

VRF CATALOGUE 2025

for Saudi Arabia





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.

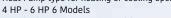
Value Integrity

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

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Heat Pump type for heating or cooling operation



• Single phase: 4 HP to 6 HP/3 models • 3 phase: 4 HP to 6 HP/3 models



For **LARGE** BUILDING V-024

VRF V- Tropical Series



Heat Pump Modular type for heating or cooling operation 8 HP - 48 HP 32 Models

- Space saving combination: 8 HP to 48 HP/21 models
- Energy efficiency combination: 20 HP to 42 HP/11 models

VRF INDOOR UNITS

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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 knowledge. 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 & Cooling



2007

8 to 42HP / Heat pump



VRF V

2009

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



VRF V-

2012

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



VRF VR-II

For Residential & Light Commercial Use

2004

Small VRF Series is released. 6HP / Heat pump



VRF **J**

2011

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



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



VRF J-IIS

2016

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



AIRSTAGE™ History

Established 1936 Established as Yaou Shouten Ltd. - 2017

1936

Established as Yaou Shouten Ltd.

Air conditioner exports to Middle East.

New Product Initiatives

Fujitsu introduced inverter technology which used R410A refrigerant.



2013

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



VRF **V-II**

2015

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



VRF **V-**

2016

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



VRF **V-III**

2017

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



VRF **J-III**

2017

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



VRF J-

RoHS Compliant

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



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)

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

· Fujitsu General America, Inc.

• Fujitsu General Do Brasil Ltda.

Overseas Sales Companies



Fujitsu General (Taiwan) Co., Ltd.



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



Fujitsu General Electronics



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



Fujitsu General (Euro) GmbH (Germany)



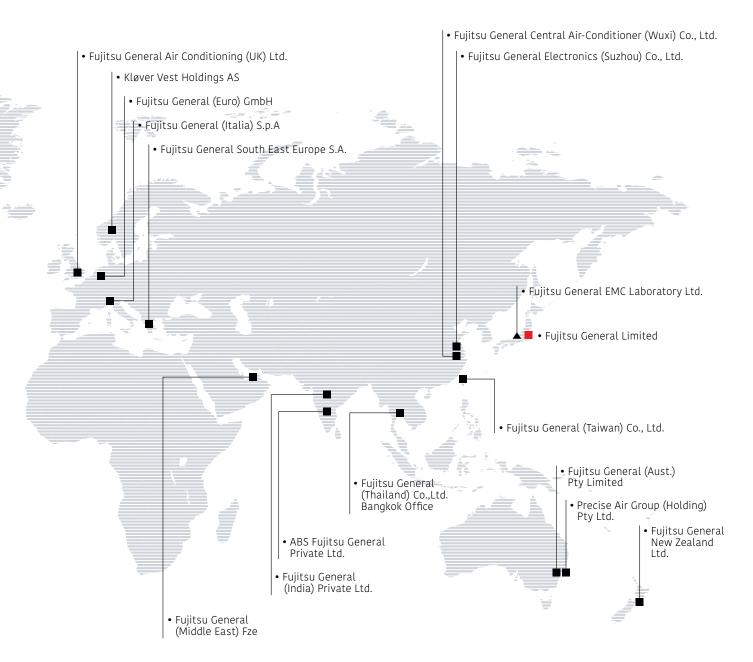
Fujitsu General Air Conditioning (UK) Ltd. (U.K.)



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



Fujitsu General (India) Private Ltd. (India)





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



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



Eujitsu General New Zealand Ltd. (New Zealand)



Fujitsu General New Zealand Fujitsu General (Middle East) Fze (U.A.E.)



ABS Fujitsu General Private Ltd. (India)



Fujitsu General Do Brasil Ltda.(Brasil)



Fujitsu General America, Inc. (U.S.A.)



Kløver Vest Holdings AS (Norway)



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

GLOBAL BUSINESS ACTIVITIES

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

North and South Americas



AHR Expo



HVAC trade shows in Brazil



Distributor conference in USA



Distributor conference in USA

Middle East



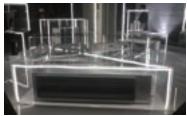
Exhibition



Training in Kuwait



Launch event in Oman



New product seminar in UAE

Europe



HVAC trade show in Germany



Training in Germany

International authoritative design awards



The NEWS Dealer Design Awards



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



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



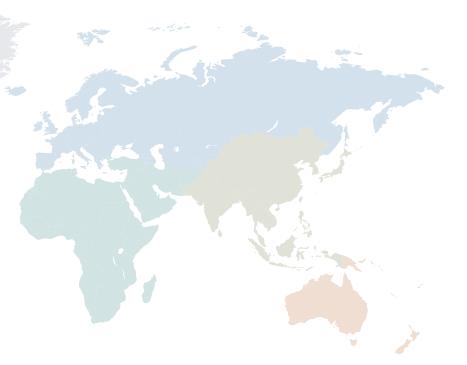
Superbrands is the world's arbiter of branding.



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



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





HVAC trade show in Germany



Training seminar in Italy





Event in the United Kingdom

Oceania



HVAC trade show in Australia



Launch event in New Zealand



Launch event in New Zealand

Asia



New product presentation meeting



Exhibition in India



V-CV Launch Event



New product presentation seminar in Singapore



Dealer Convention in Hong Kong



reddot winner 2024

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



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



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



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



China State Construction Engineering Luban Prize



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

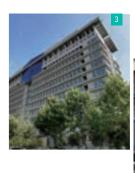
PROJECT REFERENCES

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.

















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









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















For Residential use

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



GLOBAL DEVELOPMENT & PRODUCTION BASES





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)



FGAHP



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



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



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



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

HIGH QUALITY DEVELOPMENT & PRODUCTION FACILITIES

Advanced Research Facility and Equipment

Performance Testing



Air Volume Measurement Room

Measure air volumes of the air conditioners from compact room air conditioner humidity, and air volume of models to VRF.



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



Silent Room

Measure the operating sounds of air conditioners with the sound reflectionproof walls and ceiling.

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

Reliability Testing



Constant Temperature Room

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



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



Shower Test Room

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

Transportation & Handling



Compressibility testing



Vibration testing

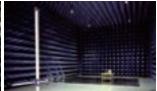


Testing Laboratory

Fujitsu General EMC Laboratory Limited







60 m Height Difference **Testing Tower**

Objective is to confirm oil circulation of compressor for reliability



Acquisition of ISO 9001

The overseas manufacturing subsidiaries of our group have obtained ISO 9001 certification.

High Product Quality Assurance

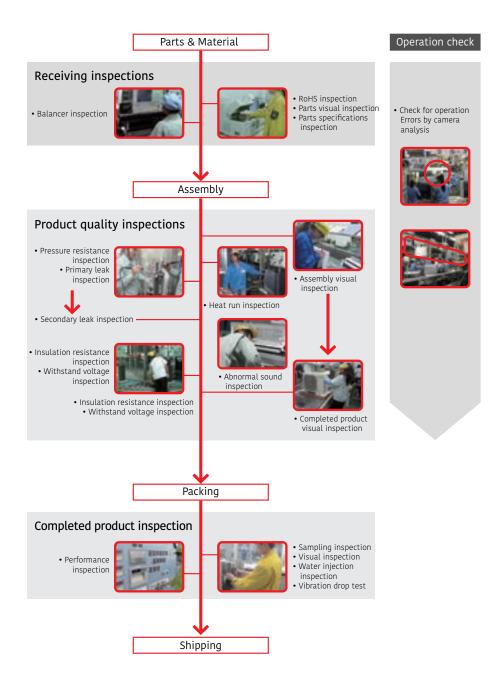
All Fujitsu General factories have acquired ISO 9001, and have built a quality control system common around the world. High quality products are offered to all over the world based on stringent quality inspections.

Receiving inspection

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

Stringent product quality inspection

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



OUR SOLUTION FOR

Fujitsu General provides the best solutions suitable for properties.

Solution Point



ALL PROPERTIES

Target Property



LIGHT COMMERCIAL

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

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





COMMERCIAL

For Large Building

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





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 room



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.







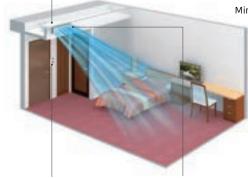
Guest room air conditioning with excellent comfort, energy saving and easy installation

Space saving

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



Mini Duct



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



Use of an external connect switch

Comfortable airflow that switches up and down air directions

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



Auto Louver Grille Kit



Centralized control of air conditioning in shared spaces

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

Light Commercial

SCHOOL

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



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

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





Various indoor units

Wall Mounted

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





Energy saving operation when there are no people by linking up with human sensor Human sensor (Option)

Light Commercial

RESTAURANT, SHOPS

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

RESTAURANT



Cassette Circular Flow Series For ambiences with dim lightings



Appropriate air conditioning in the atrium space

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





Color variations by two panels

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





Uniform temperature air conditioning

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





Commercial

LARGE BUILDING

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



Individual air conditioning system for large buildings

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





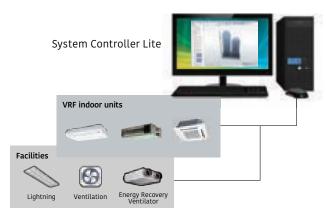
VRF V-III Tropical Series

8 HP - 48 HP 32 Models

- Space saving combination: 8 HP to 48 HP/21 models
- Energy efficiency combination: 20 HP to 42 HP/ 11 models

Centralized control of both air conditioning and lighting

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

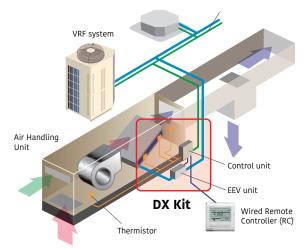




Ventilation(AHU) linked with **VRF** system

Fujitsu General's DX Kit enable other manufacture's air handling units (AHU) to be incorporated into a Fujitsu VRF system.

Possible to control comfortable air conditioning and ventilation.



Difference in height Up to 110m

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



VRF CORE TECHNOLOGY

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

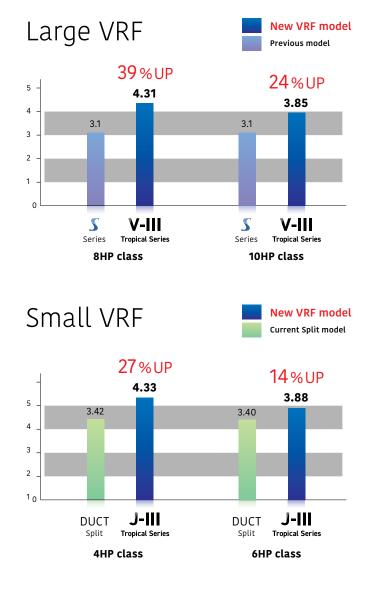




Highly Energy Efficiency

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

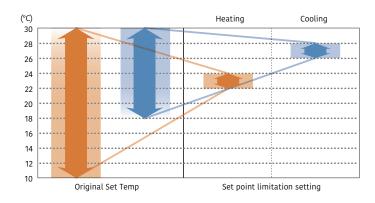




Operation Performance is Efficiently Controlled.

Room temperature set point limitation

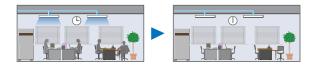
The minimum and maximum temperature ranges can be limited, which provide further energy saving while maintaining the comfort of the occupants.

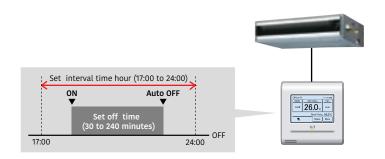


Auto-off timer

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.

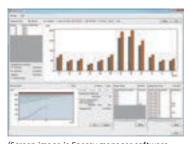
Furthermore a wired remote controller can set up the interval of time in case operation stops.



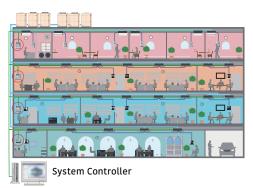


Energy saving management

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

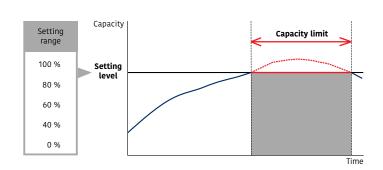


(Screen image is Energy manager software (Option))



Capacity limit operation

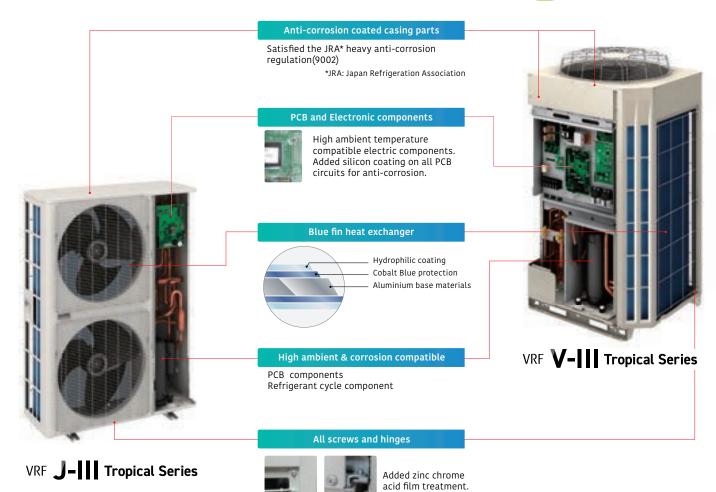
Operation capacity can be set in 5 steps for rated capability. The power consumption at peak is cut down and the maximum load is suppressed.





Heavy anti-corrosion treatment design (Inc.)



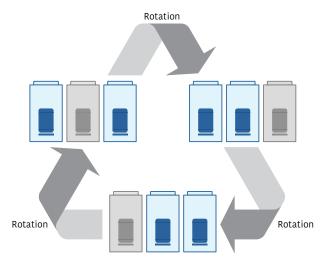


Take special notice of the following in order to enhance the anti-corrosion effect.

- Keep the unit free of direct sea breeze as much as possible by installing a windshield plate or placing the unit on the leeward side of the building.
- Arrange the unit so that any salt attached to the enclosure can be washed away by rain.
 Any water left on the bottom of the outdoor unit can increase corrosion. To prevent interference with the water drain, be careful of the tilting angle of the unit.
- Wash the enclosure regularly with water to remove any salt attached.
 Repair any damages on the unit (i.e. scratches) caused during installation or maintenance.
- Check the condition of the unit regularly. (If necessary, retreat the unit for anti-corrosion or make parts replacements.)
 Make sure the drainage is secured at the foundation.

Life-extending operation

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

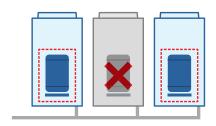


The start and stop timings are alternated among connected compressors.

Backup operation

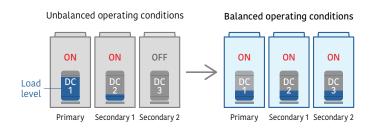
If one compressor fails, backup operation will be performed by the remaining compressors*.

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



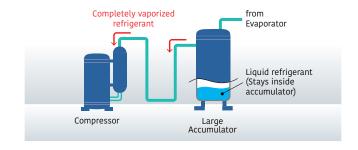
Advanced refrigerant control

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

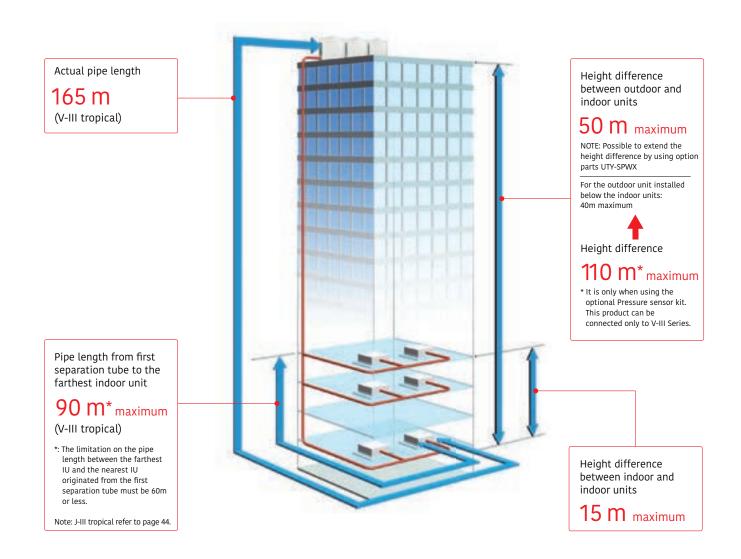
Periodic oil recovery operation is done automatically in order to feed back oil from the indoor unit to compressor.



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

Total pipe length

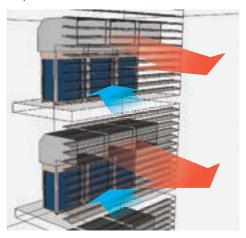
1,000 m maximum



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.



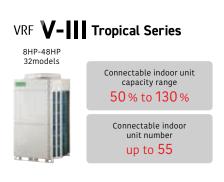
(V-III tropical)

Previous model

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.

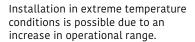
High capacity connection





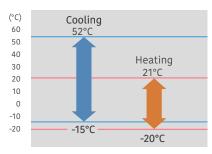
82 Pa

High ambient operation design **Linear**

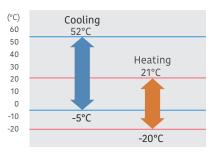




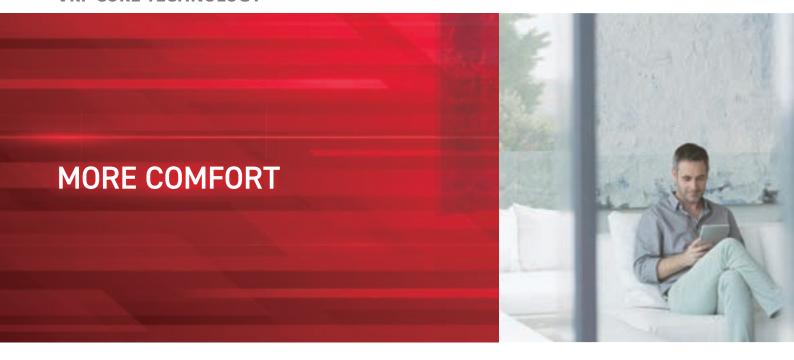
VRF **V-III** Tropical Series



VRF **J-III** Tropical Series



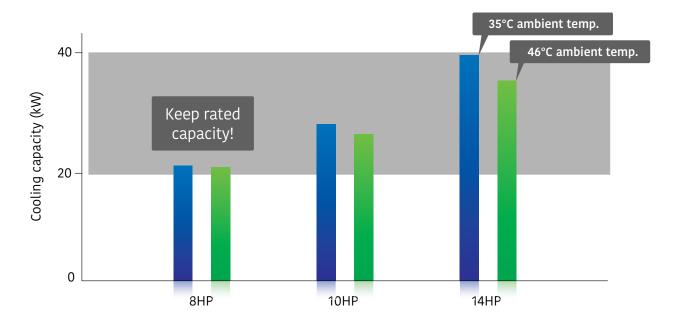
^{*.} Note : When a multiple outdoor unit connection is used, operating range is from -5°C to 52°C in cooling.



Powerful cooling capacity design



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



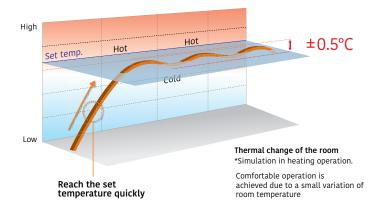
Touch Panel Wired Remote Controller

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



Precision refrigerant flow control

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

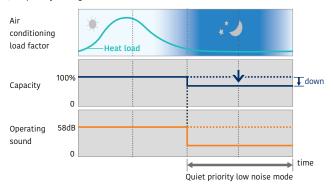


Quiet operation

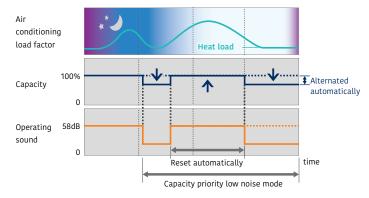
Low noise mode

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

Quiet priority setting

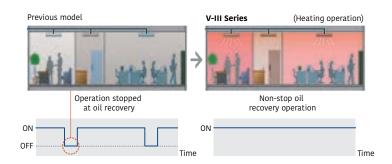


Capacity priority setting



Non-stop oil recovery operation

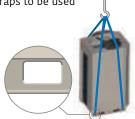
A comfortable room condition is maintained during oil recovery mode because the product continues to operate without stopping the cooling or heating operation.
*: VRF VR-II Series is not available.





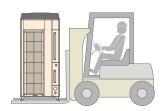
Easily transported

A lifting strap can be hooked onto an outdoor unit



Transportable by forklift The outdoor unit can be lifted and

The outdoor unit can be lifted and transported by forklift.

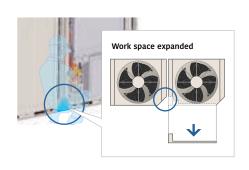


Fits into a small elevator.



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.





Front access reduces installation intervals

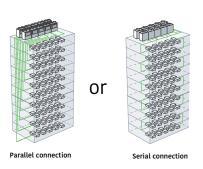
Flexible piping connection

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.

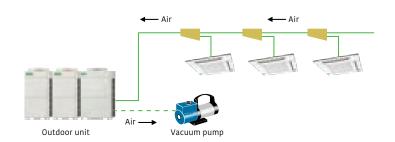


Maximum wiring length: 3 600 m

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

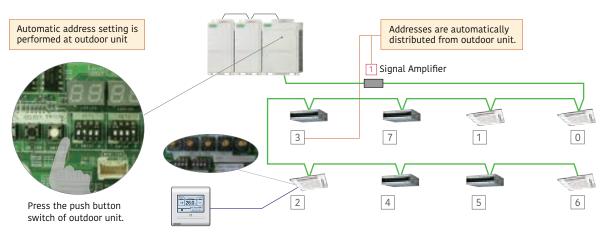
Easy evacuation - using vacuum mode function

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

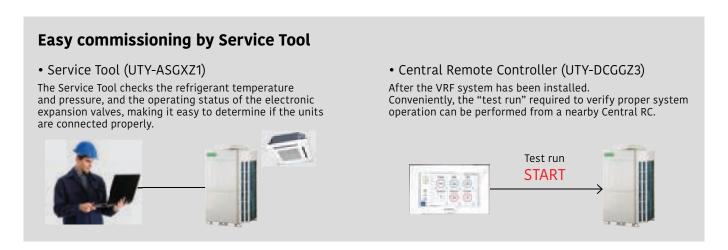


Automatic address setting

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.







Design for Easy Maintenance

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



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



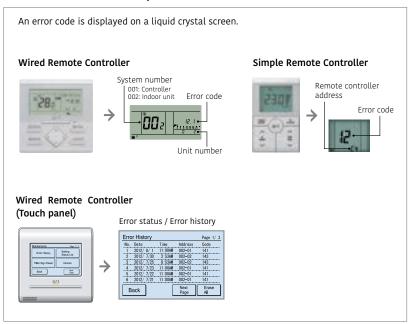
7-segment LED

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

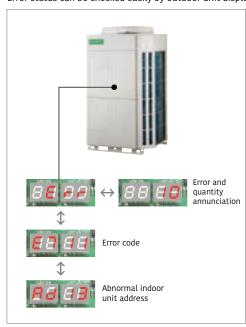
Movable PCB panel Easier for maintenance work behind the PCB



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



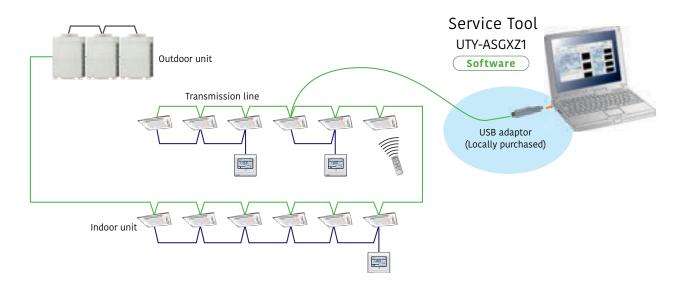
Error status can be checked easily by outdoor unit display



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.

VRF Network System Side Outdoor unit Transmission line USB adaptor (Locally purchased) Web Monitoring Tool

VRF OUTDOOR UNITS

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

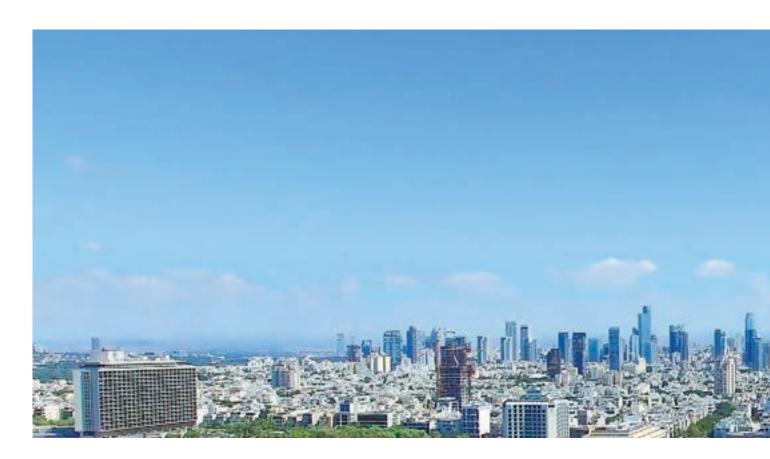


VRF LINE-UP

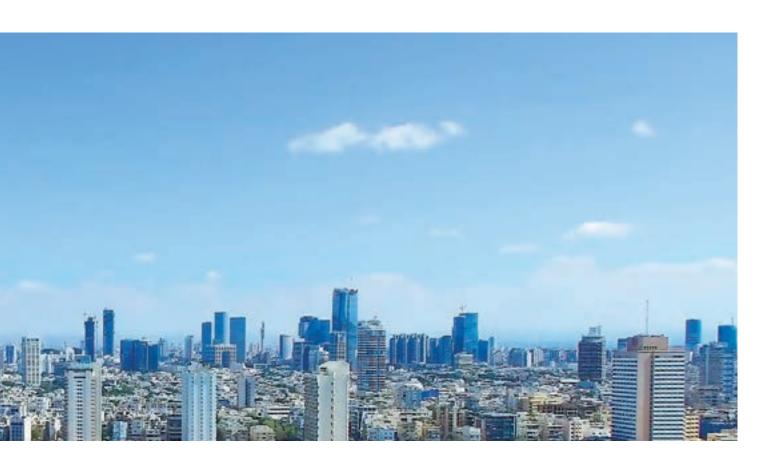
Fujitsu General provides multi air conditioning systems for buildings VRF Series matched to the size and application of the property.

Outdoor units range

НР		4	5	6	8	10	12	14	16	18	20
BTU/h		36,000	45,000	54,000	72,000	90,000	108,000	126,000	144,000	162,000	180,000
Ton		3.0	3.8	4.5	6.0	7.5	9.0	10.5	12.0	13.5	15.0
VRF J- Tropical Series	High Efficiency (Single phase)	AJH040 LBTAHN	AJH045 LBTAHN	AJH054 LBTAHN							
Heat Pump	High Efficiency (3 phase)	AJH040 LETAHN	AJH045 LETAHN	AJH054 LETAHN							
VRF V- Tropical Series	Space saving				AJS072 LNTCH	AJS090 LNTCH	AJS108 LNTCH	AJS126 LNTCH	AJS144 LNTCH		AJS180 LNTCH
Heat Pump	High Efficiency								AJS144 LNTCHH	AJS162 LNTCHH	AJS180 LNTCHH



22	24	26	28	30	32	34	36	38	40	42	44	46	48
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
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
40	39	36				999	411			446			1818181
	in it	had it.	indiad	indus.	india)								
AJS198 LNTCH	AJS216 LNTCH	AJS234 LNTCH	AJS252 LNTCHA	AJS270 LNTCH	AJS288 LNTCH	AJS306 LNTCHA	AJS324 LNTCHA	AJS342 LNTCHA	AJS360 LNTCH	AJS378 LNTCH			AJS432 LNTCH
									AFAFA				
	AJS216 LNTCHH	AJS234 LNTCHH	AJS252 LNTCHH	AJS270 LNTCHH	AJS288 LNTCHH	AJS306 LNTCHH	AJS324 LNTCHH	AJS342 LNTCHH	AJS360 LNTCHH	AJS378 LNTCHH	AJS396 LNTCHH	AJS414 LNTCHH	







System Outline

High Energy Efficiency

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

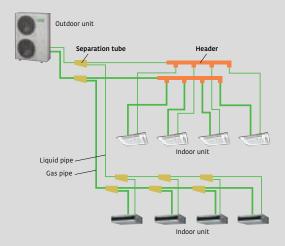
Flexible systems for small- and medium-size buildings air conditioning

Space saving design and long piping design allow for flexible installation on the roofs or balconies of small- and medium-size buildings.

Multiple indoor units of various capacities and types can be connected.

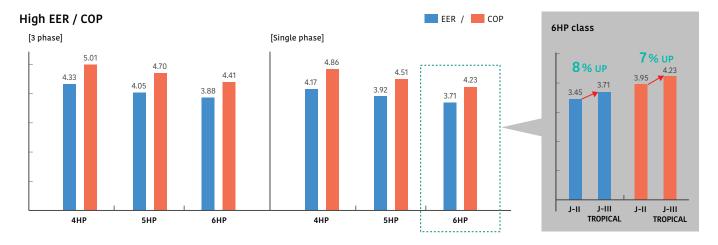
System configuration example

- 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.

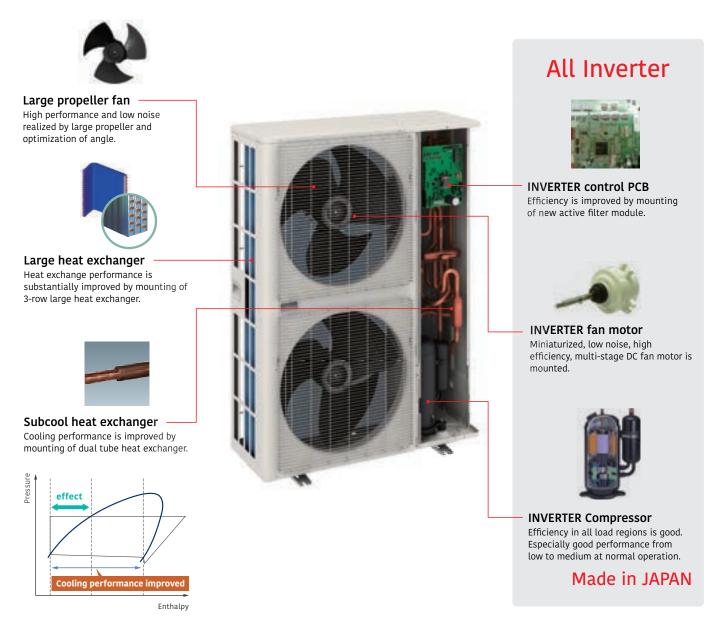


Energy efficiency

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



Long piping capability

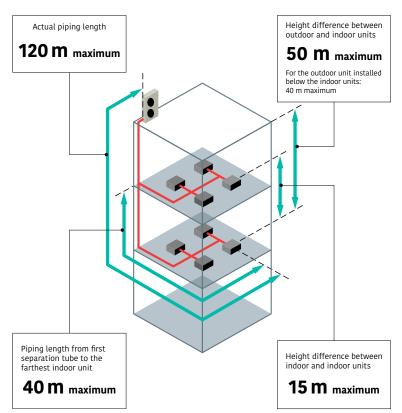
Our advanced refrigerant control technology

nipip tnaregirfer

Total pipe length 180 m maximum

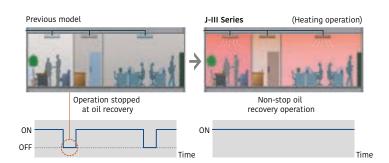
length of 180 m. This opens up new possibilities in system design.





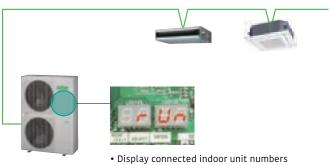
Non-stop oil recovery operation

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.



- Duplicately set address number of indoor unit can be displayed



Specifications

		HP			6	4	5	6
Rating Capacity rai		Btu/h	36,000	45,000	54,000	36,000	45,000	54,000
		Ton	3.0	3.8	4.5	3.0	3.8	4.5
Model name			AJH040LBTAHN	AJH045LBTAHN	AJH054LBTAHN	AJH040LETAHN	AJH045LETAHN	AJH054LETAHN
Maximum Connect	able Indoor Unit		1-7	1-8	1-9	1-7	1-8	1-9
Power source			Sin	ale phase, 220-240V, 60			phase, 380-415V, 60H	7
	Cooling(T1/T3)		12.1/10.3	14.0/11.1	15.5/11.5	12.1/10.3	14.0/11.1	15.5/11.5
	Heating	kW	13.6	16.0	18.0	13.6	16.0	18.0
Capacity	Cooling(T1/T3)		41,000/35,000	47,500/37,800	52,500/39,000	41,000/35,000	47,500/37,800	52,500/39,000
	Heating	Btu/h	46,000	54,500	61,000	46,000	54,500	61,000
	Cooling(T1/T3)	kW	2.90/3.47	3.57/3.77	4.18/3.92	2.79/3.30	3.46/3.57	3.99/3.71
Input power	Heating	KVV	2.80	3.55	4.26	2.71	3.40	4.08
Current	Cooling(T1/T3)		12.7/15.2	15.7/16.6	18.4/17.2	5.2/6.2	6.6/6.6	7.7/6.9
Current	Heating	A	12.3	15.6	18.7	5.0	6.5	7.8
EER	Cooling(T1/T3)	W/W	4.17/2.97	3.92/2.95	3.71/2.94	4.33/3.13	4.05/3.11	3.88/3.10
	Cooling(11/13)	Btu/h/W	14.15/10.10	13.30/10.05	12.60/9.95	14.70/10.60	13.75/10.60	13.15/10.50
COP	Heating	W/W	4.86	4.51	4.23	5.01	4.70	4.41
COP	neating	Btu/h/W	16.45	15.35	14.30	17.00	16.00	14.95
Air flow rate	High	m³/h(l/s)	6,200(1,722)	6,400(1,778)	6,900(1,916)	6,200(1,722)	6,400(1,778)	6,900(1,916)
Sound pressure	Cooling	dB (A)	50	51	53	50	51	53
level	Heating	UB (A)	52	53	55	52	53	55
	Height		1,334	1,334	1,334	1,334	1,334	1,334
Net Dimensions	Width	mm	970	970	970	970	970	970
	Depth		370	370	370	370	370	370
Net Weight		kg	120	120	120	120	120	120
Refrigerant		Type	R410A	R410A	R410A	R410A	R410A	R410A
Connection pipe	Liquid	mm	9.52	9.52	9.52	9.52	9.52	9.52
diameter	Gas	11/1111	15.88	15.88	19.05	15.88	15.88	19.05
Operating range	Cooling	°CDB	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52
- operating range	Heating	CDB	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

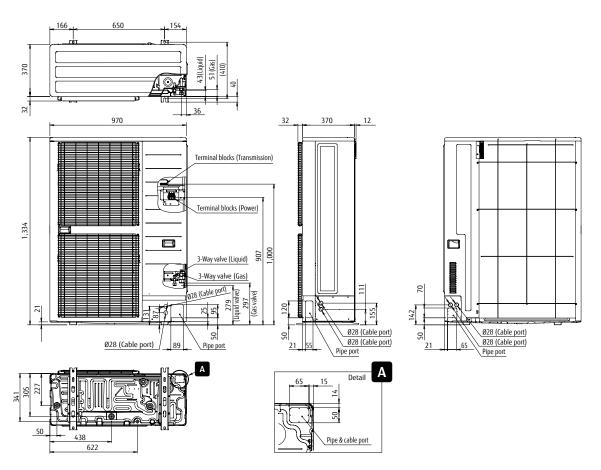
Note: Specifications are based on the following conditions.
Cooling(T1): Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB Cooling(T3): Indoor temperature of 29°CDB / 19°CWB, and outdoor temperature of 46°CDB / 24°CWB

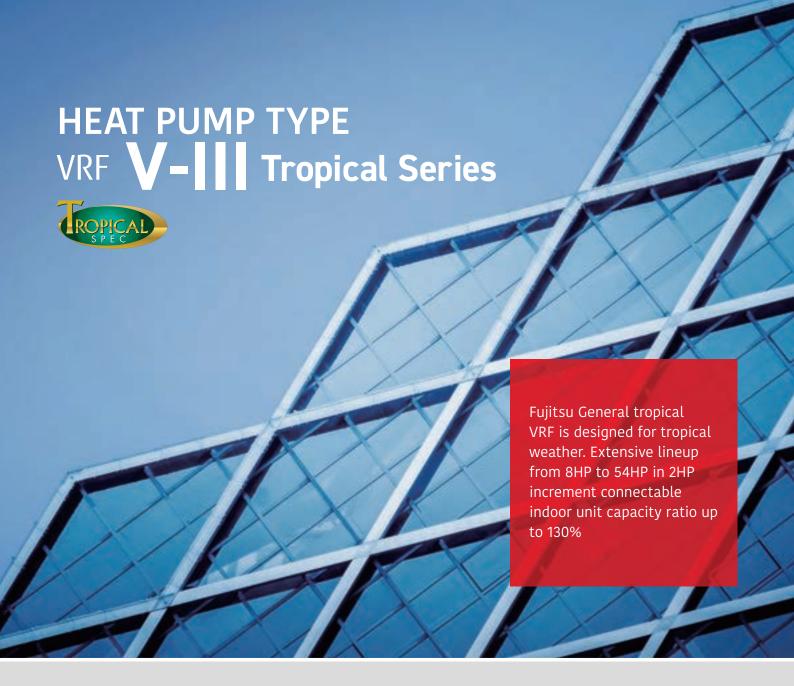
Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB. Pipe length: 7.5 m. Height difference between outdoor and indoor unit: 0 m.

Dimensions

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

(Unit:mm)





System Outline

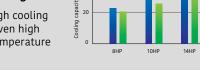
High ambient operation design

Possible to operate cooling up to 52°C outdoor temperature



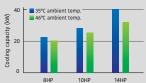
Powerful cooling capacity design

Keeping high cooling power at even high ambient temperature



Anti-corrosion treatment design

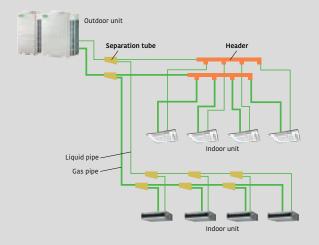
All metallic and PCB components are protected against corrosion





System configuration example

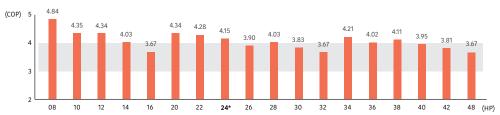
- This system is used for medium-sized and large buildings. Connecting each outdoor unit makes it possible to create a high-capacity system.
- Connection of multiple indoor units using separation tubes and headers.



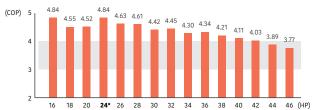
Energy efficiency

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

Space saving combination



Energy efficiency combination





Energy saving technology that boosted operation efficiency



Powerful large propeller fan

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

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.



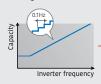
Sine-wave DC inverter control

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





Subcool heat exchanger

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



4-face heat exchanger

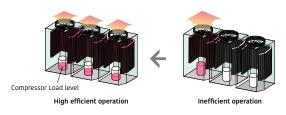
Heat exchange efficiency is significantly improved by the introduction of a 4-face heat exchanger that increases effective surface area.

Front intake port (corner cut air inhaling structure)

Advanced energy saving control

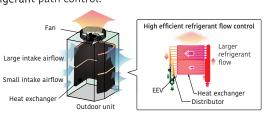
Multiple outdoor operation control

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



Heat exchanger refrigerant control

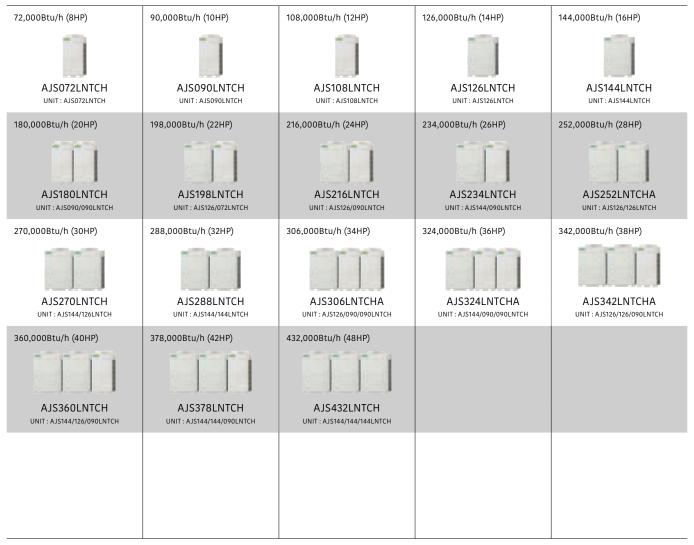
The efficiency of the top and bottom heat exchanger in the outdoor unit has been improved by adopting an optimum refrigerant path control.



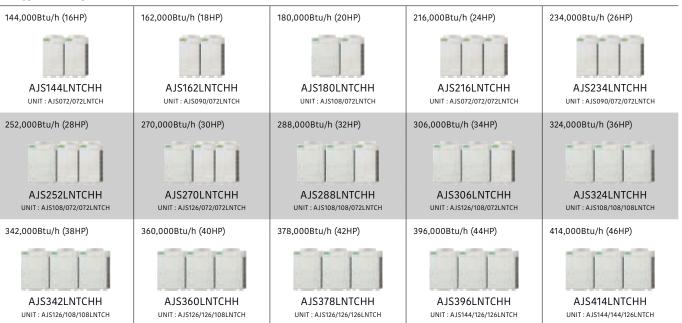
Outdoor units lineup

• Combinations other than the followings are not recommended.

Space saving combinations



Energy efficiency combinations



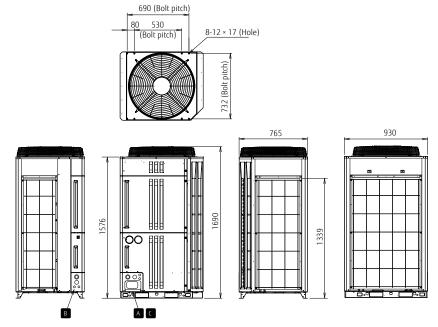


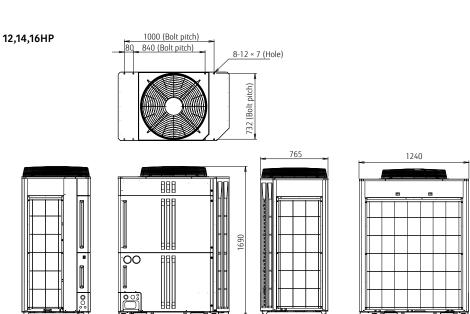
8,10HP: AJS072LNTCH / AJS090LNTCH 12,14,16HP: AJS108LNTCH / AJS126LNTCH / AJS144LNTCH

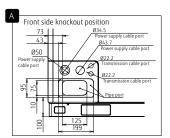


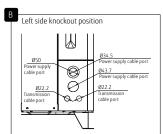
Dimensions

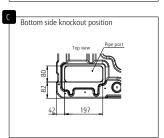
(Unit : mm) **8,10HP**











Outdoor units specifications

Space Saving Combinations

			HP	8	10	12	14	16	20	22	24	
Rating Capa	city range		Btu/h	72,000	90,000	108,000	126,000	144,000	180,000	198,000	216,000	
			Ton	6.0	7.5	9.0	10.5	12.0	15.0	16.5	18.0	
Model name				AJS072LNTCH	AJS090LNTCH	AJS108LNTCH	AJS126LNTCH	AJS144LNTCH	AJS180LNTCH	AJS198LNTCH	AJS216LNTCH	
Unit 1 Unit 2 Unit 3				AJS072LNTCH	AJS090LNTCH	AJS108LNTCH	AJS126LNTCH	AJS144LNTCH	AJS090LNTCH AJS090LNTCH	AJS126LNTCH AJS072LNTCH	AJS126LNTCH AJS090LNTCH	
Maximum Co	onnectable Ind	oor Unit		13	16	19	23	26	33	36	40	
Indoor unit con	nectable capacity	Cooling	kW	11.2-29.1	14-36.4	16.8-43.5	20-52	22.5-58.5	28-72.8	31.2-81.1	34-88.4	
Power source	e						3 phase, 380	0-415V, 60Hz				
		Cooling		22.4	28.0	33.5	40.0	45.0	56.0	62.4	68.0	
		Heating	kW	25.0	31.5	37.5	45.0	50.0	63.0	70.0	76.5	
	Capacity	Cooling	D4 //-	76000	95000	114000	135000	152000	190000	211000	230000	
		Heating	Btu/h	85000	107000	127000	152000	170000	214000	237000	259000	
	Innut naucen	Cooling	kW	5.20	7.28	8.96	10.96	13.01	14.56	16.16	18.24	
T1	Input power	Heating	KVV	5.17	7.25	8.65	11.17	13.63	14.50	16.34	18.42	
condition	Current	Cooling	^	9.2	12.0	15.0	17.7	20.7	-	-	-	
	Current	Heating	Α	9.2	12.2	14.6	18.2	21.5	-	-	-	
	EER	Cooling	W/W	4.31	3.85	3.74	3.65	3.46	3.85	3.86	3.73	
	COP	Heating	VV/VV	4.84	4.35	4.34	4.03	3.67	4.34	4.28	4.15	
	EER	Cooling	Btu/h/W	14.60	13.00	12.70	12.30	11.65	13.05	13.06	12.61	
	COP	Heating	BLU/II/VV	16.40	14.75	14.65	13.60	12.45	14.76	14.50	14.06	
	Capacity		kW	20.2	25.2	28.5	32	35.1	50.4	52.2	57.2	
	Capacity		Btu/h	68000	86000	97000	109000	119000	172000	177000	195000	
T3	Input power	Cooling	kW	6.73	9.20	9.34	10.70	11.82	18.40	17.43	19.90	
condition	Current	Cooling	Α	10.8	14.5	14.7	16.9	18.6	-	-	-	
	EER		W/W	3.00	2.74	3.05	2.99	2.97	2.74	2.99	2.87	
	EEK		Btu/h/W	10.10	9.30	10.35	10.15	10.05	9.35	10.15	9.80	
Power factor	r		%	90	92	92	92	92	-	-	-	
Air flow rate		High	m³/h	11100	11100	13000	13000	13700	11100×2	13000+11100	13000+11100	
Sound press	ura laval	Cooling	dB (A)	56	58	57	60	62	61	61	62	
Souriu press	ure tevet	Heating	UB (A)	58	59	60	62	64	62	63	64	
Maximum ex	cternal static p	ressure	Pa	82	82	82	82	82	82	82	82	
Compressor	motor output		kW	7.5	7.5	11	11	11	7.5×2	11.0+7.5	11.0+7.5	
Heat exchan	ger fin			Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	
		Height		1690	1690	1690	1690	1690	1690	1690	1690	
Dimensions		Width	mm	930	930	1240	1240	1240	930×2	1240+930	1240+930	
		Depth		765	765	765	765	765	765	765	765	
Weight			kg	255	255	279	279	279	255×2	279+255	279+255	
Refrigerant		Тур	oe	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	
Kenngerant		Charge	kg	11.7	11.7	11.8	11.8	11.8	11.7×2	11.8+11.7	11.8+11.7	
Connection	pipe diameter	Liquid	mm	12.70	12.70	12.70	12.70	12.70	15.88	15.88	15.88	
Connection	pipe diameter	Discharge Gas	111111	22.22	22.22	28.58	28.58	28.58	28.58	34.92	34.92	
Operating ra	inge	Cooling	°CDB	-15 to 52	-15 to 52	-15 to 52	-15 to 52	-15 to 52	-5 to 52	-5 to 52	-5 to 52	
operating ra	inge	Heating	CDD	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	

Energy Efficiency Combinations

				16	18	20	24	26	28	30	32
Rating Capac	city range		Btu/h	144,000	162,000	180,000	216,000	234,000	252,000	270,000	288,000
			Ton	12.0	13.5	15.0	18.0	19.5	21.0	22.5	24.0
Model name				AJS144LNTCHH	AJS162LNTCHH	AJS180LNTCHH	AJS216LNTCHH	AJS234LNTCHH	AJS252LNTCHH	AJS270LNTCHH	AJS288LNTCHH
Unit 1 Unit 2 Unit 3				AJS072LNTCH AJS072LNTCH	AJS090LNTCH AJS072LNTCH	AJS108LNTCH AJS072LNTCH	AJS072LNTCH AJS072LNTCH AJS072LNTCH	AJS090LNTCH AJS072LNTCH AJS072LNTCH	AJS108LNTCH AJS072LNTCH AJS072LNTCH	AJS126LNTCH AJS072LNTCH AJS072LNTCH	AJS108LNTCH AJS108LNTCH AJS072LNTCH
	nnectable Ind	nor Unit		26	29	33	39	43	46	50	52
	nectable capacity		kW	22.4-58.2	25-65	28-72.6	33.6-87.3	36.4-94.6	39.2-101.7	42.4-110.2	44.7-116.2
Power source	e	1			1		phase, 380-415V, 601			1	
		Cooling	kW	44.8 50	50.4	55.9	67.2	72.8	78.3	84.8	89.4
	Capacity	Heating			56.5	62.5	75.0	81.5	87.5	95.0	100.0
		Cooling Heating	Btu/h	152000 170000	171000 192000	190000 212000	228000 255000	247000 277000	266000 297000	287000 322000	304000 339000
		Cooling		170000	192000	212000 14.16	255000 15.60	17.68	19.36	322000 21.36	23.12
T1	Input power	Heating	kW	10.4	12.48	13.82	15.51	17.59	18.99	21.30	23.12
T1 condition		Cooling		10.34	12.42	13.02	- 13.51	- 17.59	10.99	21.51	-
condicion	Current	Heating	A		-	-	-	-	-	-	-
	EER	Cooling		4.31	4.04	3.95	4.31	4.12	4.04	3.97	3.87
	COP	Heating	W/W	4.84	4.55	4.52	4.84	4.63	4.61	4.42	4.45
	EER	Cooling		14.62	13.70	13.42	14.62	13.97	13.74	13.44	13.15
	COP	Heating	Btu/h/W	16.44	15.46	15.34	16.44	15.75	15.64	14.97	15.09
			kW	40.4	45.4	48.7	60.6	65.6	68.9	72.4	77.2
	Capacity		Btu/h	136000	154000	165000	204000	222000	233000	245000	262000
T3	Input power	Carlina	kW	13.46	15.93	16.07	20.19	22.66	22.80	24.16	25.41
condition	Current	Cooling	А	-	-	-	-	-	-	-	-
	EER	1	W/W	3.00	2.85	3.03	3.00	2.89	3.02	3.00	3.04
	EEK		Btu/h/W	10.1	9.67	10.27	10.10	9.80	10.22	10.14	10.31
Power factor			%	-	-	-	-	-	-	-	-
Air flow rate		High	m³/h	11100×2	11100×2	13000+11100	11100×3	11100×3	13000+11100×2	13000+11100×2	13000×2+11100
Sound pressu	ure level	Cooling	dB (A)	59	60	60	61	62	61	63	61
· ·		Heating		61	62	62	63	63	64	65	64
	ternal static p	ressure	Pa	82	82	82	82	82	82	82	82
	motor output		kW	7.5×2	7.5×2	11.0+7.5	7.5×3	7.5×3	11.0+7.5×2	11.0+7.5×2	11.0×2+7.5
Heat exchan	ger fin			Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
		Height		1690	1690	1690	1690	1690	1690	1690	1690
Dimensions		Width	mm	930×2	930×2	1240+930	930×3	930×3	1240+930×2	1240+930×2	1240×2+930
18/-1-b-		Depth	li e	765	765	765	765	765	765	765	765
Weight		T	kg	252×2 R410A	255×2 R410A	279+255 R410A	255×3	255×3	279+255×2	279+255×2	279×2+255 R410A
Refrigerant		Tyr Charge	kg kg	11.7×2	11.7×2	11.8+11.7	R410A 11.7×3	R410A 11.7×3	R410A 11.8+11.7×2	R410A 11.8+11.7×2	11.8×2+11.7
		Liquid	ку	11.7×2	11.7×2	11.8+11.7	11.7×3	11.7×3 15.88	11.8+11.7×2 15.88	11.8+11.7×2 19.05	11.8×2+11.7 19.05
Connection	oipe diameter	Discharge Gas	mm	28.58	15.88 28.58	28.58	34.92	34.92	34.92	34.92	34.92
		Cooling		-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52
Operating ra	nne	Heating	°CDB	-5 to 52 -20 to 21	-5 to 52	-5 to 52 -20 to 21	-5 to 52	-5 to 52 -20 to 21	-5 to 52	-5 to 52	-5 to 52 -20 to 21

26	28	30	32	34	36	38	40	42	48
234,000	252,000	270,000	288,000	306,000	324,000	342,000	360,000	378,000	432,000
19.5	21.0	22.5	24.0	25.5	27.0	28.5	30.0	31.5	36.0
AJS234LNTCH	AJS252LNTCHA	AJS270LNTCH	AJS288LNTCH	AJS306LNTCHA	AJS324LNTCHA	AJS342LNTCHA	AJS360LNTCH	AJS378LNTCH	AJS432LNTCH
AJS144LNTCH	AJS126LNTCH	AJS144LNTCH	AJS144LNTCH	AJS126LNTCH	AJS144LNTCH	AJS126LNTCH	AJS144LNTCH	AJS144LNTCH	AJS144LNTCH
AJS090LNTCH	AJS126LNTCH	AJS126LNTCH	AJS144LNTCH	AJS090LNTCH	AJS090LNTCH	AJS126LNTCH	AJS126LNTCH	AJS144LNTCH	AJS144LNTCH
				AJS090LNTCH	AJS090LNTCH	AJS090LNTCH	AJS090LNTCH	AJS090LNTCH	AJS144LNTCH
43	47	50	53	55	55	55	55	55	55
 36.5-94.9	40-104	42.5-110.5	45-117	48-124.8	50.5-131.3	54-140.4	56.5-146.9	59-153.4	67.5-175.5
				3 phase, 380	0-415V. 60Hz				
73.0	80.0	85.0	90.0	96.0	101.0	108.0	113.0	118.0	135.0
81.5	90.0	95.0	100.0	108.0	113.0	121.5	126.5	131.5	150.0
247000	270000	287000	304000	325000	342000	365000	382000	399000	456000
277000	304000	322000	340000	366000	384000	411000	429000	447000	510000
20.29	21.92	23.97	26.02	25.52	27.57	29.20	31.25	33.30	39.03
20.88	22.34	24.80	27.26	25.67	28.13	29.59	32.05	34.51	40.89
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
3.60	3.65	3.55	3.46	3.76	3.66	3.70	3.62	3.54	3.46
3.90	4.03	3.83	3.67	4.21	4.02	4.11	3.95	3.81	3.67
12.17	12.32	11.97	11.68	12.74	12.40	12.50	12.22	11.98	11.68
13.27	13.61	12.98	12.47	14.26	13.65	13.89	13.39	12.95	12.47
 60.3	64.0	67.1	70.2	82.4	85.5	89.2	92.3	95.4	105.3
205000	218000	228000	238000	281000	291000	304000	314000	324000	357000
21.02	21.40	22.52	23.64	29.10	30.22	30.60	31.72	32.84	35.46
-	-	-	-	-	-	-	-	-	-
2.87	2.99	2.98	2.97	2.83	2.83	2.92	2.91	2.90	2.97
 9.75	10.19	10.12	10.07	9.66	9.63	9.93	9.90	9.87	10.07
-	-	-	-	-	-	-	-	-	-
13700+11100	13000×2	13700+13000	13700×2	13000+11100×2	13700+11100×2	13000×2+11100	13700+13000+11100	13700×2+11100	13700×3
 63	63	64	65	64	65	64	65	66	67
 65	65	66	67	65	66	66	67	68	69
82	82	82	82	82	82	82	82	82	82
 11.0+7.5	11.0×2	11.0×2	11.0×2	11.0+7.5×2	11.0+7.5×2	11.0×2+7.5	11.0×2+7.5	11.0×2+7.5	11.0×3
 Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
1690	1690	1690	1690	1690	1690	1690	1690	1690	1690
 1240+930	1240×2	1240×2	1240×2	1240+930×2	1240+930×2	1240×2+930	1240×2+930	1240×2+930	1240×3
765	765	765	765	765	765	765	765	765	765
 279+255	279×2	279×2	279×2	279+255×2	279+255×2	279×2+255	279×2+255	279×2+255	279×3
 R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
 11.8+11.7	11.8×2	11.8×2	11.8×2	11.8+11.7×2	11.8+11.7×2	11.8+11.7×2	11.8+11.7×2	11.8+11.7×2	11.8×3
15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
 34.92	34.92	34.92	34.92	34.92	41.27	41.27	41.27	41.27	41.27
 -5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52
-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

34	36	38	40	42	44	46
306,000	324,000	342,000	360,000	378,000	396,000	414,000
25.5	27.0	28.5	30.0	31.5	33.0	34.5
AJS306LNTCHH	AJS324LNTCHH	AJS342LNTCHH	AJS360LNTCHH	AJS378LNTCHH	AJS396LNTCHH	AJS414LNTCHH
AJS126LNTCH	AJS108LNTCH	AJS126LNTCH	AJS126LNTCH	AJS126LNTCH	AJS144LNTCH	AJS144LNTCH
AJS108LNTCH	AJS108LNTCH	AJS108LNTCH	AJS126LNTCH	AJS126LNTCH	AJS126LNTCH	AJS144LNTCH
AJS072LNTCH	AJS108LNTCH	AJS108LNTCH	AJS108LNTCH	AJS126LNTCH	AJS126LNTCH	AJS126LNTCH
55	55	55	55	55	55	55
48-124.6	50.3-130.6	53.5-139.1	56.8-147.5	60-156	62.5-162.5	65-169
,			phase, 380-415V, 60H	łz		
95.9	100.5	107.0	113.5	120.0	125	130.0
107.5	112.5	120.0	127.5	135.0	140	145.0
325000	342000	363000	384000	405000	422000	439000
 364000	381000	406000	431000	456000	474000	492000
25.12	26.88	28.88	30.88	32.88	34.93	36.98
24.99	25.95	28.47	30.99	33.51	35.97	38.43
	-	-	-	-	-	-
-	-	-	-	-	-	-
3.82	3.74	3.70	3.68	3.65	3.58	3.52
4.30	4.34	4.21	4.11	4.03	3.89	3.77
12.94	12.72	12.57	12.44	12.32	12.08	11.87
14.57	14.68	14.26	13.91	13.61	13.18	12.80
80.7	85.5	89.0	92.5	96.0	99.1	102.2
274000	291000	303000	315000	327000	337000	347000
26.77	28.02	29.38	30.74	32.10	33.22	34.34
-	-	-	-	-	-	-
3.01	3.05	3.03	3.01	2.99	2.98	2.98
10.24	10.39	10.31	10.25	10.19	10.14	10.10
-	-	-	-	-	-	-
13000×2+11100	13000×3	13000×3	13000×3	13000×3	13700+13000×2	13700×2+13000
63	62	63	64	65	66	66
65	65	66	66	67	68	68
82	82	82	82	82	82	82
11.0×2+7.5	11.0×3	11.0×3	11.0×3	11.0×3	11.0×3	11.0×3
Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
1690	1690	1690	1690	1690	1690	1690
1240×2+930	1240×3	1240×3	1240×3	1240×3	1240×3	1240×3
765	765	765	765	765	765	765
279×2+255	279×3	279×3	279×3	279×3	275×3	279×3
R410A	R410A	R410A	R410A	R410A	R410A	R410A
11.8×2+11.7	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3
 19.05	19.05	19.05	19.05	19.05	19.05	19.05
 34.92	41.27	41.27	41.27	41.27	41.27	41.27
-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52
-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

Specifications are based on the Note: $\stackrel{\cdot}{\text{following conditions}}.$

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

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

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

VRF INDOOR UNITS

INDOOR UNITS LINE-UP

Compact Cassette

Circular Flow Cassette

Slim Duct / Slim Concealed Floor

Medium Static Pressure Duct

High Static Pressure Duct

Large Airflow Duct

Floor / Ceiling

Ceiling

Wall Mounted (EEV Internal)



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. 10 types, 55 models, Capacity range from 7,000 Btu/h to 96,000 Btu/h

Indoor units range

Indoor uni	ts range						
Capacity range		Btu/h	7,000	9,000	12,000	14,000	18,000
		kW	2.2	2.8	3.6	4.5	5.6
	Compact Cassette			AUVENOCATU	THE COLUMN TWO IS NOT	TALL MANAGEMENT	S.
Cassette	Circular Flow	(Slim type)		AUXB09GATH	AUXB12GATH	AUXB14GATH	AUXB18GATH AUXM018GTAH
	Circular rlow	(Large type)					AUXK018GTAH
	Slim Duct (With drain pump)		ARXD07GATH	ARXD09GATH	ARXD12GATH	ARXD14GATH	ARXD18GATH
	Medium Static Pressure Duct						
Duct	High Static Pressure Duct						
	Large Airflow Duct						ARXN18GATH*2
Floor	Floor (Same as Ceiling models)				ABHA12GATH	ABHA14GATH	ABHA18GATH
	Slim Concealed Floor (Same as Slim Duct models)		ARXD07GATH	ARXD09GATH	ARXD12GATH	ARXD14GATH	ARXD18GATH
Ceiling	Ceiling				ABHA12GATH	ABHA14GATH	ABHA18GATH
Wall Mounted	Wall Mounted		ACHAGTGATH	ACHAGGGATH	ASHAGGATI	ASHAAACATI	ACHMAGGATH
			ASHA07GATH	ASHA09GATH	ASHA12GATH	ASHA14GATH	ASHA18GATH

24,000	30,000	34,000	36,000	45,000	54,000	60,000	72,000	90,000	96,000
7.1	9.0	10.0	11.2	12.5	14.0	18.0	22.4	25.0	28.0
重									
AUXB24GATH									
2007									
AUXM024GTAH									
	1								
S. mark	S. 100A	S. 1994.	5.	57 100 4 1	S. 11				
AUXK024GTAH	AUXK030GTAH	AUXK034GTAH	AUXK036GTAH	AUXK045GTAH	AUXK054GTAH				
ARXD24GATH									
	COUCH)		CCCC.	CCCO.					
ARXA24GBTH	ARXA30GBTH		ARXA36GBTH	ARXA45GBTH					
			MI MI						
			ARXC36GBTH				ARXC72GBTH*1	ARXC90GBTH*1	ARXC96GATH*1
			AKAC30UBIH				ARXC72GBTH*1	ARXC90GB1H*1	AKXC90GATH*1
				M M.		m m.			
				ARKC45GATH		ARKC60GATH*1			
				7e 10 07.1111		711111000071111			
	THE REAL PROPERTY.								
ARXN24GATH*2	ARXN30GATH*2	ARXN34GATH*2	ARXN36GATH*2	ARXN45GATH*2					
ABHA24GATH									
(FILL)									
ARXD24GATH									
ABHA24GATH	ABHA30GATH		ABHA36GATH	ABHA45GATH	ABHA54GATH				
ASHA24GATH	ASHA30GATH								
			2.4.6.4.0.1.2.2.1.0.0.1.0.4						

^{*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.







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.







Previous turbo fan

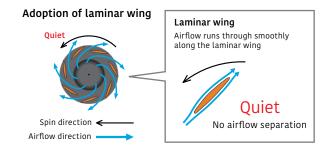
In the case of a previous fan, the air outlet range was narrow as the airflow moved to the motor side which meant the velocity of air passing through the heat exchanger was uneven.



Quiet quality

Optimization of wing form (laminar wing type) and wing number (7 blades each)

Designed by CFD-analysis (fluid) simulations



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.

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 f	rom 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: AUXB09GATH / AUXB12GATH / AUXB14GATH **AUXB18GATH / AUXB24GATH**



Specifications

Model name			AUXB09GATH	AUXB12GATH	AUXB14GATH	AUXB18GATH	AUXB24GATH						
Power source				'	Single phase, 220-240V,								
Canasity	Cooling	kW	2.8	3.6	4.5	5.6	7.1						
Capacity	Heating	KVV [3.2	4.1	5.0	6.3	8.0						
Input power		w	25	29	35	36	84						
	High		550 (153)	600 (167)	680 (189)	710 (197)	1,030 (286)						
Airflow rate	Med	m³/h (I/s)	450 (125)	530 (147)	590 (164)	580 (161)	830 (231)						
	Low	(,,-)	350 (97)	390 (108)	390 (108)	400 (111)	450 (125)						
	High		35	37	38	41	50						
Sound pressure level	Med	dB (A)	30	34	34	35	44						
	Low		25	27	27	27	30						
Dimensions (H	(W × D)	mm	245 × 570 × 570	245 × 570 × 570	245 × 570 × 570	245 × 570 × 570	245 × 570 × 570						
Weight		kg(lbs)	15 (33)	15 (33)	15 (33)	17 (37)	17 (37)						
Connection	Liquid (Flare)		6.35	6.35	6.35	9.52	9.52						
pipe diameter	Gas (Flare)	mm	12.70	12.70	12.70	15.88	15.88						
Drain hose diam	neter (I.D./O.D.)				25 / 32								
	Model na	me			UTG-UFGC-W								
Cassette Grille Dime	Dimensions (H×W×D)	mm	50×700×700										
Weight		kg(lbs)		2.6 (6)									

Note: Specifications are based on the following conditions.

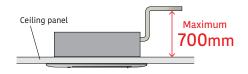
Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

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

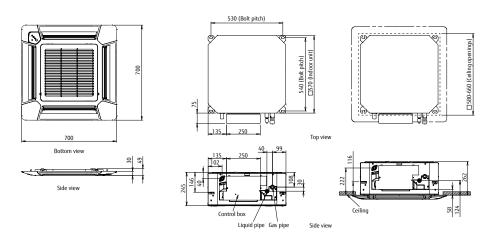
Pipe length: 7.5 m; Height difference between outdoor unit and indoor unit: 0 m. Voltage: 230 [V].

Optional parts

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



Dimensions (Unit: mm)









Unique Circular Flow design

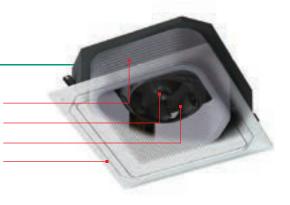
New Cassette type realizes Circular Flow to blow large airflow in 360° direction by mounting high performance DC fan motor, new turbo fan and unique seamless airflow louver design.

Ø7 mm high density heat exchanger

New DC fan motor

High efficient turbo fan

Seamless airflow louver



Uniform temperature air conditioning

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





Individual louver control

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

* Touch Panel Wired RC (UTY-RNRGZ5) and Central Remote Controller(UTY-DCGGZ3) only



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



Efficient air conditioning based on the t u o y a l m o o

Occupancy sensor increases more energy saving

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

* Touch Panel Wired RC (UTY-RNRGZ5) and Central Remote Controller(UTY-DCGGZ3) only



Human sensor (Optional)

2 modes can be selected

Auto saving

Power is saved while people are away.

Auto OFF

Operation stops after people go out.

Model: (Slim type)

AUXM018GTAH / AUXM024GTAH

ÀUXK018GTAH / AUXK024GTAH / AUXK030GTAH AUXK034GTAH / AUXK036GTAH / AUXK045GTAH

AUXK054GTAH



Large type AUXK018/024/030/034/036/045/054GTAH

Specifications

Model name			AUXM018 GTAH	AUXM024 GTAH	AUXK018 GTAH	AUXK024 GTAH	AUXK030 GTAH	AUXK034 GTAH	AUXK036 GTAH	AUXK045 GTAH	AUXK054 GTAH
Power source						Single	phase, 220-240\	/, 60Hz			
Cit.	Cooling	kW	5.6	7.1	5.6	7.1	9.0	10.0	11.2	12.5	14.0
Capacity	Heating	KVV	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
A1.0	Med	24	900	930	1,300	1,300	1,340	1,340	1,400	1,500	1,590
Airflow rate	Med-Low	m³/h	870	900	1,270	1,270	1,300	1,300	1,340	1,400	1,440
	Low		810	870	1,200	1,200	1,280	1,280	1,280	1,300	1,300
	Quiet		780	780	1,150	1,150	1,150	1,150	1,150	1,150	1,150
	High		33	35	38	38	39	39	41	44	47
	Med-High		32	33	37	37	38	38	40	42	45
Sound pressure	Med	dB	31	32	36	36	37	37	38	40	42
level	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	288×840×840
Weight		kg	24.0	24.5	26.5	26.5	29.5	29.5	29.5	29.5	29.5
Connection	Liquid (Flare)		6.35	9.52	6.35	9.52	9.52	9.52	9.52	9.52	9.52
pipe diameter	Gas (Flare)	mm	12.70	15.88	12.70	15.88	15.88	15.88	15.88	15.88	15.88
Drain hose diam	neter (I.D./O.D.)						25 / 32				
	Model na	me				UTG-	JKGD-W/UTG-UI	(GA-B			
Cassette Grille	Dimensions (H×W×D)	mm					53×950×950				
	Weight	kg					6.0				

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

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

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

pipe diameter should be Ø19.05.

Optional parts

Human Sensor Kit: UTY-SHZXC Wide Panel: LITG-AKXA-W

UTG-BKXA-W Panel Spacer:

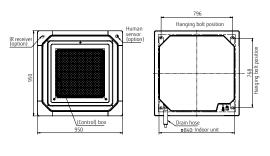
Cassette Grille: UTG-UKGD-W

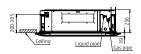
UTG-UKGA-B IR Receiver Unit: UTY-LBHXD

Air Outlet Shutter Plate: Insulation Kit for High Humidity: UTZ-KXRA

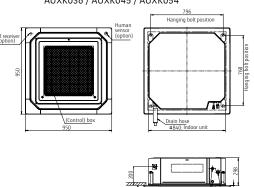
 $\textbf{Dimensions} \hspace{0.1cm} \text{(Unit: mm)}$

Models: AUXM018 / AUXM024

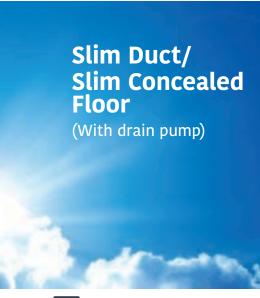




Models: AUXK018 / AUXK024 / AUXK030 / AUXK034 AUXK036 / AUXK045 / AUXK054



sag, L

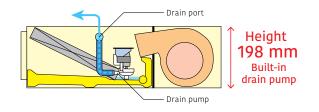






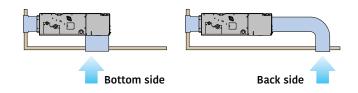
Slim design

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



Air-intake

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



Flexible installation

Ceiling concealed















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.

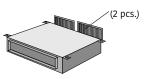


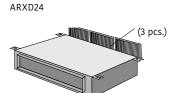


*24 model is 0 to 50 Pa

Filter (Accessory)

ARXD07 / 09 / 12 / 14 / 18





Model: ARXD07GATH / ARXD09GATH / ARXD12GATH ARXD14GATH / ARXD18GATH / ARXD24GATH







ARXD18GATH ARXD07/09/12/14GATH

> Slim Concealed Floor



ARXD24GATH

Specifications

Model name		ARXD07GATH	ARXD09GATH	ARXD12GATH	ARXD14GATH	ARXD18GATH	ARXD24GATH	
Power source		Single phase, 220-240V, 60Hz						
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	I KVV	2.8	3.2	4.0	5.0	6.3	8.0
Input power		W	44	50	54	92	83	122
	High		550 (153)	600 (167)	600 (167)	800 (222)	940 (261)	1,330 (369)
Airflow rate	Med	m³/h (I/s)	490 (136)	550 (153)	510 (142)	710 (197)	840 (233)	1,240 (344)
	Low	(.,5)	440 (122)	480 (133)	450 (125)	610 (169)	750 (208)	1,100 (306)
Static pressure range		Pa	0 to 90	0 to 50				
Standard static pressure		Pa	25	25	25	25	25	25
	High		28	29	30	34	34	35
Sound pressure level	Med	dB (A)	25	26	27	32	32	32
tevet	Low		22	24	24	28	28	29
Dimensions (H × W × D)		mm	198 × 700 × 620	198 × 700 × 620	198 × 700 × 620	198 × 700 × 620	198 × 900 × 620	198 × 1,100 × 620
Weight		kg(lbs)	17 (37)	17 (37)	18 (40)	18 (40)	22 (48)	26 (57)
Connection pipe diameter	Liquid (Flare)		6.35	6.35	6.35	6.35	9.52	9.52
	Gas (Flare)	mm	12.70	12.70	12.70	12.70	15.88	15.88
Drain hose diameter (I.D./O.D.)		25 / 32						

Note: Specifications are based on the following conditions.

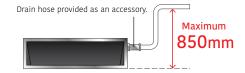
Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB. Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB. Pipe length: 7.5 m; Height difference between outdoor unit and indoor unit: 0 m. Voltage: 230 [V].

Optional parts

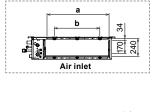
Auto louvre grille kit: UTD-GXTA-W (for ARXD07 - 14)

UTD-GXTB-W (for ARXD18) UTD-GXTC-W (for ARXD24)

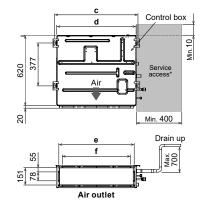
Remote Sensor Unit: UTY-XSZX IR Receiver Unit : UTB-YWC



$\textbf{Dimensions} \hspace{0.1cm} \text{(Unit: mm)}$

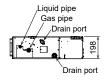






	ARXD07-14 GATH	ARXD18 GATH	ARXD24 GATH
а	574	774	974
b	P200×2=400	P200×3=600	P200x4=800
С	734	934	1,134
d	700	900	1,100
е	650	850	1,050
f	P100×6=600	P100×8=800	P100×10=1,000

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



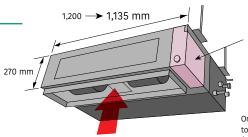






Slim & Compact design

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.

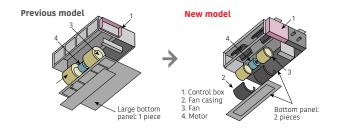


Control box is now included as part of the main chassis

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

Easy maintenance

See below for the case of rear suction type



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

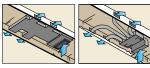
Installation styles

Embedded in Ceiling

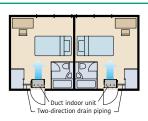




Hanging from Ceiling



Two-direction drain piping



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

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



Model: ARXA24GBTH / ARXA30GBTH ARXA36GBTH / ARXA45GBTH



Specifications

Model name			ARXA24GBTH	ARXA30GBTH	ARXA36GBTH	ARXA45GBTH
Power source		Single phase, 220-240V, 60Hz				
Capacity	Cooling	kW	7.1	9.0	11.2	12.5
	Heating	1 KVV	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 (I/s)	990 (275)	1,280 (356)	1,600 (444)	1,860 (517)
	Low] ``` [840 (233)	1,150 (319)	1,470 (408)	1,640 (456)
Static pressure range		D-	30 to 150	30 to 150	30 to 150	30 to 150
Standard static pressure		Pa -	100	100	100	100
	High		31	34	37	41
Sound pressure level	Med	dB (A)	27	32	35	38
tevet	Low		23	29	33	36
Dimensions (H × W × D)		mm	270 × 1,135 × 700	270 × 1,135 × 700	270 × 1,135 × 700	270 × 1,135 × 700
Weight		kg(lbs)	39 (86)	42 (93)	42 (93)	42 (93)
Connection pipe diameter	Liquid (Flare)		9.52	9.52	9.52	9.52
	Gas (Flare)	mm	15.88	15.88	19.05	19.05
Drain hose diameter (I.D./O.D.)			25 / 32			

Note: Specifications are based on the following conditions.

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

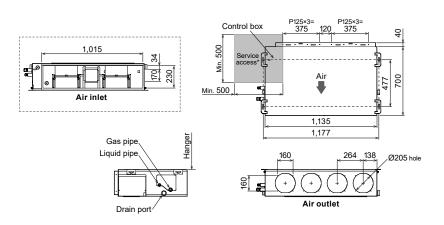
Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

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

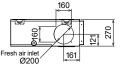
Optional parts

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

$\textbf{Dimensions} \hspace{0.1cm} \text{(Unit: mm)}$



*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).













(ARXC36 type)

(ARXC72 / 90 type)

(ARXC96 type)

Easy installation (Compact size & Lightweight)

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



(ARXC36 type)



(ARXC72 / 90 type)

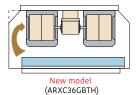


(Unit: mm)

Low noise

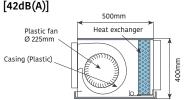
Models: ARXC36

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)



Low energy consumption by high efficiency DC fan motor

Improved motor efficiency from previous model.



(ARXC36 type)



(ARXC72 / 90 / 96 type)

Model: ARXC36GBTH ARXC72GBTH / ARXC90GBTH ARXC96GATH







Specifications

Model name Power source		ARXC36GBTH	ARXC72GBTH	ARXC90GBTH	ARXC96GATH	
		Single phase, 220-240V, 60Hz				
Capacity	Cooling	kW	11.2	22.4	25.0	28.0
	Heating	1 KVV	12.5	25.0	28.0	31.5
Input power		W	207	681	819	838
	High		1,990 (553)	3,900 (1,083)	4,300 (1,195)	4,850 (1,347)
Airflow rate	Med	m³/h (I/s)	1,680 (467)	3,300 (917)	4,000 (1,111)	4,250 (1,181)
	Low	1 (,,3)	1,330 (369)	3,000 (833)	3,500 (972)	3,600 (1,000)
Static pressure range		D-	0 to 200	0 to 300	0 to 300	0 to 300
Standard static pressure		Pa -	100	150	150	150
	High		42	47	48	48
Sound pressure level	Med	dB (A)	36	43	46	45
level	Low	1 ()	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 pipe diameter	Liquid		9.52 (Flare)	12.70 (Brazing)	12.70 (Brazing)	12.70 (Brazing)
	Gas	mm	19.05 (Flare)	22.22 (Brazing)	22.22 (Brazing)	22.22 (Brazing)
Drain hose diameter (I.D./O.D.)		1 [25/32			

Note: Specifications are based on the following conditions.

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

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

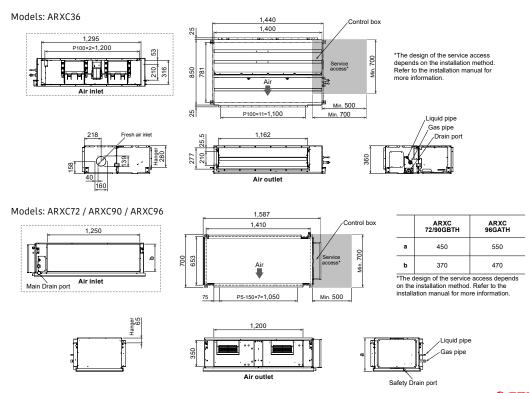
Pipe length: 7.5 m; Height difference between outdoor unit and indoor unit: 0 m. Voltage: 230 [V].

Optional parts

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

Remote Sensor Unit: UTY-XSZX

Dimensions (Unit: mm)



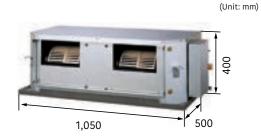






Easy installation (Compact size & Lightweight)

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



Static pressure selection

Models: ARKC45 / ARKC60

2 Types of static pressure mode are selectable.

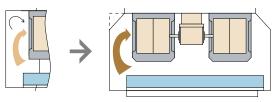




Low noise

Models: ARKC45 / ARKC60

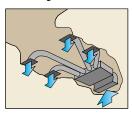
Cutting off the corners of the conventional indoor unit front panel and fan casing, has enabled less turbulent air flow. Low noise is realized by adopting a plastic case and a plastic fan.

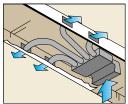


Previous model

New model

Installation styles





Model: ARKC45GATH / ARKC60GATH



Specifications

Model name			ARKC45GATH	ARKC60GATH	
Power source			Single phase, 220-240V, 60Hz		
Capacity	Cooling	kW	12.5	18.0	
	Heating	KVV	14.0	20.0	
Input power		W	715	730	
	High		3,500 (972)	3,500 (972)	
Airflow rate	Med	m³/h (I/s)	3,000 (833)	3,000 (833)	
	Low	(.,5)	2,460 (683)	2,460 (683)	
Static pressure range		D-	100 to 250	100 to 250	
Standard static pressure		Pa	100	100	
	High	dB (A)	49	49	
Sound pressure level	Med		45	45	
tevet	Low		42	42	
Dimensions (H × W × D)		mm	400 × 1,050 × 500	400 × 1,050 × 500	
Weight		kg(lbs)	46 (101)	46 (101)	
Connection pipe diameter	Liquid (Flare)		9.52 (Flare)	9.52 (Flare)	
	Gas (Flare)	mm	19.05 (Flare)	19.05 (Flare)	
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.

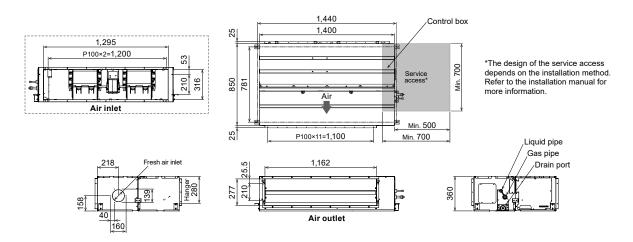
Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

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

Optional parts

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

$\textbf{Dimensions} \hspace{0.1cm} \text{(Unit: mm)}$



VRF Indoor units







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 range

50 to 250 Pa

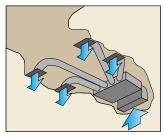
(30 / 34class)

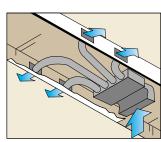
Static pressure range 50 to 300 Pa

(36 / 45class)



Installation styles





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



Specifications

Model name			ARXN18GATH	ARXN24GATH	ARXN30GATH	ARXN34GATH	ARXN36GATH	ARXN45GATH
Power source					Single phase, 2	220-240V, 50Hz	,	
Cit	Cooling	kW	5.6	7.1	9.0	10.0	11.2	12.5
Capacity	Heating	KVV	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	m³/h (I/s)	_	_	-	-	_	-
	Low	(.,5)	-	_	-	-	_	-
Static pressure range		-	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		35	37	40	43	45	45
Sound pressure level	Med	dB (A)	_	_	-	-	_	-
tevet	Low	(()	-	-	-	-	-	-
Dimensions (H >	W × D)	mm	450 × 1,587 × 700	450 × 1,587 × 700	450 × 1,587 × 700	450 × 1,587 × 700	450 × 1,587 × 700	450 × 1,587 × 700
Weight		kg(lbs)	84 (185)	84 (185)	84 (185)	84 (185)	84 (185)	84 (185)
Connection	Liquid (Flare)		9.52	9.52	9.52	9.52	9.52	9.52
pipe diameter	Gas (Flare)	mm	15.88	15.88	15.88	15.88	19.05	19.05
Drain hose 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.

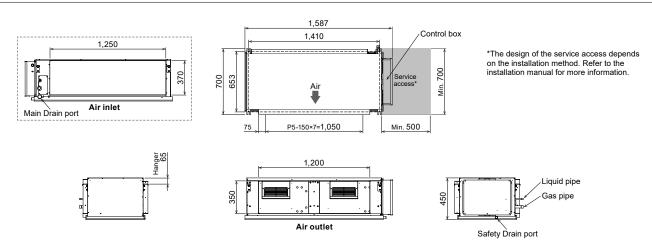
Pipe length: 7.5 m; Height difference between outdoor unit and indoor unit: 0 m. Voltage: 230 [V].

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

Optional parts

Remote Sensor Unit : UTY-XSZX

Dimensions (Unit: mm)



VRF Indoor units







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.





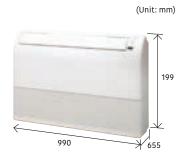
High power DC fan motor

- High power
- Wide rotation range
- High efficiency



Compact design

Symmetrical, slim and compact design.



Model: ABHA12GATH / ABHA14GATH ABHA18GATH / ABHA24GATH







Specifications

Model name			ABHA12GATH	ABHA14GATH	ABHA18GATH	ABHA24GATH	
Power source				Single phase, 2	220-240V, 60Hz		
Cit	Cooling	kW	3.6	4.5	5.6	7.1	
Capacity	Heating	KVV	4.0	5.0	6.3	8.0	
Input power		w	30	42	74	99	
Airflow rate	High		660 (183)	780 (216)	1,000 (277)	1,000 (277)	
	Med	m³/h (I/s)	570 (158)	640 (177)	720 (199)	820 (227)	
	Low	(,,,,	490 (136)	550 (152)	580 (161)	820 (227) 680 (188) 47	
	High		36	40	46	47	
Sound pressure level	Med	dB (A)	32	36	39	42	
tevet	Low		28	34	35	37	
vei (A)		mm	199 × 990 × 655	199 × 990 × 655	199 × 990 × 655	199 × 990 × 655	
Weight		kg(lbs)	25 (55)	26 (57)	26 (57)	37	
Connection	Liquid (Flare)		6.35	6.35	9.52	9.52	
pipe diameter	Gas (Flare)	mm	12.70	12.70	15.88	15.88	
Drain hose diam	eter (I.D./O.D.)			25	/ 32	•	

Note: Specifications are based on the following conditions.

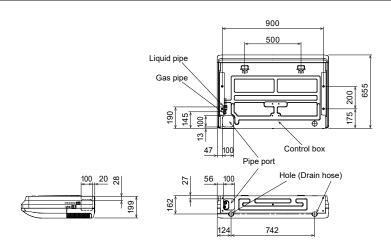
Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

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

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

Optional parts

Dimensions (Unit: mm)



VRF Indoor units

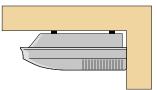






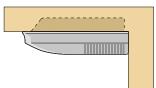
Installation

Open



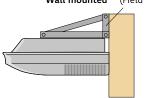
General installation pattern which suspends the indoor unit from the ceiling.





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

Wall mounted (Field Supplied)

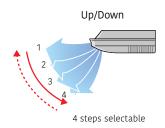


Installation which fixes the indoor unit to the wall by the use of wall brackets (Field supplied). This type of installation can be used when the ceiling space is insufficient.

Double auto swing and wide airflow

Auto airflow direction and auto swing

Left/Right 5 steps selectable



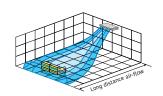
High power DC fan motor

- High power
- Wide rotation range
- High efficiency

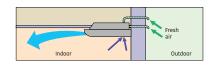


Long airflow

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



Fresh air intake



Slim & Compact design



Model: ABHA30GATH / ABHA36GATH ABHA45GATH / ABHA54GATH



Specifications

Model name			ABHA30GATH	ABHA36GATH	ABHA45GATH	ABHA54GATH	
Power source				Single phase, 2	220-240V, 60Hz		
Cit	Cooling	kW	9.0	11.2	12.5	14.0	
Capacity	Heating	KVV	10.0	12.5	14.0	16.0	
Input power		W	66	85	131	180	
Airflow rate	High		1,630 (452)	1,690 (469)	2,010 (558)	2,270 (629)	
	Med	m³/h (I/s)	1,370 (379)	1,400 (389)	1,600 (444)	1,780 (493)	
	Low	(,,,,	1,140 (316)	1,170 (325)	1,600 (444) 1,780 (493) 1,230 (342) 1,280 (355) 48 51		
	High		42	45	48	51	
	Med	dB (A)	38	38	42	45	
Sound pressure level	Low	(1)	33	34	35	36	
Dimensions (H ×	W × D)	mm	240 × 1,660 × 700	240 × 1,660 × 700	240 × 1,660 × 700		
Weight		kg(lbs)	46 (101)	48 (106)	48 (106)	48 (106)	
Connection	Liquid (Flare)		9.52	9.52	9.52	9.52	
pipe diameter	Gas (Flare)	mm	15.88	19.05	19.05	19.05	
Drain hose diam	eter (I.D./O.D.)			25	/ 32	•	

Note: Specifications are based on the following conditions.

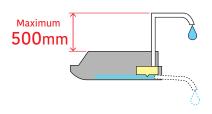
Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

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

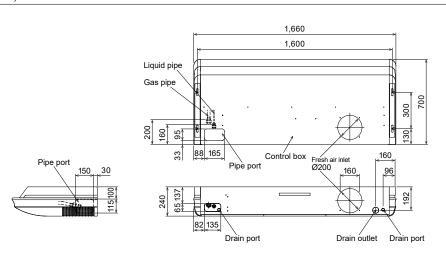
Pipe length: 7.5 m; Height difference between outdoor unit and indoor unit: 0 m. Voltage: 230 [V].

Optional parts

Drain Pump Unit: UTR-DPB24T Flange :



Dimensions (Unit: mm)









Filter features

High performance filter provides high quality air conditioning



Long-life* Ion Deodorization Filter

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

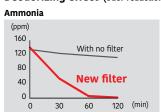
(*The filter can be used for approx. 3 years if it is washed under water to restore its surface action when it is dirty.)

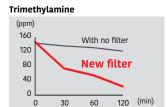


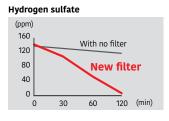
Apple-catechin Filter

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

Deodorizing effect (Odor reduction rate)





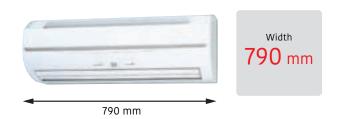


High performance filters have been thoroughly tested by the Environmental Sanitary Inspection Center using an advanced Deodorization Test.

Compact size

Powerful output even compact design

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



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.



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



Specifications

Model name			ASHA07GATH	ASHA09GATH	ASHA12GATH	ASHA14GATH
Power source				Single phase, 22	20-240V, 60Hz	
Cit	Cooling	1-10/	2.2	2.8	3.6	4.5
сараспу	Heating	KVV	2.8	3.2	4.1	5.0
Input power		W	17	18	22	34
Airflow rate	High		490 (136)	500 (139)	560 (156)	670 (186)
	Med		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)	34 670 (186)
	High		35	36	39	44
Capacity	Med		33	33	35	37
	27 / 31* ¹	31	32			
Dimensions (H ×	W × D)	mm	275 × 790 × 215	275 × 790 × 215	275 × 790 × 215	275 × 790 × 215
Weight		kg(lbs)	9 (20)	9 (20)	9 (20)	9 (20)
Connection	Liquid (Flare)		6.35	6.35	6.35	6.35
pipe diameter	Gas (Flare)	mm	12.70	12.70	12.70	12.70
Drain hose diam	eter (I.D./O.D.)			13.8 / 15.8	to 16.7	·

Note: Specifications are based on the following conditions.

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

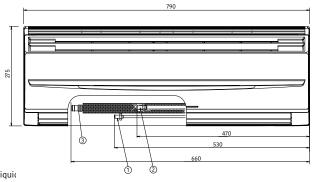
Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

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

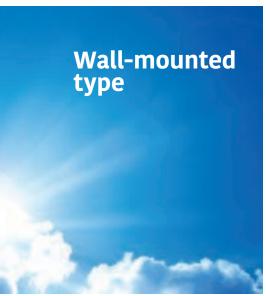
 ${}^{\star}{}1$: This value is under cooling operation.

Optional parts

Dimensions (Unit: mm)



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

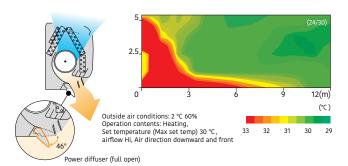




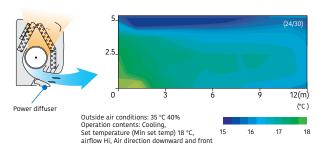


More comfort airflow by adopting power diffuser

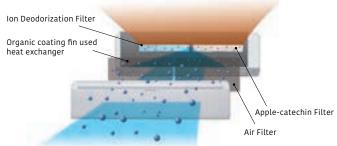
"Vertical airflow" provides powerful floor level heating



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



Air conditioner filter features



 $\label{thm:light} \mbox{High quality air conditioning by incorporation of high performance filter.}$



Ion Deodorization Filter

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

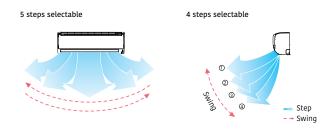


Apple-catechin Filter

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

Double auto swing

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



Model: ASHA18GATH / ASHA24GATH / ASHA30GATH



Specifications

Model name			ASHA18GATH	ASHA24GATH	ASHA30GATH
Power source			'	Single phase, 220-240V, 60Hz	
Cit	Cooling	kW	5.6	7.1	8.0
Capacity	Heating	KVV	6.3	8.0	9.0
Input power		w	32	60	91
	High		840 (233)	1,100 (305)	1,240 (343)
Airflow rate	Med	m³/h (I/s)	770 (213)	910 (252)	980 (271)
	Low	(1/3)	690 (191)	730 (202)	770 (213)
	High		41	48	52
Sound pressure level	Med	dB (A)	39	43	45
icvei	Low	(1)	35	35	35
Dimensions (H ×	W × D)	mm	320 × 998 × 228	320 × 998 × 228	320 × 998 × 228
Weight		kg(lbs)	15 (33)	15 (33)	15 (33)
Connection	Liquid (Flare)		9.52	9.52	9.52
pipe diameter	Gas (Flare)	mm	15.88	15.88	15.88
Drain hose diam	eter (I.D./O.D.)		-	12 / 16	

Note: Specifications are based on the following conditions.

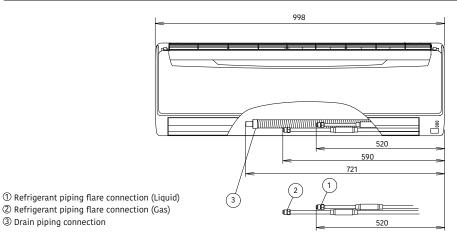
Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

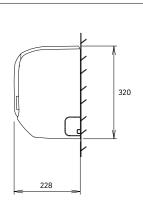
Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

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

Optional parts

Dimensions (Unit: mm)





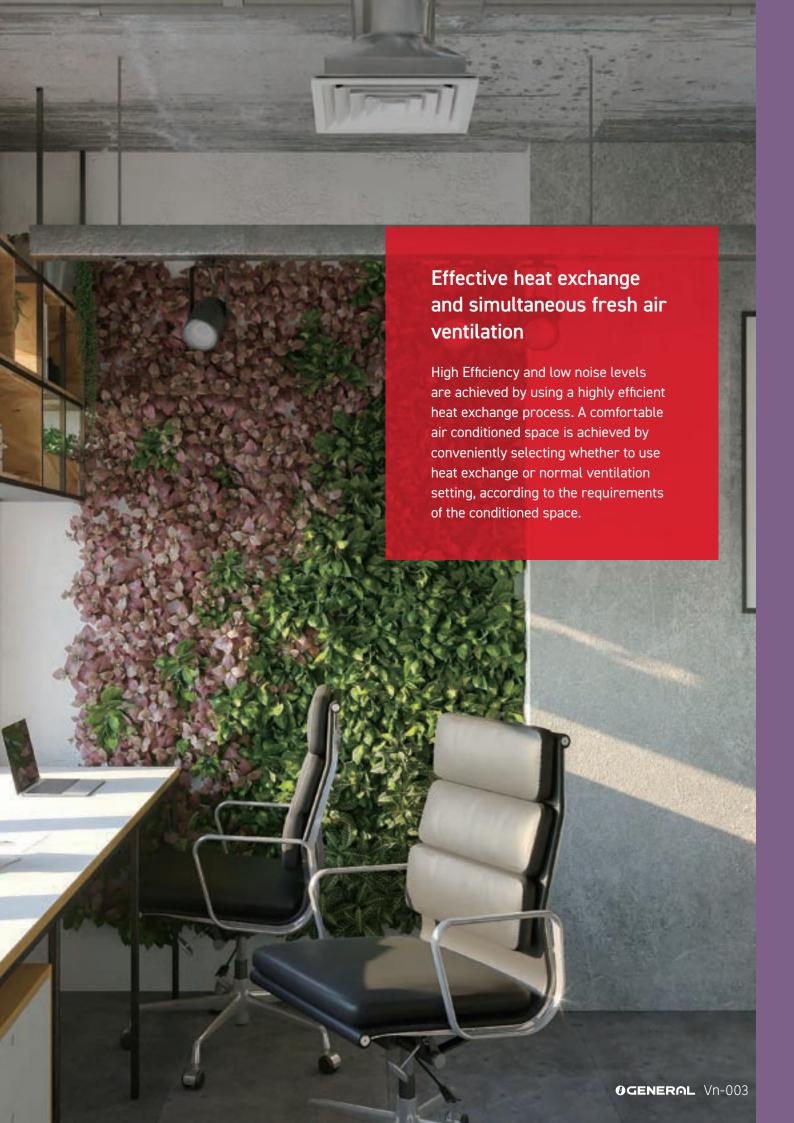
VENTILATION

Outdoor-air Processing Unit range

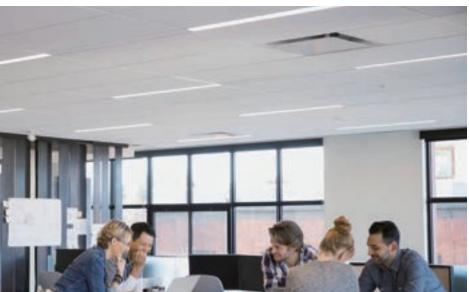
Airflow rate (m³/h)	1080	1680	2100
Model code	054	072	096
Outdoor-air Processing Unit			7
	ARXH054GTAH	ARXH072GTAH	ARXH096GTAH

DX Kit

for Air Handling Unit or Fresh Air Handling Unit application



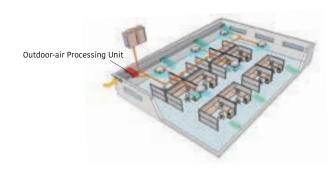


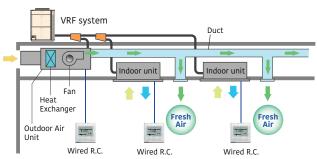




One VRF system can provide air conditioning and Fresh air supply at the same time

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.





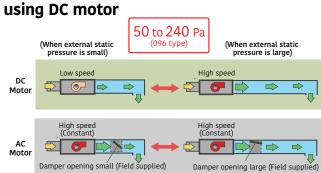
* Make sure the connected capacity is within the range of 50% to 100% of the outdoor unit capacity. In addition, if there are mixed connections with indoor units, make the Outdoor-air Processing Unit connection capacity 30% or less of the outdoor unit capacity.

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



Central Controller



 $^{^{\}star}$ The temperature setting is discharged air temperature setting. The air volume is set to a constant speed.

Model:

ARXH054GTAH / ARXH072GTAH / ARXH096GTAH







ARXH054

ARXH072

ARXH096

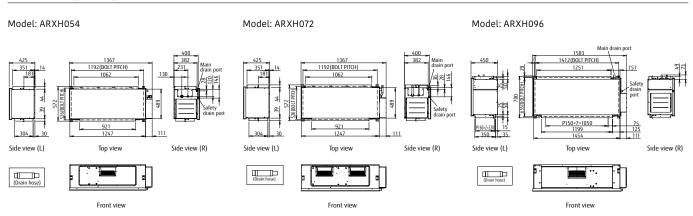
Specifications

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



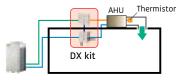
Ventilation



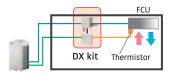




Multiple temperature sensors optimally control the air handling unit and fan coil unit.

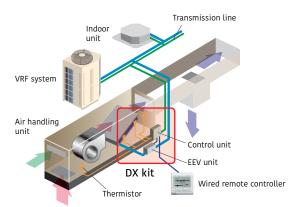


When connected to an Air handling unit, the temperature of supply air is controlled by a discharge air sensor.



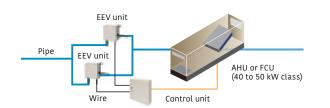
When connected to a fan coil unit, the room temperature is controlled by the discharge air sensor.

Application as part of a VRF system



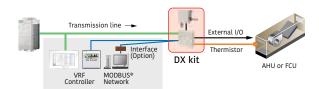
Supports a wide range of capacity classes

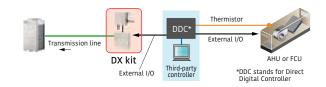
- Two EEV units can be connected in parallel to large-capacity units of up to 20 HP (50 kW). (UTP-LX180A separation tube required)
- Connectable capacity range: 5 kW to 50 kW



A variety of controls to match the application

• Central control using our VRF controllers or central management controllers





Summary of functions

Inputs

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

Outputs

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

Modbus Control

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

Installation requirements

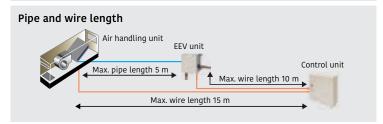
- Connectable VRF Series : All VRF
- Connectable DX Kit system capacity range: 50 to 100 % of the outdoor unit capacity
- Connectable DX Kit system capacity range with indoor units: 30 % or less of the outdoor unit capacity
- Max. wiring length from control unit: 10 m
- Max. piping length between EEV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

Connectable capacity Single connection Mixed connection DX kit Air handling unit r handling unit 50 to 100% of outdoor unit capacity Within 30% of total capacity 50 to 100% of outdoor unit capacity

[For 2EEV units connection (option)]

• Separation Tube : UTP-LX180A





Control unit: UTY-VDGX

EEV unit: UTP-VX30A/UTP-VX60A/UTP-VX90A



Specifications

Specification	DIIS												
EEV unit				UTP-VX30A			UTP-VX60A		UTP-\	/X90A	UTP-V	X90A×2	
Power source		V/Ø/Hz					230/	1/50					
Connectable ca	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	kW	5.6 (5.1-5.9)	6.3 (6.0-7.1)	8.0 (7.2-9.0)	10.0 (9.1-11.1)	12.5 (11.2-13.2)	14.0 (13.3-18.0)	22.4 (18.1-23.7)	25.0 (23.8-28.0)	40.0 (28.1-44.7)	50.4 (44.8-50.4)	
	Heating		6.3 (5.7-6.7)	7.1 (6.8-8.0)	9.0 (8.1-10.0)	11.2 (10.1-12.4)	14.0 (12.5-15.0)	16.0 (15.1-20.0)	25.0 (20.1-26.5)	28.0 (26.6-31.5)	45.0 (31.6-49.9)	56.5 (50.0-56.5)	
Airflow Rate(Re	ference value)	m³/h	1,060	1,200	1,520	1,600	2,000	2,240	3,560	4,000	6,400	8,000	
Dimensions (H	(W × D)	mm				160 × 2	20 × 90				(160 × 22	0 × 90)× 2	
Weight	Weight kg 2			2	2 × 2								
Connection pipe diameter	Liquid	mm	9.52	9.52	9.52	9.52	9.52	9.52	12.70	12.70	12.70	12.70	

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

Note: Specifications are based on the following conditions.

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

VRF CONTROL SYSTEMS

CONTROL SYSTEM OVERVIEW

BEST CONTROL SOLUTION FOR EACH PROPERTY

COMPARISON TABLE OF CONTROLLERS

Individual Controller

Centralized Controller

Converter / Adaptor



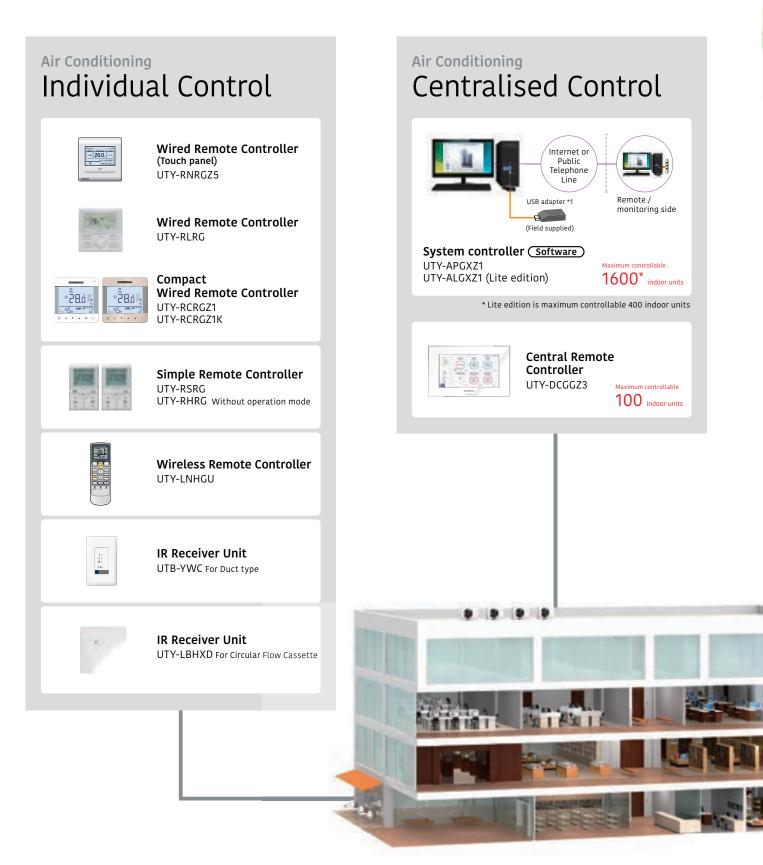
User friendly control system provides individual control to centralized control

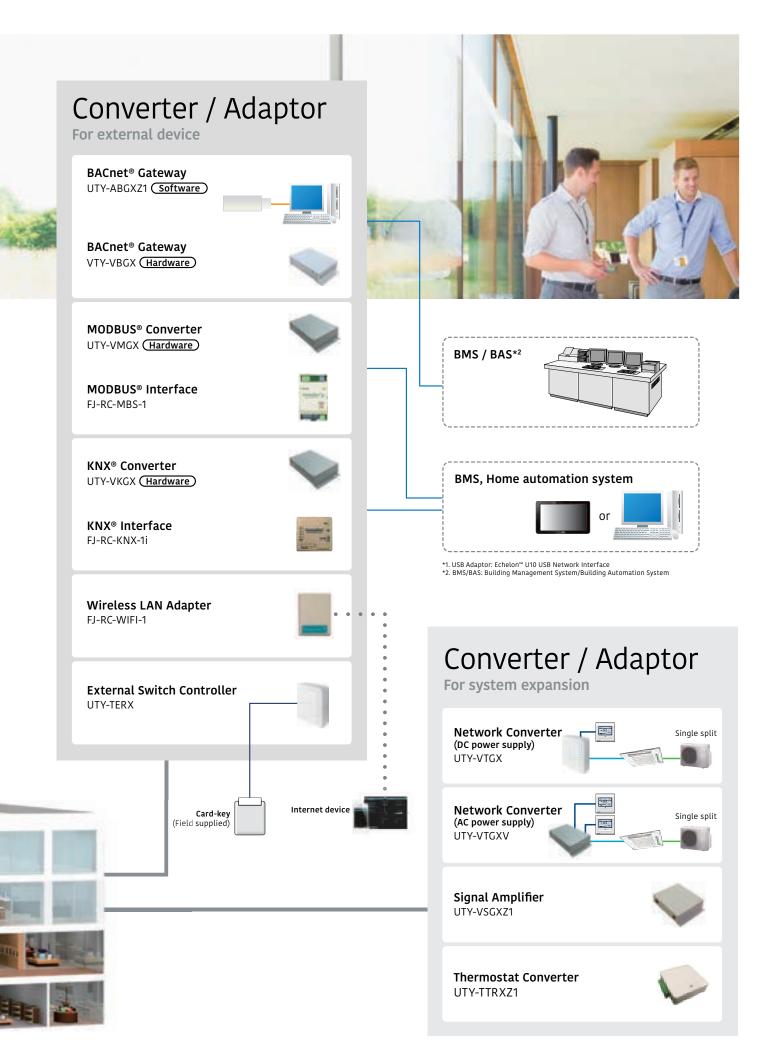
The VRF control system can perform air conditioning control of individual room, centralized control by floor or by building, or centralized energy saving air conditioning control for large buildings.

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.

CONTROL SYSTEM OVERVIEW

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





BEST CONTROL SOLUTION FOR EACH PROPERTY

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

SHOP

Туре	Individual Control	Centraliz	ed Control	Integrating Cor	ntrol (Interface)
	-288. -288.	1 (44) 1 (48)	= 0	*	*
	Wired Remote Controller	Central Remote Controller	System Controller	MODBUS® Converter	KNX° Convertor
	UTY-RNRGZ5, UTY-RLRG UTY-RCRGZ1, UTY-RCRGZ1K	UTY-DCGGZ3	UTY-APGXZ1, UTY-ALGXZ1	UTY-VMGX	UTY-VKGX
Automatic control of A/C (Schedule timer, Weekly timer etc.)	•	•	•		
Limited control for staff (RC Prohibition, Room temp set point limitation etc.)		•	•	•	•
Group Control		•	•		
Advanced Energy Saving (Peak cut, Indoor unit lead lag operation etc.)			•		
Remote Management			•		
Manage multiple sites			•		
Monitor energy consumption			•		
Control third party products			•		
Integrate FGL A/C into BMS				•	•

HOTEL

Туре	Ind	lividual Control		Centralize	ed Control		Integrating Co.	ntrol (Interface)	
	read read read read read read read read				 [*		(interface)	ı
	Wired Remote Controller	Simple Remote Controller	Wireless Remote Controller	Central Remote Controller	System Controller	BACnet® Gateway	MODBUS® Converter	KNX® Convertor	External Switch Controller
	UTY-RNRGZ5, UTY-RLRG UTY-RCRGZ1, UTY-RCRGZ1K	UTY-RSRG, UTY-RHRG	UTY-LNHGU	UTY-DCGGZ3	UTY-APGXZ1, UTY-ALGXZ1	UTY-ABGXZ1, UTY-VBGX	UTY-VMGX	UTY-VKGX	UTY-TERX
Local control for hotel guest	•	•	•						
Centralized A/C control for common space				•	•	•	•	•	
Limited control for hotel guests				•	•	•	•	•	
Remote Management					•				
Advanced Energy Saving (Peak cut, Indoor unit lead lag operation etc.)					•	•			
Monitor energy consumption					•				
Control third party products					•				
Integrate FGL A/C into BMS						•	•	•	
Interlock with window contact									•
Interlock with key-card									•

OFFICE

Туре	Ind	ividual Control		Centraliz	ed Control		Integrating Co	ntrol (Interface)	
	*2805 *2805		II			*	-	-	
Contract of the Contract of th	Wired Remote Controller	Simple Remote Controller	Wireless Remote Controller	Central Remote Controller	System Controller	BACnet® Gateway	MODBUS® Converter	KNX® Convertor	External Switch Controller
1000	UTY-RNRGZ5, UTY-RLRG UTY-RCRGZ1, UTY-RCRGZ1K	UTY-RSRG, UTY-RHRG	UTY-LNHGU	UTY-DCGGZ3	UTY-APGXZ1, UTY-ALGXZ1	UTY-ABGXZ1, UTY-VBGX	UTY-VMGX	UTY-VKGX	UTY-TERX
Local control for office staff	•	•	•	•					
Automatic control of A/C (Schedule timer, Weekly timer etc.)	•		•	•	•	•			
Centralized A/C control for management				•	•	•	•	•	
Limited control for office staff (RC Prohibition, Room temp set point limitation etc.)				•	•	•	•	•	
Advanced Energy Saving (Peak cut, Indoor unit lead lag operation etc.)					•	•			
Remote Management					•				
Energy Charge Apportionment					•	•			
Monitor energy consumption					•				
Control third party products					•				
Integrate FGL A/C into BMS						•	•	•	
Interlock with door contact									•
Interlock with human sensor for meeting room									•

COMPARISON TABLE OF CONTROLLERS

Item				BACH BACH	*280%	-2887
			Wired Remote Controller (Touch panel)	Wired Remote Controller	Compact Wired Remote Controller	Compact Wired Remote Controller
Model	Model name		UTY-RNRGZ5	UTY-RLRG	UTY-RCRGZ1	UTY-RCRGZ1
Max. cc	Max. controllable remote controller groups		1	1	1	1
Max. cc	ntrollable indoor	units	16	16	1	1
Max. cc	ntrollable groups		_	_	_	_
	On / Off		•	•	•	•
	Operation mode	setting	•	•	•	•
	Fan speed settin	g	•	•	•	•
ion	Room temp. sett	ing	•	•	•	•
Air conditioning control function	Room temp. set	point limitation	•	•	_	_
ol fu	Test operation		•	•	•	•
ntri	Up/down air dire	ction flap setting	•	•	•	•
)) b	Right/left air dir	ection flap setting	•	•	•	•
nino	Individual louve	control	•	-	•	•
ditic	Group setting		_	_	_	_
COD	RC prohibition		_	_	_	_
Air	Anti freeze setti	ng	•	_	•	•
	Set temp. auto r	eturn	•	•	_	_
	Economy mode s	etting	•	•	•	•
	Human sensor co	ontrol	•	_	_	_
	Error		•	•	•	•
	Defrosting		•	•	•	•
	Current time		•	•	_	_
	Day of the week		•	•	_	_
	R.C. prohibition		•	•	•	•
2	Address display		•	•	•	•
Display	Room temp		•	_	•	•
	Multi-language		•	_	_	_
	Summer time		•	_	_	_
	Name registration	on	•	_	_	_
	Backlight		•	_	•	•
	2D floor layout /	3D building display	_	_	_	-
	Refrigerant leak	age detection function	-	-	-	-
		Period	Week	Week	_	_
	Schedule timer	On/off, Temp, Mode, Low noise mode*5, Times per day	8	4	_	_
er	On/off timer		•	•	(OFF only)	• (OFF only)
Time	Sleep timer		_	_	-	_
· ·	Program timer		_	_	_	_
	Auto off timer		•	•	_	_
	Day off		•	•	_	_
	Min. unit of time	r setting (Minutes)	10 • 30	30	_	_
	Status monitorin	ig system	_	_	_	-
	Electricity charg	e apportionment	_	-	-	_
	Error history		•	•	_	_
	Emergency stop		_	-	-	_
Control	Remote manage	ment	_	_	_	_
Cor	Energy saving m	anagement	_	_	_	_
	E-mail notification	on for malfunction	_	_		_
	Key lock		Child lock	Child lock	_	-
	Low noise mode		-	_	_	_
	Low Horse Hlode					

				<u></u>	<u></u>
Simple Remote Controller	Simple Remote Controller*1	Wireless Remote Controller	Central Remote Controller	System Controller Lite Software	System Controller Software
UTY-RSRG	UTY-RHRG	UTY-LNHGU	UTY-DCGGZ3	UTY-ALGXZ1	UTY-APGXZ1
1	1	1	100	400	1600
16	16	16	100	400	1600
_	_	_	50	400	1600
•	•	•	•	•	•
•	_	•	•	•	•
•	•	•	•	•	•
•	•	•	•	•	•
•	•	_	•	•	•
•	•	•	-	_	_
•	•	•	•	•	•
_	_	•	•	•	•
_	-	-	● *4	_	_
-	-	-	•	•	•
-	-	-	•	•	•
-	-	-	•	•	•
-	-	-	_	-	_
_	_	•	•	•	•
	_	_	•	•	•
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_	_	•	•	•	•
		-	•	•	•
•	•	-	•	•	•
•	•	-	-	•	•
•	•	-	● *3	●*3	● *3
	-	-	•	•	•
	-	-	•	•	•
	-	-	•	•	•
•	•	_	•	-	
	-	_	-	-	•
	-	_	•	•	•
	_	-	Week	Year	Year
-	_	_	20	144	144
_	_	•	_	_	_
-	_	•	_	-	_
_	_	•	-	-	_
-	_	_	•	_	_
_	-	_	•	•	•
_	-	5	10	10	10
_		-	•	•	•
_	-	_	-	0	•
_	-	-	•	•	•
_	_	_	•*2	_	_
_	-	-	•	0	•
_		-	_	0	0
_		-	•	•	•
_	-	-	Password setting	Password setting	Password setting
-	-	_	_	•	•
*1 "Operation mode" setting is not available for this model.					

^{*1 &}quot;Operation mode" setting is not available for this model.
*3 This function is available only when using wired remote controller.

^{*2} This function is available only through external input control. *4 Equipped only with individual air volume batch reset.

^{*5} UTY-DCGGZ3 only

Wired remote controller (with touch panel)

UTY-RNRGZ



16 indoor units
up to
1 group

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

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

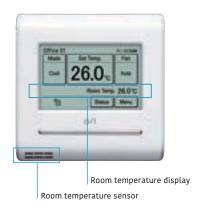
High performance and compact size

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



Accurate and comfortable control

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

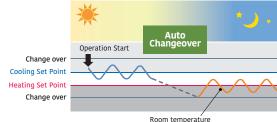


Various energy saving control

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.

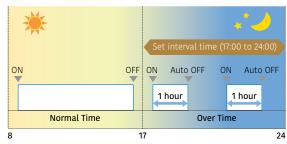
Cooling set temp. 27°C, Heating set temp. 26°C



Room temperature

Auto OFF timer

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



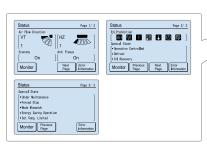
Ex.) At interval time hour (17:00 to 24:00) to prevent forgetting to turn off Set off time : 1 hour

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

Various energy saving control

Displays setting status and Limitations

• The remote controller settings can be easily checked





Summer Time display

• This function can be set easily from Menu screen



Child lock

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



Name Registration

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



Backlight

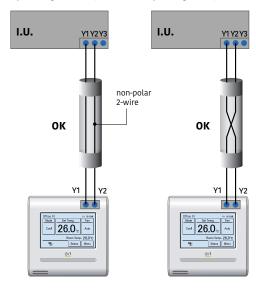
- Backlight enable easy operation in a darkened room.
- For the lighting time of Backlight, 30 or 60 seconds can be set.
- Backlight activates while the buttons are operated and goes off 30 or 60 seconds after the operation stops.



Simplified installation

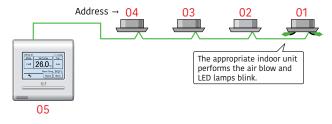
Uses non-polar 2-wire type

• 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



Specifications	specifications					
Model name		UTY-RNRGZ5				
Power Supply		DC 12V				
Dimensions (H x W x D)	mm	120 × 120 × 20.4				
Weight		220				

Wired remote controller

UTY-RLRO



16 indoor units
Up to
1 group

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

High performance and compact size

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



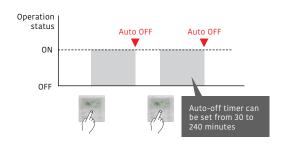
Visually intuitive operation

- 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.



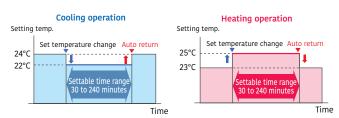
Auto-off timer

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



Set temperature auto return

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



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

Compact wired remote controller

UTY-RCRGZ1 / UTY-RCRGZ1K



UTY-RCRGZ1



UTY-RCRGZ1K

Up to

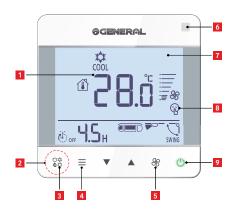
1 indoor units

1 group

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

Large screen and simple display

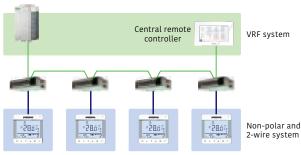
- · Although the size is compact, the screen is large
- Large letters makes it easy to see
- · Operation is simple and easy-to-understand
- Visible large letter
 Touch key (Frequently-used operation is placed on the direct button)
 Operation mode
 Menu
 Air flow
 Built in IR reciever
 LCD with backlight is clearly visible in the dark
 Easy-to-understand pictograph display
 LED is mounted for the ON/OFF key (Green light on when R.C. is turned on)



System overview

VRF connection

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



Compact 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

Model name		UTY-RCRGZ1	UTY-RCRGZ1K	
Power Supply		DC 12V		
Dimensions (H x W x D)	mm	86 × 8	6 × 44	
Weight	g	13	35	

Simple remote controller

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





UTY-RSRG

(Without operation mode)

16 indoor units Up to 1 group

Compact remote controller provides access to basic functions

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

Corresponding to various applications

• Vertical louver control:

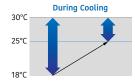
Vertical airflow direction can be adjusted for Duct types with auto louver and Cassette types, which are installed in hotels and conference rooms, can be adjusted.

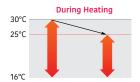




• Room temperature set point limitation:

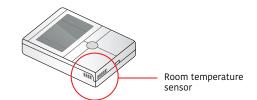
The Simple Remote Controller can manage to energy saving operation in small buildings without the central control unit.





• Built in room temperature sensor:

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



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

Wireless remote controller

UTY-LNHGU



16 indoor units

1 group

4 different daily timers

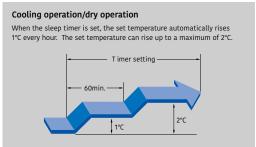
Simple and sophisticated operations with a choice of 4 daily timers

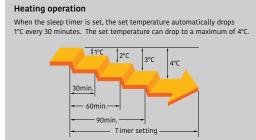
• A single controller controls up to 16 indoor units.

Built-in daily timer

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

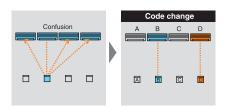
Program timer: The program timer operates the ON and OFF timer once within a 24 hour period. **Sleep timer:** The sleep timer function automatically corrects the set temperature according to the time setting to prevent excessive cooling or heating during sleep hours.





Easy installation and operation

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

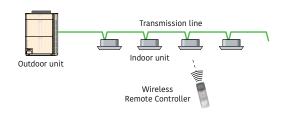


Wide and precise



Address setting

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



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

IR receiver unit for duct type

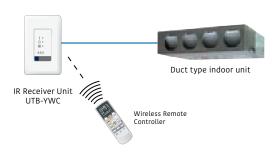
UTB-YW0

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.

Wiring connection



Specifications

< Wireless Remote Controller >

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	

IR receiver unit for Cassette

UTY-LBHXD

Cassette type indoor unit can be controlled with Wireless Remote Controller

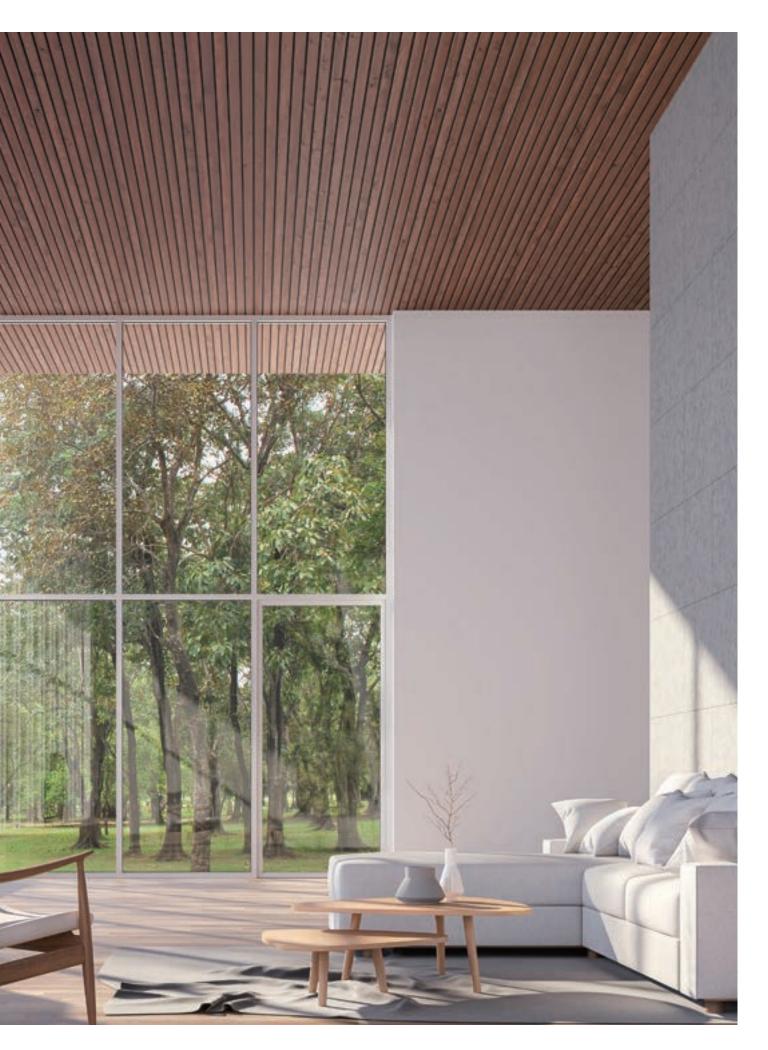
Wiring connection



Specifications

< Wireless Remote Controller >

Model name		UTY-LBHXD	
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	193.9 × 193.9 × 31.2	
Weight	g	140	



Central remote controller

UTY-DCGGZ3



100 indoor units
up to
group

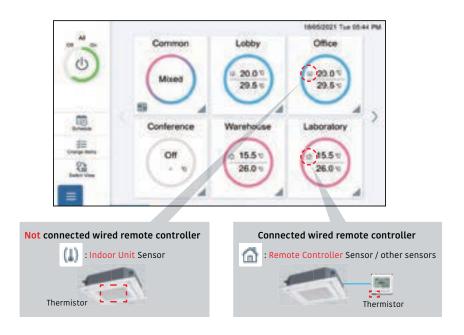
For tenants in small to midsize commercial premises

- 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.



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 each Groups



50 Remote Controller Groups Display

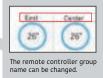


Manage & Monitor
by 50 Remote Controller Groups

Remote Controller Groups Rename

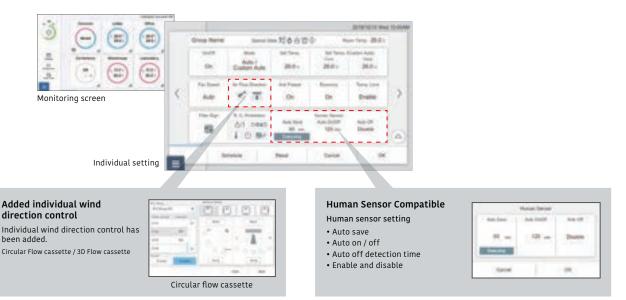
The remote controller group names can be changed. Users can know easily where the air conditioning is located by changing the remote controller group names.





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.





Trouble support function

Display error details

Display descriptive explanation when an error occurs



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.

Remote Management

Annual schedule

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





low noise schedule

Low noise operation of outdoor units can be scheduled.





Automatic return to set temperature

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

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

System controller

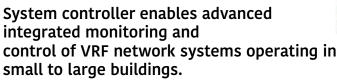
UTY-APGXZ1 Software

Up to

4 VRF network systems

400 outdoor units

1,600 indoor units



- 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

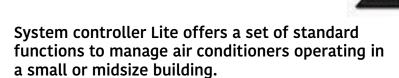
IITV-ALCY71 (Software)

Up to

1 VRF network systems

100 outdoor units

400 indoor units

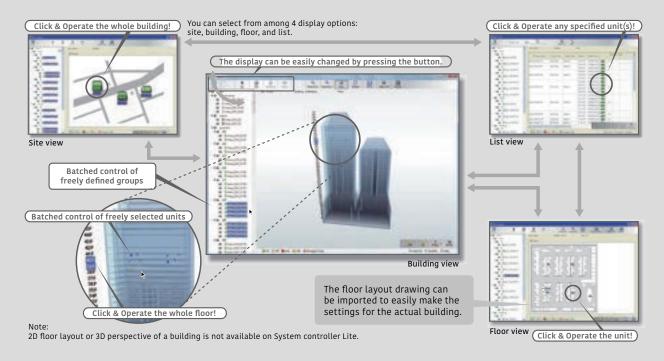


- Up to 400 indoor units and 100 outdoor units on a VRF network system can be controlled.
- In addition to precise air conditioning control, a variety of applications are available as options to offer a wider range of control.
- Supports 7 languages: Chinese, English, French, German, Polish, Russian,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

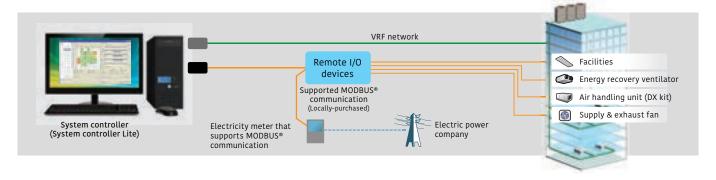




3rd party devices connected by Modbus can be controlled.

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.
- \bullet Low noise operation of outdoor units can be scheduled.



Wide-ranging control of indoor and outdoor units

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

Remote controller prohibition

Prohibits the operation mode, temperature setting, or $\ensuremath{\mathsf{ON/OFF}}$ 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

.atad ega mid

Automatic clock adjustment

Time can be set for all controllers in batch automatically.

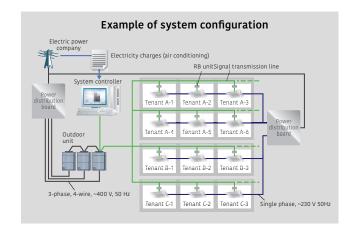
Electricity charge apportionment

Standard on System controller
Option System controller Lite UTY-PLGXA2

Electricity charge apportionment method

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

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



VRF Control Systems Centralized Controller

Features: System controller / System controller lite

Remote monitoring management

Standard on System controller
Option System controller Lite UTY-PLGXR2

The System controller can be used on site or remotely over networks for remote central control.

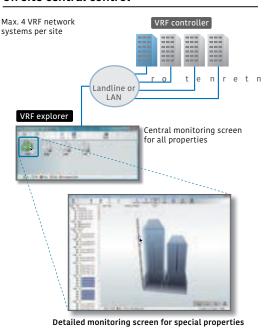
The System controller requires 2 software programs working together: The VRF controller runs on site and communicates with the VRF system;

The VRF explorer, which runs at a remote location, provides a user interface and communicates with the VRF controller.

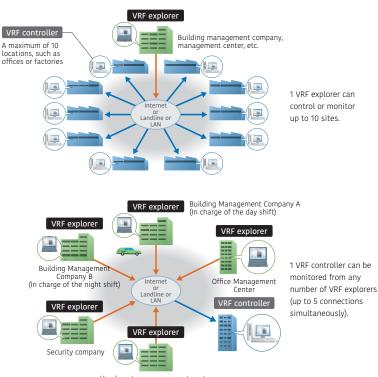
The VRF controller and the VRF explorer run on a single computer or on different computers connected on a network.

A computer running VRF explorer can centrally control up to 10 VRF system sites having up to 20 buildings each.

On site central control



Remote central control



Headquarters management center

Energy-saving management

Option System controller UTY-PEGXZ1
Option System controller Lite UTY-PLGXE2

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



Main screen for energy-saving management

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

Indoor unit rotation

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

Peak-cut mode

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

Capacity saving for outdoor unit

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

Summary of functions

			System o	ontroller	System controller Lite				
Functions			UTY-APGXZ1	Option UTY-PEGXZ1	UTY-ALGXZ1	Option UTY-PLGXR2	Option UTY-PLGXA2	Option UTY-PLGXE2	Option UTY-PLGXX
	Max. number of VRI	networks supported	4	-	1	-	-	-	-
	Max. number of ind	oor unit and remote controller groups per VRF network	400	-	400		-	-	-
		door units per VRF network	100	-		-	-	-	-
		oor units and remote controller groups per System controller	1600	-	1 400 100 100 400 100 10 10	-	-	-	-
		door units per System controller	400	-		-	-	-	-
	Multiple site displa		10	-		-	-	-	-
	Number of building		20	-	-	-	-	-	-
	Number of floors pe		200			-	-	-	-
	Number of floors pe		50		-	-	-	-	-
	3D graphical layout 2D graphical layout					-	-	-	-
	List display	view	•		_	-	-		-
	Tree display					-	_	-	-
	Group display			-	_	-	-	-	-
	Error notification						-	-	-
rror	Audible alarm			-		-	-	-	-
nanagement	E-mail notification	of errors		-	•	-	-	-	-
	Error history	<u> </u>	•	-		-	-	-	-
istory			•	-	_	-	-	-	-
			•	-	1 400 100 100 100 100 100 100 100 100 10	-	-	-	-
		ON/OFF	•	-		-	-	-	-
		Operation mode*	•	-	•	-	-	-	-
		Room temperature	•	-	•	-	-	-	-
	Error history Operation history Control history Control history Operation mode* Room temperature Fan speed Airflow direction Economy mode Setting temperature rianter control Individual management Other Other Annual Schedule Setting for a specific date ON/OFF per day ON/OFF per week Operation mode* Room temperature rianter in the properation of the p		•	-	•		-	-	-
	Individual control	Airflow direction	•	-	•		-	-	-
		Economy mode	•	UTY-PEGXZ1 -		-	-	-	
peration	Fan speed	•	-	-	-	-			
ontrol		•	-	-	-	-			
		Low noise setting of outdoor units	•	-	1 400 400 100 400 100 10 10	-	-	-	-
	to dividual	Remote controller prohibition	•	-	•	-	-	-	-
		Setting temperature range limitation	•	-	•	-	-	-	-
	management	Filter sign reset	•	-	•	-	-	-	-
	Othor		•	-	•	-	-	-	-
	Individual management Setting Filter si Other memory Pattern Annual Schedule	Pattern operations	•	-	•	-	-	-	-
			•	-	•	-	-	-	-
	Setting for a specifi	c date	•	-	•	-	-	-	-
			72	-		-	-	-	-
			504	-			-	-	-
	Day off		•	-		-	-	-	-
		ner setting (minutes)	10	-			-	-	-
	Weekly schedule fo	r low noise mode	•	-		-	-	-	-
	Web Operation		•	-	•	-	-	-	-
onitorina	Remote monitoring		•	-	-	•	-	-	-
nananament	Remote operation of		•	-	-	•	-	-	-
-	Remote function se		•	-	-	•	-	-	-
	Apportionment cha		•			-	•	-	-
	Tenant (block) setti		•			-	•	-	-
harao '		pportionment setting	•	-		-	•	-	-
nnortionment	Rated power consu		•	-		-	•	-	-
		ons for cooling and heating	-	_		-	•	-	-
	Electricity meter su		-				•	-	-
	Indoor unit rotation		-		-	-	-	•	-
	Peak cut control		-		-	-	-	•	-
	Capacity saving for		-		-	-	-	•	
	Record of energy-sa		-	_	-	-	-	•	-
	Information on ene		-	_	-	-	-	•	
	Power consumption		-		-	-	-	•	-
	Electricity meter su	pported				-	-	•	-
	Monitor		•			-	-	-	•
xternal devices			•	-		-	-	-	•
	Importing and expo		•	-		-	-	-	-
	Automatic clock adj		71	1		-	-	-	-
	Multiple language		7 languages			-	-	-	-
	Refrigerant leak de	tector	•	-		-	-	-	-
	Power shutdown		. •	-	•	-	-	I -	-

ullet : Available -: Not available

Computer requirements

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

	System controller	System controller Lite						
Operating system	• Microsoft Windows 10 Home (64-bit) • Microsoft Windows 10 Pro (64-bit) • Microsoft Windows 11 Home (64-bit) • Microsoft Windows 11 Pro (64-bit) Supported languages: English, Chinese, French, German, Russian, Spanish, and Polish							
CPU	Intel Core i3 2 GHz or higher							
Memory	• 4 GB or more (for Windows 10) • 8 GB or more (for Windows 11)							
HDD	40 GB or more of free space							
Displayed items	1,024 × 768 or higher resolution							
Interfaces	Ethernet port (for getting access to the Internet using LAN) or Modem (for getting access to the Internet using public telephone line) USB ports (Maximum of 5 ports) (Required only for the server PC that works as VRF controller) Maximum of 1 USB ports are required for WHITE-USB-KEY connection Maximum of 4 USB ports are required for Echelon U10 USB/U60-FT DIN Network Interface NOTE: Maximum number of required USB ports depends on the applicable system configuration.	Ethernet port (for getting access to the Internet using LAN) or Modem (for getting access to the Internet using public telephone line) USB ports (Maximum of 2 ports) (Required only for the server PC that works as VRI controller) 1 USB port is required for WHITE-USB-KEY connection 1 USB port is required for Echelon U10 USB/U60-FT DIN Network Interface NOTE: Maximum number of required USB ports depends on the applicable system configuration.						
Graphic accelerator	Microsoft DirectX 9.0c compatible	·						
Software	Adobe Reader 9.0 or later							

- Transmission adapter (Required for each VRF network):
 Echelon U10 USB Network Interface TP/FT-10 Channel (Model number: 75010R)
 Echelon U60-FT DIN Network Interface (Model number: 75060R-40)

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ACKING LIST?							
	For System	controller		For System controller Lite			
Туре		Option	System controller	Option			
- SF-	System controller	Energy manager	Lite	Remote access	Electricity charge apportionment	Energy saving	Centralized control
Model name	UTY-APGXZ1	UTY-PEGXZ1	UTY-ALGXZ1	UTY-PLGXR2	UTY-PLGXA2	UTY-PLGXE2	UTY-PLGXX2
White-USB-key	1	1	1	1	1	1	1

^{*1:} Software protection key to be inserted in a USB slot running System controller or System controller Lite.

System controller or System controller Lite may only run on a PC with a WHITE-USB-KEY. However, a WHITE-USB-KEY is not required for remote VRF explorer software.

BACnet® gateway UTY-ABGXZ1 Software



White-USB-key (Software Protection Key)



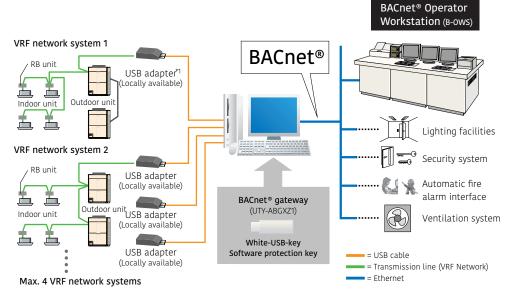
4 VRF network systems

400 outdoor units

1,600 indoor units

- It is possible to connect medium to large sized BMS to VRF network system via BACnet®, a global standard for open networks.
- A maximum of 1600 indoor units with 4 VRF network systems (a maximum of 400 indoor units & 100 outdoor units for one network system) can be connected to one BACnet® Gateway.
- It is possible to control or monitor VRF network system from BMS via BACnet® Gateway.
- Compatible with BACnet® (ANSI / ASHRAE-135-2014) application specific controller (B-ASC).
- Compatible with BACnet®/IP over Ethernet.
- Scheduling function, Alarm & Event functions as well as Electricity Change Apportionment function are provided in BACnet® Gateway.
- Connection between VRF network system to personal computer is possible via small U10 USB interface. However, both U10 USB interface & personal computer are field supplied items.
- Corresponds to 7 different languages, English, Chinese, French, German, Spanish, Russian, Polish.

Installation example



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

Computer requirements

	UTY-ABGXZ1
Operating system	Microsoft Windows 10 Home (64-bit) Microsoft Windows 10 Pro (64-bit) Microsoft Windows 11 Home (64-bit) Microsoft Windows 11 Home (64-bit) Microsoft Windows 11 Pro (64-bit) Supported languages: English, Chinese, French, German, Russian, Spanish, and Polish
CPU	Intel Core i3 2 GHz or higher
Memory	4 GB or more (for Windows 10) 8 GB or more (for Windows 11)
HDD	40 GB or more of free space
Display	1,024 × 768 or higher resolution
Interface	Ethernet port (for getting access to the Internet using LAN) or Modem (for getting access to the Internet using public telephone line) USB ports (Maximum of 5 ports) (Required only for the server PC that works as VRF controller) Maximum of 1 USB ports are required for WHITE-USB-KEY connection Maximum of 4 USB ports are required for Echelon U10 USB/U60-FT DIN Network Interface NOTE: Maximum number of required USB ports depends on the applicable system configuration.
Software	Adobe Reader 9.0 or later

- Transmission adapter (Required for each VRF network):
- Echelon U10 USB Network Interface TP/FT-10 Channel (Model number: 75010R) Echelon U60-FT DIN Network Interface (Model number: 75060R-40)

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Name and shape	Quantity	Application
White-USB-key (Software protection key with software)		Includes the software and manuals of tool for BACnet Gateway. Additionally, it works as the software protection key. Software protection key to be connected to an USB port on the PC that the BACnet Gateway is installed. BACnet Gateway runs only on a PC with this WHITE-USB-KEY.

BACnet® gateway





1 VRF network systems

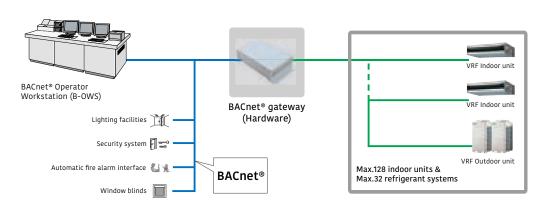
32 refrigerant systems

128 indoor units

Specifications

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

Installation example



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			
Number of controllable indo	or units	128			
Number of controllable refrigerant system		32			
Number of controllable VRF network		1			
Number of connectable units / one VRF etwork		4			

MODBUS® convertor for VRF

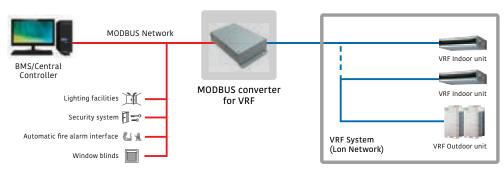
UTY-VMGX (Hardware)



128 indoor units

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.



* BMS: Building Management System

Specifications

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

MODBUS® Interface

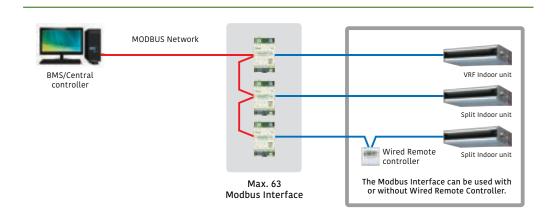
UTY-VKGX



1 indoor units

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

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



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

KNX® converter for VRF

UTY-VKGX (Hardware)



100 outdoor units 128 indoor units

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

- New KNX Convertor enables to connect central/home controller and FG VRF system.
- A maximum of 128 indoor units and 100 outdoor units can be connected to single KNX Convertor.



Specifications

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

KNX® Interface

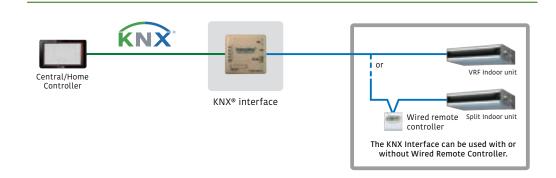
FJ-RC-KNX-1i



1 indoor units

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

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



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

Wireless LAN Adapter

FJ-RC-WIFI-1

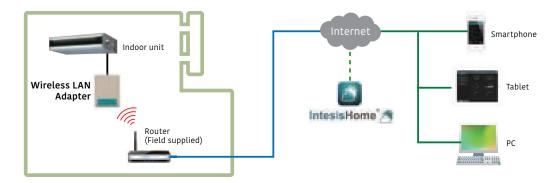


Up to

1 Single indoor unit



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



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



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

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

Network converter

UTY-VTGX / UTY-VTGXV



UTY-VTGX DC power supply type



UTY-VTGXV AC power supply type

16 single indoor units

1 group

Up to

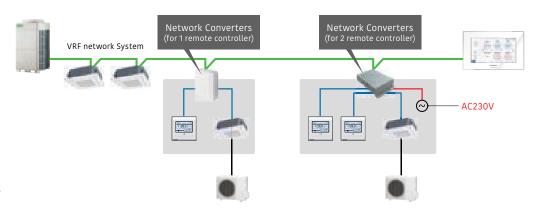
100 Network Converters

Compact remote controller provides access to basic functions

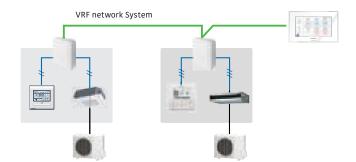
- The network converters are required when connecting single split system to VRF network system.
- Compact and light weight design
- Connectable to both types of 2-wire and 3-wire remote controllers

Installation example

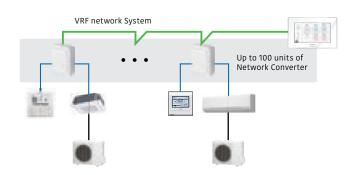
- 2 types of 1 remote controller type and 2 remote controllers type are available.
- Power supply (AC220-240V, 50/60Hz) is required for 2 remote controllers type.



• 2-wire and 3-wire type of the wired remote controller can be connectable.



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



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

External switch controller

UTY-TERX

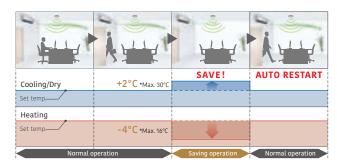


1 group

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

Installation example

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



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.

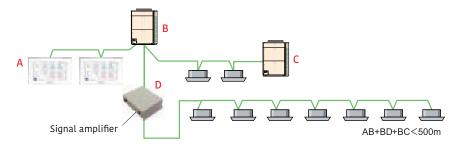
Signal amplifier





- 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



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

Thermostat Converter

UTY-TTRXZ1

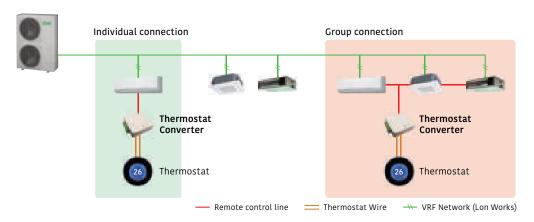


16 indoor unit

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.

Installation example



Function

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

Air Conditioning Control	Indoor unit Error notification*
Air Conditioning Control	Converter Error notification*

^{*}These function are displayed on the converter's PCB board.

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

VRF OPTION

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



Pressure sensor kit

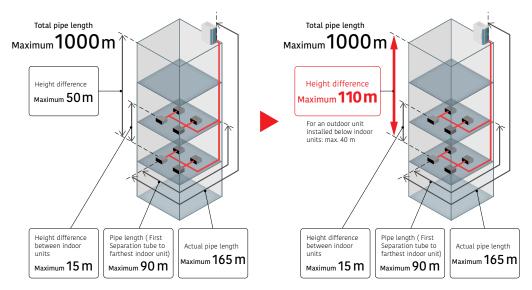
UTY-SPWX



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.)



System overview Transmission Outdoor unit (V-III Series) Pressure sensor kit UTY-SPWX Pressure sensor Refrigerant pipes 50 m to 110 m

Pressure sensor kit

Pressure sensor kit (Converter)	Refrigerant pressure sensor	Joint pipe

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

Auto louver grille kit utd-gxta-w / utd-gxtb-w / utd-gxtc-w

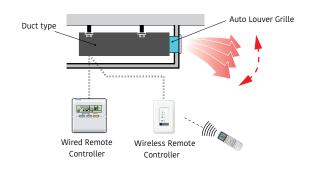


The optional clean-looking flat Auto louver grille kit blends into any interior and provides a comfortable airflow.

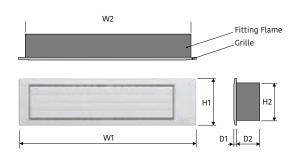


Flexible Control

- · 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



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

Model name			UTD-GXTA-W	UTD-GXTB-W	UTD-GXTC-W			
Applicable Indo	or Unit		ARXD07/09/12/14GATH	ARXD18GATH	ARXD24GATH			
Power source Connecting with Control box of indoor unit								
Fixing of Auto L	ouver Grille			Screw fixing to Flange or Square Duct				
Extension Squa	re Duct Limit		1.01	m (Max. duct length between indoor unit and Gri	ille)			
Dimensions (H	× W × D)	mm	180 × 683 × (84+9) 180 × 883 × (84+9) 180 × 1083 × (84+9)					
	Net	kg	2.0	2.5	3.0			
Weight	Gross		3.0	3.5	4.0			
Color				White				
Louver Motor				Stepping Motor				
Accessories				Fitting Flame, etc.				
	Cooling	°C	18 to 32					
Operating range	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.

CONTROL SYSTEM LIST

Controllers / Interface

ontrollers / I			Constitution	Indoor unit		-4			
		4-way Compact	Cassette Circul	ar Flow	Slim (With drain pump)	Medium Static Pressure			
ype		AUXB 09/12/14/18/24 GATH	AUXM018/024GTAH	AUXK 018/024/030/034/ 036/045/054 GTAH	ARXD 07/09/12/14/18/24 GATH	ARXA 24/30/36/45 GBTH			
Wired Remote	**************************************			UTY-RNRGZ5					
Remote Controller	(M*)		UTY-RLRG						
Compact Wired Remote Controller	*280; *380; *5.			UTY-RCRGZ1, UTY-RCRGZ1K					
Simple Remote Controller	2-wire type 3-wire type		UTY-RSI	RG, UTY-RHRG, UTY-RSKG, U	TY-RHKG				
Wireless Remote Controller				UTY-LNHG					
Central Remote Controller	=	UTY-DCGGZ3							
System Controller, System Controller Lite				UTY-APGXZ1, UTY-ALGXZ1					
IR Receiver Unit	£		UTY-I	BHXD	UTB-	ywc			
BACnet Gateway	10			UTY-ABGXZ1, UTY-VBGX					
MODBUS Converter	-			UTY-VMGX					
MODBUS Interface		FJ-RC-MBS-1			FJ-RC-I				
KNX Convertor	-		UTY-VKGX						
KNX Interface		FJ-RC-KNX-1i			FJ-RC-H				
Wireless LAN Interface		FJ-RC-WIFI-1			FJ-RC-\	WIFI-1			
External Switch Controller				UTY-TERX					
Network Converter for single split	DC Power AC Power Supply Type Supply Type			UTY-VTGX, UTY-VTGXV					
Thermostat Converter	0			UTY-TTRXZ1					

Indoor unit							
Duct High Static Pressure	Ceiling / Floor	Ceiling	Wall M -	ounted -			
ARXC36/72/90GBTH, ARKC45/60GATH ARKC45/60GATH	ABHA I 12/14/18/24 GATH	ABHA 30/36/45/54 GATH	ASHA 07/09/12/14 GATH	ASHA 18/24/30 GATH			
	UTY-R	NRGZ5					
	UTY-	RLRG					
	UTY-RCRGZ1,	UTY-RCRGZ1K					
	UTY-RSRG, UTY-RHRG	, UTY-RSKG, UTY-RHKG					
	UTY-	LNHG					
	UTY-D	CGGZ3					
	UTY-APGXZ1	, UTY-ALGXZ1					
UTB-YWC							
	UTY-ABGXZ	1, UTY-VBGX					
	UTY-	VMGX					
FJ-RC-MBS-1 (ARKC45/60GATH, ARXC96GATH only)			MBS-1				
	UTY-	vkgx					
FJ-RC-KNX-1i (ARKC45/60GATH, ARXC96GATH only)		FJ-RC-	KNX-1i				
FJ-RC-WIFI-1 (ARKC45/60GATH, ARXC96GATH only)	FJ-RC-WIFI-1 (ARKC45/60GATH, ARXC96GATH only)						
UTY-TERX							
UTY-VTGXV							
	UTY-TTRXZ1						

OPTIONAL PARTS LIST

Others

ners				10.4			
			Cassette	Indoor unit		ıct	
		4-way Compact	Circula	ar Flow	Slim (With drain pump)	Medium Static Pressure	
e		AUXB 09/12/14/18/24 GATH	AUXM018/024GTAH	AUXK 018/024/030/034/ 036/045/054 GTAH	ARXD 07/09/12/14/18/24 GATH	ARXA 24/30/36/45 GBTH	
Human Sensor Kit	6			SHZXC			
Remote Sensor Unit	New amenity space can be offered by installing the Remote sensor.				UTY-	XSZX	
Cassette Grille	UTG-UFGC-W UTG-UKGD-W UTG-UKGA-B	UTG-UFGC-W	UTG-U	KGD-W KGA-B			
Auto Louver Grille Kit					UTD-GXTA-W UTD-GXTB-W(18) UTD-GXTC-W(24)		
Long Life Filter						UTD-LF25NA	
Flange	0					UTD-SF045T UTD-RF204	
Drain Pump Unit	神震					UTZ-PX1NBA	
Wide Panel	Indoor unit 950 Panel 100 Panel (mm)		UTG-A	KXA-W			
Panel Spacer	(mm) 242 Panel spacer		UTG-B	KXA-W			
Air Outlet Shutter Plate	For Compact Cassette For Cassette	UTR-YDZB		YDZK			
Insulation for High Humidity	For Compact Cassette type / Cassette type	UTZ-KXGC	UTZ-KXRA				
Pressure Sensor Kit for V-III Series*	1						

High Static Pressure Ceiling / Floor Ceiling Tropica	Indoor unit Outdoor unit	or unit	Indoc		
ARXC36/72/90GBTH, ARXC96GATH A5/60GATH A5/60GA	or Ceiling - Wall Mounted V-III Tropical	Ceiling	Ceiling / Floor		
UTZ-PXINBA	ABHA ASHA ASHA AJS 30/36/45/54 07/09/12/14 18/24/30 072/090/ GATH GATH GATH LNTCH	ABHA 30/36/45/54 GATH	ABHA 12/14/18/24 GATH	ARKC 45/60GATH	ARXC36/72/90GBTH, ARXC96GATH
UTZ-PX1NBA					
					UTZ-PX1NBA
UTD-LF60KA(36/45/60)				(A(36/45/60)	UTD-LF60K
UTD-RF204	UTD-RF204	UTD-RF204			
UTR-DPB24T	UTR-DPB24T	UTR-DPB24T			
UTY-SPV	UTY-SPWX				

OPTIONAL PARTS

Controllers

For Individual Control

Wired Remote Controller (Touch Panel)

UTY-RNRGZ5



Wired Remote Controller

UTY-RLRG



Compact Wired Remote Controller

UTY-RCRGZ1



Compact Wired Remote Controller

UTY-RCRGZ1K



Simple Remote Controller

UTY-RSRG With operation mode



Simple Remote Controller

UTY-RHRG

Without operation mode



Wireless Remote Controller

UTY-LNHGU



IR Receiver Unit

UTB-YWC

For All Duct types except Large Airflow Duct



IR Receiver Unit

UTY-LBHXD

For Circular Flow Cassette type



Human Sensor Kit

UTY-SHZXC

For Circular Flow Cassette type



For Centralized Control

Central Remote Controller

UTY-DCGGZ3



System Controller Lite Software

UTY-ALGXZ1

WHITE-USB-KEY (Software Protection Key)



UTY-PLGXE2 UTY-PLGXX2



System Controller Software

UTY-APGXZ1

WHITE-USB-KEY (Software Protection Key)



UTY-PEGXZ1



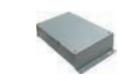
Converters / Adaptors

For External device / System expansion



BACnet® Gateway Hardware
UTY-VBGX





MODBUS® Interface FJ-RC-MBS-1

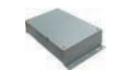


KNX® Converter Hardware for VRF
UTY-VKGX



KNX® Interface FJ-RC-KNX-1i







Wireless LAN Interface FJ-RC-WIFI-1



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



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



Network Converter for Group Remote Controller UTY-VGGXZ1



External Switch Controller UTY-TERX



Signal Amplifier UTY-VSGXZ1



Thermostat Converter UTY-TTRXZ1



Pressure Sensor Kit for V-III tropical Series* UTY-SPWX



OPTIONAL PARTS

Panels

For Cassette type

Cassette Grille

UTG-UFGD-W

For Compact Cassette type



Cassette Grille

UTG-UKGD-W

For Circular Flow Cassette type



Cassette Grille

UTG-UKGA-B

For Circular Flow Cassette type



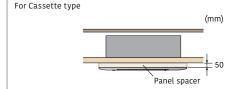
Others

For Cassette type

Wide Panel UTG-AKXA-W For Cassette type Indoor unit 950 Panel 600

Panel Spacer

UTG-BGYA-W



Insulation Kit for High Humidity

UTZ-KXRA

For Cassette type

UTZ-KXGC

For Compact Cassette type



Air Outlet Shutter Plate

UTR-YDZB

For Compact Cassette type

Shuts the air outlet when only using as 3 blow out.



Air Outlet Shutter Plate

UTR-YDZK

For Cassette type Shuts the air outlet when only using as 3 blow out.





For Ceiling type

Drain Pump Unit

UTR-DPB24T

For Ceiling type





Others

For Duct type

Flange (Round) UTD-RF204 For Medium Static Pressure Duct type / Ceiling type Long-Life Filter

Flange (Square) UTD-SF045T

For Medium Static Pressure Duct type



Remote Sensor Unit

UTY-XSZX

For All Duct type

New amenity space can be offered by installing the Remote sensor.



UTD-LF25NA For Medium Static Pressure Duct type







Auto Louver Grille Kit

UTD-GXTA-W (for ARXD07/09/12/14)
UTD-GXTB-W (for ARXD18)
UTD-GXTC-W (for ARXD24)
For Slim Duct type



Drain Pump Unit

UTZ-PX1NBA

For Medium Static Pressure Duct



Communication system: External Connect Kit

For Indoor unit				For Outdoor unit	
UTY-XWZXZ7		UTY-XWZXZD		UTY-XWZXZ6	
UTY-XWZXZB		UTY-XWZXZE		UTY-XWZXZ9	
UTY-XWZXZC				UTY-XWZXZF	
For Central Remo	ote Controller	For Touch Panel	Controller		
For Central Remo	ote Controller	For Touch Panel UTY-XWZXZA	Controller		

FUNCTION LIST

					Indoor unit			
			Cassette				ıct	
		4-way Compact	Circula	ar Flow	Slim (With drain pump)	Medium Static Pressure	High Static Pressure	High Static Pressure
Тур	ee	AUXB 09/12/14/18/24 GATH	AUXM 018/024GTAH	AUXK 018/024/030/034/ 036/045/054 GTAH	ARXD 07/09/12/14/18/24 GATH	ARXA 24/30/36/45 GBTH	ARXC36/72/90GBTH, ARXC96GATH	ARKC45/60GATH
Input	Operation / Stop				●UTY-XWZXZD ○UTY-XWZXZB			
	All On / All Off							
	Group Stop							
	Forced Stop				●UTY-XWZXZD ○UTY-XWZXZB			
	Emergency Stop				●UTY-XWZXZD ○UTY-XWZXZB			
	Forced Thermostat off				●UTY-XWZXZE ○UTY-XWZXZ7			
	Low Noise Mode Operation							
	Cooling/ Heating Priority							
	Outdoor Unit Operation Peak Control							
	Power Usage Information from Electricity Meter							
Output	Operation Status				●UTY-XWZXZC			
	Error Status				●UTY-XWZXZC			
	Indoor Unit Fun Operation Status				●UTY-XWZXZC			
	Auxiliary Heater Output					●UTY-)	(WZXZC	
	Base Heater							

	Indoc	or unit		Outdo	or unit	Controller
Ceiling / Floor	Ceiling		lounted -	J-III Tropical	V-III Tropical	Central Remote Controller
ABHA 12/14/18/24 GATH	ABHA 30/36/45/54 GATH	ASHA 07/09/12/14 GATH	ASHA 18/24/30 GATH	AJH 040/045/054 LBTAHN, AJH 040/045/054 LETAHN	AJS 072/090/ 108/126/144 LNTCH	UTY-DCGGZ3
	●UTY->	XWZXZD XWZXZB				
						●UTY-XWZXZ7 ○UTY-XWZXZ8
					●UTY-XWZXZ6	
		XWZXZD XWZXZB				
		XWZXZD XWZXZB			●UTY-XWZXZ6	●UTY-XWZXZ7 ○UTY-XWZXZ8
		XWZXZE XWZXZ7				
					●UTY-XWZXZ6	
					●UTY-XWZXZ6	
					●UTY-XWZXZF	
	●UTY-)	XWZXZC			OUTY-XWZXZ6	OUTY-XWZXZA
	●UTY-)	XWZXZC			OUTY-XWZXZ6	OUTY-XWZXZA
	●UTY-)					
					●UTY-XWZXZ9	

SEPARATION TUBE etc.

Connection Units Separation Tube UTP-AX054A UTP-AX090A UTP-AX180A Gas Pipe Gas Pipe Gas Pipe Liquid Pipe Liquid Pipe Liquid Pipe UTP-AX567A UTP-LX180A for DX Kit Gas Pipe Liquid Pipe Header UTR-H0906L / UTR-H1806L UTR-H0908L / UTR-H1808L MILL Gas Pipe Gas Pipe Liquid Pipe Liquid Pipe Outdoor Unit Branch Kit UTP-CX567A Gas Pipe Liquid Pipe

Specifications

Separation Tube

Total cooling capacity of indoor unit

kW

Model name		UTP-AX054A	ı	JTP-AX090A	UTP-AX180	A	UTP-AX567A
Total cooling capacity of indoor unit	kW	19.6 or less	28.0 or less 28.1 to		28.1 to 56.0		56.1 or more
Model name		UTP-BX090A		UTP-B	X180A		UTP-BX567A

28.1 to 56.0

56.1 or more

28.0 or less

Header

Model name	3-6 Branc	hes	UTR-H0906L	UTR-H1806L
Model Hame	3-8 Branches		UTR-H0908L	UTR-H1808L
Total cooling capacity of	al cooling capacity of indoor unit kW		28.0 or less	28.1 to 56.0
Model name	3-6 Branches 3-8 Branches		UTP-J0906A	UTP-J1806A
Model Hame			UTP-J0908A	UTP-J1808A
Total cooling capacity of	indoor unit	kW	28.0 or less	28.1 to 56.0

Outdoor unit Branch kit

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

Reducer kit

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

SUPPORT

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

Support

HVAC system design support tool Quick service & maintenance Service tool Web monitoring tool

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



Support

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

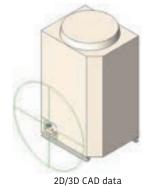


Technical information

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



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



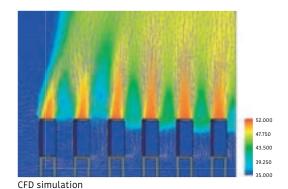
https://www.fujitsu-general.com/g-eu/support/downloads/vrf/

Technical support

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

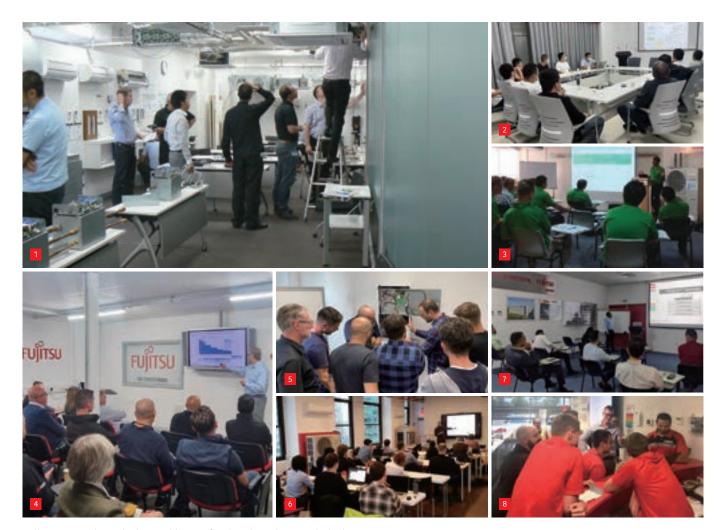
Features

- CFD simulation
- Guidelines
- Commissioning support



Commissioning support





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

Features

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

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

HVAC system design support tool

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

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

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

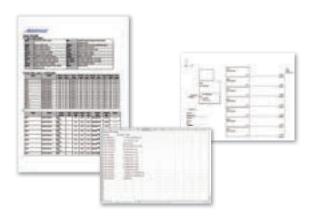


Design simulator



Automatically create model selection information

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



Outputs in the format that matches the application

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

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



Update your Design simulator

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



$\mathsf{BIM}_{\mathsf{Building}}$ information modeling

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

Fujitsu General is releasing BIM files of our products on the BIMobject® website BIMobject.com.

Outline of BIMobject®

BIMobject® is a game changer for the construction industry, offering development, maintenance, and syndication of objects on the world's largest BIM platform.

About BIM files

- BIM files can be viewed in Autodesk Revit® 2018 version or later.
- In each BIM file, the location of the connectors for the refrigerant and drain pipe is different.
- Each BIM file includes several family types.
- A catalog and specification sheet is available in Revit file format for each product.











RFA (Revit data)

A data format available for BIM-designed projects

Data content

- Shape (Size)
- · Drain direction
- Pipe direction
- Power supply location
- It contains information about the above specifications.



Type catalog with product



DWG

a standard data format used for Autodesk products



DXF

Intermediate data commonly available in CAD products

Data content

• Shape (Size)





*To learn more about how to use BIM files, refer to the instructional video on each product page. youtu.be/wfL-hwFQ7dM

Quick service & maintenance

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



Easy maintenance & monitoring

Designed for easy maintenance

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

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

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



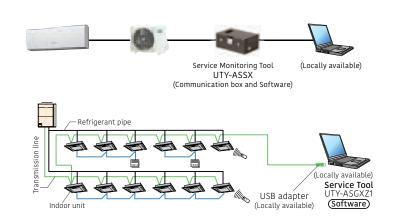




Error diagnosis by Service tool

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.

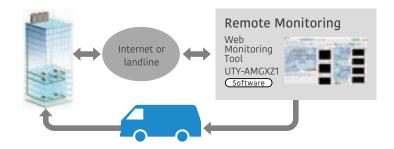
- Operating status/control
- Monitoring operating conditions
- Monitoring sensor data
- Indicating trend graphs
- Error history
- Indicating refrigerant circuit diagrams (for VRF)





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.



Mobile troubleshooting App for iOS and Android ™ devices

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

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





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.





Use the result of a self-diagnosis only as a guide and use your own judgment to make a final decision.

These sensor values are checked automatically:

- ▼ the discharge temperature is normal, "○ K"
- ▼ the super heat volume is normal, "○ 【
 "
- ☑ the high pressure pipe value is normal, "○K"
- ✓ the low pressure pipe value is normal, "○ K And the values for other items will also be diagnosed.

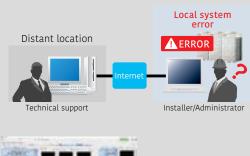


Remote technical support and maintenance

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	Microsoft Windows 10 Pro (64-bit) Microsoft Windows 11 Pro (64-bit)
CPU	Intel® Core™ processor 1 GHz or higher
Memory	4 GB or more
HDD	40 GB or more of free space
Screen resolution	1,366 × 768 or higher resolution
Interface	2 USB ports - 1 USB port is required for WHITE-USB-KEY connection - 1 USB port is required for Echelon U10 USB/U60-FT DIN Network Interface
Software	Adobe Reader 9.0 or later
Internet transmission rate (in remote access)	Internet environment capable for communication speed of 3 Mbps or more (for uploading) all the time (including when accessing to oversea website)

- Transmission adapter (Required for each VRF network):
 Echelon U10 USB Network Interface TP/FT-10 Channel (Model number: 75010R)
- Echelon U60-FT DIN Network Interface (Model number: 75060R-40)

Packing list

Name	Quantity	UTY-ASGXZ1
White-USB-key (Software protection key)	1	Software protection key to be connected to a USB port on a Service tool-installed computer. This software runs only on a computer with WibuKey.

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

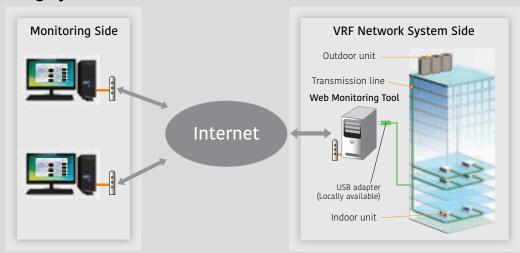
Web monitoring tool

UTY-AMGXZ1

Features

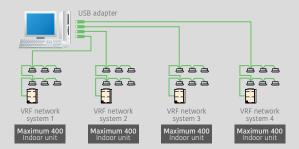
- Troubleshooting is performed by monitoring each air conditioning unit remotely during a periodical system check.
- An error notification is automatically transmitted to several locations via the internet*1.
- Requires either a dedicated internet connection or landline to operate.
- The occurrence of an error can be confirmed through an error alert and equipment status information obtained from a remote location.
- · Monitoring data can be downloaded in a remote location. These data can be accessed and displayed even when the service tool is in offline mode.
- Can be viewed on the monitoring computer's Web browser without installing any special software.
- *1: Internet e-mail access required.

Web Monitoring System



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

	UTY-AMGXZ1
Operating system	Microsoft Windows 10 Pro (64-bit) Microsoft Windows 11 Pro (64-bit)
CPU	Intel® Core™ processor 1 GHz or higher
Memory	4 GB or more
HDD	40 GB or more of free space
Screen resolution	1,366 × 768 or higher resolution
Interface	USB port (for Echelon U10 USB/U60-FT DIN Network Interface, Max. 4, software protection key) Either of the following interface is required for remote connection: Internet using LAN: Ethernet port is required.
Software	Adobe Reader 9.0 or later
Internet transmission rate (in remote access)	Internet environment capable for communication speed of 3 Mbps or more (for uploading) all the time (including when accessing to oversea website)

- Transmission adapter (Required for each VRF network):
 Echelon U10 USB Network Interface TP/FT-10 Channel (Model number: 75010R)
- Echelon U60-FT DIN Network Interface (Model number: 75060R-40)

Packing list

Name	Quantity	UTY-ASGXZ1
White-USB-key (Software protection key)		Software protection key to be connected to a USB port on a Service tool-installed computer. This software runs only on a computer with WibuKey.

Computer requirements

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



ISO 9001 Certification number: 01 100 075229

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ISO 9001 Certification number: 01 100 79269

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





ISO 9001 Certification number

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