162<br>LN★*H |
|                             |   |                              |   |   |
|                             |   |                              |   |   |
|                             |   |                              |   |   |
|                             |   |                              |   |   |
|                             |   |                              |   |   |
|                             |   |                              |   |   |
| UTD-RF204                   |   |                              |   |   |
| UTR-DPB24T                  |   |                              |   |   |
|                             |   |                              |   |   |
|                             |   |                              |   |   |
|                             |   |                              |   |   |
|                             |   |                              |   |   |
|                             |   |                              |   | UTY-SPWX                                    |

## **OPTIONAL PARTS**

#### Controllers

#### For Individual Control

| Wired Remote Controller (Touch Panel )  | Wired Remote Controller                      | Compact Wired Remote Controller |  |  |
|---|--|---------------------------------|--|--|
| UTY-RNRGZ5  | UTY-RLRG                                     | UTY-RCRGZ1                      |  |  |
| Image: Contract of the second secon |  |                                 |  |  |
| Compact Wired Remote Controller   | Simple Remote Controller                     | Simple Remote Controller        |  |  |
| UTY-RCRGZ1K   | UTY-RSRG                                     | UTY-RHRG                        |  |  |
|   | With operation mode                          | Without operation mode          |  |  |
|   |  |                                 |  |  |
| Wireless Remote Controller  | IR Receiver Unit                             | IR Receiver Unit                |  |  |
| UTY-LNHG  | UTB-YWC                                      | UTY-LRHGB1                      |  |  |
|   | For All Duct types except Large Airflow Duct | For Cassette type               |  |  |
| IR Receiver Unit  | Human Sensor Kit                             |                                 |  |  |
| UTY-LBHXD   | UTY-SHZXC                                    |                                 |  |  |
| For Circular Flow Cassette type   | For Circular Flow Cassette type              |                                 |  |  |
| 0.  | 0  |                                 |  |  |

#### For Centralized Control

| FOI CEITUAIIZEU COITU | 01    |  |
|-----------------------|-------|--|
| Central Remote Contr  | oller | System Controller Lite Software                                |
| NEW UTY-DCGGZ3        |       | UTY-ALGXZ1   |
|                       |       | WHITE-USB-KEY<br>(Software Protection Key)                     |
|                       |       | Option<br>UTY-PLGXR2<br>UTY-PLGXA2<br>UTY-PLGXE2<br>UTY-PLGXX2 |

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

UTY-PEGXZ1

#### Converters / Adaptors

For External device / System expansion

| BACnet <sup>®</sup> Gateway Software       | BACnet <sup>®</sup> Gateway Hardware  | Network Converter                           |
|--|---|---|
| UTY-ABGXZ1                                 | UTY-VBGX  | for LonWorks®                               |
| WHITE-USB-KEY<br>(Software Protection Key) |   | UTY-VLGX                                    |
|  | annum   |   |
| MODBUS® Converter Hardware                 | MODBUS <sup>®</sup> Interface   | KNX <sup>®</sup> Convertor for VRF Hardware |
| for VRF<br>UTY-VMGX                        | FJ-RC-MBS-1   | UTY-VKGX                                    |
|  | Ar Law CC<br>Interstand Read<br>Interstand Read<br>Interstand Read<br>Interstand Read<br>Interstand Read<br>Interstand Read<br>Interstand Read<br>Interstand Read |   |
| KNX <sup>®</sup> Interface                 | Wireless LAN Interface  | Network Converter                           |
| FJ-RC-KNX-1i                               | FJ-RC-WIFI-1  | for single split                            |
|  |   | UTY-VTGX<br>DC power supply type            |
|  | interstations"*   |   |
| Network Converter                          | Network Converter   | External Switch Controller                  |
| for single split                           | for Group Remote Controller   | UTY-TERX                                    |
| UTY-VTGXV<br>AC power supply type          | UTY-VGGXZ1  |   |
|  |   |   |
| Signal Amplifier                           | Thermostat Converter  | Pressure Sensor Kit                         |
| UTY-VSGXZ1                                 | UTY-TTRXZ1  | for V-III tropical Series*                  |
|  |   | UTY-SPWX                                    |
|  |   |   |

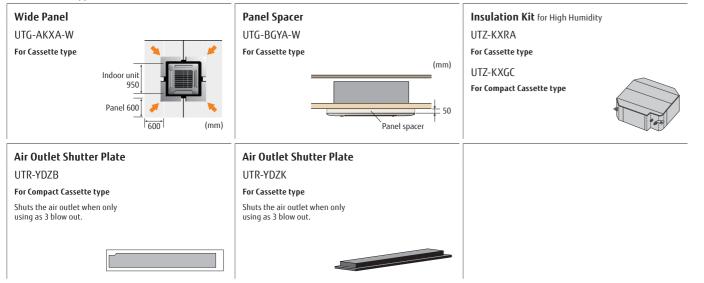
#### **OGENEROL** 133

## **OPTIONAL PARTS**

# Cassette Grille Cassette Grille

#### Others

For Cassette type



#### Others For Duct type Flange (Round) Flange (Square) UTD-SF045T UTD-RF204 For Medium Static Pressure Duck For Medium Static Pressure Duct type / Ceiling type Auto Louver Grille Kit Long-Life Filter UTD-GXTA-W (for ARXD07/09/12/ UTD-GXTB-W (for ARXD18, ARXK1 UTD-LF25NA UTD-LF60KA For Medium Static Pressure Duct type For High Static Pressure Duct type UTD-GXTC-W (for ARXD24, ARXK For Slim Duct type / Mini Duct ty

Communication system: External Connect Kit

| ;              | UTY-XWZXZD      |            |
|----------------|-----------------|------------|
|                | UTY-XWZXZE      |            |
|                |                 |            |
| ote Controller | For Touch Panel | Controll   |
|                | UTY-XWZXZA      |            |
|                |                 |            |
|                |                 |            |
|                | te Controller   | UTY-XWZXZE |

For Ceiling type

Drain Pump Unit UTR-DPB24T For Ceiling type

|                                | Remote Sensor Un   | it       |  |  |  |  |
|--------------------------------|--|----------|--|--|--|--|
|                                | UTY-XSZX   |          |  |  |  |  |
| t type                         | For All Duct type  |          |  |  |  |  |
|                                | New amenity space can b<br>offered by installing<br>the Remote sensor. | De       |  |  |  |  |
|                                |  |          |  |  |  |  |
|                                | Drain Pump Unit  |          |  |  |  |  |
| 2/14, ARXK07/09/12/14)<br>K18) | UTZ-PX1NBA<br>For Medium Static Press                                  | uro Duct |  |  |  |  |
| (24)                           | FOI MEDIUIII SCACE FIESS   |          |  |  |  |  |
| уре                            |  |          |  |  |  |  |
|                                |  | 1. I     |  |  |  |  |
|                                |  |          |  |  |  |  |
|                                |  |          |  |  |  |  |
|                                |  |          |  |  |  |  |
|                                |  |          |  |  |  |  |
|                                |  |          |  |  |  |  |
|                                | For Outdoor unit   |          |  |  |  |  |
|                                | UTY-XWZXZ6   |          |  |  |  |  |
|                                |  |          |  |  |  |  |
|                                | UTY-XWZXZ9   |          |  |  |  |  |
|                                |  |          |  |  |  |  |
|                                | UTY-XWZXZF   |          |  |  |  |  |
|                                |  |          |  |  |  |  |
| ler                            |  |          |  |  |  |  |
|                                |  |          |  |  |  |  |
|                                |  |          |  |  |  |  |
|                                |  |          |  |  |  |  |
|                                |  |          |  |  |  |  |
|                                |  |          |  |  |  |  |
|                                |  |          |  |  |  |  |
|                                |  |          |  |  |  |  |

## **FUNCTION LIST**

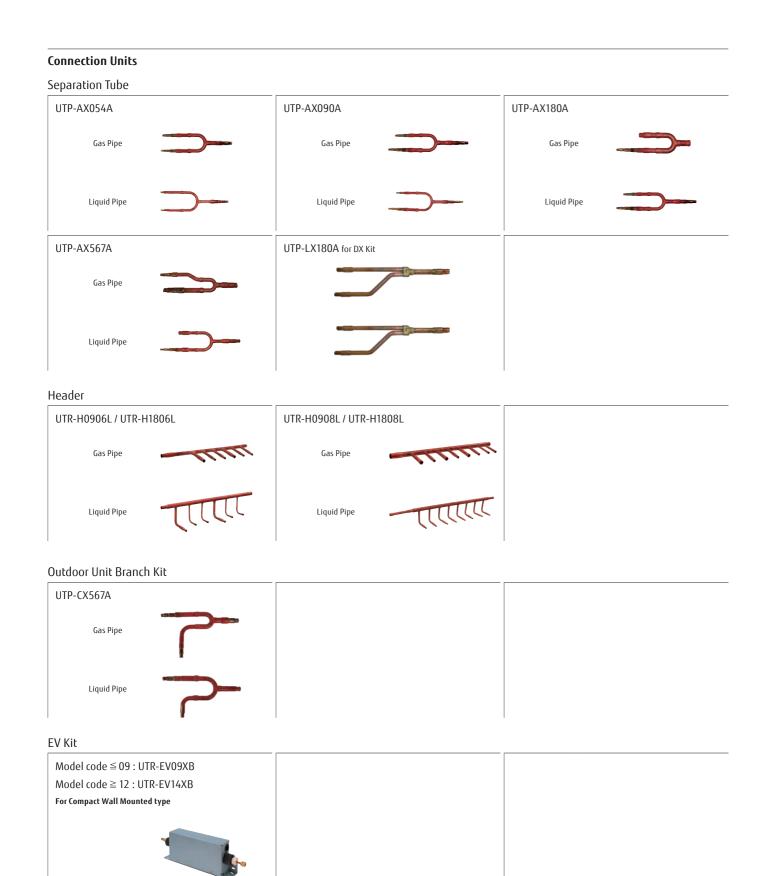
|        |  | Indoor unit  |                   |  |                     |   |                                   |                                   |   |   | Indo  | or unit                     |                             |                             |   |                          |
|--------|--|--|-------------------|--|---------------------|---|-----------------------------------|-----------------------------------|---|---|---|-----------------------------|-----------------------------|-----------------------------|---|--------------------------|
|        |  |  |                   | Cassette                                 |                     |   |                                   | 1                                 | Duct  |   |   | Duct                        |                             |                             |   | Wall Mou                 |
|        |  | 4-way Compact  |                   | way                                      | Circula             | ar Flow   | Mini<br>(With drain pump)         | Mini<br>(Without drain pump)      | Slim<br>(With drain pump)   | Medium<br>Static Pressure                                   | High Static Pressure                        | High Static Pressure        | Ceiling / Floor             | Ceiling                     |   | EEV exter                |
| Тур    |  | AUXB<br>07/09/12/14/18/24<br>GALH,<br>AUXB<br>09/12/14/18/24<br>GATH | AUXD<br>18/24GALH | AUXA<br>18/24/30/34/<br>36/45/54<br>GALH | AUXM<br>018/024GTAH | AUXK<br>018/024/030/034/<br>036/045/054<br>GTAH | ARXK<br>07/09/12/14/18/24<br>GCLH | ARXK<br>07/09/12/14/18/24<br>GALH | ARXD<br>07/09/12/14/18/24<br>GALH,<br>ARXD<br>07/09/12/14/18/24<br>GATH | ARXA<br>24/30/36/45<br>GBLH,<br>ARXA<br>24/30/36/45<br>GBTH | ARXC<br>36/72/90<br>GBTH,<br>ARXC<br>96GATH | ARXC<br>45/60/72/90<br>GATH | ABHA<br>12/14/18/24<br>GATH | ABHA<br>30/36/45/54<br>GATH | ASHA<br>07/09/12/14<br>GACH,<br>ASHA<br>07/09/12/14<br>GATH | ASHE<br>07/09/12<br>GACH |
| Input  | Operation / Stop                                     |  |                   |  |                     | ●UTY-<br>○UTY-                                  | XWZXZD<br>XWZXZB                  |                                   |   |   |   |                             |                             | OUTY-3<br>OUTY-3            | XWZXZD<br>XWZXZB  |                          |
|        | All On / All Off                                     |  |                   |  |                     |   |                                   |                                   |   |   |   |                             |                             |                             |   |                          |
|        | Group Stop   |  |                   |  |                     |   |                                   |                                   |   |   |   |                             |                             |                             |   |                          |
|        | Forced Stop  |  | 1                 | 1  | 1                   | OUTY-   | XWZXZD<br>XWZXZB                  | 1                                 | 1   | I   | 1   |                             | 1                           | OUTY-                       | xwzxzd<br>xwzxzb  | ,                        |
|        | Emergency<br>Stop                                    | •UTY-XWZXZD     •UTY-XWZXZD       •UTY-XWZXZB     •UTY-XWZXZB        |                   |  |                     |   |                                   |                                   |   |   |   |                             |                             |                             |   |                          |
|        | Forced<br>Thermostat<br>off                          | OUTY-XWZXZE     OUTY-XWZXZE       OUTY-XWZXZ7     OUTY-XWZXZ7        |                   |  |                     |   |                                   |                                   |   |   |   |                             |                             |                             |   |                          |
|        | Low Noise Mode<br>Operation                          |  |                   |  |                     |   |                                   |                                   |   |   |   |                             |                             |                             |   |                          |
|        | Cooling/<br>Heating Priority                         |  |                   |  |                     |   |                                   |                                   |   |   |   |                             |                             |                             |   |                          |
|        | Outdoor Unit<br>Operation Peak<br>Control            |  |                   |  |                     |   |                                   |                                   |   |   |   |                             |                             |                             |   |                          |
|        | Power Usage<br>Information from<br>Electricity Meter |  |                   |  |                     |   |                                   |                                   |   |   |   |                             |                             |                             |   |                          |
| Output | Operation Status                                     | us OUTY-XWZXZC OUTY-XWZXZC   |                   |  |                     |   |                                   |                                   |   |   |   |                             |                             |                             |   |                          |
|        | Error Status   | •UTY-XWZXZC •UTY-XWZXZC  |                   |  |                     |   |                                   |                                   |   |   |   |                             |                             |                             |   |                          |
|        | Indoor Unit Fun<br>Operation Status                  | n outy-xwzxzc outy-xwzxzc  |                   |  |                     |   |                                   |                                   |   |   |   |                             |                             |                             |   |                          |
|        | Auxiliary Heater<br>Output                           |  |                   |  |                     |   |                                   |                                   | ●UTY-XWZXZC   |   |   | •UTY-XWZXZC                 |                             |                             |   |                          |
|        | Base Heater  |  |                   |  |                     |   |                                   |                                   |   |   |   |                             |                             |                             |   |                          |

|      |  | Outdo   | Controller                                  |                              |
|------|--|---|---|------------------------------|
| nted |  | J-III<br>Tropical   | V-III<br>Tranical                           | Central Remote<br>Controller |
| /14  | –<br>ASHA<br>18/24/30<br>GACH,<br>ASHA<br>18/24/30<br>GATH | AJH<br>040/045/054<br>LBTBHN,<br>AJH<br>040/045/054<br>LETBHN | AjH<br>072/090/108/<br>126/144/162<br>LNTDH | UTY-DCGGZ2                   |
|      |  |   |   |                              |
|      |  |   |   | ●UTY-XWZXZ7<br>○UTY-XWZXZ8   |
|      |  |   | ●UTY-XWZXZ6                                 |                              |
|      |  |   |   |                              |
|      |  |   | ●UTY-XWZXZ6                                 | ● UTY-XWZXZ7<br>○ UTY-XWZXZ8 |
|      |  |   |   |                              |
|      |  |   | ●UTY-XWZXZ6                                 |                              |
|      |  |   |   |                              |
|      |  |   | ●UTY-XWZXZ6                                 |                              |
|      |  |   | ●UTY-XWZXZF                                 |                              |
|      |  |   | ⊖UTY-XWZXZ6                                 | outy-xwzxza                  |
|      |  |   | OUTY-XWZXZ6                                 | outy-xwzxza                  |
|      |  |   |   |                              |
|      |  |   |   |                              |
|      |  |   | ● UTY-XWZXZ9                                |                              |

•: Dry Contact O: Apply Voltage

#### **∂gener∩l** 137

## SEPARATION TUBE etc.



#### Specifications

| Separation Tube                       |    |              |                       |                           |        |            |              |  |
|---------------------------------------|----|--------------|-----------------------|---------------------------|--------|------------|--------------|--|
| Model name                            |    | UTP-AX054A   | UTP-AX090A UTP-AX180A |                           | 1      | 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                    | o 56.0 |            | 56.1 or more |  |

#### Header

| Model name                               | 3-6 Branches                           |    | UTR-H0906L   | UTR-H1806L   |
|--|--|----|--------------|--------------|
| model frame                              | 3-8 Branches                           |    | UTR-H0908L   | UTR-H1808L   |
| Total cooling capacity o                 | tal cooling capacity of indoor unit kW |    | 28.0 or less | 28.1 to 56.0 |
|  |  |    |              |              |
| Model name                               | 3-6 Branche                            | es | UTP-J0906A   | UTP-J1806A   |
| modername                                | 3-8 Branche                            | es | 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 Model | ASHE007GTAH<br>ASHE009GTAH | ASHE012GCAH<br>ASHE014GCAH |

#### Reducer kit

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

**∂gener∩l** 139

# SUPPORT

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

Support

HVAC system design support tool

Quick service & maintenance

Service tool

Web monitoring tool

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





## Support

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

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

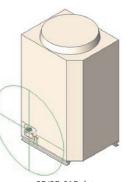


#### Technical information

We provide equipment selection software that facilitates the design of air conditioning systems by providing performance data for the units and estimation for model selection.

#### Features

- Design & Technical manuals
- Model selection & estimation
- Certification data
- 2D/3D CAD data



2D/3D CAD data

#### Product information

Information on new models is provided in the form of documents and movies in a timely manner for release, readily downloadable from the private section of our website. Contact your Fujitsu General representative for access information

#### Features

- Product news
- Brochures & manuals
- Promotional movies



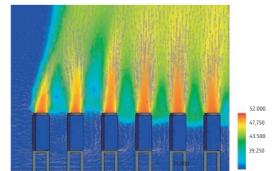
https://www.fujitsu-general.com/g-eu/support/downloads/vrf/

#### Technical support

Technical support is offered at every stage, from design through to installation, to assist in optimizing air conditioning solutions.

#### Features

- CFD simulation
- Guidelines
- Commissioning support

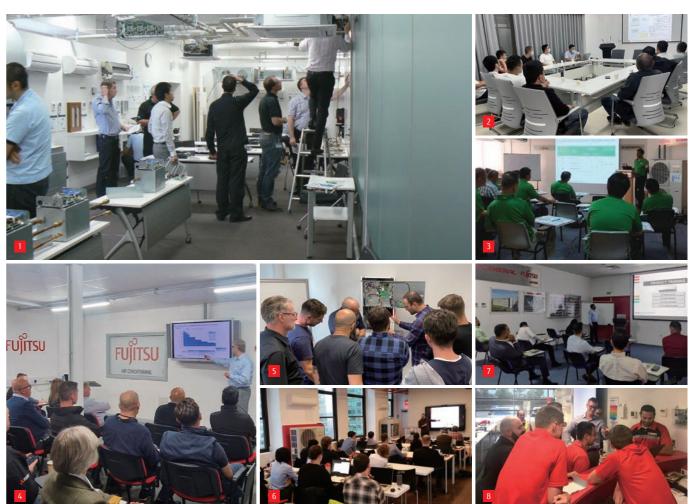


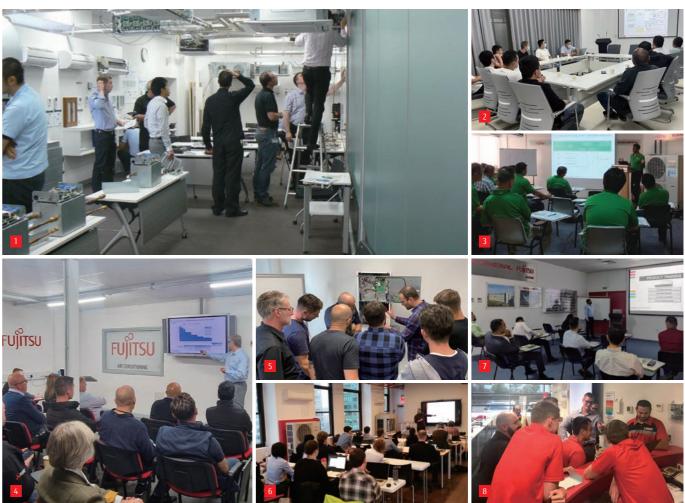
CFD simulation



Commissioning support



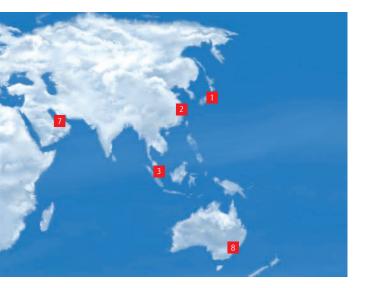




Fujitsu General regularly provides professional product, technical and service training at its training facilities worldwide. These research facilities also support the development of human resources with advanced technical skills.

#### Features

- Designing VRF systems
- On-site training for control systems



1 Head office training center in Japan 2 Training center in China <sup>3</sup> Asia training center in Singapore 4 Europe training center in the United Kingdom <sup>5</sup> Europe training center in Germany <sup>6</sup> America training center in the United States 7 Middle East training center in the UAE 8 Oceania training center in Australia

## HVAC system design support tool

Put the charts and pens away and design your projects on your computer with ease using the Design Simulator.

Everything from selecting indoor and outdoor units, allocating controls and optional parts to designing the piping and wiring systems is made easier using the program's built-in features.

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

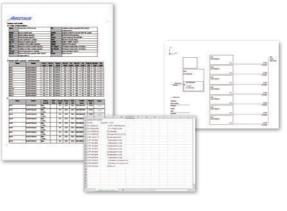


## **Design simulator**

| Personal Test Mary Ellipte   |   | and and  |   | -   | Real Property   | at fairs   | -  | ٠l.   |  |  |  |   |
|--|---|--|---|---|---|--|--|---|--|--|--|---|
| en II na E Beo   |   |  |   |   | • Cost in   | _  | -  |   |  |  |  |   |
|  |   |  | i.  |   |   |  |  |   |  |  |  |   |
| 52   |   |  | S.  |   |   |  |  | l   |  |  |  |   |
|  |   |  | ii.   |   |   |  |  | l   |  |  |  |   |
| And the second s | the fairer and  | no Dista   |   |   |   |  |  |   |  | -  | -  |   |
| angen a sen ange   | Name<br>Ta Patrice Nat  | Outer ret  | Transition<br>Transition<br>Transition                | E rear of   |   |  | Que un   |   |  | rpint  |  |   |
|  | The Product Not   | Outer ret  | Tableton Tax  | *   | and the second  | 0.0  |  |   | -  | rpint  |  |   |
|  | Fig. Protector Tot<br>Million Control of<br>Fig. 1<br>(1)<br>(1)<br>(1)<br>(1)<br>(1)<br>(1)<br>(1)<br>(1)<br>(1)<br>(1   | 8  | Eden2   | 5000  | achiad<br>RCC   | O Be   | Ne C   | Ng TC   | -  | 7014<br>1  |  | -   |
|  | The Product Not   | 8  | Calenda<br>Calenda<br>Image                           | 5000  | achiad<br>RCC   | O Be<br>ACH<br>UNL   | Ne C   | Ng TC   | -  | 7014<br>1  |  | -   |
|  | The Protocol Tell   | Contract and   |   |   | ACC USD   | 0.04<br>82.4<br>931<br>83<br>83  | 10000000000000000000000000000000000000   | Ng AC<br>ANG C<br>ANG<br>ANG  | 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                            | PECH<br>PECH<br>UNITS  |  | 12  |
|  | The Protocol Tell   | Colore and   | TRANK Data  |   | ACC<br>OCD  | 0.00<br>000<br>000<br>00<br>00<br>00<br>00<br>00<br>00<br>00<br>00<br>00                     | 27.240.4<br>27.240.4<br>27.240.4<br>27.240.4   | 14444<br>1441C<br>200   | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                              | Ri BC<br>anto<br>10  | t loop   | 1747<br>1747<br>20  |
|  | The Protocol Tell   | Colder and   | A A A A A   | € tear at<br>the gen<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>term<br>ter | 800<br>000<br>14<br>14<br>14  | ACIA<br>anti<br>10<br>13<br>14<br>14<br>14<br>14<br>14                                       | 179424<br>279424<br>279424<br>279424   | 19441   | 1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>100        | Ra SC<br>2005<br>10<br>10<br>11<br>11  | 5 house<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5 | 1994<br>C)<br>255<br>255<br>254<br>254                                      |
|  | The Protocol Tell   | International Control of Control  | A A A A A A A   | ¥ maran<br>⇒ hereb<br>tos<br>tos<br>tos<br>tos<br>tos<br>tos<br>tos<br>tos  | RCC 000   |  | 304 C<br>C/U<br>27 340 4<br>27 340 4<br>27 340 4<br>27 340 4<br>27 340 4<br>27 340 4   | Spect<br>Spect<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State | 10<br>10<br>10<br>11<br>14<br>14<br>14                             | Rig SC<br>2005<br>349<br>349<br>349<br>349<br>349<br>349<br>349  |  | 1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>100                 |
|  | The Protocol Tell   | International Control  | 134346464   | ¥ maran<br>begin<br>me<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katalogi<br>katal   | 85 C 000  | 0.000<br>8216<br>000<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10 | 304 C<br>674<br>674<br>773404<br>773404<br>773404<br>773404<br>273404<br>273404  | 19465<br>5410<br>55<br>55<br>55<br>55<br>55<br>55<br>55<br>55<br>55<br>55<br>55<br>55<br>55   | 1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>100        | Ri SC<br>(2000)<br>24<br>24<br>24<br>24<br>24<br>24<br>24<br>24<br>24  | 1 horas  | 1799-4<br>C1<br>255<br>255<br>255<br>255<br>255<br>255<br>255<br>255<br>255 |
|  | The Protocol Tell   | Ligna<br>Ligna<br>Ligna<br>Lign<br>Lign<br>Lign<br>Lign<br>Lign<br>Lign<br>Lign<br>Lign  | 5231526263  |   | echipati<br>REC<br>000<br>14<br>14<br>14<br>14<br>14<br>14<br>14<br>14<br>14              | 0.000<br>NCH<br>0001<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>1  | NA C<br>GNU<br>273404<br>273404<br>273404<br>273404<br>273404<br>273404<br>273404  | 19445<br>1947<br>197<br>197<br>197<br>194<br>194<br>194<br>194<br>194<br>194<br>194<br>194<br>194<br>194  | 10 10 10 10 10 10 10 10 10 10 10 10 10 1                           | Ri SC<br>3000<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10  | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | 200<br>200<br>200<br>200<br>200<br>200<br>200<br>200<br>200<br>200          |
|  | The Protocol Tell   | Contract of Contra | 13.12.12.12.12.12.12.12.12.12.12.12.12.12.            |   | 850<br>900<br>19<br>19<br>19<br>19<br>19<br>19<br>19<br>19<br>19<br>19<br>19<br>19<br>19  | 0 000<br>8010<br>000<br>000<br>000<br>000<br>000<br>000<br>000<br>000                        | 5040<br>573404<br>273404<br>273404<br>273404<br>273404<br>273404<br>273404<br>273404   | 9985<br>8937C<br>880<br>880<br>880<br>880<br>880<br>880<br>880<br>880<br>880<br>88  | 10000<br>100<br>100<br>100<br>100<br>100<br>100<br>100<br>100<br>1 | Riston<br>Jacobi<br>10<br>11<br>11<br>11<br>11<br>11<br>11<br>11<br>11<br>11<br>11<br>11<br>11   |  | 2014<br>201<br>201<br>201<br>201<br>201<br>201<br>201<br>201<br>201<br>201  |
|  | 75 Poleska Ve<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska | Bankar and   | 15543614666   |   | 850<br>950<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10  | 0 000<br>8000<br>0000<br>0000<br>0000<br>0000<br>0000<br>000                                 | 5040<br>5040<br>573404<br>273404<br>273404<br>273404<br>273404<br>273404<br>273404<br>273404<br>273404   | 99150<br>200<br>200<br>200<br>200<br>200<br>200<br>200<br>200<br>200<br>2   | 10000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>10        | Rij SC<br>300<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>1   |  | 200<br>200<br>200<br>200<br>200<br>200<br>200<br>200<br>200<br>200          |
|  | The Protocol Tell   | Net and a second | 点当点法法法法法法法<br>(1) (1) (1) (1) (1) (1) (1) (1) (1) (1) | Asserter  | RC C<br>000<br>14<br>14<br>14<br>14<br>14<br>14<br>14<br>14<br>14<br>14<br>14<br>14<br>14 | 0 000<br>8000<br>0 000<br>0 00<br>0 00<br>0 00<br>0 00<br>0                                  | 1945 (<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734) | Paper 6<br>Reg TC<br>2000<br>201<br>201<br>201<br>201<br>201<br>201<br>20   | 1000<br>1000<br>1000<br>1000<br>100<br>100<br>100<br>100<br>100    | Rig SC<br>(2005)<br>319<br>319<br>319<br>319<br>319<br>319<br>319<br>319<br>319<br>319   |  | 200<br>200<br>200<br>200<br>200<br>200<br>200<br>200<br>200<br>200          |
|  | 75 Poleska Ve<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska | Called and a   | A 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4               |   | RC C<br>000<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10       |  | 394 C<br>4790<br>2796<br>2796<br>2796<br>2796<br>2796<br>2796<br>2796<br>2796  | Types 6<br>55g TC<br>200<br>201<br>201<br>201<br>201<br>201<br>201<br>201   | 1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>100        | Paint SC<br>and Sc |  | 2000<br>200<br>200<br>200<br>200<br>200<br>200<br>200<br>200<br>20          |
|  | 75 Poleska Ve<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska | Net and a second | 点当点法法法法法法法<br>(1) (1) (1) (1) (1) (1) (1) (1) (1) (1) | Asserter  | RC C<br>000<br>14<br>14<br>14<br>14<br>14<br>14<br>14<br>14<br>14<br>14<br>14<br>14<br>14 |  | 1945 (<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734)<br>2734) | Paper 6<br>Reg TC<br>2000<br>201<br>201<br>201<br>201<br>201<br>201<br>20   | 1000<br>1000<br>1000<br>1000<br>100<br>100<br>100<br>100<br>100    | Rig SC<br>(2005)<br>319<br>319<br>319<br>319<br>319<br>319<br>319<br>319<br>319<br>319   |  | 200<br>200<br>200<br>200<br>200<br>200<br>200<br>200<br>200<br>200          |
|  | 75 Poleska Ve<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska<br>Poleska | Called and a   | A 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4               |   | RC C<br>000<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10       |  | 394 C<br>4790<br>2796<br>2796<br>2796<br>2796<br>2796<br>2796<br>2796<br>2796  | Types 6<br>55g TC<br>200<br>201<br>201<br>201<br>201<br>201<br>201<br>201   | 1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>100        | Paint SC<br>and Sc |  | 2000<br>2000<br>2000<br>2000<br>2000<br>2000<br>2000<br>200                 |

#### Automatically create model selection information

- The required performance, type, and temperature conditions for each indoor unit are entered and then dragged and dropped onto the outdoor unit to automatically set each unit.
- Creates piping and wiring diagrams automatically to facilitate branching, grouping, and option settings.
- The additional refrigerant charging is automatically calculated when the pipe length is entered.
- Easy configuration of remote controller groups, central controller, and converters.
- The equipment list including the equipment information is created automatically.



#### Outputs in the format that matches the application

You can export your project information in a number of industry standard file formats.

- Word format (rtf) (doc)
- Excel format (csv)
- Acrobat format (pdf)
- 2D CAD data (DXF)



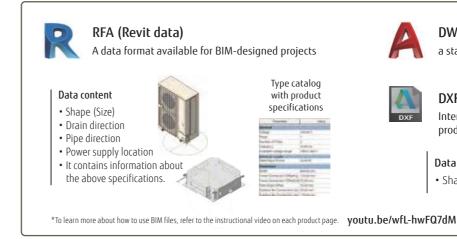
#### Update your Design simulator

The database can be updated easily online with the AutoUpdate function using FTP.

## BIM Building information modeling

#### BIM files of Fujitsu General's products are available on BIMobject®

BIM objects fo A 💺 A Fujitsu General is releasing BIM files of our products on the BIMobject® website A . BIMobject.com. 0 ... Outline of BIMobject® BIMobject<sup>®</sup> is a game changer for the construction industry, offering development, maintenance, and syndication of objects on the world's largest BIM platform. bearing the 0-About BIM files 0 === 5---• BIM files can be viewed in Autodesk Revit® 2018 version or later. • In each BIM file, the location of the connectors for the refrigerant and drain pipe is different. • Each BIM file includes several family types. • A catalog and specification sheet is available in Revit file format for each product. induct o the start of FUJITSU SPLIT ABYG24-30KRTA





lag in the sprae

trimolapot.



#### DWG

a standard data format used for Autodesk products



#### DXF

Intermediate data commonly available in CAD products

#### Data content

• Shape (Size





## Quick service & maintenance

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



## Easy maintenance & monitoring

#### Designed for easy maintenance

The operating status of the air conditioner and detailed trouble conditions are displayed on the 7-segment indicator lamp on the outdoor unit printed circuit board (PCB) and on the screen of the remote controller.

Check the status of the unit quickly for a prompt response.

- Display the operation mode at the time.
- Discharge temperature and pressure
- Compressor operation status
- "Address/Type/Number" of the outdoor unit
- Error code

#### Error diagnosis by Service tool

Connect Service tool to check the status details of units, from single split to VRF, on a computer screen. Check the errors quickly for prompt countermeasures.

- Operating status/control
- Monitoring operating conditions
- Monitoring sensor data
- Indicating trend graphs
- Error history
- Indicating refrigerant circuit diagrams (for VRF)

#### Remote monitoring

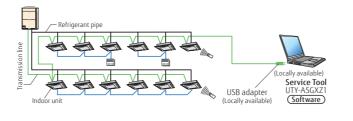
VRF system operating status and trouble status details can be monitored remotely at any time via the internet. Prompt coordination is available with service personnel.

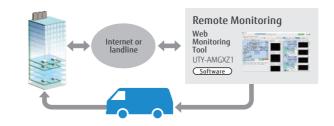




Unit n







## Mobile troubleshooting App for iOS and Android <sup>TM</sup> devices

We will release an App for troubleshooting tools for iPhone, iPod touch and other Apple devices, and Android products for Fujitsu General air conditioners (Room air conditioner/ Packaged air conditioners VRF and ATW, "AIRSTAGE Mobile", and R32 calculation of allowable refrigerant capacity)

Use Error Code Check, Troubleshooting, and Sensor Check to understand the status of your air conditioner.



## Service monitoring tool for Single split, Multi-split & Air to water



- It is not always easy to read the temperature sensor and know the status of the
- control components. So let the Service monitoring tool judge them. Visualizes protected operations
- Troubleshoots intermittent problems effectively
- Provides proof of normal operation to customers during periodical maintenance

| network (1) from (2) the   | THE OF RECEIPT  |
|--|---|
| All regime         All regime           Bit Adapted         All regime           Bit Adapted         Bit Adapted           Bit Adapted | Mandaran Hi<br>Bartan Ai<br>Bartan Ai<br>Bartan Ai<br>Bartan Ai<br>Bartan Ai<br>Bartan Ai |
| A1100  |   |

Actual operating conditions

| Dimensions (H × W × D) (mm) |  |
|-----------------------------|--|
| Weight (g)                  |  |





• A quick overview of the temperature sensor readings and the electronic expansion valves (EEVs), fans, compressors and other control components

| Talling General Arrest    | + Monacolog Taol 1227 Name contractions | * 2       |
|---------------------------|---|-----------|
| and the last              |   |           |
| man in the                |   |           |
|                           | 56.5 C                                  | NEWLE     |
| ~                         | <u></u>                                 | A         |
|                           | 105.0 rpm (1995.)                       | NAME      |
|                           |   | ILSELF.   |
| 5~                        | - 450                                   | ~         |
|                           |   |           |
|                           | V                                       |           |
|                           | ter 271.0 V 14m                         | KIN R R   |
|                           |   | anages    |
|                           |   | m         |
| Contraction of the second |   | 13000     |
|                           | 100 000 000                             | 1948 9464 |
|                           | Granhs                                  |           |
|                           |   |           |

|                   |                |         |            |             | (Retista)       | Barthan   | 1.646.   |
|-------------------|----------------|---------|------------|-------------|-----------------|-----------|----------|
|                   |                |         | C. Page 10 | Million and | Statutes, New J |           | landse y |
|                   | and the second | dans.d. | -864       | -044        | 10.0            | 37.0      | 10.4     |
|                   |                | 1992.4  |            | 104.0       | 10.0            | 914       | 1010     |
| and in            | - mail         | 100.0   | 100        | -104.0      | 10.4            | 100       | 104      |
| -                 | and .          | 1000.0  | -1010      |             | -               | 949       | 10.0     |
| wated up-         |                | 1884    | 101        |             | 84              | 202 ····· | 100      |
| -                 |                |         | 1000       |             | 18.1            | 100       |          |
| and the           |                | 1001.4  | 100.0      | 1060        | 18.5            |           | -0.4     |
| NORTH 14.         |                | 1891.4  | 363        | 1040        | 16.0            |           |          |
| and in            |                | 1864    | 100.0      | -040        | 18.0            | PP        | 44       |
| -                 | 10.4           | anna.   | 100        |             | -               | 99        |          |
|                   | 10.0           | 1001.4  | -          | (84)        | 18-0            | 444       | 10.0     |
|                   |                | wends . | 100.0      | 1040        | 18.1            | 199.0     | 100      |
|                   | ince .         | 1997.0  | 100        |             | M               | 378       | 1010     |
| -                 | 1010           | and a   | 100        |             |                 | 199.      | 10.0     |
| Barris 18.        | 10.4           | 10012   | 100.0      | 104.0       |                 |           | 1014     |
| Action of Lat.    | 36.8           | 10010   | 363        | 254         | 16.0            | 819       | 10.0     |
|                   | 1010           | 1004    | 1000       | 194.0       | (M.)            | 37.0      | 10.0     |
| NOT IN            | 10.0           | 3024    | 100.0      | -040        | 38.2            | 21.0      | 10.0     |
| and in            | 10.0           | and .   | -000       | 100.0       | -               |           | -        |
| Activation in the | 364            | -       | 100        | -040        | 38.0            | 17M -     | 210      |
| -                 | - A.           | art 4   | ALC: 1     | ing a       | 100.0           | 1964      | 84       |

**Operational histories** 

| UTY-ASSX       |  |  |  |  |  |  |
|----------------|--|--|--|--|--|--|
| 60 × 160 × 160 |  |  |  |  |  |  |
| 500            |  |  |  |  |  |  |

#### Service tool UTY-ASGXZ1

#### Extensive monitoring and analysis functions that make installation and maintenance easier

- The operation status of the system can be monitored and analyzed to detect any malfunctions.
- Data on the operation status of the system can be stored on a computer to allow for remote access.
- Up to 400 indoor units in a single VRF network system can be controlled and monitored for a large building or hotel.
- This software can be connected to any point of transmission line with a USB adapter (locally available).
- \* Saved data can be displayed offline. Note that the data saved by the following software applications cannot be displayed.
- UTR-YSTB/UTR-YSTC (Service tool)
- UTR-YMSA (Web monitoring tool)

#### Automatic operation check for refrigeration cycles

Once installed, the Service tool automatically checks for refrigeration cycles. The self-diagnosis function determines whether each sensor value is normal, which reduces the need for manual checks. The result of a diagnosis can be provided in a report.





#### These sensor values are checked automatically:

✓ the discharge temperature is normal, "OK" the super heat volume is normal, "OK'  $\checkmark$  the high pressure pipe value is normal, "OK"

the low pressure pipe value is normal, "OK And the values for other items will also be diagnosed.



#### Remote technical support and maintenance

On-site check screen can be shared between on-site staff and a service technician in a remote location. When a service technician visits the site for troubleshooting, the system's operation status can be shared in real time with a remote service center for assistance. On-site staff can have an online chat with a remote service center to get further assistance.

#### Trend charts

Previous-generation application could display only 3 sets of data from sensors. However, the current generation of the service tool displays multiple charts simultaneously so that refrigeration cycles can be monitored and checked in greater detail.





#### **Computer requirements**

|                   | UTY-ASGXZ1   |  |  |  |  |  |
|-------------------|--|--|--|--|--|--|
| Operating system  | <ul> <li>Microsoft® Windows® 7 Professional (32-bit or 64-bit) SP1</li> <li>Microsoft® Windows® 8.1 Pro (32-bit or 64-bit)</li> <li>Microsoft® Windows® 10 Pro (32-bit or 64-bit)</li> </ul> |  |  |  |  |  |
| CPU               | 1 GHz or higher  |  |  |  |  |  |
| Memory            | 1 GB or more (for Windows® 7 [32-bit], Windows® 8.1 [32-bit], and Windows® 10 [32-bit])     2 GB or more (for Windows® 7 [64-bit], Windows® 8.1 [64-bit], and Windows® 10 [64-bit])          |  |  |  |  |  |
| HDD               | 40 GB or more of free space  |  |  |  |  |  |
| Screen resolution | 1366 × 768 pixels or higher  |  |  |  |  |  |
| Interface         | USB port for U10 USB Network interface and software protection key   |  |  |  |  |  |
| Software          | Internet Explorer® 11 or Microsoft Edge  |  |  |  |  |  |

#### Packing list

| Name                                       | Quantity | Application  |
|--|----------|--|
| White-USB-key<br>(Software protection key) | 1        | Software protection key to be connected to a USB port on a Service tool-installed computer.<br>This software runs only on a computer with WibuKey. |
| •Computer requirements                     |          |  |

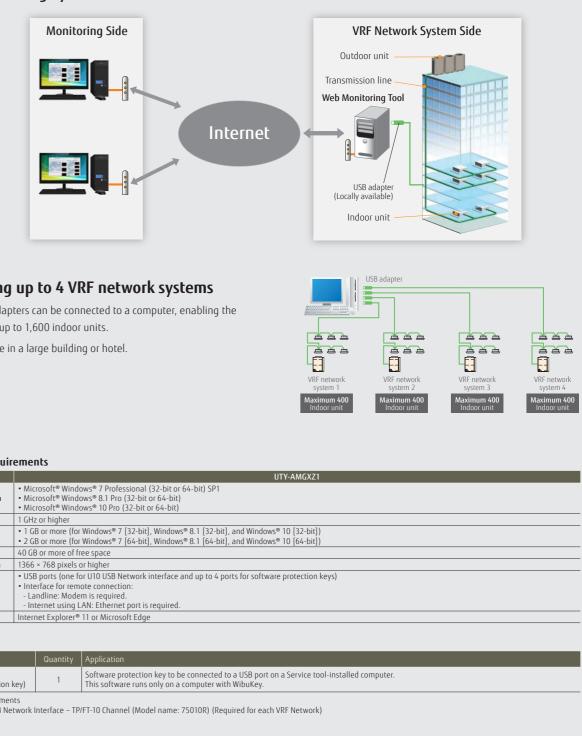
•Echelon® U10 USB Network Interface - TP/FT-10 Channel (Model namer: 75010R) (Required for each VRF Network)

#### Web monitoring tool UTY-AMGXZ1

#### Features

- Troubleshooting is performed by monitoring each air conditioning unit remotely during a periodical system check.
- An error notification is automatically transmitted to several locations via the internet\*1.
- Requires either a dedicated internet connection or landline to operate.
- mode.
- Can be viewed on the monitoring computer's Web browser without installing any special software.

#### Web Monitoring System



#### Supporting up to 4 VRF network systems

Up to 4 USB adapters can be connected to a computer, enabling the monitoring of up to 1,600 indoor units.

Suitable for use in a large building or hotel.

#### **Computer requirements**

|                   | UTU  |
|-------------------|--|
| Operating system  | Microsoft® Windows® 7 Professional (32-bit or 64-bit) SP1     Microsoft® Windows® 8.1 Pro (32-bit or 64-bit)     Microsoft® Windows® 10 Pro (32-bit or 64-bit)   |
| CPU               | 1 GHz or higher  |
| Memory            | <ul> <li>1 GB or more (for Windows<sup>®</sup> 7 [32-bit], Windows<sup>®</sup> 8.1 [32-bit], and Windows<sup>®</sup> 1</li> <li>2 GB or more (for Windows<sup>®</sup> 7 [64-bit], Windows<sup>®</sup> 8.1 [64-bit], and Windows<sup>®</sup> 1</li> </ul> |
| HDD               | 40 GB or more of free space  |
| Screen resolution | 1366 × 768 pixels or higher  |
| Interface         | USB ports (one for U10 USB Network interface and up to 4 ports for software p     Interface for remote connection:     Landline: Modem is required.     Internet using LAN: Ethernet port is required.   |
| Software          | Internet Explorer® 11 or Microsoft Edge  |

#### Packing list

| ,  |          |   |
|--|----------|---|
| Name                                       | Quantity | Application   |
| White-USB-key<br>(Software protection key) |          | Software protection key to be connected to a USB port on a S<br>This software runs only on a computer with WibuKey. |
| <i>c</i>                                   |          |   |

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

• The occurrence of an error can be confirmed through an error alert and equipment status information obtained from a remote location. • Monitoring data can be downloaded in a remote location. These data can be accessed and displayed even when the service tool is in offline

\*1: Internet e-mail access required.

**OGENEROL** 149