OGENERAL



50 HZ



CREATION OF COMFORT

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



For **LARGE** BUILDING



Heat Pump Modular type for heating or cooling operation





8 HP - 54 HP 39 Models

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

P30~



Heat Pump Modular type for heating or cooling operation



8 HP - 42 HP 18 Models

- Space saving combination: 8 HP to 42 HP/15 models
- Energy efficiency combination: 24 HP to 28 HP/3 models

P36~



For **SMALL** BUILDING



Heat Pump type for heating or cooling operation

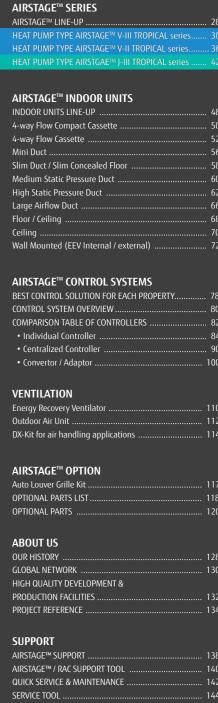


4 HP - 6 HP 6 Models

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

P42~





CONTENTS

OUR SOLUTION FOR ALL PROPERTIES ...

AIRSTAGE™ CORE TECHNOLOGY HIGH ENERGY EFFICIENCY ... HIGH RELIABILITY ... MORE COMFORT FASY INSTALLATION ...

EASY SERVICE & MAINTENANCE ..

2017 NEW PRODUCTS Commercial Solutions

OUR SOLUTION FOR ALL PROPERTIES

Fujitsu General provides the best solutions suitable for properties.

Solution Point

We provide Fujitsu General total solutions for the property unique needs.







Target Property



RESIDENTIAL & LIGHT COMMERCIAL

For Apartment, Villa and Shops 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.





2017 NEW PRODUCTS

Small VRF AIRSTAGE™ J-III TROPICAL series







- 36 to 54KBTU class,1-phase & 3-phase 6 models
- Compact Design
- · High energy efficiency with All Inverter Technology
- Flexible Design with Total Piping Design of 180m









Individual Control

Wired Remote Controller (Touch Panel)

- Easy-to-use and highly-functional controllers
- Maintains 2 separate set points for heating and cooling.
- Automatically changes mode between heating and cooling.



Simple Remote Controller

- Up to 16 indoor units can be controlled
- Simple design to match the stylish interior.
- Large LCD screen & simple operation buttons





Centralized Control

Touch Panel Controller

- Up to 400 indoor units can be controlled
- Control and monitor Fujitsu's air conditioner via LAN or Internet.
- Easy maintenance & installation



System Controller Software System Controller Lite Software

- Up to a maximum of 4 VRF network systems, 1600 indoor units, and 400 outdoor units can be controlled.*
- Simple BMS, 3rd party supported by Modbus communication can be controlled.
- *: System controller lite = Up to a maximum of 1 VRF network system, 400 indoor units, and 100 outdoor units can be controlled



Convertor / Adaptor

Various Convertors

• 4 models of hardware and software are put on the market all together. KNX® Convertor

For VRF









Service & Maintenance Tool

Service Tool & Web Monitoring Tool Software

- Extensive monitoring and analysis functions for installation and maintenance
- Troubleshooting is performed by monitoring each air conditioning unit remotely during periodical system checks.
- Automatic operation check for refrigeration



6 OGENERAL **OGENERAL** 7

APARTMENT, VILLA

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





Space saving installation

Space saving

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



Mini Duct



APARTMENT





LARGE BUILDING

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

Individual air conditioning system for large buildings

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





8 HP - 54 HP 39 Models

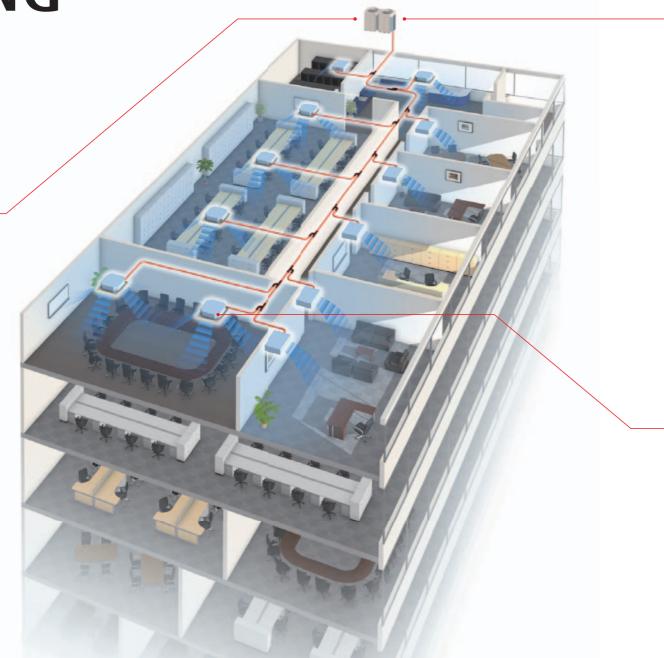
- Space saving combination: 8 HP to 54 HP / 24 models
- Energy efficiency combination: 16 HP to 46 HP / 15 models





8 HP - 42 HP 18 Models

- Space saving combination: 8 HP to 42 HP / 15 models
- Energy efficiency combination: 24 HP to 28 HP / 3 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.

NEW

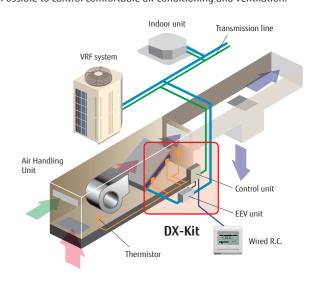
System Controller Lite





Ventilation(AHU) linked with VRF system

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



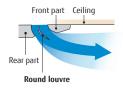
4-way Flow Cassette



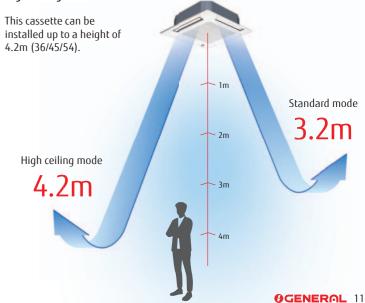
Improvement of the airflow distribution

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





High ceiling mode





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

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

HIGH ENERGY EFFICIENCY

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.

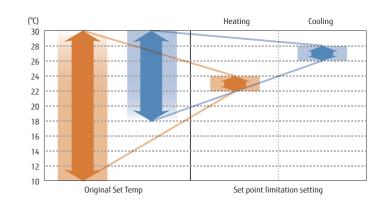




Operation Performance is Efficiently Controlled.

Room temperature set point limitation

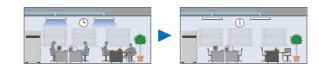
The minimum and maximum temperature ranges can be limited, which provide further energy saving while maintaining the comfort of the occupants.

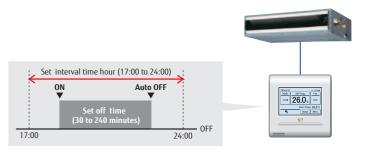


Auto-off timer

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

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

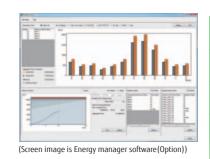


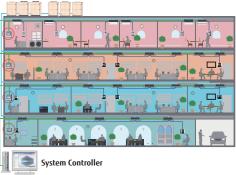


Energy saving management

A variety energy saving operations can be set and managed depending on the season, weather, and time period.

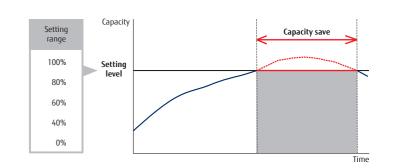
Excellent energy saving operation is performed by using System Controller.

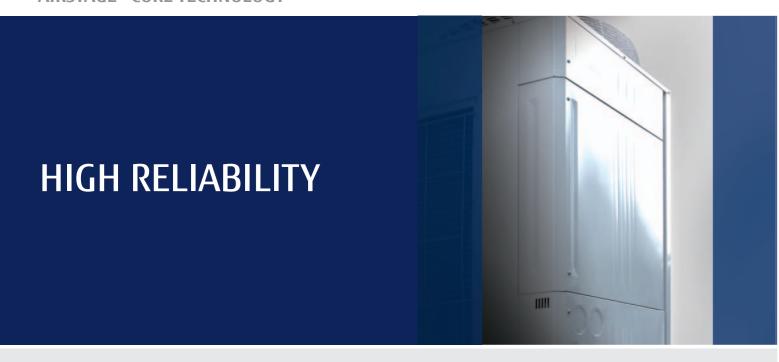




Capacity save operation

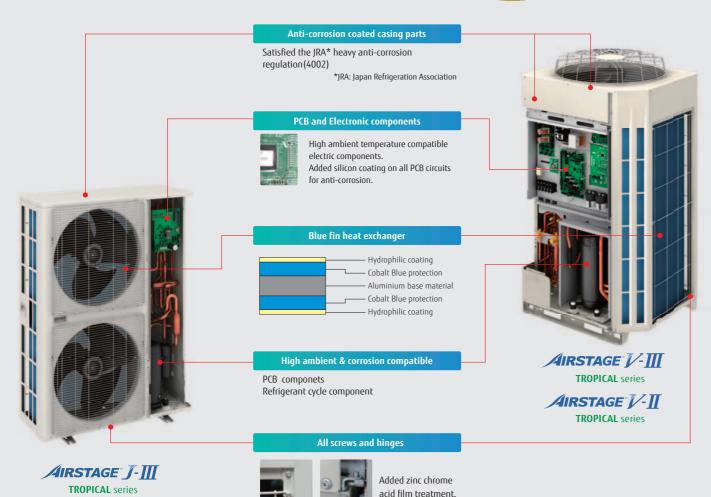
Operation capacity can be set in 5 steps for rated capability. The power consumption at peak is cut down and the maximum load is suppressed.





Heavy anti-corrosion treatment design (Corrosion treatment





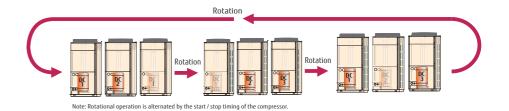
Take special notice of the following in order to enhance the anti-corrosion effect.

- 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.)

Life-extending operation

Outdoor unit rotational operation

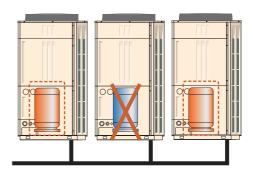
The compressor starting order is rotated so that the running time is shared.



Backup operation

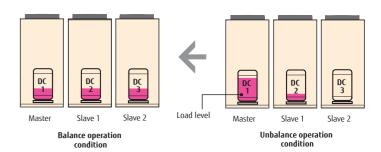
If one compressor fails, backup operation will be performed by the remaining compressors*.

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



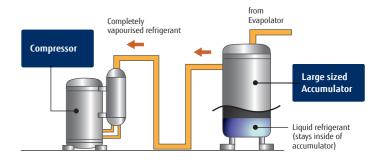
Advanced refrigerant control

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



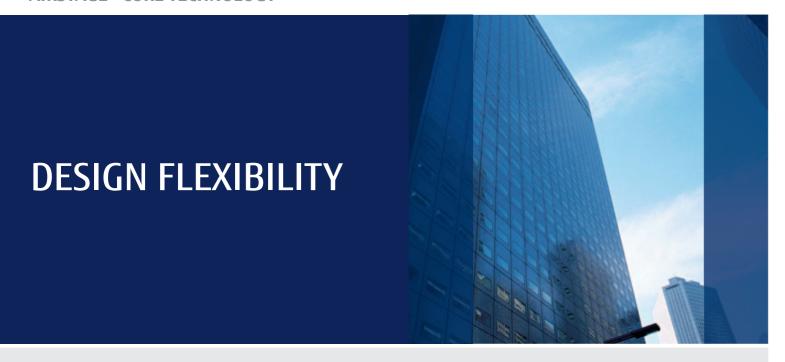
Liquid flow back protection

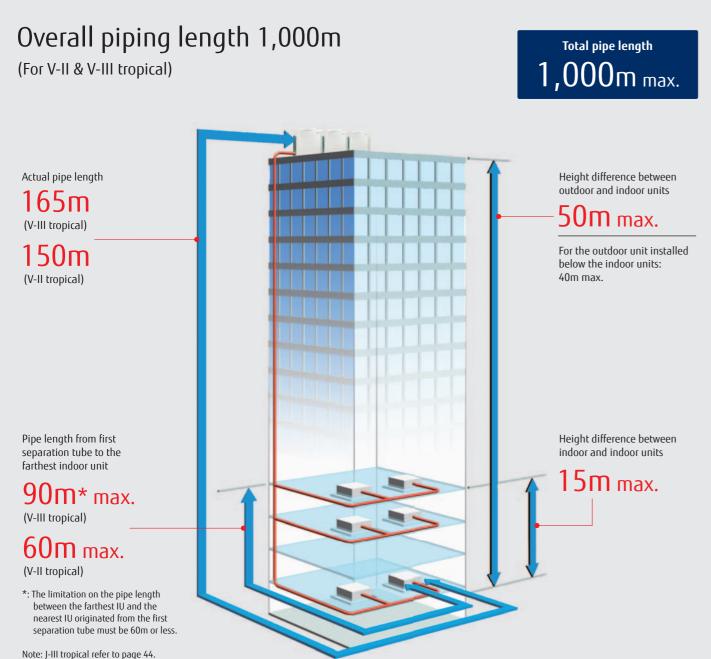
By adopting a large sized accumulator, the not completely vapourised refrigerant stays inside of the accumulator to ensure no liquid refrigerant is being fed into the compressor.



Oil Recovery operation

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

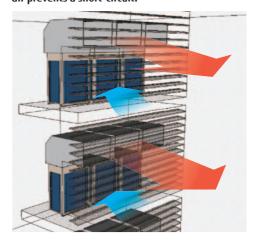




High static pressure

The outdoor unit can have a condenser hood easily connected with a static pressure of 80Pa to 82Pa. This allows outdoor units to be installed within plant rooms in high rise buildings.

Powerful discharge air prevents a short-circuit.





Previous model

V-III tropical , V-II tropic

Large diameter fan and DC motor has been utilized allowing an external static pressure of 80Pa to 82Pa. This is approximately 2.6 times greater than the previous model.

High capacity connection





ries **AIRSTAGE V-II** TROPICAL series





AIRSTAGE J- III TROPICAL series

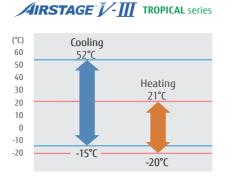


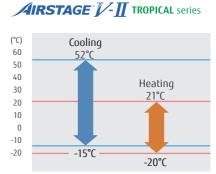


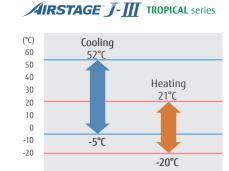
High ambient operation design (



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







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

18 OGENEROL 19

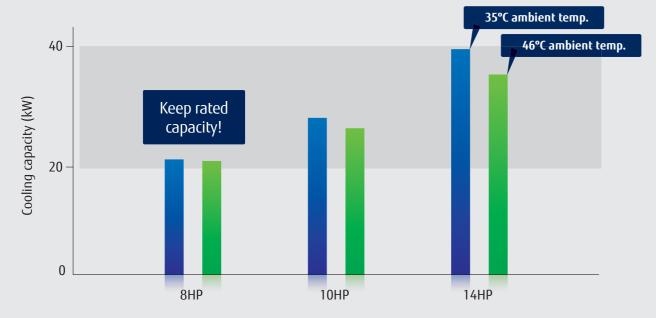
MORE COMFORT



Powerful cooling capacity design



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



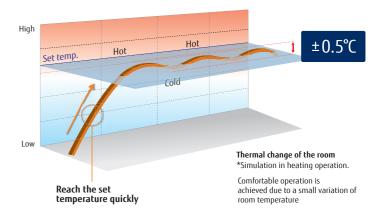
Touch Panel Wired Remote Controller

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



Precision refrigerant flow control

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

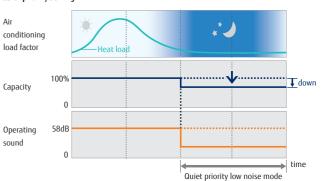


Quiet operation

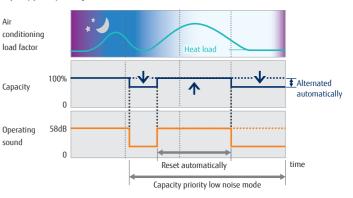
Low noise mode

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

Quiet priority setting



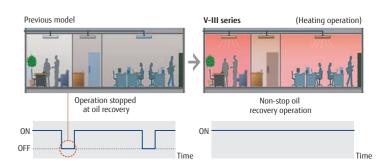
Capacity priority setting



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.

*: AIRSTAGE VR-II series is not available



OGENERAL 21 20 OGENERAL

EASY INSTALLATION



Easily transported

Easily craned using lifting belt hooksDesign of outdoor unit allows for lifting straps to be used



Transporting by forkliftTransport with forklift is possible.



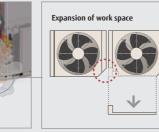
Can be transported in a small elevator

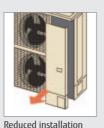


Easy access

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



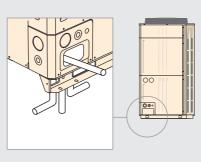


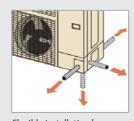


intervals by front access

Flexible piping connection

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

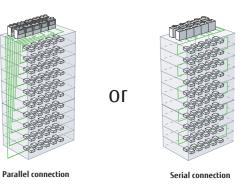




Flexible installation by 4 way pipe direction

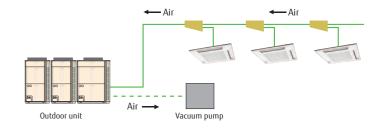
Simple wiring work

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



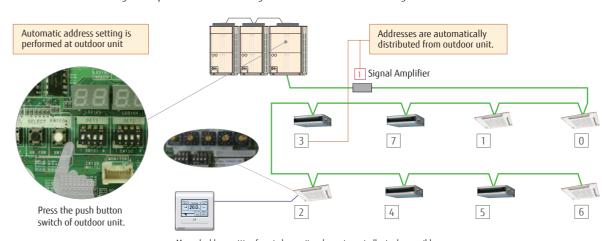
Easy evacuation - using vacuum mode function

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



Automatic address setting

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



 $\label{thm:manual} \mbox{ and remote controller is also possible.}$

Easy commissioning by Service Tool

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



EASY SERVICE & MAINTENANCE



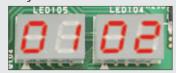
Design for Easy Maintenance

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



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

7-segment LED



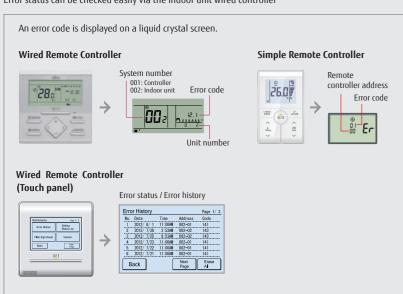
- Operation mode status
- Discharge temperature/Pressure status
- Compressor operation indication
- Address/type/number of outdoor unit

Movable PCB panel

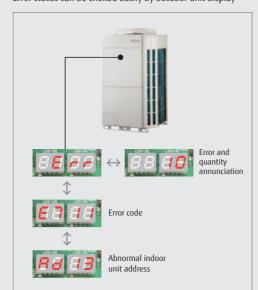
Easier for maintenance work behind the PCB



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



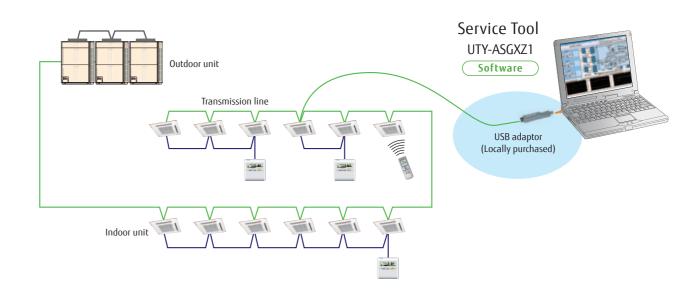
Error status can be cheked easily by outdoor unit display



Error diagnosis by Service Tool

Connection to Service Tool

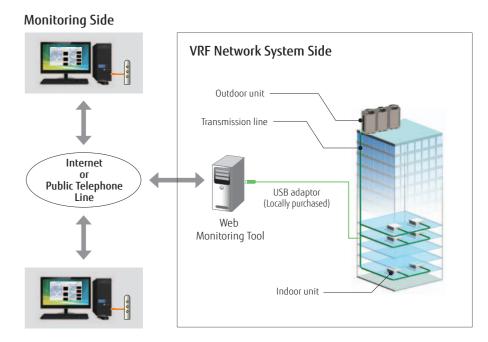
- Detail operation status and recent error history can be checked and analyzed by using the Service Tool.
- Last 5 min. operation memory can be also be recorded.

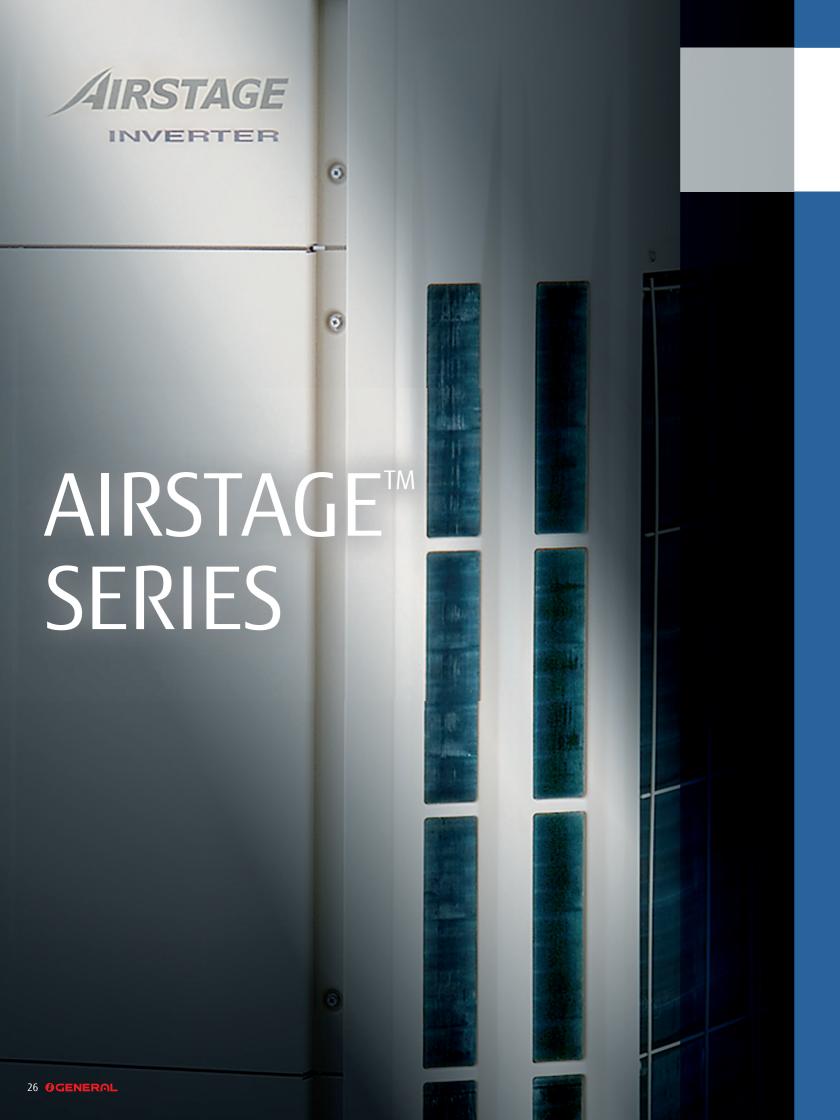


Remote monitoring

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.





The AIRSTAGE 3 Series has a total of 60 models to meet the environmental and building size requirements.



The AIRSTAGE series outdoor units were developed with structural designs and advanced inverter technology to provide higher efficiency.

High durability technology has also been incorporated to ensure long-term use.

AIRSTAGE™ LINE-UP

HEAT PUMP TYPE AIRSTAGE V-III TROPICAL Series

HEAT PUMP TYPE AIRSTAGE V-II TROPICAL Series

HEAT PUMP TYPE AIRSTAGE J-III TROPICAL Series

AIRSTAGE™ LINE-UP

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

Outdoor units range

НР		4	5	6	8	10	12	14	16	18*	20	22	24	26	28*	2	!8	30	32	34*	34	36*	36	38*	38	40	42	44*	46*	48	50*	52*	54*
BTU/h		36,000	45,000	54,000	72,000	90,000	108,000	126,000	144,000	162,000	180,000	198,000	216,000	234,000	252,000	252,	,000	270,000	288,000	306,000	306,000	324,000	324,000	342,000	342,000	360,000	378,000	396,000	414,000	432,000	450,000	468,000	486,000
Ton		3.0	3.8	4.5	6.0	7.5	9.0	10.5	12.0	13.5	15.0	16.5	18.0	19.5	21.0	21	1.0	22.5	24.0	25.5	25.5	27.0	27.0	28.5	28.5	30.0	31.5	33.0	34.5	36.0	37.5	39.0	40.5
AIRSTAGE V-III TROPICAL series	Space saving				AJ*072LN*BH				AJ*144LN*BH																	A AJ*360LN*BH						AJ*468LN*BH	AJ*486LN*BH
Heat Pump	High Efficiency								AJ*144LN*BHH		AJ*180LN*BHH			AJ*234LN*BHH	AJ*252LN*BHH			AJ*270LN*BHH <i>A</i>				AJ*324LN*BHH		AJ*342LN*BHH		AJ*360LN*BHH		AJ*396LN*BHH	AJ*414LN*BHH				
AIRSTAGE V-III TROPICAL series	Space saving				AJH072LN*AH*	: AJH090LN*AH*			AJH144LN*AH*				AJH216LN*AH*		AJH252LN*AH*			AJH270LN*AH* A				AJH324LN*AH*		AJH342LN*AH*			AJH378LN*AH*						
Heat Pump	High Efficiency													AJH234LN*AHH*	AJH252LN*AHH*																		
NEW AIRSTAGE J-III TROPICAL series	High Efficiency (Single phase)	AJH040LBTAHN	AJH045LBTAHN	AJH054LBTAHN																													
TROPICAL series Heat Pump	High Efficiency (3 phase)	AJH040LETAHN	AJH045LETAHN	AJH054LETAHN																													

*: Not available to sale in some regions

V-III Tropical : AJ*__LN* : AJG__LNL, AJH__LNT

V-II Tropical : AJH__LN*AH* : AJH__LNTAH, AJH__LNLAHU
AJH__LNTAHH, AJH__LNLAHHU



System Outline

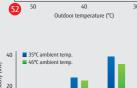
High ambient operation design

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

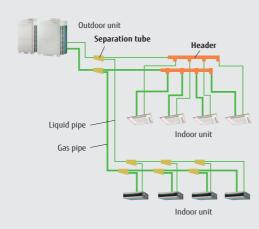
All metalic and PCB components are protected against corrosion



52°C ambient

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

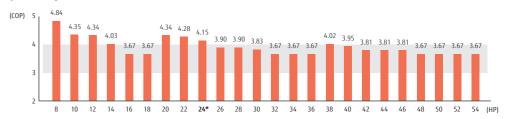


Features

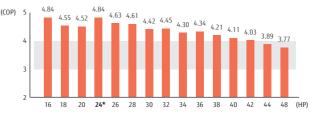
Energy efficiency

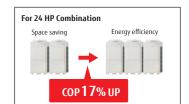
Top class high COP is realized for all combinations by our unique heat exchanger structure, high efficient DC twin compressor, and other our own technologies.

Space saving combination



Energy 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

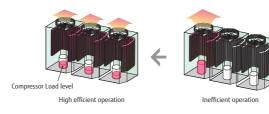
Heat exchange efficiency is significantly improved by the introduction of a new 4-face heat exchanger that increases effective surface area.

Front intake port (corner cut air inhaling structure)

Advanced energy saving control

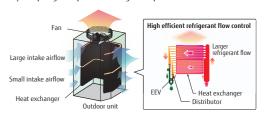
Multiple outdoor operation control

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



Heat exchanger refrigerant control

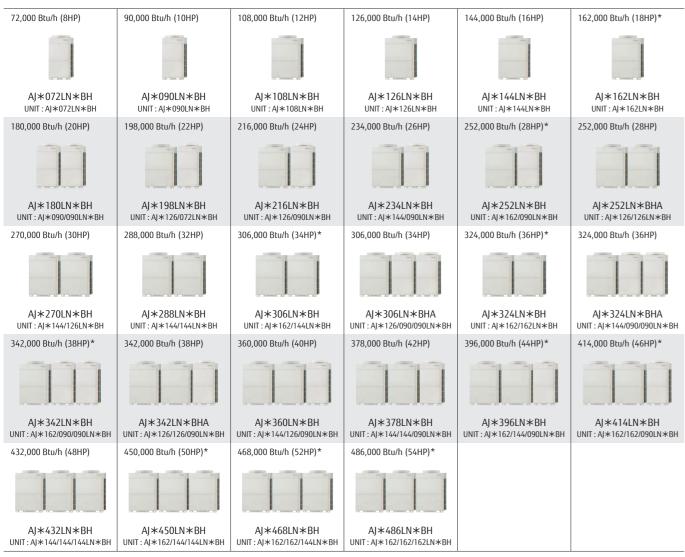
The efficiency of the top and bottom heat exchanger in the outdoor unit has been improved by adopting an optimum refrigerant path control.



• Combinations other than the followings are not recommended.

AIRSTAGE V- TROPICAL Series

Space saving combination



 $\label{eq:AJ-LN} \mbox{AJ-LNL, AJ-LNT} \qquad \mbox{*: Not available to sale in some regions}$

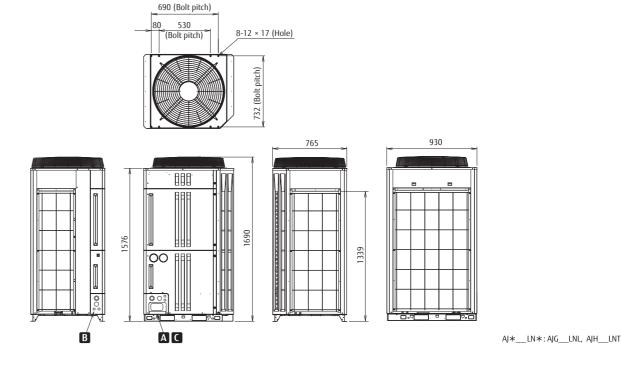
Energy efficiency combination



Dimensions

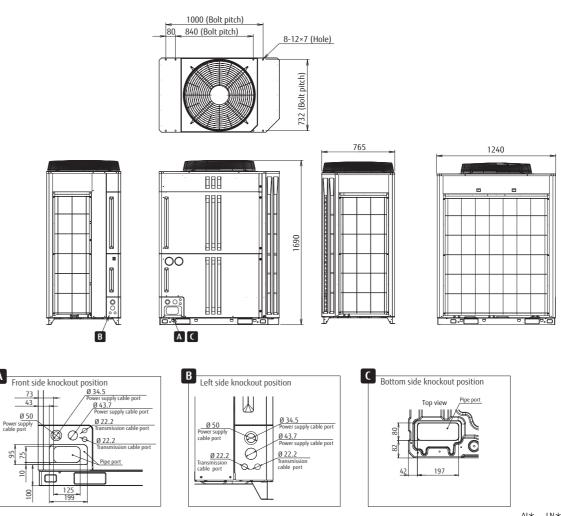
8,10HP: AJ*072LN*BH / AJ*090LN*BH

(Unit:mm)



12,14,16,18HP: AJ*108LN*BH/AJ*126LN*BH/AJ*144LN*BH/AJ*162LN*BH

(Unit : mm)





Space Saving Combination

			HP.	8	10	12	14	16	18*	20	22	24	26	28*	28	30	32	34*	34	36*	36	38*	38	40	42	44*	46*	48	50*	52*	54*
Rating Capa	acity range		:u/h	72,000	90,000	108,000	126,000	144,000	162,000	180,000	198,000	216,000	234,000	252,000	252,000	270,000	288,000	306,000	306,000	324,000	324,000	342,000	342,000	360,000	378,000	396,000	414,000	432,000	450,000	468,000	486,000
		T	on	6.0	7.5	9.0	10.5	12.0	13.5	15.0	16.5	18.0	19.5	21.0	21.0		24.0	25.5	25.5	27.0	27.0	28.5	28.5	30.0	31.5	33.0	34.5	36.0	37.5	39.0	40.5
Model nam	e			AJ*072LN*E	BH AJ*090LN*BH	AJ*108LN*BH	I AJ*126LN*BI	H AJ*144LN*BH	AJ*162LN*BH	AJ*180LN*BH	AJ*198LN*BH	AJ*216LN*BH	AJ*234LN*BF	AJ*252LN*BH	AJ*252LN*BHA	AJ*270LN*BH	H AJ*288LN*BH	H AJ*306LN*BH	AJ*306LN*BHA	AJ*324LN*BH	AJ*324LN*BHA	AJ*342LN*BH	AJ*342LN*BHA	AJ*360LN*BH	AJ*378LN*BH	AJ*396LN*BH	AJ*414LN*BH	AJ*432LN*BH	AJ*450LN*BH	AJ*468LN*BH	AJ*486LN*BH
Unit 1 Unit 2 Unit 3				AJ*072LN*B	BH AJ*090LN*BH	AJ*108LN*BH	AJ*126LN*BF	H AJ*144LN*BH	AJ*162LN*BH	AJ*090LN*BH AJ*090LN*BH	AJ*126LN*BH AJ*072LN*BH	AJ*126LN*BH AJ*090LN*BH	AJ*144LN*BH AJ*090LN*BH	AJ*162LN*BH AJ*090LN*BH	AJ*126LN*BH AJ*126LN*BH	AJ*144LN*BH AJ*126LN*BH	AJ*144LN*BH AJ*144LN*BH	AJ*162LN*BH AJ*144LN*BH	AJ*126LN*BH AJ*090LN*BH AJ*090LN*BH		AJ*090LN*BH		AJ*126LN*BH	AJ*126LN*BH	AJ*144LN*BH				AJ*162LN*BH AJ*144LN*BH AJ*144LN*BH	AJ*162LN*BH	
Maximum (Connectable Indo	oor Unit		13	16	19	23	26	29	33	36	43	43	46	47	50	53	55	55	55	55	55	55	55	55	55	55	55	55	55	55
Indoor unit co	nnectable capacity	Cooling	kW	11.2-29.1	14-36.4	16.8-43.5	20-52	22.5-58.5	25-65	28-72.8	31.2-81.1	36.5-94.9	36.5-94.9	39-101.4	40-104	42.5-110.5	45-117	47.5-123.5	48-124.8	50-130	50.5-131.3	53-137.8	54-140.4	56.5-146.9	59-153.4	61.5-159.9	64-166.4	67.5-175.5	70-182	72.5-188.5	75-195
Power source	ce								3-phase,	~400V, 50Hz													3-phase, ~4	400V, 50Hz						-	-
		Cooling	kW	22.4	28.0	33.5	40.0	45.0	50.0	56.0	62.4	73.0	73.0	78.0	80.0	85.0	90.0	95.0	96.0	100.0	101.0	106.0	108.0	113.0	118.0	123.0	128.0	135.0	140.0	145.0	150.0
	Capacity	Heating	KW	25.0	31.5	37.5	45.0	50.0	50.0	63.0	70.0	81.5	81.5	81.5	90.0	95.0	100.0	100.0	108.0	100.0	113.0	113.0	121.5	126.5	131.5	131.5	131.5	150.0	150.0	150.0	150.0
	aspass,	Cooling	Btu/h	76400	95500	114300	136500	153500	170600	191000	212900	249000	249000	266100	273000	290000	307000	324100	327500	341200	344500	361600	368500	385500	402500	419600	436700	460500	477600	494700	511800
		Heating		85300	107500	128000	153500	170600	170600	215000	238800	278100	278100	278100	307000	324100	341200	341200	368500	341200	385600	385600	414500	431600	448700	448700	448700	511800	511800	511800	511800
T1	Input power	Cooling	kW	5.20	7.28	8.96	10.96	13.01	16.56	14.56	16.16	20.29	20.29	23.84	21.92	23.97	26.02	29.57	25.52	33.12	27.57	31.12	29.20	31.25	33.30	36.85	40.40	39.03	42.58	46.13	49.68
condition		Heating Cooling		5.17 9.2	7.25	8.65 15.0	11.17	13.63	13.63	14.50	16.34	20.88	20.88	20.88	22.34	24.80	27.26	27.26	25.67	27.26	28.13	28.13	29.59	32.05	34.51	34.51	34.51	40.89	40.89	40.89	40.89
condition	Current	Heating	A	9.2	12.2	14.6	18.2	21.5	21.5	<u> </u>	_	_	-	1 -	_		+ -	-	-	_	-		-	-	-	-	-		-	,	_
	EER	Cooling	14/04/	4.31	3.85	3.74	3.65	3.46	3.02	3.85	3.86	3.60	3.60	3.27	3.65	3.55	3.46	3.21	3.76	3.02	3.66	3.41	3.70	3.62	3.54	3.34	3.17	3.46	3.29	3.14	3.02
	COP	Heating	W/W	4.84	4.35	4.34	4.03	3.67	3.67	4.34	4.28	3.90	3.90	3.90	4.03	3.83	3.67	3.67	4.21	3.67	4.02	4.02	4.11	3.95	3.81	3.81	3.81	3.67	3.67	3.67	3.67
	EER	Cooling	Btu/h/W	14.7	13.1	12.8	12.5	11.8	10.3	13.1	13.2	12.3	12.3	11.2	12.5	12.1	11.8	11.0	12.8	10.3	12.5	11.6	12.6	12.3	12.1	11.4	10.8	11.8	11.2	10.7	10.3
	COP	Heating		16.5	14.8	14.8	13.7	12.5	12.5	14.8	14.6	13.3	13.3	13.3	13.7	13.1	12.5	12.5	14.4	12.5	13.7	13.7	14.0	13.5	13.0	13.0	13.0	12.5	12.5	12.5	12.5
	Capacity		kW	20.2	25.2	28.5	32	35.1	35.2	50.4	52.2	60.3	60.3	60.4	64.0	67.1	70.2	70.3	82.4	70.4	85.5	85.6	89.2	92.3	95.4	95.5	95.6	105.3	105.4	105.5	105.6
T2	L	Cooling	Btu/h	68900	86000	97200	109200	119800	120100	172000	178100	205800	205800	206100	218400	229000	239600	239900	281200	240200	291800	292100	304400	315000	325600	325900	326200	359400	359700	360000	360300
condition	Input power		kW A	6.73 10.8	9.20	9.34	10.70	11.82	12.35	18.39	17.44	21.02	21.02	21.55	21.40	22.52	23.64	24.17	29.10	24.70	30.21	30.75	30.60	31.72	32.83	33.37	33.90	35.45	35.99	36.52	37.05
Condition	Current		W/W	3.00	2.74	3.05	2.99	18.6	2.85	2.74	2.99	2.87	2.87	2.80	2.99	2.98	2.97	2.91	2.83	2.85	2.83	2.78	2.91	2.91	2.91	2.86	2.82	2.97	2.93	2.89	2.85
	EER	Cooling	Btu/h/W	10.23	9.35	10.40	10.20	10.14	9.72	9.35	10.21	9.79	9.79	9.56	10.20	10.17	10.14	9.93	9.66	9.72	9.66	9.50	9.95	9.93	9.92	9.77	9.62	10.14	10.00	9.86	9.72
Power factor	Г		%	90	92	92	92	92	93		-	-	-		-	-	-		-	-	-	-	-	-	-	-	-	-	-		-
Airflow rate		High	m³/h	11100	11100	13000	13000	13700	13700	11100×2	13000+11100	13700+11100	13700+11100	13700+11100	13000×2	13700+13000	13700×2	13700×2	13000+11100×2	13700×2	13700+11100×2	13700+11100×2	13000×2+11100	13700+13000+11100	13700×2+11100	13700×2+11100	13700×2+11100	13700×3	13700×3	13700×3	13700×3
Sound press	ure level /	Cooling	dB	56	58	57	60	62	63	61	61	63	63	64	63	64	65	66	64	66	65	65	64	65	66	66	67	67	67	67	68
Power level		Heating	(A)	58	59	60	62	64	64	62	63	65	65	65	65	66	67	67	65	67	66	66	66	67	68	68	68	69	69	69	69
External sta	tic pressure (Ma	x)	Pa	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
	motor output		kW	7.5	7.5	11	11	11	11	7.5×2	11.0+7.5	11.0+7.5	11.0+7.5	11.0+7.5	11.0×2	11.0×2	11.0×2	11.0×2	11.0+7.5×2	11.0×2	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	11.0×2+7.5	11.0×2+7.5	11.0×3	11.0×3	11.0×3	11.0×3
Heat exchar	nger fin	II-:-bs		Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
Dimensions		Height Width	mm	1690 930	1690 930	1690 1240	1690 1240	1690 1240	1690 1240	1690×2 930×2	1690×2 1240+930	1690×2 1240+930	1690×2 1240+930	1690×2 1240+930	1690×2 1240×2	1690×2 1240×2	1690×2 1240×2	1690×2 1240×2	1690×3 1240+930×2	1690×2 1240×2	1690×3 1240+930×2	1690×3 1240+930×2	1690×3 1240×2+930	1690×3 1240×2+930	1690×3 1240×2+930	1690×3 1240×2+930	1690×3 1240×2+930	1690×3 1240×3	1690×3 1240×3	1690×3 1240×3	1690×3 1240×3
Difficusions	'	Depth	1 '''''	765	765	765	765	765	765	765×2	765×2	765×2	765×2	765×2	765×2	765×2	765×2	765×2	765×3	765×2	765×3	765×3	765×3	765×3	765×3	765×3	765×3	765×3	765×3	765×3	765×3
Weight			kg	255	255	279	279	279	279	255×2	279+255	279+255	279+255	279+255	279×2	279×2	279×2	279×2	279+255×2	279×2	279+255×2	279+255×2	279×2+255	279×2+255	279×2+255	279×2+255	279×2+255	279×3	279×3	279×3	279×3
		Туре		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant		Charge	kg	11.7	11.7	11.8	11.8	11.8	11.8	11.7×2	11.8+11.7	11.8+11.7	11.8+11.7	11.8+11.7	11.8×2	11.8×2	11.8×2	11.8×2	11.8+11.7×2	11.8×2	11.8+11.7×2	11.8+11.7×2	11.8×2+11.7	11.8×2+11.7	11.8×2+11.7	11.8×2+11.7	11.8×2+11.7	11.8×3	11.8×3	11.8×3	11.8×3
Connection	pipe diameter	Liquid	mm	12.70	12.70	12.70	12.70	12.70	15.88	15.88	15.88	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
Connection	pipe didiffeter	Gas		22.22	22.22	28.58	28.58	28.58	28.58	28.58	34.92	34.92	34.92	34.92	34.92	34.92	34.92	34.92	34.92	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27
Operation ra	ange	Cooling	°CDB	-15 to 52	-15 to 52	-15 to 52	-15 to 52	-15 to 52	-15 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52
	-	Heating		-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

AJ*__LN*: AJG__LNL, AJH__LNT *: Not available for sale in some regions.

Energy Efficiency Combination

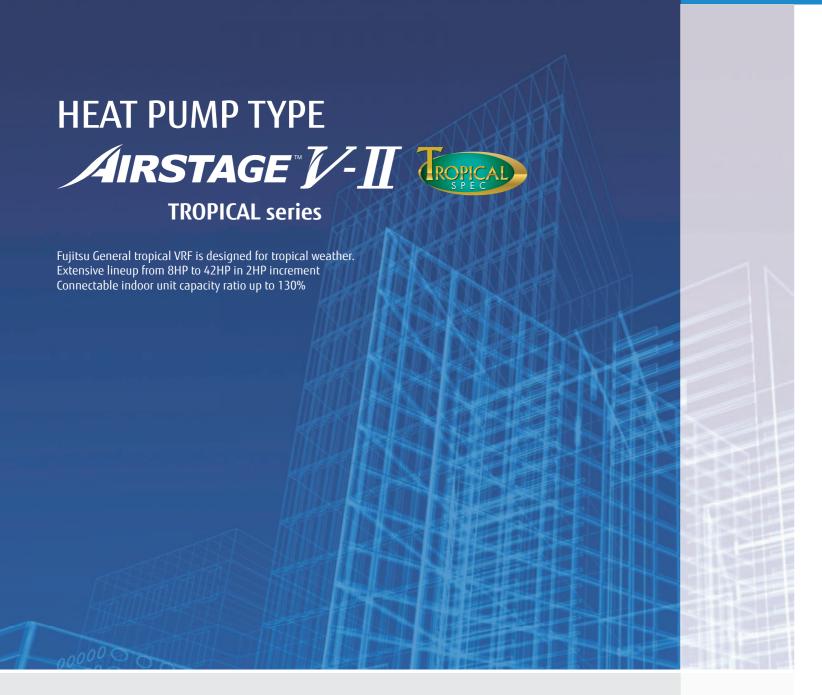
			НР	16	18	20	24	26	28	30	32	34	36	38	40	42	44	46
Rating Capa	acity range		tu/h	144,000	162,000	180,000	216,000	234,000	252,000	270,000	288,000	306,000	324,000	342,000	360,000	378,000	396,000	414,000
	, ,	T	on	12.0	13.5	15.0	18.0	19.5	21.0	22.5	24.0	25.5	27.0	28.5	30.0	31.5	33.0	34.5
Model name	ie			AJ*144LN*BHH	AJ*162LN*BHH	AJ*180LN*BHH	AJ*216LN*BHH	AJ*234LN*BHH	AJ*252LN*BHH	AJ*270LN*BHH	AJ*288LN*BHH	AJ*306LN*BHH	AJ*324LN*BHH	AJ*342LN*BHH	AJ*360LN*BHH	AJ*378LN*BHH	AJ*396LN*BHH	AJ*414LN*BHH
Unit 1				AJ*072LN*BH	AJ*090LN*BH	AJ*108LN*BH	AJ*072LN*BH	AJ*090LN*BH	AJ*108LN*BH	AJ*126LN*BH	AJ*108LN*BH	AJ*126LN*BH	AJ*108LN*BH	AJ*126LN*BH	AJ*126LN*BH	AJ*126LN*BH	AJ*144LN*BH	AJ*144LN*BH
Unit 2 Unit 3				AJ*072LN*BH	AJ*072LN*BH	AJ*072LN*BH	AJ*072LN*BH AJ*072LN*BH	AJ*072LN*BH AJ*072LN*BH	AJ*072LN*BH AJ*072LN*BH	AJ*072LN*BH AJ*072LN*BH	AJ*108LN*BH AJ*072LN*BH	AJ*108LN*BH AJ*072LN*BH	AJ*108LN*BH AJ*108LN*BH	AJ*108LN*BH AJ*108LN*BH	AJ*126LN*BH AJ*108LN*BH	AJ*126LN*BH AJ*126LN*BH	AJ*126LN*BH AJ*126LN*BH	AJ*144LN*BH AJ*126LN*BH
	Connectable Indo			26	29	33	39	43	46	50	52	55	55	55	55	55	55	55
Indoor unit con	nnectable capacity	Cooling	kW	22.4-58.2	25.2-65.5	28-72.6	33.6-87.3	36.4-94.6	39.2-101.7	42.4-110.2	44.7-116.2	48-124.6	50.3-130.6	53.5-139.1	56.8-147.5	60-156	62.5-162.5	65-169
Power source	ce						3-phase, ~	-400V, 50Hz							3-phase, ~400V, 50Hz			
		Cooling	kW	44.8	50.4	55.9	67.2	72.8	78.3	84.8	89.4	95.9	100.5	107.0	113.5	120.0	125.0	130.0
	Capacity	Heating	KVV	50.0	56.5	62.5	75.0	81.5	87.5	95.0	100.0	107.5	112.5	120.0	127.5	135.0	140.0	145.0
	Capacity	Cooling	Btu/h	152800	171900	190700	229200	248300	267100	289300	305000	327200	342900	365100	387300	409500	426500	443500
		Heating	Dtu/II	170600	192800	213300	255900	278100	298600	324100	341300	366800	384000	409500	435000	460500	477600	494700
	Input power	Cooling	kW	10.40	12.48	14.16	15.60	17.68	19.36	21.36	23.12	25.12	26.88	28.88	30.88	32.88	34.93	36.98
T1	input power	Heating	KW	10.34	12.42	13.82	15.51	17.59	18.99	21.51	22.47	24.99	25.95	28.47	30.99	33.51	35.97	38.43
condition	Current	Cooling	Λ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Current	Heating	^	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	EER	Cooling	W/W	4.31	4.04	3.95	4.31	4.12	4.04	3.97	3.87	3.82	3.74	3.70	3.68	3.65	3.58	3.52
	COP	Heating	VV/VV	4.84	4.55	4.52	4.84	4.63	4.61	4.42	4.45	4.30	4.34	4.21	4.11	4.03	3.89	3.77
	EER	Cooling	Btu/h/W	14.7	13.8	13.5	14.7	14.0	13.8	13.5	13.2	13.0	12.8	12.6	12.5	12.5	12.2	12.0
	COP	Heating	DLU/II/VV	16.5	15.5	15.4	16.5	15.8	15.7	15.1	15.2	14.7	14.8	14.4	14.0	13.7	13.3	12.9
	Capacity		kW	40.4	45.4	48.7	60.6	65.6	68.9	72.4	77.2	80.7	85.5	89.0	92.5	96.0	99.1	102.2
	Сарасіту	Coolina	Btu/h	137800	154900	166100	206700	223800	235000	247000	263300	275300	291600	303600	315600	327600	338200	348800
T3	Input power	Cooling	kW	13.47	15.93	16.08	20.20	22.66	22.81	24.17	25.42	26.78	28.03	29.39	30.75	32.11	33.22	34.34
condition	Current		A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	EER	Cooling	W/W	3.00	2.85	3.03	3.00	2.89	3.02	3.00	3.04	3.01	3.05	3.03	3.01	2.99	2.98	2.98
	EEK	Cooling	Btu/h/W	10.23	9.72	10.33	10.23	9.87	10.30	10.22	10.36	10.28	10.40	10.33	10.26	10.20	10.18	10.16
Power factor	Г		%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Airflow rate		High	m³/h	11100×2	11100×2	13000+11100	11100×3	11100×3	13000+11100×2	13000+11100×2	13000×2+11100	13000×2+11100	13000×3	13000×3	13000×3	13000×3	13700+13000×2	13700×2+13000
Sound pressu	sure level /	Cooling	dB	59	60	60	61	62	61	63	61	63	64	64	64	65	66	66
Power level		Heating	(A)	61	62	62	63	63	64	65	64	65	66	66	66	67	68	68
External stat	itic pressure (Max	<)	Pa	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
Compressor r	motor output		kW	7.5×2	7.5×2	11.0+7.5	7.5×3	7.5×3	11.0+7.5×2	11.0+7.5×2	11.0×2+7.5	11.0×2+7.5	11.0×3	11.0×3	11.0×3	11.0×3	11.0×3	11.0×3
Heat exchan	nger fin			Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
		Height		1690×2	1690×2	1690×2	1690×3	1690×3	1690×3	1690×3	1690×3	1690×3	1690×3	1690×3	1690×3	1690×3	1690×3	1690×3
Dimensions		Width	mm	1240×2	1240×2	1240+930	930×3	930×3	1240+930×2	1240+930×2	1240×2+930	1240×2+930	1240×3	1240×3	1240×3	1240×3	1240×3	1240×3
		Depth	1	765×2	765×2	765×2	765×3	765×3	765×3	765×3	765×3	765×3	765×3	765×3	765×3	765×3	765×3	765×3
Weight			kg	279×2	279×2	279+255	255×3	255×3	279+255×2	279+255×2	279×2+255	279×2+255	279×3	279×3	279×3	279×3	279×3	279×3
		Туре	2	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant	ļ ļ	Charge	kg	11.7×2	11.7×2	11.8+11.7	11.7×3	11.7×3	11.8+11.7×2	11.8+11.7×2	11.8×2+11.7	11.8×2+11.7	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3
		Liquid		12.70	15.88	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
Connection p	pipe diameter	Gas	mm	28.58	28.58	28.58	34.92	34.92	34.92	34.92	34.92	34.92	41.27	41.27	41.27	41.27	41.27	41.27
		Cooling	2500	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
Operation ra	ange	Heating	°CDB	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

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

Cooling(T3): Indoor temperature of 29°CDB / 19°CWB, and outdoor temperature of 46°CDB / 24°CWB

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

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



System Outline

High ambient operation design

Powerful cooling

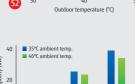
capacity design

Possible to operate cooling up to 52°C outdoor temperature

Keeping high cooling power at even high ambient temperature

Anti-corrosion treatment design

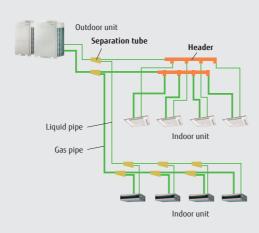
All metalic and PCB components are protected against corrosion



52°C ambient

System configuration example

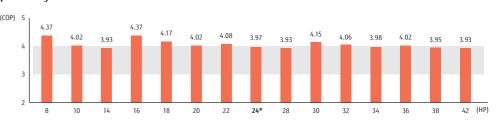
- This system is used for medium-sized and large buildings. Connecting each outdoor unit makes it possible to create a high-capacity system.
- Connection of multiple indoor units using separation tubes



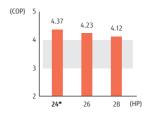
Energy efficiency

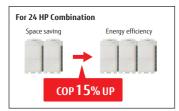
Top class high COP is realized for all combinations by our unique heat exchanger structure, high efficient DC twin compressor, and other our own technologies.

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



DC fan motor

Power consumption has been reduced by 25% compared to previous models by using a compact and high performance DC fan motor.



Subcool heat exchanger

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



Sine-wave DC inverter control

High efficiency operation is realized by using a sine wave DC inverter control.



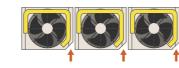
DC inverter compressor

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



4-face heat exchanger

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





Front intake port

(Corner cut air inhaling structure)

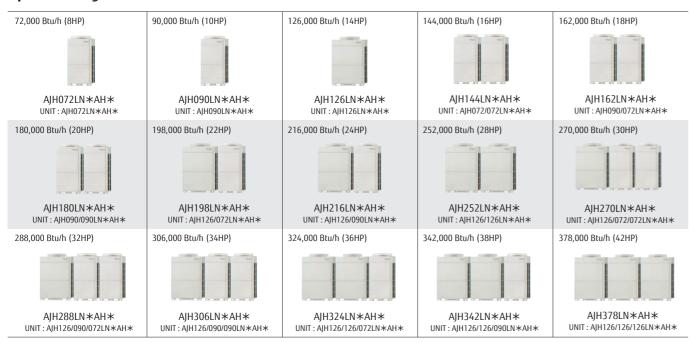
In multiple outdoor unit installations, the unique front intake

Outdoor units lineup

• Combinations other than the followings are not recommended.

AIRSTAGE //- II **TROPICAL** series

Space Saving Combination



AJH__LN*AH*: AJH__LNTAH, AJH__LNLAHU AJH__LNTAHH, AJH__LNLAHHU

Energy efficiency combination

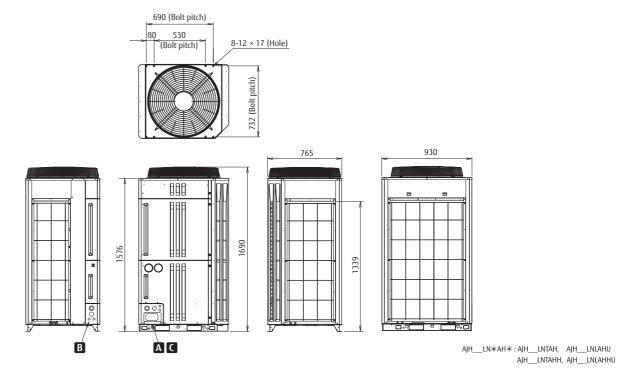


AJH__LN*AH*: AJH__LNTAH, AJH__LNLAHU AJH__LNTAHH, AJH__LNLAHHU

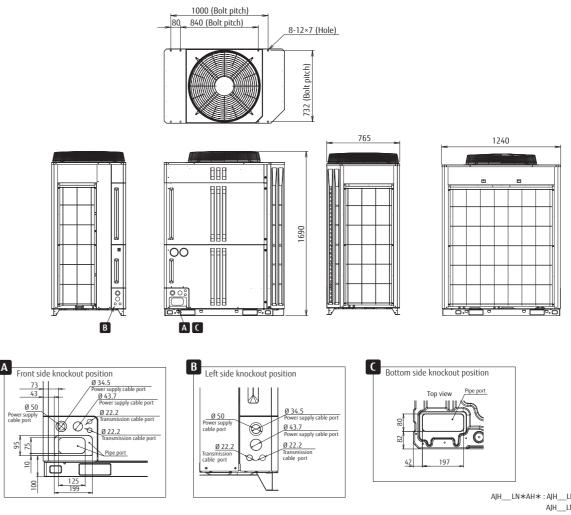
Dimensions

8,10HP: AJH072LN*AH* / AJH090LN*AH*

(Unit:mm)



14HP: AJH126LN*AH*





Space Saving Combination

		HP	8	10	14	16	18	20	22	24	28	30	32	34	36	38	42
Rating Capacity range		Btu/h	72,000	90,000	126,000	144,000	162,000	180,000	198,000	216,000	252,000	270,000	288,000	306,000	324,000	342,000	378,000
		Ton	6.0	7.5	10.5	12.0	13.5	15.0	16.5	18.0	21.0	22.5	24.0	25.5	27.0	28.5	31.5
Model name			AJH072LN*AH*	AJH090LN*AH*	AJH126LN*AH*	AJH144LN*AH*	AJH162LN*AH*	AJH180LN*AH*	AJH198LN*AH*	AJH216LN*AH*	AJH252LN*AH*	AJH270LN*AH*	AJH288LN*AH*	AJH306LN*AH*	AJH324LN*AH*	AJH342LN*AH*	AJH378LN*AH*
Unit 1 Unit 2 Unit 3			AJH072LN*AH*	AJH090LN*AH*	AJH126LN*AH*	AJH072LN*AH* AJH072LN*AH*	AJH090LN*AH* AJH072LN*AH*	AJH090LN*AH* AJH090LN*AH*	AJH126LN*AH* AJH072LN*AH*	AJH126LN*AH* AJH090LN*AH*	AJH126LN*AH* AJH126LN*AH*	AJH126LN*AH* AJH072LN*AH* AJH072LN*AH*	AJH126LN*AH* AJH090LN*AH* AJH072LN*AH*	AJH126LN*AH* AJH090LN*AH* AJH090LN*AH*	AJH126LN*AH* AJH126LN*AH* AJH072LN*AH*	AJH126LN*AH* AJH126LN*AH* AJH090LN*AH*	AJH126LN*AH* AJH126LN*AH* AJH126LN*AH*
Maximum Connectable	Indoor Unit*1		13	13	18	26	26	26	28	31	36	39	41	41	41	41	41
Indoor unit connectable	e capacity	kW	11.2-29.1	14.0-36.4	20.0-52.0	22.4-58.2	25.2-65.5	28.0-72.8	31.2-71.1	34.0-88.4	40.0-104.0	42.4-110.2	45.2-117.5	48.0-124.8	51.2-133.1	54.0-140.4	60.0-156.0
Power source					3-phase, ~	400V, 50Hz							3-phase, ~400V, 50Hz				
	Cooling(T1)		22.4	28.0	40.0	44.8	50.4	56.0	62.4	68.0	80.0	84.8	90.4	96.0	102.4	108.0	120.0
Capacity	Cooling(T3)	kW	22.4	24.3	30.7	44.8	46.7	48.6	53.1	55.0	61.4	75.5	77.4	79.3	83.8	85.7	92.1
	Heating(T1)		25.0	31.5	45.0	50.0	56.5	63.0	70.0	76.5	90.0	95.0	101.5	108.0	115.0	121.5	135.0
Input power	Cooling(T1)	kW	5.51	7.73	11.53	11.02	13.24	15.46	17.04	19.26	23.06	22.55	24.77	26.99	28.57	30.79	34.59
input power	Heating	KVV	5.72	7.83	11.45	11.44	13.55	15.66	17.17	19.28	22.90	22.89	25.00	27.11	28.62	30.73	34.35
EER	Cooling(T1)	W/W	4.07	3.62	3.47	4.07	3.81	3.62	3.66	3.53	3.47	3.76	3.65	3.56	3.58	3.51	3.46
СОР	Heating	W/W	4.37	4.02	3.93	4.37	4.17	4.02	4.08	3.97	3.93	4.15	4.06	3.98	4.02	3.95	3.93
Airflow rate		m₃/h	11,100	11,100	13,000	11,100×2	11,100×2	11,100×2	13,000+11,100	13,000+11,100	13,000×2	13,000+11,100×2	13,000+11,100×2	13,000+11,100×2	13,000×2+11,100	13,000×2+11,100	13,000×3
Sound pressure level*2	Cooling	dB(A)	56	58	60	59	60	61	61	62	63	63	63	64	64	64	65
·	Heating	` '	58	59	61	59	62	62	62	63	64	63	64	65	65	65	66
Maximum external stat	tic pressure	Pa	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Compresor motor outpu	ıt	kW	3.9	3.9	3.9+4.5	3.9×2	3.9×2	3.9×2	3.9×2+4.5	3.9×2+4.5	3.9×2+4.5×2	3.9×3+4.5	3.9×3+4.5	3.9×3+4.5	3.9×3+4.5×2	3.9×3+4.5×2	3.9×3+4.5×3
Heat exchanger fin			Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin	Blue fin
	Height		1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
Dimensions	Width	mm	930	930	1,240	930×2	930×2	930×2	1,240+930	1,240+930	1,240×2	1,240+930×2	1,240+930×2	1,240+930×2	1,240×2+930	1,240×2+930	1,240×3
	Depth		765	765	765	765	765	765	765	765	765	765	765	765	765	765	765
Weight		kg	220	220	303	220+220	220+220	220+220	303+220	303+220	303+303	303+220+220	303+220+220	303+220+220	303+303+220	303+303+220	303+303+303
Refrigerant charge		kg	11.2	11.2	11.8	11.2×2	11.2×2	11.2×2	11.8+11.2	11.8+11.2	11.8×2	11.8+11.2×2	11.8+11.2×2	11.8+11.2×2	11.8×2+11.2	11.8×2+11.2	11.8×3
Connection pipe	Liquid	mm	12.70	12.70	12.70	12.70	15.88	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05
diameter	Gas	, ii	22.22	22.22	28.58	28.58	28.58	28.58	34.92	34.92	34.92	34.92	34.92	34.92	41.27	41.27	41.27
Operation	Cooling	°CDB	-15 to 52 *1	-15 to 52 *1	-15 to 52 *1	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52						
temperature range	Heating		-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

Energy Efficiency Combination

40 **OGENERAL**

		HP	24	26	28
Rating Capacity range		Btu/h	216,000	234,000	252,000
		Ton	18.0	19.5	21.0
Model name			AJH216LN*AH*	AJH234LN*AH*	AJH252LN*AH*
Unit 1 Unit 2 Unit 3			AJH072LN*AH* AJH072LN*AH* AJH072LN*AH*	AJH090LN*AH* AJH072LN*AH* AJH072LN*AH*	AJH090LN*AH* AJH090LN*AH* AJH072LN*AH*
Maximum Connectable I	ndoor Unit*1		39	39	39
Indoor unit connectable	capacity	kW	33.6-87.4	36.4-94.6	39.2-101.9
Power source				3-phase, ~400V, 50Hz	
	Cooling(T1)		67.2	72.8	78.4
Capacity	Cooling(T3)	kW	67.2	69.1	71.0
	Heating(T1)		75.0	81.5	88.0
anut anunce	Cooling(T1)	kW	16.53	18.75	20.97
nput power	Heating	KVV	17.16	19.27	21.38
ER	Cooling(T1)	W/W	4.07	3.88	3.74
:OP	Heating	W/W	4.37	4.23	4.12
Airflow rate		m³/h	11,100×3	11,100×3	11,100×3
·	Cooling	4D(A)	61	62	62
sound pressure level*2	Heating	dB(A)	61	62	63
Maximum external statio	pressure	Pa	80	80	80
Compresor motor output		kW	3.9×3	3.9×3	3.9×3
leat exchanger fin			Blue fin	Blue fin	Blue fin
	Height		1,690	1,690	1,690
Dimensions	Width	mm	930×3	930×3	930×3
	Depth		765	765	765
Veight		kg	220+220+220	220+220+220	220+220+220
Refrigerant charge		kg	11.2×3	11.2×3	11.2×3
Connection pipe	Liquid		15.88	15.88	15.88
liameter	Gas	mm	34.92	34.92	34.92
Operation	Cooling	°CDB	-5 to 52	-5 to 52	-5 to 52
temperature range	Heating	CDR	-20 to 21	-20 to 21	-20 to 21

AJH__LN*AH*: AJH__LNTAH, AJH__LNLAHU AJH__LNTAHH, AJH__LNLAHHU Note : Specifications are based on the following conditions.

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

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

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

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

AJH__LN*AH*: AJH__LNTAH, AJH__LNLAHU AJH__LNTAHH, AJH__LNLAHHU

^{*1} Minimum connectable indoor unit number is 2. However ARXC72 and ARXC90 can be used signal connection.

^{*2} The noise value is the value when measured in an anechoic room.

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



System Outline

High Energy Efficiency

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

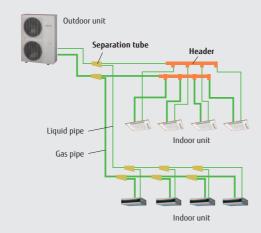
Flexible systems for small- and medium-size buildings air conditioning

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.

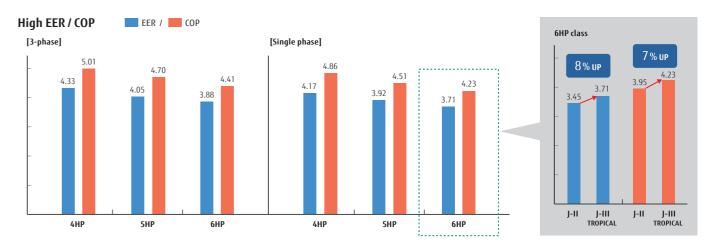
System configuration example

- 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.

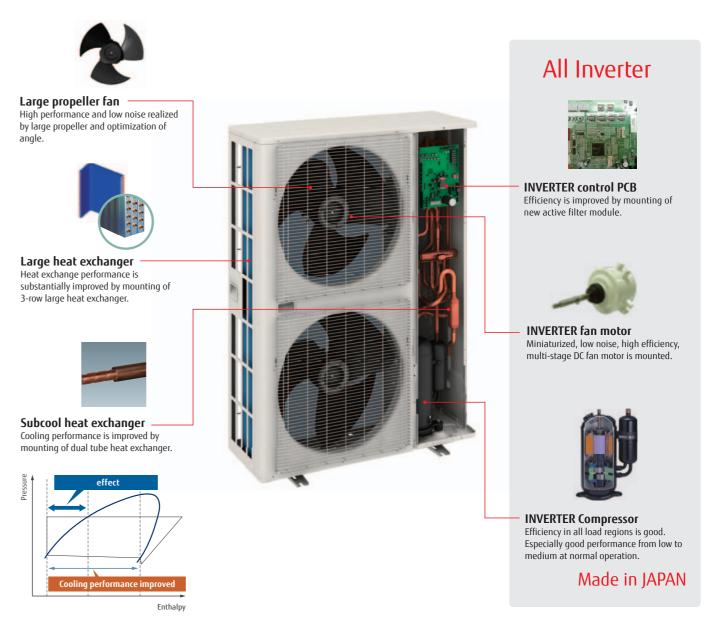


Energy efficiency

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



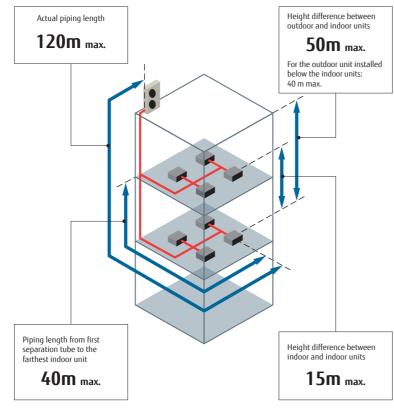


Long piping capability

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

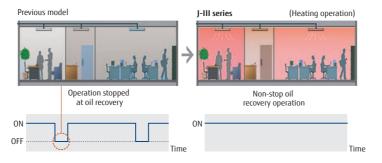






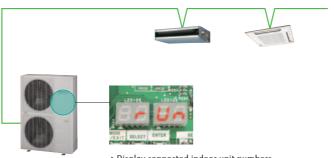
Non-stop oil recovery operation

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



Easier Installation

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



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

Specifications

		HP	4	5	6	4	5	6
Rating Capacity range	E	Stu/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 Connectable	Indoor Unit		1-7	1-8	1-9	1-7	1-8	1-9
Power source			9	Single-phase, ~230V, 50H	z.		3-phase, ~400V, 50Hz	
	Cooling(T1/T3)	kW	12.1/10.3	14.0/11.1	15.5/11.5	12.1/10.3	14.0/11.1	15.5/11.5
Connection	Heating	KVV	13.6	16.0	18.0	13.6	16.0	18.0
Capacity	Cooling(T1/T3)	- Btu/h	41,000/35,000	47,500/37,800	52,500/39,000	41,000/35,000	47,500/37,800	52,500/39,000
	Heating	DLU/II	46,000	54,500	61,000	46,000	54,500	61,000
lanut anuns	Cooling(T1/T3)		2.90/3.47	3.57/3.77	4.18/3.92	2.79/3.30	3.46/3.57	3.99/3.71
Input power	Heating	kW	2.80	3.55	4.26	2.71	3.40	4.08
Current	Cooling(T1/T3)		12.7/15.2	15.7/16.6	18.4/17.2	5.2/6.2	6.6/6.6	7.7/6.9
Cullellic	Heating	A	12.3	15.6	18.7	5.0	6.5	7.8
EER	Cli/T1/T2)	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
EEK	Cooling(T1/T3)	Btu/h/W	14.15/10.10	13.30/10.05	12.60/9.95	14.70/10.60	13.75/10.60	13.15/10.50
COP	Hankina	W/W	4.86	4.51	4.23	5.01	4.70	4.41
COP	Heating	Btu/h/W	16.45	15.35	14.30	17.00	16.00	14.95
Airflow 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)
Council processes lovel	Cooling	dB(A)	50	51	53	50	51	53
Sound pressure level	Heating	UD(A)	52	53	55	52	53	55
	Height		1,334	1,334	1,334	1,334	1,334	1,334
Net Dimensions	Width	mm	970	970	970	970	970	970
	Depth]	370	370	370	370	370	370
Net Weight		kg	120	120	120	120	120	120
Refrigerant		Туре	R410A	R410A	R410A	R410A	R410A	R410A
Connection	Liquid	mm	9.52	9.52	9.52	9.52	9.52	9.52
pipe diameter	Gas	"""	15.88	15.88	19.05	15.88	15.88	19.05
Operation	Cooling	°CDB	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52	-5 to 52
range	Heating	T CDB	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

Note: Specifications are based on the following conditions.

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

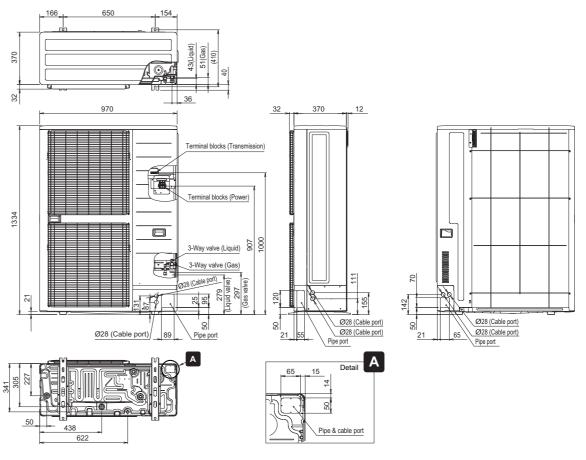
Cooling (T3): Indoor temperature of 29°CDB / 19°CWB, and outdoor temperature of 46°CDB / 24°CWB Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

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

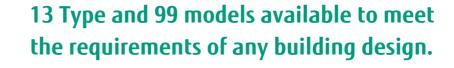
Dimensions

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

(Unit : mm)









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

INDOOR UNITS LINE-UP

4-way Flow Compact Cassette

4-way Flow Cassette

Mini Duct

Slim Duct / Slim Concealed Floor

Medium Static Pressure Duct

High Static Pressure Duct

Large Airflow Duct

Floor / Ceiling

Ceiling

Wall Mounted (EEV Internal / external)



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. 13 types, 99 models, Capacity range from 7,000 Btu/h to 96,000Btu/h

Indoor units range

Cih		Btu/h	7,000	9,000	12,000	14,000	18,000	24,000	30,000	34,000	36,000	45,000	54,000	60,000	72,000	90,000	96,000
Capacity range		kW	2.2	2.8	3.6	4.5	5.6	7.1	9.0	10.0	11.2	12.5	14.0	18.0	22.4	25.0	28.0
	/ way Flow Compact		=	=													
	4-way Flow Compact		AUGB07GALH AUGB07GATH	AUGB09GALH AUGB09GATH	AUGB12GALH AUGB12GATH	AUGB14GALH AUGB14GATH	AUGB18GALH AUGB18GATH	AUGB24GALH AUGB24GATH									
							=										
Cassette		(Slim type)					AUGD18GALH	AUGD24GALH									
	4-way Flow						AUGD18GATH	AUGD24GATH									
		(Large type)								1		1	=				
							AUGA18GALH	AUGA24GALH	AUGA30GALH AUGA30GATH	AUGA34GALH	AUGA36GALH AUGA36GATH	AUGA45GALH AUGA45GATH	AUGA54GALH AUGA54GATH				
	Mini Duct																
	(With drain pump)		ARGK07GCLH	ARGK09GCLH	ARGK12GCLH	ARGK14GCLH	ARGK18GCLH	ARGK24GCLH									
	Mini Duct (Without drain pump)																
			ARGK07GALH	ARGK09GALH	ARGK12GALH	ARGK14GALH	ARGK18GALH	ARGK24GALH									
	Slim Duct (With drain pump)																
			ARGD07GATH	ARGD09GATH	ARGD12GATH	ARGD14GATH	ARGD18GATH	ARGD24GATH									
Duct	Medium Static Pressure	e Duct						2000	0000		0000	0000					
Julia	mediam static ressur							ARGA24GBTH	ARGA30GBTH		ARGA36GBTH	ARGA45GBTH					
															The same of		
															ADCC73CPTU*1	ADCCOOCDTU*	
	High Static Pressure D	luct									ARGC36GBTH				ARGC72GBTH*1	ARGC90GBTH*1	ARGC96GATH*1
	High Static Pressure D	luct										E E.		E E.			
	High Static Pressure D	uct										ARGC45GATH		ARGC60GATH*1	ARGC72GBTH*1	ARGC90GBTH*1	
		luct										ARGC45GATH			ARGC72GBTH*1	ARGC90GBTH*1	
	High Static Pressure D	uct					ARGN18GATH*2	ARGN24GATH*2	ARGN30GATH*2	ARGN34GATH*2	ARGC36GBTH				ARGC72GBTH*1	ARGC90GBTH*1	
	Large Airflow Duct	luct					ARGN18GATH*2	ARGN24GATH*2			ARGC36GBTH	ARGC45GATH			ARGC72GBTH*1	ARGC90GBTH*1	
					ABGA12GATH	ABGA14GATH	ARGN18GATH*2	ARGN24GATH*2			ARGC36GBTH	ARGC45GATH			ARGC72GBTH*1	ARGC90GBTH*1	
Floor	Large Airflow Duct Floor (Same as Ceiling mode	els)			ABGA12GATH	ABGA14GATH	ARGN18GATH*2	ARGN24GATH*2			ARGC36GBTH	ARGC45GATH			ARGC72GBTH*1	ARGC90GBTH*1	
Floor	Large Airflow Duct	els)					ARGN18GATH*2	ARGN24GATH*2			ARGC36GBTH	ARGC45GATH			ARGC72GBTH*1	ARGC90GBTH*1	
Floor	Large Airflow Duct Floor (Same as Ceiling mod	els)	ARGD07GATH	ARGD09GATH	ABGA12GATH	ABGA14GATH ARGD14GATH	ARGN18GATH*2	ARGN24GATH*2 ABGA24GATH ARGD24GATH			ARGC36GBTH	ARGC45GATH			ARGC72GBTH*1	ARGC90GBTH*1	
Floor	Large Airflow Duct Floor (Same as Ceiling mod	els)			ABGA12GATH	ABGA14GATH	ARGN18GATH*2 ABGA18GATH	ARGN24GATH*2 ABGA24GATH			ARGC36GBTH	ARGC45GATH			ARGC72GBTH*1	ARGC90GBTH*1	
	Floor (Same as Ceiling mod Slim Concealed Floor (Same as Slim Duct m	els)			ABGA12GATH ARGD12GATH	ABGA14GATH ARGD14GATH	ARGN18GATH*2 ABGA18GATH ARGD18GATH	ARGN24GATH*2 ABGA24GATH ARGD24GATH	ARGN30GATH*2		ARGC36GBTH	ARGC45GATH ARGN45GATH*2	ABGAS4GATH		ARGC72GBTH*1	ARGC90GBTH*1	
	Floor (Same as Ceiling mode) Slim Concealed Floor (Same as Slim Duct m)	els)			ABGA12GATH ARGD12GATH	ABGA14GATH ARGD14GATH	ARGN18GATH*2 ABGA18GATH ARGD18GATH	ARGN24GATH*2 ABGA24GATH ARGD24GATH	ARGN30GATH*2		ARGC36GBTH ARGN36GATH*2	ARGC45GATH ARGN45GATH*2			ARGC72GBTH*1	ARGC90GBTH*1	
Ceiling	Floor (Same as Ceiling mod Slim Concealed Floor (Same as Slim Duct m	els)	ARGD07GATH	ARGDO9GATH	ABGA12GATH ARGD12GATH ABGA12GATH	ABGA14GATH ARGD14GATH ABGA14GATH	ARGN18GATH*2 ABGA18GATH ARGD18GATH	ARGN24GATH ARGD24GATH ABGA24GATH	ARGN30GATH*2 ABGA30GATH		ARGC36GBTH ARGN36GATH*2	ARGC45GATH ARGN45GATH*2			ARGC72GBTH*1	ARGC90GBTH*1	
	Floor (Same as Ceiling mode Slim Concealed Floor (Same as Slim Duct m	els)	ARGD07GATH ASGA07GACH	ARGD09GATH ASGA09GACH	ARGD12GATH ARGD12GATH ABGA12GATH ASGA12GACH ASGA12GATH	ABGA14GATH ABGA14GATH ASGA14GACH ASGA14GATH	ARGN18GATH*2 ABGA18GATH ABGA18GATH ASGA18GACH	ARGN24GATH ARGD24GATH ABGA24GATH ABGA24GATH	ARGN30GATH*2 ABGA30GATH ASGA30GACH		ARGC36GBTH ARGN36GATH*2	ARGC45GATH ARGN45GATH*2			ARGC72GBTH*1	ARGC90GBTH*1	
Ceiling	Floor (Same as Ceiling mode) Slim Concealed Floor (Same as Slim Duct m)	els)	ARGD07GATH ASGA07GACH	ARGD09GATH ASGA09GACH	ABGA12GATH ABGA12GATH ASGA12GACH	ABGA14GATH ABGA14GATH ABGA14GATH ASGA14GACH	ARGN18GATH*2 ABGA18GATH ABGA18GATH ASGA18GACH ASGA18GATH	ARGN24GATH ARGD24GATH ABGA24GATH ABGA24GATH	ARGN30GATH*2 ABGA30GATH ASGA30GACH		ARGC36GBTH ARGN36GATH*2	ARGC45GATH ARGN45GATH*2			ARGC72GBTH*1	ARGC90GBTH*1	

*1:ARGC60/72/90/96 cannot be connected to J-III tropical series. *2:Large Airflow Duct can be connected to V-III tropical series only.

4-way Flow Compact Cassette

Models Models

AUGB07GALH AUGB07GATH AUGB09GALH AUGB09GATH AUGB12GALH AUGB12GATH AUGB14GALH AUGB14GATH AUGB18GALH AUGB18GATH

AUGB24GALH AUGB24GATH



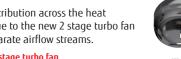


Feature

2-stage turbo fan

High efficiency design by 2 stage structure

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











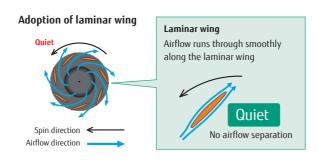
In the case of a previous fan, the air outlet range was narrow as the airflow moved to the motor side which meant the velocity of air passing through the heat exchanger was uneven.



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



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 3.0m (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

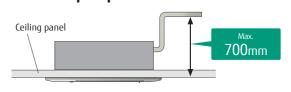


Compact design

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



High lift drain pump



Optional parts

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

Specifications

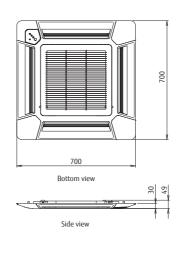
Model name			AUGB07GALH AUGB07GATH	AUGB09GALH AUGB09GATH	AUGB12GALH AUGB12GATH	AUGB14GALH AUGB14GATH	AUGB18GALH AUGB18GATH	AUGB24GALH AUGB24GATH
Power source					Single-phase	e, 230V, 50Hz		
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	KVV	2.8	3.2	4.1	5.0	6.3	8.0
Input power		W	25	25	29	35	36	84
Airflow rate	High		540 (150)	550 (153)	600 (167)	680 (189)	710 (197)	1,030 (286)
	Med	m³/h (l/s)	450 (125)	450 (125)	530 (147)	590 (164)	580 (161)	830 (231)
	Low	(1/3)	350 (97)	350 (97)	390 (108)	390 (108)	400 (111)	450 (125)
Sound pressure	High		34	35	37	38	41	50
level	Med	dB(A)	30	30	34	34	35	44
	Low		25	25	27	27	27	30
Dimensions (H x	W x D)	mm	245 × 570 × 570	245 × 570 × 570	245 × 570 × 570	245 × 570 × 570	245 × 570 × 570	245 × 570 × 570
Weight		kg(lbs)	15 (33)	15 (33)	15 (33)	15 (33)	17 (37)	17 (37)
Connection	Liquid (Flare)		6.35	6.35	6.35	6.35	9.52	9.52
pipe diameter	Gas (Flare)	mm	12.70	12.70	12.70	12.70	15.88	15.88
Drain hose diam	eter (I.D./O.U.)				25	/ 32		
Cassette	Model name				UTG-U	FGC-W		
Grille	Dimensions (HxWxD)	mm			50 × 70	00 × 700		
	Weight	kg(lbs)			2.6	(6)		

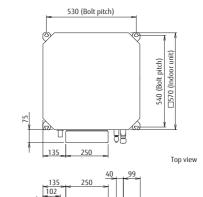
Note: Specifications are based on the following conditions.

Cooling : Indoor temperature of 27 $^{\circ}$ CDB / 19 $^{\circ}$ CWB, and outdoor temperature of 35 $^{\circ}$ CDB / 24 $^{\circ}$ CWB. Heating : Indoor temperature of 20 $^{\circ}$ CDB / (15 $^{\circ}$ CWB), and outdoor temperature of 7 $^{\circ}$ CDB / 6 $^{\circ}$ CWB.

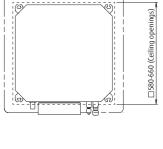
Pipe length: 7.5 m; Height difference between outdoor unit and indoor unit: 0 m. Voltage: 230 [V].

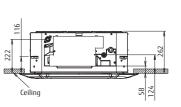
Dimensions (Unit:mm)





Liquid pipe Gas pipe





4-way Flow Cassette (Slim type)

Models Models

AUGD18GALH AUGD18GATH AUGD24GALH AUGD24GATH

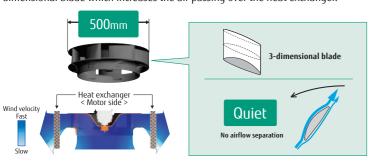


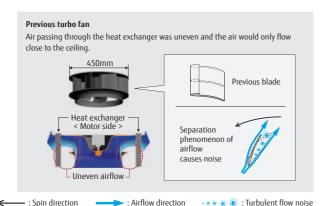


Feature

High efficiency turbo fan with 3-dimensional blade

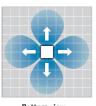
High efficiency airflow distribution has been achieved by the introduction of a ${\bf 3}$ dimensional blade which increases the air passing over the heat exchanger.

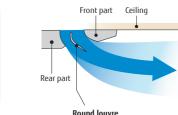


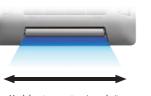


Improvement of the airflow distribution

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

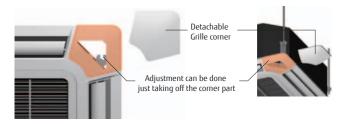






happens by spreading airflow widely

Adjustment of hanger position is possible after installation

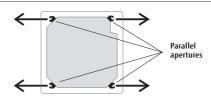


High ceiling mode

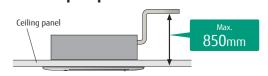
This cassette can be installed up to a height of 3.5m.

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

One way installation



High lift drain pump



Optional parts

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

Specifications

Model name			AUGD18GALH AUGD18GATH	AUGD24GALH AUGD24GATH
Power source			Single-phase	e, 230V, 50Hz
Capacity	Cooling	kW	5.6	7.1
	Heating	KVV	6.3	8.0
Input power		W	39	46
Airflow rate	High		1,150 (319)	1,280 (356)
	Med	m³/h (l/s)	940 (261)	1,040 (289)
	Low	(113)	870 (242)	870 (242)
Sound pressure	High		36	38
level	Med	dB(A)	30	33
	Low		29	29
Dimensions (H x	W x D)	mm	246 × 840 × 840	246 × 840 × 840
Weight		kg(lbs)	22 (48)	22 (48)
Connection	Liquid (Flare)		9.52	9.52
pipe diameter	Gas (Flare)	mm	15.88	15.88
Drain hose diam	eter (I.D./O.U.)		25	/ 32
Cassette	Model name		UTG-U	GGA-W
Grille	Dimensions (HxWxD)			50 × 950
	Weight	kg(lbs)	5.5	(12)

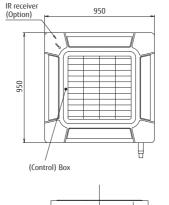
Note: Specifications are based on the following conditions.

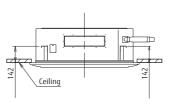
Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

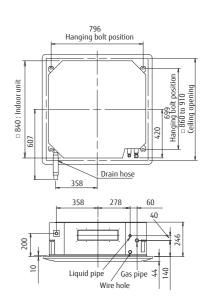
Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

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

Dimensions (Unit:mm)







4-way Flow Cassette (Large type)

Models Models

AUGA18GALH AUGA30GATH **AUGA36GATH** AUGA24GALH AUGA30GALH AUGA45GATH AUGA34GALH AUGA54GATH

AUGA36GALH AUGA45GALH AUGA54GALH

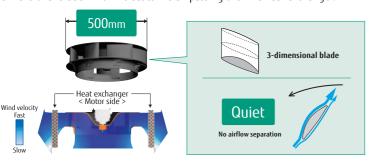


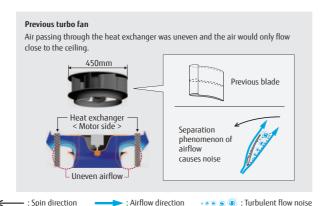


Feature

High efficiency turbo fan with 3-dimensional blade

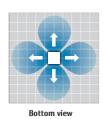
High efficiency airflow distribution has been achieved by the introduction of a 3 dimensional blade which increases the air passing over the heat exchanger.

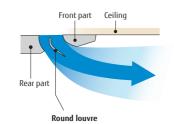


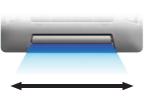


Improvement of the airflow distribution

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

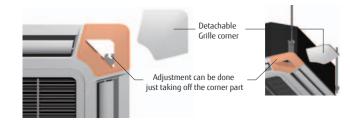






happens by spreading airflow widely

Adjustment of hanger position is possible after installation

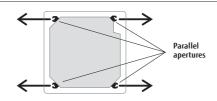


High ceiling mode

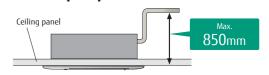
This cassette can be installed up to a height of 4.2m (36/45/54).

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

One way installation



High lift drain pump



Optional parts

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

Specifications

Model name			AUGA18GALH	AUGA24GALH	AUGA30GALH AUGA30GATH	AUGA34GALH	AUGA36GALH AUGA36GATH	AUGA45GALH AUGA45GATH	AUGA54GALH AUGA54GATH
Power source					S	ingle-phase, 230V, 50H	z		
Capacity Cooling Heating		kW	5.6	7.1	9.0	10.0	11.2	12.5	14.0
		KVV	6.3	8.0	10.0	11.2	12.5	14.0	16.0
Input power		W	51	51	59	77	80	99	119
Airflow rate	High		1,420 (394)	1,420 (394)	1,600 (444)	1,750 (486)	1,800 (500)	1,900 (528)	2,000 (556)
	Med	m³/h (l/s)	1,230 (342)	1,230 (342)	1,300 (361)	1,300 (361)	1,300 (361)	1,370 (381)	1,370 (381)
	Low		1,100/1,000*1(306/278)	1,100/1,000*1(306/278)	1,100 (306)	1,100 (306)	1,100 (306)	1,100 (306)	1,100 (306)
Sound pressure	High	dB(A)	40	40	40	43	44	46	47
level	Med		36	36	38	38	38	39	39
	Low		33/31*1	33/31*1	33	33	33	33	33
Dimensions (H x	W x D)	mm	288 × 840 × 840	288 × 840 × 840	288 × 840 × 840	288 × 840 × 840	288 × 840 × 840	288 × 840 × 840	288 × 840 × 840
Weight		kg(lbs)	27 (59)	27 (59)	27 (59)	27 (59)	27 (59)	27 (59)	27 (59)
Connection	Liquid (Flare)		9.52	9.52	9.52	9.52	9.52	9.52	9.52
pipe diameter	Gas (Flare)	mm	15.88	15.88	15.88	15.88	19.05	19.05	19.05
Drain hose diam	eter (I.D./O.U.)					25 / 32			
Cassette	Model name					UTG-UGGA-W			
Grille	Dimensions (HxWxD)	mm				50 × 950 × 950			
	Weight	kg(lbs)				5.5 (12)			

Note: Specifications are based on the following conditions.

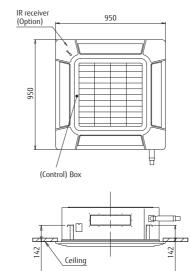
Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

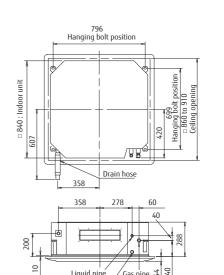
Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

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

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

Dimensions (Unit:mm)





Mini Duct

Models (With drain pump) ARGK07GCLH ARGK09GCLH ARGK12GCLH ARGK14GCLH ARGK18GCLH ARGK24GCLH





Models (Without drain pump) ARGK07GALH ARGK09GALH ARGK12GALH ARGK14GALH ARGK18GALH ARGK24GALH



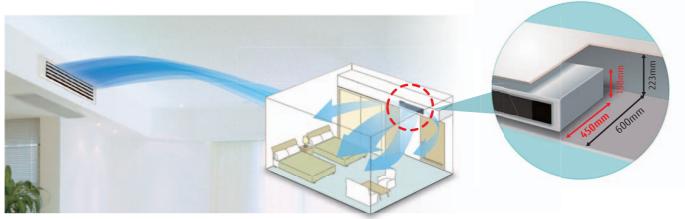


Feature

DC FAN

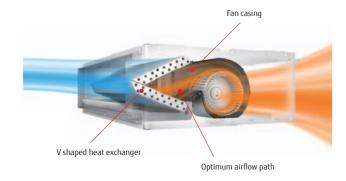
Optimum design in harmony with interior decoration

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



Advanced performance by new shaped heat exchanger and airflow

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



Easy drain design even at narrow ceiling

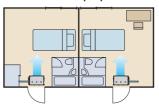
Models with drain pump: Drainage to the distant drain port is possible. **Models without drain pump:** Both sides drainage is possible.

Models with drain pump



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

Models without drain pump



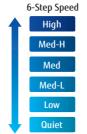
For models without drain pump, both sides drainage is possible and drain design is easy.

6-speed control*

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



at 07 / 09 models





* Compatible Remote Controller is as follows: UTY-RNRGZ2 / UTY-RLRG / UTY-RSRG / UTY-RHRG / UTY-DCGG / UTY-DTGGZ1 / UTY-ALGX / UTY-APGX

Optional parts

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

Auto Louver Grille Kit: UTD-GXTA-W (for ARGK07/09/12/14GCLH ARGK07/09/12/14GALH)

UTD-GXTB-W (for ARGK18GCLH

ARGK18GALH)

UTD-GXTC-W (for ARGK24GCLH

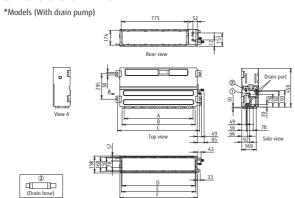
ARGK24GALH)

Specifications

Model name			ARGK07GCLH ARGK07GALH	ARGK09GCLH ARGK09GALH	ARGK12GCLH ARGK12GALH	ARGK14GCLH ARGK14GALH	ARGK18GCLH ARGK18GALH	ARGK24GCLH ARGK24GALH
Power source					Single-phase	2, 230V, 50Hz		
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	KVV	2.8	3.2	4.0	5.0	6.3	8.0
Input power	GCLH / GALH	W	28 / 21	28 / 21	35 / 28	66 / 59	73 / 66	80 / 73
	High		460 (128)	460 (128)	550 (153)	760 (211)	930 (258)	1,160 (322)
	Me-Hi		440 (122)	440 (122)	520 (144)	660 (183)	840 (233)	1,060 (294)
Airflow rate	Med	m³/h	420 (117)	420 (117)	480 (133)	560 (156)	740 (206)	960 (267)
Allilow late	Me-Lo	(l/s)	400 (111)	400 (111)	450 (125)	490 (136)	640 (178)	860 (239)
	Low		370 (103)	370 (103)	410 (114)	410 (114)	540 (150)	750 (208)
	Quiet		340 (94)	340 (94)	340 (94)	340 (94)	470 (131)	610 (169)
Static pressure ra	nge	Pa	0 to 30	0 to 30	0 to 30	0 to 50	0 to 50	0 to 50
Standard static p	ressure	Pd	10	10	10	15	15	7.1 8.0 80 / 73 1,160 (322) 1,060 (294) 960 (267) 860 (239) 750 (208) 610 (169)
	High		26	26	29	34	33	32
	Me-Hi		25	25	27	31	30	30
Sound pressure	Med	dB(A)	24	24	26	28	28	28
level	Me-Lo	GD(A)	23	23	25	26	26	27
	Low		22	22	24	24	24	25
	Quiet		21	21	22	22	22	22
Dimensions (H x	W x D)	kg(lbs)	198 × 700 × 450	198 × 700 × 450	198 × 700 × 450	198 × 700 × 450	198 × 900 × 450	198 × 1,100 × 450
Weight	GCLH / GALH	mm	15.5 (34) / 15 (33)	15.5 (34) / 15 (33)	16 (35) / 15.5 (34)	16 (35) / 15.5 (34)	19 (42) / 18.5 (41)	22.5 (50) / 22 (49)
Connection	Liquid (Flare)		6.35	6.35	6.35	6.35	9.52	9.52
pipe diameter	Gas (Flare)	mm	12.70	12.70	12.70	12.70	15.88	15.88
Drain hose diam	eter (I.D./O.U.)				25	/ 32		

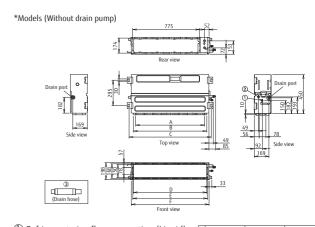
Note: Specifications are based on the following conditions. Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB. Pipe length: 7.5 m; Height difference between outdoor unit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

Dimensions (Unit:mm)



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

	ARGK07-14	ARGK18	ARGK24
Α	P100×6=600	P100×8=800	P100×10=1000
В	650	850	1050
С	752	952	1152
D	650	850	1050
Ε	665	864	1064
F	700	900	1100



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

	ARGK18	ARGK24
P100×6=600	P100×8=800	P100×10=1000
650	850	1050
752	952	1152
650	850	1050
665	864	1064
700	900	1100
	650 752 650 665	650 850 752 952 650 850 665 864

56 OGENERAL **OGENERAL** 57

Slim Duct / Slim Concealed Floor

Models

ARGD07GATH ARGD09GATH ARGD12GATH ARGD14GATH ARGD18GATH ARGD24GATH

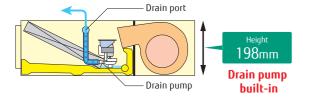




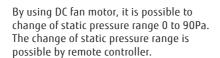
Feature

Slim design

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



Selectable with a wide range of static pressure

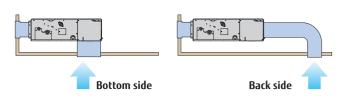




0 to 90 Pa *24 model is 0 to 50Pa

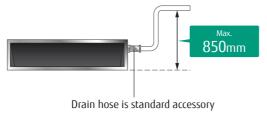
Air-intake

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

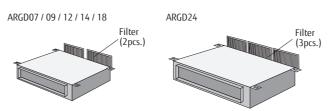


High lift drain pump

Slim Concealed Floor



Filter (Accessory)



Flexible installation





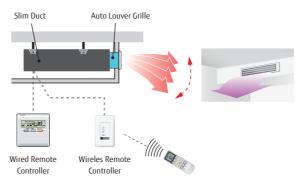






Auto Louver Grille Kit (Option)

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



Optional parts

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

Auto Louver Grille Kit: UTD-GXTA-W (for ARGD07/09/12/14GATH)

> UTD-GXTB-W (for ARGD18GATH) UTD-GXTC-W (for ARGD24GATH)

Specifications

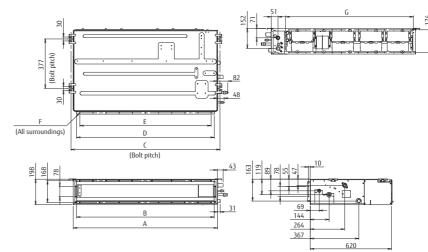
Model name			ARGD07GATH	ARGD09GATH	ARGD12GATH	ARGD14GATH	ARGD18GATH	ARGD24GATH
Power source					Single-phase	e, 230V, 50Hz		
Capacity	Capacity Cooling		2.2	2.8	3.6	4.5	5.6	7.1
Heating		kW	2.8	3.2	4.0	5.0	6.3	8.0
Input power		W	44	50	54	92	83	122
Airflow rate	High	24	550 (153)	600 (167)	600 (167)	800 (222)	940 (261)	1,330 (369)
Med	m³/h (l/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)	7.1 8.0 122 1,330 (369)
Static pressure ra	nge	Pa	0 to 90	0 to 50				
Standard static p	ressure	га	25	25	25	25	25	25
Sound pressure	High		28	29	30	34	34	35
level	Med	dB(A)	25	26	27	32	32	32
	Low		22	24	24	28	28	29
Dimensions (H x	W x D)	mm	198 × 700 × 620	198 × 700 × 620	198 × 700 × 620	198 × 700 × 620	198 × 900 × 620	198 × 1,100 × 620
Weight kg(lbs		kg(lbs)	17 (37)	17 (37)	18 (40)	18 (40)	22 (48)	26 (57)
Connection	Liquid (Flare)		6.35	6.35	6.35	6.35	9.52	9.52
pipe diameter	Gas (Flare)	mm	12.70	12.70	12.70	12.70	15.88	15.88
Drain hose diam	eter (I.D./O.U.)	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 $^{\circ}$ CDB / (15 $^{\circ}$ CWB), and outdoor temperature of 7 $^{\circ}$ CDB / 6 $^{\circ}$ CWB. Pipe length: 7.5 m; Height difference between outdoor unit and indoor unit: 0 m.

Dimensions (Unit:mm)

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

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



	ARGD07-14	ARGD18	ARGD24
Α	700	900	1100
В	650	850	1050
С	734	934	1134
D	650	850	1050
Е	P100x6=600	P100x8=800	P100x10=1000
F	18xØ5	22xØ5	26xØ5
G	574	774	974

Medium Static Pressure Duct

Models

ARGA24GBTH ARGA30GBTH ARGA36GBTH **ARGA45GBTH**

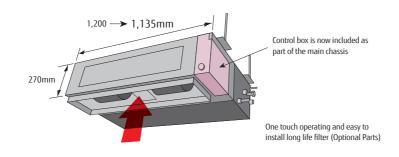




Feature

Slim & Compact design

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



Selectable with a wide range of static pressure

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



Can be installed for various location

It can be installed in such locations as high-rise condominiums by low static pressure design.



It can also be installed in wide spade when high static pressure is required, such as for offices.



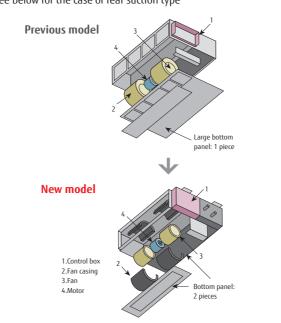
Easy setting by using remote controller

The change of static pressure range is possible by remote controller



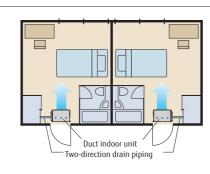
Easy maintenance

See below for the case of rear suction type



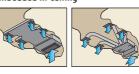
Structural improvement is attained by making the bottom panel two pieces, front and rear. The internal fan casing is also manufactured in two pieces, namely upper and lower. The $\,$ maintenance of the motor and fan can be easily carried out by removing the rear panel and the lower part of the casing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

Two-direction drain piping

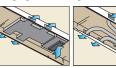


Installation styles

Embedded in Ceiling



Hanging from Ceiling



Optional parts

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

Specifications

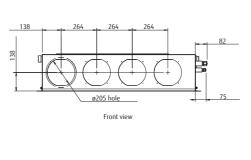
Model name			ARGA24GBTH	ARGA30GBTH	ARGA36GBTH	ARGA45GBTH		
Power source			Single-phase, 230V, 50Hz					
Capacity	Cooling	kW	7.1	9.0	11.2	12.5		
	Heating	KVV	8.0	10.0	12.5	14.0		
Input power		W	190	188	312	312		
Airflow rate	High	2/1	1,280 (356)	1,280 (356)	1,720 (478)	1,720 (478)		
	Med	m³/h (l/s)	1,210 (336)	1,210 (336)	1,670 (464)	1,670 (464)		
Low	Low	()	1,130 (314)	1,130 (314)	1,600 (444)	1,600 (444)		
Static pressure ra	nge	Pa	30 to 150	30 to 150	30 to 150	30 to 150		
Standard static p	ressure	10	100	100	100	100		
Sound pressure	High		38	40	43	43		
level	Med	dB(A)	36	38	41	41		
	Low		34	36	39	39		
Dimensions (H x	W x D)	mm	270 × 1,135 × 700	270 × 1,135 × 700	270 × 1,135 × 700	270 × 1,135 × 700		
Weight		kg(lbs)	39 (86)	42 (93)	42 (93)	42 (93)		
Connection	Liquid (Flare)		9.52	9.52	9.52	9.52		
pipe diameter	Gas (Flare)	mm	15.88	15.88	19.05	19.05		
Drain hose diam	eter (I.D./O.U.)]		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 $^{\circ}$ CDB / (15 $^{\circ}$ CWB), and outdoor temperature of 7 $^{\circ}$ CDB / 6 $^{\circ}$ CWB. Pipe length: 7.5 m; Height difference between outdoor unit and indoor unit: 0 m.

Dimensions (Unit:mm)

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

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



- 1177 (Bolt pitch)
- ① Refrigerant piping flare connection (Liquid):
- ② Refrigerant piping flare connection (Gas):
- ③ Drain piping connection (Drain pipe)

60 OGENERAL **OGENERAL** 61

High Static Pressure Duct

Models

ARGC36GBTH ARGC72GBTH ARGC90GBTH ARGC96GATH







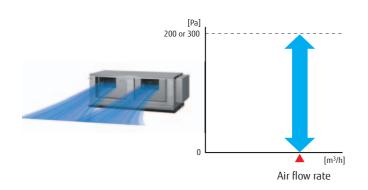


Feature

Static pressure selection

By using DC fan motor, it is possible to change static pressure range from 0 to 200Pa (ARGC36) / 300Pa (ARGC72/90/96).

The change of static pressure range is possible by function setting with wired / wireless remote controller.



Low energy consumption by high efficiency DC fan motor

Improved motor efficiency from previous model.





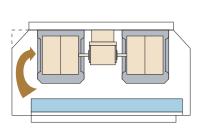
(ARGC36 type)

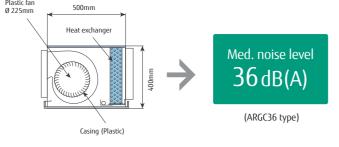
(ARGC72 / 90 / 96 type)

Low noise

Models: ARGC36

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.





Easy installation (Compact size & Light weight)

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



(ARGC36 type)





(Unit:mm)

(ARGC72 / 90 type)

Optional parts

Long-Life Filter: UTD-LF60KA (For ARGC36GBTH)

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

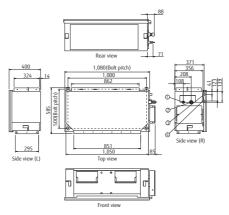
Specifications

Model name			ARGC36GBTH	ARGC72GBTH	ARGC90GBTH	ARGC96GATH
Power source			Single-phase, 230V, 50Hz Single-phase,		, 230V, 50Hz	Single-phase, 230V, 50Hz
Capacity	Cooling	kW	11.2	22.4	25.0	28.0
Heating	NVV	12.5	25.0	28.0	31.5	
Input power		W	207	681	819	838
Airflow rate	High Med m3/l		1,990 (553)	3,900 (1,083)	4,300 (1,195)	4,850 (1,347)
		m³/h (l/s)	1,680 (467)	3,300 (917)	4,000 (1,111)	4,250 (1,181)
Low	Low	(113)	1,330 (369)	3,000 (833)	3,500 (972)	3,600 (1,000)
Static pressure ra	nge	Pa	0 to 200	0 to 300	0 to 300	0 to 300
Standard static pr	essure		100	150	150	150
Sound pressure	High		42	47	48	48
level	Med	dB(A)	36	43	46	45
	Low	1	32	40	44	42
Dimensions (H x	W x D)	mm	400 × 1,050 × 500	450 × 1,587 × 700	450 × 1,587 × 700	550 × 1,587 × 700
Weight		kg(lbs)	40 (88)	84(185)	84(185)	105(231)
Connection	Liquid		9.52 (Flare)	12.70 (Brazing)	12.70 (Brazing)	12.70 (Brazing)
pipe diameter	Gas	mm	19.05 (Flare)	22.22 (Brazing)	22.22 (Brazing)	22.22 (Brazing)
Drain hose diam	eter (I.D./O.U.)	1	25 / 32	25 / 32		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 $^{\circ}$ CDB / (15 $^{\circ}$ CWB), and outdoor temperature of 7 $^{\circ}$ CDB / 6 $^{\circ}$ CWB. Pipe length: 7.5 m; Height difference between outdoor unit and indoor unit: 0 m.

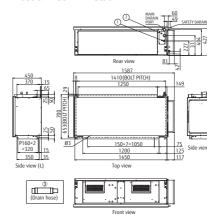
Dimensions (Unit:mm)

Models: ARGC36



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

Models: ARGC72 / ARGC90



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

- Models: ARGC96
- ① Refrigerant pipe flare connection (Liquid)
- ② Refrigerant pipe flare connection (Gas)
- ③ Drain hose

62 **OGENEROL OGENERAL** 63

High Static Pressure Duct

Models

ARGC45GATH ARGC60GATH ARGC72GATH ARGC90GATH



ARGC45 ARGC60



ARGC72 ARGC90

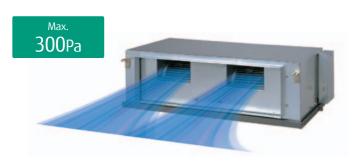


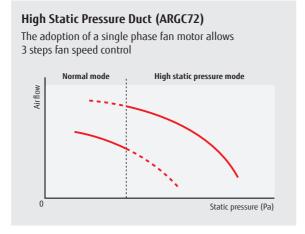
Feature

Static pressure selection

Models: ARGC72/ARGC90

2 Types of static pressure mode are selectable.

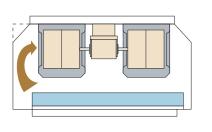


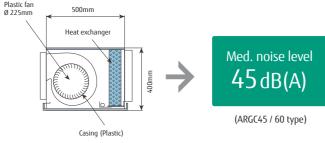


Low noise

Models: ARGC45 / ARGC60

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.





Easy installation (Compact size & Light weight)

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





Optional parts

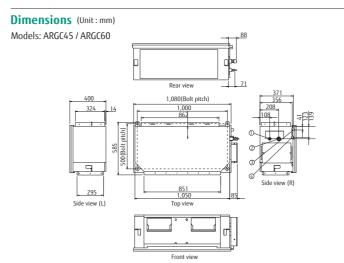
Long-Life Filter: UTD-LF60KA (For ARGC45/60GATH)

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

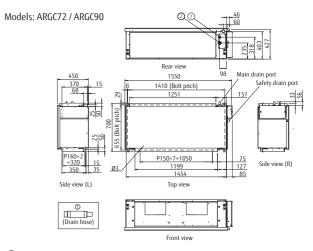
Specifications

Model name			ARGC45GATH	ARGC60GATH	ARGC72GATH	ARGC90GATH		
Power source			Single-phase	, 230V, 50Hz	Single-phase	Single-phase, 230V, 50Hz		
Capacity	Cooling	kW	12.5	18.0	22.4	25.0		
Heating	KVV	14.0	20.0	25.0	28.0			
Input power		W	715	730	1,110	1,250		
Airflow rate	rflow rate High Med	- 1	3,500 (972)	3,500 (972)	3,900 (1,083)	4,300 (1,195)		
		m³/h (l/s)	3,000 (833)	3,000 (833)	3,300 (917)	4,000 (1,111)		
	Low	(3)	2,460 (683)	2,460 (683)	3,000 (833)	3,500 (972)		
Static pressure ra	nge	Pa	100 to 250	100 to 250	50 to 300	100 to 300		
Standard static p	essure	10	100	100	260	250		
Sound pressure	High		49	49	51	53		
level	Med	dB(A)	45	45	48	51		
	Low]	42	42	45	49		
Dimensions (H x	W x D)	mm	400 × 1,050 × 500	400 × 1,050 × 500	450 × 1,550 × 700	450 × 1,550 × 700		
Weight		kg(lbs)	46 (101)	46 (101)	83 (-)	85(-)		
Connection	Liquid		9.52 (Flare)	9.52 (Flare)	12.70 (Brazing)	12.70 (Brazing)		
pipe diameter	Gas	mm	19.05 (Flare)	19.05 (Flare)	22.22 (Brazing)	22.22 (Brazing)		
Drain hose diam	eter (I.D./O.U.)]	25/	32	25	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 $^{\circ}$ CDB / (15 $^{\circ}$ CWB), and outdoor temperature of 7 $^{\circ}$ CDB / 6 $^{\circ}$ CWB. Pipe length: 7.5 m; Height difference between outdoor unit and indoor unit: 0 m.



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



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

64 **OGENERAL OGENERAL** 65

Large Airflow Duct

Models

ARGN18GATH ARGN24GATH ARGN30GATH ARGN34GATH ARGN36GATH

ARGN45GATH

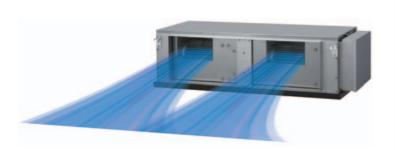




Feature

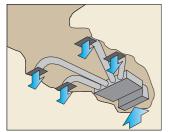
Large airflow volume

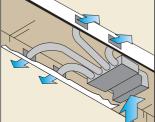
It can be installed in places such as early replacement of air required by large airflow volume.

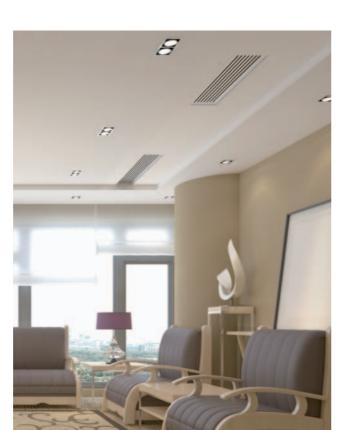




Installation styles







Selectable with a wide range of static pressure



50 to 250Pa

50 to 300Pa

(30 / 34class)

(36 / 45class)

Optional parts

Remote Sensor Unit: UTY-XSZX

Specifications

Model name			ARGN18GATH	ARGN24GATH	ARGN30GATH	ARGN34GATH	ARGN36GATH	ARGN45GATH
Power source					Single-phase	e, 230V, 50Hz		
Capacity Cooling		kW	5.6	7.1	9.0	10.0	11.2	12.5
	Heating	KW	6.3	8.0	10.0	11.2	12.5	14.0
Input power		W	154	205	306	432	572	572
Airflow rate	flow rate High	2.0	2,280 (633)	2,640 (733)	3,200 (889)	3,720 (1,033)	4,120 (1,145)	4,120 (1,145)
Med	m³/h (l/s)	-	-	_	-	-	-	
Low		(3)	-	-	-	-	-	-
Static pressure ra	nge	- Pa	50 to 100	50 to 150	50 to 250	50 to 250	50 to 300	50 to 300
Standard static p	ressure	10	50	50	50	50	60	60
Sound pressure	High		35	37	40	43	45	45
level	Med	dB(A)	=	-	=	-	-	_
	Low		=	-	_	-	-	-
Dimensions (H x	W x 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		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.U.)]			25	/ 32		

Note: Specifications are based on the following conditions.

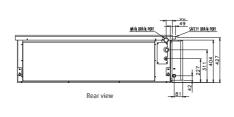
Cooling: Indoor temperature of 27*CDB / 19*CWB, and outdoor temperature of 35*CDB / 24*CWB.

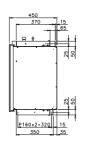
Heating: Indoor temperature of 20*CDB / (15*CWB), and outdoor temperature of 7*CDB / 6*CWB.

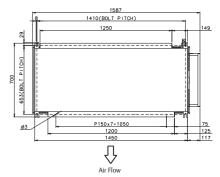
Pipe length: 7.5 m; Height difference between outdoor unit and indoor unit: 0 m. Voltage: 230 [V].

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

Dimensions (Unit:mm)









Floor / Ceiling

Models

ABGA12GATH ABGA14GATH ABGA18GATH ABGA24GATH



Floor standing



Feature

Flexible installation

Example for floor installation

Floor console



Example for ceiling installation

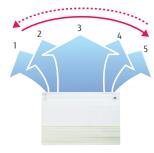
Under ceiling



Double auto swing

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

RIGHT and LEFT SWING



UP and DOWN SWING



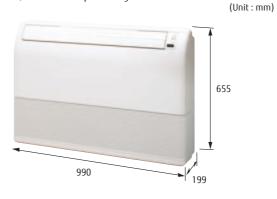
High power DC fan motor

- High power
- Wide rotation range
- High efficiency



Compact design

Symmetrical, slim and compact design.



Auto-closing louvre

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

Super vane

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

Specifications

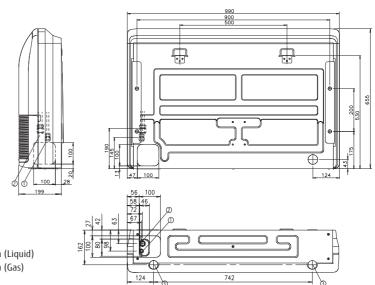
Model name			ABGA12GATH	ABGA14GATH	ABGA18GATH	ABGA24GATH			
Power source			Single-phase, 230V, 50Hz						
Capacity	Cooling	kW	3.6	4.5	5.6	7.1			
	Heating	KVV	4.0	5.0	6.3	8.0			
Input power		W	30	42	74	99			
Airflow rate	High		660 (183)	780 (216)	1,000 (277)	1,000 (277)			
	Med	m³/h (l/s)	570 (158)	640 (177)	720 (199)	820 (227)			
	Low	(1/3)	490 (136)	550 (152)	580 (161)	680 (188)			
Sound pressure	High		36	40	46	47			
evel	Med	dB(A)	32	36	39	42			
	Low		28	34	35	37			
Dimensions (H x	W x D)	mm	199 × 990 × 655	199 × 990 × 655	199 × 990 × 655	199 × 990 × 655			
Weight		kg(lbs)	25 (55)	26 (57)	26 (57)	27 (59)			
Connection	Liquid (Flare)		6.35	6.35	9.52	9.52			
pipe diameter	Gas (Flare)	mm	12.70	12.70	15.88	15.88			
Drain hose diam	eter (I.D./O.U.)		25/32						

Note : Specifications are based on the following conditions.

Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB. Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

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

Dimensions (Unit:mm)



- Refrigerant piping flare connection (Liquid)
 Periograph piping flare connection (Cas)
- ② Refrigerant piping flare connection (Gas)
- $\ensuremath{\mathfrak{G}}$ Drain piping connection

Ceiling

Models

ABGA30GATH ABGA36GATH ABGA45GATH ABGA54GATH

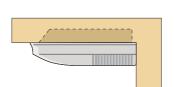




Feature

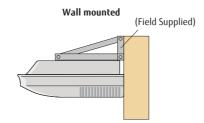
Installation

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



Concealed

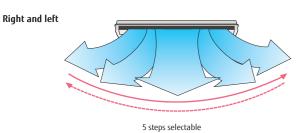
Installation pattern where part of the indoor unit is embedded into the ceiling.



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

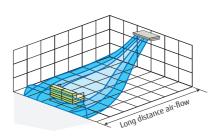


Up and down

4 steps selectable

Long airflow

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

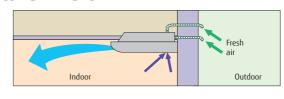


High power DC fan motor

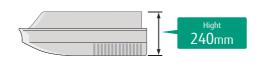
• High power • Wide rotation range • High efficiency



Fresh air intake

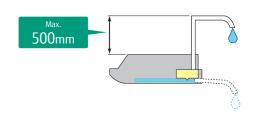


Slim & Compact design



High lift drain pump

Optional drain pump unit allows flexible installation design.



Optional parts

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

Specifications

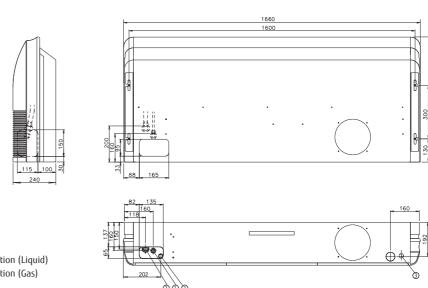
Model name			ABGA30GATH	ABGA36GATH	ABGA45GATH	ABGA54GATH		
Power source			Single-phase, 230V, 50Hz					
Capacity	Cooling	kW	9.0	11.2	12.5	14.0		
	Heating	KVV	10.0	12.5	14.0	16.0		
Input power		W	66	85	131	180		
Airflow rate	High		1,630 (452)	1,690 (469)	2,010 (558)	2,270 (629)		
	Med	m³/h (l/s)	1,370 (379)	1,400 (389)	1,600 (444)	1,780 (493)		
	Low	(113)	1,140 (316)	1,170 (325)	1,230 (342)	1,280 (355)		
Sound pressure	High		42	45	48	51		
level	Med	dB(A)	38	38	42	45		
	Low		33	34	35	36		
Dimensions (H x	W x D)	mm	240 × 1,660 × 700	240 × 1,660 × 700	240 × 1,660 × 700	240 × 1,660 × 700		
Weight		kg(lbs)	46 (101)	48 (106)	48 (106)	48 (106)		
Connection	Liquid (Flare)		9.52	9.52	9.52	9.52		
pipe diameter	Gas (Flare)	mm	15.88	19.05	19.05	19.05		
Drain hose diam	Drain hose diameter (I.D./O.U.)		25/32					

Note : Specifications are based on the following conditions.

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

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

Dimensions (Unit:mm)



- ① Refrigerant piping flare connection (Liquid)
- ② Refrigerant piping flare connection (Gas)
- $\ \, \textbf{ 3} \,\, \textbf{Drain piping connection}$

Wall Mounted

Models (EEV internal) Models (EEV external)
ASGA07GACH ASGA07GATH ASGE07GACH
ASGA09GACH ASGA09GATH ASGE09GACH
ASGA12GACH ASGA12GATH ASGE12GACH
ASGA14GACH ASGA14GATH ASGE14GACH





Feature

Filter features

High quality air conditioning by incorporation of high performance filter



Ion Deodorization Filter

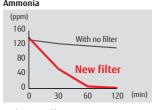
The filter deodorizes by powerfully decomposing absorbed odors using the oxidizing and reducing effects of ions generated by the ultra-fine-particle ceramic.

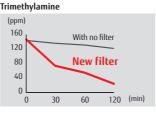


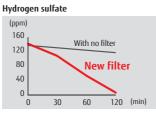
Apple-catechin Filter

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

Deodorizing effect (Odor reduction rate)

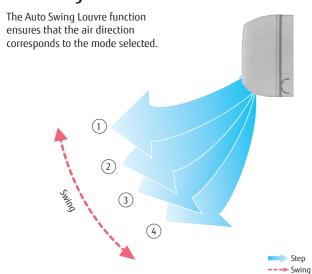






Testing organization:
Environmental Sanitary Inspection Center
Test method:
Dendorization Test

Auto swing louvre



Compact size

Powerful output even compact design

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





New style high power DC fan motor

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



Easy maintenance

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



Symmetrical design

Symmetrical, clean design that suits all interiors.

Specifications

Model name			ASGA07GACH ASGA07GATH	ASGA09GACH ASGA09GATH	ASGA12GACH ASGA12GATH	ASGA14GACH ASGA14GATH	ASGE07GACH	ASGE09GACH	ASGE12GACH	ASGE14GACH
Power source Single-phase, 230V, 50Hz						Single-phase	, 230V, 50Hz			
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	2.2	2.8	3.6	4.5
	Heating	N.A.A.	2.8	3.2	4.1	5.0	2.8	3.2	4.1	5.0
Input power		W	17	18	22	34	15	16	21	34
Airflow rate	High		490 (136)	500 (139)	560 (156)	670 (186)	490 (136)	500 (139)	560 (156)	680 (189)
	Med	m³/h (l/s)	450 (125)	450 (125)	480 (133)	490 (136)	450 (125)	450 (125)	480 (133)	490 (136)
	Low	(1/3)	370/420*1 (103/117*1)	370/420*1 (103/117*1)	420 (117)	420 (117)	370/420*1 (103/117*1)	370/420*1 (103/117*1)	420 (117)	420 (117)
Sound pressure	High		35	36	39	44	34	35	38	43
level	Med	dB(A)	33	33	35	37	32	32	34	35
	Low		27 / 31*1	27 / 31*1	31	32	26 / 30*1	26 / 30*1	30	30
Dimensions (H x	W x D)	mm	275 × 790 × 215	275 × 790 × 215	275 × 790 × 215	275 × 790 × 215	275 × 790 × 215	275 × 790 × 215	275 × 790 × 215	275 × 790 × 215
Weight		kg(lbs)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)
Connection	Liquid (Flare)		6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35
pipe diameter	Gas (Flare)	mm	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70
Drain hose diameter (I.D./O.U.)				13.8 / 15.	8 to 16.7			13.8 / 15.	8 to 16.7	
EV Kit (option)			-	_	_	_	UTR-EV09XB	UTR-EV09XB	UTR-EV14XB	UTR-EV14XB

Note: Specifications are based on the following conditions.

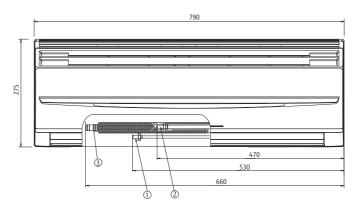
Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

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

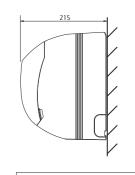
Pipe length: 7.5 m; Height difference between outdoor unit and indoor unit: 0 m. Voltage: 230 [V].

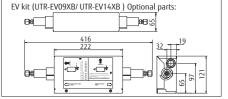
*1: This value is under cooling operation.

Dimensions (Unit:mm)



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





Wall Mounted

Models Models

ASGA18GACH ASGA18GATH ASGA24GACH ASGA24GATH ASGA30GACH ASGA30GATH

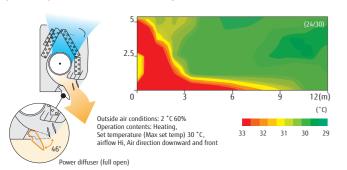




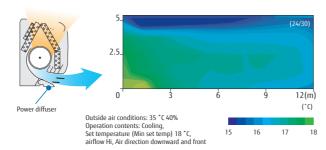
Feature

More comfort airflow by adopting power diffuser

"Vertical airflow" provides powerful floor level heating



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



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

High quality air conditioning by incorporation of high performance filter.



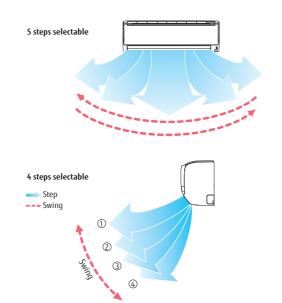
The filter deodorizes by powerfully decomposing absorbed odors using the oxidizing and reducing effects of ions generated by the ultra-fine-particle ceramic.



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

Double auto swing

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



Compact & Slim design

By using DC fan motor, compact design is realized.



Easy maintenance

Simplification of drain pan cleaning improves maintenance-ability.

Specifications

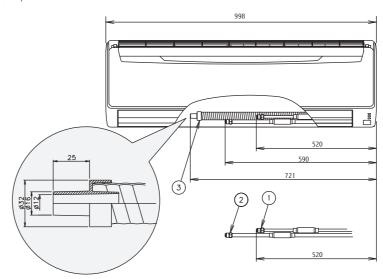
Model name			ASGA18GACH ASGA18GATH	ASGA24GACH ASGA24GATH	ASGA30GACH ASGA30GATH
Power source			·	Single-phase, 230V, 50Hz	
Capacity	Cooling	kW	5.6	7.1	8.0
	Heating	KVV	6.3	8.0	9.0
Input power		W	32	60	91
Airflow rate	High		840 (233)	1,100 (305)	1,240 (343)
	Med	m³/h (l/s)	770 (213)	910 (252)	980 (271)
	Low	(1/5)	690 (191)	730 (202)	770 (213)
Sound pressure	High		41	48	52
level	Med	dB(A)	39	43	45
	Low	ĺ	35	35	35
Dimensions (H x	W x 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.U.)	- 1		12 / 16	

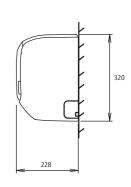
Note : Specifications are based on the following conditions.

Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB. Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

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

Dimensions (Unit:mm)





- $\mathop{\bigcirc}\limits_{\,\,\,}$ Refrigerant piping flare connection (Liquid)
- ② Refrigerant piping flare connection (Gas)
- ③ Drain hose connection

User friendly control system provides individual control to centralized control







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

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

CONTROL SYSTEM

CONTROL SYSTEM OVERVIEW

INDIVIDUAL CONTROLLER

CENTRALIZED CONTROLLER

CONVERTOR / ADAPTOR

BEST CONTROL SOLUTION FOR EACH PROPERTY

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

SHOP

Туре	Individual Control		Centralize	ed Control		In	tegrating Control (Interfa	ce)
The second								
	Wired Remote Controller	Group Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller	Network Convertor for LonWorks®	MODBUS® Convertor	KNX® Convertor
	UTY-RNRGZ2, UTY-RLRG	UTY-CGGGU	UTY-DCGG	UTY-DTGGZ1	UTY-APGXZ1, UTY-ALGXZ1	UTY-VLGX	UTY-VMGX	UTY-VKGX
Automatic control of A/C (Schedule timer, Weekly timer etc.)	•	•	•	•	•			
Limited control for staff (RC Prohibition, Room temp set point limitation etc.)			•	•	•	•	•	•
Group Control		•	•	•	•			
Advanced Energy Saving (Peak cut, Indoor unit rotation operation etc.)					•			
Remote Management				•	•			
Manage multiple sites				•	•			
Monitor energy consumption					•			
Control third party products					•			
Integrate FGL A/C into BMS						•	•	•

HOTEL

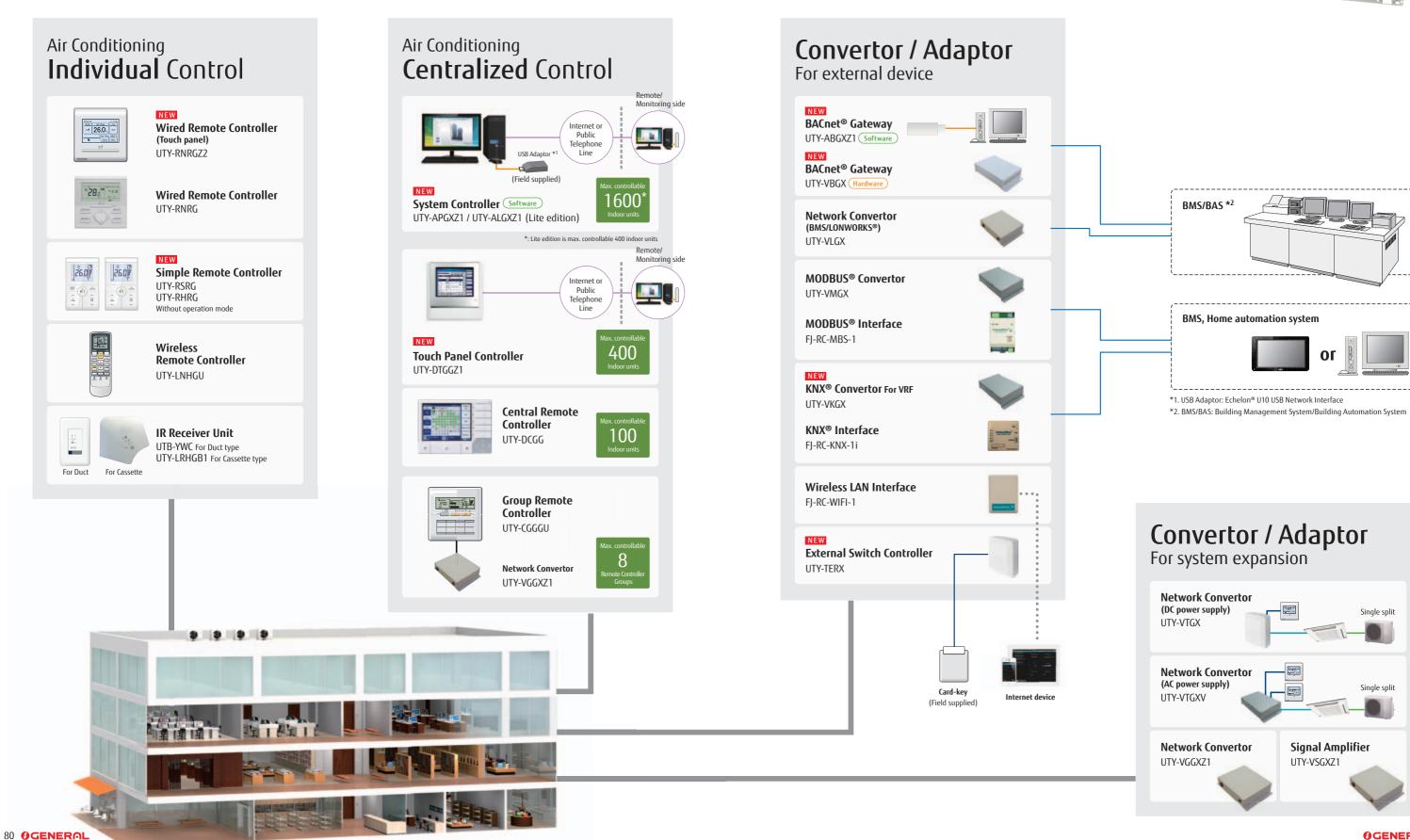
Туре		Individual Contro	ol		Centralize	ed Control			Integra	ating Control (Int	erface)	
2000		kd ±♥: ±♥:						\	\rightarrow			
	Wired Remote Controller	Simple Remote Controller	Wireless Remote Controller	Group Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller	BACnet® Gateway	Network Convertor for LonWorks®	MODBUS® Convertor	KNX® Convertor	External Switch Controller
	UTY-RNRGZ2, UTY-RLRG	UTY-RSRG, UTY-RHRG	UTY-LNHGU	UTY-CGGG	UTY-DCGG	UTY-DTGGZ1	UTY-APGXZ1, UTY-ALGXZ1	UTY-ABGXZ1, UTY-VBGX	UTY-VLGX	UTY-VMGX	UTY-VKGX	UTY-TERX
Local control for hotel guest	•	•	•									
Centralized A/C control for common space				•	•	•	•	•	•	•	•	
Limited control for hotel guests					•	•	•	•	•	•	•	
Remote Management						•	•					
Advanced Energy Saving (Peak cut, Indoor unit rotation operation etc.)							•	•				
Monitor energy consumption							•					
Control third party products							•					
Integrate FGL A/C into BMS								•	•	•	•	
Interlock with window contact												•
Interlock with key-card												•

OFFICE

OFFICE												
Туре		Individual Contro	ıl		Centralize	ed Control			Integra	ating Control (Int	erface)	
							-	\	\Q			
W. C. HILLS	Wired Remote Controller	Simple Remote Controller	Wireless Remote Controller	Group Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller	BACnet® Gateway	Network Convertor for LonWorks®	MODBUS® Convertor	KNX® Convertor	External Switch Controller
100	UTY-RNRGZ2, UTY-RLRG	UTY-RSRG, UTY-RHRG	UTY-LNHGU	UTY-CGGGU	UTY-DCGG	UTY-DTGGZ1	UTY-APGXZ1, UTY-ALGXZ1	UTY-ABGXZ1, UTY-VBGX	UTY-VLGX	UTY-VMGX	UTY-VKGX	UTY-TERX
Local control for office staff	•	•	•	•	•							
Automatic control of A/C (Schedule timer, Weekly timer etc.)	•		•	•	•	•	•	•				
Centralized A/C control for management					•	•	•	•	•	•	•	
Limited control for office staff (RC Prohibition, Room temp set point limitation etc.)					•	•	•	•	•	•	•	
Advanced Energy Saving (Peak cut, Indoor unit rotation operation etc.)							•	•				
Remote Management						•	•					
Energy Charge Apportionment						•	•	•				
Monitor energy consumption							•					
Control third party products							•					
Integrate FGL A/C into BMS								•	•	•	•	
Interlock with door contact												•
Interlock with human sensor for meeting room												•

CONTROL SYSTEM OVERVIEW

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



For Light Commercial

• Small VRF

For Commercial

• Large VRF

COMPARISON TABLE OF CONTROLLERS

ltem	1000	581	Kof 	 \$\display					-	
	Wired Remote Controller (Touch panel)	Wired Remote Controller	Simple Remote Controller	Simple Remote Controller *1	Wireless Remote Controller	Group Remote Controller	Central Remote Controller	Touch Panel Controller	System Controller Lite Software	System Controller Software
Model name	UTY-RNRGZ2	UTY-RLRG	UTY-RSRG	UTY-RHRG	UTY-LNHGU	UTY-CGGGU	UTY-DCGG	UTY-DTGGZ1	UTY-ALGXZ1	UTY-APGXZ1
Max. controllable remote controller groups	1	1	1	1	1	8	100	400	400	1600
Max. controllable indoor units	16	16	16	16	16	128	100	400	400	1600
Max. controllable groups	-	=	_	_	=	_	16	400	400	1600
On / Off	•	•	•	•	•	•	•	•	•	•
Operation mode setting	•	•	•	_	•	•	•	•	•	•
Fan speed setting	•	•	•	•	•	•	•	•	•	•
Room temp. setting	•	•	•	•	•	•	•	•	•	•
Room temp. set point limitation	•	•	•	•	_	_	•	•	•	•
Test operation	•	•	•	•	•	_	•	•	_	_
Up/down air direction flap setting	•	•	•	•	•	_	•	•	•	•
Right/left air direction flap setting	•	•	_	_	•	=	•	•	•	•
Individual louver control	•	_	_	_		_	_	•	_	
Group setting	_	_	_	_		_	•	•	•	•
RC prohibition	_	_	_	_	_	_	•	•	•	•
Anti freeze setting	•	_	_	_			•	•	•	•
Set temp. auto return	•	•		_		_	_	•	_	_
Economy mode setting	•	•		_	•		•	•	•	•
Human sensor control	•		_	_		_	_	•	•	•
Error	•	•	•	-		•	-	•	•	•
Defrosting	•	•	•	•				•		•
- 1	•	•				-	•		•	-
Current time	•	•	_	_	•	•	•	•	•	•
Day of week	•	•	-	-		•	-	•	•	•
R.C. prohibition	•	•	•	•		•	•	•	•	•
Cooling/heating priority	•		•	•		•	•	•	•	•
Address display	•	-	•	•	-	•	•	•	•	•
Room temp	•		•	•	-	_	-	•	-	_
Multi language		_	_	_	-	_	•	•	•	•
Summer time	•	_	=	-	-	-	•	•	•	•
Name registration	•	_	_	-		_	•	•	•	•
Backlight	•	-	•	•		_	•	•	-	=
2D floor layout / 3D building display	-	-	_	-		_	-	_	-	•
Schedule Period	Week	Week	_	-		Week	Week	Year	Year	Year
timer On/off, Temp, Mode, Times per day	8	4	-	-	=	4	20	20	144	144
On/off timer	•	•		-	•	-	-	-	-	-
Sleep timer	-	-	-	-	•	-	-	-	-	-
Program timer	-	-	-	-	•	-	-	-	-	-
Auto off timer	•	•	-	-	-	-	-	•	-	-
Day off	•	•	-	-	_	-	•	•	•	•
Min. unit of timer setting (Minutes)	10 • 30	30	_	-	5	10	10	10	10	10
Status monitoring system	-	-	_	-	-	_	•	•	•	•
Electricity charge apportionment	-	-	_	-	-	-	-	0	0	•
Error history	•	•	_	-	-	•	•	•	•	•
Emergency stop	_	_	_	_	=	_	•* ²	•* ²	=	
Remote management	-	_	_	_	-	_	-	•	0	•
Energy saving management	-	=		_	=	_	-	_	0	0
E-mail notification for malfunction	_	_	_	_		_	_	•	•	•
Key lock	• Child lock	• Child lock	-	-	-	• Child lock	• Password setting	Password setting	Password setting	Password setting
Law asisa mada								_		
Low noise mode	-	-	_	=		_	=	•	-	=

^{*1 &}quot;Operation mode" setting is not available for this model.
*2 This function is available only through external input control.

^{●:} Supported ○: Optional function —: Not supported yet

Wired Remote Controller (Touch Panel)



NEW UTY-RNRGZ2

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

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

Functions

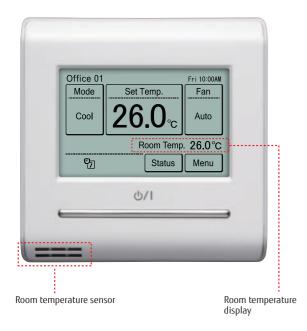
High performance and compact size

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



Accurate and comfortable control

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



Backlight

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

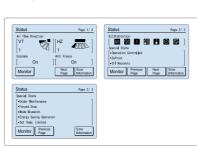


Various convenient functions

∞ı |26.0。|

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



| Office 01 | Fri 10 00 kB | Mode | Set Temp. | Fan | Auto |

Child lock

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



Name Registration

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

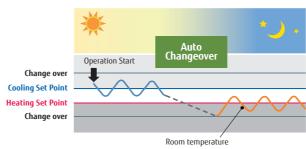


Various energy saving control

Custom Auto

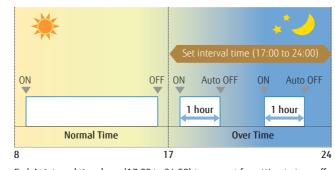
- Maintains 2 separate set points for heating and cooling.
- Automatically changes mode between heating and cooling.
- * This function is not available for some models.

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



Auto OFF timer

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



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

2 schedules Weekly Timer

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



Set Temperature Auto Return

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

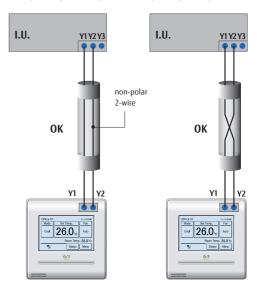
Set Temperature Upper and Lower Limit Setting

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

Simplified installation

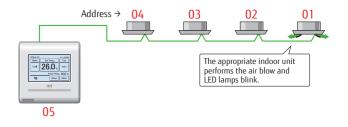
Uses non-polar 2-wire type

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



Auto Address Setting/Setting Position Notification

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



Easy Maintenance

Error History Display

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



Specifications

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

DC12V is supplied by indoor unit

84 OGENEROL 85

Wired Remote Controller

Max. controllable 16 indoor units

UTY-RLRG

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



Functions

High performance and compact size

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



High visibility and easy operation

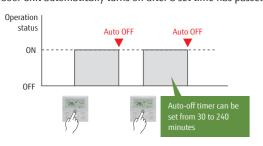
- "Mode", "Set Temp", and "Fan" are displayed at large size on the top screen.
- Each function to be set is indicated by
- Control guide is displayed and operation is simple and straightforward.



clearer with large LCD.

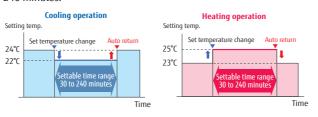
Auto-off timer

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



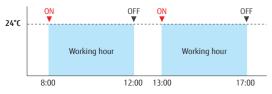
• The setting temperature auto return

- 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.



Weekly timer function

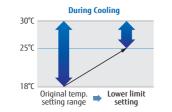
• Not only time setting On / Off, but also setting of the operation mode and set temperature can be set by Weekly timer function.

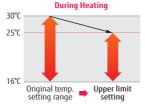


4 types (ON, OFF, ON, OFF) can be set on every day of the week in a week.

Set temperature upper and lower limit setting

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





Specifications

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

Weight (g) DC12V is supplied by indoor unit.

Simple Remote Controller



NEW UTY-RSRG

NEW UTY-RHRG (Without Operation mode)

Compact remote controller provides access to basic functions

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





UTY-RHRG

26.07

UTY-RHRG Without Operation mode

Functions

Corresponding to various applications

Vertical louver control:

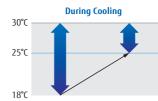
Vertical air flow direction can be adjusted for Duct types with auto louver and Cassette types, which are installed in hotels and conference rooms, can be adjusted.

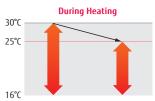




Room temperature set point limitation:

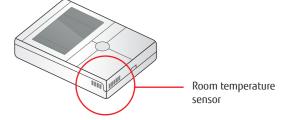
The Simple Remote Controller can manage to energy saving operation in small buildings without the central control unit.





Built in room temperature sensor:

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



Specifications

Model name	UTY-RSRG	UTY-RHRG
Power Supply	DC	12V
Dimensions (H x W x D) (mm)	120 x 7	5 x 19.4
Weight (g)	11	20

Wireless Remote Controller

UTY-LNHGU

Simple and sophisticated operations with a choice of 4 daily timers

• A single controller controls up to 16 indoor units.





Functions

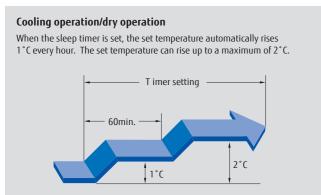
Built-in daily timer

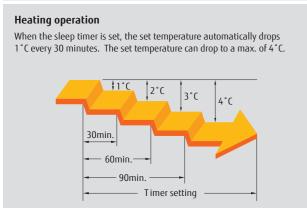
Select from 4 different timer programs:

On / Off / Program / Sleep

Program timer: The program timer operates the ON and OFF timer once within a 24 hour period.

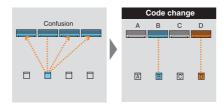
Sleep timer: The sleep timer function automatically corrects the set temperature according to the time setting to prevent excessive cooling or heating during sleep hours.





Easy installation and operation

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

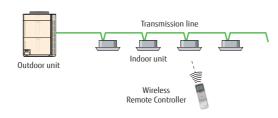


Wide and precise



Address setting

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



Specifications

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

IR Receiver Unit

UTB-YWC

Necessary to control for all Duct types* by Wireless Remote Controller

*Only Large Airflow Duct can not be connected to IR Receiver Unit.

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

Functions

Wiring connection Wireless Remote Controller Duct Type Indoor Unit IR Receiver Unit

Specifications

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

IR Receiver Unit

UTY-LRHGB1

Cassette type indoor unit can be controlled with Wireless Remote Controller



Functions



Specifications

Model name	UTY-LRHGB1
Power Supply	DC 5V
Dimensions (H x W x D) (mm)	193.9×193.9×31.2
Weight (g)	140

88 **GENERAL OGENERAL** 89

Group Remote Controller

UTY-CGGGU

Group control of indoor units with simple operation

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

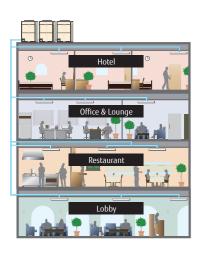
(Network Convertor allows up to 4 Group Remote Controllers)

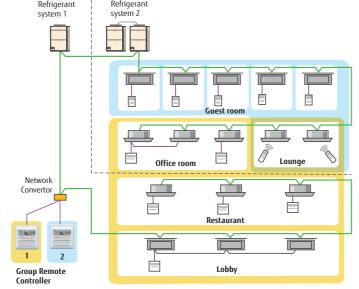


Functions

Control up to 8 remote controller groups

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





Group Remote Controller 1: To control office room, lounge restaurant and lobby

Group Remote Controller 2: To control guest room (7 remote controller groups)

High performance and compact size

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



Built-in weekly timers

The weekly timer is provided as a standard function.

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

Specifications

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

Central Remote Controller

UTY-DCGG

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

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

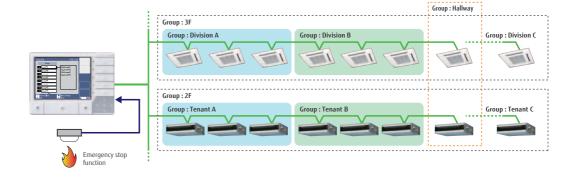
100



Functions

System overview

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



Functions

· Diverse control of indoor units



· Remote controller prohibition (All, On / Off, Mode, Temp, Timer, Filter)



· Weekly timer



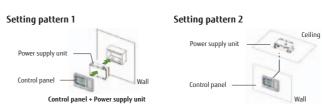
· Error history

• Automatic clock adjustment

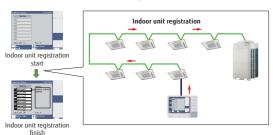


Easy Installation

- The control panel and power supply unit can be installed separately.
- For flexibility in installation, the Control panel can be built into the wall or fix on the wall.



• Automatic or manual indoor unit registration



Specifications

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

DC12V is supplied by a network converter. **OGENERAL** 91 90 OGENERAL

Touch Panel Controller

NEW UTY-DTGGZ1

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



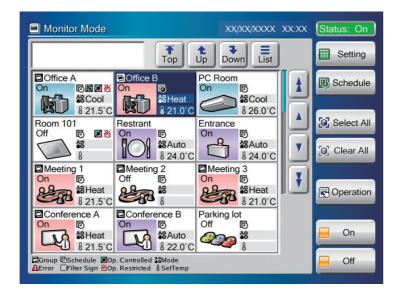


400

Functions

Control & monitoring from anywhere

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



Easy maintenance

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

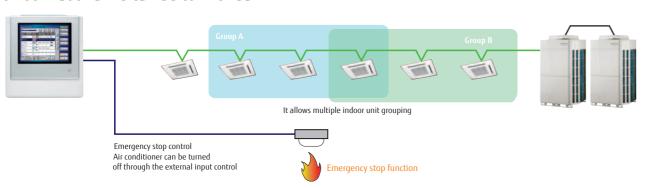


Easy installation

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

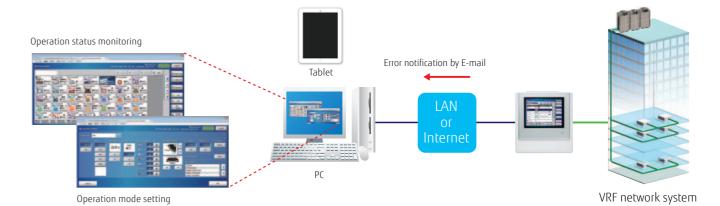


Up to 400 indoor units can be controlled



Control & monitoring from anywhere

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











Not only operations but also detail settings such as schedule or group settings can be operated from remote locations.

Smart Phone

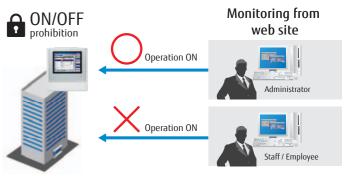
Model	Browser
Nexus 6P (Android 7.1.1)	Google Chrome 5.5
iphone7 (iOS 10.1)	Safari 10

Tablet

Model	Browser
ipad Pro 9.7inch (iOS 10.2.1)	Safari 10

Flexible access permission for Point each level user.

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



Additional languages function

creating language database.

Corresponds to 7 different languages, English, Chinese, French, German, Spanish, Russian, Polish as standard. Additional language can be integrated on remote device by

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



/ Languages + NEW Other languages

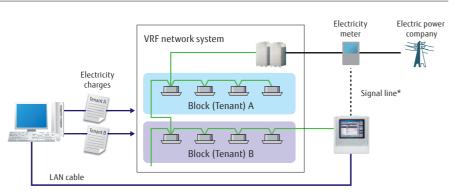
92 **OGENEROL OGENERAL** 93

Functions

Electricity charge apportionment

• Electricity charge apportionment can be performed easily for the power consumed when billing users for air conditioning power charges.

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



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

Option UTY-PTGXA

Automatic summer time setting

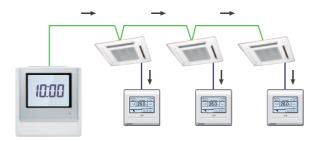
Providing function

1) Schedule setting of summer time setting

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

Automatic clock adjustment

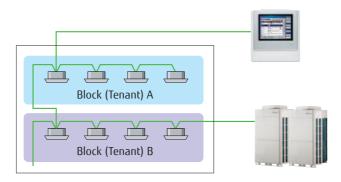
2) The time setting of each controller can be set in batch automatically.



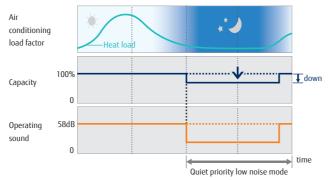
Outdoor low noise operation

Users can choose from 4 low noise levels, depending on the installation

The operaion time can be set using the timer.



Quiet priority setting





Supported	O: Optional function	 - : Not supported yet 	

Time zone setting

Name registration

Language setting

Backlight

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

FUNCTIONS SUMMARY

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

Specifications

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

7+other

94 **OGENERAL OGENERAL** 95

System Controller

NEW UTY-APGXZ1

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

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





System Controller Lite (

NEW UTY-ALGXZ1

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

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



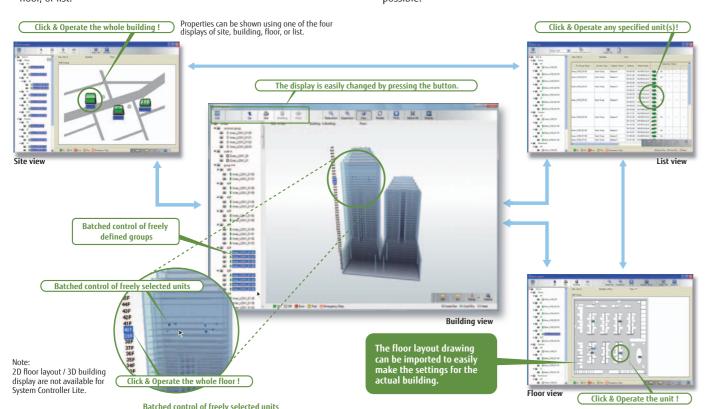


Functions

User friendly view and operation

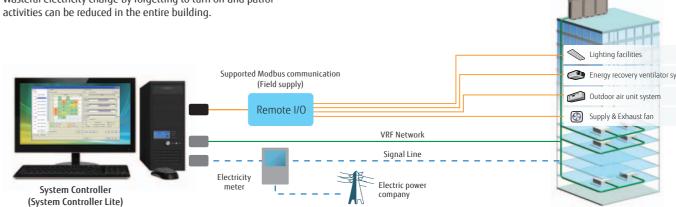
• Click & Operate: The property is shown visually from the perspective most suitable for operation and operated accordingly (Click & Operate). You can select from among the 4 displays of site, building, floor, or list.

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



3rd party devices connected by Modbus can be controlled.

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



Diverse operation management & Data management

Schedule management

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

Diverse control of indoor and outdoor unit

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

Remote controller prohibition

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

Automatic clock adjustment

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

Error display & E-mail notification

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

Standard for System Controller

Option for System Controller Lite UTY-PLGXX2

Data base import/export

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

Operating & control record

Displays the history of operation status and control.

Electricity charge apportionment

Electricity charge apportionment calculation framework

Suppose you want to find the power consumed by the air conditioners of each tenant from the electricity charge for each month. With electricity charge apportionment function, used energy apportionment ratio will be provided, calculating in detail the energy consumed by the units used by each tenant. This information is then used to calculate the charges for the electricity consumed for air conditioning by each tenant from the total electricity charges in the bill from the electric power company. (See figure at right)

The detailed calculation takes into consideration such things as unused rooms and nighttime electricity charges and shows them in a charges calculation sheet.

Standard for System Controller

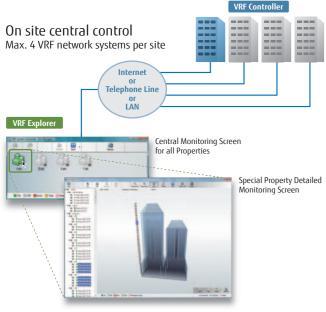
Option for System Controller Lite UTY-PLGXA2

System Configuration Example RR Unit Signal transmission line Tenant A-1 Tenant A-2 Tenant A-3 Tenant A-4 Tenant A-5 Tenant A-6 Tenant B-1 Tenant B-2 Tenant B-3 Tenant C-1 Tenant C-2 Tenant C-3

96 **OGENERAL OGENERAL** 97 **Functions**

Remote management

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



Remote central control 1 VRF Explorer can control or monitor up to 10 sites. 1 VRF Controller can be monitored from any number of VRF Explorers (Up to 5 connections simultaneously) Building Management Company A (In charge of the day shift)

Standard for System Controller

Option for System Controller Lite UTY-PLGXR2

Energy saving management

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

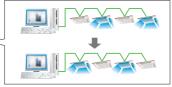
Energy saving graph data: This graph compares the electricity consumption with the previous month and previous year to make it easy to analyze the energy saving effect.

Energy Saving Management Main Screen

Indoor unit rotation operation

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

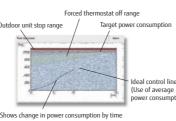




Option for System Controller Lite UTY-PLGXE2 Peak cut operation

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

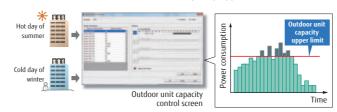
consumed while maintaining comfort and conducting control to maintain the target power consumption set for each time. The indoor units to be controlled can be freely grouped and the control level can be set.



Option for System Controller UTY-PEGX

Outdoor unit capacity save

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



FUNCTIONS SUMMARY

	Туре		System o	ontroller	System controller lite				
Function			UTY-APGXZ1	Option UTY-PEGXZ1	UTY-ALGXZ1	Option UTY-PLGXR2	Option UTY-PLGXA2	Option UTY-PLGXE2	Option UTY-PLGXX
	Max. VRF networks		4	-	1	-	-	-	-
System		emote controller groups per VRF network	400	-	400	-	-	-	-
pecification		per System controller	100	-	100	-	-	-	-
	Max. indoor units /	remote controller groups per System controller	1600	-	400	-	=	-	-
	Max. outdoor units	per System controller	400	-	100	-	-	-	-
	Multi site display	14 -4.	10	-	10	-	-	-	-
	Number of building Number of floor per		20	-	-	-	-	-	-
				-	-	-	-	-	-
ite	Number of floor per		50	-	-	-	-	-	-
supervision	3D graphical layout		•	-	-	-	-	-	-
	2D graphical layout List display	view	•	-	-	-	-	-	-
	Tree display		•	-	•	-	-	-	-
	Group display		•	-	•	-	-	-	-
	Error notification		•	-	•	-	-	-	-
rror	Audible alarm		•	-	•	-	-	-	-
nanagement	Error e-mail notifica	tion	•	-	•	-	-	-	-
	Error history	ILIOII	•	-	•	-	-	-	-
History	Operation history		•	-	•	-	-	-	-
iistoi y	Control history		•	-	•	-	-	-	-
	CONTROL HISTORY	On/Off	•	-	•	-	-	-	-
		Operation mode	•	-	•	-		-	-
		Room temperature		-		-	-	-	-
				-	•	-	-	-	-
	Individual	Fan speed	•	-	•	-	-	-	-
	control	Air flow direction	•	-	•	-	-	-	-
	COILLIOI	Economy mode	•	-	•		1	-	-
Operation		Room temperature set point limitation		-	•	-		-	-
ontrol		Test operation	•	-	•	-	-	-	-
		Antifreeze	•	-	•	-	-	-	-
		Outdoor unit low noise setting	•	-	•	-	-	-	-
	Individual	Remote control prohibition setting		-	•	-	-	-	-
	management	Temperature upper and lower limit setting	•	-	•	-	-	-	-
		Filter sign reset	•	-	•	-	-	-	-
	Other	Memory operation	•	-	•			-	-
	A C	Pattern operation			•	-	-	-	-
	Annual Schedule		•	-	•	-	-	-	-
	Special day setting		- 72	-	- 70	-	-	-	-
chedule	On /off per day		72	-	72	-	-	-	-
ciledule	On / off per week		504	-	504	-	-	-	-
	Day off	are a fate and	•	-	•	-	-	-	-
	Min. unit of timer se		10		10	-		-	-
	Low noise mode Weekly schedule		•	-	•		-	-	-
	Remote monitoring		•	-	-	•	-	-	-
Remote	Remote operation c		•	-	-	•	-	-	-
nanagemment	Remote function sel		•	-	-	•	-	-	-
	Web Remote Contro		•	-	-	•	-	-	-
	Apportionment cha		•	-	-	-	•	-	-
lectricity	Tenant (block) setti		•	-	-	-	•	-	-
harge '		pportionment setting			-	-	•	-	-
pportionment		nption allotment setting	•	-	-	-	•	-	-
		on at cooling and heating	-	•*	· ·	-	•	-	-
	Electricity meter supported		-	•	-	-	•	-	-
	Indoor unit rotation		-	•	-	-	-	•	-
norau	Peak cut control	b	-	•	-	-	-	•	<u> </u>
nergy	Outdoor unit capaci		-	•	-	-	-	•	-
aving	Record of energy sa		-	•	-	-	-	•	-
nanagement	Energy saving infor		-	•	-	-	-	•	-
	Power consumption		-	0		-	-	•	
	Electricity meter sur	pported	_	•		-	-	•	-
xternal Device	Monitor		•	-	-	-	-	-	•
ontrol	Control		•	-	-	-	-	-	•
2.1	Database import/ex		•	-	•	-	-	-	-
)thers	Automatic clock adj	ustment	•	-	•	-	-	-	-
	Multi language		7 languages	-	7 languages	-	-	I -	-

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

Personal computer system requirements

The required PC specifications are shown in the following table.

	System Controller	System Controller Lite			
Operating system	 Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit), Windows® 10 Pro (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit), Windows® 10 Pro (32-bit or 64-bit) 	64-bit) it or 64-bit)			
CPU	Intel® CoreTM i3 2 GHz or higher				
Memory	• 2 GB or more (for Windows® 7 [32-bit]) • 4 GB or more (for Windows® 7	[64-bit], Windows® 8.1, and Windows® 10)			
HDD	40 GB or more of free space	40 GB or more of free space			
Display	1024 x 768 or higher resolution	1024 x 768 or higher resolution			
Interface	•Ethernet port (for getting access to the Internet using LAN) or Modem (for getting access to the Internet using Public Telephone Line) •USB ports (Maximum of 6 ports) (Required only for the Server PC that works as VRF Controller) - Maximum of 2 USB ports are required for WHITE-USB-KEY/WibuKey connection - Maximum of 4 USB ports are required for Echelon® U10 USB Network Interface * Maximum number of required USB port depends on the applicable system configuration.	•Ethernet port (for getting access to the Internet using LAN) or Modem (for getting access to the Internet using Public Telephone Line) •USB ports (Maximum of 6 ports) (Required only for the Server PC that works as VRF Controller) - Maximum of 4 USB ports are required for WHITE-USB-KEY/WibuKey connection - 1 USB port is required for Echelon® U10 USB Network Interface *The maximum number of required USB port depends on the applicable system configuration.			
Graphic accelerator	Microsoft® DirectX® 9.0c compatible				
Software	Adobe® Reader® 9.0 or later				

Echelon® U10 USB Network Interface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)re.

<packing lis<="" th=""><th>t></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></packing>	t>								
		For System	n controller		For System controller Lite				
Туре		01			Option				
		System controller	Energy manager	System Controller Lite	Remote access	Electricity charge apportionment	Energy saving	Central Control	
Model nam	ie	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.

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

BACnet® Gateway









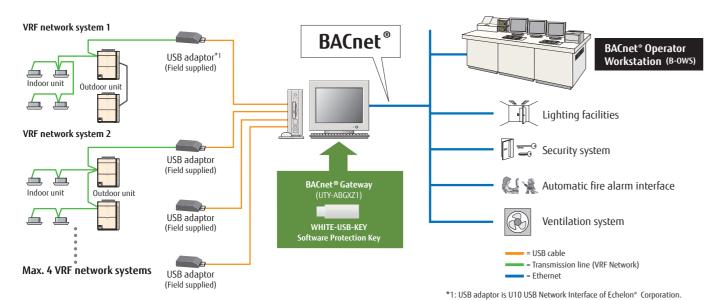




- **NEW UTY-ABGXZ1**
- It is possible to connect medium to large sized BMS to VRF network system via BACnet®, a global standard for open networks.
- A maximum of 1600 indoor units with 4 VRF network systems (a maximum of 400 indoor units & 100 outdoor units for one network system) can be connected to one BACnet® Gateway.
- It is possible to control or monitor VRF network system from BMS via BACnet® Gateway.
- Compatible with BACnet® (ANSI / ASHRAE-135-2012) 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.

Functions

Installation example



Personal computer system requirements

	UIY-ABUXZI
Operating system	 Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1 Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit) Microsoft® Windows® 10 Home (32-bit or 64-bit), Windows® 10 Pro (32-bit or 64-bit) [Supported languages] English, Chinese, French, German, Russian, Spanish, and Polish
CPU	Intel® CoreTM i3 2 GHz or higher
Memory	2 GB or more (for Windows® 7 [32-bit]) 4 GB or more (for Windows® 7 [64-bit], Windows® 8.1, and Windows® 10)
HDD	40 GB or more of free space
Display	1024 x 768 or higher resolution
Interface	Ethernet port (for getting access to the Internet using LAN) USB ports (Maximum of 5 ports) 1 USB port is required for WHITE-USB-KEY/WibuKey connection Maximum of 4 USB ports are required for Echelon® U10 USB Network Interface * Maximum number of required USB ports depends on the applicable system configurations.
Software	Adobe® Reader® 9.0 or later
•Echelon* U10 USB Network Int	erface – TP/FT-10 Channel (Model number: 75010R) (Required for each VRF Network.)

IITV_ARCY71

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

BACnet® Gateway (Hardware)

NEW UTY-VBGX

- 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-135-2010) application specific controller (B-ASC).
- Compatible with BACnet®/IP over Ethernet.



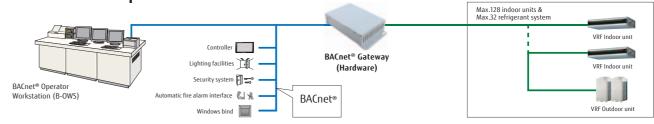


100

128

Functions

Installation example



Specifications

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

Model name	UTY-VBGX
Power Supply	208-240V 50/60Hz, single phase
Power Consumption (W)	4.6 (max)
Dimensions (H × W × D) (mm)	59.6 × 270.4 × 176
Weight (g)	1,200

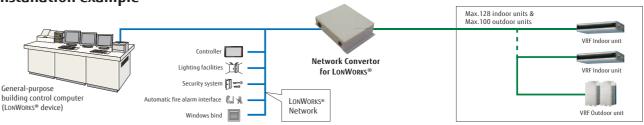
Network Convertor for LonWorks®

UTY-VLGX

- For connection between VRF network system and a LONWORKS® open network for management of small to medium-sized BMS and VRF network system.
- $\bullet \ \, \text{The UTY-VLGX permits central monitoring and control of a VRF network system from a BMS through}$ a LONWORKS® interface.
- Up to 128 Indoor units can be connected to one Network Convertor for LONWORKS®

Functions

Installation example



Specifications

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

Transmission specifications (BMS side)

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

OGENERAL 101 100 OGENERAL

MODBUS® Convertor

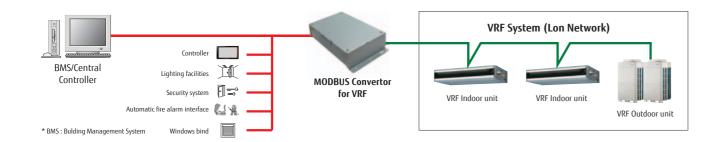
UTY-VMGX

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

- Compact and lightweight design Direct connection to MODBUS Network
- Up to 128 indoor units can be controlled in one MODBUS Convertor
- The MODBUS Convertor permits central monitoring and control of air conditioners from BMS or Central Controller.

Max. connectal 9 units to one VI Max. controllat 100 outdoor unit Selectable 128 indoor units

Functions



Specifications

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

MODBUS® Interface

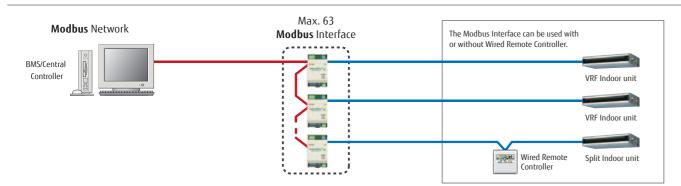
FJ-RC-MBS-1

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

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

Action ((IntesisBox or States A.S. O.S.)

Functions



Specifications

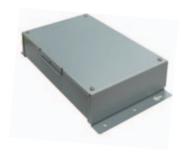
Model name	FJ-RC-MBS-1
Dimensions (H x W x D) (mm)	93×53×58
Weight (g)	85

KNX® Convertor (for VRF)

NEW UTY-VKGX

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

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



Functions



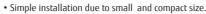
Specifications

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

KNX® Interface

FJ-RC-KNX-1i

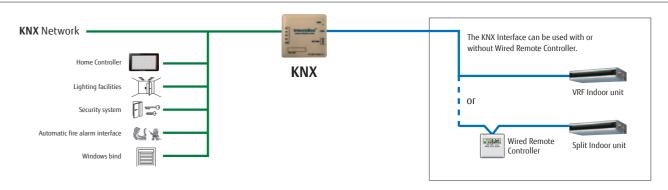
The KNX Interface allows a complete integration of air conditioners with KNX Network systems.



- 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



Functions



Specifications

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

102 OGENEROL 103

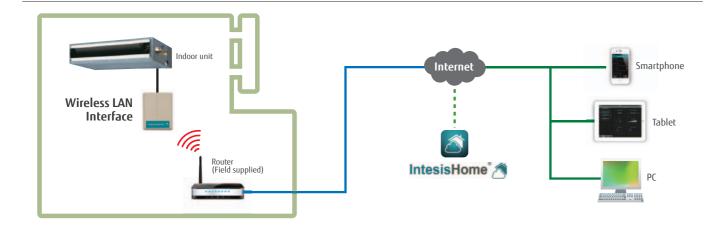
Wireless LAN Interface IntesisHome®

FJ-RC-WIFI-1

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



Functions



Basic control

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



Advanced control (Optional functions)

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

Notifications and History

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

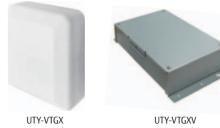
Specifications

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

Network Convertor

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

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



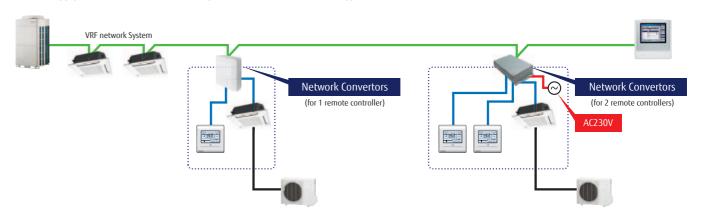


UTY-VTGX UTY-VTGXV
DC power supply type AC power supply type

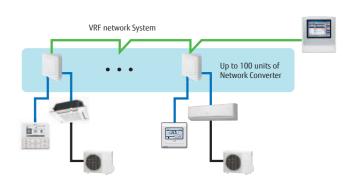
Functions

Installation example

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



- 2-wire and 3-wire type of the wired remote controller can be connectable.
- Power supply (AC220-240V, 50/60Hz) is required for 2 remote controllers type.
- VRF network System
- A central control can be provided for the single split systems. (Up to 100 units of Network Convertor is connectable in one VRF network system)



Specifications

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

Network Convertor

UTY-VGGXZ1

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

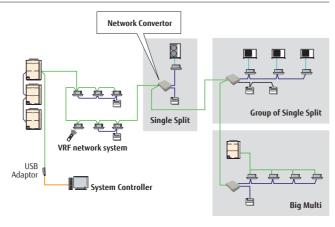




Functions

Used for connecting single split system

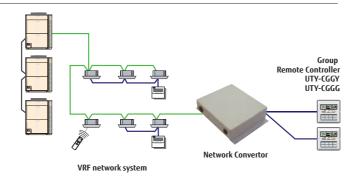
- Split type systems can be centrally controlled from Touch Panel Controller or System Controller through connection to the VRF's network convertor.
- On / Off Control, Master control, Room temperature and Fan speed setting via the Network Convertor are available.
- One Network Convertor can be used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



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

Used for connecting Group Remote Controller

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



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

Specifications

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

External Switch Controller

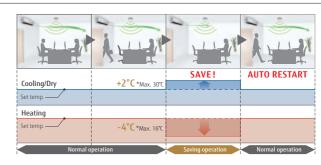
NEW UTY-TERX

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

Functions

Installation example

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



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

Specifications

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

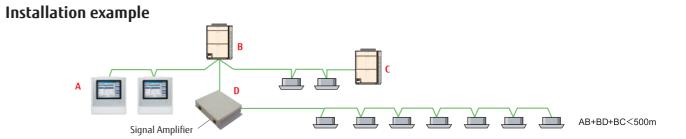
DC12V is supplied by the indoor unit.

Signal Amplifier

UTY-VSGXZ1

- Transmission Line length can be extended up to 3,600m with multiple Signal Amplifiers.
- Up to 40 signal amplifiers can be installed in a VRF network system.
- · A signal amplifier is required,
- (1) When the total wiring length of the transmission line exceeds 500m.
- (2) When the total number of units on the transmission line exceeds 64.

Functions



Specifications

Model name	UTY-VSGXZ1
Model fidfile	011-930AZ1
Power Supply	208-240V 50/60Hz, Single phase
Power Consumption (W)	4.5
Dimensions (H × W × D) (mm)	67 x 288 x 211
Weight (g)	1,500





EFFECTIVE HEAT EXCHANGE AND SIMULTANEOUS FRESH AIR VENTILATION

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

Energy Recovery Ventilator

Outdoor Air Unit

DX-Kit for airhandling applications

Energy Recovery Ventilator range

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

Outdoor Air Unit range

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



Energy Recovery Ventilator

Models UTZ-BD025B

UTZ-BD035B UTZ-BD050B UTZ-BD080B

UTZ-BD100B



Feature

Heat exchange ventilation and normal ventilation

Heat exchange ventilation

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

Normal ventilation

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

Adopts a highly efficient counter-flow heat exchange element



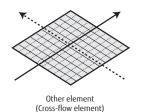
Energy efficiency and ecology

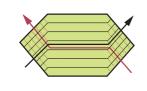
Energy consumption is dramatically reduced by using a counterflow heat-exchange element. Air conditioning load is reduced by approximately 20%, resulting in significant energy savings. Recovers up to 77% of the heat in the outgoing air.



Features of heat exchange element

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





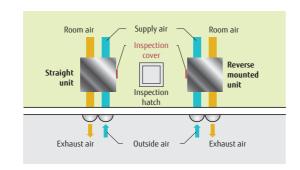
(Counter-flow element)

exhaust system **Adoption of straight air supply / exhaust system:** Duct design is

Reverse mountable direct air supply /

simplified because the air supply / exhaust ducts are straight.

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



Quiet operation

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

Slim shape and easier installation

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



Extended range of an external static pressure

An external static pressure is improved by adopting a powerful fan

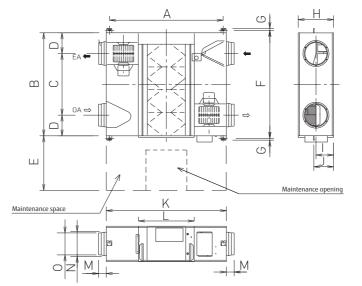
This allows for application in a wide variety building.

Specifications

								(Tentative)
Rated	flow rate			250 m³/h	350 m³/h	500 m³/h	800 m ³ /h	1000 m ³ /h
Model	No.			UTZ-BD025B	UTZ-BD035B	UTZ-BD050B	UTZ-BD080B	UTZ-BD100B
Power	source					Single-phase, 230V, 50Hz		
	CInput power	Extra high / High / Low	kW	128 / 123 / 96	190 / 185 / 168	289 / 225 / 185	418 / 378 / 295	464 / 432 / 311
	Air flow rate	Extra high / High / Low	m³/h	250 / 250 / 190	350 / 350 / 240	500 / 500 / 440	800 / 800 / 630	1000 / 1000 / 700
	External static pressure	Extra high / High / Low	Pa	105 / 95 / 45	140 / 60 / 45	120 / 60 / 35	140 / 110 / 55	105 / 80 / 75
EAT EXCHANGE VENTILATION	Temperature Exchange Efficiency	Extra high / High / Low	%	75 / 75 / 77	75 / 75 / 78	75 / 75 / 76	75 / 75 / 76	75 / 75 / 79
EAT EX	Energy Exchange Efficiency Cooling	Extra high / High / Low	%	63 / 63 / 65	66 / 66 / 71	62 / 62 / 64	65 / 65 / 68	65 / 65 / 70
HEAT VEN	Energy Exchange Efficiency Heat pump	Extra high / High / Low	%	70 / 70 / 72	69 / 69 / 73	67 / 67 / 69	71 / 71 / 74	71 / 71 / 76
	Sound pressure level	Extra high / High / Low	dB*	31.5 / 30.5 / 26.5	33 / 31 / 25.5	37.5 / 35.5 / 32.5	37.5 / 37 / 34.5	38.5 / 37.5 / 34.5
z	Input power	Extra high / High / Low	W	128 / 123 / 96	190 / 185 / 168	289 / 225 / 185	418 / 378 / 295	464 / 432 / 311
NORMAL VENTILATION	Air flow rate	Extra high / High / Low	m³/h	250 / 250 / 190	350 / 350 / 240	500 / 500 / 440	800 / 800 / 630	1000 / 1000 / 700
N I I	External static pressure	Extra high / High / Low	Pa	105 / 95 / 45	140 / 60 / 45	120 / 60 / 35	140 / 110 / 55	105 / 80 / 75
Z Z	Sound pressure level	Extra high / High / Low	dB*	31.5 / 30.5 / 26.5	33 / 31 / 25.5	38.5 / 38 / 32.5	37.5 / 37 / 34.5	40.5 / 39.5 / 36.5
Dimen	nsions (W × D × H)		mm	882 x 599 x 270	1050 x 804 x 317	1090 x 904 x 317	1322 x 884 x 388	1322 x 1134 x 388
Weigh	t		kg	29	49	57	71	83
Outlet	duct diameter		mm	150	150	200	250	250
_				40 10	40 10	40 40	40 10	40 10

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

Dimensions (Unit:mm)



	UTZ-BD025B	UTZ-BD035B	UTZ-BD050B	UTZ-BD080B	UTZ-BD100B
Α	810	978	1018	1250	1250
В	599	804	904	884	1134
C	315	580	640	428	678
D	142	112	132	228	228
Ε	600	600	600	600	600
F	655	860	960	940	1190
G	19	19	19	19	19
Н	270	317	317	388	388
1	135	159	159	194	194
J	159	182	182	218	218
K	882	1050	1090	1322	1322
L	414	470	470	612	612
M	95	70	127	85	85
N	219	162	210	258	258
0	144	144	194	242	242

110 **OGENERAL OGENERAL** 111

Outdoor Air Unit

Models ARXH054GTAH ARXH072GTAH ARXH096GTAH





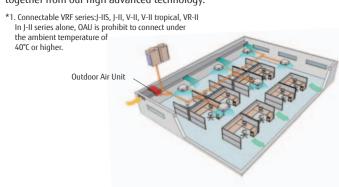


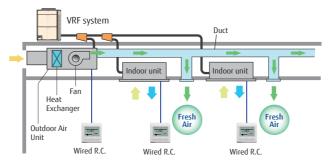
ARXH096GTAH

Feature

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

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





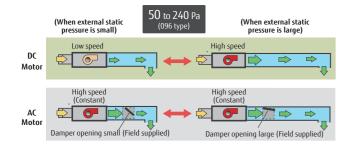
* Make sure the connected capacity is within the range of 50% to 100% of the outdoor unit capacity. In addition, if there are mixed connections with indoor units, make the Outdoor Air Unit connection capacity 30% or less of the outdoor unit capacity.

High energy savings and flexible duct design by using DC motor

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



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



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



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

Specifications

Rated flow rate			1000 m ³ /h	1500 m ³ /h	2000 m ³ /h				
Model No.			ARXH054GTAH	ARXH072GTAH	ARXH096GTAH Single-phase, 230V, 50Hz				
Power source			Single-phase, 230V, 50Hz	Single-phase, 230V, 50Hz					
Capacity	Cooling	kW	14.0	22.4	28.0				
	Heating	KW	8.9	13.9	17.4				
Input Power Cooling / Heating		W	179	292	370				
Airflow Rate		m³/h	1,080	1,680	2,100				
Static Pressure Standard (range)		Pa	185 (50-185)	200 (50-200)	200 (50-240)				
Sound Pressure	Level	dB(A)	42	44	47				
Dimensions (H >	(W x D)	mm	425×1,367×572	425×1,367×572	450×1,583×700				
Weight		kg	48	55	71				
Connection Pipe (Small / Large)	Diameter	mm	Ø9.52/Ø19.05	Ø12.70/Ø22.22	Ø12.70/Ø22.22				
Operation	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 R41						

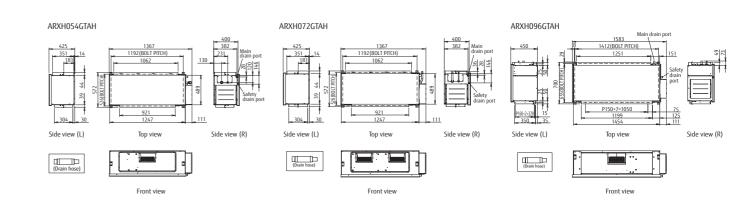
Note: Specifications are based on the following conditions.

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].

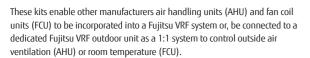
Dimensions (Unit:mm)



DX-Kit for air handling applications

Models Control unit **UTY-VDGX**

EEV unit UTP-VX30A UTP-VX60A UTP-VX90A





Control unit UTY-VDGX

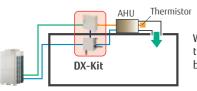




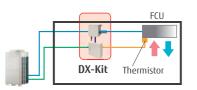


Feature

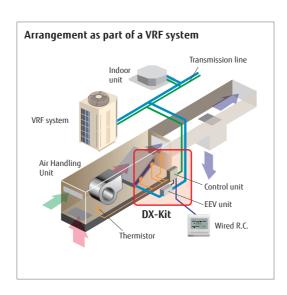
Multiple temperature sensors optimally control the air handling unit and fan coil unit.



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

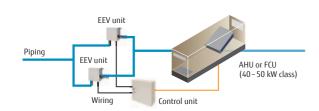


When connecting to a fan coil unit, the room temperature is controlled by the return air temperature sensor.



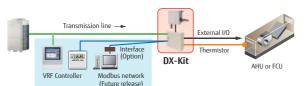
Supports a wide range of capacity classes

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

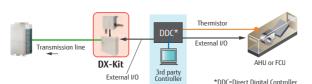


A variety of controls to match the application

• Central control using our VRF controllers or central management controllers



• Central control from external controllers



Functions Summary

Inputs

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

Outputs

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

Modbus Control

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

Installation Limitation

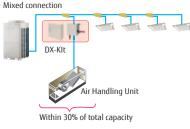
- Connectable VRF series : All VRF
- Connectable DX-Kit system capacity range: 50 to 100% of the outdoor unit capacity
- Connectable DX-Kit system capacity range with indoor units : 30% or less of the outdoor unit capacity
- Max. wiring length from control unit: 10 m
- Max. piping length between EEV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

50% - 100% of outdoor unit capacity

Connectable capacity

Single connection



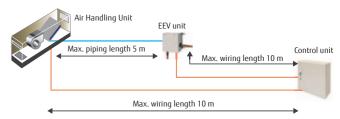


50% - 100% of outdoor unit capacity

[For 2EEV units connection (option)]



Piping and wiring length



Specifications

EEV unit				UTP-VX30A			UTP-VX60A		UTP-\	/X90A	UTP-VX90A×2			
Power source				Single-phase, 230V, 50Hz										
Connectable capacity class			5.0	6.3	8.0	10.0	12.5	14.0	20.0	25.0	40.0	50.0		
	Cooling	Cooling		5.6	6.3	8	10	12.5	14	22.4	25	40	50.4	
Canaciby		kW	(5.1-5.9)	(6.0-7.1)	(7.2-9.0)	(9.1-11.1)	(11.2-13.2)	(13.3-18.0)	(18.1-23.7)	(23.8-28.0)	(28.1-44.7)	(44.8-50.4)		
Capacity	Heating	KVV	6.3	7.1	9	11.2	14	16	25	28	45	56.5		
			(5.7-6.7)	(6.8-8.0)	(8.1-10.0)	(10.1-12.4)	(12.5-15.0)	(15.1-20.0)	(20.1-26.5)	(26.6-31.5)	(31.6-49.9)	(50.0-56.5)		
Airflow Rate(Refe	rence value)	m³/h	1,060	1,060 1,200 1,520 1,600 2,000 2,240 3,560 4,000							6,400	8,000		
Dimensions (H×V	V×D)	mm		160 × 220 × 90 (160 × 220 × 90										
Weight		kg		2								× 2		
Connection pipe d	iameter(Liquid)	mm			Ø9	.52				Ø12	.70			

EEV unit		UTY-VDGX
Power source		Single-phase, 230V, 50Hz
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].

114 **OGENEROL OGENERAL** 115



Auto Louver Grille Kit (Option)

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



Feature

Flexible Control

• Operation with indoor unit

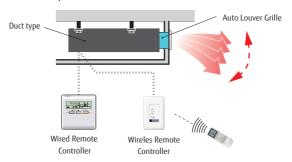
Auto Louver can be operated by synchronizing remote controller of indoor unit

• UP and Down auto swing

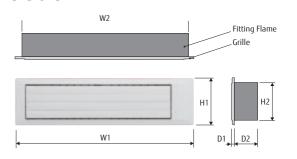
- Auto airflow direction and auto swing
- 4 steps selectable

Auto-closing louver

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



Dimensions



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

Specifications

Model name			UTD-GXTA-W	UTD-GXTB-W	UTD-GXTC-W							
Applicable Indoo	r Unit		ARGD07/09/12/14GATH ARGK07/09/12/14GCLH ARGK07/09/12/14GALH	ARGD18GATH ARGK18GCLH ARGK18GALH	ARGD24GATH ARGK24GCLH ARGK24GALH							
Power source			·	Connecting with Control box of Indoor unit								
Fixing of Auto Lo	ouver Grille			Screw fixing to Flange or Square Duct								
Extension Square	e Duct Limit		1.0m (Max. duct length between indoor unit and Grille)									
		mm (inch)	180x683x(84+9) [7-3/32 x 26-7/8 x (3-5/16+11/32)]	180 x 883 x (84+9) [7-3/32 x 34-3/4 x (3-5/16+11/32)]	180 x 1083 x (84+9) [7-3/32 x 42-5/8 x (3-5/16+11/32)]							
Weight	Net	kg	2.0 (4.4)	2.5 (5.6)	3.0 (6.7)							
	Gross	(lb.)	3.0 (6.7)	3.5 (7.8)	4.0 (8.9)							
Color				White								
Louver Motor				Stepping Motor								
Accessories				Fitting Flame, etc.								
Operation	Cooling	°C (°F)		18 to 32 (64 to 90)								
Range	Cooling	% RH		80% or less								
	Heating	°C (°F)		16 to 30 (60 to 88)								

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

OPTIONAL PARTS LIST

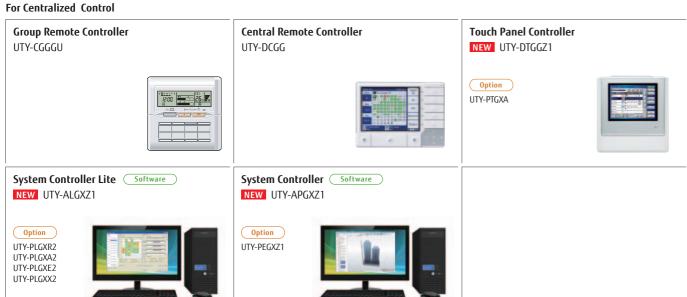
Co	ntroller	s / Interface	Indoor unit													
				Cassette				Di	Indoo	runit					Wall Mounte	d
			4-way Compact	4-way (slim)	4-way (Large)	Mini (With drain pump)	Mini (Without drain pump)	Slim (With drain pump)	Medium Static Pressure	High Stati	c Pressure	Ceiling / Floor	Ceiling	_	EEV external	_
Тур	e		AUGB 07/09/12/14/ 18/24GALH	AUGD 18/24 GALH	AUGA 18/24/30/34/ 36/45/54GALH	ARGK 07/09/12/14/ 18/24GCLH	ARGK 07/09/12/14/ 18/24GALH	ARGD 07/09/12/14/ 18/24GATH	ARGA 24/30/36/45 GBTH	ARGC 36/72/90 GBTH	ARGC 45/60/72/90 GATH	ABGA 12/14/18/24 GATH	ABGA 30/36/45/54 GATH	ASGA 07/09/12/14 GACH	ASGE 07/09/12/14 GACH	ASGA 18/24/30 GACH
			AUGB 07/09/12/14/ 18/24GATH	AUGD 18/24 GATH	AUGA 30/36/45/54 GATH					ARGC 96 GATH				ASGA 07/09/12/14 GATH		ASGA 18/24/30 GATH
Controllers	Wired Remote	1200		UTY-RNRGZ2 UTY-RLRG												
ı	Controller	28,7														
ı	Simple Remote Controller	2-wire type 3-wire type		UTY-RSRG, UTY-RHRG, UTY-RSKG, UTY-RHKG												
ı	Wireless Remote Controller			UTY-LNHGU												
ı	Group Remote Controller								UTY-CGGGU +							
ı	Central Remote Controller								UTY-0							
ı	Touch Panel Controller								UTY-D'							
	System Controller, System Controller Lite	F							UTY-APGXZ1,							
Interface	BACnet Gateway								UTY-ABGXZ1							
ı	Network Convertor for LonWorks								UTY-1							
ı	MODBUS Convertor								UTY-V							
ı	MODBUS Interface	Total Control of the		FJ-RC-MBS-1					MBS-1	FJ-RC- (ARGC45/60/72/9				FJ-RC-MBS-	1	
ı	KNX Convertor			UTY-VKGX												
	KNX Interface	Secretary -		FJ-RC-KNX-1i												
	Wireless LAN Interface			FJ-RC-WIFI-1				FJ-RC-	WIFI-1	FJ-RC- (ARGC45/60/72/9				● FJ-RC-WIFI-	1	
	External Switch Controller								UTY-							

Others

				Cassette				D	uct	ii uiiit				Wall Mounted			
			4-way Compact	4-way (slim)	4-way (Large)	Mini (With drain pump)	Mini (Without drain pump)	Slim (With drain pump)	Medium Static Pressure	High Stati	c Pressure	Ceiling <i>I</i> Floor	Ceiling	_	EEV external	_	
Ту	DE AUGB AUGD AUGA ARGK ARGK ARGK ARGC ARGC ARGC ARGC 07/09/12/14/ 18024GALH GALH 36/45/54GALH 180/24 GALH 180/24 GALH 180/24 GALH ARGC ARGC ARGC 12/14/180/24GALH GALH ARGC 12/14/180/24GALH 180/24GALH 180/24GALH 180/24GALH 180/24GALH 180/24GALH ARGC 96 GATH GATH GATH GATH							12/14/18/24	ABGA 30/36/45/54 GATH	ASGA 07/09/12/14 GACH ASGA 07/09/12/14 GATH	ASGE 07/09/12/14 GACH	ASGA 18/24/30 GACH ASGA 18/24/30 GATH					
Others	IR Receiver Unit			UTY-LI	RHGB1				-YWC								
ı	Remote Sensor Unit	New amenity space can be offered by installing the Remote sensor.							XSZX								
ı	Cassette	UTG-UFGD-W	UTG- UFGD-W														
ı	Grille	UTG-UGGA-W		UTG-U	GGA-W												
ı	Auto Louver Grille Kit						UTD-GXTA-W UTD-GXTB-W(18 UTD-GXTC-W(24										
ı	Long Life Filter						UTD-LF25NA		UTD-L	UTD-LF60KA (36 / 45 / 60)							
ı	Flange	0—							UTD-SF045T UTD-RF204				UTD-RF204				
ı	Drain Pump								● UTZ-PX1NBA								
ı	Unit	8											● UTR-DPB24T				
ı	Wide Panel	Indoor unit 950 Panel 600 (mm)		UTG-A	KXA-W GYA-W												
	Panel Spacer	(mm) 24.2 Panel spacer		UTG-B	UTG-BKXA-W UTG-BGYA-W												
	Air Outlet Shutter Plate	For Cassette	● UTR-YDZB		UTR-YDZK												
	Insulation for High Humidity	For Compact Cassette type / Cassette type	● UTZ-KXGC	UTZ-	▶ KXRA												

OPTIONAL PARTS

Controllers For Individual Control Wired Remote Controller Wired Remote Controller Simple Remote Controller (Touch Panel) UTY-RLRG NEW UTY-RSRG With operation mode NEW UTY-RNRGZ2 | Mode | Set Temp. | Fac | Cod | 26.0 % | Auto Simple Remote Controller Wireless Remote Controller **IR Receiver Unit** NEW UTY-RHRG UTY-LNHGU UTB-YWC Without operation mode For All Duct types except Large Airflow Duct 610 **IR Receiver Unit** UTY-LRHGB1 For Cassette type



Convertors / Adaptors

For External device



For System expansion





120 OGENERAL **OGENERAL** 121

OPTIONAL PARTS

For Duct type

Flange (Round) UTD-RF204

For Medium Static Pressure Duct type / Ceiling type



Flange (Square) UTD-SF045T

For Medium Static Pressure Duct type



Remote Sensor Unit UTY-XSZX

For All Duct type

New amenity space can be offered by installing



Long-Life Filter

UTD-LF25NA For Medium Static Pressure Duct type



UTD-LF60KA

For High Static Pressure Duct type



Auto Louver Grille Kit

UTD-GXTA-W (for ARGD07/09/12/14, ARGK07/09/12/14) UTD-GXTB-W (for ARGD18, ARGK18) UTD-GXTC-W (for ARGD24, ARGK24)

For Slim Duct type / Mini Duct type



Drain Pump Unit

UTZ-PX1NBA

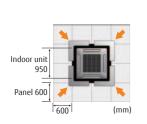
For Medium Static Pressure Duct type



For Cassette type

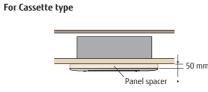
Wide Panel

UTG-AKXA-W For Cassette type



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 Ceiling type

Drain Pump Unit UTR-DPB24T

For Ceiling type



For Cassette type

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



Others

Communication system: External Connect Kit

For Indoor unit				For Outdoor uni	it
UTY-XWZXZ7		UTY-XWZXZD		UTY-XWZXZ6	
UTY-XWZXZB		UTY-XWZXZE		UTY-XWZXZ9	
UTY-XWZXZC				UTY-XWZXZF	
For Central Remote Control	ler	For Touch Pane	l Controller		
UTY-XWZXZ7		UTY-XWZXZA			
UTY-XWZXZ7		UTY-XWZXZA			

External Input and Output Function/External Connect Kit/Communication Kit

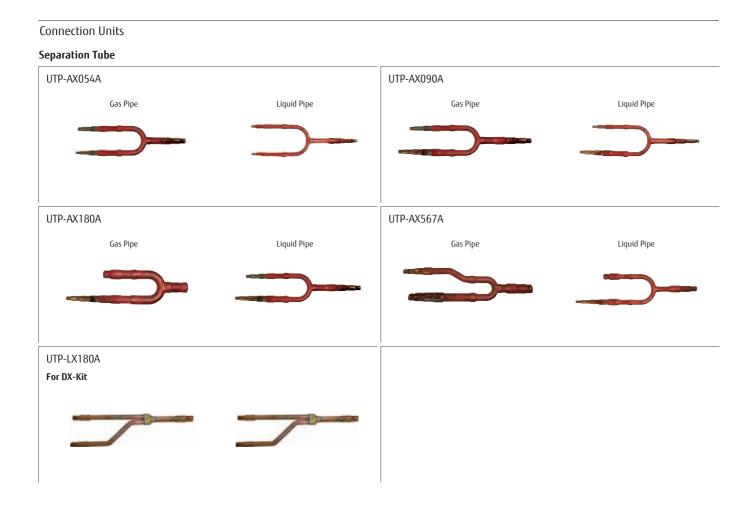
				Indoor unit	Outdo	or unit	Controller			
Туре		Cassette	Duct			Wall	V-III Tropical	V-II Tropical	Central Remote Controller	Touch Panel Controller
		4-way Compact, 4-way,	Mini Slim (With drain pump), Medium Static Pressure, High Static Pressure	Ceiling / Floor	Ceiling	Mounted, Wall Mounted EEV external	AJ* 072/090/108/ 126/144/162 LN*BH	AJH 072/090/126 LN*AH*	UTY-DCGG	UTY-DTGGZ1
Input	Operation / Stop			UTY-XWZXZD UTY-XWZXZB						
	All On / All Off								● UTY-XWZXZ7 ○ UTY-XWZXZ8	• *2 • *2
	Batch Stop						● UTY-	XWZXZ6		
	Forced Stop UTY-XWZXZD UTY-XWZXZB									
	Emergency Stop			UTY-XWZXZD UTY-XWZXZB	• uty-	XWZXZ6	● UTY-XWZXZ7 ○ UTY-XWZXZ8	• *2 ○ *2		
	Forced Thermostat off	● UTY-XWZXZE ○ UTY-XWZXZZ								
	Low Noise Mode Operation						• uty-	XWZXZ6		
	Cooling/ Heating Priority						• uty-	XWZXZ6		
	Outdoor Unit Operation Peak Control						● UTY-	XWZXZ6		
ı	Power Usage Information from Electricity Meter						● UTY-	XWZXZF		• *2 ○ *2
Outpu	Operation Status		● UTY-XWZXZC					XWZXZ6	ОП	Y-XWZXZA
	Error Status			UTY-XWZXZC			○ UTY-	XWZXZ6	OUT	Y-XWZXZA
	Indoor Unit Fun Operation Status			UTY-XWZXZC						
	Auxiliary Heater Output		• UTY-XWZXZC							
	Base Heater						• UTY-	XWZXZ9		

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

V-II Tropical : AJH__LN*AH* : AJH__LNTAH, AJH__LNLAHU

^{• :} Dry Contact O: Apply Voltage

OPTIONAL PARTS



Header



EV Kit

Outdoor Unit Branch Kit	
UTP-CX567A	
Gas Pipe	Liquid Pipe
7	7

Model code ≤ 09 : UTR-EV09XB

Model code ≥ 12 : UTR-EV14XB

For Compact Wall Mounted type

Specifications

Separation Tube

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

Header

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

Outdoor unit Branch kit

Model name		UTP-CX567A
Number of Outdoor unit	2 outdoor units	1
	3 outdoor units	2

EV Kit

Model name	UTR-EV09XB	UTR-EV14XB
Application Model	ASGE07GACH ASGE09GACH	ASGE12GACH ASGE14GACH

ABOUT US

Since we began our air conditioning business in 1971, our products have been popular around the world and we continue to improve them.

OUR HISTORY
GLOBAL NETWORK
HIGH QUALITY DEVELOPMENT & PRODUCTION FACILITIES
PROJECT REFERENCE



OUR HISTORY

Overseas Air Conditioning Business since 1971 VRF Business since 2001

FUJITSU GENERAL's VRF AIRSTAGE™ Series has been developed based on our long-term air-conditioning technology know-how and was first provided 14 years ago.

We have offered a series of products from large homes to large-scale buildings to meet the various market needs.



For **LARGE** BUILDING

2001

10HP / Heat recovery & Heat pump

2003

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



AIRSTAGE S

2007

8 to 42HP / Heat pump



AIRSTAGE V

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



AIRSTAGE V-II

2012

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



AIRSTAGE VR-II

2013

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



AIRSTAGE V-II

2015

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



AIRSTAGE V-III



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



AIRSTAGE J-IIIL

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

NEW

AIRSTAGE T-III

Tropical spec model High efficiency and compact design model

4HP to 6HP / Heat pump



For **SMALL** BUILDING

2004

Small VRF series is released. 6HP / Heat pump



AIRSTAGE J AI

011

High efficiency and small capacity model

High efficien

4HP to 6HP / Heat pump

High efficien

4HP to 6HP /



AIRSTAGE J-II

2014

2009

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



AIRSTAGE J-[[S

2016

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



AIRSTAGE J-∭

2017

AIRSTAGE™ History

1936 Established as Yaou Shouten Ltd. - 2016

1936 Established as Yaou Shouten Ltd.

Air conditioner exports to Middle East.

Certification Acquisition of

ISO14001

1998 : Fujitsu General (Shanghai) Co.,Ltd. 1999 : Fujitsu General (Thailand) co.,Ltd.

2002 : FGA (Thailand) Co.,Ltd.

2006: Fujitsu General Central Air-conditioner (Wuxi) co.,Ltd.

New Product Initiatives

Fujitsu introduced inverter technology which used R410A refrigerant.



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 CompressorsUse of 100% inverter driven DC compressors.



GLOBAL NETWORK

Fujitsu General's air conditioning business has acquired a major share of the overseas market. We have many production and sales facilities overseas, and we continue to develop and sell products that are accepted around the world by their "easy-to-use and environmentally-friendly technology".





R&D Center in Fujitsu General(Shanghai)

R&D Center in Fujitsu General Engineering (Thailand)





Fujitsu General (Shanghai) Co., Ltd.



F.G.L.S. Electric Co., Ltd.



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



FGA (Thailand) Co., Ltd.



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



TCFG Compressor (Thailand) Co.,Ltd.



HIGH QUALITY DEVELOPMENT & PRODUCTION FACILITIES

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

Advanced Research Facility and Equipment

Performance Testing



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



Calorimeter

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

air conditioner.



Silent Room

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





Constant Temperature Room

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



Practical Test Room

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



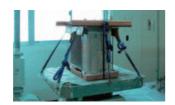
Shower Test Room

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





Compressibility testing



Vibration testing

Testing Laboratory

Fujitsu General EMC Laboratory Limited







Practical Test Room

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



ACQUISITION OF ISO 9001 AND ISO 14001

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

In 2012, overseas sales bases (11 companies) acquired the certification of ISO 14001.



ISO 9001

High Product Quality Assurance

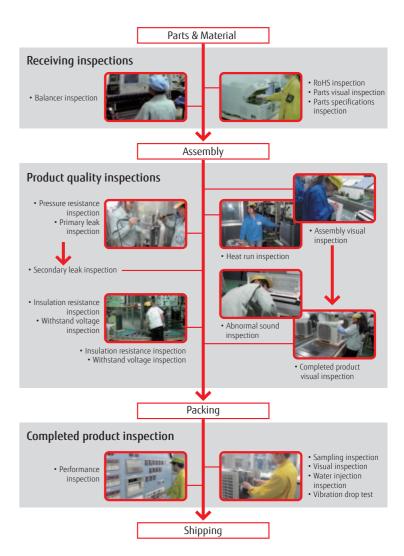
All Fujitsu General factories have acquired ISO 9001, and have built a quality control system common around the world. High quality products are offered to all over the world based on stringent quality inspections.

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.



PROJECT REFERENCE

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





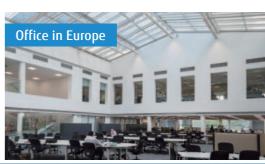


Fujitsu General's Products has been installed in over 50 countries worldwide.













Office in china











SUPPORT

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

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

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



AIRSTAGE™ SUPPORT

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

Training

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

Features

- Designing AIRSTAGE™ Systems
- Control System on-site training



















Technical information

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

Features

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

Product information

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

Features

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

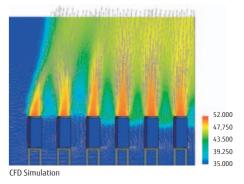


Technical support

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

Features

- CFD Simulation
- Guide line
- Commissioning Support





Commissioning Support

138 **OGENERAL OGENERAL** 139

AIRSTAGE™ / RAC SUPPORT TOOL

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

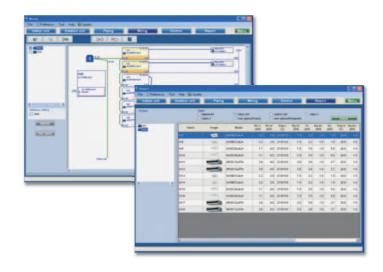
Everything from selecting indoor and outdoor units, allocating controls and optional parts to designing the piping and wiring systems is made easier using the program's built-in features.

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

Design Simulator

Automatically create model selection information

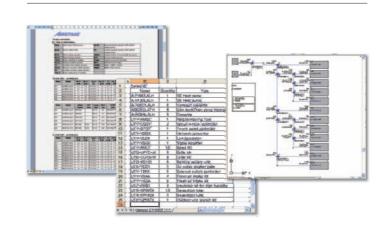
- Each unit can be automatically set by entering the required performance, type, and temperature conditions for each indoor unit and then dragging and dropping into the outdoor unit.
- Piping and wiring diagrams can be created automatically and it is easy to set branches, grouping, and options.
- The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



Output the format that matches the application

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

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



Update your Design Simulator

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



User side(PC)

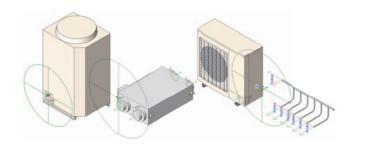
FTP server side (PC)

BIM Building Information Modeling

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

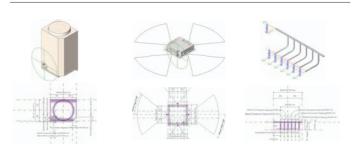
3D and 2D product data

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



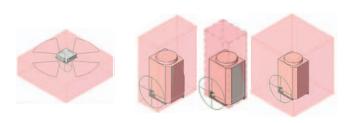
Installation limitation

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



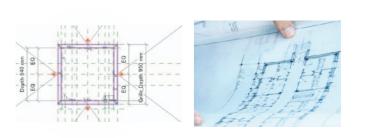
Update your Design Simulator

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



Product specifications & link information

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



QUICK SERVICE & MAINTENANCE

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

Mobile troubleshooting tool for iPhone & Android



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

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



Easy maintenance & monitoring

Design for easy maintenance

Design for easy maintenance

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

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

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

7-segment LED

Wired Remote Controller (Touch panel)

Error status/Error history



Wired Remote Controlle



Error diagnosis by Service Tool

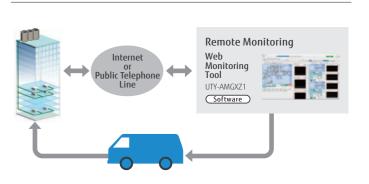
Error diagnosis by Service Tool
The unit status details for VRF system can be checked on PC screen by connecting Service Tool.
Quick countermeasures can be taken

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

Refrigerant piping (Locally purchased) Service Tool (Locally purchased) Service Tool USB adaptor (Locally purchased) Service Tool UTY-ASSOXZI Software

Remote monitoring

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



SERVICE TOOL

Extensive monitoring and analysis functions for installation and maintenance

- Operation status can be checked and analyzed to detect even the smallest abnormalities
- Storage of data on system operation status on a PC allows access even from off site.
- Up to 400 indoor units (a single VRF network system) can be controlled and monitored for large scale buildings or hotels
- This software can be connected to any point of transmission line with USB adaptor (locally purchased)
- * The saved data can be displayed offline. However, the data saved by the following model cannot be displayed.
- UTR-YSTB/UTR-YSTC (Service Tool)
- UTR-YMSA (Web Monitoring Tool)

Automatic operation check for refrigeration cycle

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

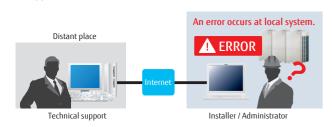






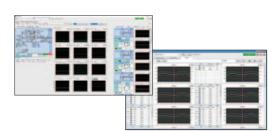
Remote technical support & maintenance

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



Various trend graph display

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



Personal computer system requirements

	UTY-ASGXZ1
Operating system	Microsoft® Windows® 7 Professional (32-bit or 64-bit) SP1 Microsoft® Windows® 8.1 Pro (32-bit or 64-bit) Microsoft® Windows® 10 Pro (32-bit or 64-bit)
CPU	1 GHz or higher
Memory	• 1 GB or more (for Windows Vista®, Windows® 7 [32-bit], Windows® 8.1 [32-bit], and Windows® 10 [32-bit]) • 2 GB or more (for Windows® 7 [64-bit], Windows® 8.1 [64-bit], and Windows® 10 [64-bit])
HDD	40 GB or more of free space
Display	1366 x 768 or higher resolution
Interface	2 USB ports 1 USB port is required for software protection key connection 1 USB port is required for Echelon® U10 USB Network Interface
Software	Internet Explorer® 11 or Microsoft Edge / Adobe® Reader® 9.0 or later

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

<Packing lists

-i denting not		
Name and shape	Quantity	Application
WHITE-USB-KEY (Software protection key)	1	Software protection key to be connected to USB port on the Service Tool-installed PC. These products run only on a PC with WibuKey.

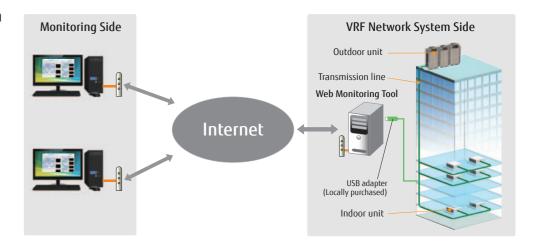
WEB MONITORING TOOL

Product features

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

*1: Use of internet mail system required.

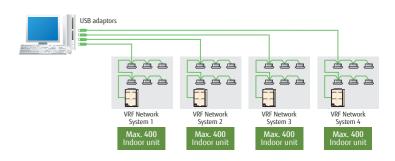
Web Monitoring System



Support 4 VRF network systems

USB adaptor (max. 4 adaptors per PC) permit, monitoring of up to 1,600 indoor units.

Suitable for large-scale buildings or hotels.



Personal computer system requirements

	UTY-AMGXZ1					
	Microsoft® Windows® 7 Professional (32-bit or 64-bit) SP1 Microsoft® Windows® 9.1 Pro (32-bit or 64-bit)					
Operating system	Microsoft® Windows® 8.1 Pro (32-bit or 64-bit) Microsoft® Windows® 10 Pro (32-bit or 64-bit)					
СРИ	1 GHz or higher					
Memory	• 1 GB or more (for Windows Vista®, Windows® 7 [32-bit], Windows® 8.1 [32-bit], and Windows® 10 [32-bit]) • 2 GB or more (for Windows® 7 [64-bit], Windows® 8.1 [64-bit], and Windows® 10 [64-bit])					
HDD	40 GB or more of free space					
Display	1366 x 768 or higher resolution					
Interface	USB port (for 10 USB 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	Internet Explorer® 11 or Microsoft Edge / Adobe® Reader® 9.0 or later					

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

<packing list=""></packing>		
Name and shape	Quantity	Application
WHITE-USB-KEY	1	Software protection key to be connected to USB port on the Service Tool-installed PC.
(Software protection key)	'	These products run only on a PC with WibuKey.

144 **OGENEROL OGENERAL** 145





ISO 9001 ISO 14001 Certified number: 01 100 89394 Certified number: 01 104 9245/01 Fujitsu General (Thailand) Co., Ltd.





ISO 14001 BUREAU VERITAS



ISO 9001 ISO 14001 Certified number: 15914010065R4M Certified number: 15912E10022R3M Fujitsu General Central Air-conditioner (Wuxi) Co., Ltd.

- " AIRSTAGE" is a worldwide trademark of FUJITSU GENERAL LIMITED and is a registered trademark in Japan and other countries or areas.
- Specifications and design are subject to change without notice for future improvement.
- For further details, please check with our authorised dealer.
- iPhone and iPad are trademarks of Apple Inc., registered in the U.S. and other countries.
- Other company and product names mentioned herein may be registered trademarks, trademarks or trade names of their respective owners.
- Actual products' colors may be different from the colors shown in this printed material. Distributed by:

FUJITSU GENERAL LIMITED 3-3-17, Suenaga, Takatsu-ku, Kawasaki 213-8502, Japan

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