

# HEAT PUMP TYPE

**NEW** *AIRSTAGE™ J-III* series

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

## System Outline

### Compact Outdoor unit

The compact and low sound level enable the units to be installed to various environment with restriction and/or limited spaces such as mechanical rooms and or rooftops.

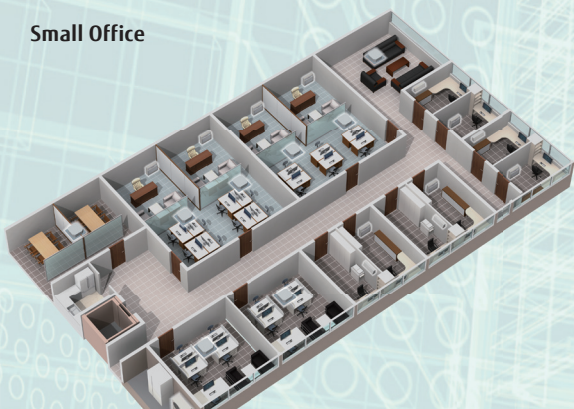
### Small room application

Up to 30 indoor units can be connected by the optimum heat exchanger structure. Available to various small rooms.

### Quiet design

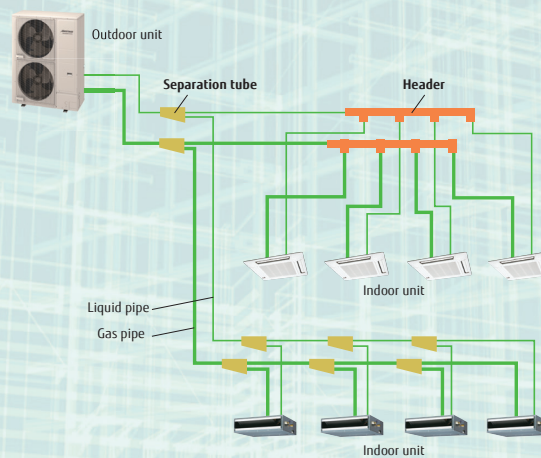
Top class low sound operation has been achieved. This allows installation of the units to various places without a special sound prevention work.

### Small Office



### System configuration example

- This system is used for small and medium-sized buildings. 1 refrigerant system is used for each outdoor unit.
- Connection of multiple indoor units using separation tubes and headers.



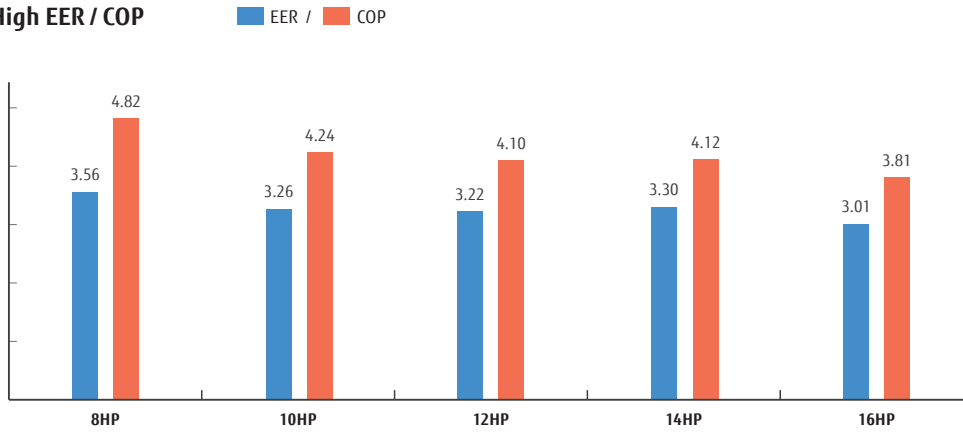


# Features

## Efficiency in actual operation

Top class high EER/COP is achieved for all models by large heat exchanger, high efficient DC twin compressor, and our own technologies.

High EER / COP



## Advanced high efficiency technology



Ø570mm

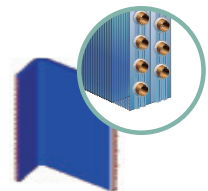
### Large propeller fan

The high efficiency and the low sound operation are mutually realized by reduction of a draft loss which are enabled by the Fujitsu General's original blade design and a large diameter propeller fan.



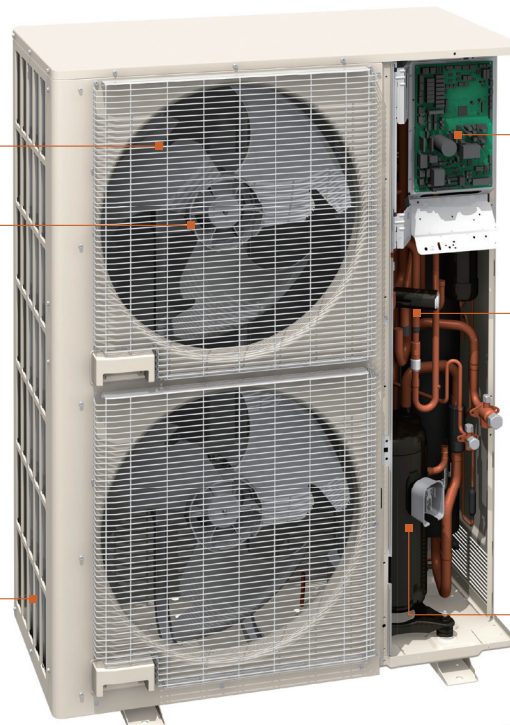
### DC fan motor

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



### Large heat exchanger

Heat exchange performance is substantially improved by mounting of 2.6-row large heat exchanger.



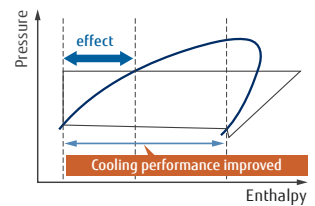
### DC inverter control

Efficiency is improved by mounting of new active filter module.



### Subcool heat exchanger

Cooling performance is improved by mounting of dual tube heat exchanger.



### Scroll compressor

The equipment of scroll compressor with a wide range of rotational frequency from 15 to 120 rps together with Fujitsu General's unique sensorless sine wave control method which smoothly control the input power run into the motor realized a mutual improvement on the energy efficient operation and the low sound operation.

15-120 rps





## Features



Fujitsu General provides perfect total air conditioning systems that take into account energy saving, low noise, comfortable airflow, small room application and centralized control for small-sized office buildings with many small rooms.

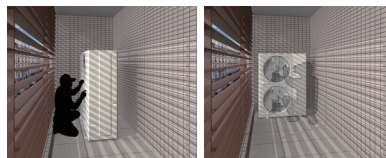
Image: 8/10/12 HP models



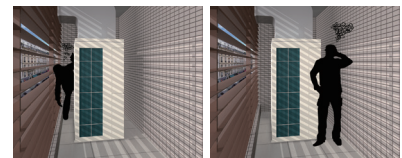
## Compact Design



## In house installation



AIRSTAGE™ J-Series outdoor unit



AIRSTAGE™ V-Series outdoor unit

### Low noise in consideration for the nearby residents

This model is front blow type and about 1000 mm wide, so flexible installation is possible even at narrow in house space.

## Installation at building back side



AIRSTAGE™ J-Series outdoor unit



AIRSTAGE™ V-Series outdoor unit

### Space saving

Due to compact and thin model, direct ground installation or wall mounted installation is possible even at narrow off-street.

## Installation at back street of building



AIRSTAGE™ J-Series outdoor unit



AIRSTAGE™ V-Series outdoor unit

### Flexible installation

This model is front blow type and slim & low body, so installation space is compact. Building windows are not blocked and space saving multiple units installation is possible.



# Features

## Long piping capability

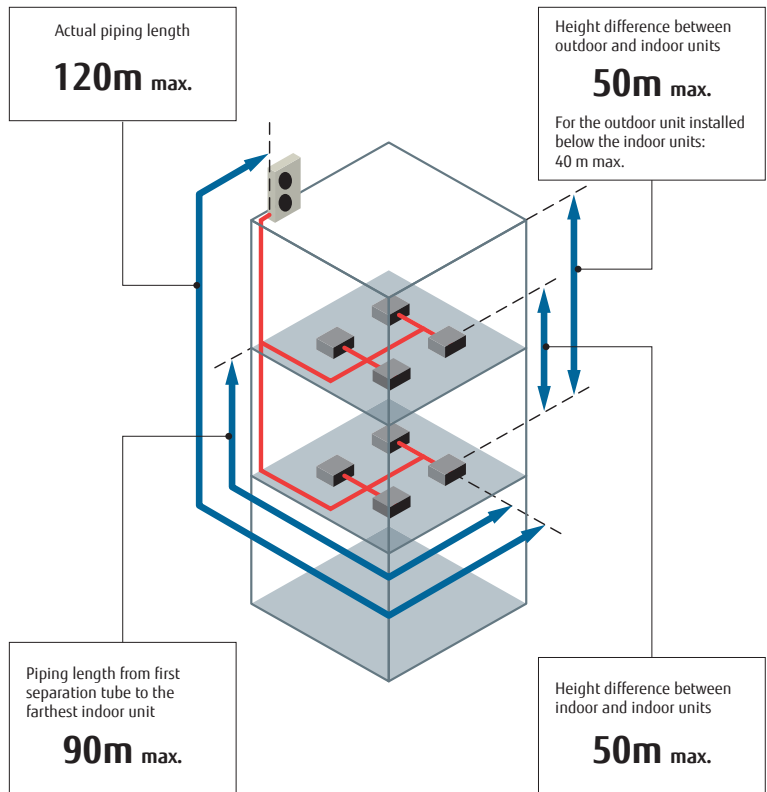
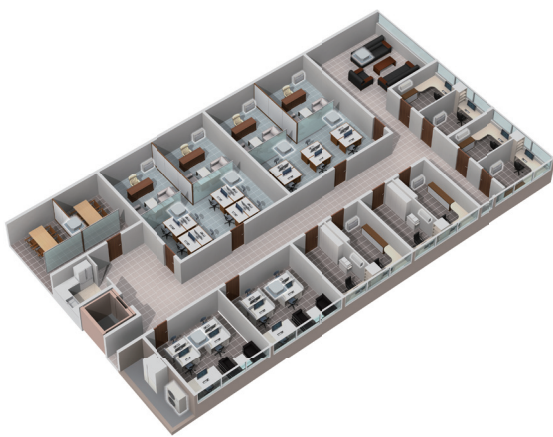
Our advanced refrigerant control technology allows us to achieve a total refrigerant piping length of 400 m. This opens up new possibilities in system design.

Total pipe length  
**400m max.**

## Up to 30 units\* can be connected

The combination of the smallest but adequate capacity indoor unit and a new outdoor unit with the optimum heat exchanger structure has realized the industry's top class connection of 30 units.

\*: 16HP model



## High Static Pressure

External static pressure is available up to 60Pa for 14/16HP. (20Pa for 8HP, 30Pa for 10/12HP)

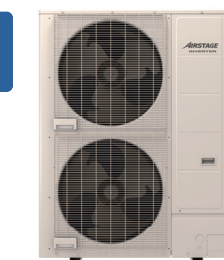


## Top Class Low Operating Sound

Top class low operating sound is realized. Highly suited to densely populated areas thanks to their low operating sound.

### Sound Power level

**66 dB(A)**



**AIRSTAGE J-III L**

**77 dB(A)**



Current model (8HP)

**← 11 dB(A)**



## Specifications

Rating Capacity range		HP	8	10	12	14	16
Model name			AJY072LELAH	AJY090LELAH	AJY108LELAH	AJY126LELAH	AJY144LELAH
Maximum Connectable Indoor Unit			1-15	1-19	1-27	1-27	1-30
Power source			3-phase, ~400V, 50Hz				
Capacity	Cooling	kW	22.4	28.0	33.5	40.0	45.0
	Heating		22.4	28.0	33.5	40.0	45.0
Input power	Cooling	kW	6.30	8.59	10.42	12.12	14.96
	Heating		4.65	6.61	8.18	9.71	11.81
EER	Cooling	W/W	3.56	3.26	3.22	3.30	3.01
COP	Heating		4.82	4.24	4.10	4.12	3.81
Air flow rate		m <sup>3</sup> /h	8,400	9,000	11,000	13,000	14,000
Sound pressure level / Power level	Cooling	dB (A)	52 / 66	54 / 69	59 / 73	62 / 75	64 / 77
	Heating		54 / -	57 / -	61 / -	63 / -	65 / -
Dimensions	Height	mm	1,428	1,428	1,428	1,638	1,638
	Width		1,080	1,080	1,080	1,080	1,080
	Depth		480	480	480	480	480
Weight		kg	170	177	178	213	213
Refrigerant	Type (Global Warming Potential)		R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)
	Charge	kg(CO <sub>2</sub> e-q-T)	7.0 (14.6)	7.5 (15.7)	7.5 (15.7)	11.0 (22.9)	11.0 (22.9)
Connection pipe diameter	Liquid	mm	9.52	9.52	12.70	12.70	12.70
	Gas		19.05	22.20	28.58	28.58	28.58
Total pipe length		m	400	400	400	400	400
Max. Height difference			50/40 (Outdoor unit: Upper/Lower)				
Operation range	Cooling	°C	-15 to 46	-15 to 46	-15 to 46	-5 to 46*	-5 to 46*
	Heating		-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

Note : Specifications are based on the following conditions.

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

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

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

\* The cooling operation range of -15 to 46°C is allowed only when all of the indoor units connected to the system are higher than capacity of 5.6kW.

## Dimensions

Models : AJY072LELAH / AJY090LELAH / AJY108LELAH

Models : AJY126LELAH / AJY108LELAH

(Unit : mm)

