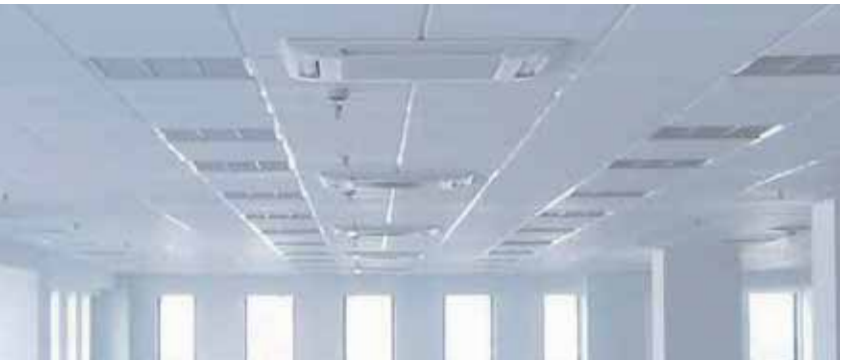
FUJITSU

AIR CONDITIONING



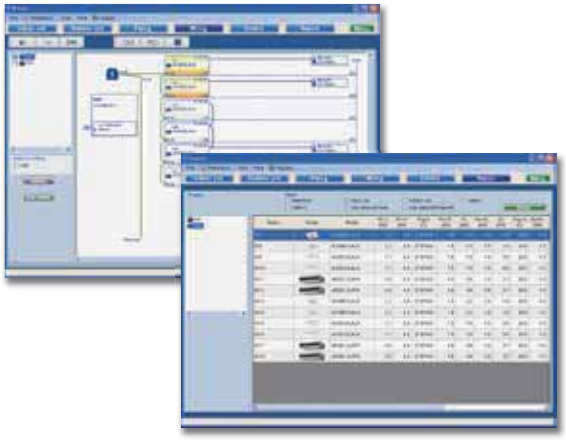
FUJITSU VRF
PRODUCT CATALOGUE
2016/17

VRF
VENTILATION

Design Simulator

Automatically create model selection information

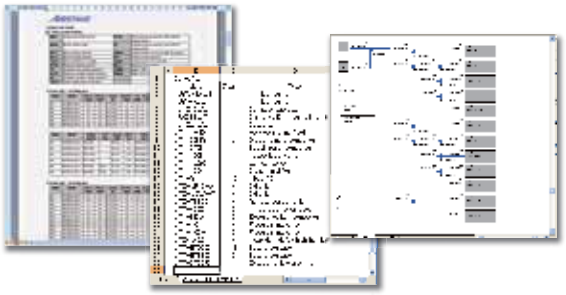
- Each unit can be automatically set by entering the required performance, type, and temperature conditions for each indoor unit and then dragging and dropping into the outdoor unit.
- Piping and wiring diagrams can be created automatically and it is easy to set branches, grouping, and options.
- The 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

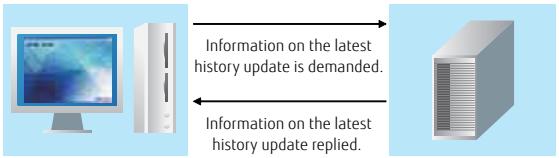
The information specific to your project can be exported in a number of industry standard file formats.

- Word format (rtf)
- Excel format (csv)
- Adobe 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.



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 information

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

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.

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.

NEW VRF

High Static Pressure Duct (Future Release)

- 96 class high energy efficiency
- Wide static pressure range of 50 to 300 Pa
- 5 static pressure selection

NEW OPTIONAL PARTS For VRF

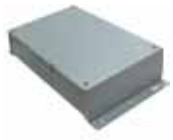
Touch Panel Controller

- Up to 400 indoor units can be controlled.
- Remote control and remote monitoring functions
- Electricity charge apportionment function added (option)

Convertor

- Network convertor can be connected to single split 2 types of DC power supply type and AC power supply type are available
- MODBUS® Convertor can be connected to MODBUS Network

Network Convertor



MODBUS® Convertor

VRF

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.

AIRSTAGE™ SERIES Outline

Heat Recovery Modular type for simultaneous heating and cooling operation

AIRSTAGE™ VR-II

8 HP - 48 HP 34 Models

- Space saving combination: 8 HP to 48 HP/ 21 models
- Energy efficiency combination: 16 HP to 44 HP/ 13 model

Heat Pump Modular type for heating or cooling operation

AIRSTAGE™ V-III

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

Heat Pump type for heating or cooling operation

AIRSTAGE™ J-II

4 HP, 5 HP, 6 HP 3 Models
Single phase

AIRSTAGE™ J-IIS

4 HP, 5 HP, 6 HP 3 Models
Single phase

VR-II & V-III Common Features

All Type Lineup

Outdoor units

Capacity (kW)		12.1	14.0	15.1-15.5	22.4	28.0	33.5	40.0	45.0	50.4	55.9	61.5	67.0	73.5
HP		4	5	6	8	10	12	14	16	18	20	22	24	26
VR-II series Heat Recovery	Space saving Page 010 ~ Set Model				AJYA72GALH	AJYA90GALH	AJY108GALH	AJY126GALH	AJY144GALH	AJY162GALH	AJY180GALH	AJY198GALH	AJY216GALH	AJY234GALH
	Energy efficiency Page 010 ~ Set Model								AJY144GALHH			AJY198GALHH	AJY216GALHH	AJY234GALHH
V-III series Heat Pump	Space saving Page 016 ~ Set Model				AJY072LALBH	AJY090LALBH	AJY108LALBH	AJY126LALBH	AJY144LALBH	AJY162LALBH	AJY180LALBH	AJY198LALBH	AJY216LALBH	AJY234LALBH
	Energy efficiency Page 016 ~ Set Model								AJY144LALBHH	AJY162LALBHH	AJY180LALBHH		AJY216LALBHH	AJY234LALBHH
J-II series* Heat Pump Page 022 ~		AJY040LALH	AJY045LALH	AJY054LALH										
J-IIS series Heat Pump Page 024 ~		AJY040LCLAH	AJY045LCLAH	AJY054LCLAH										

*** Model numbers may change without prior notice**

Indoor units


Compact Cassette


Cassette


Slim Duct
(With drain pump)


Medium Static Pressure
Duct


High
Static Pressure Duct


Floor/Ceiling


Ceiling


Wall Mounted
(EEV internal/EEV external)


Wall Mounted

Indoor units
Capacity range 1.1 kW to 28.0 kW
(J-II & J-IIS can be connected up to 14.0 kW.)

78.5	85.0	90.0	95.0	100.5	107.0	112.0	118.5	123.5	130.0	135.0	140.0	145.0	150.0
28	30	32	34	36	38	40	42	44	46	48	50	52	54
AJY252GALH	AJY270GALH	AJY288GALH	AJY306GALH	AJY324GALH	AJY342GALH	AJY360GALH	AJY378GALH	AJY396GALH	AJY414GALH	AJY432GALH			
AJY252GALHH	AJY270GALHH	AJY288GALHH	AJY306GALHH	AJY324GALHH	AJY342GALHH	AJY360GALHH	AJY378GALHH	AJY396GALHH					
AJY252LALBH	AJY270LALBH	AJY288LALBH	AJY306LALBH	AJY324LALBH	AJY342LALBH	AJY360LALBH	AJY378LALBH	AJY396LALBH	AJY414LALBH	AJY432LALBH	AJY450LALBH	AJY468LALBH	AJY486LALBH
AJY252LALBHH	AJY270LALBHH	AJY288LALBHH	AJY306LALBHH	AJY324LALBHH	AJY342LALBHH	AJY360LALBHH	AJY378LALBHH	AJY396LALBHH	AJY414LALBHH				

Ventilation

Energy Recovery Ventilator
5 models

Outdoor Air Unit
3 models

DX Solutions for Air Handling Applications

Controllers

Wireless
Remote Controller

Simple
Remote Controller

Wired
Remote Controller

Wired Remote Controller
(Touch Panel)

Group
Remote Controller

Central
Remote Controller

NEW

Touch Panel
Controller

System Controller
System Controller Lite
(Software)

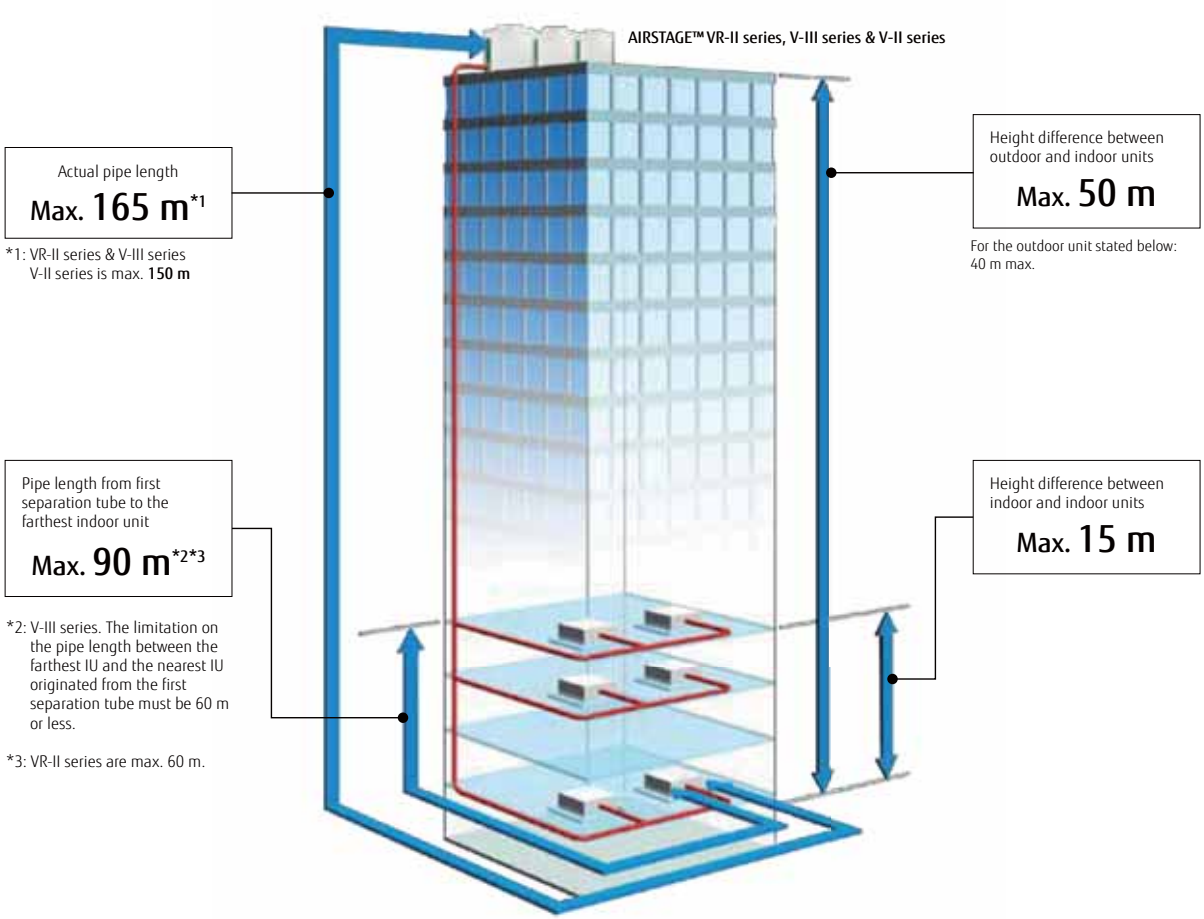
Ventilation
2 type 8 models & DX Solution for Air Handling Applications

Various Easy-To-Use Controllers
User's needs are supported by offering a variety of controls, such as individual control, central control, and building management control options.

VRII & VIII
Design Flexibility

Overall piping length Max. 1,000 m

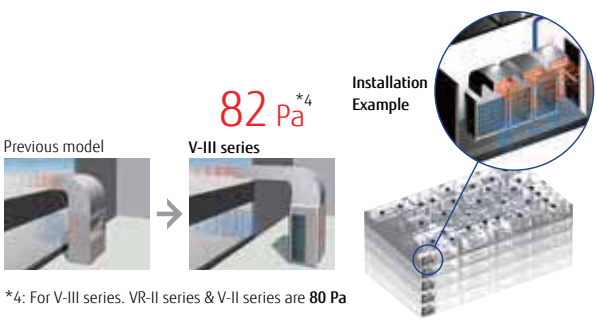
World's top class overall piping length of 1,000 m allows for application in a wide variety of buildings.



High static pressure

The outdoor unit can have a condenser hood easily connected with a static pressure of 82 Pa*4 standard. This allows outdoor units to be installed within plant rooms in high rise buildings.

Large diameter fan and DC motor has been utilized allowing an external static pressure of 82 Pa*4.



*4: For V-III series. VR-II series & V-II series are **80 Pa**

High capacity connection

Series	Connectable indoor unit capacity range	Connectable indoor unit number
AIRSTAGE™ VR-II series Heat Recovery Modular type	50% to 150%*5	up to 64
AIRSTAGE™ V-III series Heat Pump Modular type	50% to 150%*6	up to 64
AIRSTAGE™ J-II series Heat Pump type	50% to 130%*5	up to 9
AIRSTAGE™ J-IIS series Heat Pump type	50%*7 to 130%*5	up to 8

*5: Conditions of maximum connectable indoor unit capacity ratio is as the chart above.

*6: Max. capacities in the combinations including the 18 HP outdoor unit fall below 150%.

*7: Only 4 HP is 46%

OUTDOOR UNITS

Heat Recovery Modular Type

AIRSTAGE™ VR-II

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

System Outline

Simultaneous cooling and heating operation using 1 refrigerant system

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

Annual cooling operation

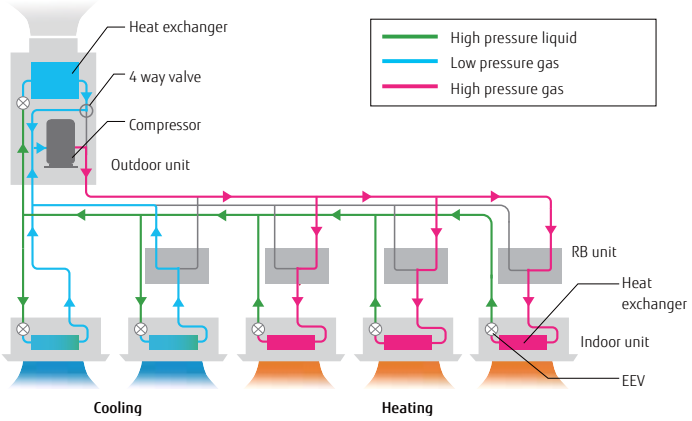
Use annual cooling operation for the rooms and other spaces that require constant temperature control throughout the year.

Handles changes in the temperature difference

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

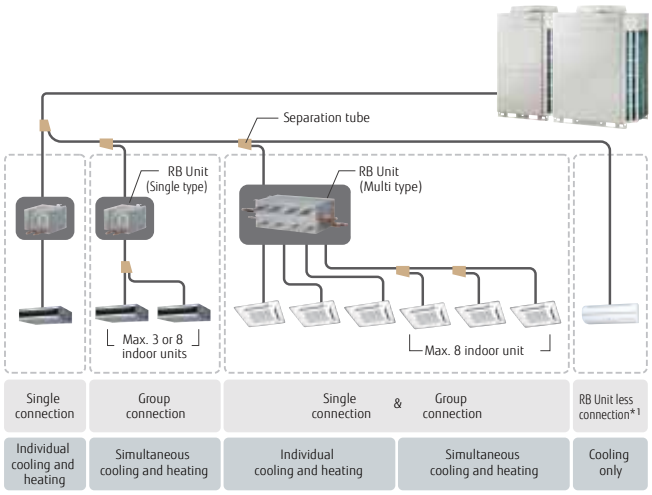
High Operating Energy Efficiency

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



Flexible piping connection

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



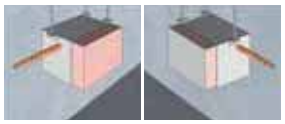
	Single connection	Group connection	Single connection & Group connection	RB Unit less connection*1
Application	Individual cooling and heating	Simultaneous cooling and heating	Individual cooling and heating	Simultaneous cooling and heating	Cooling only

- The RB unit can be freely positioned between the first branch and the indoor unit.
- The maximum height difference between RB units is 15 m.

*1: RB Unit is not necessary for cooling only use.

Flexible installation of RB unit

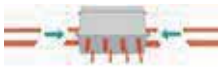
- Small & slim design saves space. Hight 198 mm
- A drain pipe is not required
- The control box position can be changed to meet the installation conditions
- Small design saves space
- A drain pipe is not required
- Simple installation series connection design



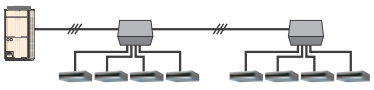
Installation possible from either side for freedom of the control box

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

- 2-way connection



- Up to 2 units can be connected in series.

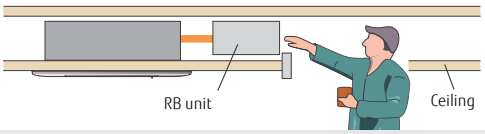


Easy to maintenance in a narrow space

- Maintenance can be performed from the side.

- Electrics box can be temporarily fixed by sliding down.

- Parts can be replaced easily even at narrow space in the ceiling.



RB unit (single type)

RB unit (multi type)

Outdoor units lineup

• Combinations other than the followings are not recommended.

Space saving combination

22.4 kW (8HP)  AJYA72GALH UNIT : AJYA72GALH	28.0 kW (10HP)  AJYA90GALH UNIT : AJYA90GALH	33.5 kW (12HP)  AJY108GALH UNIT : AJY108GALH	40.0 kW (14HP)  AJY126GALH UNIT : AJY126GALH	45.0 kW (16HP)  AJY144GALH UNIT : AJY144GALH
50.4 kW (18HP)  AJY162GALH UNIT : AJYA90/A72GALH	56.0 kW (20HP)  AJY180GALH UNIT : AJYA90/A90GALH	61.5 kW (22HP)  AJY198GALH UNIT : AJY108/A90GALH	67.0 kW (24HP)  AJY216GALH UNIT : AJY108/108GALH	73.0 kW (26HP)  AJY234GALH UNIT : AJY144/A90GALH
78.5 kW (28HP)  AJY252GALH UNIT : AJY144/108GALH	85.0 kW (30HP)  AJY270GALH UNIT : AJY144/126GALH	90.0 kW (32HP)  AJY288GALH UNIT : AJY144/144GALH	95.0 kW (34HP)  AJY306GALH UNIT : AJY108/108/A90GALH	100.5 kW (36HP)  AJY324GALH UNIT : AJY108/108/108GALH
106.5 kW (38HP)  AJY342GALH UNIT : AJY144/108/A90GALH	112.0 kW (40HP)  AJY360GALH UNIT : AJY144/108/108GALH	118.0 kW (42HP)  AJY378GALH UNIT : AJY144/144/A90GALH	123.5 kW (44HP)  AJY396GALH UNIT : AJY144/144/108GALH	130.0 kW (46HP)  AJY414GALH UNIT : AJY144/144/126GALH
135.0 kW (48HP)  AJY432GALH UNIT : AJY144/144/144GALH				

Energy efficiency combination

44.8 kW (16HP)  AJY144GALHH UNIT : AJYA72/A72GALH	62.4 kW (22HP)  AJY198GALHH UNIT : AJY126/A72GALH	67.2 kW (24HP)  AJY216GALHH UNIT : AJYA72/A72/A72GALH	72.8 kW (26HP)  AJY234GALHH UNIT : AJYA90/A72/A72GALH	78.4 kW (28HP)  AJY252GALHH UNIT : AJYA90/A90/A72GALH
84.0 kW (30HP)  AJY270GALHH UNIT : AJYA90/A90/A90GALH	90.4 kW (32HP)  AJY288GALHH UNIT : AJY126/A90/A72GALH	96.0 kW (34HP)  AJY306GALHH UNIT : AJY126/A90/A90GALH	102.4 kW (36HP)  AJY324GALHH UNIT : AJY126/126/A72GALH	108.0 kW (38HP)  AJY342GALHH UNIT : AJY126/126/A90GALH
113.0 kW (40HP)  AJY360GALHH UNIT : AJY144/126/A90GALH	120.0 kW (42HP)  AJY378GALHH UNIT : AJY126/126/126GALH	125.0 kW (44HP)  AJY396GALHH UNIT : AJY144/126/126GALH		

8,10,12HP : AJYA72GALH / AJYA90GALH / AJY108GALH
14,16HP : AJY126GALH / AJY144GALH

AIRSTAGE VR-II

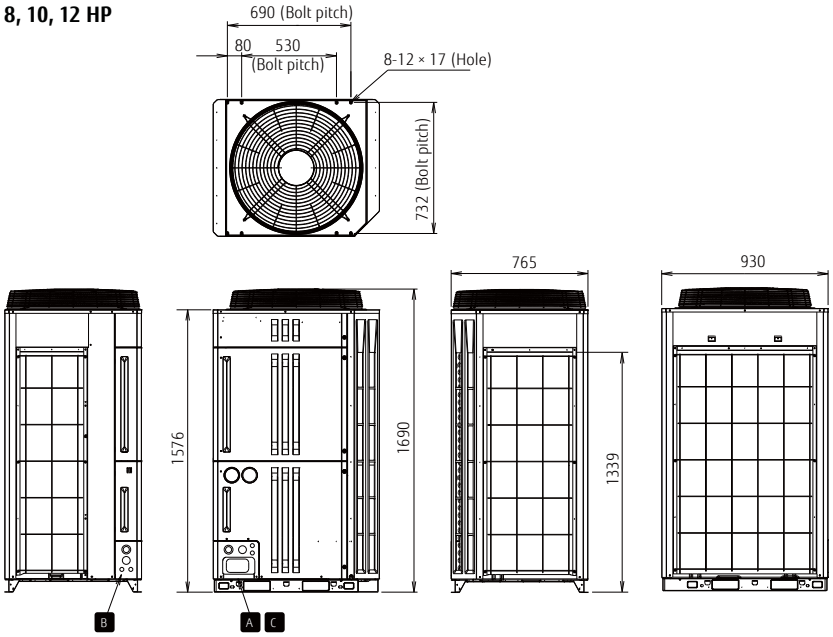
8, 10, 12 HP

14, 16 HP

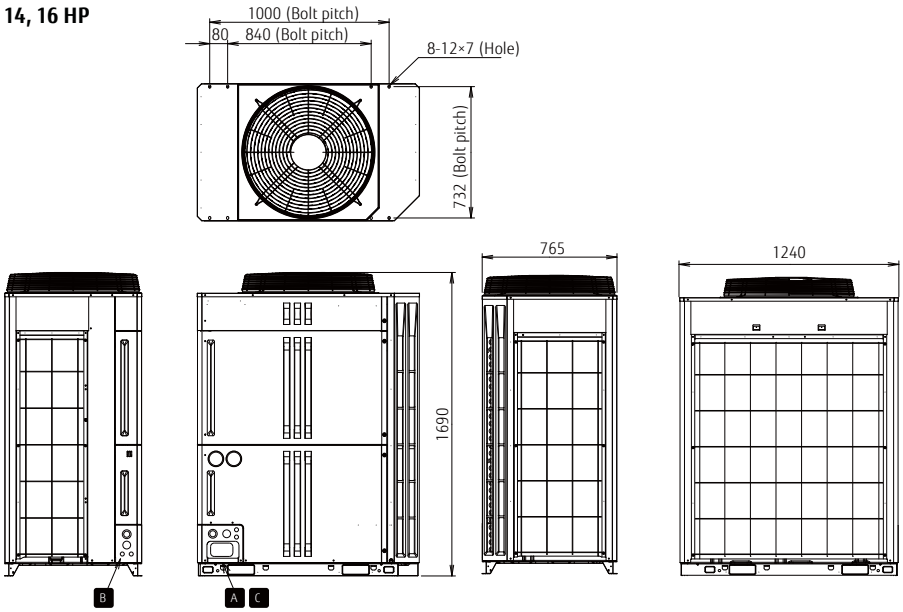
Dimensions

(Unit : mm)

8, 10, 12 HP



14, 16 HP



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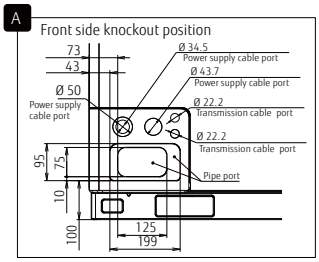

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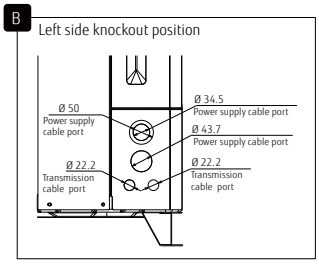

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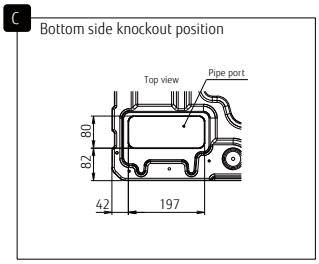


Outdoor units specifications

Space Saving Combination

Rating Capacity range	HP		8	10	12	14	16	18	20	22	24
											
Set Model name			AJYA72GALH	AJYA90GALH	AJY108GALH	AJY126GALH	AJY144GALH	AJY162GALH	AJY180GALH	AJY198GALH	AJY216GALH
Unit 1 Unit 2 Unit 3			AJYA72GALH	AJYA90GALH	AJY108GALH	AJY126GALH	AJY144GALH	AJYA90GALH AJYA72GALH	AJYA90GALH AJYA90GALH	AJY108GALH AJYA90GALH	AJY108GALH AJY108GALH
Maximum Connectable Indoor Unit*1			15	16	17	21	24	27	30	32	35
Indoor unit connectable capacity		kW	11.2-33.6	14.0-42.0	16.8-50.2	20.0-60.0	22.5-67.5	25.2-75.6	28.0-84.0	30.8-92.2	33.5-100.5
Power source			3-phase 4 wire , 400 V, 50Hz								
Capacity	Cooling	kW	22.4	28.0	33.5	40.0	45.0	50.4	56.0	61.5	67.0
	Heating		25.0	31.5	37.5	45.0	50.0	56.5	63.0	69.0	75.0
Input power	Cooling	kW	5.45	7.11	9.75	11.34	13.61	12.56	14.22	16.86	19.50
	Heating		5.70	7.33	9.62	10.90	12.77	13.03	14.66	16.95	19.24
EER	Cooling	W/W	4.11	3.94	3.44	3.53	3.31	4.01	3.94	3.65	3.44
COP	Heating	W/W	4.39	4.30	3.90	4.13	3.92	4.34	4.30	4.07	3.90
Air flow late		m^3/h	11,100	11,100	11,100	13,000	13,000	11,100×2	11,100×2	11,100×2	11,100×2
Sound pressure level*2 /	Cooling	dB(A)	56 / 77	58 / 79	59 / 80	60 / 81	61 / 82	60 / 81	61 / 82	62 / 83	62 / 83
Power Level	Heating		58 / 80	59 / 81	61 / 83	61 / 83	61 / 83	62 / 84	62 / 84	63 / 85	64 / 86
Maximum external static pressure		Pa	80	80	80	80	80	80	80	80	80
Compressor motor output		kW	7.5	7.5	7.5	11.0	11.0	7.5×2	7.5×2	7.5×2	7.5×2
Min Recc MCB		AMP	20	25	25	40	40	25 + 20	25 + 25	25 + 25	25 + 25
Dimensions	Height	mm	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
	Width		930	930	930	1,240	1,240	930×2	930×2	930×2	930×2
	Depth		765	765	765	765	765	765	765	765	765
Weight		kg	262	262	262	286	286	262×2	262×2	262×2	262×2
Refrigerant charge		kg	11.8	11.8	11.8	11.8	11.8	11.8×2	11.8×2	11.8×2	11.8×2
Connection pipe diameter	Liquid	mm	12.70	12.70	12.70	12.70	12.70	15.88	15.88	15.88	15.88
	Discharge Gas		15.88	19.05	19.05	22.22	22.22	22.22	22.22	28.58	28.58
	Suction Gas		22.22	22.22	28.58	28.58	28.58	28.58	28.58	34.92	34.92
Operation range	Cooling	˚CDB	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46
	Heating		-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21
	Cooling/Heating		-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21

Energy Efficiency Combination

Rating Capacity range	HP		16	22	24	26	28	30
								
Set Model name			AJY144GALHH	AJY198GALHH	AJY216GALHH	AJY234GALHH	AJY252GALHH	AJY270GALHH
Unit 1 Unit 2 Unit 3			AJYA72GALH AJYA72GALH	AJY126GALH AJYA72GALH	AJYA72GALH AJYA72GALH AJYA72GALH	AJYA90GALH AJYA72GALH AJYA72GALH	AJYA90GALH AJYA90GALH AJYA72GALH	AJYA90GALH AJYA90GALH AJYA90GALH
Maximum Connectable Indoor Unit*1			24	33	36	39	42	45
Indoor unit connectable capacity		kW	22.4-67.2	31.2-93.6	33.6-100.8	36.4-109.2	39.2-117.6	42.0-126.0
Power source			3-phase 4 wire , 400 V, 50Hz					
Capacity	Cooling	kW	44.8	62.4	67.2	72.8	78.4	84.0
	Heating		50.0	70.0	75.0	81.5	88.0	94.5
Input power	Cooling	kW	10.90	16.79	16.35	18.01	19.67	21.33
	Heating		11.40	16.60	17.10	18.73	20.36	21.99
EER	Cooling	W/W	4.11	3.72	4.11	4.04	3.99	3.94
COP	Heating	W/W	4.39	4.22	4.39	4.35	4.32	4.30
Air flow late		m^3/h	11,100×2	13,000+11,100	11,100×3	11,100×3	11,100×3	11,100×3
Sound pressure level*2 /	Cooling	dB(A)	59 / 80	61 / 82	61 / 82	62 / 83	62 / 83	63 / 84
Power Level	Heating		61 / 83	63 / 85	63 / 85	63 / 85	63 / 85	64 / 86
Maximum external static pressure		Pa	80	80	80	80	80	80
Compressor motor output		kW	7.5×2	11.0+7.5	7.5×3	7.5×3	7.5×3	7.5×3
Min Recc MCB		AMP	20 + 20	40 + 20	20 + 20 + 20	20 + 20 + 20	25 + 25 + 20	25 + 25 + 25
Dimensions	Height	mm	1,690	1,690	1,690	1,690	1,690	1,690
	Width		930×2	1,240+930	930×3	930×3	930×3	930×3
	Depth		765	765	765	765	765	765
Weight		kg	262×2	286+262	262×3	262×3	262×3	262×3
Refrigerant charge		kg	11.8×2	11.8×2	11.8×3	11.8×3	11.8×3	11.8×3
Connection pipe diameter	Liquid	mm	12.70	15.88	15.88	15.88	15.88	19.05
	Discharge Gas		22.22	28.58	28.58	28.58	28.58	28.58
	Suction Gas		28.58	34.92	34.92	34.92	34.92	34.92
Operation range	Cooling	˚CDB	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46
	Heating		-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21
	Cooling/Heating		-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21

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.
When cooling operation will be conducted at outdoor air temperature below -5°C,
the outdoor unit must be installed in a position that is higher than or equal to those of indoor units.

26	28	30	32	34	36	38	40	42	44	46	48
											
AJY234GALH	**AJY252GALH**	**AJY270GALH**	**AJY288GALH**	**AJY306GALH**	**AJY324GALH**	**AJY342GALH**	**AJY360GALH**	**AJY378GALH**	**AJY396GALH**	**AJY414GALH**	**AJY432GALH**
AJY144GALH AJYA90GALH	AJY144GALH AJY108GALH	AJY144GALH AJY126GALH	AJY144GALH	AJY108GALH AJY108GALH AJYA90GALH	AJY108GALH AJY108GALH AJY108GALH	AJY144GALH AJY108GALH AJYA90GALH	AJY144GALH AJY108GALH	AJY144GALH AJY144GALH AJYA90GALH	AJY144GALH AJY144GALH AJY108GALH	AJY144GALH AJY144GALH AJY126GALH	AJY144GALH AJY144GALH AJY144GALH
39	42	45	48	50	53	57	60	63	64	64	64
36.5-109.5	39.3-117.7	42.5-127.5	45.0-135.0	47.5-142.5	50.3-150.7	53.3-159.7	56.0-168.0	59.0-177.0	61.8-185.2	65.0-195.0	67.5-202.5
3-phase 4 wire , 400 V, 50Hz											
73.0	78.5	85.0	90.0	95.0	100.5	106.5	112.0	118.0	123.5	130.0	135.0
81.5	87.5	95.0	100.0	106.5	112.5	119.0	125.0	131.5	137.5	145.0	150.0
20.72	23.36	24.95	27.22	26.61	29.25	30.47	33.11	34.33	36.97	38.56	40.83
20.10	22.39	23.67	25.54	26.57	28.86	29.72	32.01	32.87	35.16	36.44	38.31
3.52	3.36	3.41	3.31	3.57	3.44	3.50	3.38	3.44	3.34	3.37	3.31
4.05	3.91	4.01	3.92	4.01	3.90	4.00	3.91	4.00	3.91	3.98	3.92
13,000+11,100	13,000+11,100	13,000×2	13,000×2	11,100×3	11,100×3	13,000+11,100×2	13,000+11,100×2	13,000×2+11,100	13,000×2+11,100	13,000×3	13,000×3
63 / 84	63 / 84	64 / 84.5	64 / 85	63 / 85	64 / 85	64 / 85	65 / 85.5	65 / 86	65 / 86	65 / 86	66 / 87
63 / 85	64 / 86	64 / 86	64 / 86	65 / 87.2	65 / 87	65 / 87	66 / 87.7	65 / 87	66 / 88	66 / 88	66 / 88
80	80	80	80	80	80	80	80	80	80	80	80
11.0+7.5	11.0+7.5	11.0×2	11.0×2	7.5×3	7.5×3	11.0+7.5×2	11.0+7.5×2	11.0×2+7.5	11.0×2+7.5	11.0×3	11.0×3
25 + 40	40 + 25	40 + 40	40 + 40	25 + 25 + 25	25 + 25 + 25	40 + 25 + 25	40 + 25 + 25	40 + 40 + 25	40+40+25	40 + 40 + 40	40 + 40 + 40
1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
1,240+930	1,240+930	1,240×2	1,240×2	930×3	930×3	1,240+930×2	1,240+930×2	1,240×2+930	1,240×2+930	1,240×3	1,240×3
765	765	765	765	765	765	765	765	765	765	765	765
286+262	286+262	286×2	286×2	286×3	286×3	286+262×2	286+262×2	286×2+262	286×2+262	286×3	286×3
11.8×2	11.8×2	11.8×2	11.8×2	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3
15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
28.58	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	34.92	34.92	41.27	41.27	41.27	41.27	41.27	41.27	41.27
-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46
-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
-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21

32	34	36	38	40	42	44
						
AJY288GALHH	**AJY306GALHH**	**AJY324GALHH**	**AJY342GALHH**	**AJY360GALHH**	**AJY378GALHH**	**AJY396GALHH**
AJY126GALH AJYA90GALH AJYA72GALH	AJY126GALH AJYA90GALH AJYA90GALH	AJY126GALH AJY126GALH AJYA72GALH	AJY126GALH AJY126GALH AJYA90GALH	AJY144GALH AJY126GALH AJYA90GALH	AJY126GALH AJY126GALH AJY126GALH	AJY144GALH AJY126GALH AJY126GALH
48	51	54	57	60	64	64
45.2-135.6	48.0-144.0	51.2-153.6	54.0-162.0	56.5-169.5	60.0-180.0	62.5-187.5
3-phase 4 wire , 400 V, 50Hz						
90.4	96.0	102.4	108.0	113.0	120.0	125.0
101.5	108.0	115.0	121.5	126.5	135.0	140.0
23.90	25.56	28.13	29.79	32.06	34.02	36.29
23.93	25.56	27.50	29.13	31.00	32.70	34.57
3.78	3.76	3.64	3.63	3.52	3.53	3.44
4.24	4.23	4.18	4.17	4.08	4.13	4.05
13,000+11,100×2	13,000+11,100×2	13,000×2+11,100	13,000×2+11,100	13,000×2+11,100	13,000×3	13,000×3
63 / 84	64 / 85	64 / 85	64 / 86	65 / 86	65 / 86	65 / 86
64 / 86	65 / 87	65 / 87	65 / 87	65 / 87	66 / 88	66 / 88
80	80	80	80	80	80	80
11.0+7.5×2	11.0+7.5×2	11.0×2+7.5	11.0×2+7.5	11.0×2+7.5	11.0×3	11.0×3
40 + 25 + 20	40 + 25 + 25	40 + 40 + 20	40 + 40 + 25	40 + 40 + 25	40 + 40 + 40	40 + 40 + 40
1,690	1,690	1,690	1,690	1,690	1,690	1,690
1,240+930×2	1,240+930×2	1,240×2+930	1,240×2+930	1,240×2+930	1,240×3	1,240×3
765	765	765	765	765	765	765
286+262×2	286+262×2	286×2+262	286×2+262	286×2+262	286×3	286×3
11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3	11.8×3
19.05	19.05	19.05	19.05	19.05	19.05	19.05
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
-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46	-10 to 46
-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21
-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21	-10 to 21

*1 Minimum connectable indoor unit number is 2.

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

Heat Pump Modular Type

AIRSTAGE™ V-III

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

System Outline

Excellent energy saving

Heat pump inverter type realizes the highly energy saving air conditioning for individual cooling and heating operation by all inverter technology for seasonal efficiency.

High design flexibility for various building air conditioning

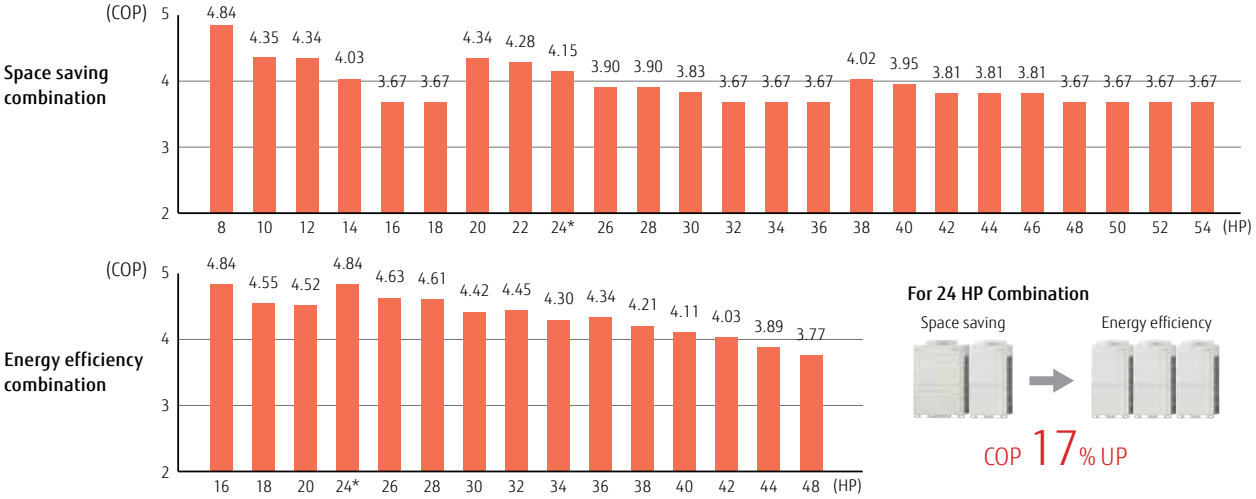
High design flexibly meets the various needs of high-rise building air conditioning such as outdoor unit roof top concentrated installation and each floor installation by large capacity combination, sufficient connection capacity, and high static pressure design.

Easy installation and maintenance

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

Efficiency in actual operation

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



Energy saving technology that boosted operation efficiency

Powerful large propeller fan

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

*1. CFD = Computational Fluid Dynamics

3 phase DC fan motor

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

Subcool heat exchanger

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

Sine-wave DC inverter control

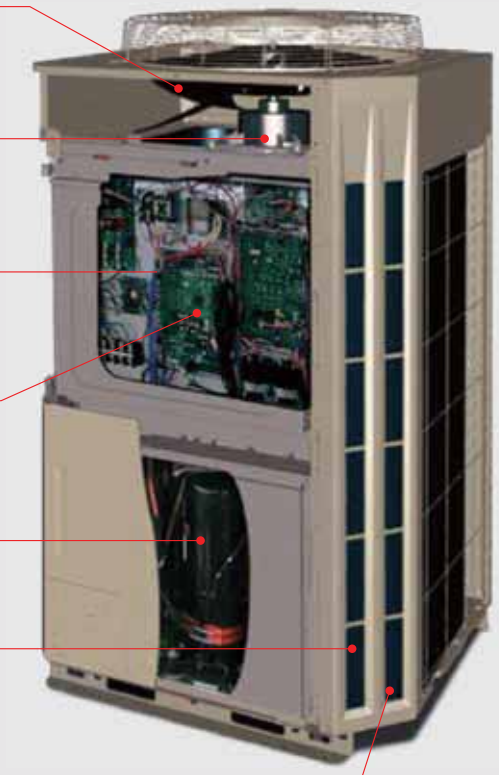
High efficiency is realized by adoption of reduced switching loss IPM.

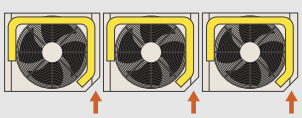
High efficient and large capacity DC inverter compressor

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

4-face heat exchanger

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





Front intake port (corner cut air inhaling structure)

In multiple outdoor unit installations, the unique front intake design improves airflow into the Heat Exchanger.

Outdoor units lineup

• Combinations other than the followings are not recommended.

Space saving combination

22.4 kW (8HP)  AJY072LALBH UNIT : AJY072LALBH	28.0 kW (10HP)  AJY090LALBH UNIT : AJY090LALBH	33.5 kW (12HP)  AJY108LALBH UNIT : AJY108LALBH	40.0 kW (14HP)  AJY126LALBH UNIT : AJY126LALBH	45.0 kW (16HP)  AJY144LALBH UNIT : AJY144LALBH
50.0 kW (18HP)  AJY162LALBH UNIT : AJY162LALBH	56.0 kW (20HP)  AJY180LALBH UNIT : AJY090/090LALBH	62.4 kW (22HP)  AJY198LALBH UNIT : AJY126/072LALBH	68.0 kW (24HP)  AJY216LALBH UNIT : AJY126/090LALBH	73.0 kW (26HP)  AJY234LALBH UNIT : AJY144/090LALBH
78.0 kW (28HP)  AJY252LALBH UNIT : AJY162/090LALBH	85.0 kW (30HP))  AJY270LALBH UNIT : AJY144/126LALBH	90.0 kW (32HP)  AJY288LALBH UNIT : AJY144/144LALBH	95.0 kW (34HP)  AJY306LALBH UNIT : AJY162/144LALBH	100.0 kW (36HP)  AJY324LALBH UNIT : AJY162/162LALBH
106.0 kW (38HP)  AJY342LALBH UNIT : AJY162/090/090LALBH	113.0 kW (40HP)  AJY360LALBH UNIT : AJY144/126/090LALBH	118.0 kW (42HP)  AJY378LALBH UNIT : AJY144/144/090LALBH	123.0 kW (44HP)  AJY396LALBH UNIT : AJY162/144/090LALBH	128.0 kW (46HP)  AJY414LALBH UNIT : AJY162/162/090LALBH
135.0 kW (48HP)  AJY432LALBH UNIT : AJY144/144/144LALBH	140.0 kW (50HP)  AJY450LALBH UNIT : AJY162/144/144LALBH	145.0 kW (52HP)  AJY468LALBH UNIT : AJY162/162/144LALBH	150.0 kW (54HP)  AJY486LALBH UNIT : AJY162/162/162LALBH	

Energy efficiency combination

44.8 kW (16HP)  AJY144LALBHH UNIT : AJY072/072LALBH	50.4kW (18HP)  AJY162LALBHH UNIT : AJY090/072LALBH	55.9 kW (20HP)  AJY180LALBHH UNIT : AJY108/072LALBH	67.2 kW (24HP)  AJY216LALBHH UNIT : AJY072/072/072LALBH	72.8 kW (26HP)  AJY234LALBHH UNIT : AJY090/072/072LALBH
78.3 kW (28HP)  AJY252LALBHH UNIT : AJY108/072/072LALBH	84.8 kW (30HP)  AJY270LALBHH UNIT : AJY126/072/072LALBH	89.4 kW (32HP)  AJY288LALBHH UNIT : AJY108/108/072LALBH	95.9 kW (34HP)  AJY306LALBHH UNIT : AJY126/108/072LALBH	100.5 kW (36HP)  AJY324LALBHH UNIT : AJY108/108/108LALBH
107.0 kW (38HP)  AJY342LALBHH UNIT : AJY126/108/108LALBH	113.5 kW (40HP)  AJY360LALBHH UNIT : AJY126/126/108LALBH	120.0 kW (42HP)  AJY378LALBHH UNIT : AJY126/126/126LALBH	125.0 kW (44HP)  AJY396LALBHH UNIT : AJY144/126/126LALBH	130.0 kW (46HP)  AJY414LALBHH UNIT : AJY144/144/126LALBH

8,10HP : AJY072LALBH / AJY090LALBH
12,14,16HP : AJY108LALBH / AJY126LALBH / AJY144LALBH / AJY162LALBH

AIRSTAGE V-III

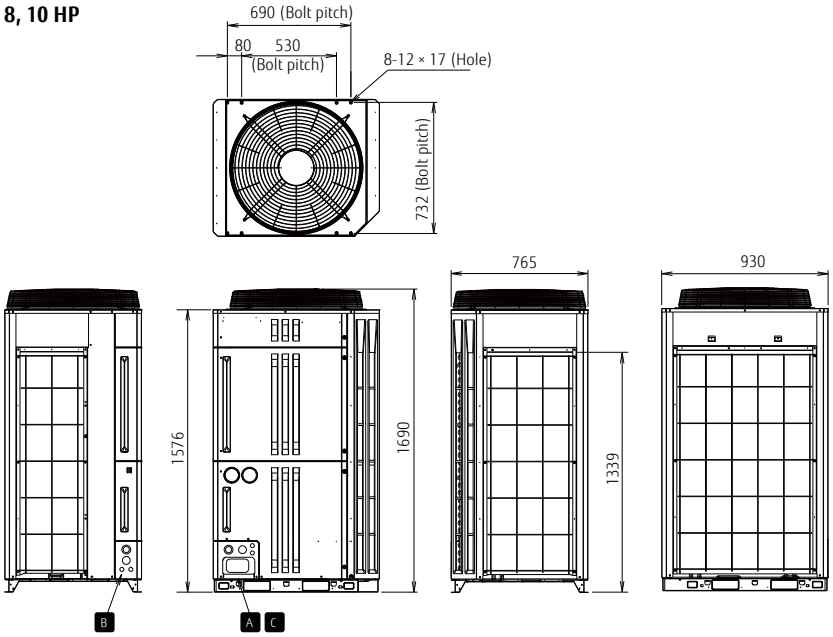
8, 10 HP

12, 14, 16 HP

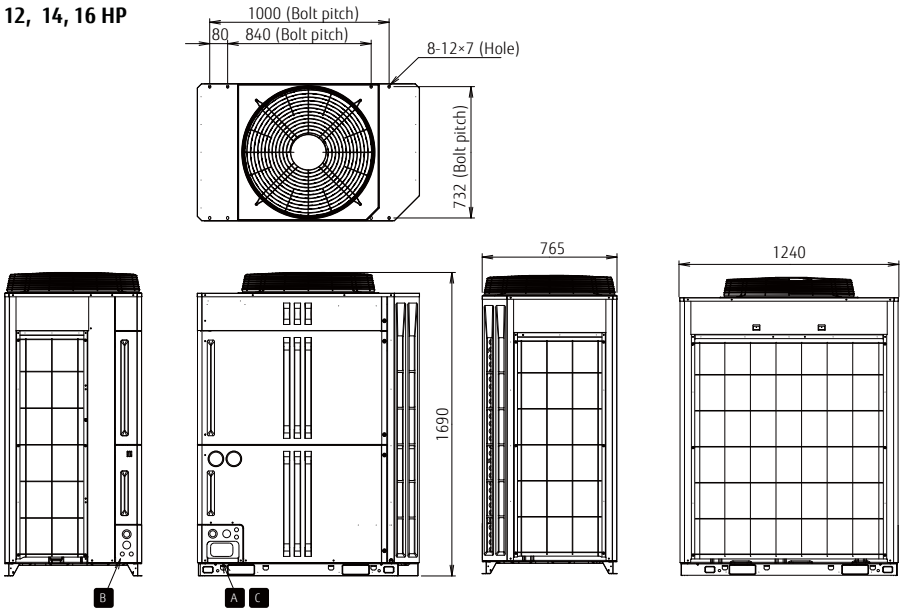
Dimensions

(Unit : mm)

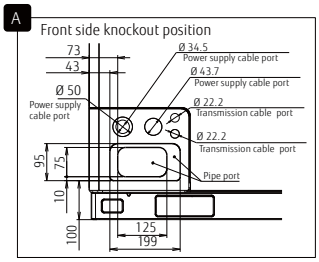
8, 10 HP



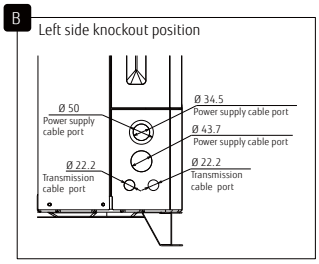
12, 14, 16 HP



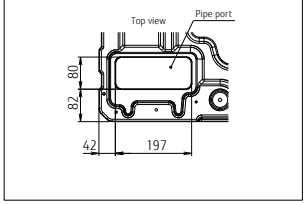
A
Front side knockout position



B
Left side knockout position



C
Bottom side knockout position



Outdoor units specifications

Space Saving Combination

Rating Capacity range		HP	8	10	12	14	16	18	20	22	24	26	28
													
Model name			AJY072LALBH	AJY090LALBH	AJY108LALBH	AJY126LALBH	AJY144LALBH	AJY162LALBH	AJY180LALBH	AJY198LALBH	AJY216LALBH	AJY234LALBH	AJY252LALBH
Unit 1 Unit 2 Unit 3			AJY072LALBH	AJY090LALBH	AJY108LALBH	AJY126LALBH	AJY144LALBH	AJY162LALBH	AJY090LALBH AJY090LALBH	AJY126LALBH AJY072LALBH	AJY126LALBH AJY090LALBH	AJY144LALBH AJY090ALBH	AJY162LALBH AJY090LALBH
Maximum Connectable Indoor Unit*1			17	21	26	30	34	39	43	47	52	56	60
Indoor unit connectable capacity	Cooling	kW	11.2-33.6	14.0-42.0	16.8-50.2	20.0-60.0	22.5-67.5	25.0-67.5	28.0-84.0	31.2-93.6	34.0-102.0	36.5-109.5	39.0-109.5
Power source			3-phase 4 wire, 400 V, 50Hz										
Capacity	Cooling	kW	22.4	28.0	33.5	40.0	45.0	50.0	56.0	62.4	68.0	73.0	78.0
	Heating		25.0	31.5	37.5	45.0	50.0	50.0	63.0	70.0	76.5	81.5	81.5
Input power	Cooling	kW	5.20	7.28	8.96	10.96	13.01	16.56	14.56	16.16	18.24	20.29	23.84
	Heating		5.17	7.25	8.65	11.17	13.63	13.63	14.50	16.34	18.42	20.88	20.88
EER	Cooling	W/W	4.31	3.85	3.74	3.65	3.46	3.02	3.85	3.86	3.73	3.60	3.27
COP	Heating		4.84	4.35	4.34	4.03	3.67	3.67	4.34	4.28	4.15	3.90	3.90
Air flow rate	High	m^3/h	11,100	11,100	13,000	13,000	13,700	13,700	11,100×2	13,000+11,100	13,000+11,100	13,000+11,100	13,700+11,100
Sound pressure level*2 / Power Level	Cooling	dB (A)	56 / 77	58 / 79	57 / 78	60 / 81	62 / 83	63 / 84	61 / 82	61 / 82	62 / 83	63 / 84	64 / 85
	Heating		58 / 80	59 / 81	60 / 83	62 / 84	64 / 86	64 / 86	62 / 84	63 / 85	64 / 86	65 / 87	65 / 87
Maximum external static pressure	Pa		82	82	82	82	82	82	82	82	82	82	82
Compressor motor output	kW		7.5	7.5	11.0	11.0	11.0	11.0	7.5×2	11.0+7.5	11.0+7.5	11.0+7.5	11.0+7.5
Min Recc MCB	AMP		20	25	25	40	40	40	25+25	40+20	40+25	40+25	40+25
Dimensions	Height	mm	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
	Width	mm	930	930	1,240	1,240	1,240	1,240	930×2	1,240+930	1,240+930	1,240+930	1,240+930
	Depth	mm	765	765	765	765	765	765	765	765	765	765	765
Weight	kg		252	252	275	275	275	275	252×2	275+252	275+252	275+252	275+252
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
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
	Gas		22.22	22.22	28.58	28.58	28.58	28.58	28.58	34.92	34.92	34.92	34.92
Operation range	Cooling	˚C	-15 to 46	-15 to 46	-15 to 46	-15 to 46	-15 to 46	-15 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
	Heating		-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

Energy Efficiency Combination

Rating Capacity range		HP	16	18	20	24	26	28	30
									
Model name			AJY144LALBHH	AJY162LALBHH	AJY180LALBHH	AJY216LALBHH	AJY234LALBHH	AJY252LALBHH	AJY270LALBHH
Unit 1 Unit 2 Unit 3			AJY072LALBH AJY072LALBH	AJY090LALBH AJY072LALBH	AJY108LALBH AJY072LALBH	AJY072LALBH AJY072LALBH AJY072LALBH	AJY090LALBH AJY072LALBH AJY072LALBH	AJY108LALBH AJY072LALBH AJY072LALBH	AJY126LALBH AJY072LALBH AJY072LALBH
Maximum Connectable Indoor Unit*1			34	39	43	52	56	60	64
Indoor unit connectable capacity	Cooling	kW	22.4-67.2	25.2-75.6	28.0-83.8	33.6-100.8	36.4-109.2	39.2-117.4	42.4-127.2
Power source			3-phase 4 wire, 400 V, 50Hz						
Capacity	Cooling	kW	44.8	50.4	55.9	67.2	72.8	78.3	84.8
	Heating		50.0	56.5	62.5	75.0	81.5	87.5	95.0
Input power	Cooling	kW	10.40	12.48	14.16	15.60	17.68	19.36	21.36
	Heating		10.34	12.42	13.82	15.51	17.59	18.99	21.51
EER	Cooling	W/W	4.31	4.04	3.95	4.31	4.12	4.04	3.97
COP	Heating		4.84	4.55	4.52	4.84	4.63	4.61	4.42
Air flow rate	High	m^3/h	11,100×2	11,100×2	13,000+11,100	11,100×3	11,000×3	13,000+11,100×2	13,000+11,100×2
Sound pressure level*2 / Power Level	Cooling	dB (A)	59 / 80	60 / 81	60 / 81	61 / 82	62 / 83	61 / 82	63 / 84
	Heating		61 / 83	62 / 84	62 / 85	63 / 85	63 / 85	64 / 86	65 / 87
Maximum external static pressure	Pa		82	82	82	82	82	82	82
Compressor 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
Min Recc MCB	AMP		20+20	25+20	25+20	20+20+20	25+20+20	25+20+20	40+20+20
Dimensions	Height	mm	1,690	1,690	1,690	1,690	1,690	1,690	1,690
	Width	mm	930×2	930×2	1,240+930	930×3	930×3	1,240+930×2	1,240+930×2
	Depth	mm	765	765	765	765	765	765	765
Weight	kg		252×2	252×2	275+252	252×3	252×3	275+252×2	275+252×2
Refrigerant 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
Connection pipe diameter	Liquid	mm	12.70	15.88	15.88	15.88	15.88	15.88	19.05
	Gas		28.58	28.58	28.58	34.92	34.92	34.92	34.92
Operation range	Cooling	˚C	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
	Heating		-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 : 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.
When cooling operation will be conducted at outdoor air temperature below -5°C, the outdoor unit must be installed in a position that is higher than or equal to those of indoor units.

	30	32	34	36	38	40	42	44	46	48	50	52	54
	AJY270LALBH	AJY288LALBH	AJY306LALBH	AJY324LALBH	AJY342LALBH	AJY360LALBH	AJY378LALBH	AJY396LALBH	AJY414LALBH	AJY432LALBH	AJY450LALBH	AJY468LALBH	AJY486LALBH
	AJY144LALBH AJY126LALBH	AJY144LALBH AJY144LALBH	AJY162LALBH AJY144LALBH	AJY162LALBH AJY162LALBH	AJY162LALBH AJY090LALBH AJY090LALBH	AJY144LALBH AJY126LALBH AJY090LALBH	AJY144LALBH AJY144LALBH AJY090LALBH	AJY162LALBH AJY144LALBH AJY090LALBH	AJY162LALBH AJY162LALBH AJY090LALBH	AJY144LALBH AJY144LALBH AJY144LALBH	AJY162LALBH AJY144LALBH AJY144LALBH	AJY162LALBH AJY162LALBH AJY144LALBH	AJY162LALBH AJY162LALBH AJY162LALBH
	64	64	64	64	64	64	64	64	64	64	64	64	64
	42.5-127.5	45.0-135.0	47.5-135.0	50.0-135.0	53.0-151.5	56.5-169.5	59.0-177.0	61.5-177.0	64.0-177.0	67.5-202.5	70.0-202.5	72.5-202.5	75.0-202.5
	3-phase 4 wire, 400 V, 50Hz												
	85.0	90.0	95.0	100.0	106.0	113.0	118.0	123.0	128.0	135.0	140.0	145.0	150.0
	95.0	100.0	100.0	100.0	113.0	126.5	131.5	131.5	131.5	150.0	150.0	150.0	150.0
	23.97	26.02	29.57	33.12	31.12	31.25	33.30	36.85	40.40	39.03	42.58	46.13	49.68
	24.80	27.26	27.26	27.26	28.13	32.05	34.51	34.51	34.51	40.89	40.89	40.89	40.89
	3.55	3.46	3.21	3.02	3.41	3.62	3.54	3.34	3.17	3.46	3.29	3.14	3.02
	3.83	3.67	3.67	3.67	4.02	3.95	3.81	3.81	3.81	3.67	3.67	3.67	3.67
	13,700+13,000	13,700×2	13,700×2	13,700×2	13,700+11,100×2	13,700+13,000+11,100	13,700×2+11,100	13,700×2+11,100	13,700×2+11,100	13,700×3	13,700×3	13,700×3	13,700×3
	64 / 85	65 / 86	66 / 87	66 / 87	65 / 86	65 / 86	66 / 87	66 / 87	67 / 87	67 / 88	67 / 88	67 / 88	68 / 89
	66 / 88	67 / 89	67 / 89	67 / 89	66 / 88	67 / 89	68 / 90	68 / 90	68 / 90	69 / 91	69 / 91	69 / 91	69 / 91
	82	82	82	82	82	82	82	82	82	82	82	82	82
	11.0×2	11.0×2	11.0×2	11.0×2	11.0+7.5×2	11.0×2+7.5	11.0×2+7.5	11.0×2+7.5	11.0×2+7.5	11.0×3	11.0×3	11.0×3	11.0×3
	40+40	40+40	40+40	40+40	40+25+25	40+40+25	40+40+25	40+40+25	40+40+40	40+40+40	40+40+40	40+40+40	40+40+40
	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
	1,240×2	1,240×2	1,240×2	1,240×2	1,240+930×2	1,240×2+930	1,240×2+930	1,240×2+930	1,240×2+930	1,240×3	1,240×3	1,240×3	1,240×3
	765	765	765	765	765	765	765	765	765	765	765	765	765
	275×2	275×2	275×2	275×2	275+252×2	275×2+252	275×2+252	275×2+252	275×2+252	275×3	275×3	275×3	275×3
	11.8×2	11.8×2	11.8×2	11.8×2	11.8+11.7×2	11.8×2+11.7	11.8×2+11.7	11.8×2+11.7	11.8×2+11.7	11.8×3	11.8×3	11.8×3	11.8×3
	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	34.92	34.92	34.92	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27	41.27
	-5 to 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
	-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

	32	34	36	38	40	42	44	46
	AJY288LALBHH	AJY306LALBHH	AJY324LALBHH	AJY342LALBHH	AJY360LALBHH	AJY378LALBHH	AJY396LALBHH	AJY414LALBHH
	AJY108LALBH AJY108LALBH AJY072LALBH	AJY126LALBH AJY108LALBH AJY072LALBH	AJY108LALBH AJY108LALBH AJY108LALBH	AJY126LALBH AJY108LALBH AJY108LALBH	AJY126LALBH AJY126LALBH AJY108LALBH	AJY126LALBH AJY126LALBH AJY126LALBH	AJY144LALBH AJY126LALBH AJY126LALBH	AJY144LALBH AJY144LALBH AJY126LALBH
	64	64			64	64	64	64
	44.7-134.1	48.0-143.8	50.3-150.7	53.5-160.5	56.8-170.2	60.0-180.0	62.5-187.5	65.0-195.0
	3-phase 4 wire, 400 V, 50Hz							
	89.4	95.9	100.5	107.0	113.5	120.0	125.0	130.0
	100.0	107.5	112.5	120.0	127.5	135.0	140.0	145.0
	23.12	25.12	26.88	28.88	30.88	32.88	34.93	36.98
	22.47	24.99	25.95	28.47	30.99	33.51	35.97	38.43
	3.87	3.82	3.74	3.70	3.68	3.65	3.58	3.52
	4.45	4.30	4.34	4.21	4.11	4.03	3.89	3.77
	13,000×2+11,100	13,000×2+11,100	13,000×3	13,000×3	13,000×3	13,000×3	13,700+13,000×2	13,700×2+13,000
	61 / 82	63 / 84	63 / 83	64 / 84	64 / 85	65 / 86	66 / 87	66 / 87
	64 / 87	65 / 88	65 / 88	65 / 88	66 / 88	67 / 89	68 / 90	68 / 90
	82	82	82	82	82	82	82	82
	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
	25+25+20	40+25+20	25+25+25	40+25+25	40+40+25	40+40+40	40+40+40	40+40+40
	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690
	1,240×2+930	1,240×2+930	1,240×3	1,240×3	1,240×3	1,240×3	1,240×3	1,240×3
	765	765	765	765	765	765	765	765
	275×2+252	275×2+252	275×3	275×3	275×3	275×3	275×3	275×3
	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
	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	34.92	34.92	41.27	41.27	41.27	41.27	41.27	41.27
	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

*1 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.

NEW Heat Pump for Small Capacity Type

System Outline

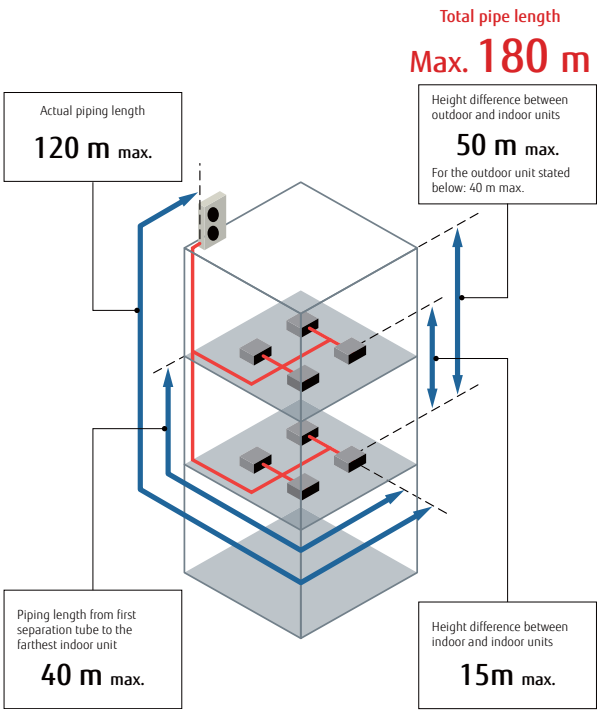
High energy efficiency

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

Flexible systems for small- andmedium-size buildings air conditioning

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

4,5,8HP



4,5,6HP : AJYA40LALH / AJYA45LALH / AJYA54LALH*

AIRSTAGE J-II

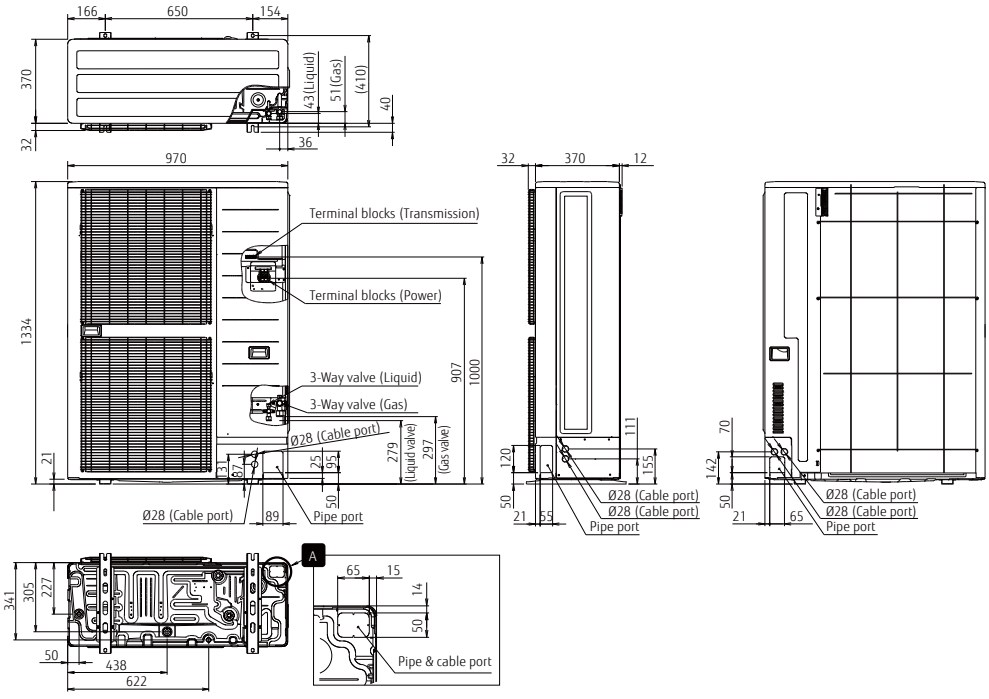
Specifications

Rating Capacity range		HP	4	5	6
Model name			AJYA40LALH	AJYA45LALH	AJYA54LALH
Maximum Connectable Indoor Unit			7	8	9
Power source			230/1/50	230/1/50	230/1/50
Capacity	Cooling	kW	12.1	14.0	15.5
	Heating		13.6	16.0	18.0
Input power	Cooling	kW	3.25	3.89	4.49
	Heating		3.17	3.81	4.56
EER	Cooling	W/W	3.72	3.60	3.45
COP	Heating	W/W	4.29	4.20	3.95
Air flow late		m^3/h	6,200	6,400	6,900
Sound pressure / Power level	Cooling	dB(A)	50 / 66	51 / 67	53 / 69
	Heating		52 / 66	53 / 67	53 / 69
Min Recc MCB		AMP	32	32	32
Net Dimensions	Height	mm	1,334	1,334	1,334
	Width		970	970	970
	Depth		370	370	370
Weight		kg	117	117	117
Refrigerant charge		kg	4.8	5.3	5.3
Connection pipe diameter	Liquid	mm	3/8	3/8	3/8
	Gas		5/8	5/8	5/8
Total pipe length		m	120	120	120
Max. height difference			30	30	30
Operation range	Cooling	°C	-5 to 46	-5 to 46	-5 to 46
	Heating		-20 to 21	-20 to 21	-20 to 21

Note: Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.
The protective function may work when using it outside the operation range.
*Model number may change without prior notice

Dimensions

(Unit : mm)



Heat Pump for Small Capacity Type

AIRSTAGE™ J-IIS

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

System Outline

Space saving and low sound level design

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

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

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

Small and light weight outdoor unit

This model is much more compact than conventional 6HP comparable outdoor units. Even when installed on the balcony it fits within the height of the fence. The compact size with a height of less than 1 m allows it to be installed under windows and in tight spaces

Model / 6HP class

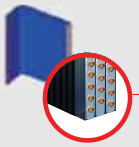
Height difference
998 mm
▲25%

Light weight
87 kg
▲26%

Advanced high efficiency technology

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

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

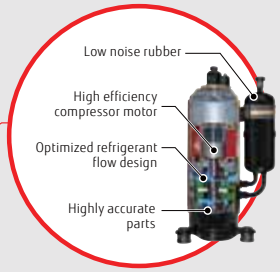


Large heat exchanger
Heat exchange performance is substantially improved by mounting of 3-row large heat exchanger.

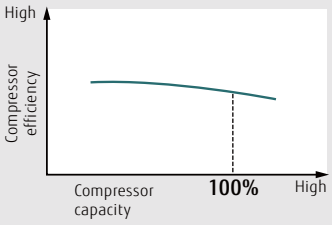
High heat transfer copper tube (Improved lead angle)

Smooth airflow grille
This grille was aerodynamically designed for good efficiency with little blow loss.

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

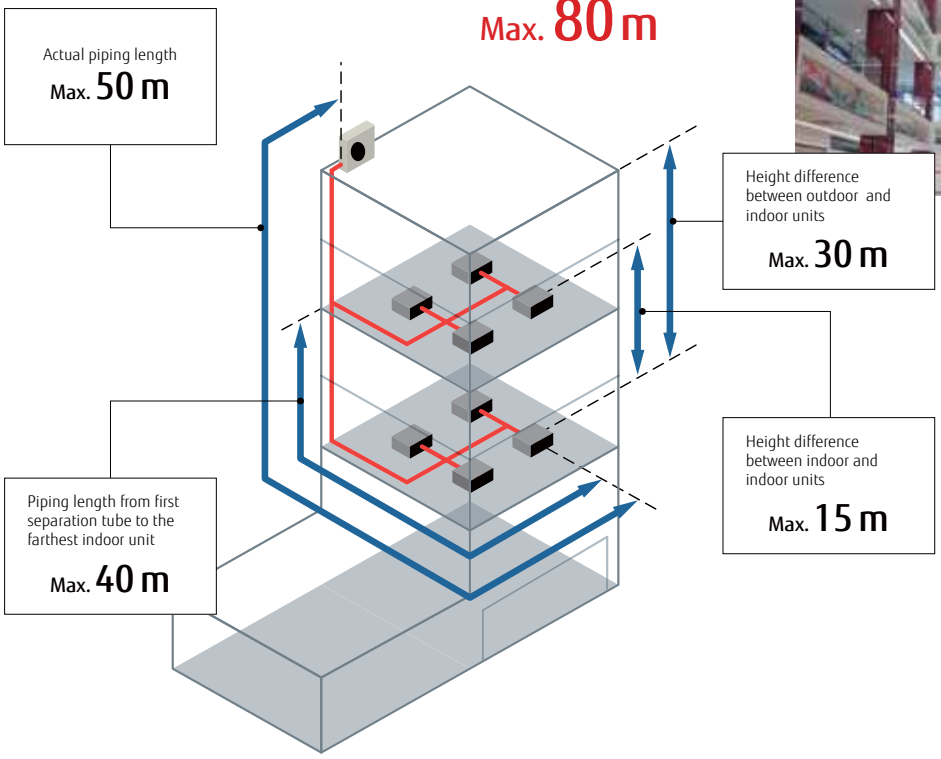


Compact and high performance DC twin rotary compressor
Efficiency in all load regions is good. Especially good performance from low to medium at normal operation.



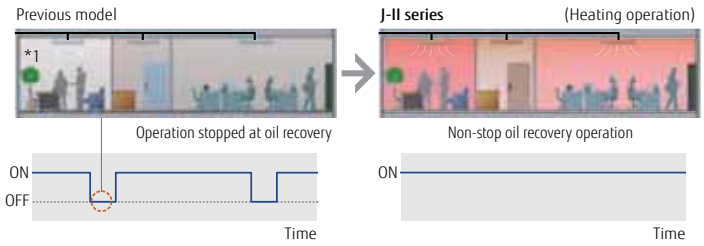
Long piping length

Our advanced refrigerant control technology allows us to achieve a total refrigerant piping length of 80 m. This opens up new possibilities in system design.



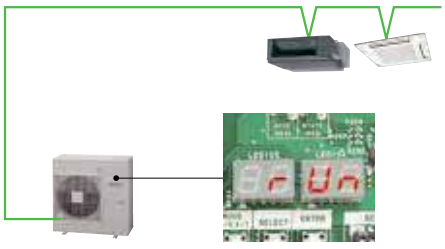
Non-stop oil recovery operation

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

4,5,6HP : AJY040LCLAH / AJY045LCLAH / AJY054LCLAH

AIRSTAGE J-IIS

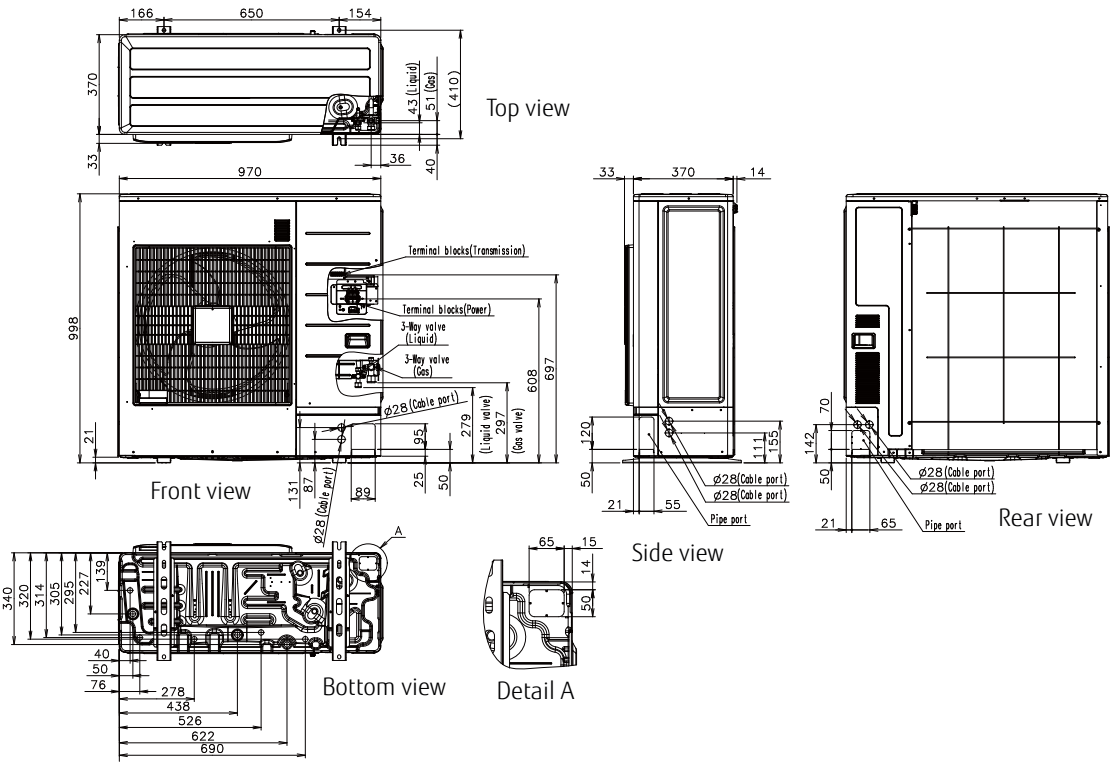
Specifications

Rating capacity range	HP		4	5	6
Model name			AJY040LCLAH	AJY045LCLAH	AJY054LCLAH
Maximum connectable indoor unit			7	8	8
Power source	V/Ø/Hz		230/1/50	230/1/50	230/1/50
Capacity	Cooling	kW	12.1	14.0	15.1
	Heating		13.6	16.0	16.5
Input power	Cooling	kW	3.44	4.43	5.32
	Heating		3.09	3.93	4.26
EER	Cooling	W/W	3.52	3.16	2.84
COP	Heating		4.40	4.07	3.87
Airflow rate		m^3/h	4,040	4,200	4,200
Sound Pressure Power level	Cooling	dB (A)	51 / 67	53 / 69	54 / 70
	Heating		54 / 68	55 / 69	56 / 70
Min Recc MCB		AMP	32	32	32
Dimensions	Height	mm	998	998	998
	Width	mm	970	970	970
	Depth	mm	370	370	370
Weight	kg		86	86	87
Refrigerant charge	kg		4.0	4.0	4.0
Connection Pipe diameter	Liquid	mm	3/8	3/8	3/8
	Gas		5/8	5/8	5/8
Total pipe length		m	80	80	80
Max. Height difference			30	30	30
Operation Range	Cooling	˚C	-5 to 46	-5 to 46	-5 to 46
	Heating		-20 to 21	-20 to 21	-20 to 21

Note : Specifications are based on the following conditions.
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.
The protective function may work when using it outside the operation range.

Dimensions

(Unit : mm)



Indoor units

Indoor Unit Lineup

12 Types, 66 Models, Capacity range from 1.1 kW to 28.0 kW

Capacity range (kW)		1.1	2.2	2.8	3.6	4.5	5.6
Model code		4	7	9	12	14	18
Cassette	4-way Compact Cassette	 AUXB04GALH	 AUXB07GALH	 AUXB09GALH	 AUXB12GALH	 AUXB14GALH	 AUXB18GALH
	4-way Cassette (Slim type)						 AUXD18GALH
	4-way Cassette (Large type)						
Duct	Slim Duct (With drain pump)	 ARXD04GALH	 ARXD07GALH	 ARXD09GALH	 ARXD12GALH	 ARXD14GALH	 ARXD18GALH
	Medium Static Pressure Duct						
	High Static Pressure Duct						
Floor	Floor (*Same as Ceiling models)				 ABYA12GATH	 ABYA14GATH	 ABYA18GATH
	Slim Concealed Floor (*Same as Slim Duct models)	 ARXD04GALH	 ARXD07GALH	 ARXD09GALH	 ARXD12GALH	 ARXD14GALH	 ARXD18GALH
Ceiling	Ceiling				 ABYA12GATH	 ABYA14GATH	 ABYA18GATH
Wall Mounted	Wall Mounted	 ASYA04GACH	 ASYA07GACH	 ASYA09GACH	 ASYA12GACH	 ASYA14GACH	 ASYA18GACH
	Wall Mounted (EEV external)	 ASHE04GACH	 ASHE07GACH	 ASHE09GACH	 ASHE12GACH	 ASHE14GACH	

With this model, connection of EV kit is necessary.

7.1 24	9.0 30	11.2 36	12.5 45	14.0 54	18.0 60	22.4 72	25.0 90	28.0 96
 AUXB24GALH								
 AUXD24GALH								
	 AUXA30GALH	 AUXA36GALH	 AUXA45GALH	 AUXA54GALH				
 ARXD24GALH								
 ARXA24GBLH	 ARXA30GBLH	 ARXA36GBLH	 ARXA45GBLH					
		 ARXC36GBTH	 ARXC45GATH		 ARXC60GATH*1	 ARXC72GBTH*1	 ARXC90GBTH*1	Future Release  ARXC96GATH*1
 ABYA24GATH								
 ARXD24GALH								
 ABYA24GATH	 ABYA30GATH	 ABYA36GATH	 ABYA45GATH	 ABYA54GATH				
 ASYA24GACH	 ASYA30GACH							

*1: ARXC60/72/90G/96G cannot be connected to J-IIS and J-III series.

Indoor Units Specifications

4-way Compact Cassette

Model No.			AUXB04GALH	AUXB07GALH	AUXB09GALH	AUXB12GALH	AUXB14GALH	AUXB18GALH	AUXB24GALH
Power Source			230v ~ 50Hz						
Capacity	UK Total Cooling	KW	0.80	1.60	2.10	2.70	3.30	4.20	5.30
	UK Sensible Cooling		0.70	1.50	1.70	2.30	2.70	3.20	4.40
	UK Heating		1.20	2.60	3.00	3.80	4.70	5.90	7.40
	Nominal Cooling		1.10	2.20	2.80	3.60	4.50	5.60	7.10
	Nominal Heating		1.30	2.80	3.20	4.10	5.00	6.30	8.00
Input Power		Watts	23	25	25	29	35	36	84
Airflow Rate	High	m3/hr	530	540	550	600	680	710	1,030
	Med		420/450 htg/clg *1	450	450	530	590	580	830
	Low		300/350 htg/clg*1	350	350	390	390	400	450
Sound Pressure level	High	dB(A)	34	34	35	37	38	41	50
	Med		28/30 htg/clg *1	30	30	34	34	35	44
	Low		21/25 htg/clg *1	25	25	27	27	27	30
Dimensions (H x W x D)		mm	245 x 570 x 570 (grille 50 x 700 x 700)						
Weight		kg	15					17	
Connection pipe dia	Liquid (flare)	inches	1/4					3/8	
	Gas (flare)		1/2					5/8	

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. *1: This value is under cooling operation.

4-way Cassette

Model No.			AUXD18GALH	AUXD24GALH	AUXA30GALH	AUXA36GALH	AUXA45GALH	AUXA54GALH
Power Source			230v ~50Hz					
Capacity	UK Total Cooling	KW	4.20	5.30	6.70	8.30	9.30	10.40
	UK Sensible Cooling		3.90	4.80	6.00	7.10	7.70	8.40
	UK Heating		5.90	7.40	9.30	11.60	13.00	14.90
	Nominal Cooling		5.60	7.10	9.00	11.20	12.50	14.00
	Nominal Heating		6.30	8.00	10.00	12.50	14.00	16.00
Input Power		Watts	39	46	59	80	99	119
Airflow Rate	High	m3/hr	1,150	1,280	1,600	1,800	1,900	2,000
	Med		940	1,040	1,300	1,300	1,370	1,370
	Low		870	870	1,100	1,100	1,100	1,100
Sound Pressure level	High	dB(A)	36	38	40	44	46	47
	Med		30	33	38	38	39	39
	Low		29	29	33	33	33	33
Dimensions (H x W x D)		mm	246 x 840 x 840		288 x 840 x 840 (grille 50 x 950 x 950)			
Weight		kg	22		27			
Connection pipe dia	Liquid (flare)	inches	3/8					
	Gas (flare)		5/8			3/4		

***Price includes Grille, to be ordered separately**

Specifications
Specifications are based on the following conditions for all VRF indoor units:
Nominal Cooling: Indoor temperature of 27°CDB / 19°CWB and outdoor temperature of 35°CDB / 24°CWB
Nominal Heating: Indoor temperature of 20°CDB and outdoor temperature of 7°CDB
UK Cooling: indoor temperature 23°CDB / 16°CWB and outdoor temperature 30°C
UK Heating: indoor temperature 20°CDB and outdoor temperature 0°C

Slim Duct / Slim Concealed Floor



Model No.			ARXD04GALH	ARXD07GALH	ARXD09GALH	ARXD12GALH	ARXD14GALH	ARXD18GALH	ARXD24GALH
Power Source			230v ~50Hz						
Capacity	UK Total Cooling	KW	0.80	1.60	2.10	2.70	3.30	4.20	5.30
	UK Sensible Cooling		0.70	1.50	1.80	2.30	2.90	3.50	4.90
	UK Heating		1.20	2.60	3.00	3.70	4.70	5.90	7.40
	Nominal Cooling		1.10	2.20	2.80	3.60	4.50	5.60	7.10
	Nominal Heating		1.30	2.80	3.20	4.00	5.00	6.30	8.00
Input Power		Watts	38	44	50	54	92	83	122
Airflow Rate	High	m3/hr	510	550	600	600	800	940	1,330
	Med		400/470 htg/clg *1	490	550	510	710	840	1,240
	Low		320/440 htg/clg *1	440	480	450	610	750	1,100
Static Pressure		Pa	0 to 90	0 to 90	0 to 90	0 to 90	0 to 90	0 to 90	0 to 50
Standard static pressure			25	25	25	25	25	25	25
Sound Pressure level	High	dB(A)	26	28	29	30	34	34	35
	Med		21/25 htg/clg	25	26	27	32	32	32
	Low		20/22 htg/clg	22	24	24	28	28	29
Dimensions (H x W x D)		mm	198 x 700 x 620					198 x 900 x 620	198 x 1,100 x 620
Weight		kg	17			18		22	26
Connection pipe dia	Liquid (flare)	inches (mm)	1/4					3/8	
	Gas (flare)		1/2					5/8	

*1: This value is under cooling operation.

Medium Static Pressure Duct

Model No.			ARXA24GBLH	ARXA30GBLH	ARXA36GBLH	ARXA45GBLH
Power Source			230v ~ 50Hz			
Capacity	UK Total Cooling	KW	5.30	6.70	8.30	9.30
	UK Sensible Cooling		4.70	5.60	7.00	7.90
	UK Heating		7.40	9.30	11.60	13.00
	Nominal Cooling		7.10	9.00	11.20	12.50
	Nominal Heating		8.00	10.00	12.50	14.00
Input Power		Watts	94	108	194	240
Airflow Rate	High	m3/hr	1,280	1,410	1,840	1,970
	Med		990	1,280	1,600	1,860
	Low		840	1,150	1,470	1,640
Static Pressure		Pa	0 to 150	0 to 150	0 to 150	0 to 150
Standard static pressure			40	50	50	60
Sound Pressure level	High	dB(A)	31	34	37	41
	Med		27	32	35	38
	Low		23	29	33	36
Dimensions (H x W x D)		mm	270 x 1,135 x 700			
Weight		kg	36	40		
Connection pipe dia	Liquid (flare)	inches	1/4			
	Gas (flare)		5/8		3/4	

High Static Pressure Duct


Model No.			ARXC36GATH	ARXC45GATH	ARXC60GATH*	ARXC72GATH*	ARXC90GATH*
Power Source			230v ~ 50Hz				
Capacity	UK Total Cooling	KW	8.30	9.30	13.40	16.60	18.60
	UK Sensible Cooling		7.40	9.20	12.20	15.10	15.60
	UK Heating		11.60	13.00	18.60	23.30	26.00
	Nominal Cooling		11.20	12.50	18.00	22.40	25.00
	Nominal Heating		12.50	14.00	20.00	25.00	28.00
Input Power		Watts	405	715	730	1100	1250
Airflow Rate	High	m3/hr	2,600	3,500	3,500	3,900	4,300
	Med		1,950	3,000	3,000	3,300	4,000
	Low		1,450	2,460	2,460	3,000	3,500
Static Pressure		Pa	100 to 200	100 to 250	100 to 250	50 to 300	100 to 300
Standard static pressure			100	100	100	260	250
Sound Pressure level	High	dB(A)	45	49	49	51	53
	Med		38	45	45	48	51
	Low		32	42	42	45	49
Dimensions (H x W x D)		mm	400 x 1,050 x 500			450 x 1,550 x 700	
Weight		kg	43	46		83	85
Connection pipe dia	Liquid	inches (mm)	3/8 Flare			1/2 Brazed	
	Gas		3/4 Flare			7/8 Brazed	

*ARXC60/72/90GALH can not be connected to J-II or J-IIS outdoot units

Indoor Units Specifications

Floor / Ceiling

Model No.			ABYA12GATH	ABYA14GATH	ABYA18GATH	ABYA24GATH
Power Source			230v ~ 50Hz			
Capacity	UK Total Cooling	KW	2.70	3.30	4.20	5.30
	UK Sensible Cooling		2.40	3.00	3.80	4.20
	UK Heating		3.70	4.70	5.90	7.40
	Nominal Cooling		3.60	4.50	5.60	7.10
	Nominal Heating		4.00	5.00	6.30	8.00
Input Power		Watts	30	42	74	99
Airflow Rate	High	m3/hr	660	780	1,000	1,000
	Med		570	640	720	820
	Low		490	550	580	680
Sound Pressure level	High	dB(A)	36	40	46	47
	Med		32	36	39	42
	Low		28	34	35	37
Dimensions (H x W x D)		mm	199 x 990 x 655			
Weight		kg	25	26	26	27
Connection pipe dia	Liquid (flare)	inches	1/4		3/8	
	Gas (flare)		1/2		5/8	

Ceiling

Model No.			ABYA30GATH	ABYA36GATH	ABYA45GATH	ABYA54GATH
Power Source			230v ~ 50Hz			
Capacity	UK Total Cooling	KW	6.70	8.30	9.30	10.40
	UK Sensible Cooling		6.10	6.90	7.90	8.90
	UK Heating		9.30	11.60	13.00	14.90
	Nominal Cooling		9.00	11.20	12.50	14.00
	Nominal Heating		10.00	12.50	14.00	16.00
Input Power		Watts	66	85	131	180
Airflow Rate	High	m3/hr	1,630	1,690	2,010	2,270
	Med		1,370	1,400	1,600	1,780
	Low		1,140	1,170	1,230	1,280
Sound Pressure level	High	dB(A)	42	45	48	51
	Med		38	38	42	45
	Low		33	34	35	36
Dimensions (H x W x D)		mm	240 x 1,660 x 700			
Weight		kg	46	48		
Connection pipe dia	Liquid (flare)	inches	3/8	3/8		
	Gas (flare)		5/8	3/4		

Refrigerant Leak Detection

To meet the requirements of EN378 (to be revised in 2016) all split / VRF systems installed in an occupied space with a refrigerant charge in excess of 0.44kg/m3 (R410a) must have a leak detector with audible alarm fitted.

Fujitsu's Design Simulator software can be used to accurately calculate the actual refrigerant charge based on system size and proposed pipe-work lengths and configuration.

Refrigerant leak detection systems are available from a number of specialist suppliers some of who offer installation, commissioning and maintenance services along with their products these companies include but are not limited too.

Aquilar, CPC (UK) Ltd, TQ Environmental, Murco Gas detection systems, Amos Detection, JAVAC

Wall Mounted

Model No.			ASYA04GACH	ASYA07GACH	ASYA09GACH	ASYA12GACH	ASYA14GACH
Power Source			230v ~50Hz				
Capacity	UK Total Cooling	KW	0.80	1.60	2.10	2.70	3.30
	UK Sensible Cooling		0.70	1.60	1.90	2.30	2.80
	UK Heating		1.20	2.60	3.00	3.80	4.70
	Nominal Cooling		1.10	2.20	2.80	3.60	4.50
	Nominal Heating		1.30	2.80	3.20	4.10	5.00
Input Power		Watts	13	17	18	22	34
Airflow Rate	High	m3/hr	450	490	500	560	670
	Med		370/440 htg/clg *1	450	450	480	490
	Low		320/420 htg/clg *1	370/420 htg/clg *1	370/420 htg/clg *1	420	420
Sound Pressure level	High	dB(A)	33	35	36	39	44
	Med		27/32 htg/clg *1	33	33	35	37
	Low		22/31 htg/clg *1	27/31 htg/clg *1	27/31 htg/clg *1	31	32
Dimensions (H x W x D)		mm	275 x 790 x 215				
Weight		kg	9				
Connection pipe dia	Liquid (flare)	inches	1/4				
	Gas (flare)		1/2				
		EV Kit	N/A				

*1 : This value is under cooling operation.

Wall Mounted

Model No.			ASYE07GACH	ASYE09GACH	ASYE12GACH	ASYE14GACH
Power Source			230v ~ 50Hz			
Capacity	UK Total Cooling	KW	1.60	2.10	2.70	3.30
	UK Sensible Cooling		1.60	1.90	2.30	2.80
	UK Heating		2.60	3.00	3.80	4.70
	Nominal Cooling		2.20	2.80	3.60	4.50
	Nominal Heating		2.80	3.20	4.10	5.00
Input Power		Watts	15	16	21	34
Airflow Rate	High	m3/hr	490	500	460	680
	Med		450	450	480	490
	Low		370/420 htg/clg *1	370/420 htg/clg *1	420	420
Sound Pressure level	High	dB(A)	34	35	38	43
	Med		32	32	34	35
	Low		26/30 htg/clg *1	26/30 htg/clg *1	30	30
Dimensions (H x W x D)		mm	275 x 790 x 215			
Weight		kg	9			
Connection pipe dia	Liquid (flare)	inches	1/4			
	Gas (flare)		1/2			
		EV Kit	UTR-EV09XB		UTR-EV14XB	

*1 : This value is under cooling operation.

Wall Mounted

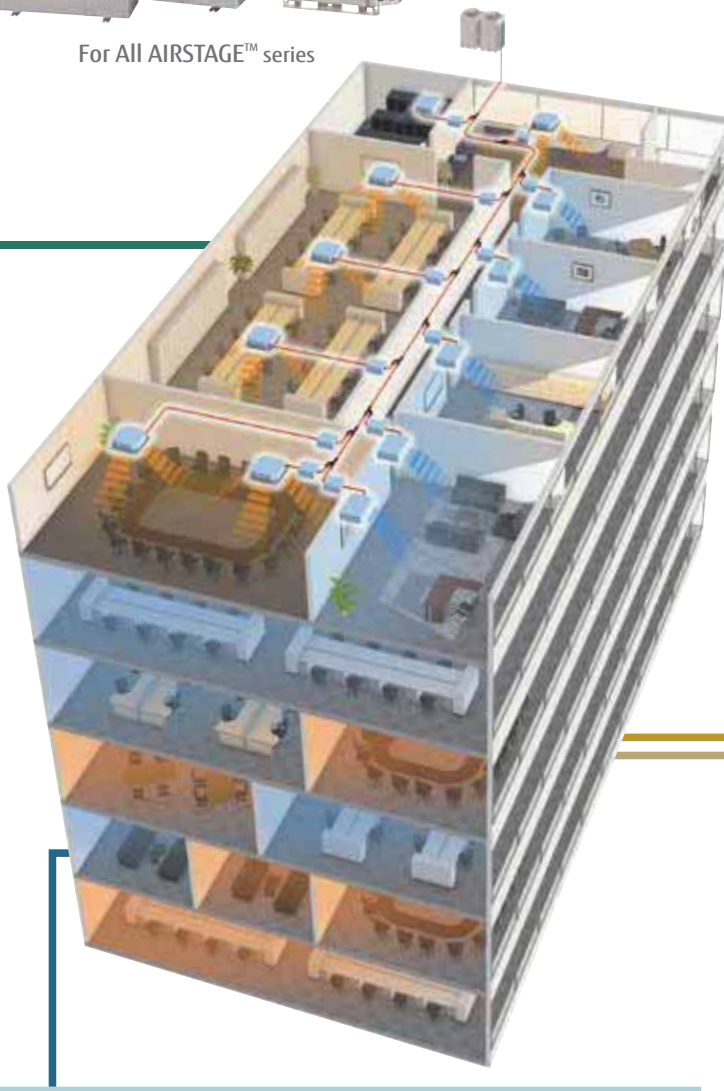
Model No.			ASYA18GACH	ASYA24GACH	ASYA30GACH
Power Source			230v ~ 50Hz		
Capacity	UK Total Cooling	KW	4.20	5.30	5.90
	UK Sensible Cooling		3.50	4.60	5.10
	UK Heating		5.90	7.40	8.40
	Nominal Cooling		5.60	7.10	8.00
	Nominal Heating		6.30	8.00	9.00
Input Power		Watts	32	60	91
Airflow Rate	High	m3/hr	840	1,100	1,240
	Med		770	910	980
	Low		690	730	770
Sound Pressure level	High	dB(A)	41	48	52
	Med		39	43	45
	Low		35	35	35
Dimensions (H x W x D)		mm	320 x 998 x 228		
Weight		kg	15		
Connection pipe dia	Liquid (flare)	inches	3/8		
	Gas (flare)		5/8		

Controller

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 All AIRSTAGE™ series



Air Conditioning Individual Control

Wired Remote Controller (Touch panel)
UTY-RNRYZ1

Wired Remote Controller
UTY-RLRY

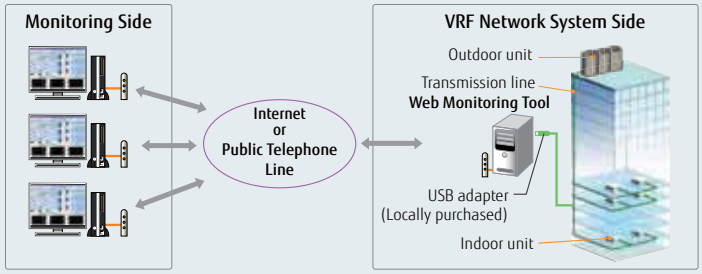
Simple Remote Controller
UTY-RSKY

Simple Remote Controller
UTY-RHKY
Without operation mode

Wireless Remote Controller
UTY-LNHY

Service & Maintenance Tool

Web Monitoring System Software
UTY-AMGX



Service Tool Software
UTY-ASGX

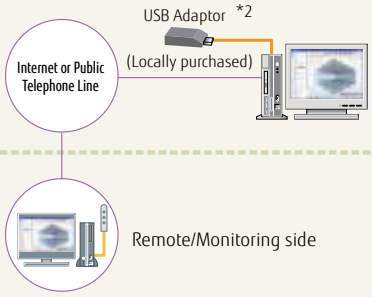
USB Adaptor *2
(Locally purchased)

Air Conditioning Centralized Control

System Controller
Software

UTY-APGX

UTY-ALGX (Lite edition)



Touch Panel Controller
UTY-DTGYZ1 NEW

Option NEW

UTY-PTGXA

Central Remote Controller
UTY-DCGY

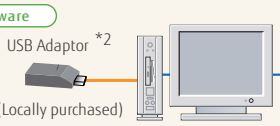
Group Remote Controller
UTY-CGGY

Network Convertor
UTY-VGGXZ1

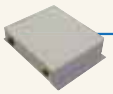
Convertor / Adaptor (for external device)

BACnet® Gateway
Software

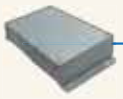
UTY-ABGX



Network Convertor (BMS/LONWORKS®)
UTY-VLGX



MODBUS® Convertor
UTY-VMGX NEW



MODBUS® Interface
FJ-RC-MBS-1

KNX® Interface
FJ-RC-KNX-1i

Wireless LAN Interface
FJ-RC-WIFI-1

External Switch Controller
UTY-TEKX

Card-key
(Locally purchased)

Internet device

BMS/BAS *1

BMS, Home automation system

*1. BMS/BAS: Building Management System/Building Automation System

*2. USB Adaptor: Echelon® U10 USB Network Interface

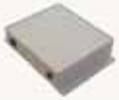
Convertor / Adaptor (for system expansion)

Network Convertor
UTY-VTGX NEW

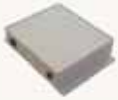
Network Convertor (AC power supply)

UTY-VTGXV NEW

Network Convertor
UTY-VGGXZ1



Signal Amplifier
UTY-VSGXZ1



Comparison table of Controllers

Item			 Wired Remote Controller (Touch panel)	 Wired Remote Controller	 Simple Remote Controller	 Simple Remote Controller*1	 Wireless Remote Controller	 Group Remote Controller	 Central Remote Controller	 Touch Panel Controller	 System Controller Lite Software	 System Controller Software
Model name			UTY-RNRYZ1	UTY-RLRY	UTY-RSKY	UTY-RHKY	UTY-LNHY	UTY-CGGY	UTY-DCGY	UTY-DTGYZ1	UTY-ALGX	UTY-APGX
Max. controllable remote controller groups			1	1	1	1	1	8	100	400	400	1600
Max. controllable indoor units			16	16	16	16	16	128	100	400	400	1600
Max. controllable groups			–	–	–	–	–	–	16	400	400	1600
Air conditioning control function	On / Off		●	●	●	●	●	●	●	●	●	●
	Operation mode setting		●	●	●	–	●	●	●	●	●	●
	Fan speed setting		●	●	●	●	●	●	●	●	●	●
	Room temp. setting		●	●	●	●	●	●	●	●	●	●
	Room temp. set point limitation		●	●	–	–	–	–	●	●	●	●
	Test operation		●	●	●	–	●	–	●	●	–	–
	Up/down air direction flap setting		●	●	–	–	●	–	●	●	●	●
	Right/left air direction flap setting		●	●	–	–	●	–	●	●	●	●
	Group setting		–	–	–	–	–	–	●	●	●	●
	RC prohibition		–	–	–	–	–	–	●	●	●	●
	Anti freeze setting		●	–	–	–	–	–	●	●	●	●
	Economy mode setting		●	●	–	–	●	–	●	●	●	●
Display	Error		●	●	●	●	–	●	●	●	●	●
	Defrosting		●	●	●	●	–	–	●	●	●	●
	Current time		●	●	–	–	●	●	●	●	●	●
	Day of week		●	●	–	–	–	●	–	●	●	●
	R.C. prohibition		●	●	●	●	–	●	●	●	●	●
	Cooling/heating priority		●	●	●	●	–	●	●	●	●	●
	Address display		●	●	●	●	–	●	●	●	●	●
	Room temp		●	–	–	–	–	–	–	–	–	–
	Multi language		●	–	–	–	–	–	●	●	●	●
	Summer time		●	–	–	–	–	–	●	●	●	●
	Name registration		●	–	–	–	–	–	●	●	●	●
	Backlight		●	–	●	●	–	–	●	●	–	–
	2D floor layout / 3D building display		–	–	–	–	–	–	–	–	–	●
Timer	Schedule timer	Period	Week	Week	–	–	–	Week	Week	Year	Year	Year
		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
Control	Status monitoring system		–	–	–	–	–	–	●	●	●	●
	Electricity charge apportionment		–	–	–	–	–	–	–	○	○	●
	Error history		●	●	–	–	–	●	●	●	●	●
	Emergency stop		–	–	–	–	–	–	●*2	●*2	–	–
	Remote management		–	–	–	–	–	–	–	●	○	●
	Energy saving management		–	–	–	–	–	–	–	–	○	○
	E-mail notification for malfunction		–	–	–	–	–	–	–	●	●	●
	Key lock		● Child lock	● Child lock	–	–	–	● Child lock	● Password setting	● Password setting	● Password setting	● Password setting

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

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

Wired Remote Controller (Touch Panel)

UTY-RNRYZ1

Max. Controllable
16 indoor units

Features

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

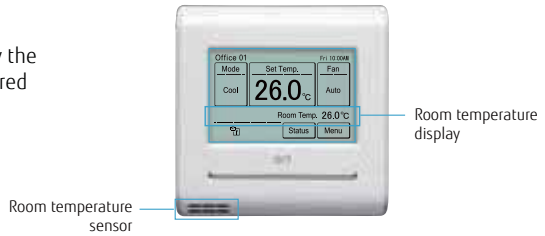
- Easy finger touch operation with LCD panel
- Built-in weekly/Daily timer(ON/OFF,Temp.,Mode)
- Backlight enables easy operation in a darkened room
- Room temperature display
- Control up to 16 indoor units
- Corresponds to 12 different languages (English, Chinese, French, German, Spanish, Russian, Polish,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

High performance and compact size

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

Accurate and comfortable control

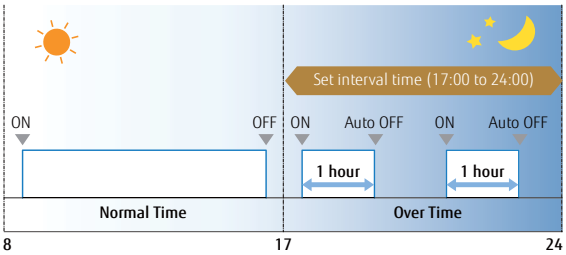
Indoor temperature can be detected accurately by the inclusion of a thermo sensor in the body of the wired controller.



Various energy saving control

Auto OFF timer

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



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

2 schedules Weekly Timer

Set Temperature Auto Return

Set Temperature Upper and Lower Limit Setting

Specifications

Model name	UTY-RNRYZ1
Power Source	DC 12 V
Dimensions (H × W × D) (mm)	120 × 120 × 20.4
Weight (g)	220

DC12 V is supplied by the indoor unit.

Wired Remote Controller

UTY-RLRY

While Stocks Last

Features

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

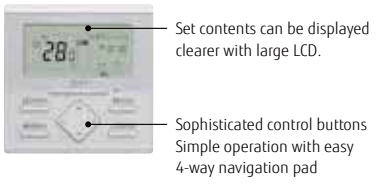
Max. Controllable
16 indoor units

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.

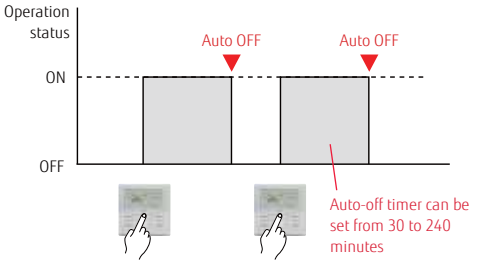
High visibility and easy operation

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



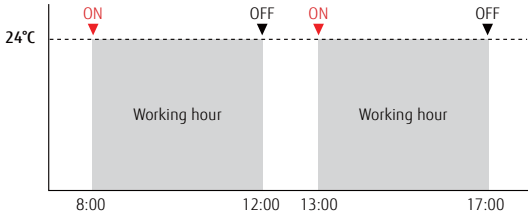
Auto-off timer

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



Weekly timer function

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



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

Various energy saving control

Set Temperature Auto Return

Set Temperature Upper and Lower Limit Setting

Specifications

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

DC12 V is supplied by the indoor unit.

Simple Remote Controller

UTY-RSKY / UTY-RHKY (Without operation mode)

Without operation mode

Max. Controllable
16 indoor units

Features

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.
- 3-wire type

Easy-to-use operation

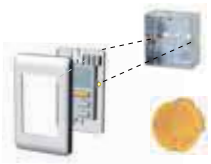
- Provides access to basic operations, such as Start / Stop, Fan control, Operation mode switching, and Room temperature setting.
- A large On / Off button is provided in the centre of the remote controller for easy operation.
- Can be used jointly with other individual control unit.
- Following an error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

Backlight

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

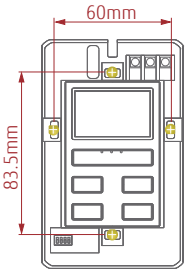
Simple installation

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



European switch box

JIS built-in box



Functions

Operation \ Model	 UTY-RSKY	 UTY-RHKY
On / Off	●	●
Fan control	●	●
Operation mode	●	–*1
Room temp. setting	●	●

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

Specifications

Model name	UTY-RSKY	UTY-RHKY
Power Source	DC 12 V	DC 12 V
Dimensions (H × W × D) (mm)	120 × 75 × 14	120 × 75 × 14
Weight (g)	90	90

DC12 V is supplied by the indoor unit.

Wireless Remote Controller

UTY-LNHY

Max. Controllable
16 indoor units

Selectable
4 daily timers

Features

Simple and sophisticated operations with a choice of 4 daily timers

• A single controller controls up to 16 indoor units.

Built-in timers

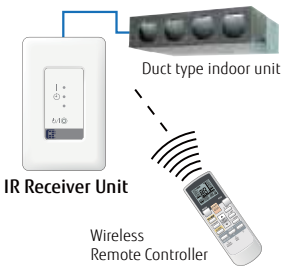
4 timer programs: On / Off / Program / Sleep
Program timer: Operates ON/OFF timer once within 24 hours
Sleep timer: Corrects the set temperature automatically during sleep time

Easy installation and operation

Code selector switch prevents indoor unit mix-up (up to 4 codes)
Wide and precise transmitting range

IR Receiver Unit

UTB-YWC



Features

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

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

IR Receiver Unit

UTY-LRHYB1

Features

Cassette type indoor unit can be controlled with Wireless Remote Controller

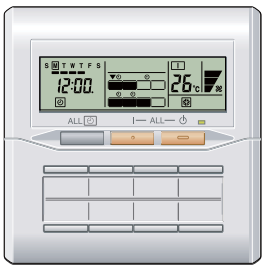
Specifications

Model name	UTY-LNHY	UTB-YWC	UTY-LRHYB1
Battery	1.5 V (R03 / LR03 / AAA) × 2	DC 5 V	DC 5 V
Dimensions (H × W × D) (mm)	170 × 56 × 19	145 × 90 × 30	193.9 × 193.9 × 31.2
Weight (g)	85	150	140

DC12 V is supplied by the indoor unit.

Group Remote Controller

UTY-CGGY



Features

Group control of indoor units with simple operation

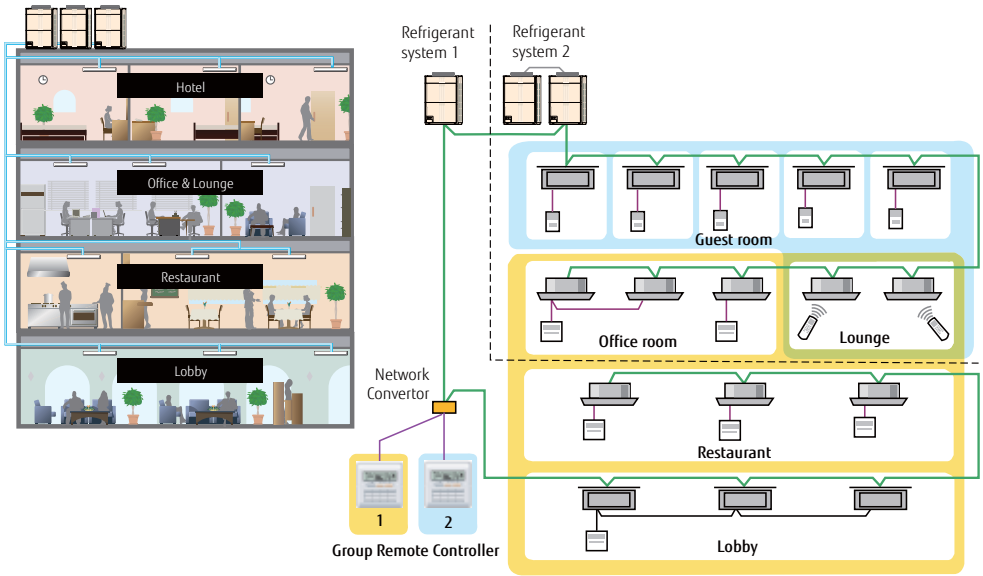
- Up to 8 remote controller groups can be controlled by one Group Remote Controller.
- Up to 64 Group Remote Controllers can be connected in one VRF network system.
- Network Convertor is required to connect Group Remote Controllers to a VRF network system. (Network Convertor allows up to 4 Group Remote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

Max. Controllable
8
remote controller groups

Max. Controllable
64
group R.C.in a VRF network system

Control up to 8 remote controller groups

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



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

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

High performance and compact size

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

Built-in weekly timers

The weekly timer is provided as a standard function.

Specifications

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

DC12 V is supplied by the indoor unit.

Central Remote Controller

UTY-DCGY

Max. Controllable
100 indoor units

Max. Controllable
16 groups

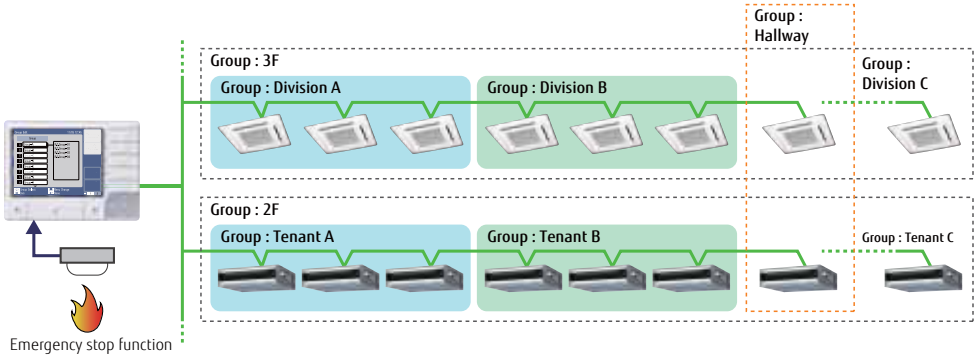
Features

For small- and medium-sized buildings and tenants

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

System overview

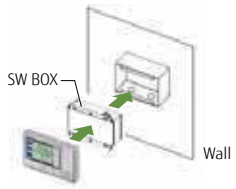
- It allows multiple indoor units grouping (Max.16 groups controlled)
- Interlock with external device



Easy Installation

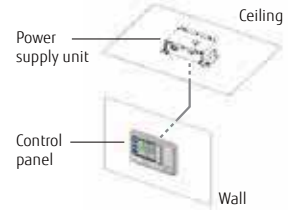
- The control panel and power supply unit can be installed separately.
- For flexibility in installation, the Control panel can be built into the wall or fix on the wall.

Setting pattern 1



Control panel + Power supply unit

Setting pattern 2



Functions

- Diverse control of indoor units
- Weekly timer
- Automatic clock adjustment
- Error history

Specifications

Model name	UTY-DCGY	
	Control Panel	Power Supply Unit
Power Supply	DC 5 V	100-240 V, 50-60Hz, Single phase
Dimensions (H × W × D) (mm)	120 × 162 × 25.7	99 × 135 × 39.2
Weight (g)	308	355

NEW Touch Panel Controller

UTY-DTGYZ1

Max. Controllable
400 indoor units

Max. Controllable
100 outdoor units

Max. Controllable
400 groups

Features

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

Diverse operation management

Individual control

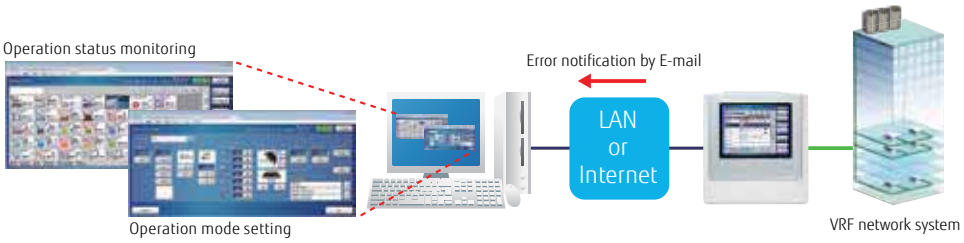
Flexible grouping

Schedule control

Indoor units operation monitoring

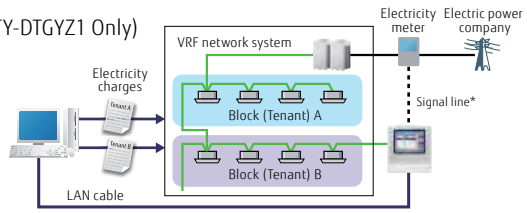
Remote monitoring and operation (UTY-DTGYZ1 Only)

- Air conditioner can be monitored and controlled via LAN from PC.
- Error contents are notified automatically by E-mail at error occurrence to handle the trouble promptly.



Electricity charge apportionment (UTY-DTGYZ1 Only) (Option: UTY-PTGXA)

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



*: 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.

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.

Specifications

Model name	UTY-DTGYZ1 NEW	UTY-PTGXA NEW	UTY-DTGY*
Power Supply	100-240 V 50/60Hz, Single phase	DC 5V (USB Bus power)	100-240 V 50/60Hz, Single phase
Dimensions (H × W × D) (mm)	260 × 246 × 54	62 × 17 × 10	260 × 246 × 54
Weight (g)	2,150	9	2,150
Interface	Transmission/LAN/USB/ EXT IN/EXT OUT/Reset SW	USB	USB 2.0

*Not compatible with UTY-PTGXA

System Controller

UTY-APGX Software

Features

Max. Controllable
4 VRF network systems

Max. Controllable
400 outdoor units

Max. Controllable
1,600 indoor units

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.
- Corresponds to 7 different languages (English, Chinese, French, German, Spanish, Russian, Polish)

System Controller Lite

UTY-ALGX Software

Features

Max. Controllable
1 VRF network systems

Max. Controllable
100 outdoor units

Max. Controllable
400 indoor units

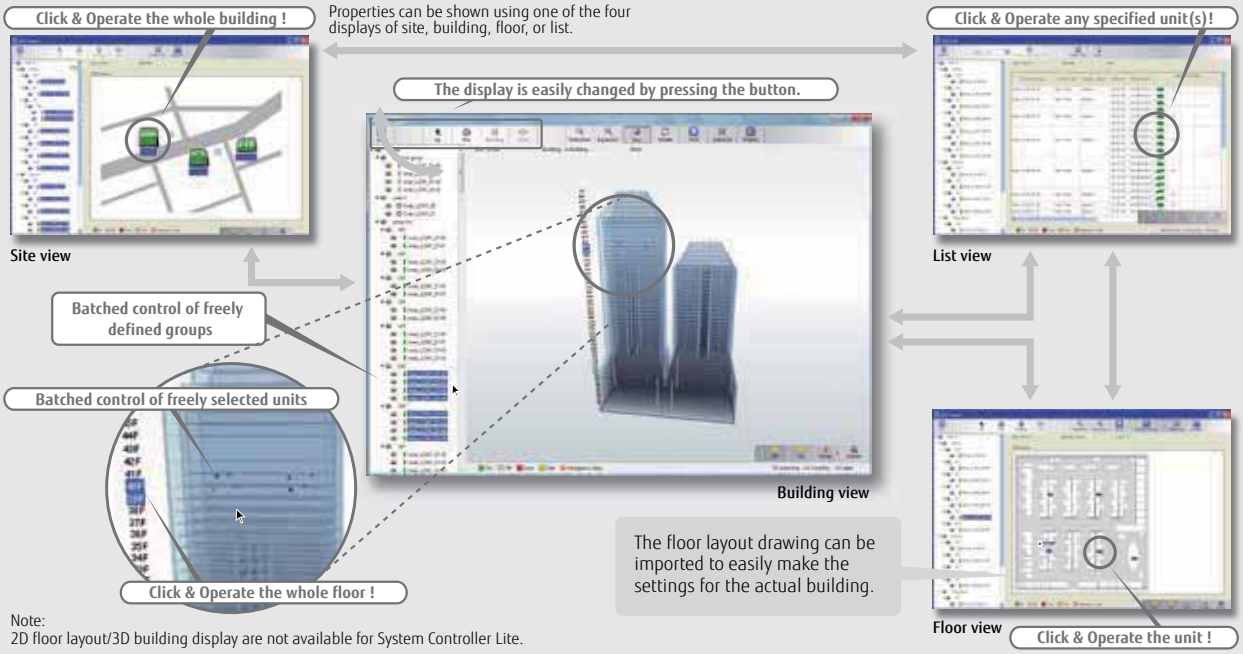
System Controller Lite has standard functions sufficient for air conditioner management in small and medium scale buildings .

- 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 customoers a wide range of choice.
- Corresponds to 7 different languages (English, Chinese, French, German, Spanish, Russian, Polish)

High visibility and Easy 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.



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

Diverse operation management & Data management

Standard for System Controller and System Controller Lite

Schedule management

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

Diverse control of indoor unit and outdoor unit

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

Remote controller prohibition

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

Error display & E-mail notification

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

Operating & control record

Displays the history of operation status and control.

Data base import/export

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

Automatic clock adjustment

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

Electricity charge apportionment

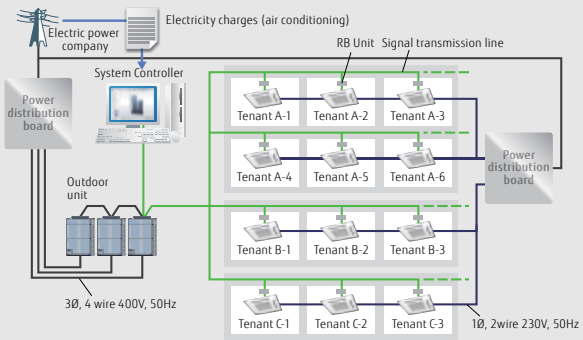
Standard for System Controller

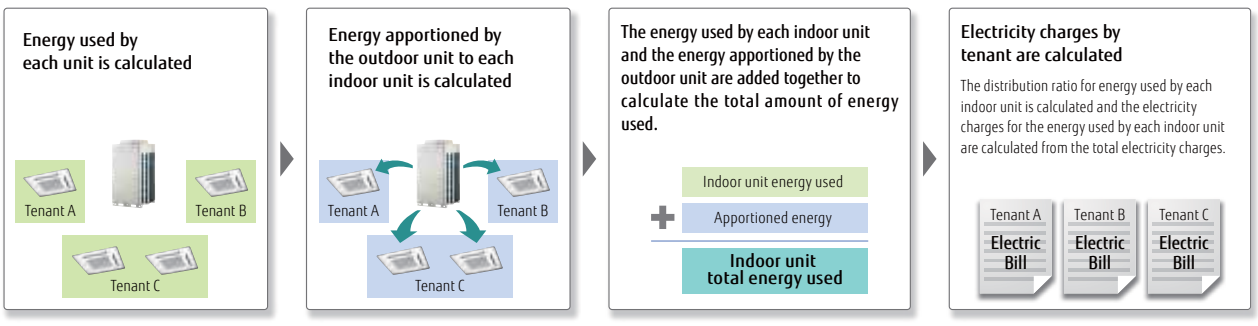
Option for System Controller Lite UTY-PLGXA1

Electricity charge apportionment calculation framework

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

System Configuration Example



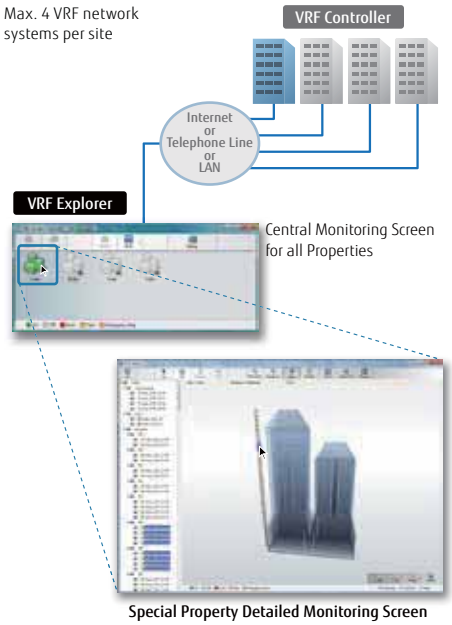


Remote management

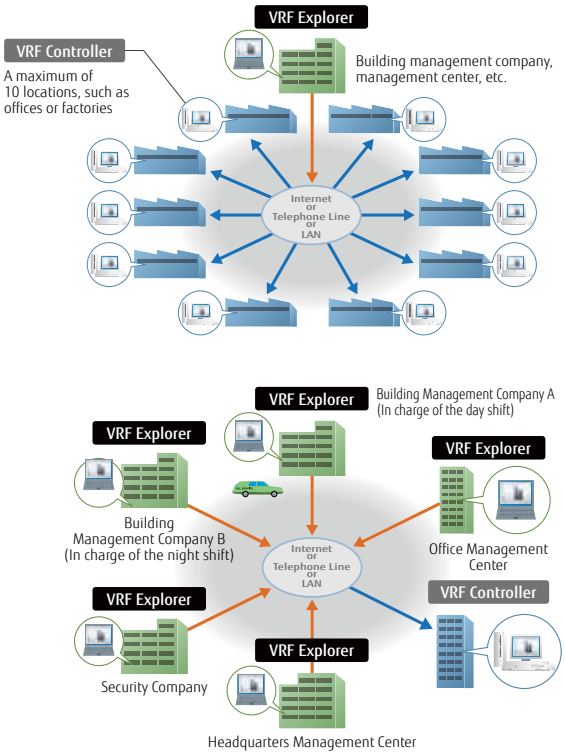
Standard for System Controller
Option for System Controller Lite UTY-PLGXA1

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

On site central control



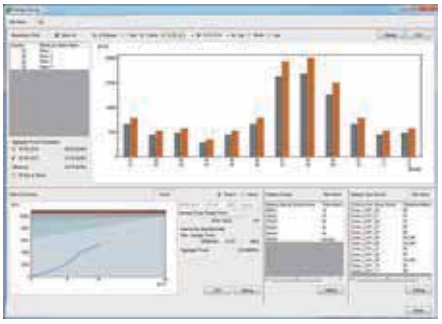
Remote central control



Energy saving management

Option for System Controller UTY-PEGX
Option for System Controller Lite UTY-PLGXE1

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



Energy Saving Management Main Screen

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

Indoor unit rotation operation

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

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.

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

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

*:Power calculation application software is necessary, please contact the local FGL representative.

○: Available. - : Not available.

Personal computer system requirements

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

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

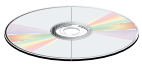
PACKING LIST

Type	For System controller		For System controller Lite			
	System Controller	Option Energy manager	System Controller Lite	Option Remote access	Option Electricity charge apportionment	Option Energy saving
Model name	UTY-APGX	UTY-PEGX	UTY-ALGX	UTY-PLGXR1	UTY-PLGXA1	UTY-PLGXE1
DVD-ROM	1	1	1	–	–	–
WibuKey*1(Software protection key)	1	1	1	1	1	1

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

BACnet® Gateway

UTY-ABGX Software



DVD-ROM (Software)

Software Protection Key

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

Max. Controllable
4
VRF network systems

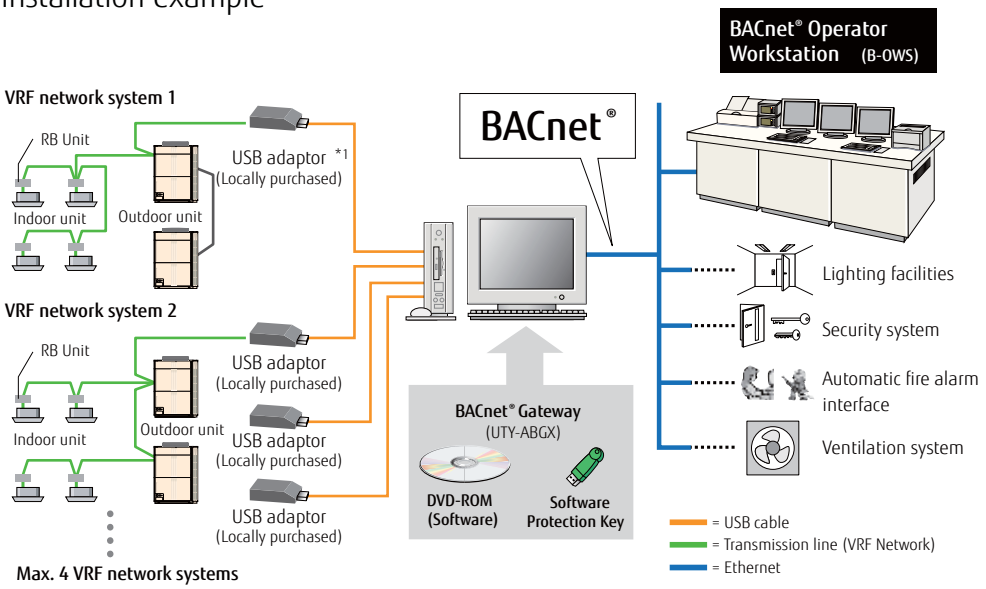
Max. Controllable
400 outdoor units

Max. Controllable
1,600 indoor units

Features

- It is possible to connect medium to large sized BMS to VRF network system via BACnet®, a global standard for open networks.
- A maximum of 1600 indoor units with 4 VRF network systems (a maximum of 400 indoor units & 100 outdoor units for one network system) can be connected to one BACnet® Gateway.
- It is possible to control or monitor VRF network system from BMS via BACnet® Gateway.
- Compatible with BACnet® (ANSI / ASHRAE-135-2004) application specific controller (B-ASC).
- Compatible with BACnet®/IP over Ethernet.
- Scheduling function, Alarm & Event functions as well as Electricity Change Apportionment function are provided in BACnet® Gateway.
- Connection between VRF network system to personal computer is possible via small U10 USB interface. However, both U10 USB interface & personal computer are locally purchased items.
- Corresponds to 7 different languages, English, Chinese, French, German, Spanish, Russian, Polish.

Installation example



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

Personal computer system requirements

	UTY-ABGX
Operating system	• Microsoft® Windows Vista® Home Premium (32-bit) SP2, Windows Vista® Business (32-bit) SP2 • Microsoft® Windows® 7 Home Premium (32-bit or 64-bit) SP1, Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8 (32-bit or 64-bit), Windows® 8 Pro (32-bit or 64-bit) • Microsoft® Windows® 8.1 (32-bit or 64-bit), Windows® 8.1 Pro (32-bit or 64-bit) • 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® Core™ i3 2 GHz or higher
Memory	• 2 GB or more (for Windows Vista® and Windows® 7 [32-bit]) • 4 GB or more (for Windows® 7 [64-bit], Windows® 8, 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 WibuKey connection - Maximum of 4 USB ports are required for Echelon® U10 USB Network Interface * Maximum number of required USB ports depends on the applicable system configurations.
Software	Adobe® Reader® 9.0 or later
Optical drive	DVD-ROM drive

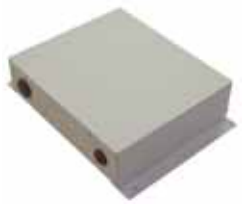
Packing list

Name and shape	Quantity
DVD-ROM	1
WibuKey (Software protection key)	1

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

Network Convertor for LONWORKS®

UTY-VLGX



Features

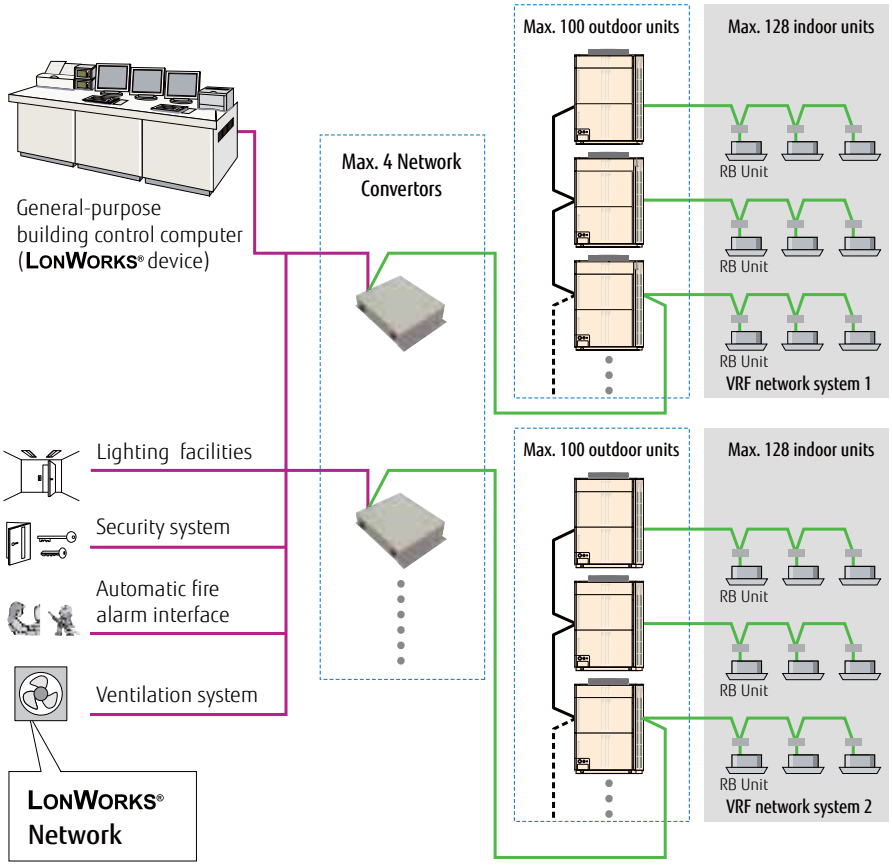
- For connection between VRF network system and a LONWORKS® open network for management of small to medium-sized BMS and VRF network system.
- The UTY-VLGX permits central monitoring and control of a VRF network system from a BMS through a LONWORKS® interface.
- Up to 128 Indoor units can be connected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

Max. Controllable
4 units to BMS

Max. Controllable
100 outdoor units

Max. Controllable
128 indoor units

Installation example



Specifications

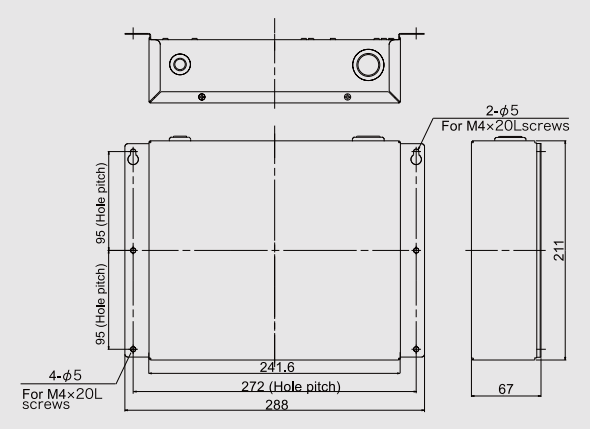
Model name	UTY-VLGX
Power Supply	208-240V 50/60Hz, Single phase
Power Consumption (W)	4.5
Dimensions (H × W × D) (mm)	67 × 288 × 211
Weight (g)	1,500

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.)

Dimensions

(Unit : mm)



NEW MODBUS® Convertor

UTY-VMGX

Max. Controllable
9 units to one VRF

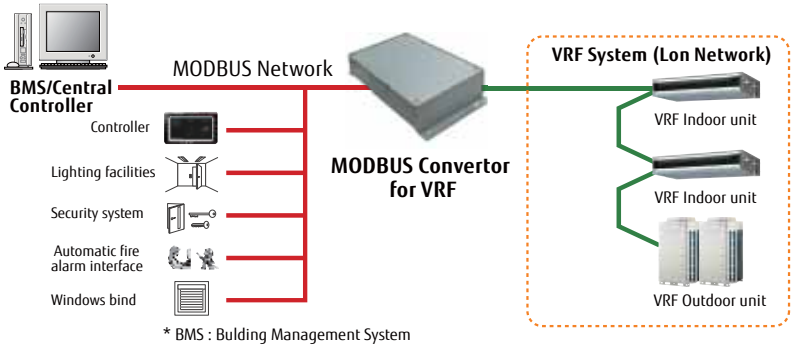
Max. Controllable
100 outdoor units

Selectable
128 indoor units

Features

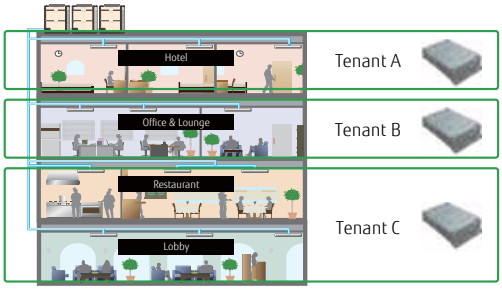
The MODOBUS Convertor allows a complete integration of air conditioners into MODBUS Networks.

- 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.



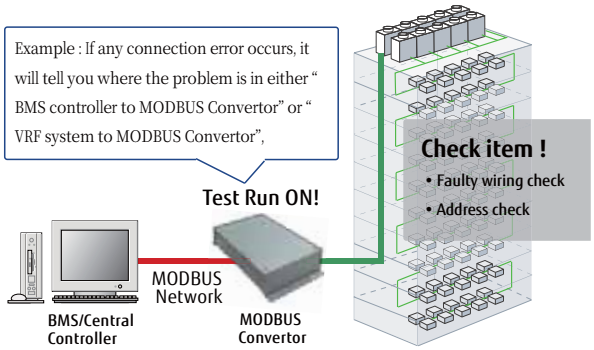
Connectable MAX 9

Up to 9 convertors can be connected to a VRF network. The simultaneous controls such as ON/OFF or temperature settings can be done for each zone.



Traceability of sources of connection error

It is easy to locate the source of error if any connection errors should occur after completion of installation works.



Specifications

Model name	UTY-VMGX
Power Supply	AC220/240V 50/60Hz
Input power (W)	Max. 2
Dimensions (H × W × D) (mm)	54 × 260 × 150
Weight (g)	1,100

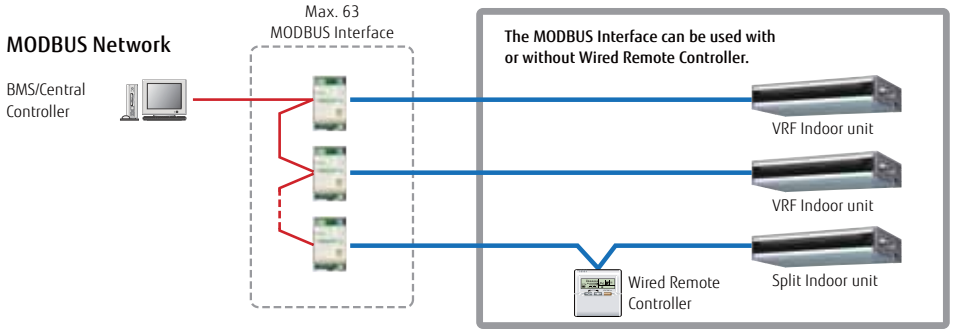
MODBUS® Interface

FJ-RC-MBS-1

Features

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.



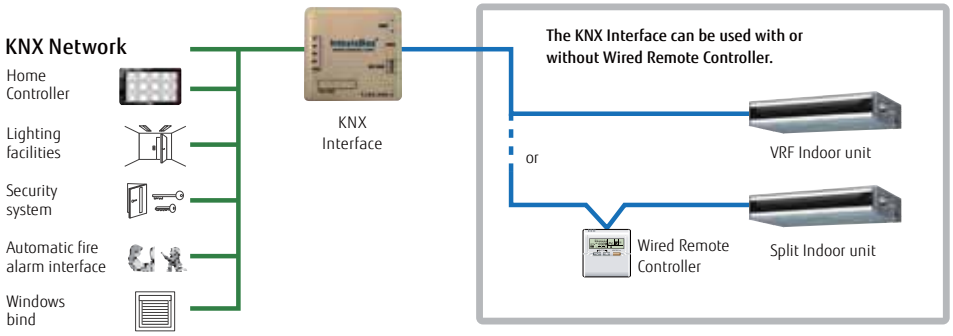
KNX® Interface

FJ-RC-KNX-1i

Features

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

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



Specifications

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

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

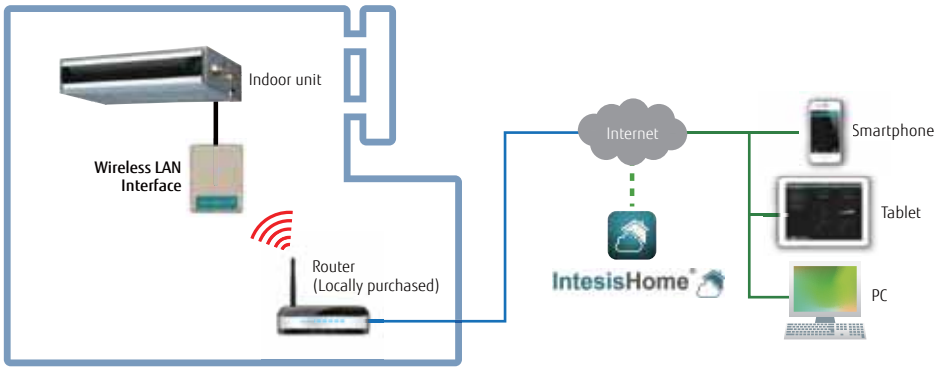
Wireless LAN Interface

FJ-RC-WIFI-1

Features

IntesisHome®

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



Basic control

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


(Application screen image)

Advanced control (Optional functions)

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

Notifications and history

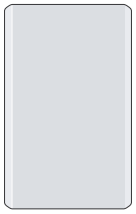
- Alerts e-mail notification (future release)
- Air conditioning malfunction alerts
- Connectivity monitoring and alerts
- History (future release)

Specifications

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

External Switch Controller

UTY-TEKX



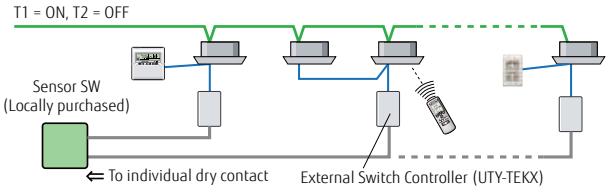
Features

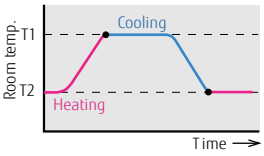
Air conditioner switching can be controlled by connecting other sensor switches

- In combination with a field supply Card-Key Switch or other sensor, the External Switch Controller allows control of the ON / OFF, Room temperature, Fan speed and Master control functions. This makes this product suitable for installations such as hotel rooms.
- Card-key or other sensor switches are available as a locally purchased parts.

Installation example

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



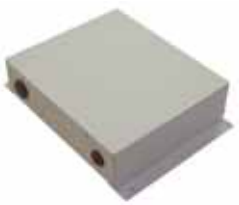


Note 1.
Please choose a thermosensor switch which can be set up for T1 and T2.

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

Signal Amplifier

UTY-VSGXZ1

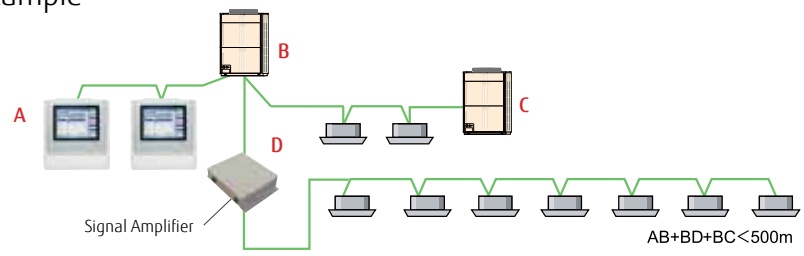


Features

- Transmission Line length can be extended up to 3,600m with multiple Signal Amplifiers.
- Up to 8 signal amplifiers can be installed in a VRF network system.
- A signal amplifier is required,

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

Installation example



Specifications

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

DC12V is supplied by the indoor unit.

Model name	UTY-VSGXZ1
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

NEW Network Convertor for single split

UTY-VTGX / UTY-VTGXV

UTY-VTGX
DC power supply type

UTY-VTGXV
AC power supply type

Max. Controllable
16
single indoor units

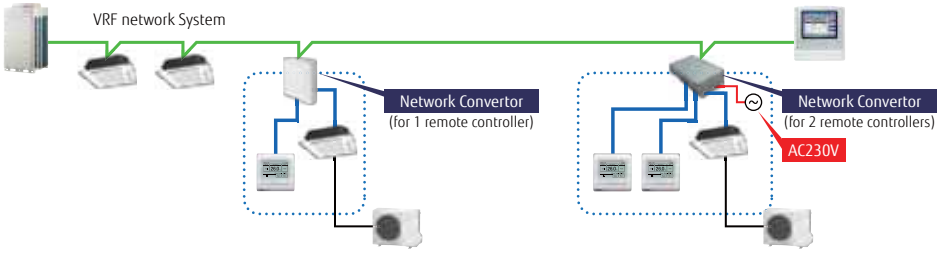
Max. Controllable
100
Network Convertors

Features

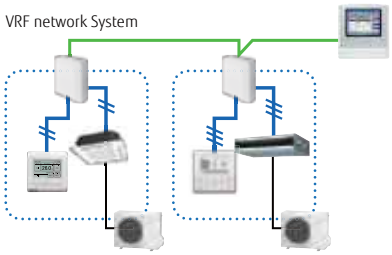
- The network convertors are required when connecting single split system to VRF network system.
- Compact and light weight design
- Connectable to both types of 2-wire and 3-wire remote controllers

Installation example.

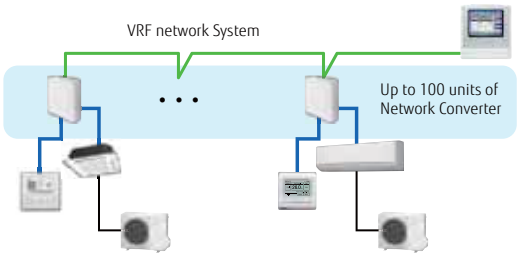
- 2 types of 1 remote controller type and 2 remote controllers type are available.
- Power supply (AC220-240V, 50/60Hz) is required for 2 remote controllers type.



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



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

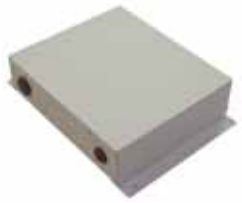


Specifications

Model name	UTY-VTGX		UTY-VTGXV
Power Supply	polar 3-wire DC12V	non-polar 2-wire DC12V	50/60Hz AC220/240V
Input power (W)	Max. 1.2		Max. 3
Dimensions (H × W × D) (mm)	43 × 117 × 140		54 × 260 × 150
Weight (g)	250		1,100

Network Convertor for Group Remote Controller

UTY-VGGXZ1



Max. Controllable
16
Network Convertor units

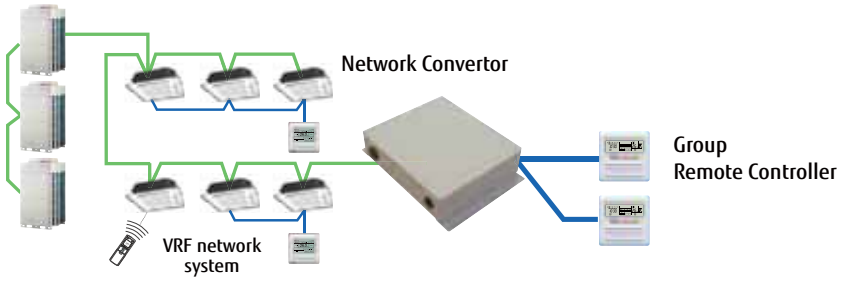
Max. Controllable
4
Group Remote Controllers

Features

- This network convertor is required when connecting Group Remote Controller to VRF network system.

Installation example

- 4 Group Remote Controllers can be connected to a single network convertor.
- 2 refrigerant circuits can be covered by a single network convertor.
- Up to a total of 16 network convertors and central remote 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)	6.5
Dimensions (H × W × D) (mm)	67 x 288 x 211
Weight (g)	1,500

Web Monitoring Tool

UTY-AMGX Software

VRF network system can be supported
4

Max. Monitor and controll
400
outdoor units

1,600
indoor units
can be supported

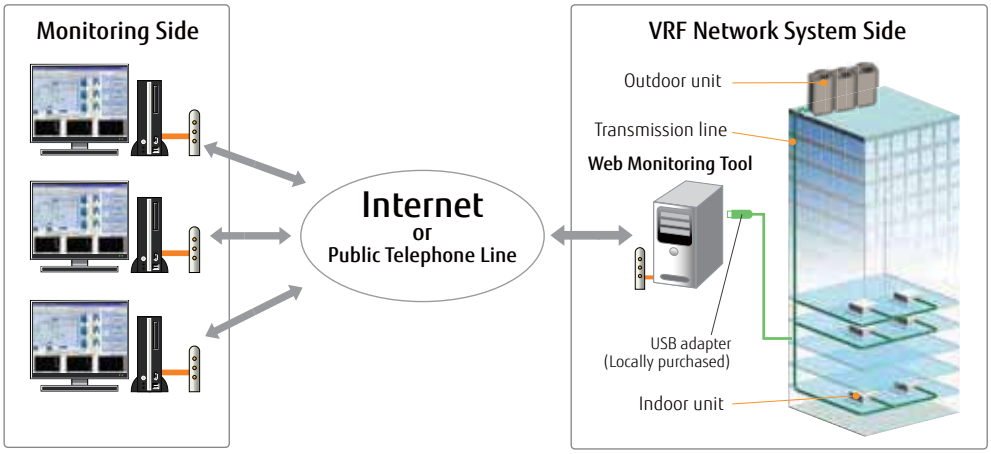
Features

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.

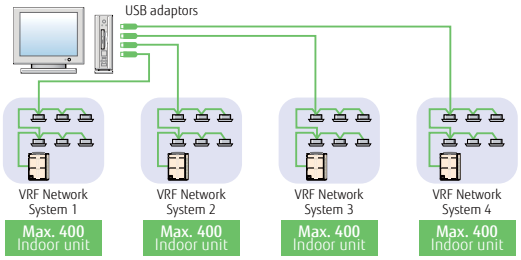
*1: Use of internet mail system required.

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-AMGX
Operating system	• Microsoft® Windows Vista® Home Premium (32-bit) SP2, Windows Vista® Business (32-bit) SP2 • Microsoft® Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8 Pro (32-bit or 64-bit) • Microsoft® Windows® 8.1 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 [32-bit], and Windows® 8.1 [32-bit]) • 2 GB or more (for Windows® 7 [64-bit], Windows® 8 [64-bit], and Windows® 8.1 [64-bit])
HDD	40 GB or more of free space
Display	1024 x 768 or higher resolution
Interface	• Ethernet port (for getting access to the Internet using LAN) or Modem (for getting access to the Internet using Public Telephone Line) • USB ports (Maximum of 5 ports) - 1 USB port is required for WibuKey connection - Maximum of 4 USB ports are required for Echelon® U10 USB Network Interface * Maximum number of required USB ports depends on the applicable system configurations.
Software	Internet Explorer® 8, 9, 10 or 11 / Adobe® Reader® 9.0 or later
Optical drive	DVD-ROM drive

Packing list

Name and shape	Quantity
DVD-ROM	1
WibuKey (Software protection key)	1

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

Service Tool

UTY-ASGX Software

Max. Monitor and controll
100
outdoor units

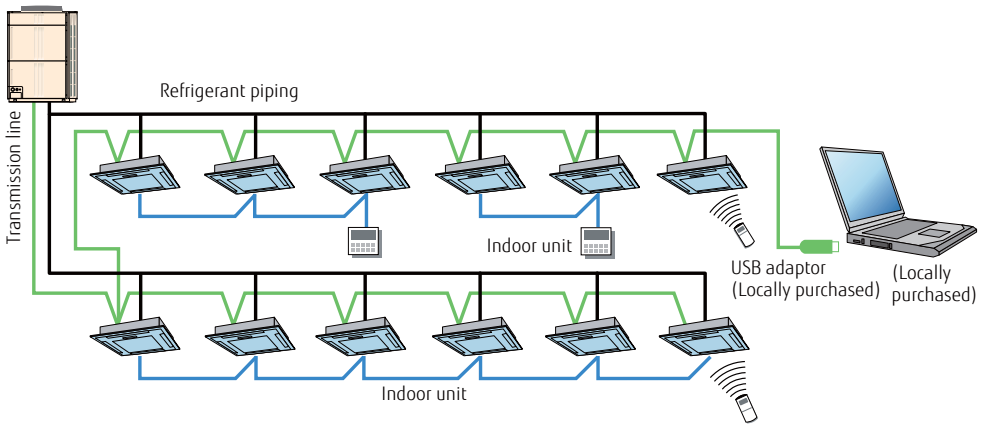
Max. Monitor and controll
400
indoor units

Features

Extensive monitoring and analysis functions for installation and maintenance

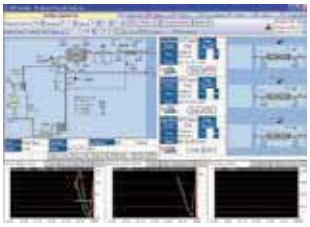
- Operation status can be checked and analyzed to detect even the smallest abnormalities
- Storage of data on system operation status on a PC allows access even from off site.
- Up to 400 indoor units (a single VRF network system) can be controlled and monitored for large scale buildings or hotels
-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

Wiring connection



Functions

•Equipment Detail (Diagram)



- •Equipment Detail (List)
- •Error History
- •Remote File Download
- •System List
- •Commissioning Tool

Personal computer system requirements

	UTY-ASGX
Operating system	• Microsoft® Windows Vista® Home Premium (32-bit) SP2, Windows Vista® Business (32-bit) SP2 • Microsoft® Windows® 7 Professional (32-bit or 64-bit) SP1 • Microsoft® Windows® 8 Pro (32-bit or 64-bit) • Microsoft® Windows® 8.1 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 [32-bit], and Windows® 8.1 [32-bit]) • 2 GB or more (for Windows® 7 [64-bit], Windows® 8 [64-bit], and Windows® 8.1 [64-bit])
HDD	10 GB or more of free space
Display	1024 x 768 or higher resolution
Interface	• 2 USB ports - 1 USB port is required for WibuKey connection - 1 USB port is required for Echelon® U10 USB Network Interface
Software	Internet Explorer® 8, 9, 10 or 11 / Adobe® Reader® 9.0 or later
Optical drive	DVD-ROM drive

Packing list

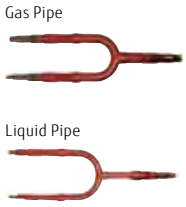
Name and shape	Quantity
DVD-ROM	1
WibuKey (Software protection key)	1

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

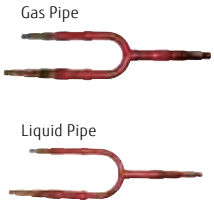
OPTIONAL PARTS FOR VRF

Connection Units

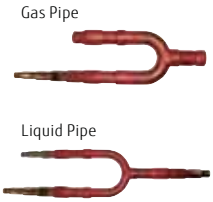
Separation Tube



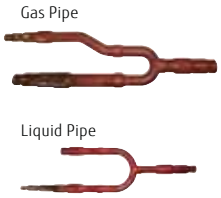
UTP-AX054A



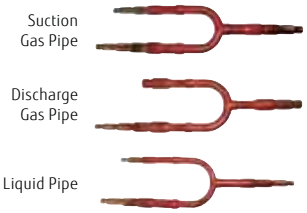
UTP-AX090A



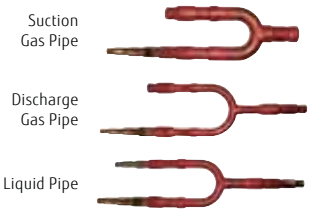
UTP-AX180A



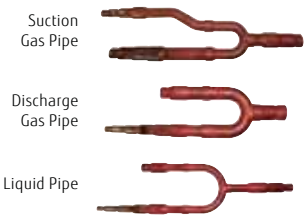
UTP-AX567A



UTP-BX090A



UTP-BX180A

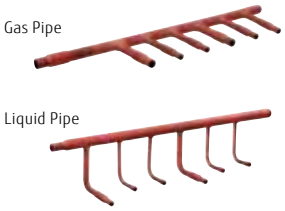


UTP-BX567A

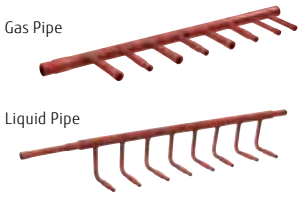
For DX-Kit

UTP-LX180A

Header



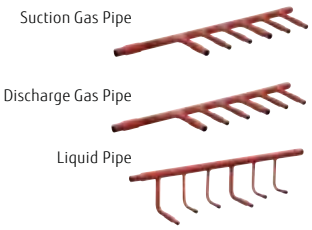
UTR-H0906L / UTR-H1806L



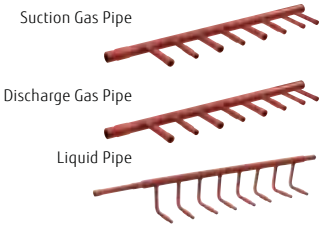
UTR-H0908L / UTR-H1808L

Outdoor Unit Branch Kit

UTP-CX567A



UTP-J0906A / UTP-J1806A



UTP-J0908A / UTP-J1808A

UTP-DX567A

EV Kit

For Compact Wall Mounted type

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

RB Unit

Single type

UTP-RX01AH / UTP-RX01BH
UTP-RX01CH

Multi type

UTP-RX04BH

Specifications

Separation Tube

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

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

Header

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

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

Outdoor unit Branch kit

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

EV Kit

Model name	UTR-EV09XB	UTR-EV14XB
Application model	ASYE04GACH ASYE07GACH ASYE09GACH	ASYE12GACH ASYE14GACH

RB Unit

Type		Single type			Multi type
Model name		UTP-RX01AH	UTP-RX01BH	UTP-RX01CH	UTP-RX04BH
Power source	V/Ø/Hz	230/ 1 / 50			
Input power	W	17	24	31	96
Number of branches		1	1	1	4
Maximum capacity of connectable indoor units (Q)	kW	Q ≧ 8.0	Q ≦ 18.0	Q ≦ 28.0	Q ≦ 56.1*1
Maximum capacity of connectable indoor units per branch (Q)	kW	Q ≧ 8.0	Q ≦ 18.0	Q ≦ 28.0	Q ≦ 18.0
Maximum number of connectable indoor units per branch		3	8	8	8
Dimensions (H×W×D)	mm	198×298×268			260×658×428

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

Controllers

For Individual Control

Wired Remote Controller (Touch Panel)
UTY-RNRYZ1 NEW

Wired Remote Controller
UTY-RLRY

Simple Remote Controller
UTY-RSKY
With operation mode

Simple Remote Controller
UTY-RHKY
Without operation mode

Wireless Remote Controller
UTY-LNHY

IR Receiver Unit
UTB-YWC
For All Duct types except Large Airflow Duct

IR Receiver Unit
UTY-LRHYB1
For Cassette type

For Centralized Control

Group Remote Controller
UTY-CGGY

Central Remote Controller
UTY-DCGY

Touch Panel Controller
UTY-DTGYZ1 NEW
UTY-DTGY

Option
UTY-PTGXA

System Controller Lite Software
UTY-ALGX

Option
UTY-PLGXA1
UTY-PLGXR1
UTY-PLGXE1

System Controller Software
UTY-APGX

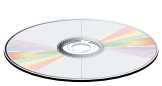
Option
UTY-PEGX

USB Adaptor (Field supplied)
USB75010R
For system controllers

Convertors / Adaptors

For External device

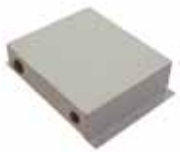
BACnet® Gateway Software
UTY-ABGX



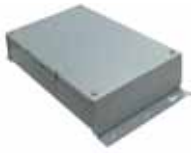
DVD-ROM (Software)

Software Protection Key

Network Convertor for LONWORKS®
UTY-VLGX



MODBUS® Convertor for VRF
UTY-VMGX NEW



MODBUS® Interface
FJ-RC-MBS-1

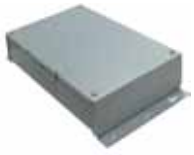
KNX® Interface
FJ-RC-KNX-1i

Wireless LAN Interface
FJ-RC-WIFI-1

For System expansion

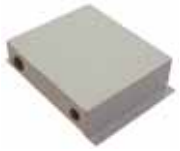
Network Convertor for single split
UTY-VTGX NEW

Network Convertor for single split
UTY-VTGXV NEW
AC power supply type



Network Convertor for Group Remote Controller
UTY-VGGXZ1

Signal Amplifier
UTY-VSGXZ1



External Switch Controller
UTY-TEKX

Panels

For Cassette type

Cassette Grille
UTG-UFYC-W
For Compact Cassette type

Cassette Grille
UTG-UGYA-W
For Cassette type

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 the Remote sensor.

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 ARXD04/07/09/12/14GALH)
UTD-GXTB-W (for ARXD18GALH)
UTD-GXTC-W (for ARXD24GALH)
For Slim Duct type

Drain Pump Unit
UTZ-PX1NBA
For Medium Static Pressure Duct type

For Cassette type

Fresh Air Intake Kit
UTZ-VXAA
For Compact Cassette type

Fresh Air Intake Kit
UTZ-VXRA
For Cassette type

For Ceiling type

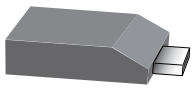
Drain Pump Unit
UTR-DPB24T
For Ceiling type

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

Service

Service Tool Software
UTY-ASGX

USB Adaptor (Field supplied)
USB75010R
For system controllers



Outdoor Unit
Strip and Re-build Service (Terms and conditions apply)

Others

Communication system: External Connect Kit

For Indoor unit

UTY-XWZXZ7

UTY-XWZXZB

UTY-XWZXZC

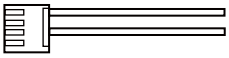
UTY-XWZXZD

UTY-XWZXZE

For Outdoor unit

UTY-XWZXZ6

UTY-XWZXZ9



UTY-XWZXZF

For RB unit

UTY-XWZXZ6

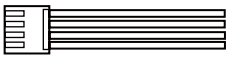
UTY-XWZXZB

For Central Remote Controller

UTY-XWZXZ7

UTY-XWZXZ8

UTY-XWZXZA



For Touch Panel Controller

UTY-XWZXZA

Function list

		Indoor unit	Outdoor unit	Controller		Other
				Central Remote Controller	Touch Panel Controller	RB Unit
Input	Operation / Stop	●UTY-XWZXZD ○UTY-XWZXZB	——	——	——	——
	All On / All Off	——	——	●UTY-XWZXZ7 ○UTY-XWZXZ8	●*3 ○*3	——
	Batch Stop	——	●UTY-XWZXZ6	——	——	——
	Forced Stop	●UTY-XWZXZD ○UTY-XWZXZB	——	——	——	——
	Emergency Stop	●UTY-XWZXZD ○UTY-XWZXZB	●UTY-XWZXZ6	●UTY-XWZXZ7 ○UTY-XWZXZ8	●*3 ○*3	——
	Forced Thermostat off	●UTY-XWZXZE ○UTY-XWZXZ7	——	——	——	——
	Low Noise Mode Operation	——	●UTY-XWZXZ6	——	——	——
	Cooling / Heating Priority	——	●UTY-XWZXZ6*1	——	——	●UTY-XWZXZ6 ○UTY-XWZXZB
	"Outdoor Unit Operation Peak Control"	——	●UTY-XWZXZ6	——	——	——
	"Power Usage Information from Electricity Meter"	——	●UTY-XWZXZF	——	●*3 ○*3	——
Output	Operation Status	●UTY-XWZXZC	○UTY-XWZXZ6	○UTY-XWZXZA	○UTY-XWZXZA	——
	Error Status	●UTY-XWZXZC	○UTY-XWZXZ6	○UTY-XWZXZA	○UTY-XWZXZA	——
	Indoor Unit Fun Operation Status	●UTY-XWZXZC	——	——	——	——
	Auxiliary Heater Output	●UTY-XWZXZC*2	——	——	——	——
	Base Heater	——	●UTY-XWZXZ9	——	——	——

*1. Heat Pump type only
*2. Duct type only
*3. Touch Panel Controller has these functions for Dry contact and Apply voltage, however, above External Connect Kit is not necessary because Touch Panel Controller has an external input terminal block.

●: Dry Contact ○: Apply Voltage

VENTILATION

Effective heat exchange and simultaneous fresh air ventilation

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

Airflow rate (m³/h)	250	350	500	800	1000	1500	2000
Energy Recovery Ventilator Page 066	 UTZ-BD025B	 UTZ-BD035B	 UTZ-BD050B	 UTZ-BD080B	 UTZ-BD100B		
Outdoor Air Unit Page 068					 ARXH054GTAH	 ARXH072GTAH	 ARXH096GTAH

Connectable Capacity class (kW)	5.0	6.3	8.0	10.0	12.5	14.0	20.0	25.0	40.0	50.0
DX-Kit for air handling applications Page 070	 EEV unit UTP-VX30A	 Control unit UTY-VDGX		 EEV unit UTP-VX60A	 Control unit UTY-VDGX		 EEV unit UTP-VX90A	 Control unit UTY-VDGX	 EEV unit UTP-VX90A × 2	 Control unit UTY-VDGX

Optional Hard-wired Controller Interface

UTI-ERV

Features

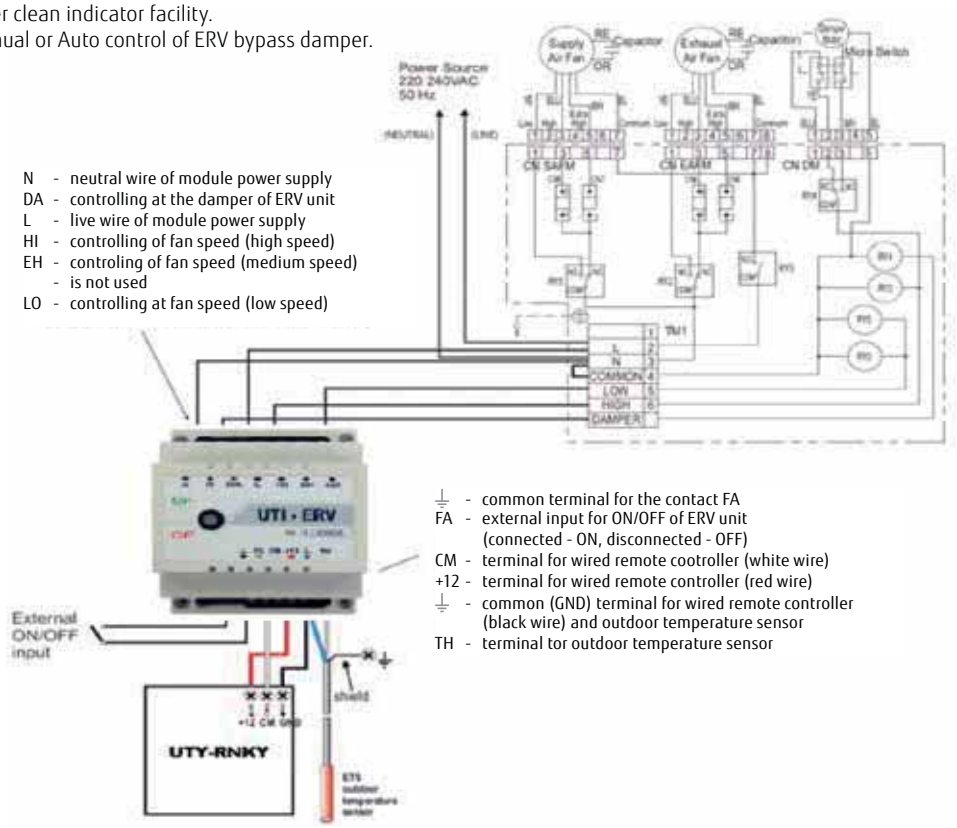
In order to use a Fujitsu hard-wired controller c/w time clock with the ERV units an interface is required.
The UTI-ERV interface provides the following features:-

UTI-ERV interface supplied with outside air intake duct sensor for control of the ERV bypass damper e.g. heat recovery or "free cooling" bypass mode.
Dry contact terminals for remote on/off e.g. from BMS.
Allows the use of a Fujitsu UTY-RNKY* hard wired controller which has the following features:-
Allows ERV fan speed selection from remote controller - Hi/Low (ERV HI/low fan speeds can also be changed by re-configuring the tapings on the fan motors).

- Controller has an integral 7 day programmable time clock.
- HW Controller has built-in room temperature sensor and temperature selection.
- Filter clean indicator facility.
- Manual or Auto control of ERV bypass damper.

Wired Diagram

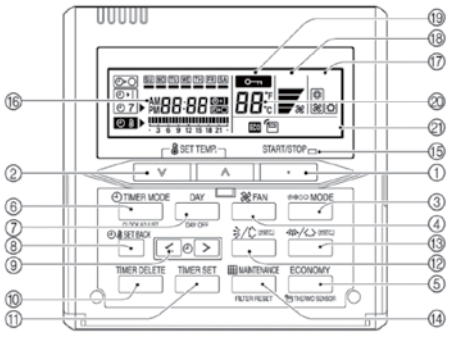
N - neutral wire of module power supply
DA - controlling at the damper of ERV unit
L - live wire of module power supply
HI - controlling of fan speed (high speed)
EH - controling of fan speed (medium speed)
- is not used
LO - controlling at fan speed (low speed)



⏚ - common terminal for the contact FA
FA - external input for ON/OFF of ERV unit (connected - ON, disconnected - OFF)
CM - terminal for wired remote cootroller (white wire)
+12 - terminal for wired remote controller (red wire)
⏚ - common (GND) terminal for wired remote controller (black wire) and outdoor temperature sensor
TH - terminal tor outdoor temperature sensor

Description of the buttons of remote controller*

UTY-RNKY



1 Start/Stop Button
2 Set Temperature Button
3 Master Control Button
4 Fan Control Button
5 Recovery ventilator ON/OFF
6 Timer Mode (CLOCK ADJUST) Button
7 DAY (DAY OFF) Button
8 SET BACK Button
9 Set Time Button
10 DELETE Button
11 SET Button
12 NIA13 N/A
14 Filter Button
15 Operation Lamp
16 Timer and Clock Display
17 Operation Mode Display
18 Fan Speed Display
19 Operation Lock Display
20 Temperature Display
21 Function Display
DELETE Button
ECO SET Button

Specifications

Model name	UTI-ERV	UTY-RNKY
Power Supply	208-240V 50/60Hz, Single Phase	from UTI-ERV
Power Consumption (W)	6.5	-
Dimensions (H × W × D) (mm)	67 x 288 x 211	120 x 120 x 18
Weight (g)	1,500	160

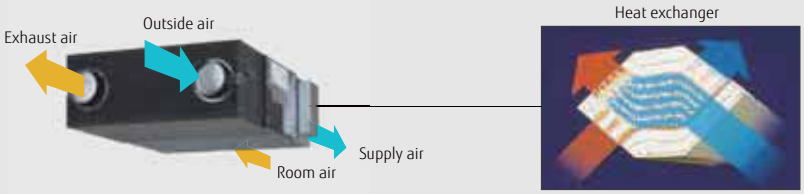
*UTY-RNKY to be ordered separately

Energy Recovery Ventilator

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

Features

Adopts a highly efficient counter-flow heat exchange element



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

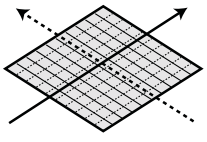
The operation is used during periods when the room space requires no cooling or heating effect, i.e. when there is minimal temperature difference between the indoor and outdoor environments.

Energy efficiency and ecology

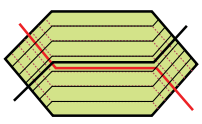
Energy consumption is dramatically reduced by using a counter-flow heat-exchange element.
Air conditioning load is reduced by approximately 20%, resulting in significant energy savings.
Recovers up to 77% of the heat in the outgoing air.

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.



Other element
(Cross-flow element)



Fujitsu element
(Counter-flow element)

Quiet operation

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

Extended range of an external static pressure

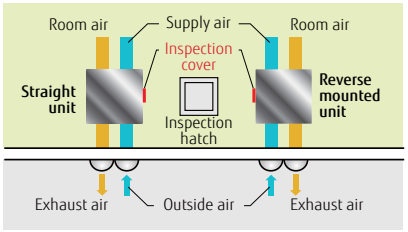
An external static pressure is improved by adopting a powerful fan motor.This allows for application in a wide variety building.

Slim shape and easier installation

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

Reverse mountable direct air supply / exhaust system

Adoption of straight air supply / exhaust system: Duct design is simplified because the air supply / exhaust ducts are straight.
Since each unit can be mounted in reverse position, only one inspection hole is needed for two units: Two units can share one inspection hole so duct work is easier and more flexible.



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


UTZ-BD025B


UTZ-BD035B


UTZ-BD050B


UTZ-BD080B


UTZ-BD100B

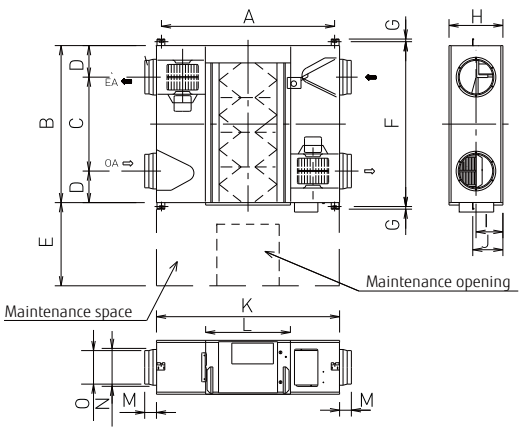
Specifications

Rated flow rate				250 m³/h	350 m³/h	500 m³/h	800 m³/h	1000 m³/h
Model No.				UTZ-BD025B	UTZ-BD035B	UTZ-BD050B	UTZ-BD080B	UTZ-BD100B
Power source				220 - 240V, 50Hz				
Heat Exchange Ventilation	Input power	(Extra high)/High/Low	W	128 / 123 / 96	190 / 185 / 168	289 / 225 / 185	418 / 378 / 295	464 / 432 / 311
	Air flow rate	(Extra high)/High/Low	m³/h	250 / 250 / 190	350 / 350 / 240	500 / 500 / 440	800 / 800 / 630	1000 / 1000 / 700
		(Extra high)/High/Low	l/s	69 / 69 / 52	97 / 97 / 66	138 / 138 / 122	222 / 222 / 175	277 / 277 / 194
	External static pressure	(Extra high)/High/Low	Pa	105 / 95 / 45	140 / 60 / 45	120 / 60 / 35	140 / 110 / 55	105 / 80 / 75
	Temperature Exchange Efficiency	(Extra high)/High/Low	%	75 / 75 / 77	75 / 75 / 78	75 / 75 / 76	75 / 75 / 76	75 / 75 / 79
	Energy Exchange Efficiency Cooling	(Extra high)/High/Low	%	63 / 63 / 65	66 / 66 / 71	62 / 62 / 64	65 / 65 / 68	65 / 65 / 70
	Energy Exchange Efficiency Heat pump	(Extra high)/High/Low	%	70 / 70 / 72	69 / 69 / 73	67 / 67 / 69	71 / 71 / 74	71 / 71 / 76
	Sound pressure level	(Extra high)/High/Low	dB*	31.5 / 30.5 / 26.5	33 / 31 / 25.5	37.5 / 35.5 / 32.5	37.5 / 37 / 34.5	38.5 / 37.5 / 34.5
Normal Ventilation	Input power	(Extra high)/High/Low	W	128 / 123 / 96	190 / 185 / 168	289 / 225 / 185	418 / 378 / 295	464 / 432 / 311
	Air flow rate	(Extra high)/High/Low	m³/h	250 / 250 / 190	350 / 350 / 240	500 / 500 / 440	800 / 800 / 630	1000 / 1000 / 700
			l/s	69 / 69 / 52	97 / 97 / 66	138 / 138 / 122	222 / 222 / 175	277 / 277 / 194
	External static pressure	(Extra high)/High/Low	Pa	105 / 95 / 45	140 / 60 / 45	120 / 60 / 35	140 / 110 / 55	105 / 80 / 75
	Sound pressure level	(Extra high)/High/Low	dB*	31.5 / 30.5 / 26.5	33 / 31 / 25.5	38.5 / 38 / 32.5	37.5 / 37 / 34.5	40.5 / 39.5 / 36.5
Dimensions		W×D×H	mm	882 x 599 x 270	1050 x 804 x 317	1090 x 904 x 317	1322 x 884 x 388	1322 x 1134 x 388
Weight			kg	29	49	57	71	83
Outlet duct diameter			mm	150	150	200	250	250
Operation range			℃	-10 to 40	-10 to 40	-10 to 40	-10 to 40	-10 to 40
Maximum humidity			%	85	85	85	85	85

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

Dimensions

(Unit : mm)



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

Outdoor Air Unit

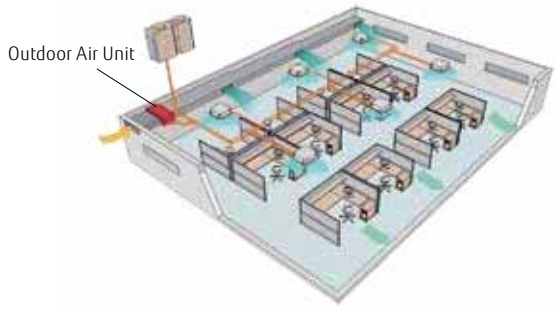
The heat pump method
efficiently processes the outdoor air
for cooling and heating and
supplies 100% fresh air into a room.

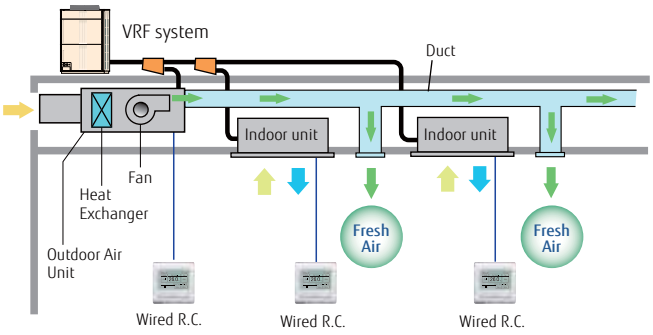
Features

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

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

*1. Connectable VRF series:J-IIS, J-II, V-II, VR-IIIn J-II series alone, OAU is prohibit to connect under the ambient temperature of 40°C or higher.

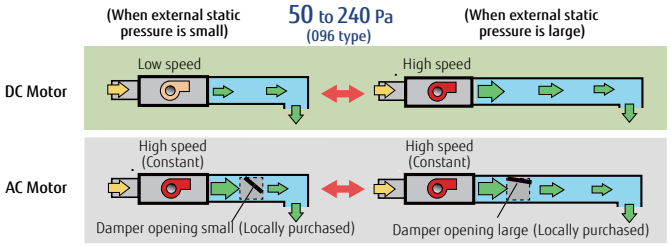




* Make sure the connected capacity is within the range of 50% to 100% of the outdoor unit capacity. In addition, if there are mixed connections with indoor units, make the Outdoor Air Unit connection capacity 30% or less of the outdoor unit capacity.

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

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

Central Controller

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

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

Model : ARXH054GTAH / ARXH072GTAH / ARXH096GTAH Production by order

ARXH054GTAH

ARXH072GTAH

ARXH096GTAH

Specifications

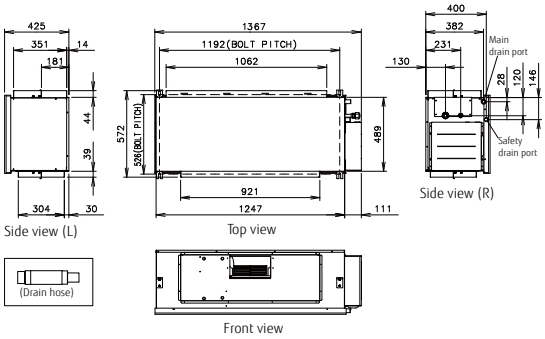
Model name			ARXH054GTAH	ARXH072GTAH	ARXH096GTAH
Power source		V/Ø/Hz	230/1/50	230/1/50	230/1/50
Capacity	Cooling	kW	14.0	22.4	28.0
	Heating		8.9	13.9	17.4
Input Power	Cooling/Heating	W	179	292	370
Airflow Rate		m^3/h	1,080	1,680	2,100
		l/s	300	466	583
Static Pressure	Standard (range)	Pa	185 (50-185)	200 (50-200)	200 (50-240)
Sound Pressure Level		dB (A)	42	44	47
Dimensions (H x W x D)		mm	425×1,367×572	425×1,367×572	450×1,583×700
Weight		kg	48	55	71
Connection Pipe Diameter (Small / Large)		mm	Ø9.52/Ø19.05	Ø12.70/Ø22.22	Ø12.70/Ø22.22
Operation Range	Cooling	°CDB	5 to 43	5 to 43	5 to 43
	Heating		-7 to 21	-7 to 21	-7 to 21
Refrigerant			R410A	R410A	R410A

Note : Specifications are based on the following conditions. Cooling : Outdoor temperature of 33°CDB / 28°CWB. Heating : Outdoor temperature of 0°CDB / -2.9°CWB. Pipe length : 7.5 m Voltage : 230 [V].

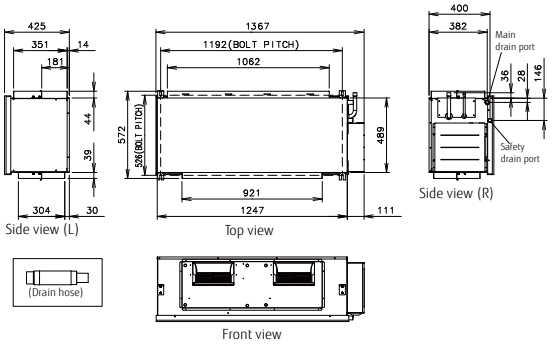
Dimensions

(Unit : mm)

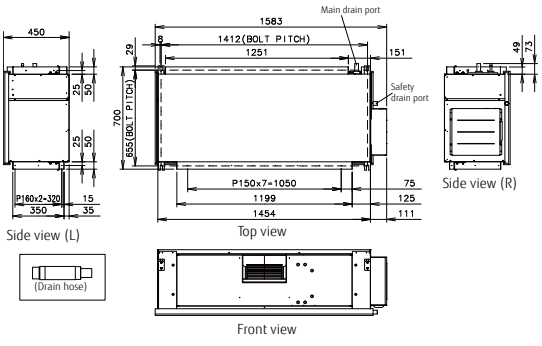
ARXH054GTAH



ARXH072GTAH



ARXH096GTAH

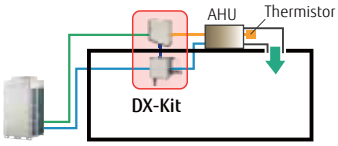


DX-Kit For Air Handling Applications

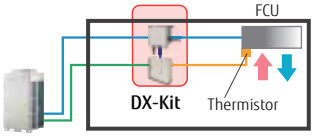
These kits enable other manufacturers air handling units (AHU) and fan coil units (FCU) to be incorporated into a Fujitsu VRF system or, be connected to a dedicated Fujitsu VRF outdoor unit as a 1:1 system to control outside air ventilation (AHU) or room temperature (FCU).

Features

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

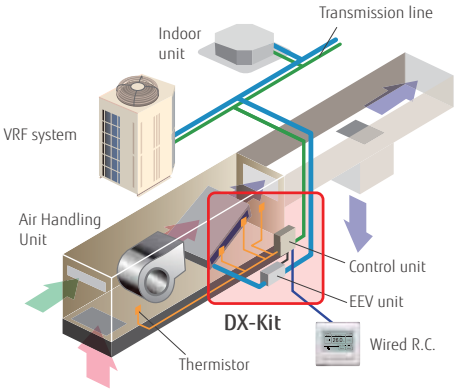


When connecting to an air handling unit, the supply air temperature is controlled by the discharge sensor.



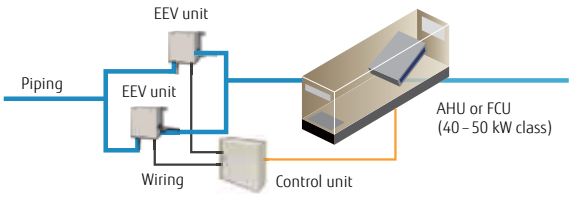
When connecting to a fan coil unit, the room temperature is controlled by the return air temperature sensor.

Arrangement as part of a VRF system



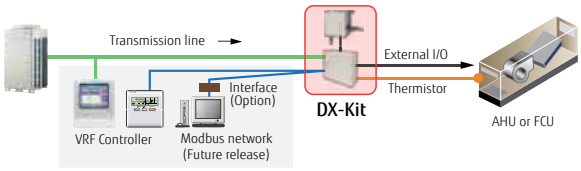
Supports a wide range of capacity classes

- 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

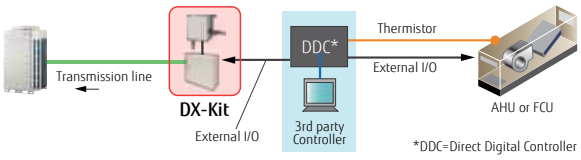


A variety of controls to match the application

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

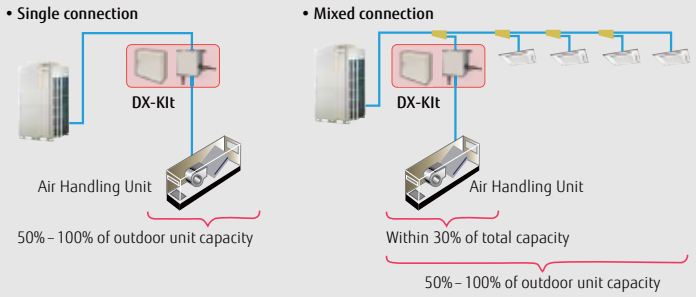
Possible to control via a MODBUS enabled BMS by using optional interface.

For 2EEV units connection (option)
Separation Tube: UTP-LX180A

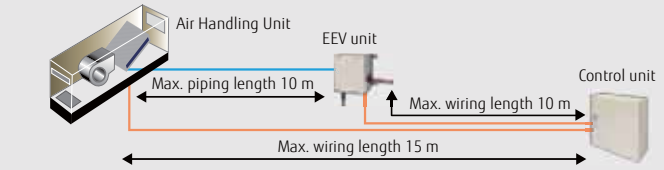
Installation Limitation

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

Connectable capacity



Piping and wiring length



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


EEV unit
UTP-VX30A


EEV unit
UTP-VX60A


EEV unit
UTP-VX90A


Control unit
UTY-VDGX

Specifications

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

Control unit		UTY-VDGX
Power source	V/Ø/Hz	230/1/50
Dimensions (H × W × D)	mm	400 × 400 × 120
List Price		750

EEV unit		UTP-VX30A	UTP-VX60A	UTP-VX90A	UTP-VX90A×2
Connection pipe diameter (Liquid)	mm	3/8	1/2	1/2	1/2
Dimensions (H × W × D)		160 × 220 × 90			

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].

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www.fujitsu-general.com/uk

Notice for specifications

I.U.=Indoor Unit O.U.=Outdoor Unit Qu=Quiet *=Not decided yet

- Specifications and design are subject to change without notice for future improvement.
- For further details, please check with our authorised dealer.
- Cooling / Heating capacities are based on the following conditions.

Cooling	Indoor temp. : 27°C DB/19°C WB Outdoor temp.: 35°C DB/24°C WB	Heating	Indoor temp. : 20°C DB Outdoor temp.: 7°C DB/6°C WB

- Performance test is in accordance with EN14511
- Seasonal efficiency test is on accordance with EN14825
- Sound power test is in accordance with EN12102

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