

From city to oasis, and  
for a sustainable future



**INVERTER**



8 / 10 / 12HP models

14 / 16HP models

18 / 20HP models

Smart, cutting-edge design with an extensive lineup from 8HP to 80HP with the capacity ratio of indoor units connectable up to 150%.

51 models ranging from 8 to 80HP

- Standard combination: 37 models from 8 to 80HP
- Energy efficient combination: 14 models from 16 to 44HP

Cooling Only type

## VRF VC-V Series

System configuration example

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

Wide lineup of **51** models from 8 to **80HP**

Standard combination improvement

New range



Đại diện chính thức hãng Fujitsu General tại Việt Nam:

**CÔNG TY TNHH THƯƠNG MẠI GAV VIỆT NAM**

**Trụ sở tại Thành Phố Hồ Chí Minh**

129 Điện Biên Phủ, Phường 15, Quận Bình Thạnh, TP. Hồ Chí Minh  
Điện thoại: (028) 3535 6839 Hotline: 1800 8239 / 1800 55 68 60

**VPDD tại Hà Nội**

Tòa nhà Âu Việt, số 1A đường Lê Đức Thọ, Phường Mai Dịch, Quận Cầu Giấy, TP Hà Nội  
Điện thoại: (024) 7309 6860 Hotline: 1900 638 340

**VPDD tại Đà Nẵng**

775 Trường Chinh, Quận Cẩm Lệ, TP. Đà Nẵng Điện thoại: 0911 986 896

# Energy saving technology that boosts operation efficiency

## Powerful large propeller fan

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

\*1. CFD=Computational Fluid Dynamics



## 3 phase DC fan motor

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

## Sine wave DC inverter control

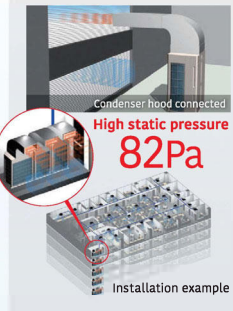
High efficiency is realized by adoption of reduced switching loss IPM.

## 4-face heat exchanger

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

## High system flexibility

The industry-leading high static pressure, long pipe design, and connection capacity, enable flexible installation on each floor and installation of various indoor units.



## Subcool heat exchanger

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



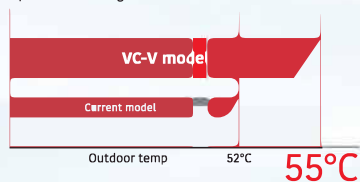
## High Performance Scroll Compressor

The combination of a scroll compressor and our proprietary sensorless sine wave control that smoothly controls the input power into the motor can achieve a wider rotational frequency range from 15 to 120rps, resulting in high energy-efficiency and quieter operation.



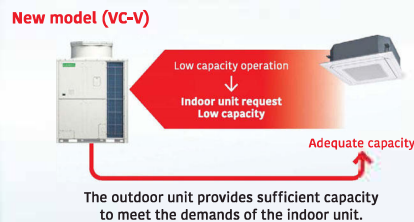
## Wide operating range

Designed to perform at ambient temperatures as high as 55°C. Installation in extreme temperature conditions is possible due to an increased operational range.



## Intelligent refrigerant control

Fujitsu General is proposing outdoor units equipped with refrigerant control function. The refrigerant control operates with suitable control corresponding to the heat load of the room and offers a more comfortable environment. The refrigerant control also provides increased energy savings.



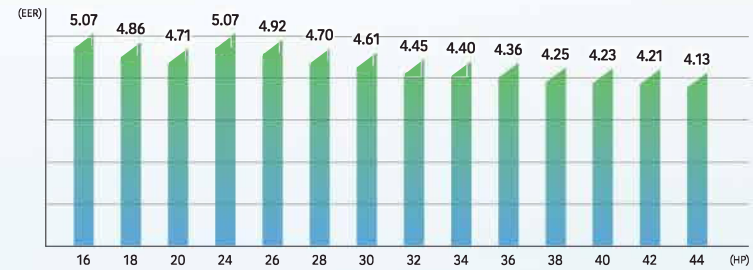
## Class leading High energy efficiency

The use of our proprietary heat exchanger structure and high-efficiency Scroll compressors achieves class leading Energy Efficiency Ratio (EER) in every combination.

Class leading High EER  
**5.07**  
Energy Efficiency combinations



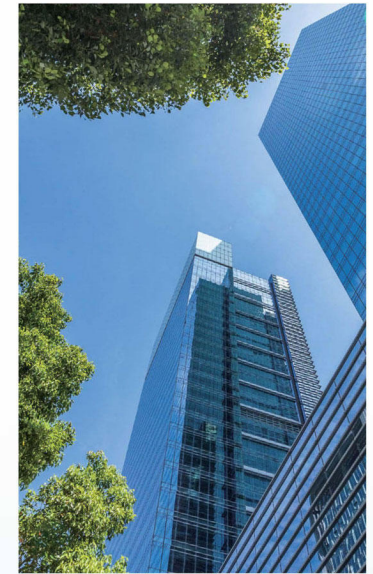
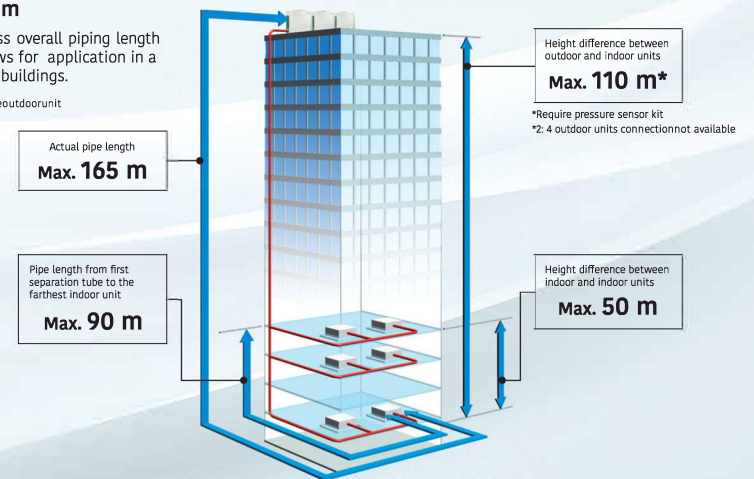
## Energy Efficiency combinations



## Overall piping length Max. 1,000 m

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

\*700m in case of single outdoor unit



# Outdoor units lineup

Combinations other than the followings are not recommended.



## Standard combination

22.4kW (8HP) <b>AJG072JATAH</b> UNIT : AJG072JATAH	28.0kW (10HP) <b>AJG090JATAH</b> UNIT : AJG090JATAH	33.5kW (12HP) <b>AJG108JATAH</b> UNIT : AJG108JATAH	40.0kW (14HP) <b>AJG126JATAH</b> UNIT : AJG126JATAH	45.0kW (16HP) <b>AJG144JATAH</b> UNIT : AJG144JATAH	50.0 kW (18HP) <b>AJG162JATAH</b> UNIT : AJG162JATAH
56.0 kW (20HP) <b>AJG180JATAH</b> UNIT : AJG180JATAH	61.5 kW (22HP) <b>AJG198JATAH</b> UNIT : AJG198JATAH	67.0 kW (24HP) <b>AJG216JATAH</b> UNIT : AJG216JATAH	73.5 kW (26HP) <b>AJG234JATAH</b> UNIT : AJG234JATAH	78.5 kW (28HP) <b>AJG252JATAH</b> UNIT : AJG252JATAH	83.5 kW (30HP) <b>AJG270JATAH</b> UNIT : AJG270JATAH
90.0 kW (32HP) <b>AJG288JATAH</b> UNIT : AJG144/144JATAH	95.0 kW (34HP) <b>AJG306JATAH</b> UNIT : AJG162/144JATAH	100.0 kW (36HP) <b>AJG324JATAH</b> UNIT : AJG162/162JATAH	106.0 kW (38HP) <b>AJG342JATAH</b> UNIT : AJG180/162JATAH	112.0 kW (40HP) <b>AJG360JATAH</b> UNIT : AJG180/180JATAH	117.0 kW (42HP) <b>AJG378JATAH</b> UNIT : AJG162/108/108JATAH
123.0 kW (44HP) <b>AJG396JATAH</b> UNIT : AJG180/108/108JATAH	130.0 kW (46HP) <b>AJG414JATAH</b> UNIT : AJG162/126/126JATAH	135.0 kW (48HP) <b>AJG432JATAH</b> UNIT : AJG162/144/126JATAH	140.0 kW (50HP) <b>AJG450JATAH</b> UNIT : AJG162/162/126JATAH	145.0 kW (52HP) <b>AJG468JATAH</b> UNIT : AJG162/162/144JATAH	150.0 kW (54HP) <b>AJG486JATAH</b> UNIT : AJG162/162/162JATAH
156.0 kW (56HP) <b>AJG504JATAH</b> UNIT : AJG180/180/108JATAH	162.0 kW (58HP) <b>AJG522JATAH</b> UNIT : AJG180/180/126JATAH	168.0 kW (60HP) <b>AJG540JATAH</b> UNIT : AJG180/180/150JATAH	173.0 kW (62HP) <b>AJG558JATAH</b> UNIT : AJG180/152/108/108JATAH	179.0 kW (64HP) <b>AJG576JATAH</b> UNIT : AJG180/180/180/108JATAH	183.5 kW (66HP) <b>AJG594JATAH</b> UNIT : AJG162/162/162/108JATAH
189.5 kW (68HP) <b>AJG612JATAH</b> UNIT : AJG180/162/162/108JATAH	195.5 kW (70HP) <b>AJG630JATAH</b> UNIT : AJG180/180/162/108JATAH	201.5 kW (72HP) <b>AJG648JATAH</b> UNIT : AJG180/180/180/108JATAH	206.0 kW (74HP) <b>AJG666JATAH</b> UNIT : AJG180/162/162/162JATAH	212.0 kW (76HP) <b>AJG684JATAH</b> UNIT : AJG180/180/180/162JATAH	218.0 kW (78HP) <b>AJG702JATAH</b> UNIT : AJG180/180/180/162JATAH
224.0 kW (80HP) <b>AJG720JATAH</b> UNIT : AJG180/180/180/180JATAH					

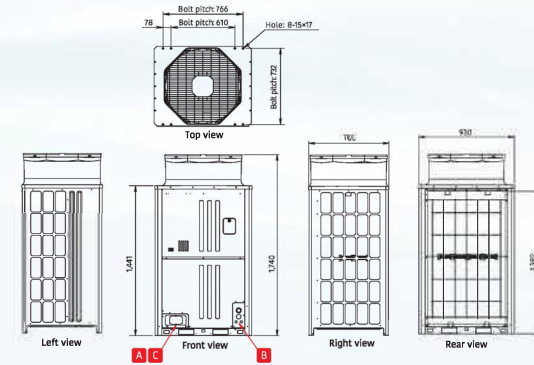
## Energy efficiency combinations

44.8 kW (16HP) <b>AJG144JATAHH</b> UNIT : AJG072/072JATAH	50.4 kW (18HP) <b>AJG162JATAHH</b> UNIT : AJG090/072JATAH	56.0 kW (20HP) <b>AJG180JATAHH</b> UNIT : AJG090/090JATAH	67.2 kW (24HP) <b>AJG216JATAHH</b> UNIT : AJG072/072/072JATAH	72.8 kW (26HP) <b>AJG234JATAHH</b> UNIT : AJG090/072/072JATAH	78.3 kW (28HP) <b>AJG252JATAHH</b> UNIT : AJG108/072/072JATAH
83.9 kW (30HP) <b>AJG270JATAHH</b> UNIT : AJG108/090/072JATAH	89.4 kW (32HP) <b>AJG288JATAHH</b> UNIT : AJG108/108/072JATAH	95.0 kW (34HP) <b>AJG306JATAHH</b> UNIT : AJG108/108/090JATAH	101.5 kW (36HP) <b>AJG324JATAHH</b> UNIT : AJG126/108/090JATAH	107.0 kW (38HP) <b>AJG342JATAHH</b> UNIT : AJG126/108/108JATAH	113.5 kW (40HP) <b>AJG360JATAHH</b> UNIT : AJG126/126/108JATAH
120.0 kW (42HP) <b>AJG378JATAHH</b> UNIT : AJG126/126/126JATAH	125.0 kW (44HP) <b>AJG396JATAHH</b> UNIT : AJG144/126/126JATAH				

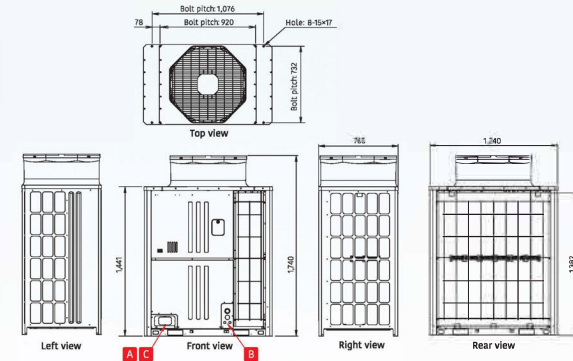
## Dimensions

8,10,12HP : AJG072JATAH / AJG090JATAH / AJG108JATAH

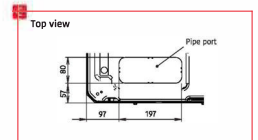
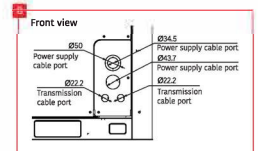
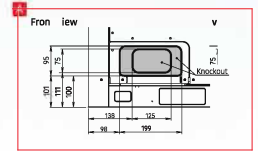
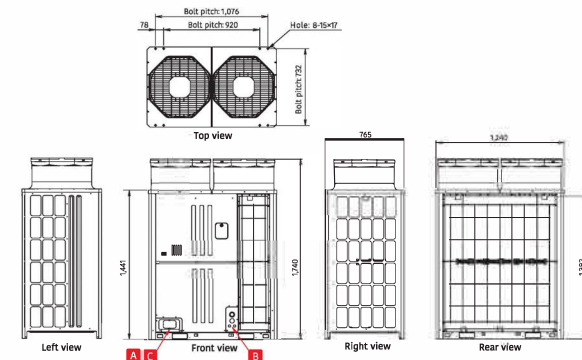
(Unit : mm)



14,16HP : AJG126JATAH / AJG144JATAH



18,20HP : AJG162JATAH / AJG180JATAH



# VRF Indoor Unit Lineup

17 Types, 93 Models, Capacity range from 2.2kW to 28.0 kW

Capacity range (kW)		2.2	2.8	3.6	4.0	4.5	5.6	7.1	9.0	10.0	11.2	14.0	16.0	18.0	22.4	25.0	28.0
Chassis type	Chassis Image	7.0	9.0	12.0	14.0	14.0	18.0	24.0	30.0	34.0	36.0	45.0	54.0	60.0	72.0	90.0	96.0
Compact Cassette		●	●	●	-	●	●	●	-	-	-	-	-	-	-	-	-
4-way Flow (Slim / Large)		-	-	-	-	-	●	●	●	●	●	●	●	-	-	-	-
Circular Flow (Slim / Large)		-	●	●	-	●	●	●	●	●	●	●	●	-	-	-	-
1-way cassette		●	●	●	-	●	●	●	-	-	-	-	-	-	-	-	-
3D Flow		-	-	-	-	-	●	●	-	-	-	-	-	-	-	-	-
Slim duct with drain pump		●	●	●	-	●	●	●	-	-	-	-	-	-	-	-	-
Low static pressure duct		●	●	●	-	●	●	●	●	●	●	●	●	-	-	-	-
Slim duct High efficiency		-	●	●	-	●	●	-	-	-	-	-	-	-	-	-	-
Mini duct with drain pump		●	●	●	-	●	●	●	-	-	-	-	-	-	-	-	-

Capacity range (kW)		2.2	2.8	3.6	4.0	4.5	5.6	7.1	9.0	10.0	11.2	14.0	16.0	18.0	22.4	25.0	28.0
Chassis type	Chassis Image	7.0	9.0	12.0	14.0	14.0	18.0	24.0	30.0	34.0	36.0	45.0	54.0	60.0	72.0	90.0	96.0
Medium static pressure duct		-	-	-	-	-	-	●	●	-	●	●	●	-	-	-	-
Medium static pressure duct High efficiency		-	-	-	-	-	-	●	●	-	-	-	-	-	-	-	-
High static pressure Duct		-	-	-	-	-	-	-	-	-	●	-	●	●	●	-	-
		-	-	-	-	-	-	-	-	-	●	-	-	-	-	-	●
Floor/Ceiling		-	-	●	-	●	●	●	-	-	-	-	-	-	-	-	-
Ceiling		-	-	-	-	-	-	-	●	-	●	●	●	-	-	-	-
Wall mount		●	●	●	●	-	-	-	-	-	-	-	-	-	-	-	-
Wall mount		●	●	●	●	-	-	-	-	-	-	-	-	-	-	-	-
Large Wall mount		-	-	-	-	-	●	●	●	●	-	-	-	-	-	-	-

## Outdoor air unit

Capacity range (kW)	2.2	2.8	3.6	4.0	4.5	5.6	7.1	9.0	10.0	11.2	14.0	16.0	18.0	22.4	25.0	28.0
Outdoor air unit	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

# Remote Controller

Controller type	Image	Model name	New C/O	V-III
Wired remote controller		UTY-RNRGZ*	●	●
Wired remote controller		UTY-RLRG	●	●
Wired remote controller		UTY-RVNGM	●	●
Wired remote controller		UTY-RCRGZ1	●	●
Group remote controller		UTY-CGGG	●	●
Simple remote controller		UTY-RSNGM	●	●
Simple remote controller		UTY-RSRG	●	●

Controller type	Image	Model name	New C/O	V-III
Simple remote controller		UTY-RHRG	●	●
Wireless remote controller		UTY-LNHG	●	●
Wireless remote controller		UTY-LNTG	●	●
Central remote controller (8 rooms multi)		UTY-DMMGM	●	●
IR receiver unit		UTB-YWC UTY-TRFX	●	●
IR receiver unit		UTY-LRHGB1 UTY-LRHGD	●	●

Controller type	Image	Model name	New C/O	V-III
System controller		UTY-APGXZ1	●	●
		Energy saving option UTY-PEGXZ1	●	●
System controller Lite		UTY-ALGXZ1	●	●
		Electricity charge apportionment UTY-PLGXA2	●	●
		Remote management UTY-PLGXR2	●	●
		Energy saving management UTY-PLGXE2	●	●
Service tool		UTY-ASGXZ1	●	●
Web monitoring tool		UTY-AMGXZ1	●	●
BACnet Gateway (Soft)		UTY-ABGXZ1	●	●
BACnet Gateway (Hard)		UTY-VBEX	●	●
Network converter		UTY-VLGX	●	●

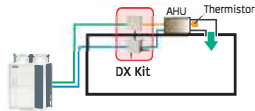
Controller type	Image	Model name	New C/O	V-III
MODBUS converter		UTY-VMEX	●	●
MODBUS converter		UTY-VMGX	●	●
KNX converter		UTY-VKXZ	●	●
KNX converter		UTY-VKGX	●	●
Central remote controller		UTY-DCGGZ1	●	●
Wireless LAN interface		UTY-VTGX	●	●
External switch controller		UTY-TERX	●	●
Network converter (DC supply)		UTY-VTGX	●	●
Network converter (AC supply)		UTY-VTGV	●	●
Signal amplifier		UTY-VSGXZ1	●	●

# DX Kit for Air Handling Application for VRF Outdoor Unit

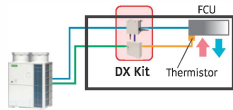


These kits enable other manufacturers air handling units (AHU) and fan coil units (FCU) to be incorporated into a Fujitsu VRF system or, be connected to a dedicated Fujitsu VRF outdoor unit as a 1:1 system to control outside air ventilation (AHU) or room temperature (FCU).

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



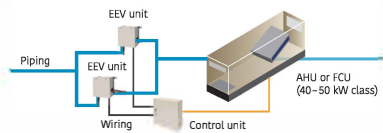
When connecting to an air handling unit, the supply air temperature is controlled by the discharge sensor.



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

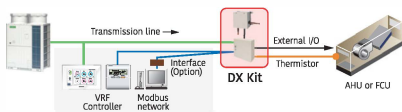
## Supports a wide range of capacity classes

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

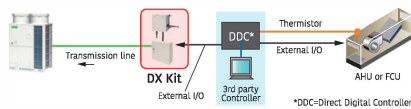


## A variety of controls to match the application

Central control using our VRF controllers or central management controllers



Central control from external controllers



\*DDC-Direct Digital Control

## Functions Summary

### Inputs

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

### Outputs

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

### MODBUS® Control

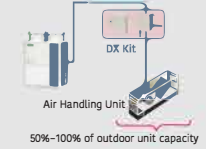
Possible to control via a MODBUS enabled BMS by using optional interface.

## Installation Limitation

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

### Connectable capacity

- Single connection



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

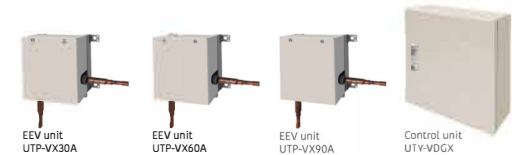


### Piping and wiring length



### Control unit: UTY-VDGX

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



## Specifications

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

Control unit		UTY-VDGX			
Power source		230V/50			
Dimensions (H × W × D)		400 × 400 × 120			

EEV unit		UTP-VX30A	UTP-VX60A	UTP-VX90A	UTP-VX180A-2
Connection pipe diameter (Liquid)		Ø9.53	Ø12.70	Ø12.70	Ø12.70
Dimensions (H × W × D)		160 × 220 × 90			

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

# Control System Overview

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

