

AIRSTAGE™ V-II

Variable Refrigerant Flow System

Multi Air Conditioning System for Buildings

Large Capacity Multi VRF System
DC Inverter Control Compressor
Long Piping System Design
High Efficiency Refrigerant R410A





AIRSTAGE™ V-II

Variable Refrigerant Flow System

8, 10, 12HP

Newly designed compact outdoor unit

Smart and cutting edge design

Extensive lineup from 8HP to 48HP in 2HP increment

Connectable indoor unit capacity ratio up to 150%



DIMENSIONS: H 1,690 X W 930 X D 765 (mm)

High Efficiency Operating System

EER/COP has been significantly improved by unique inverter technology and refrigerant control technology.



Installation Flexibility

Total pipe length of 1,000m and 150m actual pipe length. From small to large buildings, any application can be supported.



14, 16HP



DIMENSIONS: H 1,690 X W 1,240 X D 765 (mm)

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Compact Design

The outdoor unit size has been significantly reduced by optimizing of equipment. This allows for a reduction in the required installation area floor space.



User Friendly Central Control

Diverse building air conditioning control functions can be controlled easily by central Airconditioning control.



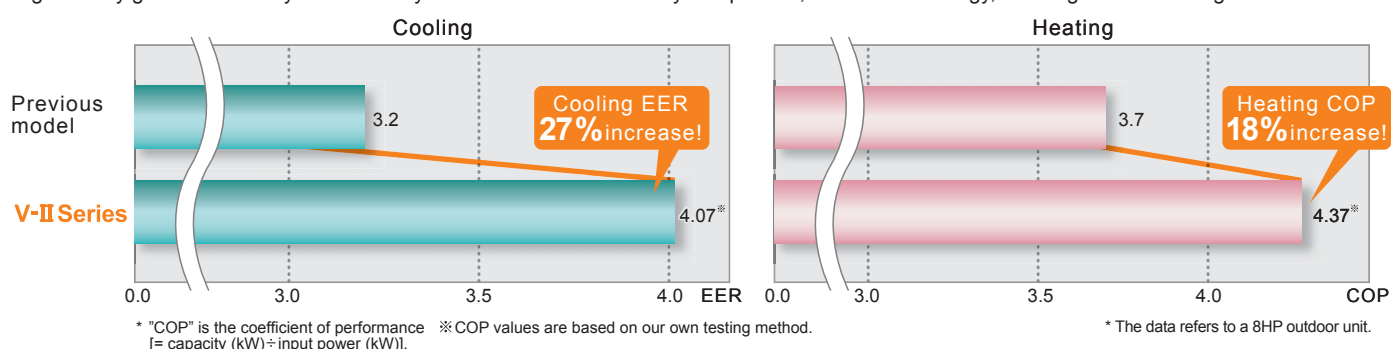
High Efficiency Operation

Advanced system considers high efficiency operation

High Efficiency

■ Significantly improved EER/COP

Significantly greater efficiency is realized by the use of a DC twin rotary compressor, inverter technology, and large heat exchanger.



■ Energy saving technology that boosted operation efficiency

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

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

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

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














Previous model → **V-II Series**
Surface area 1.7 times!

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



Energy efficiency combination

Choice of space saving or energy efficiency combinations

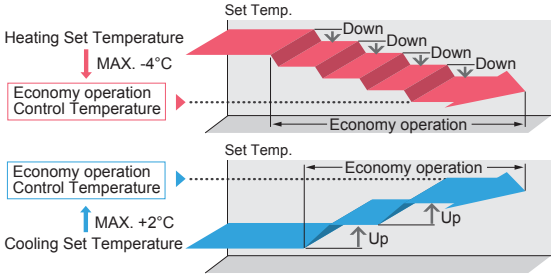
| [Space saving combination] | [Energy efficiency combination] | |
|--|--|--------------------------------|
| [For 16HP]  16HP | →   8HP 8HP | 18% energy saving ! |
| [For 24HP]   12HP 12HP | →    8HP 8HP 8HP | 12% energy saving ! |
| [For 28HP]   16HP 12HP | →    12HP 8HP 8HP | 10% energy saving ! |

(Comparison of Average COP)

Various energy saving features

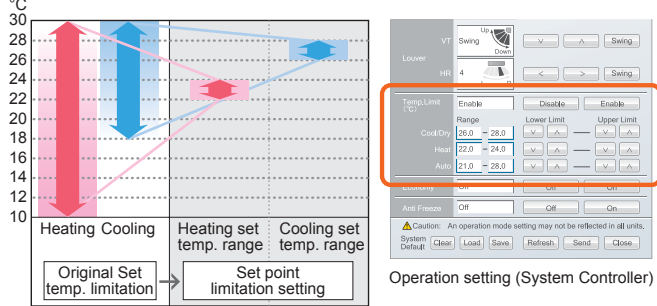
Economy operation

Economy operation can be set by remote controller.
The temperature setting is offset automatically over a certain period of time.



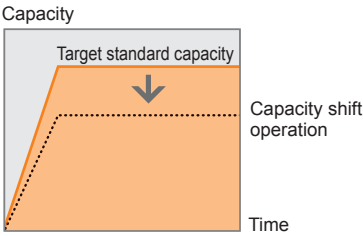
Room temperature set point limitation

The minimum and maximum temperature range can be set giving further energy saving while considering the comfort of the occupants.



Capacity shift operation

When the heat load is minimal, capacity can be reduced according to surrounding conditions.



Auto-off timer

Each remote controller is equipped with an OFF timer function that automatically stops operation when a fixed time has elapsed from the start of operation.
This prevents wasteful operation. (NB Except simple remote controller)

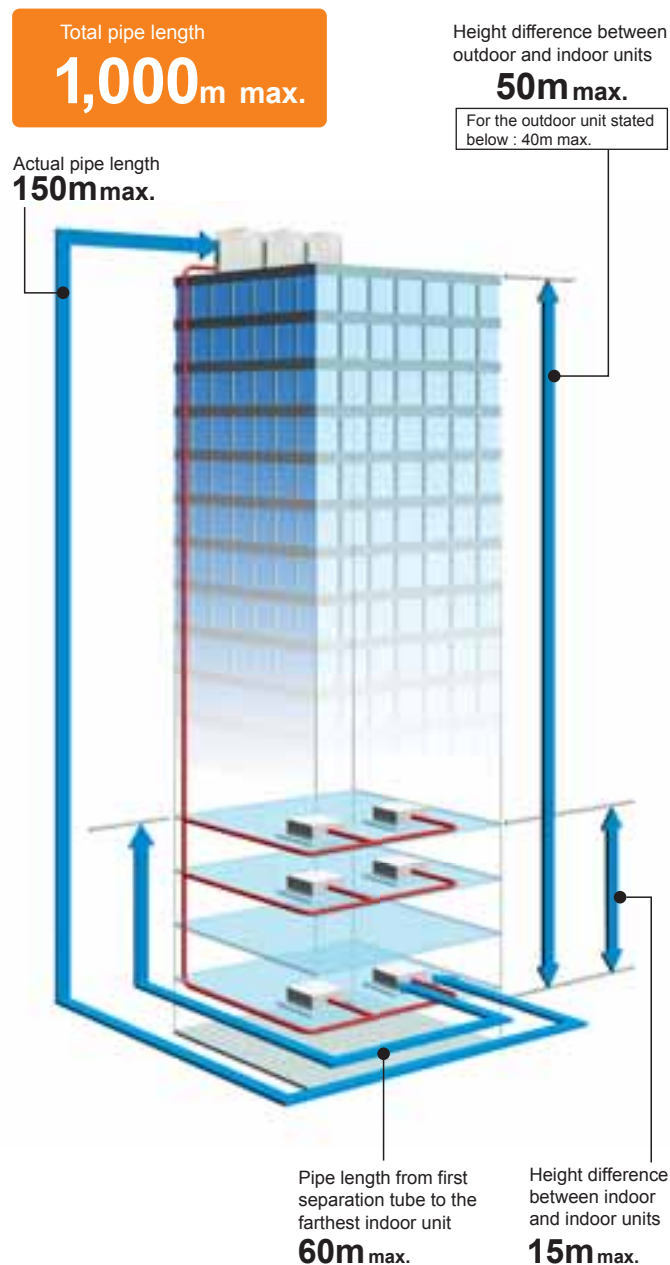
Design Versatility

V-II systems can be applied to a wide variety of Building applications due to the reduced outdoor unit size and piping length capabilities

Flexible and easy piping design

■ Overall piping length 1,000m

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

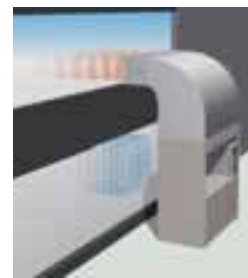


■ High static pressure of 80Pa

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

Powerful discharge with an external static pressure of 80Pa.

Previous model

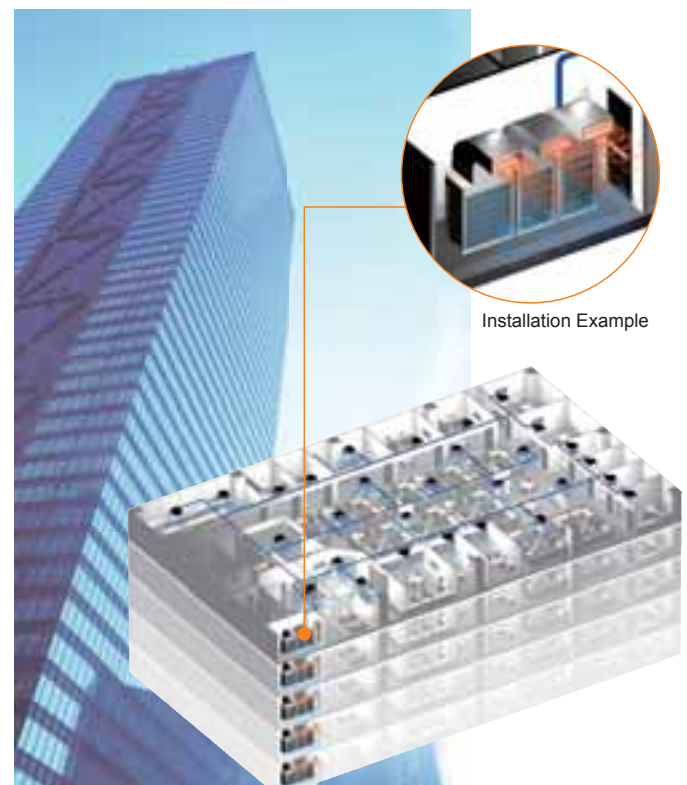


V-II Series



80Pa
as standard

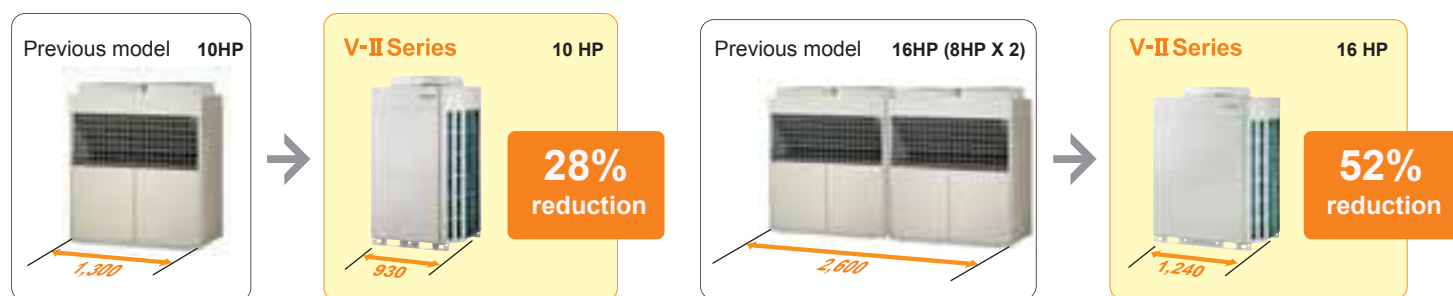
Large diameter fan and DC motor has been utilized allowing an external static pressure of 80Pa. This is approximately 2.6 times greater than the previous model.



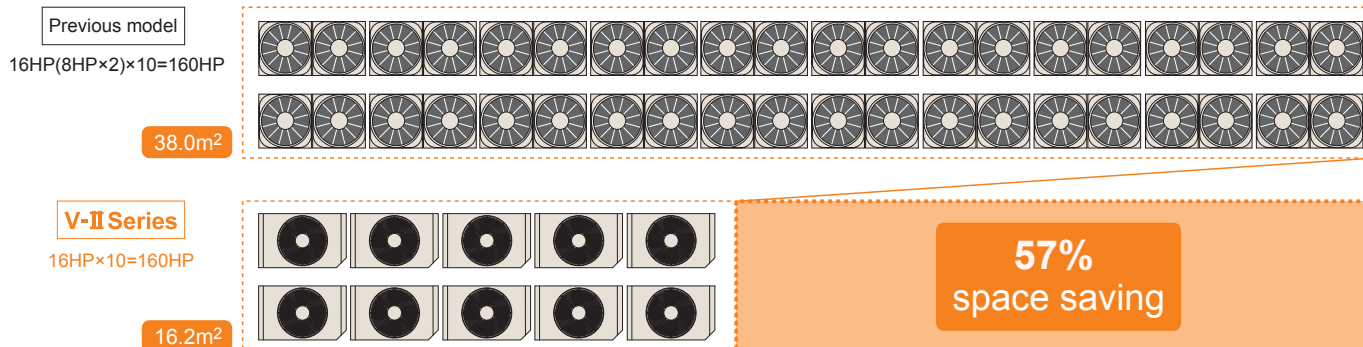


■ Space saving and compact size

Compact size has been achieved by significantly reducing the width of the outdoor units compared to previous models.



For 160HP



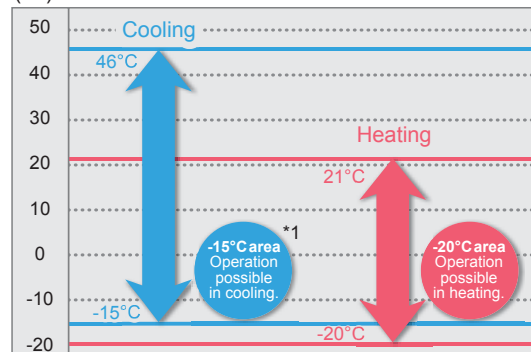
■ Wide operating range

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

Cooling : -15°C~46°C

Heating : -20°C~21°C

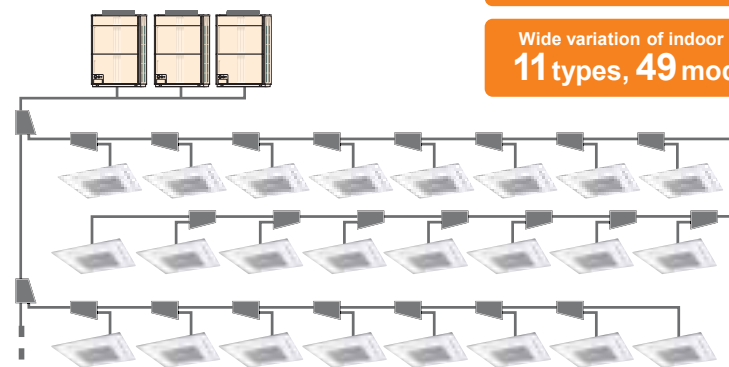
(°C)



*1 Note : When a multiple outdoor unit connection is used, operating range is from -5°C to 46°C in cooling.

■ Various combinations

Various combination from 8HP to 48HP with 2HP increments. 11 types, 49 models of indoor units can be selected ranging from 2.2kW to 25kW in capacity. A maximum of 150% indoor unit connectable capacity.



Note : when indoor unit connected capacity is greater than 100%, individual indoor units will operate at a slightly lower capacity when maximum capacity is required.

Connectable indoor unit capacity
Ratio up to 150 %

Connectable indoor unit number
up to 48

Wide variation of indoor units
11 types, 49 models

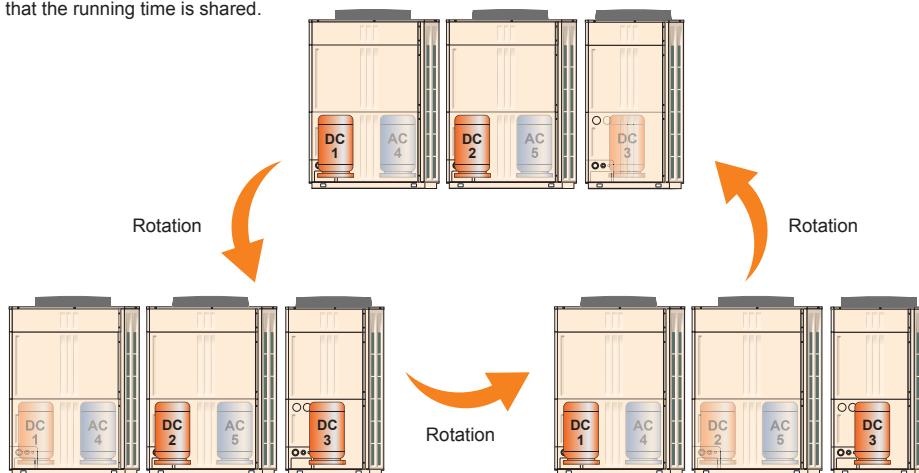
High Reliability

High reliability considering long-term safety and confidence

Longer lasting units

Outdoor unit operation rotation

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



Note : The inverter compressors start in priority.
Rotate operation is alternated by the start / stop timing of the compressors



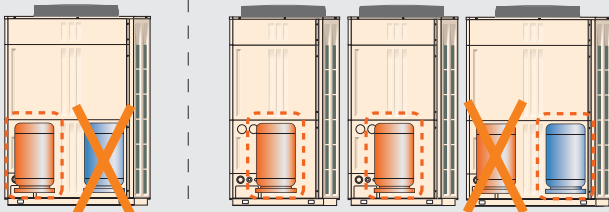
Continuous operation

Backup operation

If one of two compressors malfunctions, it will not affect the operation of the remaining outdoor units.

Outdoor Units

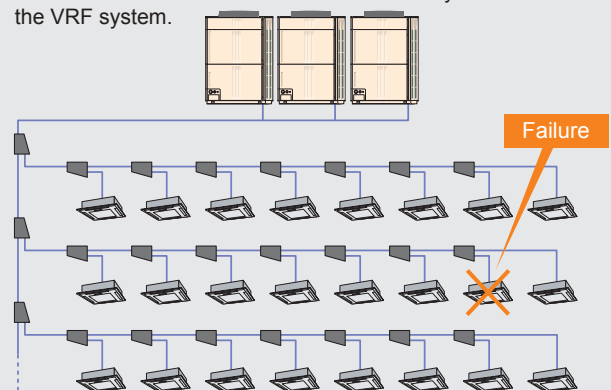
If one of compressor fails, emergency operation will be performed by the remaining compressors.



Indoor Units

Indoor unit continuous operation

Each indoor unit is controlled individually on the system network. This allows all indoor units to continue to operate unaffected even if an error should occur at any indoor unit's on the VRF system.





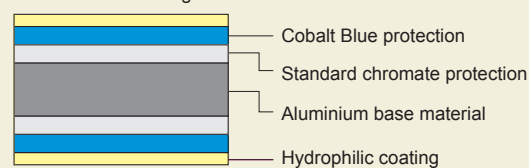
Corrosion treatment

■ Adoption of blue fin heat exchanger

Corrosion resistant of the heat exchanger has been improved by the introduction of blue fin treatment to the outdoor unit's heat exchanger.



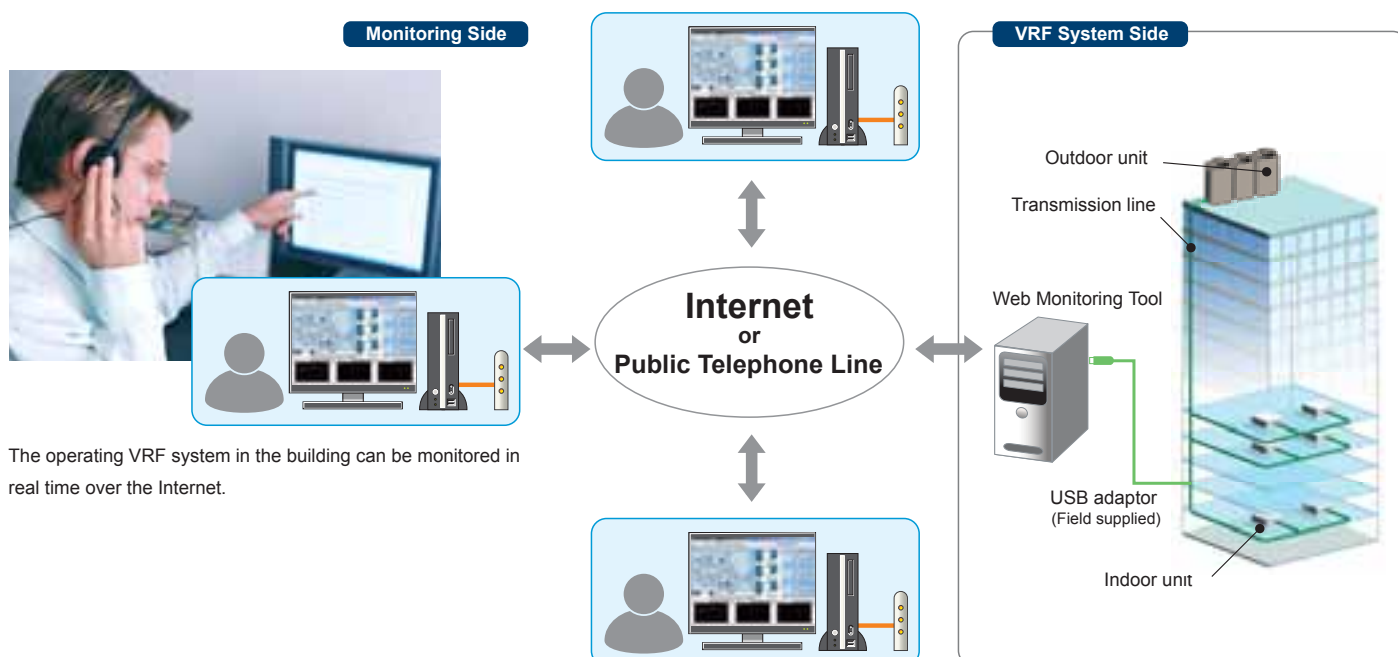
Blue fin heat exchanger



Remote monitoring

■ Remote monitoring over the internet

The Web Monitoring system allows you view system operation at all times over the internet ensuring trouble free operation.



The operating VRF system in the building can be monitored in real time over the Internet.

Easy Installation

From transportation of the product to address setting for commissioning, significant improvements have been made which reduce the cost of installation.

Easily transported

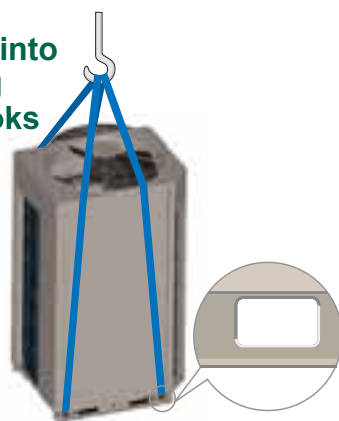
■ Light weight

20% weight reduction
(Than Previous model)

Note: In the case of 14HP

■ Easily craned into position using lifting belt hooks

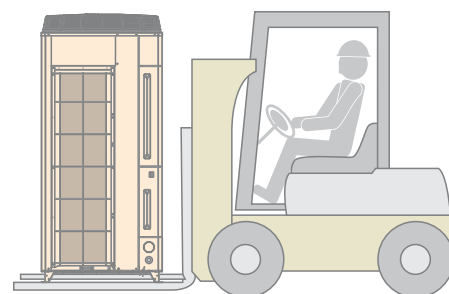
Design of outdoor unit allows for lifting straps to be used



■ Can be transported in a small elevator



■ Transporting by forklift



Transport with forklift is possible.

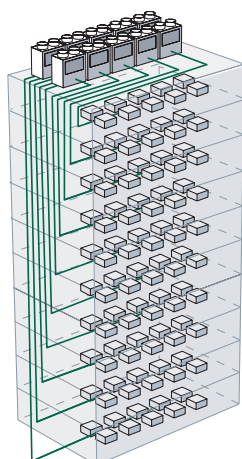
Simple wiring & piping work

■ Simple signal line connection

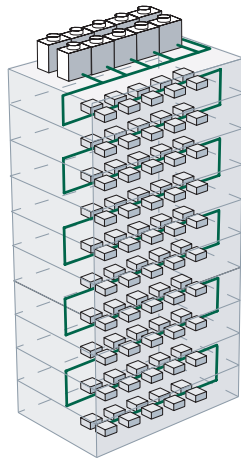
Installation is made easier as the communications wiring can be connected continuously to any component.

Up to maximum length 3,600m

V-II Series



Other wiring method

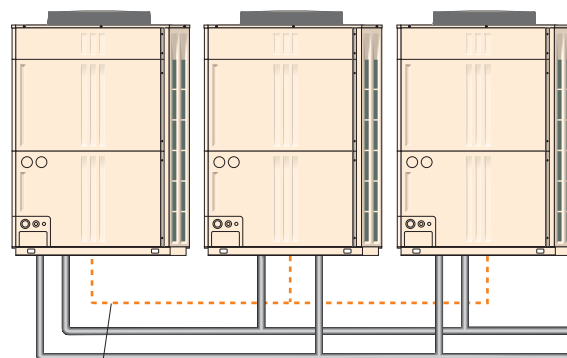


Simple wiring method

Note: In a multiple refrigerant system installation, Automatic addressing sequence cannot be initiated

■ Easy piping connection

The need for a oil equalization pipe as required on the previous model has been removed. The installation costs have been reduced by employing a Simple 2 pipe connection



Eliminating oil equalization pipe

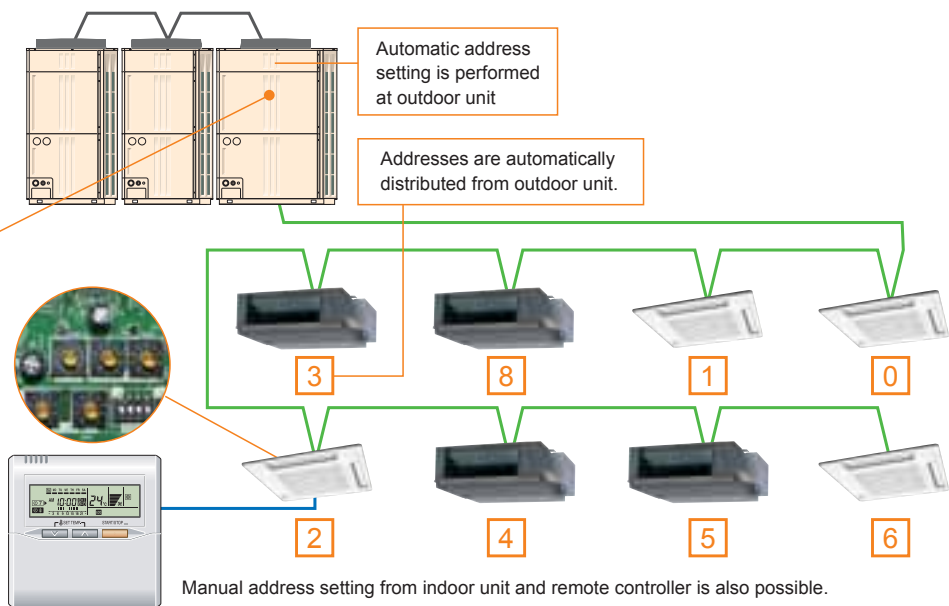
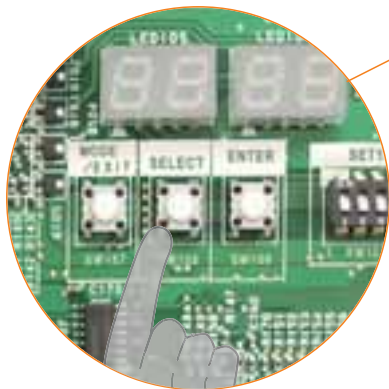


Easy setting operation

Automatic address setting

The address of each indoor unit can be automatically set by button switch of outdoor unit.

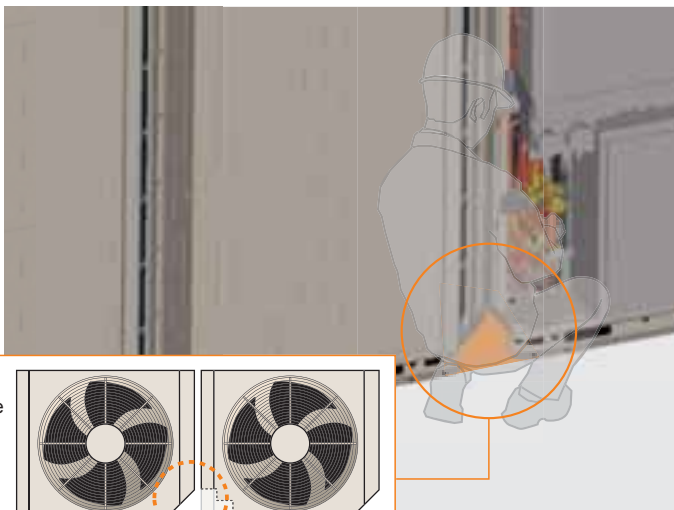
Press the pushbutton switch of outdoor unit.



Easy maintenance

Easy access

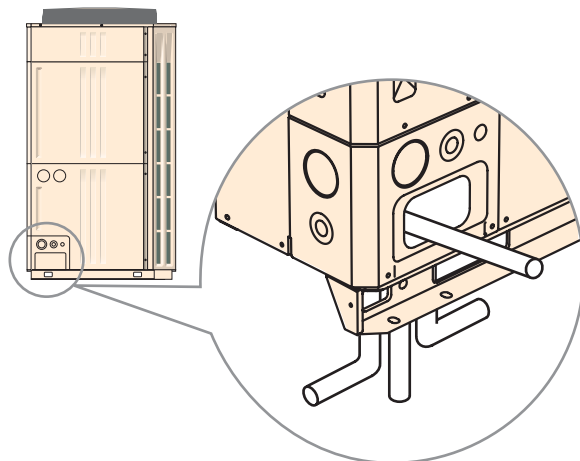
By adopting a L-Shape front panel that can be removed, the work space for installation and service has been significantly expanded by this new design. For multiple installations, work is performed easily and efficiently even in a narrow space.



Four way piping connection

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

Four way connection



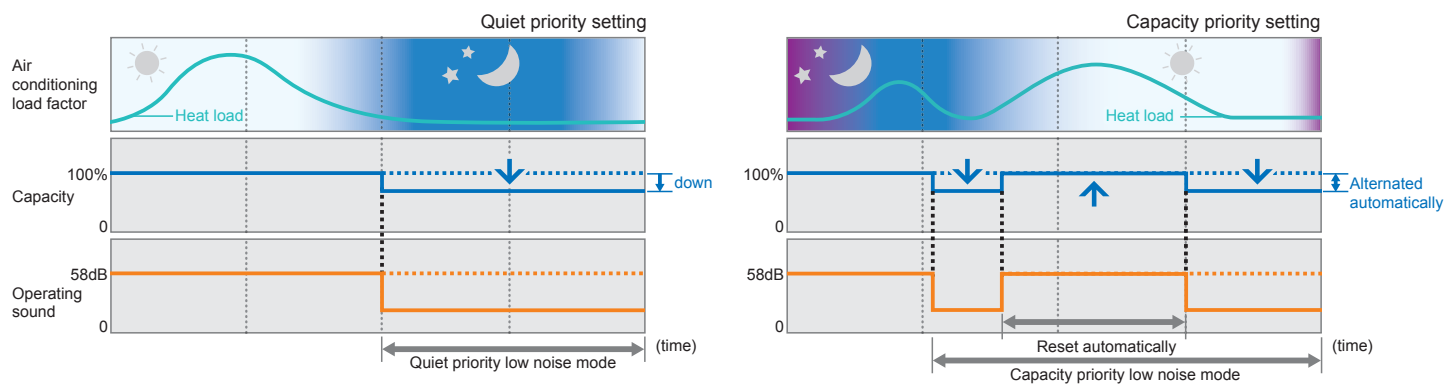
Comfort and Convenience

Low noise, easy operational settings, and comfortable temperature adjustment allows for V-II systems to be used in building air conditioning applications.

Quiet operation

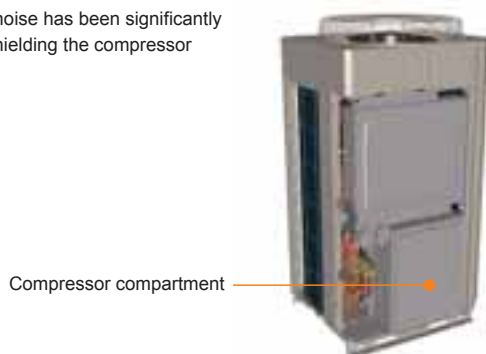
Low noise mode

Two low noise modes can be selected automatically by quiet priority setting and capacity priority setting depending on the usage environment and outside temperature load.



Low noise design

Compressor noise has been significantly reduced by shielding the compressor compartment.



Indoor unit

Low noise indoor unit lineup



Auto changeover function

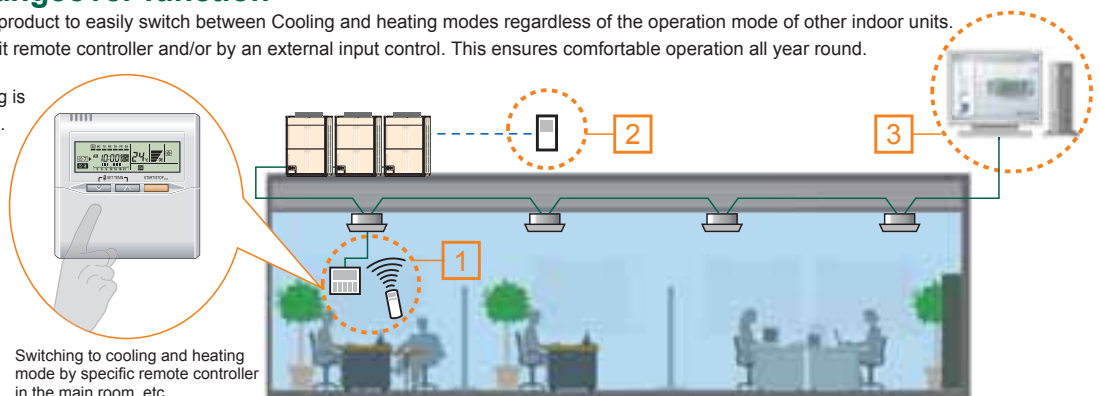
Selectable auto changeover function

Auto changeover setting allows for the product to easily switch between Cooling and heating modes regardless of the operation mode of other indoor units. This can be done via specific indoor unit remote controller and/or by an external input control. This ensures comfortable operation all year round.

Command for operational mode switching is controlled by one of the following options.

1 selected from the following:

- 1 Various remote controllers connected to indoor unit
- 2 External input terminal of outdoor unit
- 3 System controller



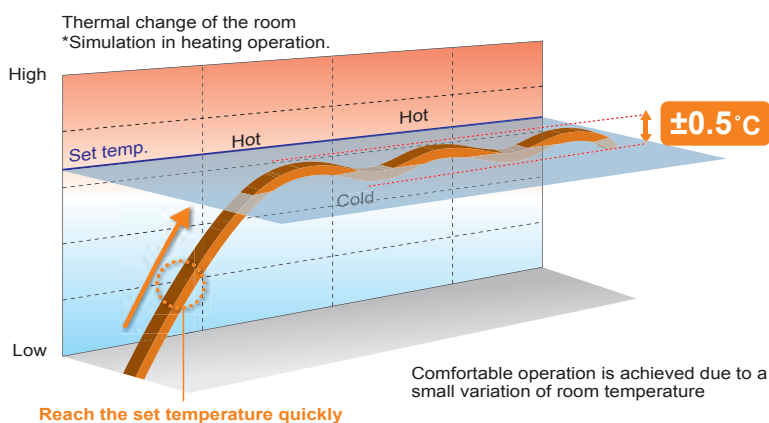


Comfortable, convenient control

Precision refrigerant flow control

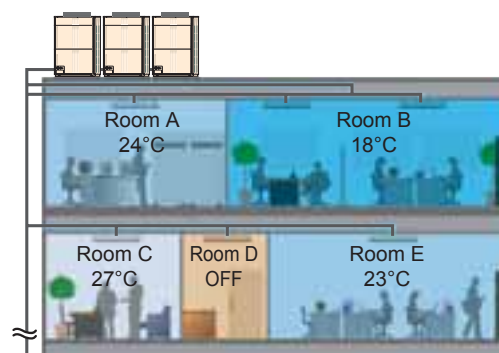
Precision and Smooth refrigerant flow control is achieved by using a DC Inverter control in conjunction with individual indoor unit electronic expansion valve control.

This allows for a high precision comfortable temperature control of $\pm 0.5^{\circ}\text{C}$.



Individual Air Conditioning Control

The desired temperature conditions of each room are met due to the Individual thermostat control of each indoor unit.



Simple central management function



7.5 inch large LCD Touch Panel Controller

- Simple central control operation Simple operation by icon display and color touch screen
- Yearly schedule function Daily starting & stopping and temperature setting are managed.
- Clock setting function The clock of each individual controller is periodically corrected.



Schedule screen

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.

Previous model



Operation stopped at oil recovery

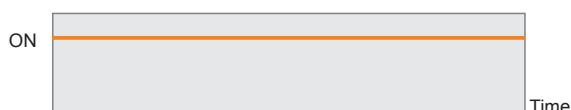


V-II Series

(Heating operation)



Non-stop oil recovery operation

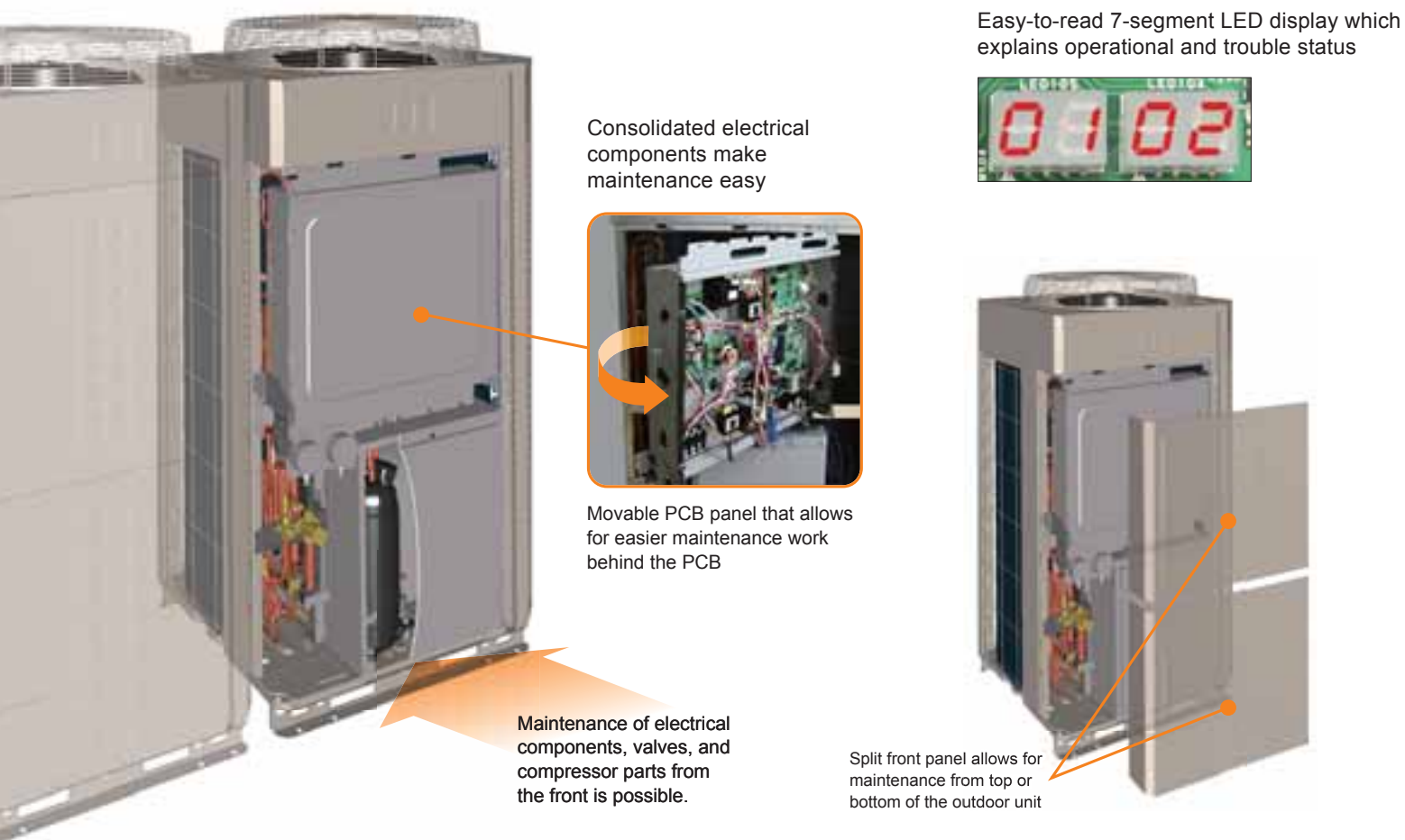


Easy Service & Maintenance

Designed for Quick Service response,
Easy maintenance and Troubleshooting

Design for easy service and maintenance

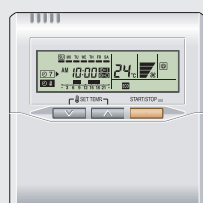
- Inspection and replacement of main parts is easier due to innovative construction and an LED operational display.



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

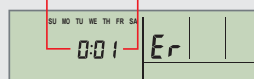
An error code is displayed on a liquid crystal screen.

Wired Remote Controller



Faulty unit number
(Remote controller address)

Error code

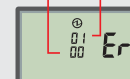


Simple Remote Controller



Faulty unit number
(Remote controller address)

Error code





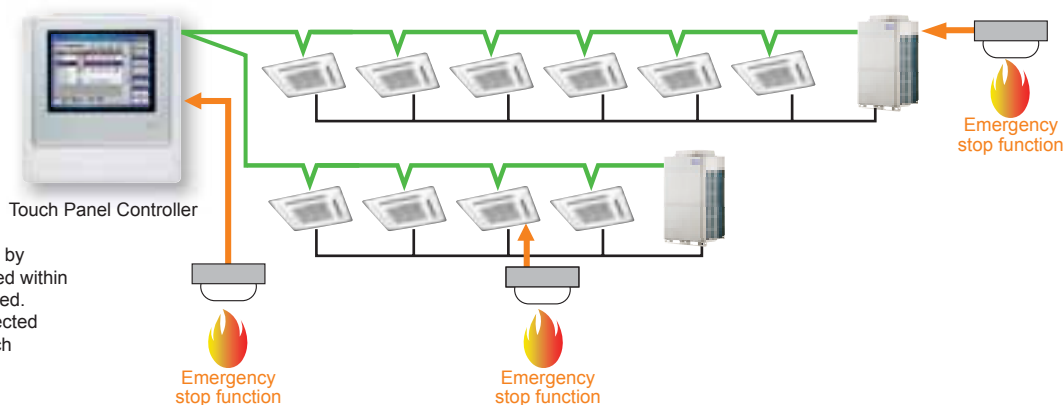
Emergency stop function

Emergency stop

Emergency alarm can be received by indoor, outdoor units or Touch Panel Controller when they received it, all units will be stopped.

Note:

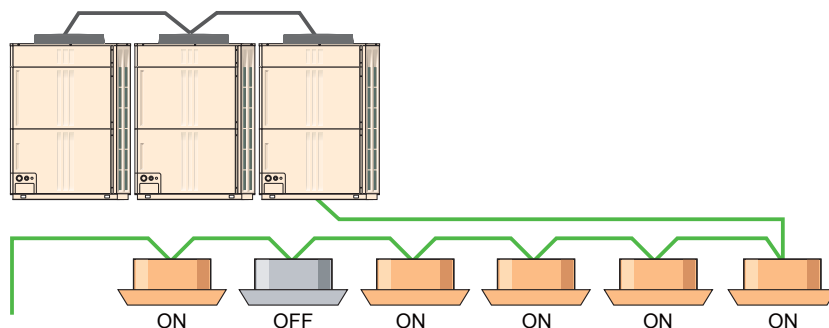
In case of received Emergency alarm by Indoor/outdoor unit: All units connected within same refrigerant system will be stopped.
Touch Panel Controller: all unit connected within VRF network system with Touch Panel Controller will be stopped.



Continuous operation during maintenance

Non-stop operation

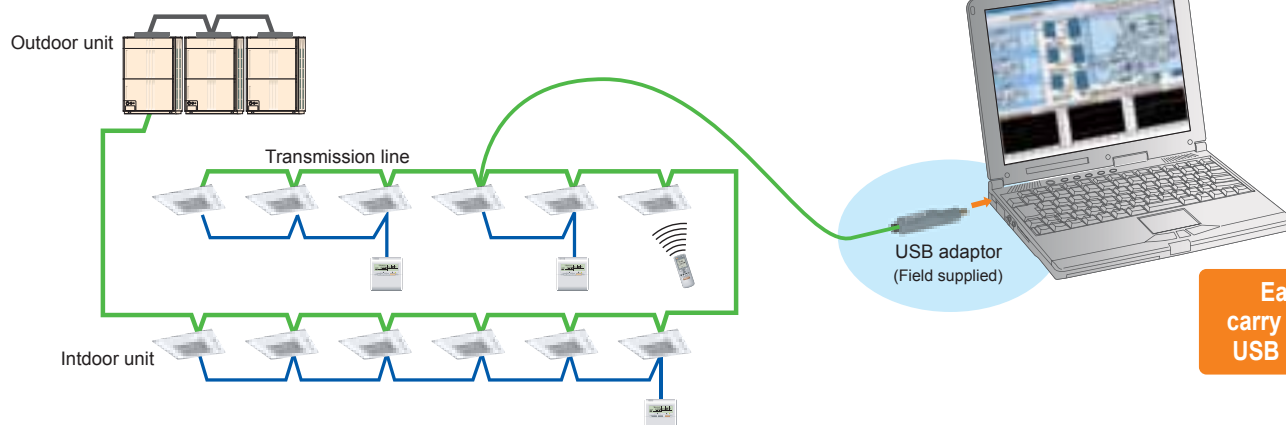
When servicing a specific indoor unit, maintenance can be performed even without turning off the other indoor units.



Prompt trouble diagnosis

Trouble diagnosis by Service Tool

Suitable maintenance is possible by analysis of the operation data. Connection anywhere in the VRF network is easy.



Outdoor Units Lineup

- Extensive line up from 8HP to 48HP in 2HP increments
- Space saving combination and Energy efficiency combination available, which can be selected to suit any air conditioning needs
- Combinations other than the followings are not recommended.

■ Space saving combination

22.4kW (8HP)



AJ*A72LALH
UNIT : AJ*A72LALH

28.0kW (10HP)



AJ*A90LALH
UNIT : AJ*A90LALH

33.5kW (12HP)



AJ*108LALH
UNIT : AJ*108LALH

40.0kW (14HP)



AJ*126LALH
UNIT : AJ*126LALH

45.0kW (16HP)



AJ*144LALH
UNIT : AJ*144LALH

50.4kW (18HP)



AJ*162LALH
UNIT : AJ*A90/A72LALH

55.9kW (20HP)



AJ*180LALH
UNIT : AJ*108/A72LALH

61.5kW (22HP)



AJ*198LALH
UNIT : AJ*108/A90LALH

67.0kW (24HP)



AJ*216LALH
UNIT : AJ*108/108LALH

73.5kW (26HP)



AJ*234LALH
UNIT : AJ*126/108LALH

78.5kW (28HP)



AJ*252LALH
UNIT : AJ*144/108LALH

85.0kW (30HP)



AJ*270LALH
UNIT : AJ*144/126LALH

90.0kW (32HP)



AJ*288LALH
UNIT : AJ*144/144LALH

95.0kW (34HP)



AJ*306LALH
UNIT : AJ*108/108/A90LALH

100.5kW (36HP)



AJ*324LALH
UNIT : AJ*108/108/108LALH

107.0kW (38HP)



AJ*342LALH
UNIT : AJ*126/108/108LALH

112.0kW (40HP)



AJ*360LALH
UNIT : AJ*144/108/108LALH

118.5kW (42HP)



AJ*378LALH
UNIT : AJ*144/126/108LALH

123.5kW (44HP)



AJ*396LALH
UNIT : AJ*144/144/108LALH

130.0kW (46HP)



AJ*414LALH
UNIT : AJ*144/144/126LALH

135.0kW (48HP)



AJ*432LALH
UNIT : AJ*144/144/144LALH

■ Energy efficiency combination

44.8kW (16HP)



AJ*144LALHH
UNIT : AJ*A72/A72LALH

62.4kW (22HP)



AJ*198LALHH
UNIT : AJ*126/A72LALH

67.2kW (24HP)



AJ*216LALHH
UNIT : AJ*A72/A72/A72LALH

72.8kW (26HP)



AJ*234LALHH
UNIT : AJ*A90/A72/A72LALH

78.3kW (28HP)



AJ*252LALHH
UNIT : AJ*108/A72/A72LALH

84.8kW (30HP)



AJ*270LALHH
UNIT : AJ*126/A72/A72LALH

89.8kW (32HP)



AJ*288LALHH
UNIT : AJ*108/108/A72LALH

95.9kW (34HP)



AJ*306LALHH
UNIT : AJ*126/108/A72LALH

102.4kW (36HP)



AJ*324LALHH
UNIT : AJ*126/126/A72LALH

113.5kW (40HP)



AJ*360LALHH
UNIT : AJ*126/126/A108LALH

120.0kW (42HP)



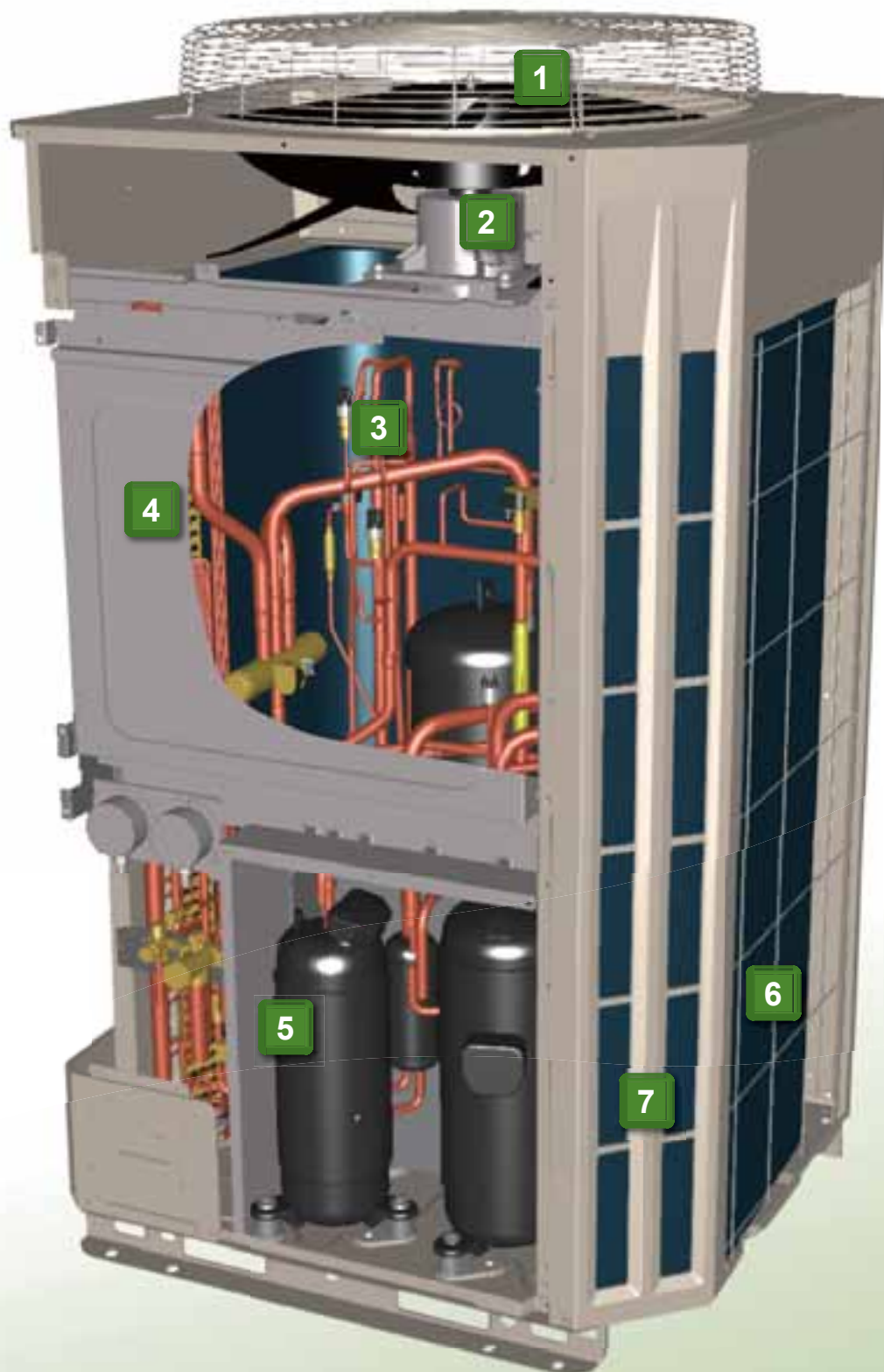
AJ*378LALHH
UNIT : AJ*126/126/126LALH

125.0kW (44HP)



AJ*396LALHH
UNIT : AJ*144/126/126LALH

Innovative Technology



1 Powerful large propeller fan

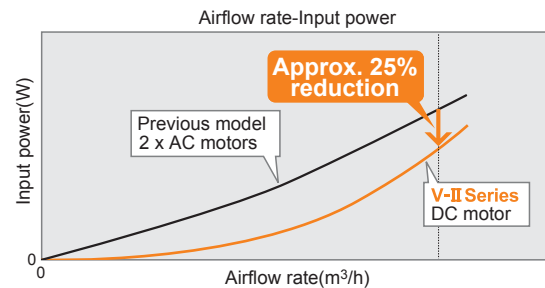


By using CFD*1 technology, A newly designed fan achieves high performance and low noise operation.

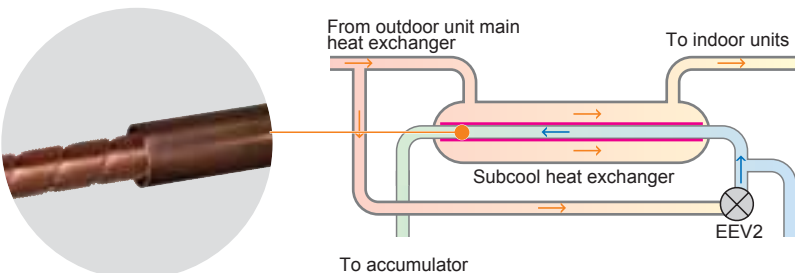
2 DC fan motor



High Performance and High Efficiency has been realized by using a small DC fan motor which has reduced power consumption by 25% when compared with the previous model.

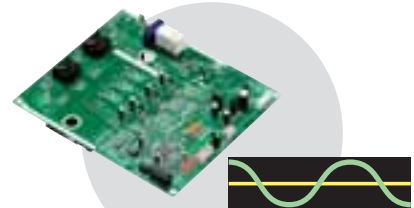


3 Subcool heat exchanger



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

4 Sine wave DC inverter control



A DC Sine wave inverter control has been used which allows for a high efficiency and high energy saving operation. Inverter losses are significantly reduced by newly adopted IPM and original motor control.

5 DC twin rotary compressor



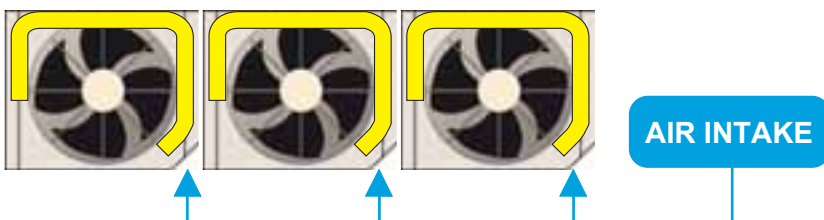
A high performance, low noise, large capacity DC twin rotary compressor is used. Each part is optimized with intake and compression efficiency increased to the maximum extent. In addition, high performance and high quality is maintained by using a double accumulator.

6 Heat exchanger



Reduced compact size and energy saving has been realised by utilizing a $\varnothing 7\text{mm}$ high density piping design with a unique enclosing shape. This new coil design allows for an increase of approximately 1.7 times heat exchanger volume when compared with the previous model.

7 Front intake port (omnidirectional intake)






Front intake port is designed to prevent decreasing airflow when multiple outdoor units are installed.







Specifications

Space saving combination

| Rating Capacity range | | | HP | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 |
|-----------------------------------|---------|--------|-----------|---|------------|------------|--|------------|---|--------------------------|--------------------------|--------------------------|
| | | | |  | | |  | |  | | | |
| Set Model | | | | AJ*A72LALH | AJ*A90LALH | AJ*108LALH | AJ*126LALH | AJ*144LALH | AJ*162LALH | AJ*180LALH | AJ*198LALH | AJ*216LALH |
| Unit 1 Unit 2 Unit 3 | | | | AJ*A72LALH | AJ*A90LALH | AJ*108LALH | AJ*126LALH | AJ*144LALH | AJ*A90LALH AJ*A72LALH | AJ*108LALH AJ*A72LALH | AJ*108LALH AJ*A90LALH | AJ*108LALH AJ*108LALH |
| Maximum Connectable Indoor Unit*1 | | | | 15 | 16 | 17 | 21 | 24 | 32 | 32 | 32 | 35 |
| Indoor unit connectable capacity | Cooling | kW | 11.2-33.6 | 14.0-42.0 | 16.8-50.2 | 20.0-60.0 | 22.4-67.2 | 25.2-75.6 | 28.0-83.9 | 30.8-92.3 | 33.5-100.5 | |
| Power source | | | | | | | | | | | | |
| Capacity | Cooling | kW | 22.4 | 28.0 | 33.5 | 40.0 | 45.0 | 50.4 | 55.9 | 61.5 | 67.0 | |
| | Heating | | 25.0 | 31.5 | 37.5 | 45.0 | 50.0 | 56.5 | 62.5 | 69.0 | 75.0 | |
| Input power | Cooling | kW | 5.51 | 7.73 | 9.62 | 11.53 | 14.17 | 13.24 | 15.13 | 17.35 | 19.24 | |
| | Heating | | 5.72 | 7.83 | 9.28 | 11.45 | 12.60 | 13.55 | 15.00 | 17.11 | 18.56 | |
| EER | Cooling | W/W | 4.07 | 3.62 | 3.48 | 3.47 | 3.18 | 3.81 | 3.69 | 3.54 | 3.48 | |
| COP | Heating | | 4.37 | 4.02 | 4.04 | 3.93 | 3.97 | 4.17 | 4.17 | 4.03 | 4.04 | |
| Airflow rate | High | m³/h | 11,100 | 11,100 | 11,100 | 13,000 | 13,000 | 11,100 x 2 | 11,100 x 2 | 11,100 x 2 | 11,100 x 2 | |
| Sound pressure level*2 | Cooling | dB (A) | 56 | 58 | 58 | 60 | 61 | 60 | 60 | 61 | 61 | |
| | Heating | | 58 | 59 | 60 | 61 | 61 | 62 | 62 | 63 | 63 | |
| Maximum external static pressure | Pa | | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | |
| Compressor motor output | kW | | 3.9 | 3.9 | 3.9 + 4.5 | 3.9 + 4.5 | 3.9 + 4.5 | 3.9 x 2 | 3.9 x 2 + 4.5 | 3.9 x 2 + 4.5 | 3.9 x 2 + 4.5 x 2 | |
| Heat exchanger fin | | | Blue fin | Blue fin | Blue fin | Blue fin | Blue fin | Blue fin | Blue fin | Blue fin | Blue fin | |
| Dimensions | Height | mm | 1,690 | 1,690 | 1,690 | 1,690 | 1,690 | 1,690 | 1,690 | 1,690 | 1,690 | |
| | Width | mm | 930 | 930 | 930 | 1,240 | 1,240 | 930 x 2 | 930 x 2 | 930 x 2 | 930 x 2 | |
| | Depth | mm | 765 | 765 | 765 | 765 | 765 | 765 | 765 | 765 | 765 | |
| Weight | kg | | 220 | 220 | 275 | 296 | 296 | 220+220 | 275+220 | 275+220 | 275+275 | |
| Refrigerant charge | kg | | 11.2 | 11.2 | 11.8 | 11.8 | 11.8 | 11.2 x 2 | 11.8 + 11.2 | 11.8 + 11.2 | 11.8 x 2 | |
| Connection pipe diameter | Liquid | mm | 12.70 | 12.70 | 12.70 | 12.70 | 12.70 | 15.88 | 15.88 | 15.88 | 15.88 | |
| | Gas | | 22.20 | 22.20 | 28.58 | 28.58 | 28.58 | 28.58 | 28.58 | 34.92 | 34.92 | |
| Operation temperature range | Cooling | °C | -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 | |
| | 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 | |

Energy efficiency combination

| Rating Capacity range | | HP | 16 | 22 | 24 | 26 | 28 | 30 |
|-----------------------------------|---------|--------|---|---|--|---|--|---|
| | | |  |  | |  | |  |
| Set Model | | | AJ*144LALHH | AJ*198LALHH | AJ*216LALHH | AJ*234LALHH | AJ*252LALHH | AJ*270LALHH |
| Unit 1 Unit 2 Unit 3 | | | AJ*A72LALH AJ*A72LALH | AJ*126LALH AJ*A72LALH | AJ*A72LALH AJ*A72LALH AJ*A72LALH | AJ*A90LALH AJ*A72LALH AJ*A72LALH | AJ*108LALH AJ*A72LALH AJ*A72LALH | AJ*126LALH AJ*A72LALH AJ*A72LALH |
| Maximum Connectable Indoor Unit*1 | | | 30 | 33 | 36 | 39 | 42 | 45 |
| Indoor unit connectable capacity | Cooling | kW | 22.4-67.2 | 31.2-93.6 | 33.6-100.8 | 36.4-109.2 | 39.2-117.4 | 42.4-127.2 |
| Power source | | | | | | | | |
| Capacity | Cooling | kW | 44.8 | 62.4 | 67.2 | 72.8 | 78.3 | 84.8 |
| | Heating | | 50.0 | 70.0 | 75.0 | 81.5 | 87.5 | 95.0 |
| Input power | Cooling | kW | 11.02 | 17.04 | 16.53 | 18.75 | 20.64 | 22.55 |
| | Heating | | 11.44 | 17.17 | 17.16 | 19.27 | 20.72 | 22.89 |
| EER | Cooling | W/W | 4.07 | 3.66 | 4.07 | 3.88 | 3.79 | 3.76 |
| COP | Heating | | 4.37 | 4.08 | 4.37 | 4.23 | 4.22 | 4.15 |
| Airflow rate | High | m³/h | 11,100 x 2 | 13,000 + 11,100 | 11,100 x 3 | 11,100 x 3 | 11,100 x 3 | 13,000+11,000 x 2 |
| Sound pressure level*2 | Cooling | dB (A) | 59 | 61 | 61 | 62 | 62 | 63 |
| | Heating | | 59 | 62 | 61 | 62 | 63 | 63 |
| Maximum external static pressure | Pa | | 80 | 80 | 80 | 80 | 80 | 80 |
| Compressor motor output | kW | | 3.9 x 2 | 3.9 x 2+4.5 | 3.9 x 3 | 3.9 x 3 | 3.9 x 3+4.5 | 3.9 x 3+4.5 |
| Heat exchanger fin | | | Blue fin | Blue fin | Blue fin | Blue fin | Blue fin | Blue fin |
| Dimensions | Height | mm | 1,690 | 1,690 | 1,690 | 1,690 | 1,690 | 1,690 |
| | Width | mm | 930 x 2 | 930+1,240 | 930 x 3 | 930 x 3 | 930 x 3 | 930 x 2+1,240 |
| | Depth | mm | 765 | 765 | 765 | 765 | 765 | 765 |
| Weight | kg | | 220+220 | 296+220 | 220+220+220 | 220+220+220 | 275+220+220 | 296+220+220 |
| Refrigerant charge | kg | | 11.2 x 2 | 11.8 +11.2 | 11.2 x 3 | 11.2 x 3 | 11.8 + 11.2 x 2 | 11.8+11.2 x 2 |
| Connection pipe diameter | Liquid | mm | 12.70 | 15.88 | 15.88 | 15.88 | 15.88 | 19.05 |
| | Gas | | 28.58 | 34.92 | 34.92 | 34.92 | 34.92 | 34.92 |
| Operation temperature range | Cooling | °C | -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 |

AJ* : AJY(FUJITSU), AJH(GENERAL)

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.




*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.

| 26 | 28 | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 44 | 46 | 48 |
|--|--------------------------|---|--------------------------|---|--|---|--|---|--|---|--|
|  | |  | |  | |  | |  | |  | |
| AJ*234LALH | AJ*252LALH | AJ*270LALH | AJ*288LALH | AJ*306LALH | AJ*324LALH | AJ*342LALH | AJ*360LALH | AJ*378LALH | AJ*396LALH | AJ*414LALH | AJ*432LALH |
| AJ*126LALH AJ*108LALH | AJ*144LALH AJ*108LALH | AJ*144LALH AJ*126LALH | AJ*144LALH AJ*144LALH | AJ*108LALH AJ*108LALH AJ*A90LALH | AJ*108LALH AJ*108LALH AJ*108LALH | AJ*126LALH AJ*108LALH AJ*108LALH | AJ*144LALH AJ*108LALH AJ*108LALH | AJ*144LALH AJ*126LALH AJ*108LALH | AJ*144LALH AJ*144LALH AJ*108LALH | AJ*144LALH AJ*144LALH AJ*126LALH | AJ*144LALH AJ*144LALH AJ*144LALH |
| 39 | 42 | 45 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 |
| 36.8-110.3 | 39.3-117.8 | 42.5-127.5 | 45.0-135.0 | 47.5-142.5 | 50.3-150.8 | 53.5-160.5 | 56.0-168.0 | 59.3-177.8 | 61.8-185.3 | 65.0-195.0 | 67.5-202.5 |
| 3-phase 4 wire, 400 V, 50Hz | | | | | | | | | | | |
| 73.5 | 78.5 | 85.0 | 90.0 | 95.0 | 100.5 | 107.0 | 112.0 | 118.5 | 123.5 | 130.0 | 135.0 |
| 82.5 | 87.5 | 95.0 | 100.0 | 106.5 | 112.5 | 120.0 | 125.0 | 132.5 | 137.5 | 145.0 | 150.0 |
| 21.15 | 23.79 | 25.70 | 28.34 | 26.97 | 28.86 | 30.77 | 33.41 | 35.32 | 37.96 | 39.87 | 42.51 |
| 20.73 | 21.88 | 24.05 | 25.20 | 26.39 | 27.84 | 30.01 | 31.16 | 33.33 | 34.48 | 36.65 | 37.80 |
| 3.48 | 3.30 | 3.31 | 3.18 | 3.52 | 3.48 | 3.48 | 3.35 | 3.36 | 3.25 | 3.26 | 3.18 |
| 3.98 | 4.00 | 3.95 | 3.97 | 4.04 | 4.04 | 4.00 | 4.01 | 3.98 | 3.99 | 3.96 | 3.97 |
| 13,000+11,100 | 13,000+11,100 | 13,000 x 2 | 13,000 x 2 | 11,100 x 3 | 11,100 x 3 | 13,000+11,100x2 | 13,000+11,100x2 | 13,000+11,100 | 13,000+11,100 | 13,000 x 3 | 13,000 x 3 |
| 62 | 63 | 64 | 64 | 63 | 63 | 64 | 64 | 65 | 65 | 65 | 66 |
| 64 | 64 | 64 | 64 | 64 | 65 | 65 | 65 | 65 | 65 | 66 | 66 |
| 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| 3.9 x 2 + 4.5 x 2 | 3.9 x 2 + 4.5 x 2 | 3.9 x 2 + 4.5 x 2 | 3.9 x 2 + 4.5 x 2 | 3.9 x 3 + 4.5 x 2 | 3.9 x 3 + 4.5 x 3 | 3.9 x 3 + 4.5 x 3 | 3.9 x 3 + 4.5 x 3 | 3.9 x 3 + 4.5 x 3 | 3.9 x 3 + 4.5 x 3 | 3.9 x 3 + 4.5 x 3 | 3.9 x 3 + 4.5 x 3 |
| Blue fin | Blue fin | Blue fin | Blue fin | Blue fin | Blue fin | Blue fin | Blue fin | Blue fin | Blue fin | Blue fin | Blue fin |
| 1,690 | 1,690 | 1,690 | 1,690 | 1,690 | 1,690 | 1,690 | 1,690 | 1,690 | 1,690 | 1,690 | 1,690 |
| 930+1,240 | 930+1,240 | 1,240 x 2 | 1,240 x 2 | 930 x 3 | 930 x 3 | 930 x 2 + 1,240 | 930 x 2 + 1,240 | 930 + 1,240 x 2 | 930 + 1,240 x 2 | 1,240 x 3 | 1,240 x 3 |
| 765 | 765 | 765 | 765 | 765 | 765 | 765 | 765 | 765 | 765 | 765 | 765 |
| 296+275 | 296+275 | 296+296 | 296+296 | 275+275+220 | 275+275+275 | 296+275+275 | 296+275+275 | 296+296+275 | 296+296+275 | 296+296+296 | 296+296+296 |
| 11.8 x 2 | 11.8 x 2 | 11.8 x 2 | 11.8 x 2 | 11.8 x 2 + 11.2 | 11.8 x 3 | 11.8 x 3 | 11.8 x 3 | 11.8 x 3 | 11.8 x 3 | 11.8 x 3 | 11.8 x 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 |
| 34.92 | 34.92 | 34.92 | 34.92 | 34.92 | 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 |
| -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 |

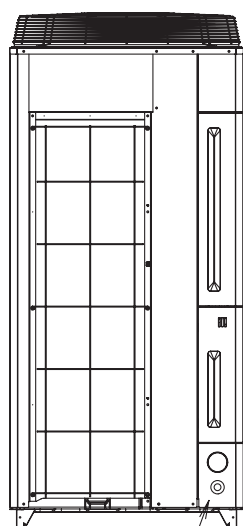
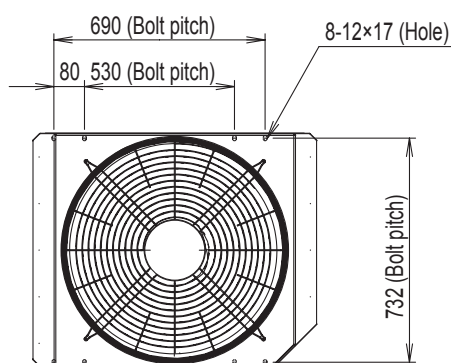
| 32 | 34 | 36 | 40 | 42 | 44 |
|--|--|---|---|---|--|
|  | |  | |  | |
| AJ*288LALHH | AJ*306LALHH | AJ*324LALHH | AJ*360LALHH | AJ*378LALHH | AJ*396LALHH |
| AJ*108LALH AJ*108LALH AJ*A72LALH | AJ*126LALH AJ*108LALH AJ*A72LALH | AJ*126LALH AJ*126LALH AJ*A72LALH | AJ*126LALH AJ*126LALH AJ*A108LALH | AJ*126LALH AJ*126LALH AJ*126LALH | AJ*144LALH AJ*126LALH AJ*126LALH |
| 48 | 48 | 48 | 48 | 48 | 48 |
| 44.7-134.1 | 48.0-143.8 | 51.2-153.6 | 56.8-170.2 | 60.0-180.0 | 62.5-187.5 |
| 3-phase 4 wire, 400 V, 50Hz | | | | | |
| 89.4 | 95.9 | 102.4 | 113.5 | 120.0 | 125.0 |
| 100.0 | 107.5 | 115.0 | 127.5 | 135.0 | 140.0 |
| 24.75 | 26.66 | 28.57 | 32.68 | 34.59 | 37.23 |
| 24.28 | 26.45 | 28.62 | 32.18 | 34.35 | 35.50 |
| 3.61 | 3.60 | 3.58 | 3.47 | 3.47 | 3.36 |
| 4.12 | 4.06 | 4.02 | 3.96 | 3.93 | 3.94 |
| 11,100 x 3 | 13,000+11,100 x 2 | 13,000 x 2+11,100 | 13,000 x 2+11,100 | 13,000 x 3 | 13,000 x 3 |
| 62 | 63 | 64 | 64 | 65 | 65 |
| 64 | 64 | 65 | 65 | 66 | 66 |
| 80 | 80 | 80 | 80 | 80 | 80 |
| 3.9 x 3+4.5 x 2 | 3.9 x 3+4.5 x 2 | 3.9 x 3+4.5 x 2 | 3.9 x 3+4.5 x 3 | 3.9 x 3+4.5 x 3 | 3.9 x 3+4.5 x 3 |
| Blue fin | Blue fin | Blue fin | Blue fin | Blue fin | Blue fin |
| 1,690 | 1,690 | 1,690 | 1,690 | 1,690 | 1,690 |
| 930 x 3 | 930 x 2+1,240 | 930+1,240 x 2 | 930+1,240 x 2 | 1,240 x 3 | 1,240 x 3 |
| 765 | 765 | 765 | 765 | 765 | 765 |
| 275+275+220 | 296+275+220 | 296+296+220 | 296+296+275 | 296+296+296 | 296+296+296 |
| 11.8 x 2+11.2 | 11.8 x 2+11.2 | 11.8 x 2+11.2 | 11.8 x 3 | 11.8 x 3 | 11.8 x 3 |
| 19.05 | 19.05 | 19.05 | 19.05 | 19.05 | 19.05 |
| 34.92 | 34.92 | 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 |
| -20 to 21 | -20 to 21 | -20 to 21 | -20 to 21 | -20 to 21 | -20 to 21 |

Dimensions

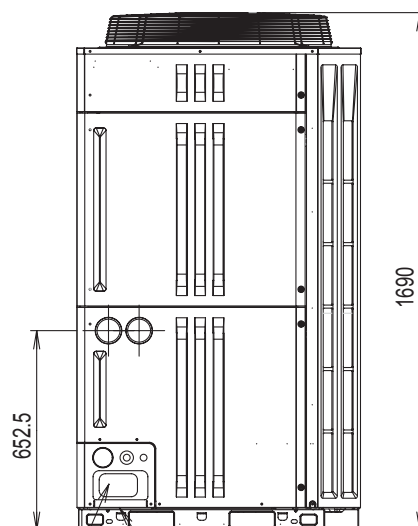
8, 10, 12HP

AJ*A72LALH
AJ*A90LALH
AJ*108LALH

(Unit : mm)

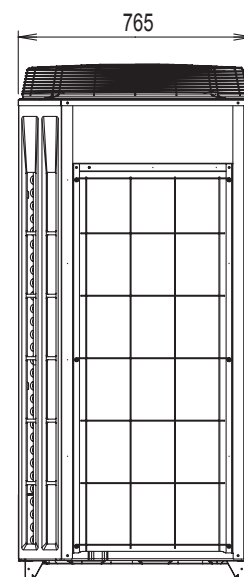


B



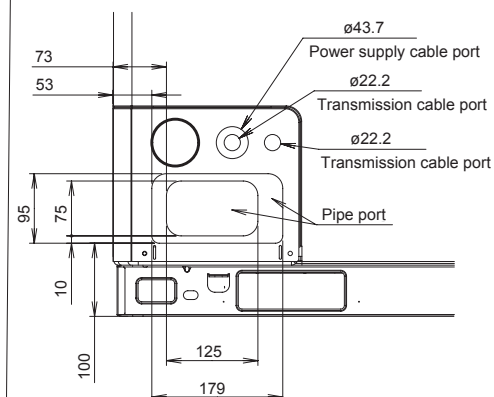
A

C



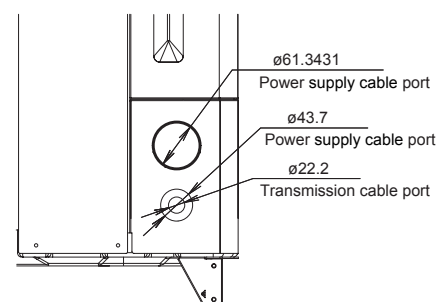
A

Front side knockout position



B

Left side knockout position

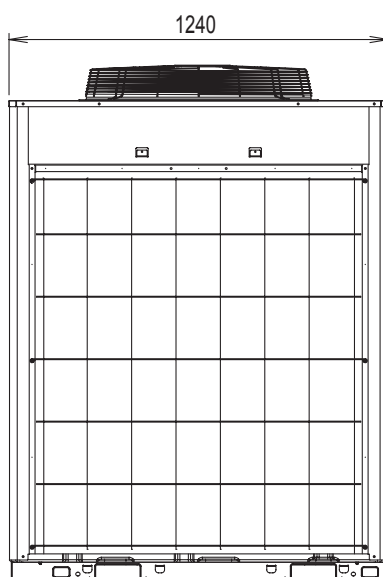
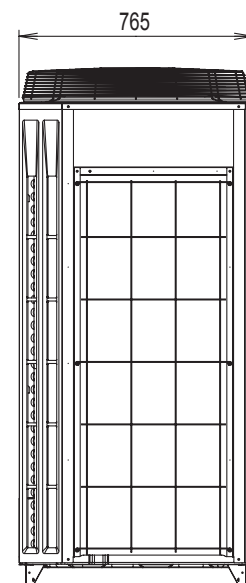
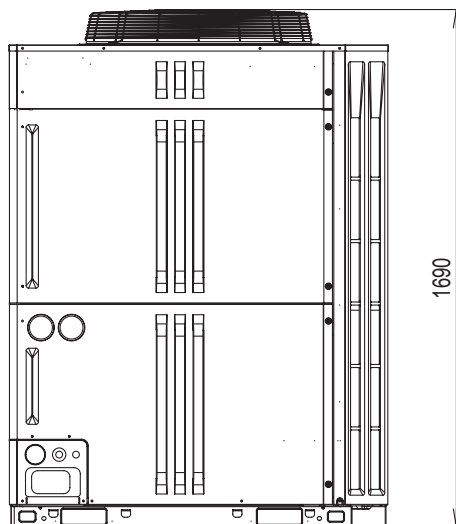
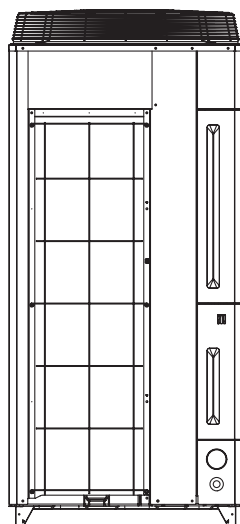
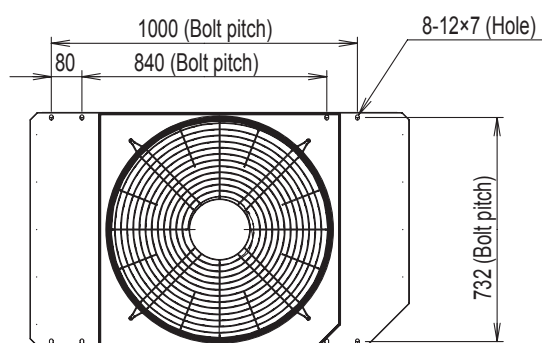


14, 16HP

AJ*126LALH

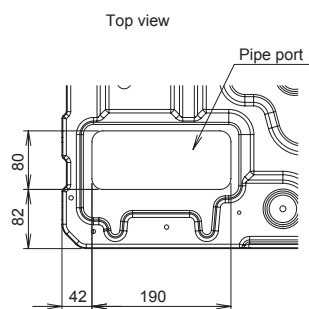
AJ*144LALH

(Unit : mm)



C

















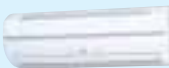
Bottom side knockout position



Indoor Unit Lineup














11 Types, 49 Models, Capacity range from 2.2kW to 25.0kW

Comprehensive range of indoor units of variety design and capacity ranges available which can be selected to suit any air conditioning needs.

| Rating Capacity Range (kW) | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 7.1 |
|--|---|---|---|--|---|---|
| Model code | 7 | 9 | 12 | 14 | 18 | 24 |
| Compact Cassette P26 |  AUXB07LALH |  AUXB09LALH |  AUXB12LALH |  AUXB14LALH |  AUXB18LALH |  AUXB24LALH |
| Cassette P28 | | | | |  AUXD18LALH |  AUXD24LALH |
| Compact Duct P30 |  ARXB07LALH |  ARXB09LALH |  ARXB12LALH |  ARXB14LALH |  ARXB18LALH | |
| Low Static Pressure Duct P32 | | | | | |  ARXB24LATH |
| Duct P32 | | | | | |  ARXA24LATH |
| High Static Pressure Duct P34 | | | | | | |
| Floor / Ceiling P36 | | |  AB*A12LATH |  AB*A14LATH |  AB*A18LATH |  AB*A24LATH |
| Ceiling P38 | | | | | | |
| Compact Wall Mounted (EEV internal) P40 |  AS*A07LACH |  AS*A09LACH |  AS*A12LACH |  AS*A14LACH | | |
| Compact Wall Mounted (EEV external) P40 |  AS*E07LACH |  AS*E09LACH |  AS*E12LACH |  AS*E14LACH | With this model connection of EV kit is necessary. | |
| Wall Mounted P42 | | | | |  AS*A18LATH |  AS*A24LATH |

The indoor units above cannot be connected to the S or V Series.

AB* : ABY(FUJITSU), ABH(GENERAL) AS* : ASY(FUJITSU), ASH(GENERAL)

| 9.0 | 11.2 | 12.5 | 14.0 | 18.0 | 22.4 | 25.0 |
|--|---|---|---|--|---|---|
| 30 | 36 | 45 | 54 | 60 | 72 | 90 |
| | | | | | | |
|  AUXA30LALH |  AUXA36LALH |  AUXA45LALH |  AUXA54LALH | | | |
| | | | | | | |
|  ARXB30LATH |  ARXB36LATH |  ARXB45LATH | | | | |
|  ARXA30LATH |  ARXA36LATH |  ARXA45LATH | | | | |
| |  ARXC36LATH |  ARXC45LATH | |  ARXC60LATH |  ARXC72LATH |  ARXC90LATH |
| | | | | | | |
|  AB*A30LATH |  AB*A36LATH |  AB*A45LATH |  AB*A54LATH | | | |
| | | | | | | |
| | | | | | | |
|  AS*A30LATH | | | | | | |

Compact Cassette

Compact size panel design
that fits standard ceiling panel (600x600mm)

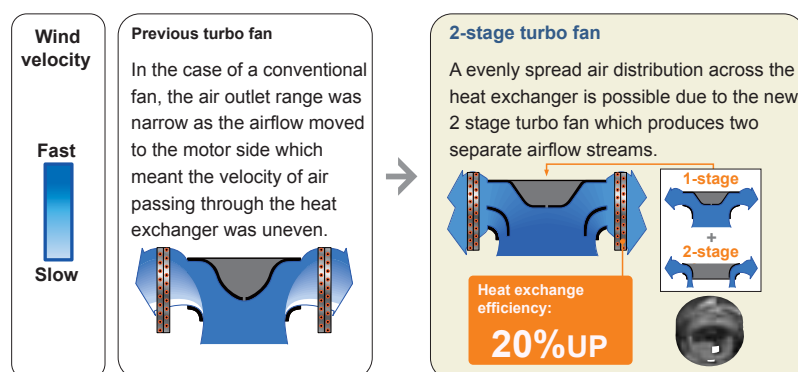
Models

AUXB07LALH
AUXB09LALH
AUXB12LALH
AUXB14LALH
AUXB18LALH
AUXB24LALH



2-stage turbo fan

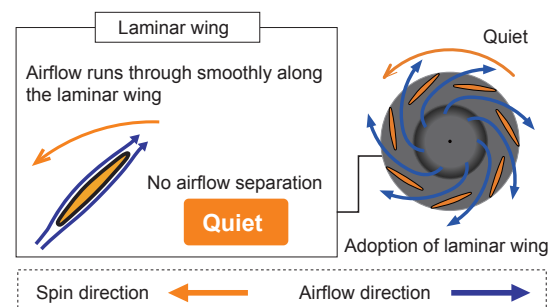
High efficiency design by 2 stage structure



Quiet quality

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

Designed by CFD-analysis (fluid) simulations



Specifications

| Model name | | | AUXB07LALH | AUXB09LALH | AUXB12LALH | AUXB14LALH | AUXB18LALH | AUXB24LALH |
|-----------------------------|------------------------|-------|------------------------|----------------|------------|------------|------------|------------|
| Power source | | | 230V~50Hz | | | | | |
| Capacity | Cooling | kW | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 7.1 |
| | Heating | | 2.8 | 3.2 | 4.1 | 5.0 | 6.3 | 8.0 |
| Input power | | W | 25 | 25 | 29 | 35 | 36 | 84 |
| Airflow rate | High | m³/h | 540 | 550 | 600 | 680 | 710 | 1,030 |
| | Med | | 450 | 450 | 530 | 590 | 580 | 830 |
| | Low | | 350 | 350 | 390 | 390 | 400 | 450 |
| Sound pressure level | High | dB(A) | 34 | 35 | 37 | 38 | 41 | 50 |
| | Med | | 30 | 30 | 34 | 34 | 35 | 44 |
| | Low | | 25 | 25 | 27 | 27 | 27 | 30 |
| Dimensions (H x W x D) | | mm | 245 x 570 x 570 | | | | | |
| Weight | | kg | 15 | | | | 17 | |
| Connection pipe diameter | Liquid (Flare) | mm | ø6.35 | | | | ø9.52 | |
| | Gas (Flare) | | ø12.70 | | | | ø15.88 | |
| | Drain | | ø25 (I.D.); ø32 (O.D.) | | | | | |
| Grille(option) | Model name | | UTG-UF*C-W | | | | | |
| | Dimensions (H x W x D) | | mm | 50 x 700 x 700 | | | | |
| | Weight | | kg | 2.6 | | | | |

F*: FY (FUJITSU) ; FG (GENERAL)

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].

Easy maintenance

① Maintenance of fan motor and fan

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

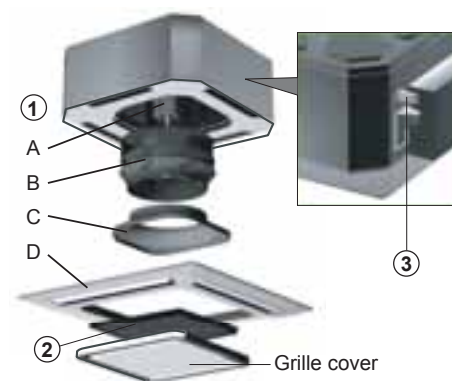
A : Fan motor B : 2-stage turbo fan
C : Bell-mouth D : Panel

② Long life filter

: standard equipment

③ Adaptation of transparent drainage parts

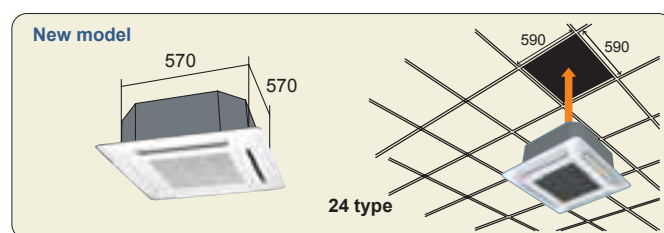
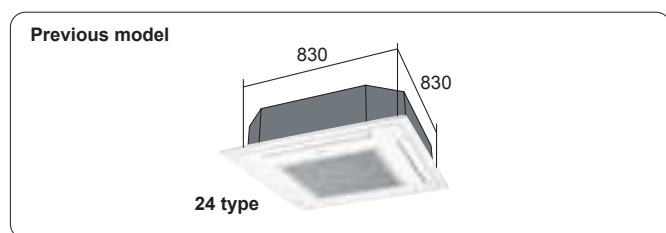
During installation, maintenance and operation, the drain pump and kit can be checked easily.



Compact design

World's first 24,000Btu model in the compact cassette category

(Easy installation by taking off ceiling panel of 600 x 600 size)



High lift drain pump



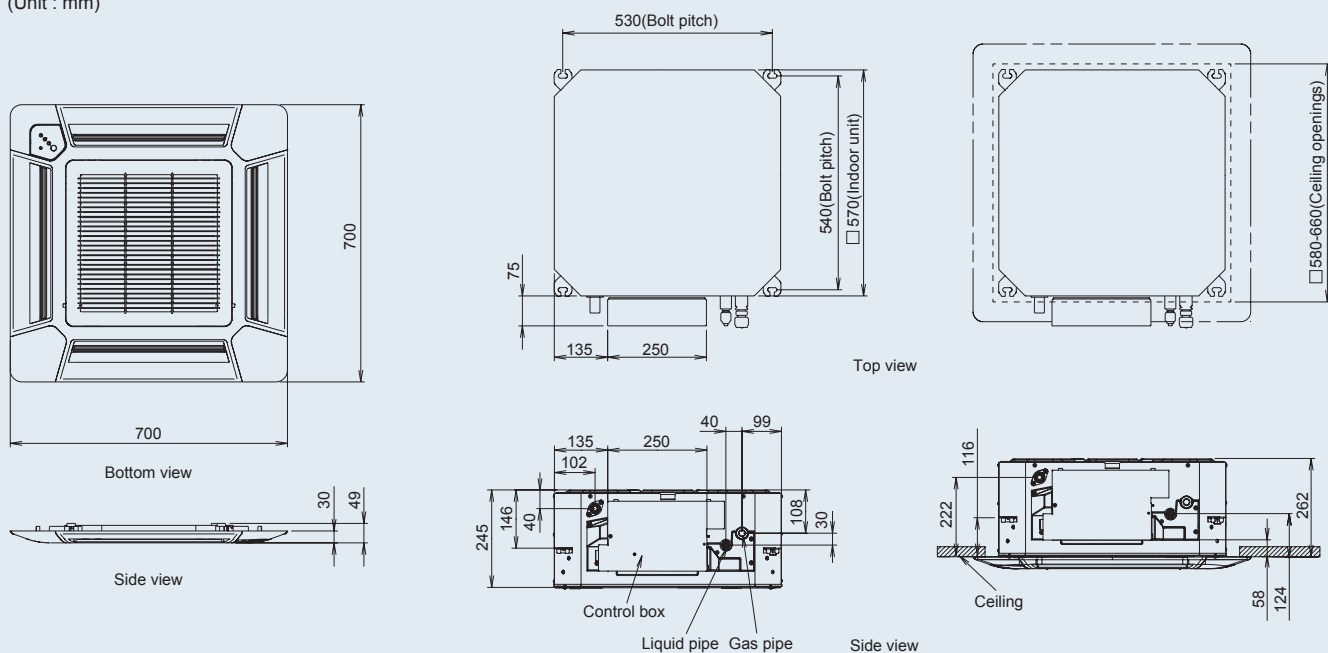
Optional parts

Air Outlet Shutter Plate UTR-YDZB

Dimensions

Models: AUXB07 / AUXB09 / AUXB12 / AUXB14 / AUXB18 / AUXB24

(Unit : mm)



Cassette

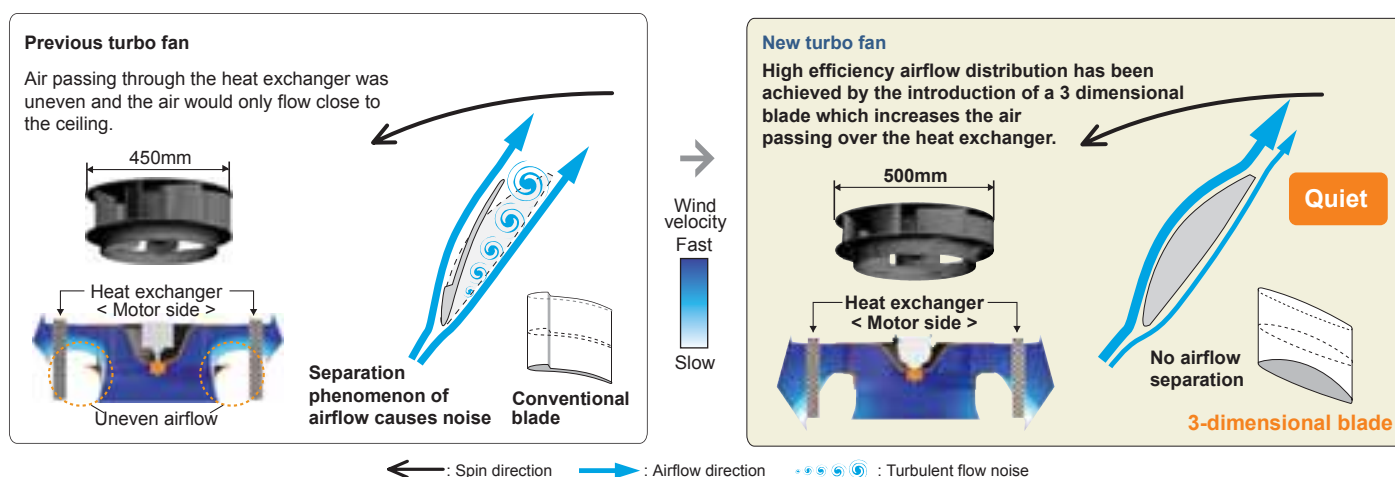
Powerful, wide airflow and quiet operation

Models

AUXD18LALH
AUXD24LALH
AUXA30LALH
AUXA36LALH
AUXA45LALH
AUXA54LALH



High efficiency turbo fan with 3-dimensional blade



Specifications

| Model name | | | AUXD18LALH | AUXD24LALH | AUXA30LALH | AUXA36LALH | AUXA45LALH | AUXA54LALH |
|-----------------------------|--------------------------|-------|-------------------------|------------|-----------------|------------|------------|------------|
| Power source | | | 230V~,50Hz | | | | | |
| Capacity | Cooling | kW | 5.6 | 7.1 | 9.0 | 11.2 | 12.5 | 14.0 |
| | Heating | | 6.3 | 8.0 | 10.0 | 12.5 | 14.0 | 16.0 |
| Input power | | W | 39 | 46 | 59 | 80 | 99 | 119 |
| Airflow rate | High | m³/h | 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 | 1,000 | 1,000 | 1,000 | 1,000 |
| Sound pressure level | High | dB(A) | 36 | 38 | 40 | 44 | 46 | 47 |
| | Med | | 30 | 33 | 38 | 38 | 39 | 39 |
| | Low | | 29 | 29 | 31 | 31 | 31 | 31 |
| Dimensions (H x W x D) | | mm | 246 x 840 x 840 | | 288 x 840 x 840 | | | |
| Weight | | kg | 23 | | 27 | | | |
| Connection pipe diameter | Liquid (Flare) | mm | ø9.52 | | | | | |
| | Gas (Flare) | | ø15.88 | | | ø19.05 | | |
| | Drain | | ø25 (I.D.) ; ø32 (O.D.) | | | | | |
| Grille (option) | Model name | | UTG-UG★A-W | | | | | |
| | Dimensions (H x W x D) | | 50 x 950 x 950 | | | | | |
| | Weight | | 5.5 | | | | | |

G★ : GY(FUJITSU) ; GG(GENERAL)

Note : Specifications are based on the following conditions.

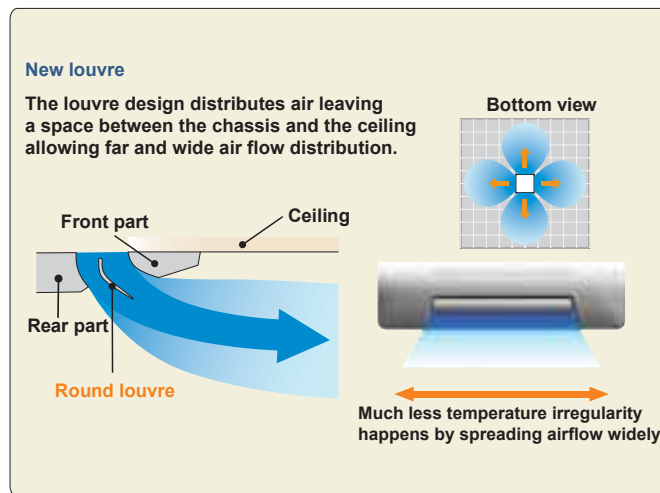
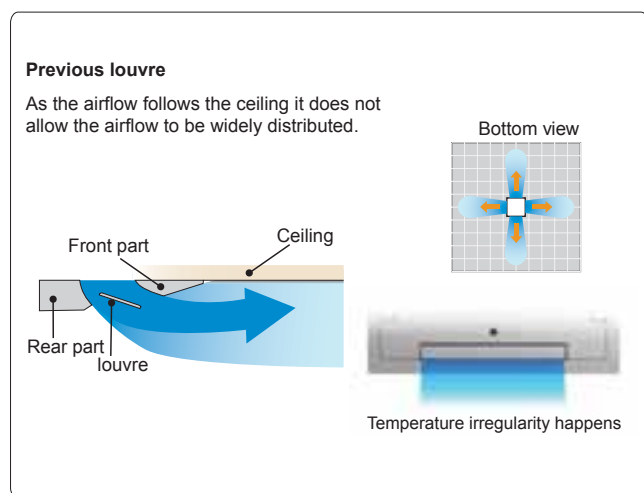
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

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

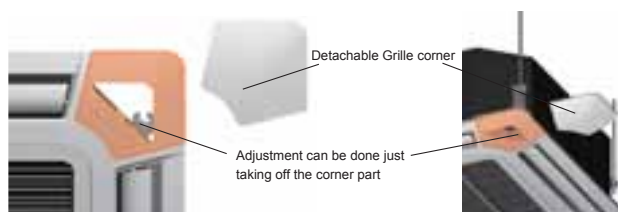
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

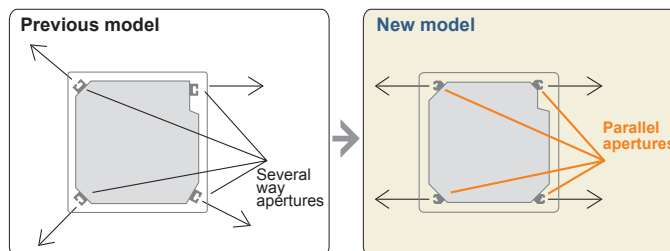
Improvement of the airflow distribution



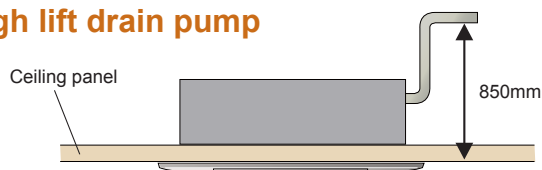
Adjustment of hanger position is possible after installation



One way aperture installation



High lift drain pump



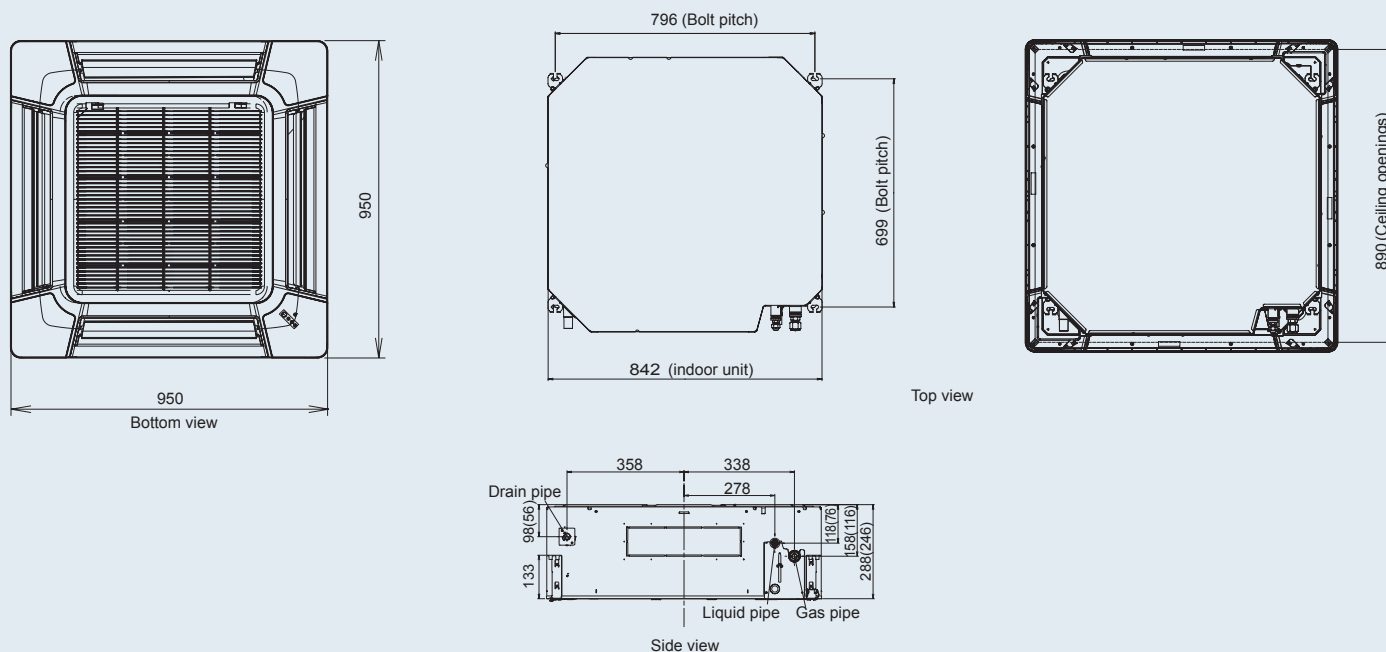
Optional Parts

- IR Receiver Kit UTY-LRH*B1
 - Air Outlet Shutter Plate UTR-YDZC
 - Panel Spacer UTG-BGYA-W
 - Wide Panel UTG-AGYA-W
- H*: HY(FUJITSU); HG(GENERAL)

Dimensions

Models: AUXD18LALH / AUXD24LALH (Slim type)
AUXA30LALH / AUXA36LALH / AUXA45LALH / AUXA54LALH

(Unit : mm)
() : AUXD18 / AUXD24



Compact Duct

Small and compact indoor unit suitable for many applications

Models

ARXB07LALH
ARXB09LALH



Models

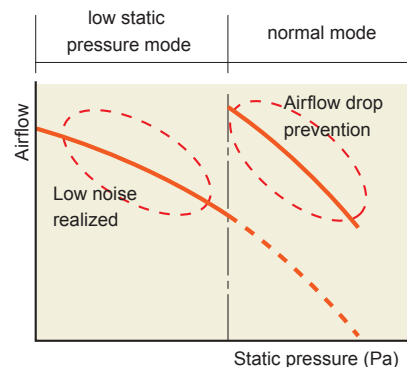
ARXB12LALH
ARXB14LALH
ARXB18LALH



Low noise level

A low noise level has been achieved for each capacity

| Model | | 7 | 9 | 12 | 14 | 18 |
|-------------------------------|-------|--------|----|----|----|----|
| Static pressure (Normal/Max.) | Pa | 0 / 50 | | | | |
| Noise level (Low speed) | dB(A) | 24 | 27 | 25 | 30 | 30 |



Specifications

| Model name | | | ARXB07LALH | ARXB09LALH | ARXB12LALH | ARXB14LALH | ARXB18LALH |
|-----------------------------|----------------|-------|-------------------------|------------|-----------------|------------|------------|
| Power source | | | 230V ~, 50Hz | | | | |
| Capacity | Cooling | kW | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 |
| | Heating | | 2.8 | 3.2 | 4.1 | 5.0 | 6.3 |
| Input power | | W | 46 | 55 | 63 | 90 | 96 |
| Airflow rate | High | m³/h | 370 | 440 | 590 | 800 | 890 |
| | Med | | 310 | 370 | 500 | 750 | 810 |
| | Low | | 280 | 340 | 450 | 700 | 730 |
| Static pressure range | | Pa | 0 to 50 | 0 to 50 | 0 to 50 | 0 to 50 | 0 to 50 |
| Standard static pressure | | | 25 | 25 | 25 | 25 | 25 |
| Sound pressure level | High | dB(A) | 29 | 31 | 30 | 33 | 36 |
| | Med | | 26 | 29 | 28 | 32 | 34 |
| | Low | | 24 | 27 | 25 | 30 | 30 |
| Dimensions (H x W x D) | | mm | 217 x 663 x 595 | | 217 x 953 x 595 | | |
| Weight | | kg | 18 | | 25 | | |
| Connection pipe diameter | Liquid (Flare) | mm | ø6.35 | | | | ø9.52 |
| | Gas (Flare) | | ø12.70 | | | | ø15.88 |
| | Drain | | ø25 (I.D.) ; ø32 (O.D.) | | | | |

Note : Specifications are based on the following conditions.

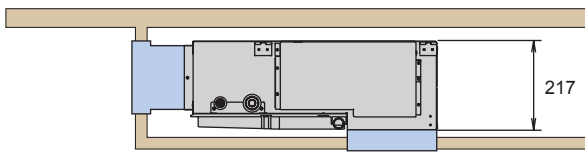
Cooling : Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.

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

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

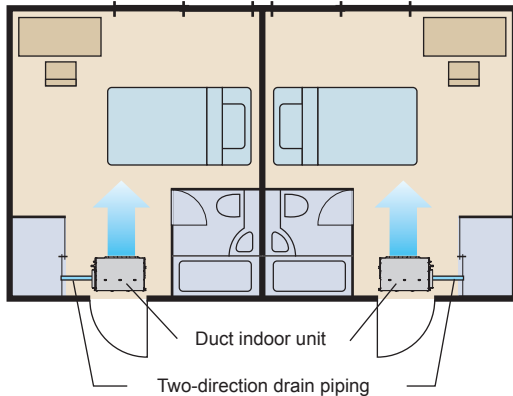
Compact design

Ultra-slim duct air conditioner for easy installation



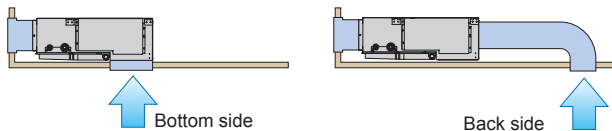
Slim size (217mm) allows installation even where the space behind the ceiling is narrow.

Two-direction drain piping

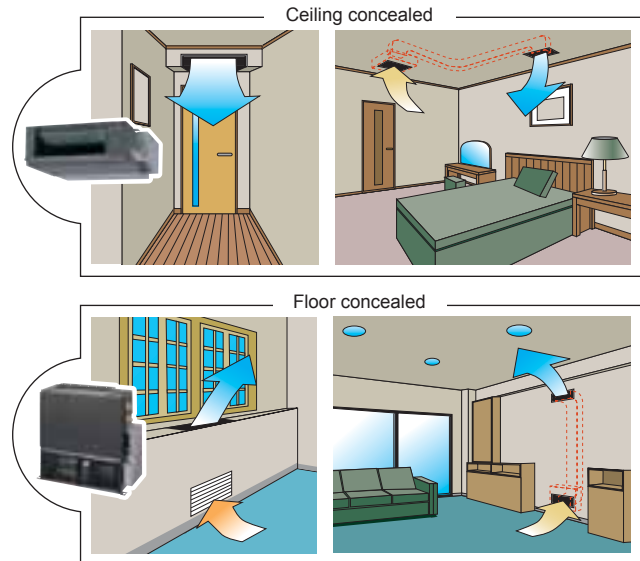


Air-intake

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

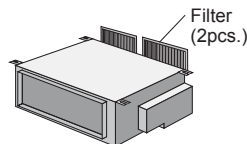


Flexible installation

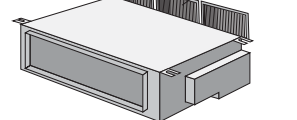


Filter (Accessory)

ARXB07 / ARXB09



ARXB12 / ARXB14 / ARXB18



Optional parts

Remote Sensor Unit UTD-RS100
 IR Receiver Unit UTB-*WB
 Drain Pump Unit UTZ-PX1BBA
 *WB : YWB(FUJITSU) , GWB(GENERAL)

Dimensions

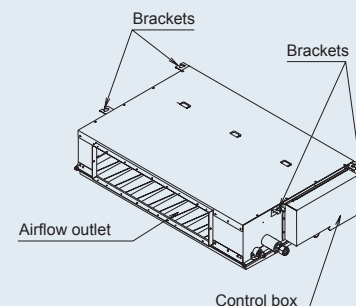
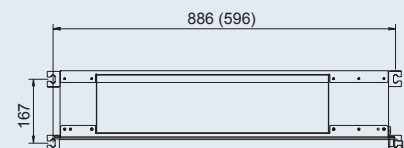
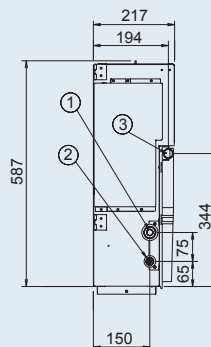
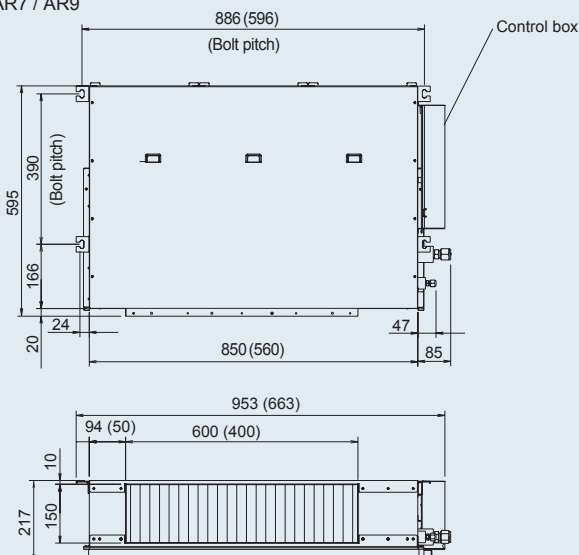
Models: ARXB07 / ARXB09 / ARXB12 / ARXB14 / ARXB18

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

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

(Unit : mm)

() : AR7 / AR9



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

Low Static Pressure Duct

Indoor units suitable for quiet rooms such as a hotel or a bedroom

Models

ARXB24LATH
ARXB30LATH
ARXB36LATH
ARXB45LATH



Duct

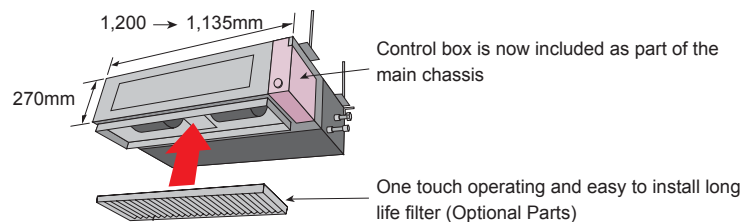
Slim Compact design allows for easy installation in narrow ceiling spaces up to 270mm

Models

ARXA24LATH
ARXA30LATH
ARXA36LATH
ARXA45LATH

Slim & Compact design

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



Specifications

| Model name | | | ARXB24LATH | ARXB30LATH | ARXB36LATH | ARXB45LATH | ARXA24LATH | ARXA30LATH | ARXA36LATH | ARXA45LATH |
|-----------------------------|----------------|-------|------------------------|------------|------------|------------|------------------------|------------|------------|------------|
| Power source | | | 230V ~, 50Hz | | | | 230V ~, 50Hz | | | |
| Capacity | Cooling | kW | 7.1 | 9.0 | 11.2 | 12.5 | 7.1 | 9.0 | 11.2 | 12.5 |
| | Heating | | 8.0 | 10.0 | 12.5 | 14.0 | 8.0 | 10.0 | 12.5 | 14.0 |
| Input power | | W | 145 | 198 | 253 | 338 | 190 | 188 | 312 | 312 |
| Airflow rate | High | m³/h | 1,100 | 1,410 | 1,710 | 1,970 | 1,280 | 1,280 | 1,720 | 1,720 |
| | Med | | 920 | 1,280 | 1,600 | 1,790 | 1,210 | 1,210 | 1,670 | 1,670 |
| | Low | | 810 | 1,150 | 1,470 | 1,670 | 1,130 | 1,130 | 1,600 | 1,600 |
| Static pressure range | | Pa | 0 to 80 | 0 to 80 | 0 to 80 | 0 to 80 | 30 to 150 | 30 to 150 | 30 to 150 | 30 to 150 |
| Standard static pressure | | | 40 | 50 | 50 | 60 | 100 | 100 | 100 | 100 |
| Sound pressure level | High | dB(A) | 31 | 34 | 37 | 41 | 38 | 40 | 43 | 43 |
| | Med | | 27 | 32 | 35 | 38 | 36 | 38 | 41 | 41 |
| | Low | | 25 | 29 | 33 | 36 | 34 | 36 | 39 | 39 |
| Dimensions (H x W x D) | | mm | 270x1,135x700 | | | | 270x1,135x700 | | | |
| Weight | | kg | 43 | 45 | | | 43 | 45 | | |
| Connection pipe diameter | Liquid (Flare) | mm | ø9.52 | | | | ø9.52 | | | |
| | Gas (Flare) | | ø15.88 | | ø19.05 | | ø15.88 | | ø19.05 | |
| | Drain | | ø25 (I.D.); ø32 (O.D.) | | | | ø25 (I.D.); ø32 (O.D.) | | | |

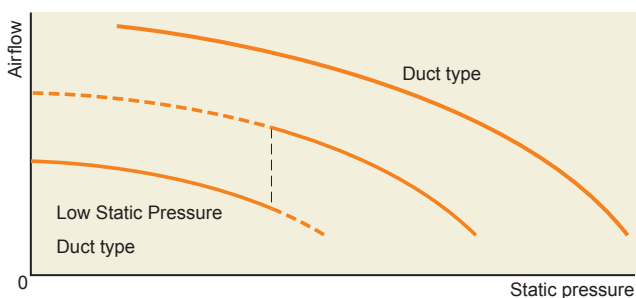
Note : Specifications are based on the following conditions.

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

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

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

Line-up of low-noise and high-power models, compatible with a wide range of static pressure



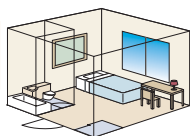
Low Static Pressure Duct type

Optimum model for hotels or bedrooms

An ultra low-noise model that achieves a quiet interior. Perfect for hotels or bedrooms with limited air duct installation space. Two different levels can be selected according to the static pressure range.

25dB

ARXB24
Low



Duct type

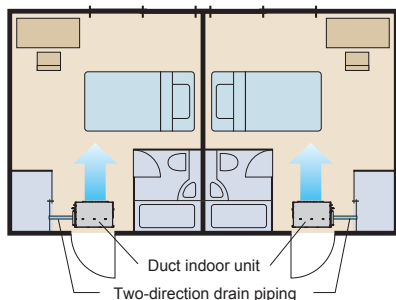
Powerful model with a flexible design

With a powerful motor, appropriate for a wide range of static pressure. Flexible air duct installation is possible in a large space such as an office.

Max. 150Pa

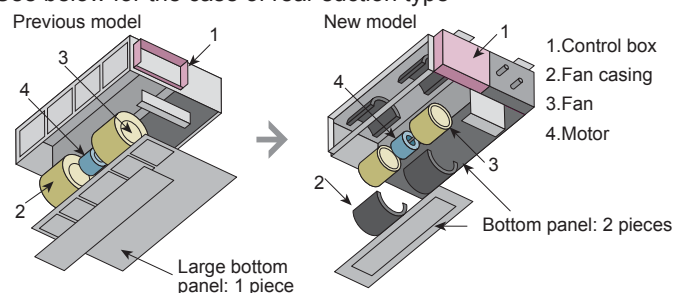


Two-direction drain piping



Easy maintenance

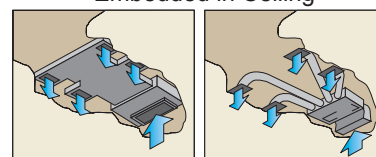
See below for the case of rear suction type



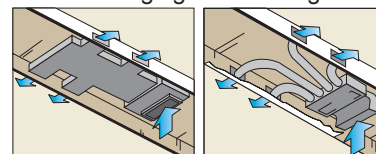
Structural improvement is attained by making the bottom panel two pieces, front and rear. The internal fan casing is also manufactured in two pieces, namely upper and lower. The maintenance of the motor and fan can be easily carried out by removing the rear panel and the lower part of the casing while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

Installation styles

Embedded in Ceiling



Hanging from Ceiling



Optional parts

| | |
|-----------------------------------|------------|
| Remote Sensor Unit | UTD-RS100 |
| Long Life Filter | UTD-LF25NA |
| Flange (Square) | UTD-SF045T |
| Flange (Round) | UTD-RF204 |
| IR Receiver Unit | UTB-★WB |
| Drain Pump Unit | UTZ-PX1NBA |
| ★WB : YWB(FUJITSU) , GWB(GENERAL) | |

Dimensions

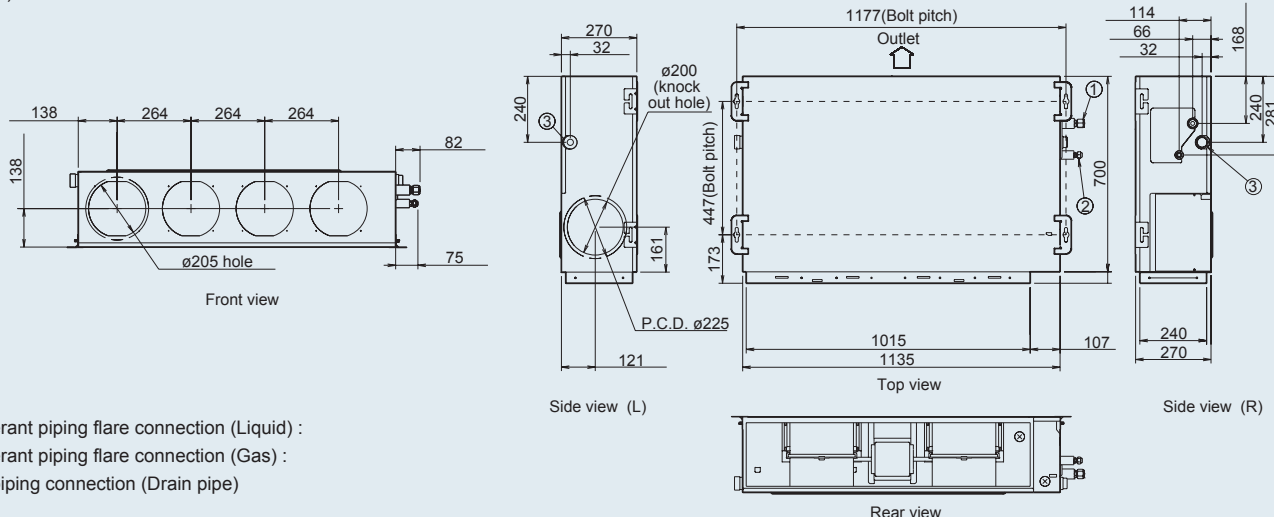
Models: ARXB24 / ARXB30 / ARXB36 / ARXB45

ARXA24 / ARXA30 / ARXA36 / ARXA45

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

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

(Unit : mm)



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

High Static Pressure Duct

These indoor units allow for high airflow quantities

Models

ARXC36LATH
ARXC45LATH
ARXC60LATH



Models

ARXC72LATH
ARXC90LATH



Specifications

| Model name | | | ARXC36LATH | ARXC45LATH | ARXC60LATH | ARXC72LATH | ARXC90LATH |
|-----------------------------|---------|-------|-------------------------|------------|------------|-------------------|------------|
| Power source | | | 230 V ~, 50Hz | | | | |
| Capacity | Cooling | kW | 11.2 | 12.5 | 18.0 | 22.4 | 25.0 |
| | Heating | | 12.5 | 14.0 | 20.0 | 25.0 | 28.0 |
| Input power | | W | 405 | 427 | 427 | 1,110 | 1,250 |
| Airflow rate | High | m³/h | 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 range | | 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 | 45 | 47 | | 82 | 82 |
| Connection pipe diameter | Liquid | mm | ø9.52 (Flare) | | | ø12.70 (Brazing) | |
| | Gas | | ø19.05 (Flare) | | | ø22.22(Brazing) | |
| | Drain | | ø25 (I.D.) ; ø32 (O.D.) | | | | |

Note : Specifications are based on the following conditions.

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

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

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

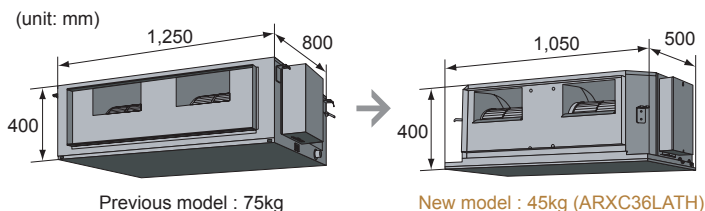
Easy installation (Compact size & Lightweight)

Models : ARXC36

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

Volume
47.5%
down

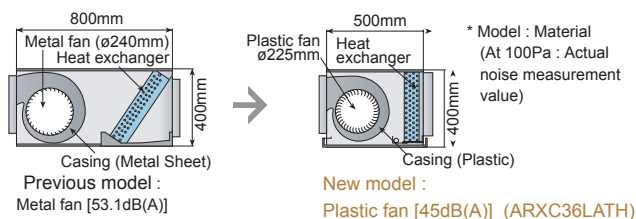
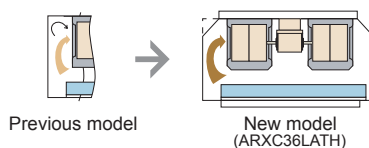
Weight
40%
down



Low noise

Models : ARXC36 / ARXC45 / ARXC60

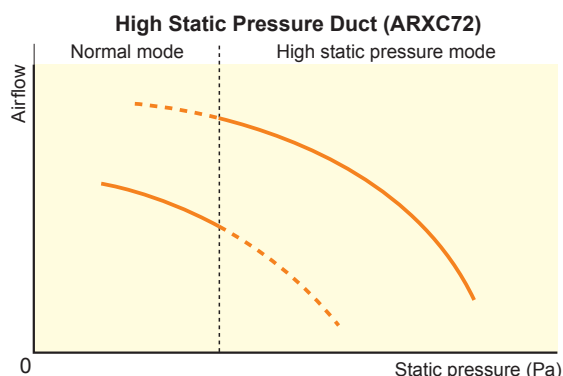
Cutting off the corners of the conventional indoor unit front panel and fan casing, has enabled less turbulent air flow. Low noise is realized by adopting a plastic case and a plastic fan.



Static pressure selection : ARXC72/ARXC90



2 Types of static pressure mode are selectable.



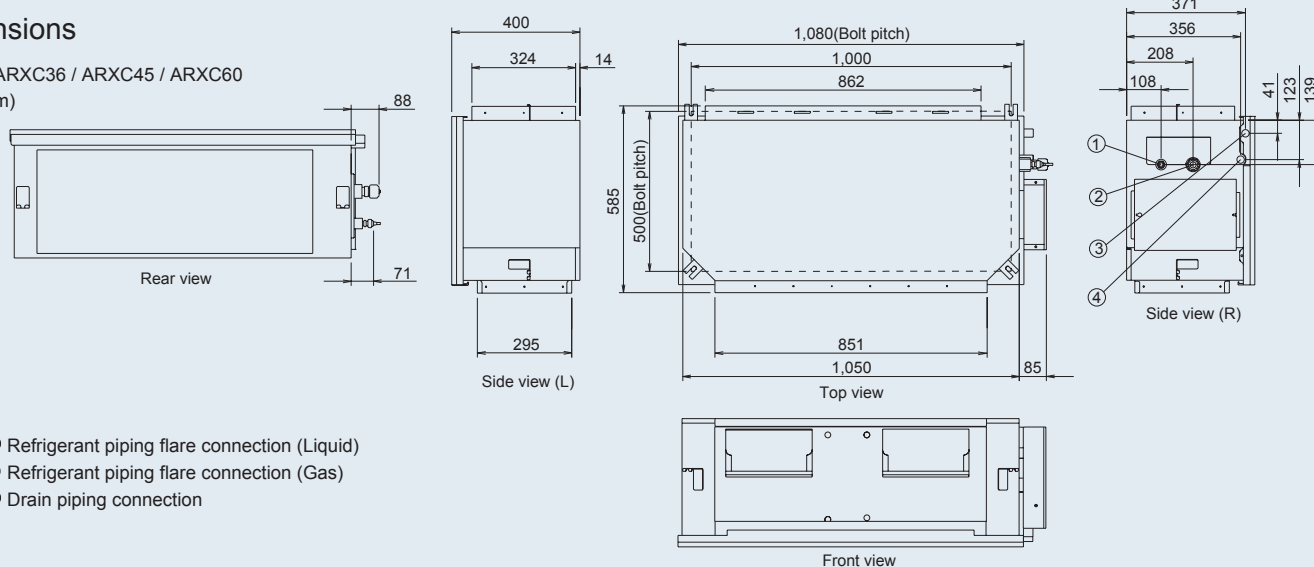
The adoption of a single phase fan motor allows 3 steps fan speed control

Optional parts

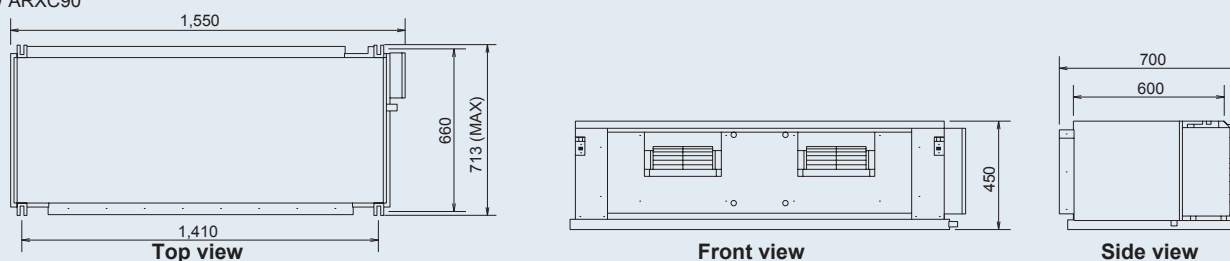
Long-Life Filter UTD-LF60KA (For ARXC36 / 45 / 60)
IR Receiver Unit UTB-★WB
★WB : YWB(FUJITSU) , GWB(GENERAL)

Dimensions

Models: ARXC36 / ARXC45 / ARXC60
(Unit : mm)



Models: ARXC72 / ARXC90
(Unit : mm)



Floor / Ceiling

The slim and lightweight design allows the unit to be suspended from the ceiling or installed on the floor. This type suits many room designs

Models

AB*A12LATH

AB*A14LATH

AB*A18LATH

AB*A24LATH



Flexible installation

Example for floor installation

Floor console



Example for ceiling installation

Under ceiling



Specifications

| Model name | | | AB*A12LATH | AB*A14LATH | AB*A18LATH | AB*A24LATH |
|-----------------------------|----------------|-------|-------------------------|------------|------------|------------|
| Power source | | | 230V ~, 50Hz | | | |
| Capacity | Cooling | kW | 3.6 | 4.0 | 5.6 | 7.1 |
| | Heating | | 4.1 | 4.5 | 6.3 | 8.0 |
| Input power | | W | 57 | 57 | 88 | 88 |
| Airflow rate | High | m³/h | 600 | 600 | 780 | 880 |
| | Med | | 500 | 500 | 650 | 740 |
| | Low | | 480 | 480 | 550 | 630 |
| Sound pressure level | High | dB(A) | 40 | 40 | 46 | 48 |
| | Med | | 37 | 37 | 41.5 | 44 |
| | Low | | 34 | 34 | 37 | 40 |
| Dimensions (H x W x D) | | mm | 199 x 990 x 655 | | | |
| Weight | | kg | 28 | | | |
| Connection pipe diameter | Liquid (Flare) | mm | ø6.35 | | ø9.52 | |
| | Gas (Flare) | | ø12.70 | | ø15.88 | |
| | Drain | | ø25 (I.D.) ; ø32 (O.D.) | | | |

AB*: ABY(FUJITSU), ABH(GENERAL)

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.

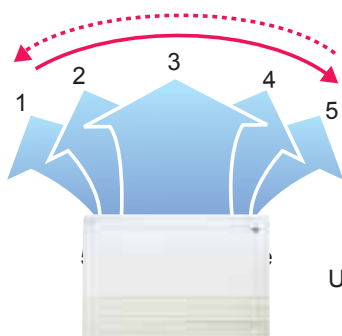
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

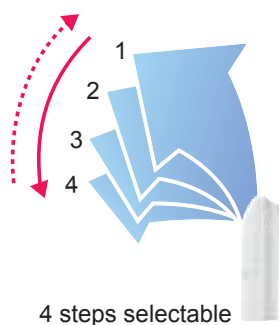
Double auto swing

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

RIGHT and LEFT SWING



UP and DOWN SWING



4 steps selectable

Super vane

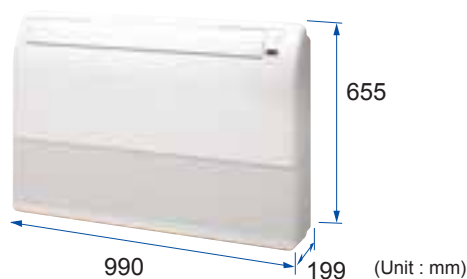
Double Louvre Super vane with newly developed special configuration boosts airflow sending cool air quickly to every corner of the room.

Auto-closing louvre

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

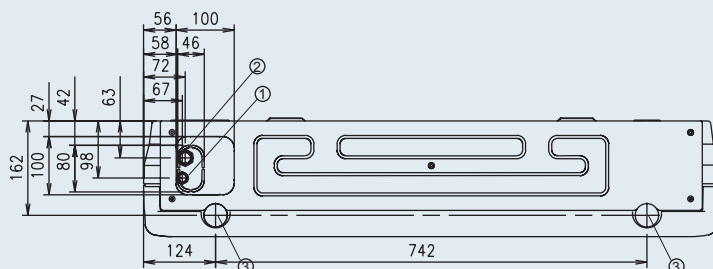
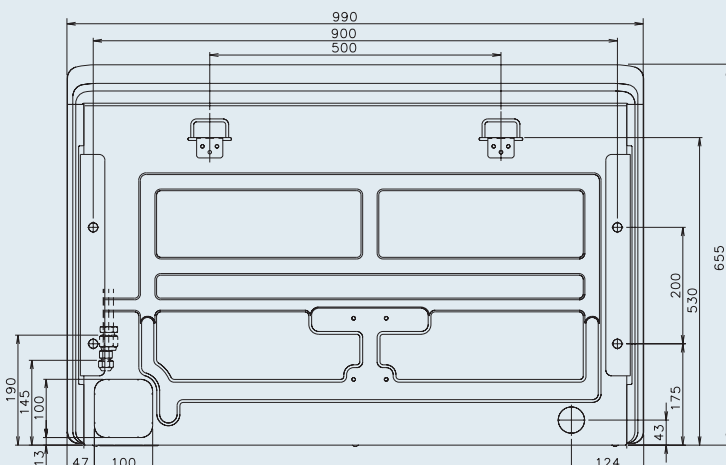
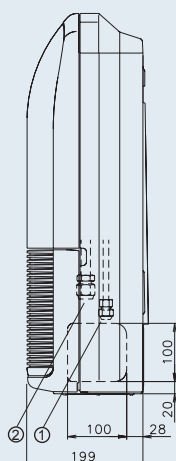
Compact design

Symmetrical, slim and compact design.



Dimensions

Models: AB*A12 / AB*A14 / AB*A18 / AB*A24
(Unit : mm)



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

Ceiling

Easily concealed in any installation

Models

AB*A30LATH

AB*A36LATH

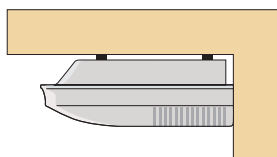
AB*A45LATH

AB*A54LATH



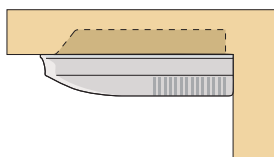
Installation

Open



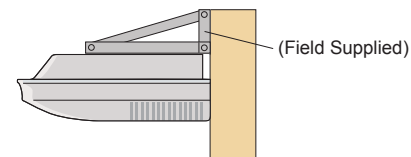
General installation pattern which suspends the indoor unit from the ceiling.

Concealed



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

Wall mounted



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

Specifications

| Model name | | | AB*A30LATH | AB*A36LATH | AB*A45LATH | AB*A54LATH |
|-----------------------------|----------------|-------|-------------------------|------------|------------|------------|
| Power source | | | 230V ~, 50Hz | | | |
| Capacity | Cooling | kW | 9.0 | 11.2 | 12.5 | 14.0 |
| | Heating | | 10.0 | 12.5 | 14.0 | 16.0 |
| Input power | | W | 124 | 144 | 160 | 180 |
| Airflow rate | High | m³/h | 1,450 | 1,660 | 1,850 | 2,200 |
| | Med | | 1,280 | 1,500 | 1,660 | 2,000 |
| | Low | | 980 | 1,270 | 1,430 | 1,800 |
| Sound pressure level | High | dB(A) | 42 | 45 | 48 | 52 |
| | Med | | 39 | 42 | 46 | 50 |
| | Low | | 35 | 37 | 41 | 46 |
| Dimensions (H x W x D) | | mm | 240 x 1,660 x 700 | | | |
| Weight | | kg | 48 | | | |
| Connection pipe diameter | Liquid (Flare) | mm | ø9.52 | | | |
| | Gas (Flare) | | ø15.88 | ø19.05 | | |
| | Drain | | ø25 (I.D.) ; ø32 (O.D.) | | | |

AB*: ABY(FUJITSU), ABH(GENERAL)

Note : Specifications are based on the following conditions.

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

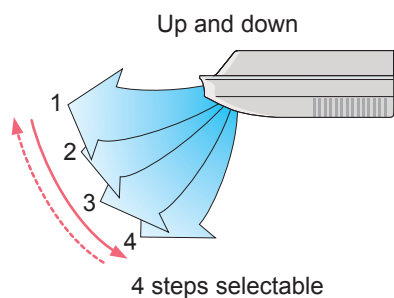
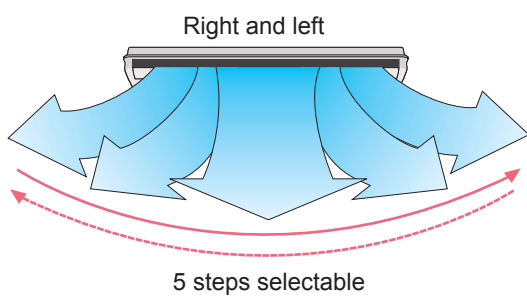
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

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

Voltage : 230 [V].

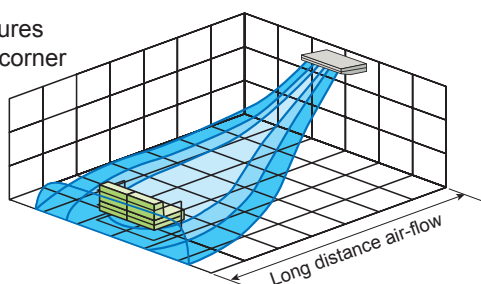
Double auto swing and wide airflow

Auto airflow direction and auto swing



Long Airflow

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

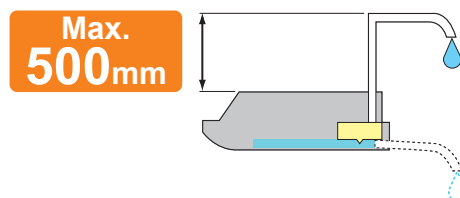


Slim & Compact design

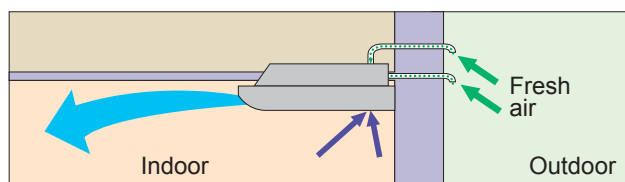


Condensate lift-up mechanism (Option)

Optional drain lift-up mechanism allows flexible installation.



Fresh air intake



Long-life filter

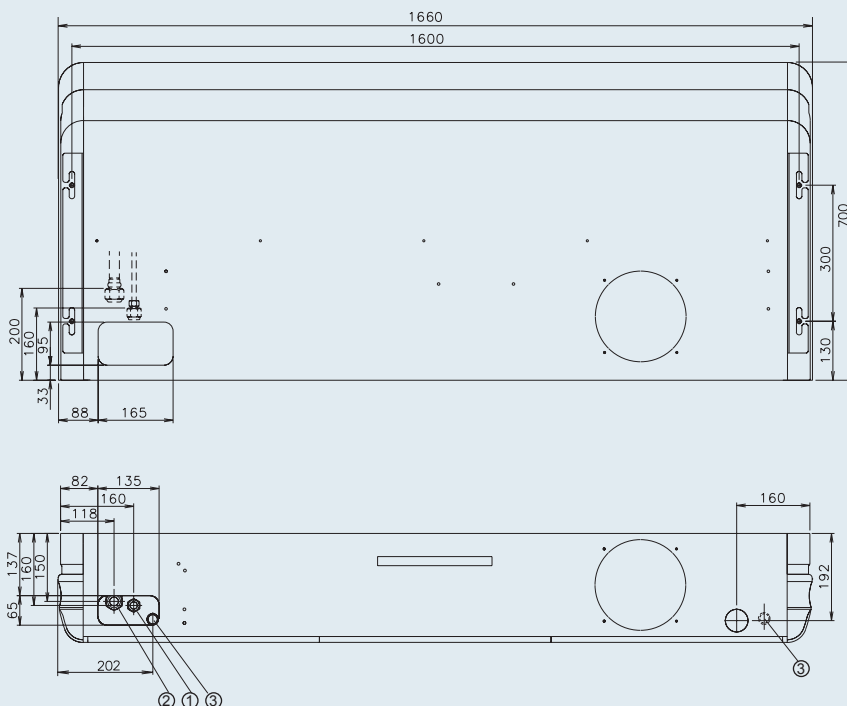
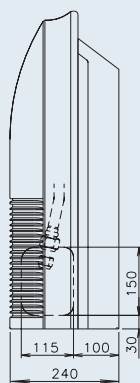
High Efficiency long-life filter doubles the life of the filter compared to standard filters.

Optional parts

Drain Pump Unit UTR-DPB24T

Dimensions

Models: AB*A30 / AB*A36 / AB*A45 / AB*A54
(Unit : mm)



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

Compact Wall Mounted

Compact and Stylish design indoor

Models

(EEV internal model) (EEV external model)

AS*A07LACH AS*E07LACH

AS*A09LACH AS*E09LACH

AS*A12LACH AS*E12LACH

AS*A14LACH AS*E14LACH



Filter features



Apple-catechin filter

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

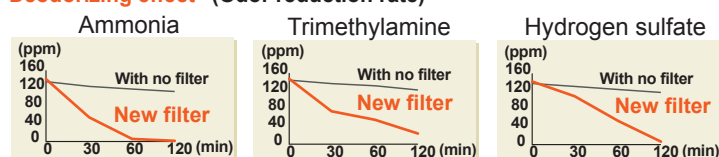


Long-life* Ion deodorization filter

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



Deodorizing effect (Odor reduction rate)



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

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

Specifications

| Model name | | | AS*A07LACH | AS*A09LACH | AS*A12LACH | AS*A14LACH | AS*E07LACH | AS*E09LACH | AS*E12LACH | AS*E14LACH |
|-----------------------------|----------------|-------|---------------------------------|------------|------------|------------|---------------------------------|------------|------------|------------|
| Power source | | | 230V ~, 50Hz | | | | 230V ~, 50Hz | | | |
| Capacity | Cooling | kW | 2.2 | 2.8 | 3.6 | 4.5 | 2.2 | 2.8 | 3.6 | 4.5 |
| | Heating | | 2.8 | 3.2 | 4.1 | 5.0 | 2.8 | 3.2 | 4.1 | 5.0 |
| Input power | | W | 16 | 16 | 19 | 30 | 15 | 16 | 20 | 28 |
| Airflow rate | High | m³/h | 490 | 500 | 560 | 670 | 490 | 500 | 560 | 680 |
| | Med | | 450 | 450 | 480 | 490 | 450 | 450 | 480 | 490 |
| | Low | | 370 | 370 | 420 | 420 | 370 | 370 | 420 | 420 |
| Sound pressure level | High | dB(A) | 35 | 36 | 39 | 44 | 34 | 35 | 38 | 43 |
| | Med | | 33 | 33 | 35 | 37 | 32 | 32 | 34 | 35 |
| | Low | | 27 | 27 | 31 | 32 | 26 | 26 | 30 | 30 |
| Dimensions (H x W x D) | | mm | 275 x 790 x 215 | | | | 275 x 790 x 215 | | | |
| Weight | | kg | 9 | | | | 9 | | | |
| Connection pipe diameter | Liquid (Flare) | mm | ø6.35 | | | | ø6.35 | | | |
| | Gas (Flare) | | ø12.70 | | | | ø12.70 | | | |
| | Drain | | ø13.8(I.D.) ; ø15.8-ø16.7(O.D.) | | | | ø13.8(I.D.) ; ø15.8-ø16.7(O.D.) | | | |
| EV Kit (option) | | | - | | | | UTR-EV09XB | | UTR-EV14XB | |

AS*: ASY(FUJITSU), ASH(GENERAL)

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.

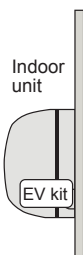
Pipe length : 7.5 m; Height difference between outdoor unit and indoor unit : 0 m.

Voltage : 230 [V].

Low noise

27dB

(AS07/09)



Electronic Expansion valves are built-in allowing for easy installation.

For installation to places that require additional low noise, select the external electronic expansion valve type.

Compact size

Powerful output even compact design

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

**Width
790mm**

Symmetrical design

Symmetrical, clean design that suits all interiors.



New Style High Power DC fan motor

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

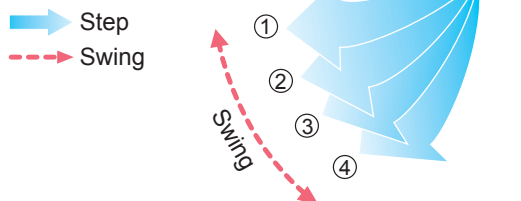


Auto swing louvre

The Auto Swing Louvre function ensures that the air direction corresponds to the mode selected.

Cooling : 2-step (① - ②) *1

Heating : 4-step (① - ④)



*1 When doing 3-4 louvre-setting positions in cooling operation, it returns to the 2 louvre-setting position automatically 30 minutes later.

Easy maintenance

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



Wired control compatible



Wired and Wireless Remote Controller are acceptable.



Wired Remote Controller

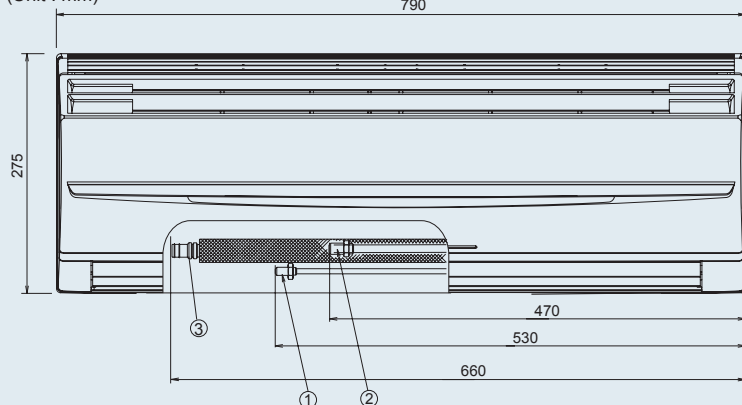


Simple Remote Controller

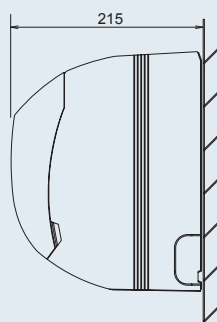
Dimensions

Models: AS*A07 / AS*A09 / AS*A12 / AS*A14
AS*E07 / AS*E09 / AS*E12 / AS*E14

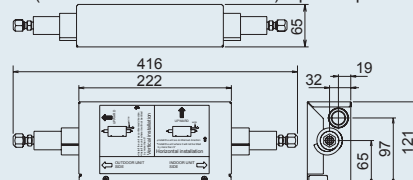
(Unit : mm)



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



EV kit (UTR-EV09XB/ UTR-EV14XB) Optional parts:



Wall Mounted

Double auto swing louver provides pleasant air flow to every corner of the room

Models

AS*A18LATH

AS*A24LATH

AS*A30LATH



Powerful output in spite of small size

Though the indoor unit is compact, it features a large, high pressure cross fan (107mm diameter) in a center mounted configuration and a lambda type heat exchanger to provide plenty of power. The extra long diffuser provides a wide outflow opening for air. This ensures a large air outflow volume over a wide area to cool or heat all areas of the room.



Specifications

| Model name | | | AS*A18LATH | AS*A24LATH | AS*A30LATH |
|-----------------------------|----------------|-------|-------------------------|------------|------------|
| Power source | | | 230V ~, 50Hz | | |
| Capacity | Cooling | kW | 5.6 | 7.1 | 8.0 |
| | Heating | | 6.3 | 8.0 | 8.8 |
| Input power | | W | 63 | 74 | 73 |
| Airflow rate | High | m³/h | 870 | 940 | 980 |
| | Med | | 700 | 720 | 870 |
| | Low | | 540 | 600 | 750 |
| Sound pressure level | High | dB(A) | 43 | 45 | 45 |
| | Med | | 37 | 39 | 42 |
| | Low | | 30 | 33 | 39 |
| Dimensions (H x W x D) | | mm | 320 x 1,120 x 220 | | |
| Weight | | kg | 16 | | |
| Connection pipe diameter | Liquid (Flare) | mm | ø9.52 | | |
| | Gas (Flare) | | ø15.88 | | |
| | Drain | | ø12 (I.D.) ; ø16 (O.D.) | | |

AS*: ASY(FUJITSU), ASH(GENERAL)

Note : Specifications are based on the following conditions.

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

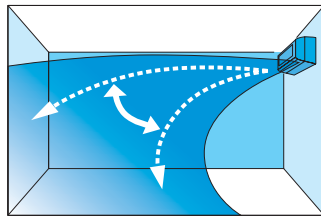
Heating : Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.

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

Voltage : 230 [V].

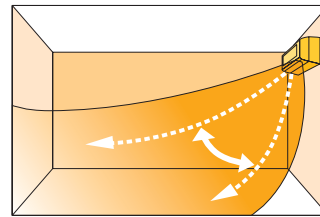
Multi airflow

Large independently driven power diffuser used



Horizontal concentration and other air direction control

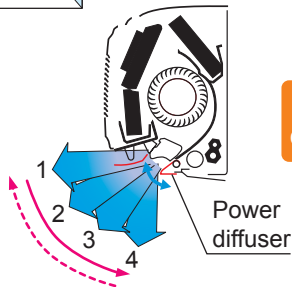
Cooling



Wide down flow

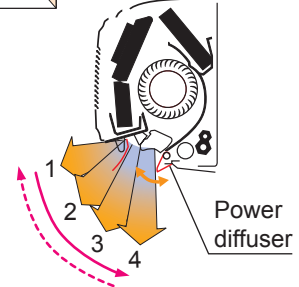
Heating

Steps
Swing



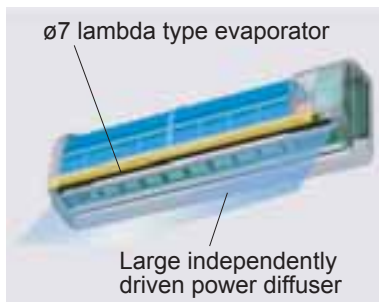
Large independently driven power diffuser

Steps
Swing



Low noise

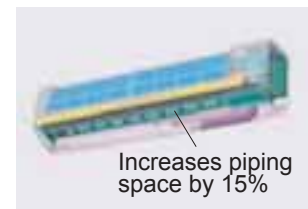
- High efficiency fan construction ⇒ ø7mm Lambda type evaporator improves the airflow path
- Large independently driven power diffuser



Low noise
30dB
(AS18)

Easy installation

Expanded work space at bottom of casing increases piping space by 15%.

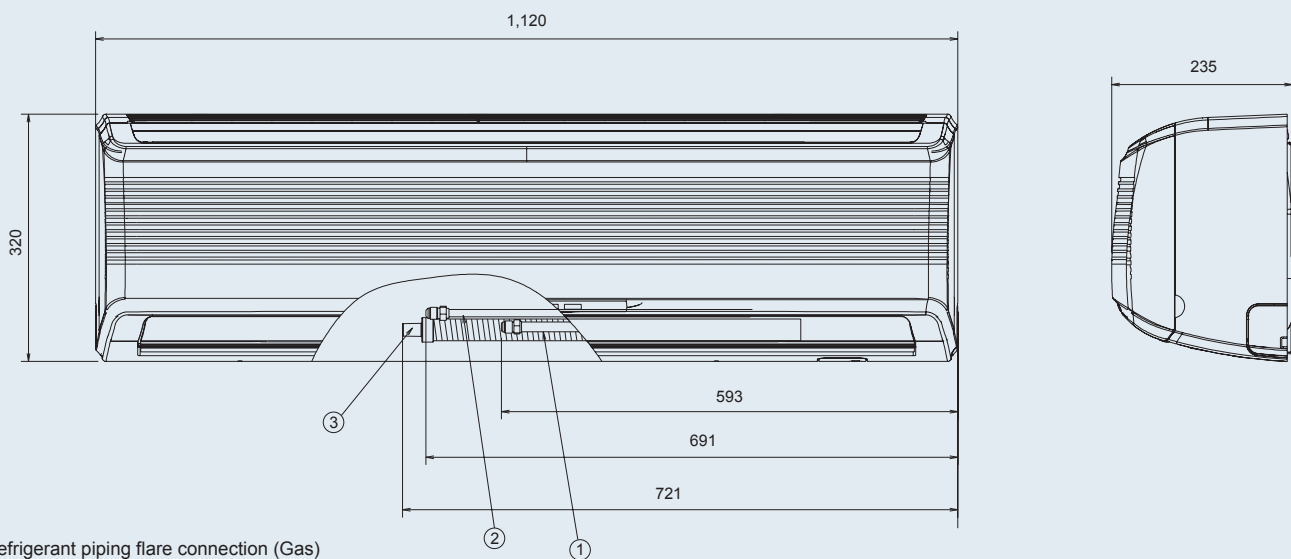


Others

- Double auto swing
- 2-way draining route

Dimensions

Models: AS*A18 / AS*A24 / AS*A30
(Unit : mm)

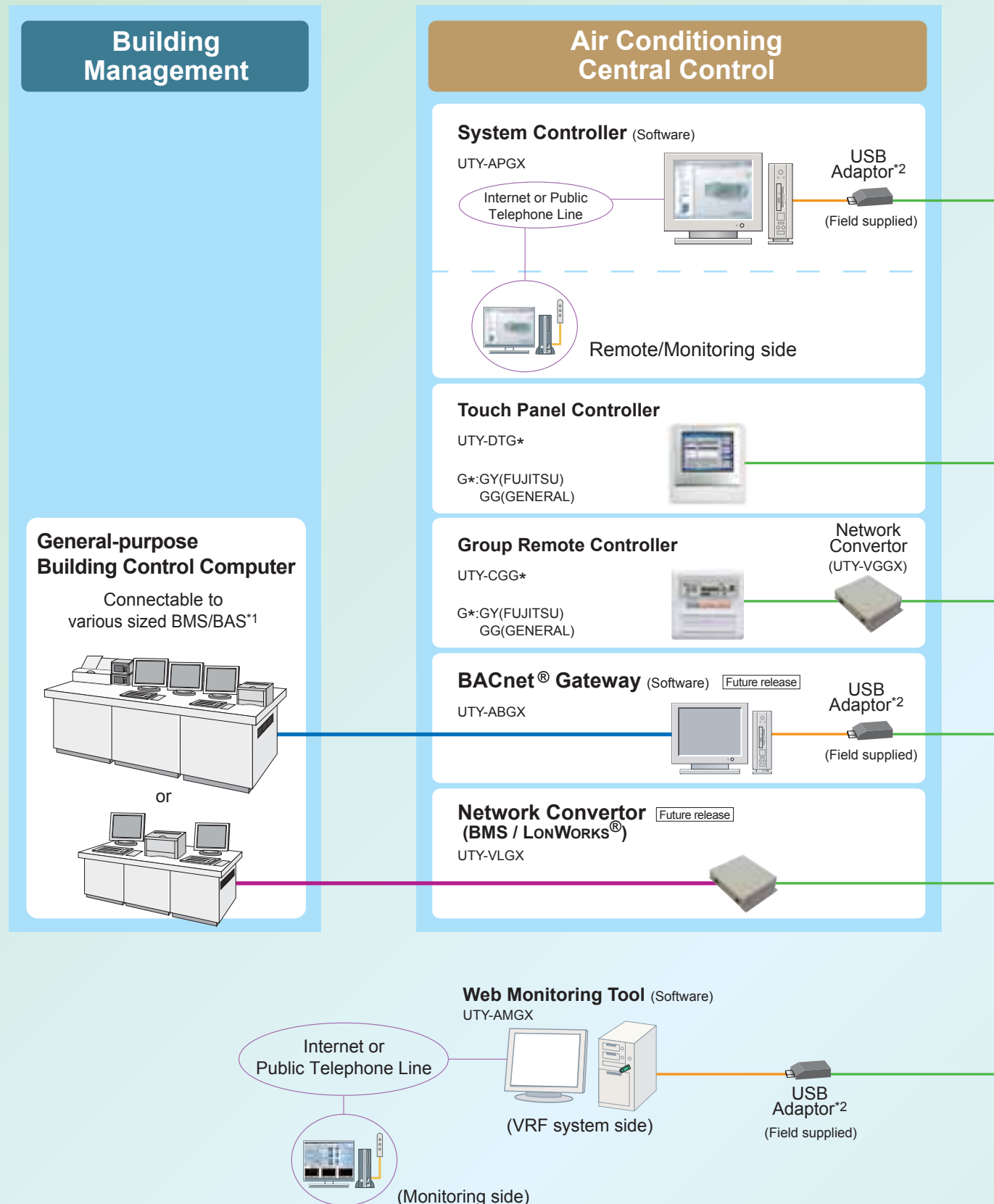


- ① Refrigerant piping flare connection (Gas)
- ② Refrigerant piping flare connection (Liquid)
- ③ Drain piping connection

Control System

The V-II system supports every users needs by offering a variety of Control systems, including individual control, central control and building management control options.

System Diagram



*1. BMS/BAS: Building Management System / Building Automation System
 *2. USB Adaptor is U10 USB Network Interface of Echelon® Corporation.

The device above cannot be connected to the S or V series. (Except System Controller)

Air Conditioning Individual Control

Wired Remote Controller

UTY-RNK*

K*:KY(FUJITSU),KYT(FUJITSU)
KG(GENERAL)



Simple Remote Controller

UTY-RSK*

K*:KY(FUJITSU),KYT(FUJITSU)
KG(GENERAL)



Simple Remote Controller

UTY-RHK*

K*:KY(FUJITSU),KYT(FUJITSU)
KG(GENERAL)



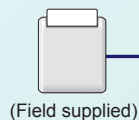
Wireless Remote Controller

UTY-LNH*

H*:HY(FUJITSU)
HG(GENERAL)



Card-key



External Switch Controller

UTY-TEKX



Service Tool (Software)

UTY-ASGX

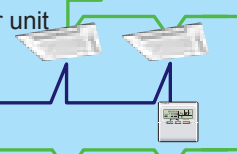


System

Outdoor unit

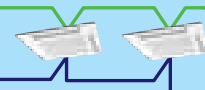


Indoor unit



Signal Amplifier

UTY-VSGX



IR Receiver Unit

UTB-*WB

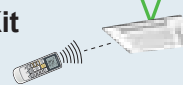
*WB:YWB, TWB



IR Receiver Kit

UTY-LRH*B1

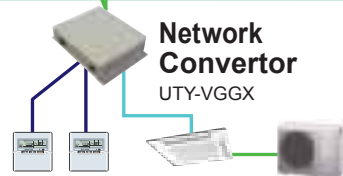
*B:YB(FUJITSU)
GB(GENERAL)



For single split

Network Converter

UTY-VGGX



- Transmission line (VRF Network)
- Module link
- Remote controller line
- USB cable
- LONWORKS Network
- Ethernet
- Signal line(Single split system)
- Group Remote Controller line

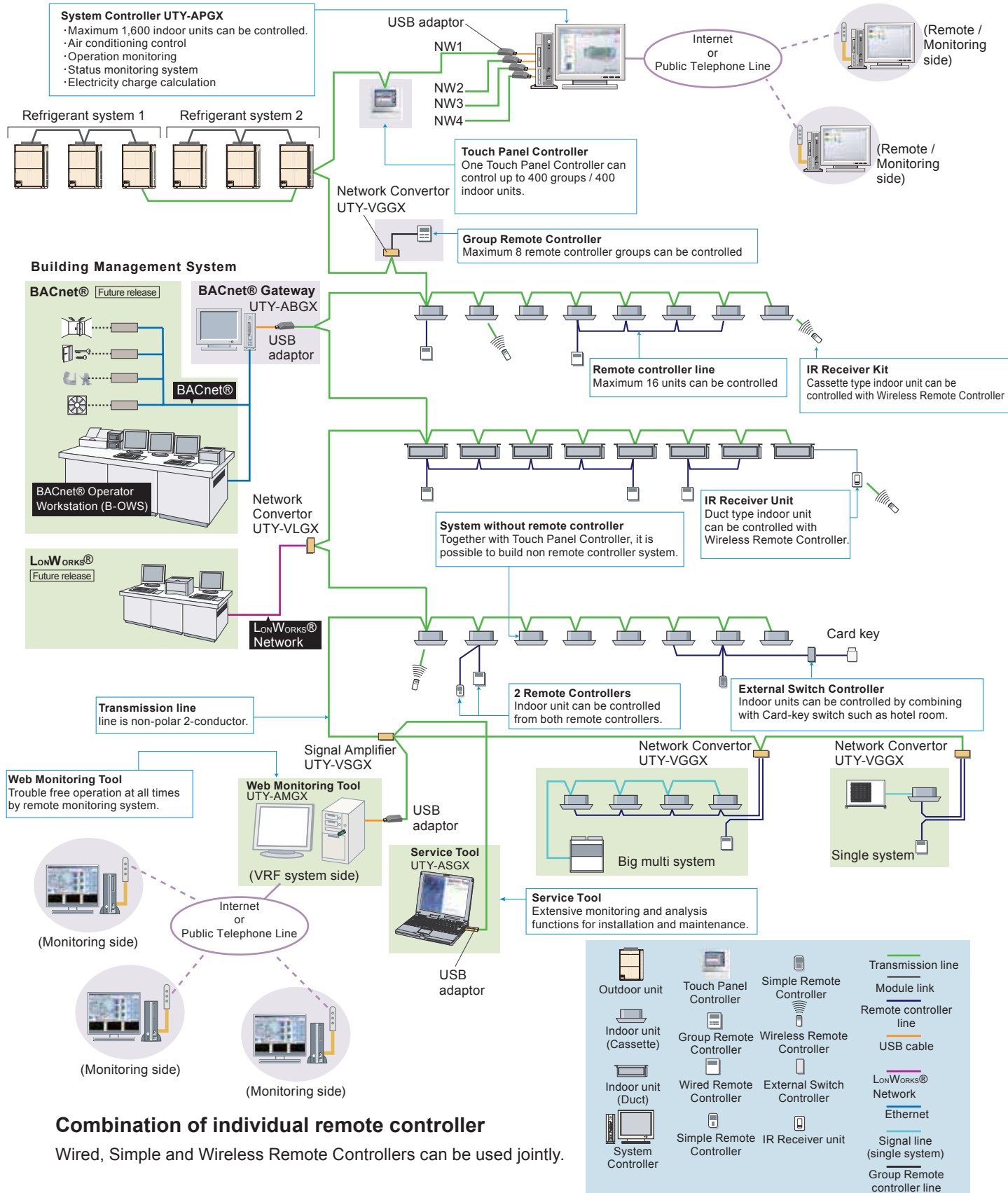
Wiring System

- Wiring construction of the control system is made of power source wiring, transmission wiring and remote controller wiring.
- Total wiring length (total length of transmission line) can be extended up to 3,600m (by using signal amplifiers).

Max. Connectable
100
outdoor units

Max. Connectable
400
indoor units

Max. Transmission
line length
3,600m



Combination of individual remote controller

Wired, Simple and Wireless Remote Controllers can be used jointly.

Comparison table of Controllers

| Item | | Wired Remote Controller | Simple Remote Controller | Simple ¹ Remote Controller | Wireless Remote Controller | Group Remote Controller | Touch Panel Controller | System Controller (Software) |
|--|---------------------------------------|-----------------------------------|-----------------------------------|---------------------------------------|----------------------------|-------------------------|------------------------|------------------------------|
| Model name | | UTY-RNKY UTY-RHKYT UTY-RNKG | UTY-RSKY UTY-RSKYT UTY-RSKG | UTY-RHKY UTY-RHKYT UTY-RHKG | UTY-LNHY UTY-LNHG | UTY-CGGY UTY-CGGG | UTY-DTGY UTY-DTGG | UTY-APGX |
| Max. controllable remote controller groups | | 1 | 1 | 1 | 1 | 8 | 400 | 1600 |
| Max. controllable indoor units | | 16 | 16 | 16 | 16 | 96 | 400 | 1600 |
| Max. controllable groups | | - | - | - | - | - | 400 | 1600 |
| Air conditioning control function | On / Off | ● | ● | ● | ● | ● | ● | ● |
| | Operating 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 | Failure | ● | ● | ● | - | ● | ● | ● |
| | Defrosting | ● | ● | ● | ● | - | ● | ● |
| | Current time | ● | - | - | ● | ● | ● | ● |
| | Day of week | ● | - | - | - | ● | ● | ● |
| | R.C. prohibition | ● | ● | ● | - | - | ● | ● |
| | Cooling/heating priority | ● | ● | ● | - | ● | ● | ● |
| | Address display | ● | ● | ● | - | ● | ● | ● |
| Timer | System schedule timer | - | - | - | - | - | ● | ● |
| | On/off per day | - | - | - | - | - | 20 | 72 |
| | On/off per week | - | - | - | - | - | 140 | 504 |
| | Weekly timer | ● | - | - | - | ● | - | - |
| | On/off per day | 2 | - | - | - | 2 | - | - |
| | On/off per week | 14 | - | - | ● | 14 | - | - |
| | On/off timer | ● | - | - | ● | - | - | - |
| | Sleep timer | - | - | - | ● | - | - | - |
| | Program timer | - | - | - | ● | - | - | - |
| Control | Day off | ● | - | - | - | - | ● | ● |
| | Min. unit of timer setting(Minutes) | 30 | - | - | 5 | 10 | 10 | 10 |
| | Status monitoring system | - | - | - | - | - | ● | ● |
| | Electricity charge calculation | - | - | - | - | - | - | ● |
| | Error history | ● | ● | ● | - | ● | ● | ● |
| | Emergency stop | - | - | - | - | - | ● ^{*2} | - |
| | Control via internet | - | - | - | - | - | - | ● |
| | E-mail notification for malfunction | - | - | - | - | - | - | ● |

*1 "Master control" setting is not available for this model.

*2 This function is available only through external input. control.

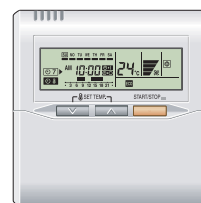
Wired Remote Controller

UTY-RNK*

The room temperature can be controlled by detecting the temperature accurately from the built-in sensor

- Simple operation with Built-in Weekly / Daily Timer.
- Control up to 16 indoor units.
- Up to 2 wired remote controllers can be connected to a single indoor unit.

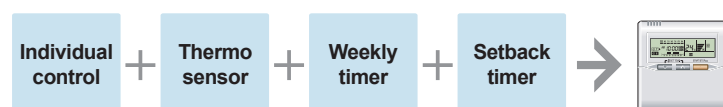
Max. controllable
16
indoor units



Functions

Powerful features and compact size

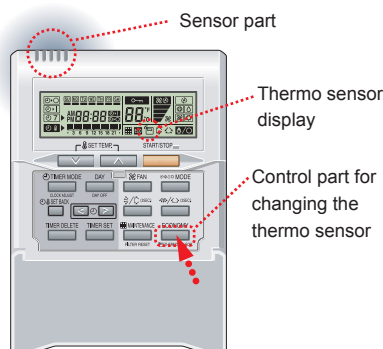
This Wired Remote Controller incorporates four primary functions into a single unit.



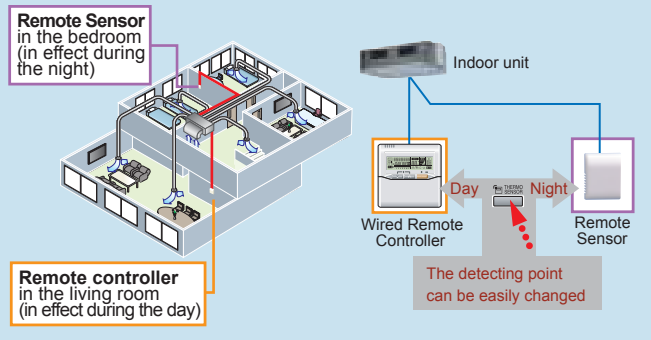
Accurate and comfortable

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

This new wired remote controller and the optional remote sensor allows flexibility in sensor location, suitable for all requirements.



Example of changing sensor



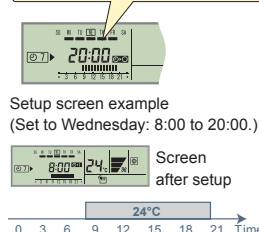
Displayed temperature is set temperature.

Built-in timers

Weekly timer :

Possible to set ON/OFF time to operate twice each day of the week.

Easy-to-understand time bar display



Setback timer :

Possible to set temperature for two times spans and for each day of the week.



Setup screen example
(Set from Sunday to Saturday:
12:00 to 15:00, 28°C.)

At "Weekly timer" + "Set back timer" setup



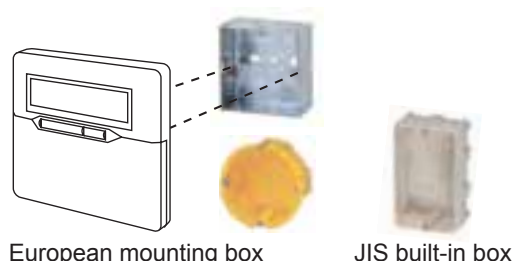
Diagnosis check function

Two methods are available for determining the cause of failure in the event of a malfunction occurs:

- Malfunction diagnosis function
- Error history (Last 16 error codes can be accessed)

Simple installation

Components are compatible with standard switch boxes. Flat back surface allows to be installed wherever it is needed.



Specifications

| | |
|-----------------------------|----------------|
| Model name | UTY-RNK* |
| Power Supply | DC 12V |
| Dimensions (H x W x D) (mm) | 120 x 120 x 17 |
| Weight (g) | 160 |

DC12V is supplied by the indoor unit.

K* : KY(FUJITSU), KYT(FUJITSU), KG(GENERAL)

Simple Remote Controller

UTY-RSK* UTY-RHK* (Without master control)

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.

Max. controllable
16
indoor units



UTY-RSK*



UTY-RHK*
Without master control

Functions

User-friendly operation

- Provides access to basic operations, such as Start / Stop, Fan control, Master control 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.

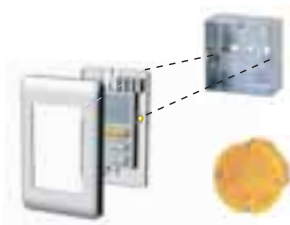
Background light

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



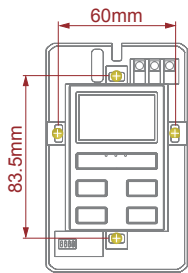
Simple installation

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

| Model | UTY-RSK* | UTY-RHK* |
|--------------------|----------|----------|
| Operation | | |
| On / Off | ● | ● |
| Fan control | ● | ● |
| Master control | ● | —*1 |
| Room temp. setting | ● | ● |

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

Specifications

| Model name | UTY-RSK* | UTY-RHK* |
|-----------------------------|----------------------|----------------------|
| Power Supply | DC 12V | |
| Dimensions (H x W x D) (mm) | 120 x 75 x 14 | |
| Weight (g) | 90 (100 : UTY-RSKYT) | 90 (100 : UTY-RHKYT) |

DC12V is supplied by the indoor unit.

K* : KY(FUJITSU), KYT(FUJITSU), KG(GENERAL)

Wireless Remote Controller

UTY-LNH*

Simple and sophisticated operations
with a choice of 4 daily timers

- A single controller controls up to 16 indoor units.

Max. controllable
16
indoor units

Selectable
4
daily timers



Functions

Built-in daily timer

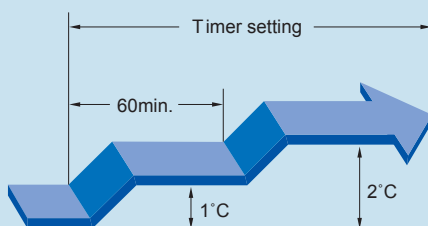
Select from 4 different timer programs : On / Off / Program / Sleep

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

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

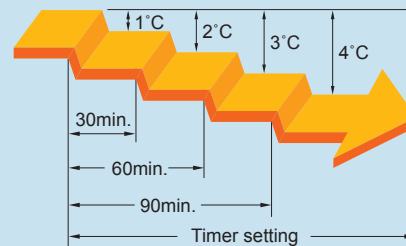
Cooling operation/dry operation

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



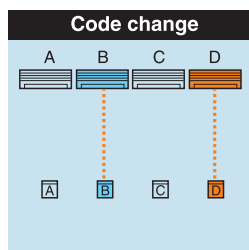
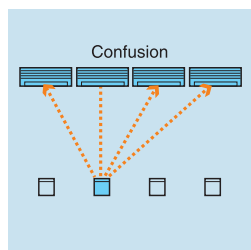
Heating operation

When the sleep timer is set, the set temperature automatically drops 1°C every 30 minutes. The set temperature can drop to a max. of 4°C.

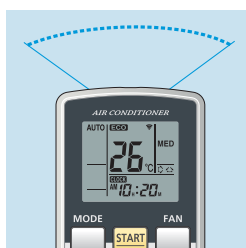


Easy installation and operation

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

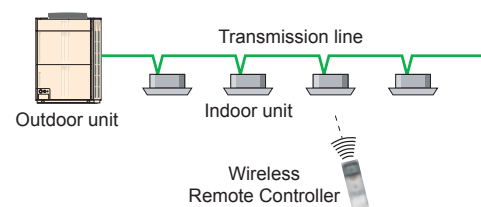


- Wide and precise transmitting range.



System addressing

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



Specifications

| | |
|-----------------------------|-----------------------------|
| Model name | UTY-LNH* |
| Battery | 1.5V (R03 / LR03 / AAA) x 2 |
| Dimensions (H x W x D) (mm) | 158 x 56 x 20 |
| Weight (g) | 70 |

H* : HY(FUJITSU), HG(GENERAL)

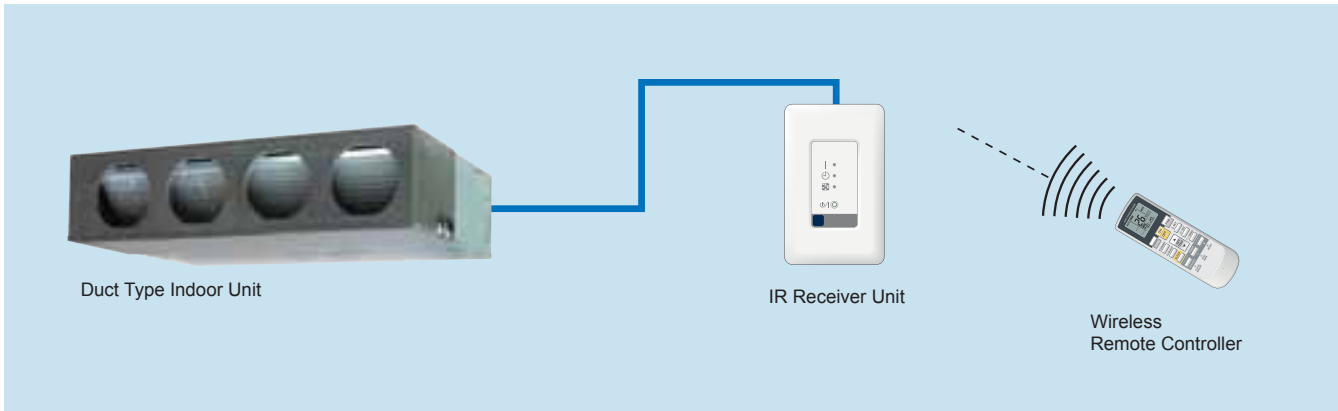
IR Receiver Unit

UTB-***WB**

Necessary to control for all duct type by Wireless Remote Controller



Wiring connection



Specifications

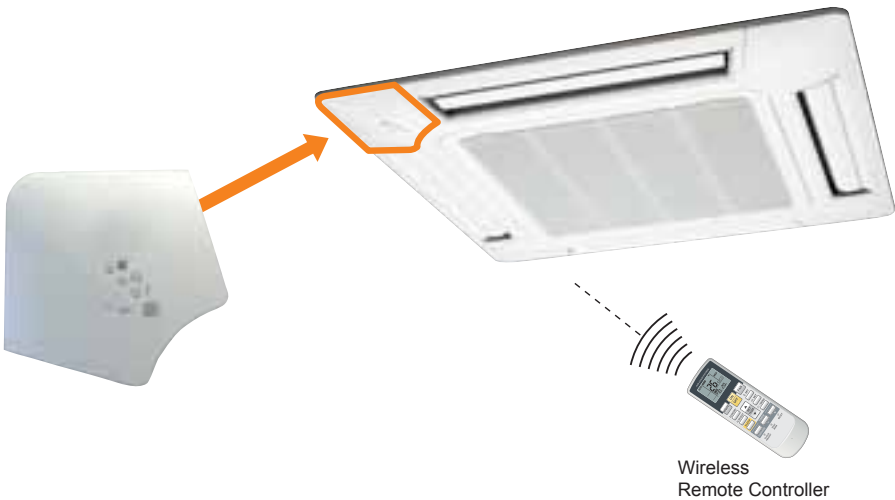
| | |
|-----------------------------|-----------------|
| Model name | UTB- *WB |
| Dimensions (H x W x D) (mm) | 122 x 60 x 26.5 |
| Weight (g) | 150 |

*WB : YWB(FUJITSU), GWB(GENERAL)

IR Receiver Kit

UTY-LRH***B1**

Cassette type indoor unit can be controlled with Wireless Remote Controller



Specifications

| | |
|-----------------------------|---------------------|
| Model name | UTY-LRH *B1 |
| Dimensions (H x W x D) (mm) | 213.8 x 213.8x 25.7 |
| Weight (g) | 140 |

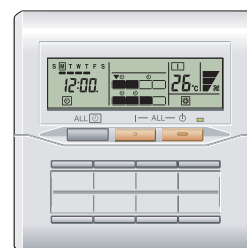
H* : HY(FUJITSU), HG(GENERAL)

Group Remote Controller

UTY-CGG*

Max. controllable
8
remote controller groups

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



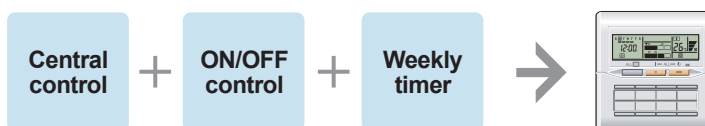
Group control of indoor units with simple operation

- 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 Converter (UTY-VGGX) is required to connect Group Remote Controllers to a VRF network system.
(Network Converter allows up to 4 Group Remote Controllers)

Functions

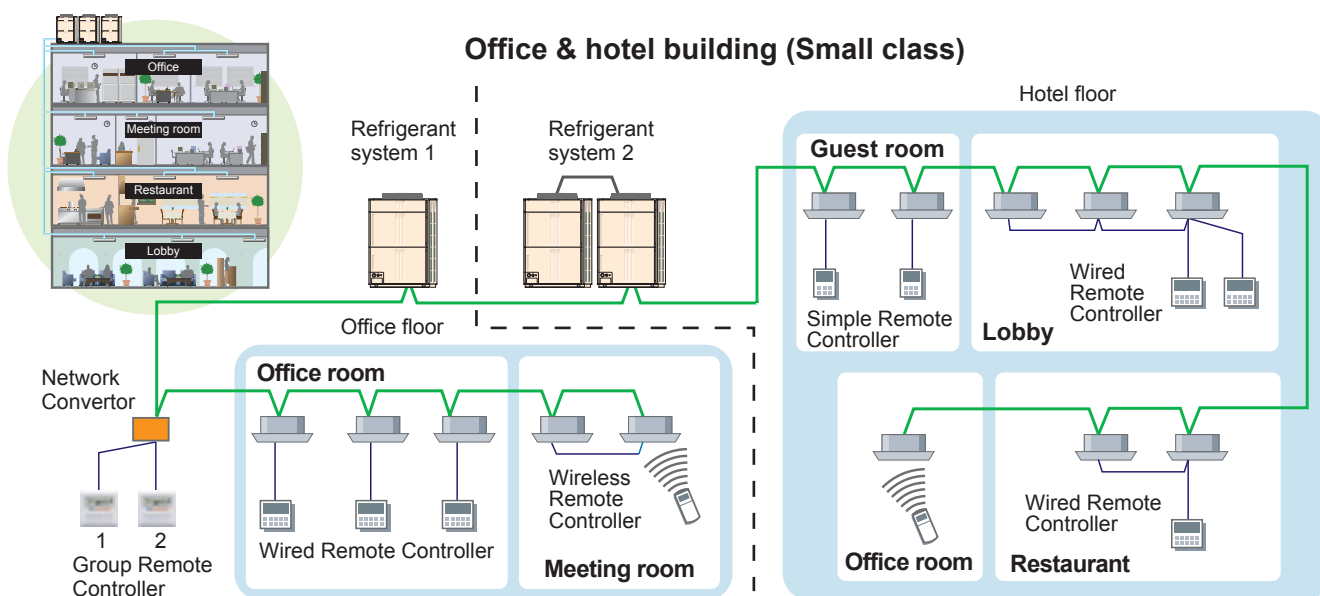
High performance and compact size

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



Control up to 8 remote controller groups

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



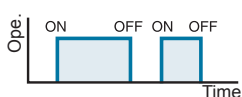
Group Remote Controller 1: To control office floor and hotel floor (8 remote controller groups).
Group Remote Controller 2: To control hotel floor (5 remote controller groups).

Built-in weekly timers

The weekly timer is provided as a standard function.

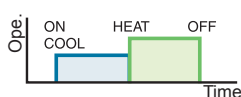
1. The timer can be set up for up to 4 times per day. (On / Off, operating mode, set temperature)
2. Allows separate settings for each day of the week.

ON / OFF switching



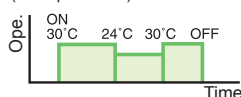
Air conditioning ON/OFF setting corresponding to air conditioning specification needs is possible.

Cooling / Heating switching



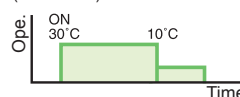
Switching between the cooling mode and heating mode can be set by time.

Temperature switching (Peak power cut)



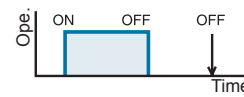
Since peak power cut is performed in a planned way, setting which changes the room temperature linked with time is possible.

Temperature switching (Anti-freeze)



Low temperature heating operation can be set to prevent freezing in cold regions at night, etc.

Stop setting



Indoor unit stop setting at operation end time is possible.

Useful functions

1 Timer setting at all the connected indoor units is possible by centralized timer on the front panel.

ALL TIMER Button

Press the ALL TIMER button to turn the timer operation on or off for all indoor units.

3 The indoor unit can be quickly turned on and off by ON / OFF button of each indoor unit on the front of the door.

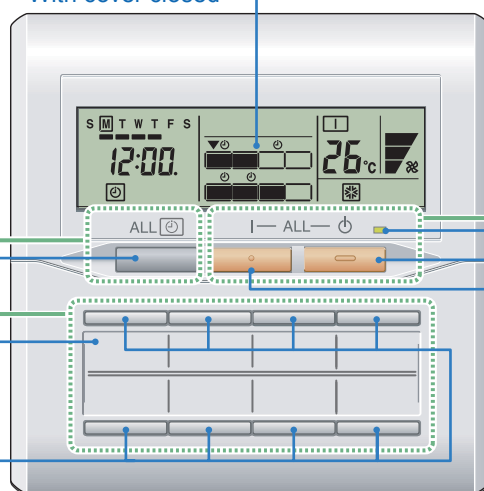
Indoor Unit Name Labels

Write the names of the indoor units on the included labels and attach them.

ON / OFF Button

Press the ON / OFF button to turn the corresponding indoor unit on or off.

With cover closed



Indoor Unit Operation Indicators

Timer setting at all the connected indoor units is possible by centralized timer on the front panel.

■ : On
○ : Timer operation
□ : Off
▼ : Selection

2 All the connected indoor units can be turned on / off simultaneously by centralized ON/OFF button on the front of the cover.

Operation Lamp

This is on if any of the indoor units is operating. This flashes if any of the indoor units has malfunction(s).

ALL OFF Button

Press the ALL OFF button to turn off all of the indoor units.

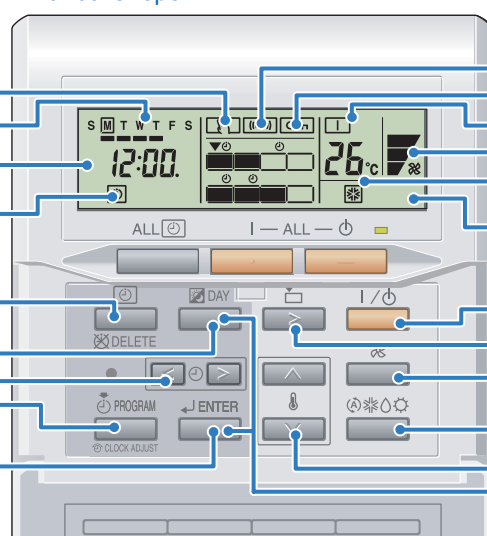
ALL ON Button

Press the ALL ON button to turn on all of the indoor units.

Timer and Clock Display and setting

With cover open

Setting Display
Day Display
Timer and Clock Display
Timer Mode Display
Timer Mode (DELETE) Button
DAY Button
Set Time Button
PROGRAM (CLOCK ADJUST) Button
ENTER Button



Displaying the Status and Controlling indoor units

Transmission Display
Operation Lock Display
ON / OFF Display
Fan Speed Display
Set Temperature Display
Operation Mode Display
ON / OFF Button
Select Button
Fan Control Button
Master Control Button
Set Temperature Button
Child Lock Function

*1 : "AUTO" is not available for a heat pump model unless it is set up for the master indoor unit.

*2 : "FAN" is not available for a heat pump model

*3 : "HEAT" is not available for a cooling only model

Specifications

| | |
|-----------------------------|----------------|
| Model name | UTY-CGG* |
| Power Supply | DC 12V |
| Dimensions (H x W x D) (mm) | 120 x 120 x 17 |
| Weight (g) | 200 |

DC12V is supplied by a network converter.

Touch Panel Controller

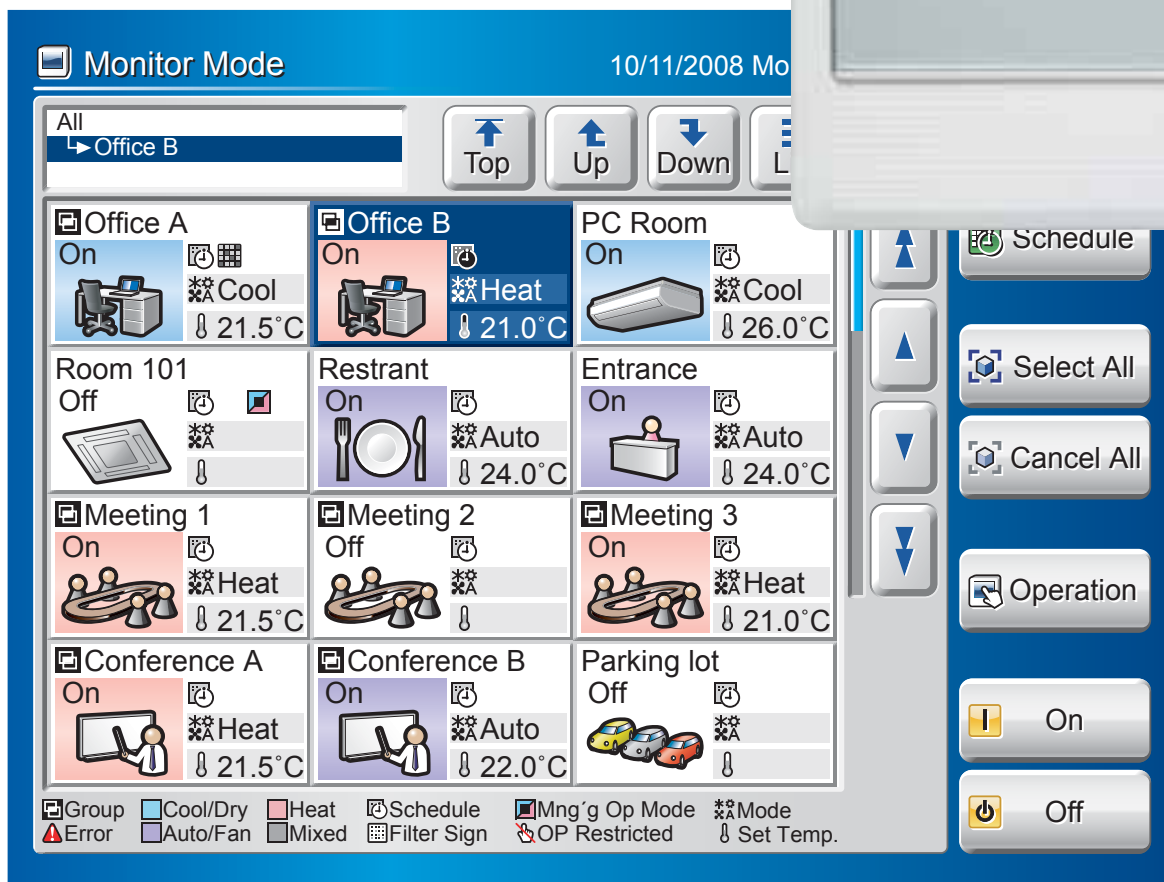
UTY-DTG*

7.5 inch screen

High visibility and easy operation via high resolution 7.5 inch TFT-LCD touch panel screen

Stylish design

Stylish shape and design to suit all applications



Real size screen image

Easy operation

- Large and wide-angled LCD is easily viewable even at a distance
- Easy-to-understand icon-driven Graphical User Interface (GUI)
- Wide range of simple-to-understand icons
- Operation can be selected using your finger or the dedicated touch pen by pressing the appropriate on-screen icon
- Up-to-date status display
- Background color identifies current control operation
Blue for monitoring, green for operational control

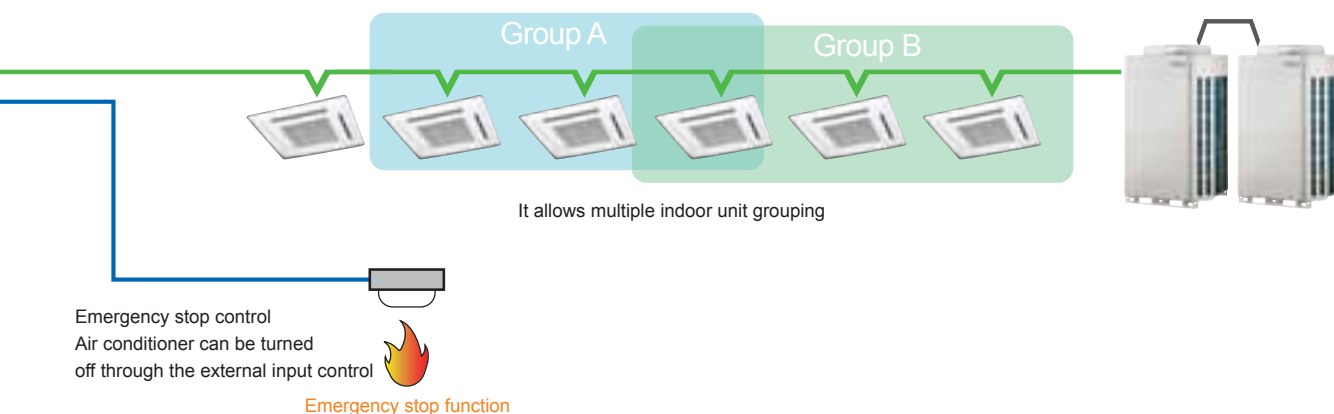


Easy maintenance

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



Up to 400 indoor units can be controlled



Versatility



Function

- Up to 400 indoor units can be controlled
- It allows multiple indoor units grouping
- Schedule timer function is standard(20 patterns per day)
- Emergency stop function(through the external input control)
- Temperature upper and lower limit setting
- The clock of each indoor unit correct setting



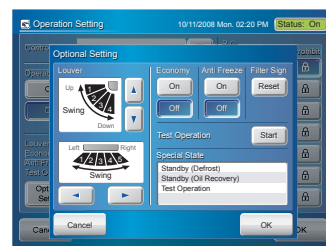
Individual control



Flexible grouping



Schedule control



Indoor units operation monitoring

Easy installation

Touch Panel Controller is easily mounted to the wall
Flat back surface allows to be installed wherever it is needed.

- Correctable mechanism for tilting (horizontal) after the installation of the body

No additional component is required for installation

- There is no need for the installation space of power supply adaptor and transmission adaptor etc.



Specifications

| | |
|-----------------------------|------------------|
| Model name | UTY-DTG* |
| Power Supply | 100-240V 50/60Hz |
| Dimensions (H x W x D) (mm) | 260 x 246 x 54 |
| Weight (g) | 2,150 |
| Interface | USB 2.0 |

System Controller

Software

UTY-APGX

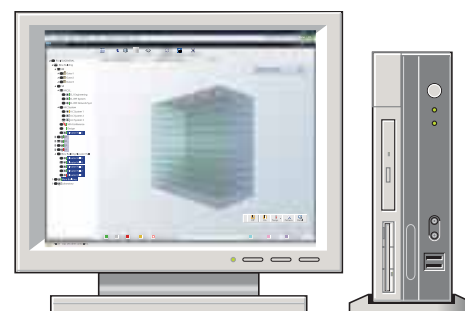
This system realizes the advanced general monitoring & control of VRF system from small scale buildings to large scale buildings.

- Up to a maximum of 4 network systems, 1600 indoor units, and 400 outdoor units can be controlled.
- Supports VRF S series, V series and V-II series.
- 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.

Max. controllable
4
VRF system

Max. controllable
400
outdoor units

Max. controllable
1,600
indoor units



Functions

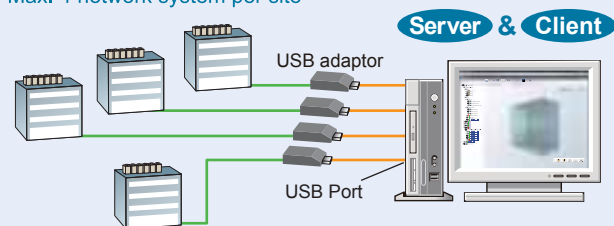
Remote centralized control

System controller may be used on site or remotely over various networks for remote central control. System controller requires 2 softwares working together. Server program runs in the background and communicate with VRF System. Client program provides user interface and communicate with the Server. Server and client program may run in a single PC or in different PCs separated by network.

By using client software, one PC can perform central control and web control of 10 VRF system sites with max. 20 buildings per site.

On site central control

Max. 4 network system per site



1 network system

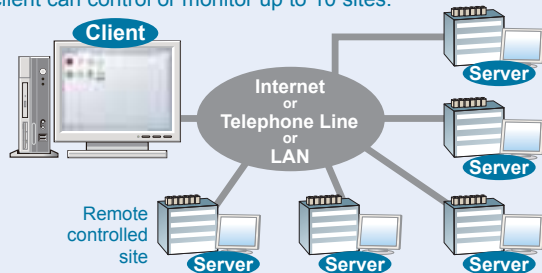
Max. controllable
400
Indoor units

100
Outdoor units

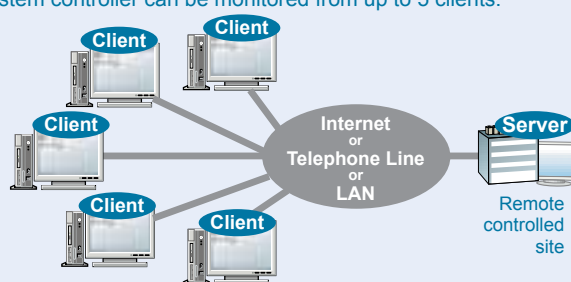
Max. transmission line length
3,600m

Remote central control

1 client can control or monitor up to 10 sites.

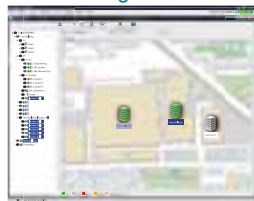


1 system controller can be monitored from up to 5 clients.



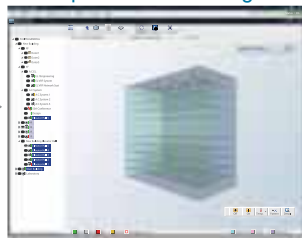
User friendly view and operation

Monitoring located site



Monitor mode (Site)

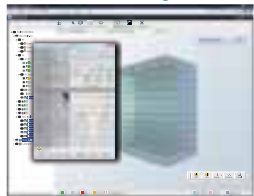
Main operation monitoring screen



Monitor mode (Building)

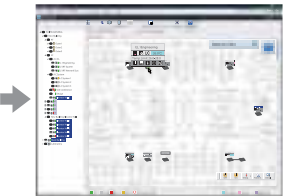
- Provides graphical view of units layout as site, building and floor layout just as they are located in the actual sites.
- Unit status may be monitored at a glance, selecting the appropriate view that just fit your purpose.
- Control may also be performed from various views as individual unit or as a whole site, building or a whole floor.
- User defined groups, that are neatly arrange as tree view, easy to find, monitor and operate.

Air conditioning control

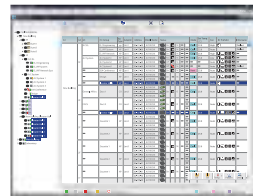


Operation setting

Operation monitoring of each site

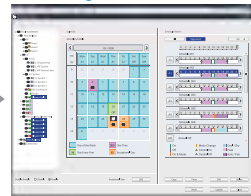


Monitor mode (Floor)



Monitor mode (List)

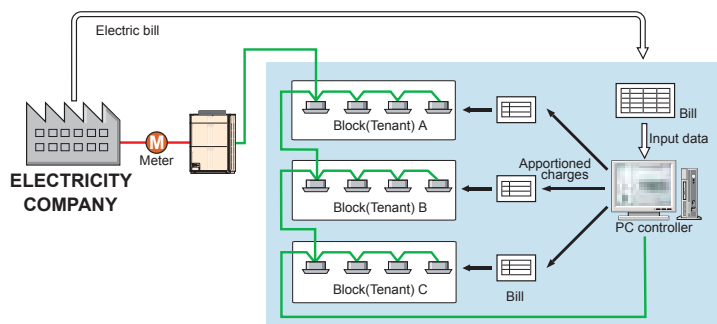
Management functions



Schedule setting

Electricity charge calculation

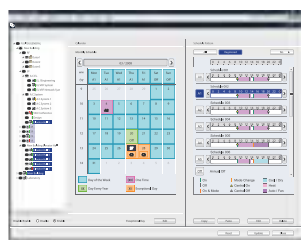
- Total electricity charge, billed for multiple indoor units connected to the charge meter for air conditioning, is apportioned according to the accumulated operation time and indoor unit capacity.
- Allows accounting for special rates (e.g., for night or weekend use).
- Calculations can be printed as final bills format.



Note: This electrical power apportioning calculation is not official.
When issued to the user as a bill, it must be explained to the user in advance.

Schedule control

- 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 recorded 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.



Schedule Control

Error display

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.



Operation Record

Diverse control of indoor units

- Indoor unit operation state, operation mode, etc. are displayed
- Indoor unit start/stop and operation mode switching
- Temperature setting, Remote Controller prohibition.



Energy saving function

Energy saving operation considering comfort by economy setting, upper/lower limit temperature setting, etc.



OPERATING CONDITIONS

The following chart shows the detail requirement for an AT compatible personal computer to run System Controller.
Applies for both server and client software.

| | |
|-------------------------|--|
| Personal Computer | AT compatible machine that runs Microsoft® Windows® |
| Operating System | Microsoft® Windows® Vista Home Premium, Business, Ultimate Edition Microsoft® Windows® XP Professional with Service Pack2 or later |
| CPU | Intel® Pentium® / Celeron 2GHz (Server), 1GHz (Client) or higher |
| HDD | 40GB or more of free space (5GB for Client PC) |
| Memory | 1GB or more |
| Display | 1024 x 768 dots or more. 15 inch or higher size is preferable. |
| Interface | USB port is required for each of the followings for Server PC; -Wibu Key (Software protection key) - Echelon® U10 USB Network Interface (Required for each VRF Network) Ethernet port is required for remote connection using internet. |
| Other Software Required | Adobe® Acrobat® reader 4.0 or later |
| Accelerator | Requires the internal graphics accelerator be compatible with Microsoft® DirectX® 9.0 or later. |

<PACKING LIST>

| Item | Q'ty | Application |
|---------------------------------------|------|--|
| CD-ROM | 1 | Includes the software for System Controller. Both server and client software is included. |
| Wibu Key (Software protection key) | 1 | Software protection key to be inserted in a USB slot running System Controller. System Controller may only run on a PC with Wibu Key. Remote client software does not require Wibu Key. |

Personal computer must be field supplied.
U10 USB Network Interface must be field supplied. Contact EchelonR Corporation or its local sales representative for detail.
Product Name : U10 USB Network Interface - TP/FT-10 Channel Model Number: 75010R

Network Converter

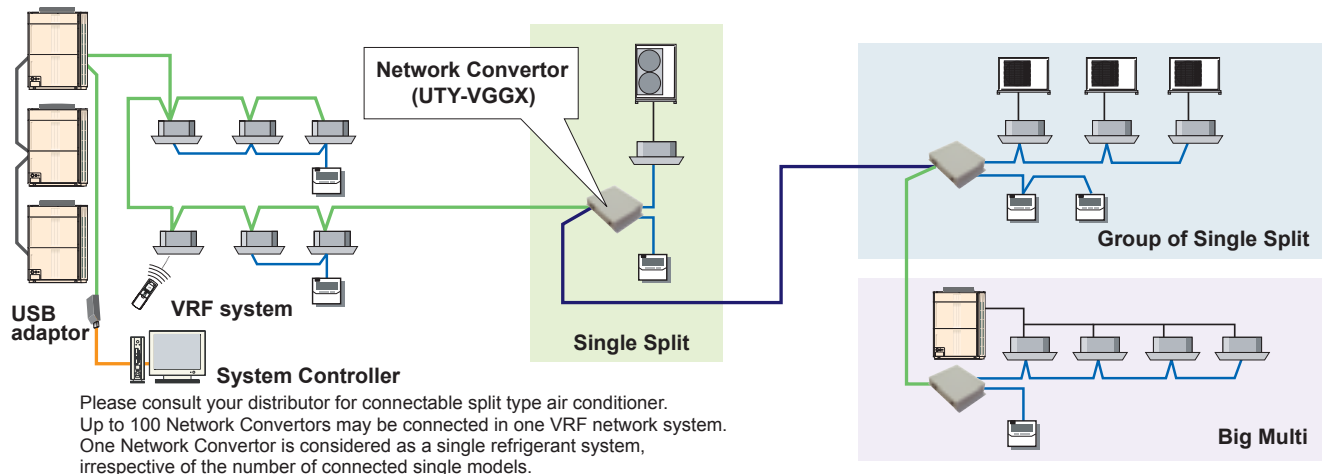
UTY-VGGX

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



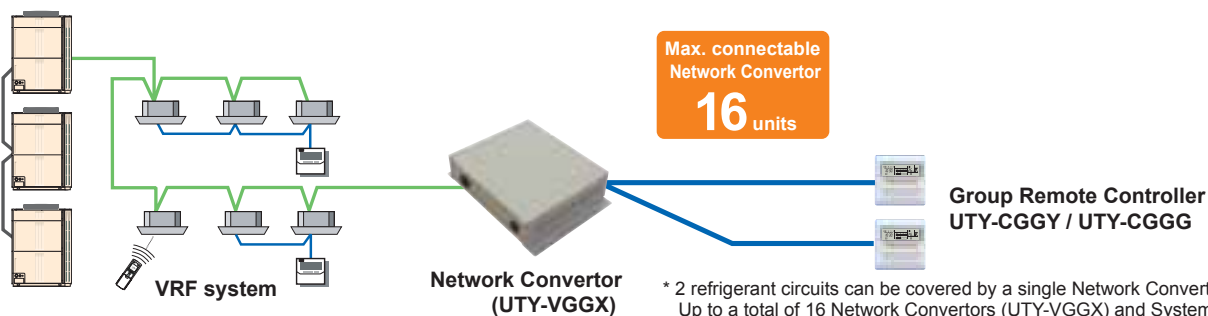
Used for connecting single split system

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



Used for connecting Group Remote Controller

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

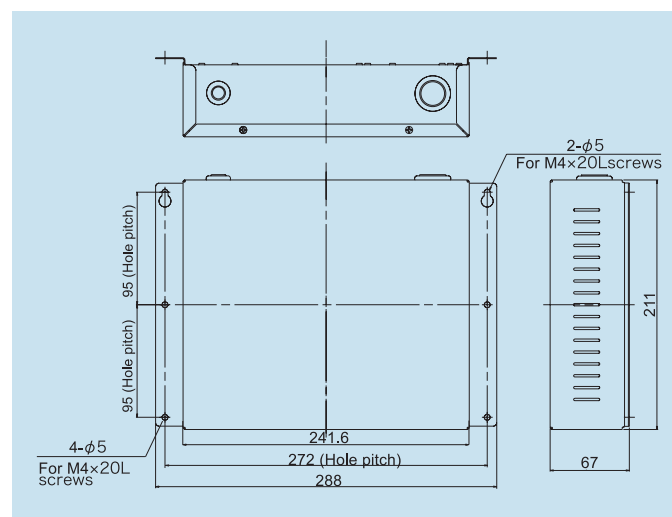


* 2 refrigerant circuits can be covered by a single Network Converter (UTY-VGGX).
Up to a total of 16 Network Converters (UTY-VGGX) and System Controller adaptors can be connected in a single VRF system.

Specifications

| | |
|-----------------------------|------------------|
| Model name | UTY-VGGX |
| Power Supply | 220-240V 50/60Hz |
| Power Consumption (W) | 6.5 |
| Dimensions (H x W x D) (mm) | 67 x 288 x 211 |
| Weight (g) | 1,500 |

Dimensions



Network Converter for LONWORKS® (Future Release)

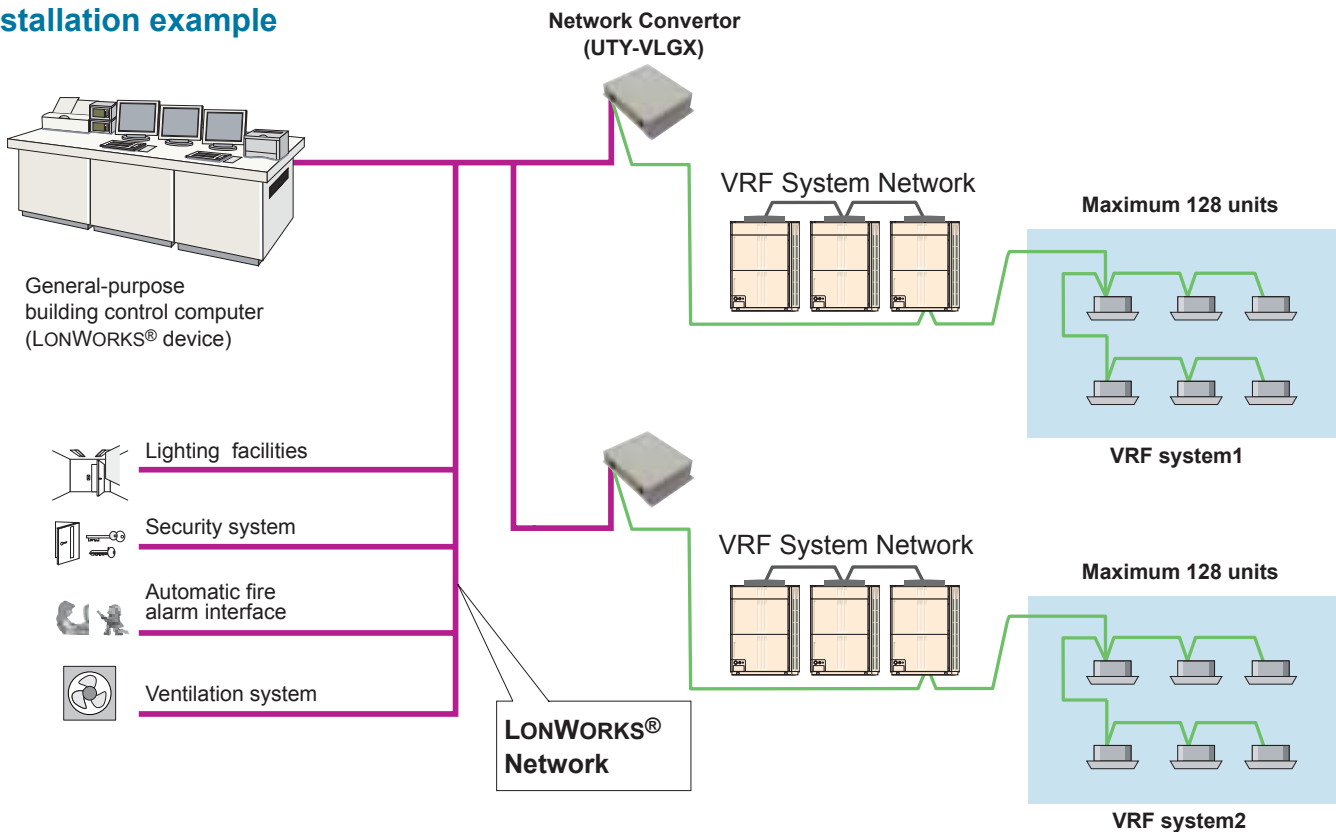
UTY-VLGX

Max. controllable
128 units
indoor units



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

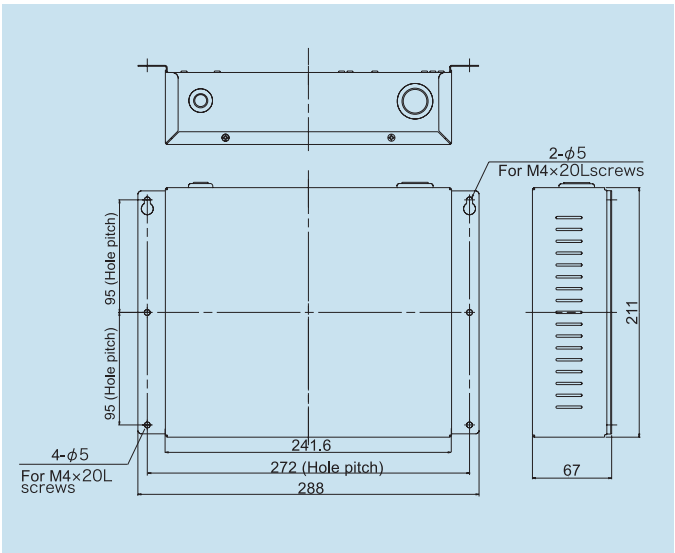
Installation example



Specifications

| | |
|-----------------------------|------------------|
| Model name | UTY-VLGX |
| Power Supply | 220-240V 50/60Hz |
| Power Consumption (W) | 4.5 |
| Dimensions (H x W x D) (mm) | 67 x 288 x 211 |
| Weight (g) | 1,500 |

Dimensions



Transmission specifications (BMS side)

| | |
|-----------------------|--|
| Transmission speed | 78kbps |
| Transceiver | FTT-10A |
| Transmission way form | Free topology |
| Terminated resistor | None (It attaches at the terminal of a network.) |

BACnet® Gateway

Software

(Future Release)

UTY-ABGX

Max. controllable

4

VRF system

Max. controllable

400

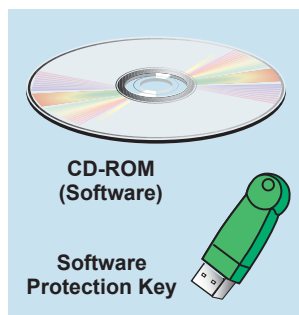
outdoor units

Max. controllable

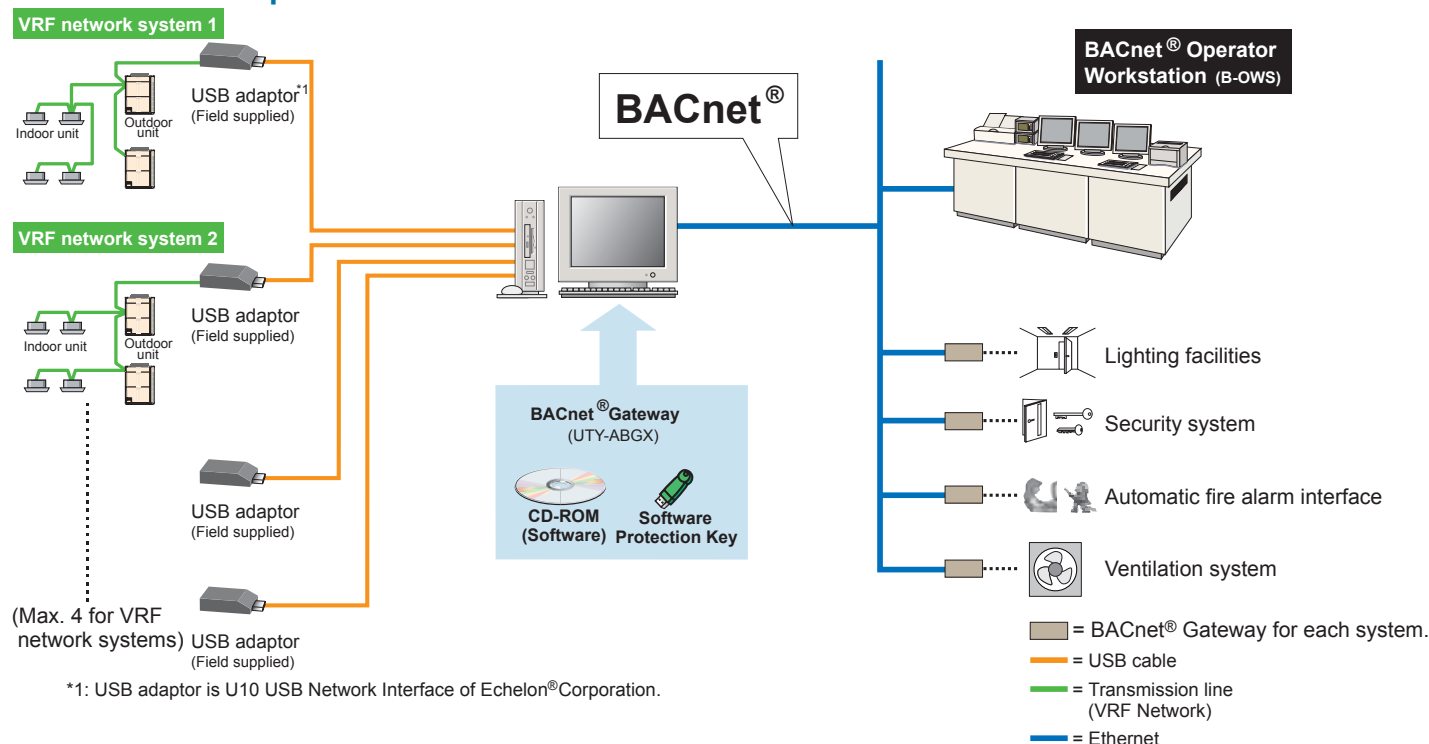
1,600

indoor units

- The VRF system can be incorporated into a Building Management System.
- Enables central control of up to 1,600 indoor units through BACnet®, a global standard for open networks.
- Conforms to ANSI / ASHRAE Standards® 135-2001 BACnet® Application Specific Controller (B-ASC) BACnet® / IP over Ethernet.
- Connects up to 4 VRF systems (1,600 indoor units / 400 outdoor units) per gateway.
- Ideal for applications in high rise buildings and hotels, etc.



Installation example



Requirements of PC for this software

| | |
|-------------------------|--|
| Personal Computer | AT compatible machine that runs Microsoft® Windows® |
| Operating System | Microsoft® Windows® Vista Home Premium, Business, Ultimate Edition Microsoft® Windows® XP Professional with Service Pack2 or later |
| CPU | Intel® Pentium® / Celeron 2GHz or higher |
| Memory | 1GB (Vista) , 512MB (XP) or more |
| Display | 1024 x 768 dots or more |
| Interface | USB port is required for each of the followings; -Wibu Key (Software protection key) - Echelon® U10 USB Network Interface (Required for each VRF Network) Ethernet port is required |
| Other Software Required | Adobe® Acrobat® reader 4.0 or later |

<PACKING LIST>

| | |
|--------------|-------------------|
| Packing List | CD-ROM / Wibu Key |
|--------------|-------------------|

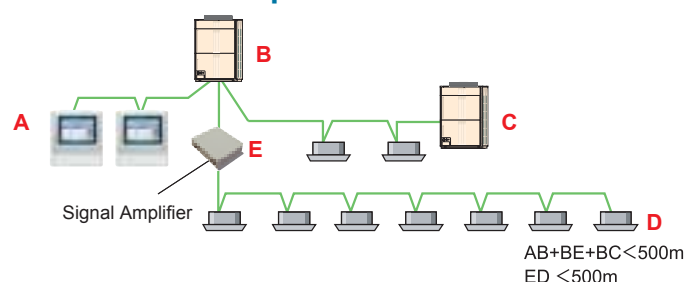
Signal Amplifier

UTY-VSGX

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



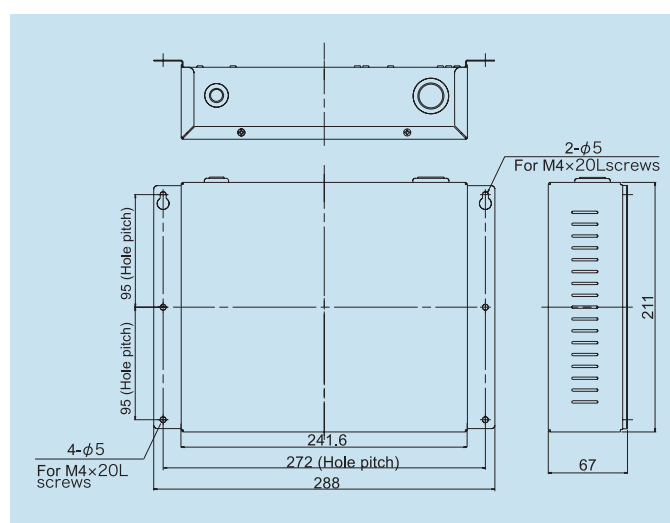
Installation example



Specifications

| | |
|-----------------------------|------------------|
| Model name | UTY-VSGX |
| Power Supply | 220-240V 50/60Hz |
| Power Consumption (W) | 4.5 |
| Dimensions (H X W X D) (mm) | 67 X 288 X 211 |
| Weight (g) | 1,500 |

Dimensions

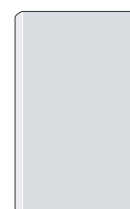


External Switch Controller

UTY-TEKX

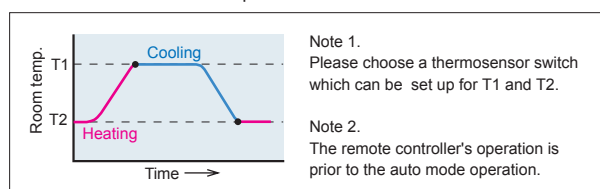
Air conditioner switching can be controlled by connecting other sensor switches

- 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 field supplied parts.

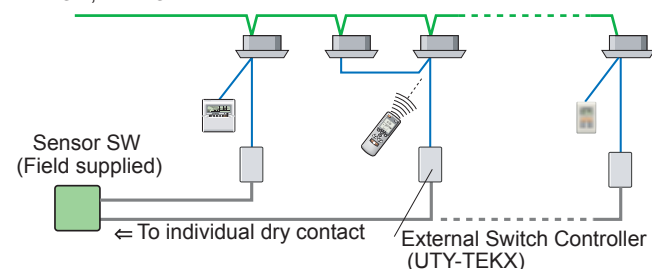


Installation example

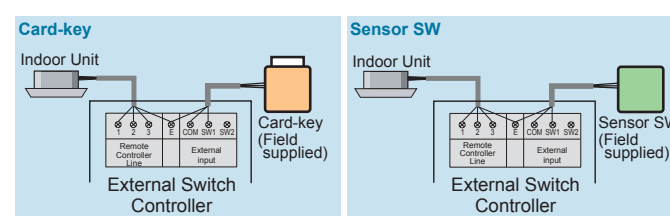
- Auto mode operation, which switches the cooling and the heating automatically, is enabled by using the sensor switch and External Switch Controller.
- Note: All indoor units will operate in the same mode.



T1 = ON, T2 = OFF



Electrical wiring



Specifications

| | |
|-----------------------------|---------------|
| Model name | UTY-TEKX |
| Power Supply | DC 12V |
| Dimensions (H x W x D) (mm) | 120 x 75 x 30 |
| Weight (g) | 90 |

DC12V is supplied by the indoor unit.

Service Tool

Software

UTY-ASGX

Extensive monitoring and analysis functions for installation and maintenance

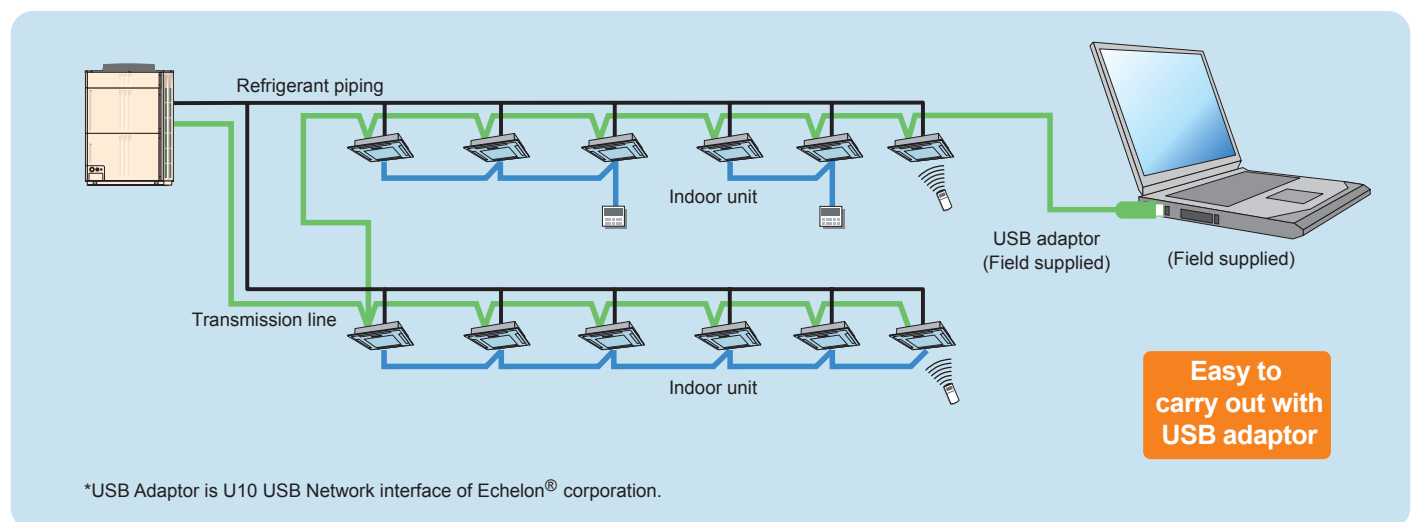
- Operation status can be checked and analyzed to detect even the smallest abnormalities.
- Storage of data on system operation status on a PC allows access even from off site.
- Up to 400 indoor units (a single VRF system) can be controlled and monitored for large scale buildings or hotels.
- This software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

Max. Monitor and
control
100
outdoor units

Max. Monitor and
control
400
indoor units

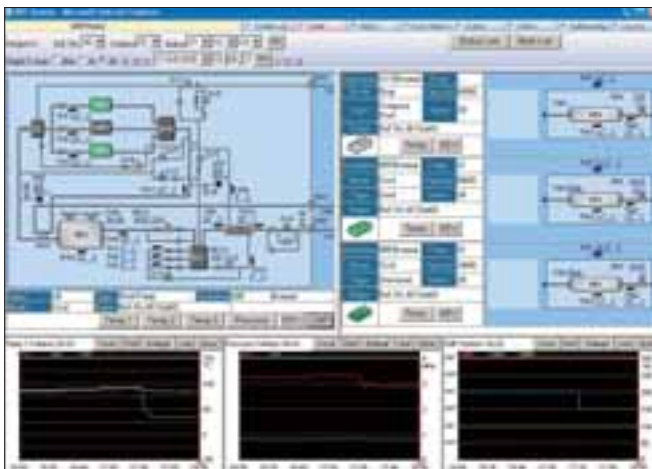


Wiring connection



Functions

Equipment Detail (Diagram)



Displays the detail information for sensor values, electrical components etc. for the specified units in schematic. The information here can be used along with the detail information in list form, to check the operation status of units and make detail analysis on the cause, in case an error occurs.

Equipment Detail (List)

| Unit ID | Sensor Value | Electrical Component | ... |
|---------|--------------|----------------------|-----|
| 001 | 25.5 | 100V | ... |
| 002 | 26.0 | 100V | ... |
| 003 | 25.8 | 100V | ... |
| 004 | 26.2 | 100V | ... |
| 005 | 25.9 | 100V | ... |
| 006 | 26.1 | 100V | ... |
| 007 | 25.7 | 100V | ... |
| 008 | 26.3 | 100V | ... |
| 009 | 25.6 | 100V | ... |
| 010 | 26.4 | 100V | ... |

Displays the detail information for sensor values, electrical components etc. of units in a specified refrigerant system in list form. The information here can be used along with the detail information in diagram form, to check the operation status of units and make detail analysis on the cause, in case an error occurs.

Error History

| Date | Time | Error Code | Error Name | Error Detail |
|------------|----------|------------|---------------------|--|
| 2010/10/10 | 10:10:10 | 001 | Communication Error | Communication error with outdoor unit. |
| 2010/10/10 | 10:10:10 | 002 | Communication Error | Communication error with indoor unit. |
| 2010/10/10 | 10:10:10 | 003 | Communication Error | Communication error with outdoor unit. |
| 2010/10/10 | 10:10:10 | 004 | Communication Error | Communication error with indoor unit. |
| 2010/10/10 | 10:10:10 | 005 | Communication Error | Communication error with outdoor unit. |
| 2010/10/10 | 10:10:10 | 006 | Communication Error | Communication error with indoor unit. |
| 2010/10/10 | 10:10:10 | 007 | Communication Error | Communication error with outdoor unit. |
| 2010/10/10 | 10:10:10 | 008 | Communication Error | Communication error with indoor unit. |
| 2010/10/10 | 10:10:10 | 009 | Communication Error | Communication error with outdoor unit. |
| 2010/10/10 | 10:10:10 | 010 | Communication Error | Communication error with indoor unit. |

Displays the error information for each unit. The error information can sequentially be displayed up to 50 items as they occur starting with the latest error.

System List

| Unit No. | Name | Type | Capacity | Status |
|----------|---------|-------------|----------|--------|
| 01 | Unit 01 | Indoor Unit | 1.0 | Normal |
| 02 | Unit 02 | Indoor Unit | 1.0 | Normal |
| 03 | Unit 03 | Indoor Unit | 1.0 | Normal |
| 04 | Unit 04 | Indoor Unit | 1.0 | Normal |
| 05 | Unit 05 | Indoor Unit | 1.0 | Normal |
| 06 | Unit 06 | Indoor Unit | 1.0 | Normal |
| 07 | Unit 07 | Indoor Unit | 1.0 | Normal |
| 08 | Unit 08 | Indoor Unit | 1.0 | Normal |
| 09 | Unit 09 | Indoor Unit | 1.0 | Normal |
| 10 | Unit 10 | Indoor Unit | 1.0 | Normal |

Displays the overall operation status of all or specified units in the system in a list form.

Remote File Download

| File Name | Size | Download Status |
|----------------------|--------|-----------------|
| System Log | 1.0 MB | Downloaded |
| Operation Log | 1.0 MB | Downloaded |
| Error Log | 1.0 MB | Downloaded |
| Commissioning Log | 1.0 MB | Downloaded |
| Test Run Log | 1.0 MB | Downloaded |
| Remote File Download | 1.0 MB | Downloaded |
| Remote File Download | 1.0 MB | Downloaded |
| Remote File Download | 1.0 MB | Downloaded |
| Remote File Download | 1.0 MB | Downloaded |
| Remote File Download | 1.0 MB | Downloaded |

Operation and error history data can be downloaded. Only the required data may be downloaded specifying the refrigerant system, unit and time range.

Commissioning Tool

Test run commands can be executed with this tool.
During test running, the outdoor unit / indoor unit sensor data can be saved (commissioning log data).
After the end of test running, this data can be exported in CSV file format.

Requirements of PC for this software

| | |
|-------------------|---|
| Personal Computer | AT compatible machine that runs Microsoft® Windows® |
| Operating System | Microsoft® Windows® 2000 Professional (English version / Service pack4 or later) Microsoft® Windows® XP Professional (English version / Service pack2 or later) Microsoft® Windows® Vista Home Premium, Business, Ultimate Edition. (English version) |
| CPU | Intel® Pentium® / Celeron®, AMD Athlon™ / Duron™ 1GHz or higher |
| HDD | 4.1 GB or more of free space |
| Memory | 1GB (Vista) , 512 MB (XP/2000) or more |
| Interface | USB port is required for each of the following ; -Wibu Key(Software protection key) -Echelon® U10 USB Network Interface(Required for each VRF Network) |
| Software | Internet Explorer 6.0 or later / Adobe® Acrobat® Reader 4.0 or later |
| Hardware | USB Adaptor is U10 USB Network interface of Echelon® corporation. |

<PACKING LIST>

| | |
|--------------|-------------------|
| Packing List | CD-ROM / Wibu Key |
|--------------|-------------------|

Personal computer must be field supplied.
U10 USB Network Interface must be field supplied. Contact EchelonR Corporation or its local sales representative for detail.
Product Name : U10 USB Network Interface - TP/FT-10 Channel Model Number: 75010R

Web Monitoring Tool

Software

UTY-AMGX

4

VRF system
can be supported

1600

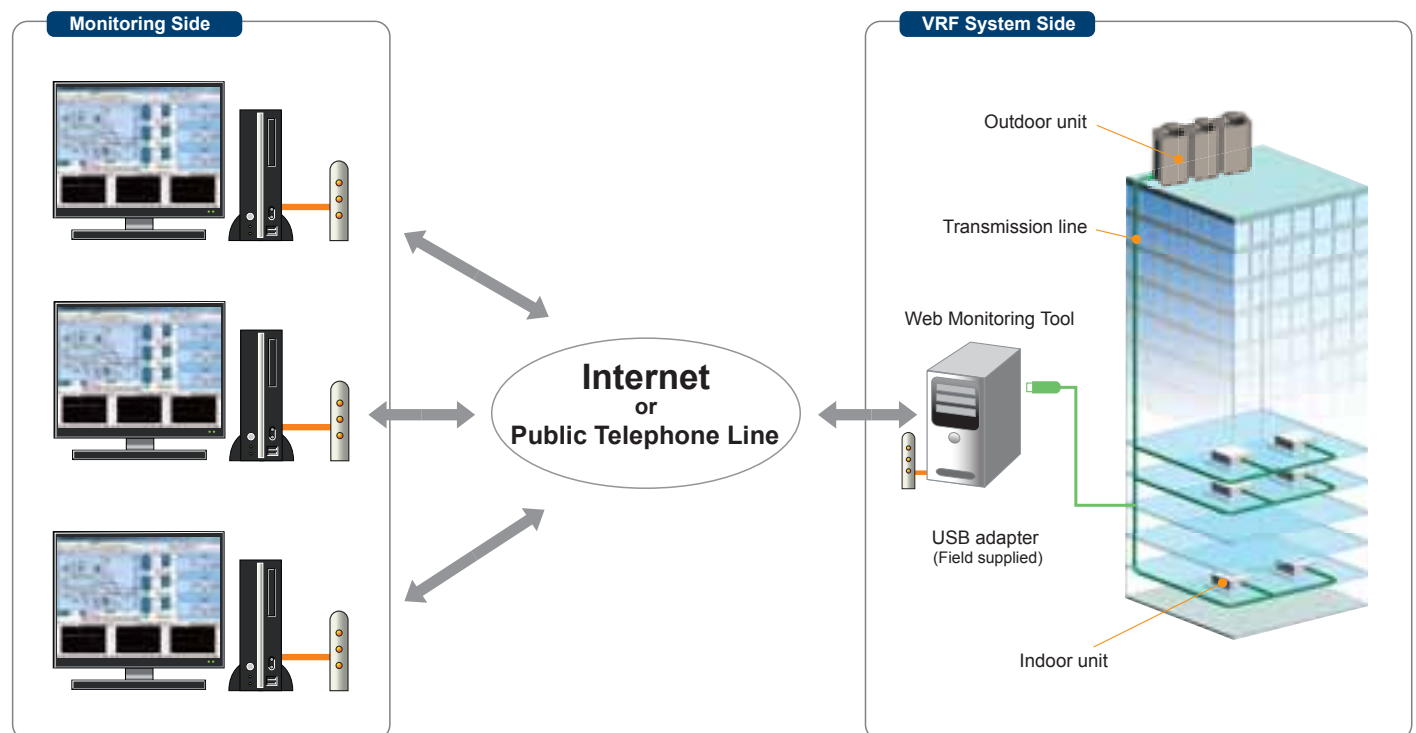
Indoor unit
can be monitored

Product features

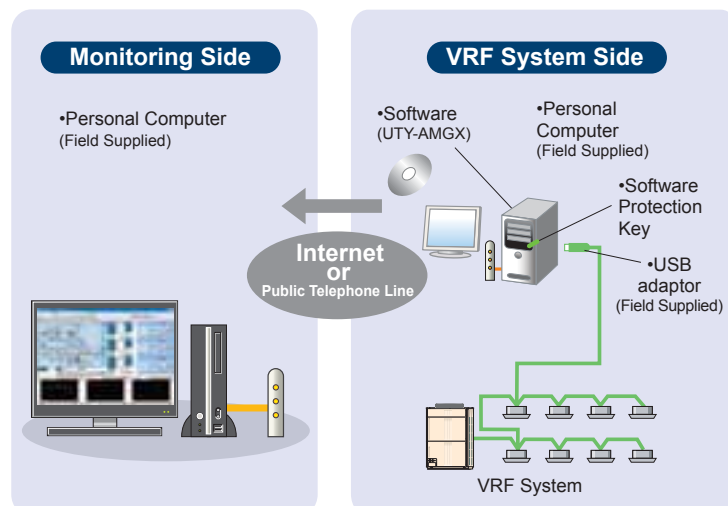
- Troubleshooting is performed by monitoring each air conditioning unit remotely during periodical system checks.
- Error notification can be automatically transmitted to several locations using the internet*¹.
- Requires either a dedicated internet connection* or public telephone line.
- Determination 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: USB of internet mail system required.

Web Monitoring System

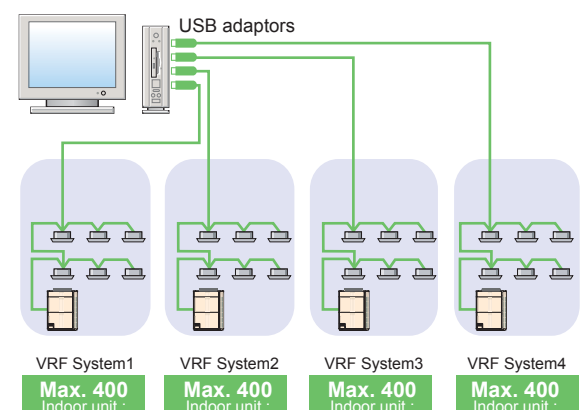


System components



Support 4 VRF system

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



Comparison table

| No. | Item | Service Tool UTY-ASGX | Web Monitoring Tool UTY-AMGX | |
|-----|---|--------------------------|---------------------------------|-----------------|
| | | | Monitoring Side | VRF System Side |
| 1 | Interchangeability of equipment | ● | ● | ● |
| 2 | Indication of equipment list | ● | ● | ● |
| 3 | Operation control | ● | — | ● |
| 4 | Indication of refrigerant circuit diagram | ● | ● | ● |
| 5 | Commissioning tool | ● | — | ● |
| 6 | Monitoring of equipment information | ● | ● | ● |
| 7 | Monitoring of operating condition | ● | ● | ● |
| 8 | Monitoring of sensor data | ● | ● | ● |
| 9 | Storage and CSV output of operating history (sensor data) | ● | ● | ● |
| 10 | Indication of trend graph | ● | ● | ● |
| 11 | Printing of trend graph | ● | ● | ● |
| 12 | Monitoring and screen display of abnormalities | ● | ● | ● |
| 13 | E-mail automatic transmission of abnormalities | — | — | ● *1 |
| 14 | Setting for user level | — | — | ● |

*1 Available only during a connection to the Internet.

Requirements of PC for this software

| | |
|-------------------|---|
| Personal Computer | AT compatible machine that runs Microsoft® Windows® |
| Operating System | Microsoft® Windows® 2000 Professional (English version / Service pack4 or later) Microsoft® Windows® XP Professional (English version / Service pack2 or later) Microsoft® Windows® Vista Home Premium, Business, Ultimate Edition. (English version) |
| CPU | Intel® Pentium® / Celeron®, AMD Athlon™ / Duron™ 1GHz or higher |
| HDD | 4.1 GB or more of free space |
| Memory | 1GB or more |
| Interface | USB port is required for each of the following ; -Wibu Key(Software protection key) -Echelon® U10 USB Network Interface(Required for each VRF Network) Ethernet port is required for remote connection using internet. |
| Software | Internet Explorer 6.0 or later / Adobe® Acrobat® Reader 4.0 or later |
| Hardware | USB Adaptor is U10 USB Network interface of Echelon® corporation. |

<PACKING LIST>

| | |
|--------------|-------------------|
| Packing List | CD-ROM / Wibu Key |
|--------------|-------------------|

Personal computer must be field supplied.

U10 USB Network Interface must be field supplied. Contact EchelonR Corporation or its local sales representative for detail.

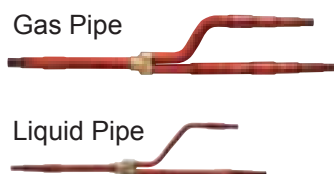
Product Name : U10 USB Network Interface - TP/FT-10 Channel Model Number: 75010R

Optional Parts

Connection Tube

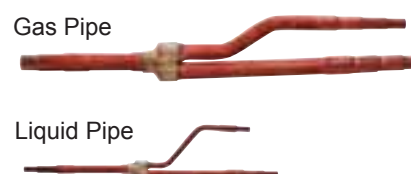
Separation Tube

Model : UTR-BP090X



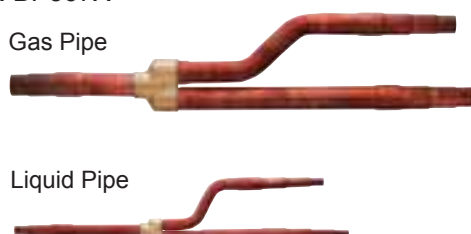
Separation Tube

Model : UTR-BP180X



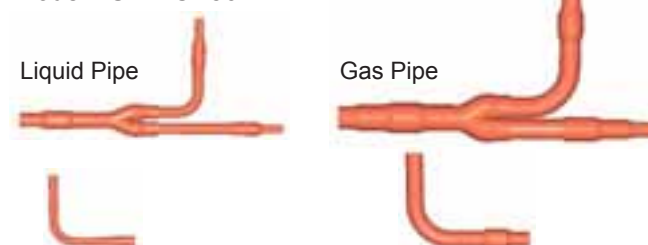
Separation Tube

Model : UTR-BP567X



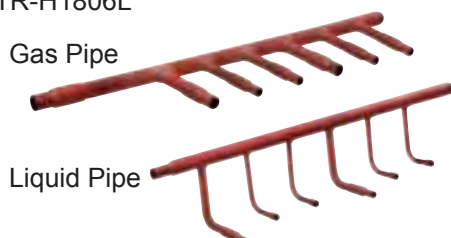
Outdoor Unit Branch kit

Model : UTR-CP567X



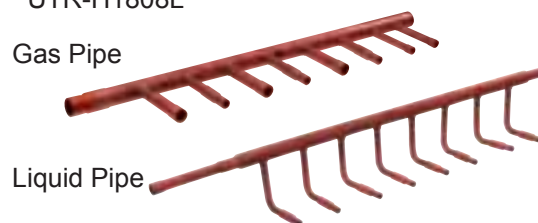
Header

Model : UTR-H0906L
UTR-H1806L



Header

Model : UTR-H0908L
UTR-H1808L



Outdoor unit Branch kit

| | | |
|------------------------|-----------------|---|
| Model name | UTR-CP567X | |
| Number of Outdoor unit | 2 outdoor units | 1 |
| | 3 outdoor units | 2 |

Separation Tube

| | | | |
|---------------------------------|------------|------------|-------------|
| Model name | UTR-BP090X | UTR-BP180X | UTR-BP567X |
| Total model code of indoor unit | 90 or less | 91 to 180 | 181 or more |

Header

| | | | |
|---------------------------------|------------|------------|------------|
| Model name | 6 Branches | UTR-H0906L | UTR-H1806L |
| | 8 Branches | UTR-H0908L | UTR-H1808L |
| Total model code of indoor unit | 90 or less | | 91 to 180 |

EV Kit

| | | |
|-------------------|------------|------------|
| Model name | UTR-EV09XB | UTR-EV14XB |
| Application Model | AS*E07LACH | AS*E12LACH |
| | AS*E09LACH | AS*E14LACH |

AS* : ASY(FUJITSU), ASH(GENERAL)

Others

Flange (Round)

Model : UTD-RF204

For Low Static Pressure Duct type / Duct type



Flange (Square)

Model : UTD-SF045T

For Low Static Pressure Duct type / Duct type



Long-Life Filter

Model : UTD-LF25NA

For Low Static Pressure Duct type/Duct type



Long-Life Filter

Model : UTD-LF60KA

For High Static Pressure Duct type



Drain Pump Unit

Model : UTZ-PX1BBA

For Compact Duct type

Model : UTZ-PX1NBA
For Low Static Pressure
Duct type and Duct type



IR Receiver Unit

Model : UTB-YWB

UTB-TWB
For All Duct type



Remote Sensor Unit

Model : UTD-RS100

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

For All Duct type



Drain Pump Unit

Model : UTR-DPB24T

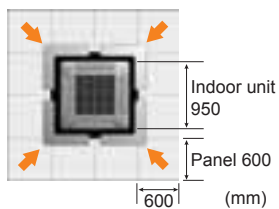
For Ceiling type



Wide Panel

Model : UTG-AGYA-W

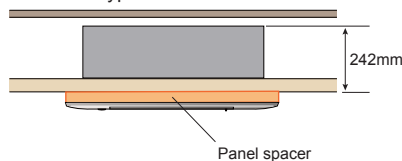
For Cassette type



Panel Spacer

Model : UTG-BGYA-W

For Cassette type



IR Receiver Kit

Model : UTY-LRHYB1

UTY-LRHGB1

For Cassette type



Air Outlet Shutter Plate

Model : UTR-YDZB

Shuts the air outlet when only using as 2 or 3 blow out.

For Cassette type



Air Outlet Shutter Plate

Model : UTR-YDZC

Shuts the air outlet when only using as 2 or 3 blow out.

For Cassette type

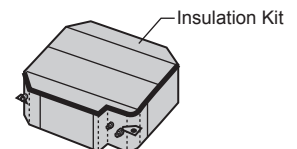


Insulation Kit for High Humidity

Model : UTZ-KXGA (For Cassette type)

UTZ-KXGB (For Slim Cassette type)

UTZ-KXGC (For Compact Cassette type)

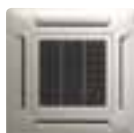


Grille Kit

Model : UTG-UFYC-W

UTG-UGFC-W

For Compact Cassette type



Grille Kit

Model : UTG-UGYA-W

UTG-UGGA-W

For Cassette type



EV Kit

Model code < 09 : UTR-EV09XB

Model code ≥ 12 : UTR-EV14XB

For Compact Wall Mounted type





ISO 9001
Certified number:09 100 79269
Fujitsu General (Shanghai) Co., Ltd.

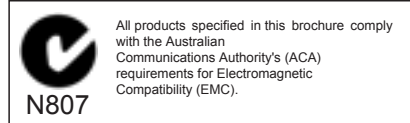


ISO 14001
Certified number:104692



ISO 9001
Certified number:09 100 89394
Fujitsu General (Thailand) Co., Ltd.

ISO 14001
Certified number:09 104 9245



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FUJITSU GENERAL LIMITED

1116, Suenaga, Takatsu-ku, Kawasaki 213-8502, Japan

URL : <http://www.fujitsu-general.com>

6NNV21-0903E Printed in Japan