

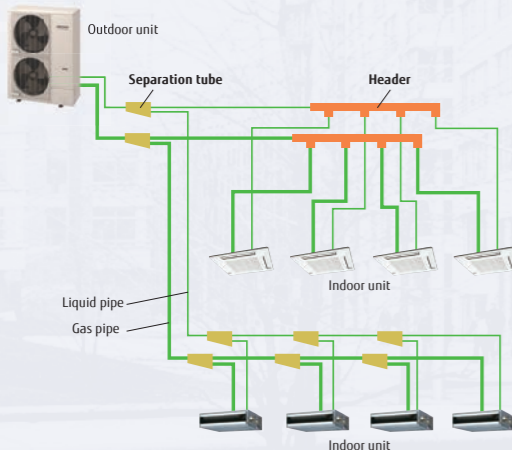
Heat Pump

for Small Capacity Type



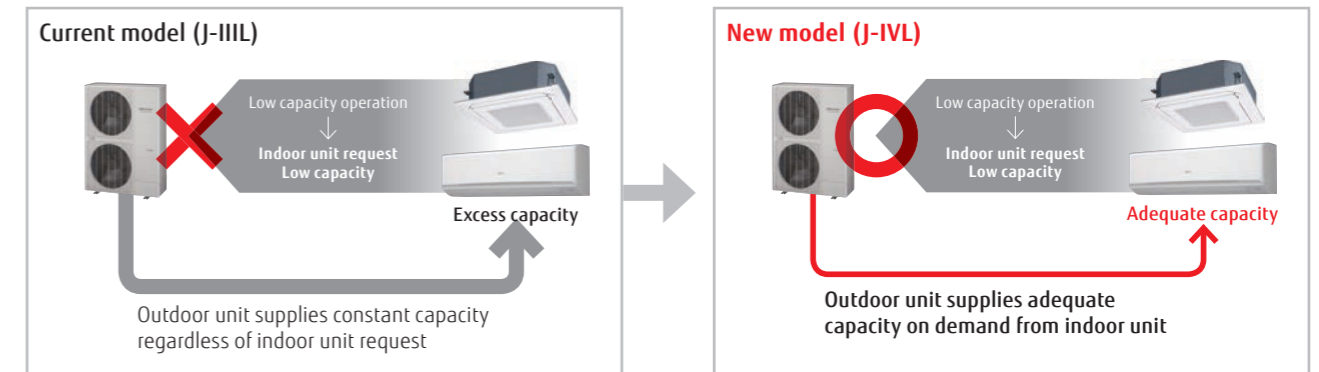
System configuration example

- 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.



New intelligent refrigerant control

Fujitsu general proposes New outdoor unit which includes New refrigerant control. New refrigerant control can be operated with suitable control corresponding to heat load of the room and can offer a more comfortable space. New refrigerant control can also provide more energy savings.



* The improvement by the control and the actual sine wave varies by the combination of the indoor unit and system operating condition.

External static pressure

External static pressure is available up to 60Pa for 14/16/18HP. (30Pa for 8/10HP, 40Pa for 12HP)

* Capacities are slightly decreased for rated values during high static pressure operation.



Advanced high efficiency technology

Ø570 mm 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.

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.

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

Scroll compressor
The equipment of scroll compressor with a wide range of rotational frequency from 15 to 130 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.

15-130 rps

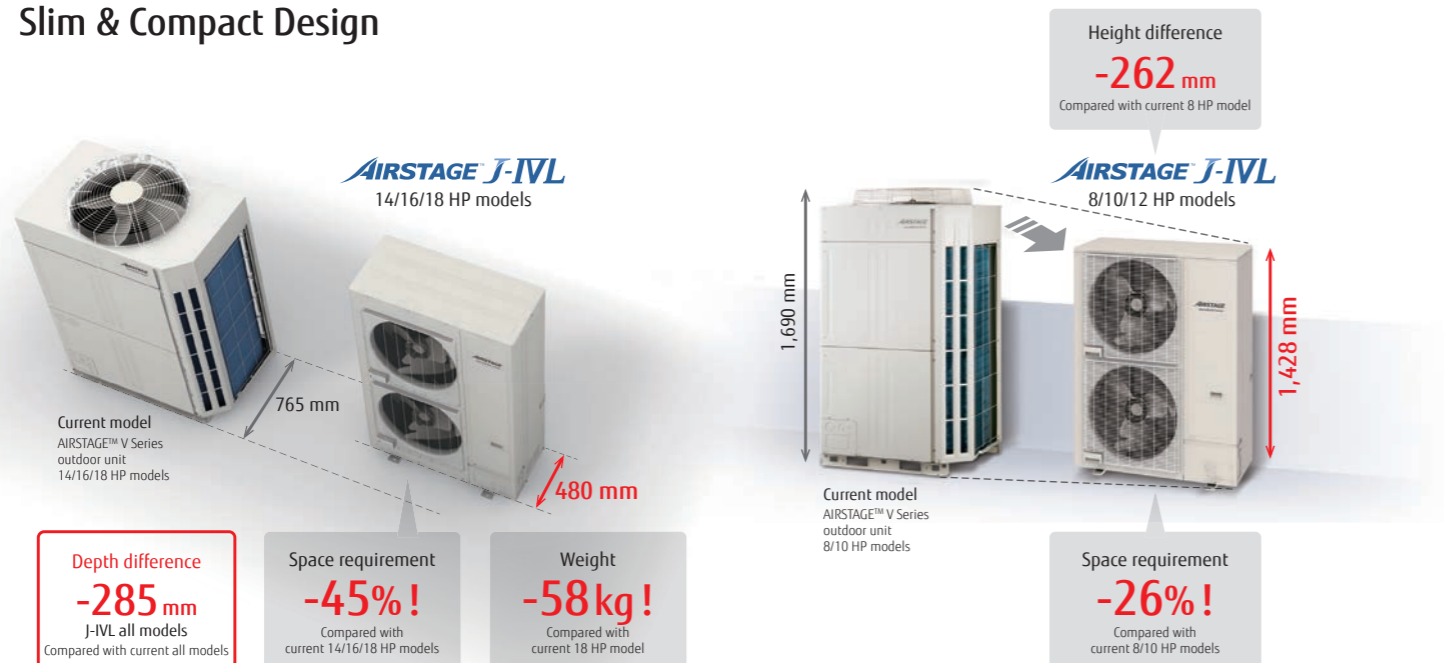


Fujitsu General provides perfect total air conditioning systems that take into account energy saving, low noise, comfortable airflow, small room application and centralized control for small-sized office buildings with many small rooms.

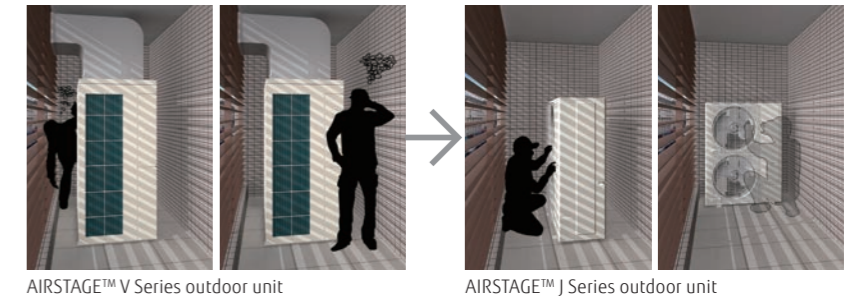
AIRSTAGE™ J-IVL

Image: 8/10/12 HP models

Slim & Compact Design



Various Installation



In house installation
Low noise in consideration for the nearby residents

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



Narrow space behind building
Space saving

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

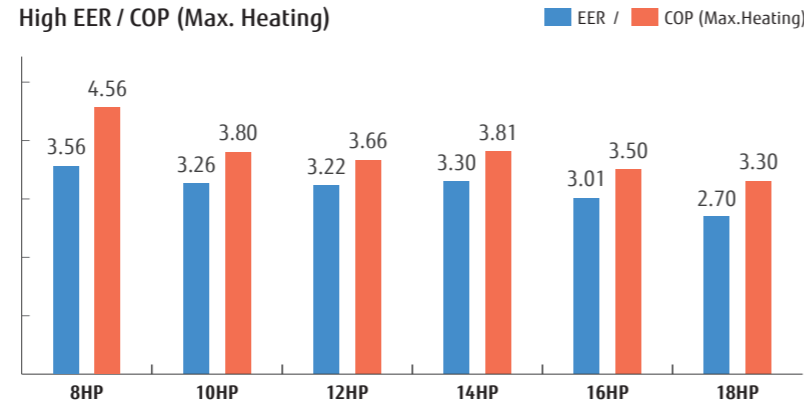


Installation at back street of building
Flexible installation

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

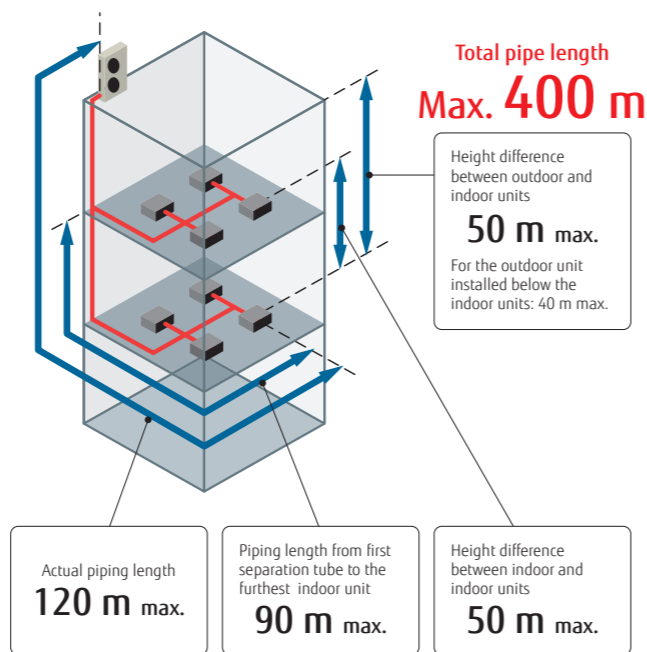
Efficiency in actual operation

Top class high EER/COP(Max. Heating) is achieved for all models by large heat exchanger, high efficient Scroll compressor, and our own technologies.



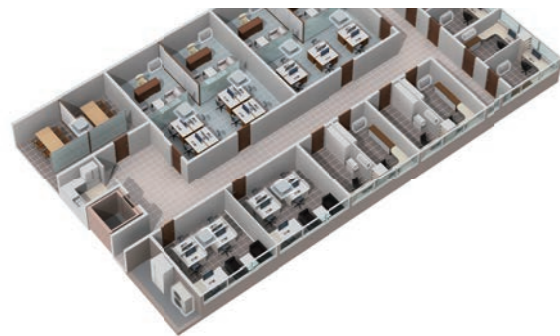
Long piping length

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.



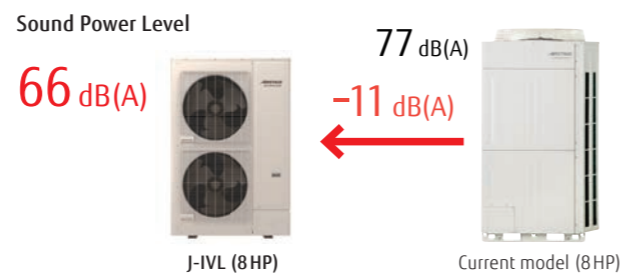
Up to 42 indoor units* can be connected

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 42 units. *: 18 HP model



Top Class Low Operating Sound

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



8,10,12 HP: AJY072LELBH / AJY090LELBH / AJY108LELBH
14,16,18 HP: AJY126LELBH / AJY144LELBH / AJY162LELBH



Specifications

Rating Capacity range		HP	8	10	12	14	16	18
Model name			AJY072LELBH	AJY090LELBH	AJY108LELBH	AJY126LELBH	AJY144LELBH	AJY162LELBH
Maximum Connectable Indoor Unit			1-20	1-25	1-30	1-36	1-40	1-42
Power source			3 phase, ~400V, 50Hz					
Capacity	Cooling	kW	22.4	28.0	33.5	40.0	45.0	50.0
	Nominal Heating		22.4	28.0	33.5	40.0	45.0	50.0
	Max Heating		25.0	31.5	37.5	45.0	50.0	55.0
Input power	Cooling	kW	6.30	8.59	10.42	12.12	14.96	18.52
	Nominal Heating		4.65	6.61	8.18	9.71	11.81	13.66
	Max Heating		5.45	8.29	10.25	11.80	14.29	16.66
EER	Cooling	W/W	3.56	3.26	3.22	3.30	3.01	2.70
	Nominal Heating		4.82	4.24	4.10	4.12	3.81	3.66
COP	Cooling	W/W	4.56	3.80	3.66	3.81	3.50	3.30
	Max Heating		4.82	4.24	4.10	4.12	3.81	3.66
Airflow rate		m ³ /h	8,400	9,000	11,000/12,100	13,000	14,000	14,800/15,300
Sound pressure level / Power level	Cooling	dB(A)	52/66	54/69	59/73	62/75	64/77	65/79
	Heating		54/-	57/-	62/-	63/-	65/-	68/-
Net Dimensions	Height	mm	1,428	1,428	1,428	1,638	1,638	1,638
	Width		1,080	1,080	1,080	1,080	1,080	1,080
	Depth		480	480	480	480	480	480
Weight		kg	170	177	178	213	213	217
	Refrigerant	Type (Global Warming Potential)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)
Connection pipe diameter	Charge	kg(CO ₂ eq-T)	7.0 (14.6)	7.5 (15.7)	7.5 (15.7)	11.0 (22.9)	11.0 (22.9)	11.8 (24.6)
	Liquid		9.52	9.52	12.70	12.70	12.70	12.70
Total pipe length	Gas	mm	19.05	22.20	28.58	28.58	28.58	28.58
			400	400	400	400	400	400
Max. height difference		m	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*	-5 to 46*
	Heating		-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21	-20 to 21

Note: Specifications are based on the following conditions.

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

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

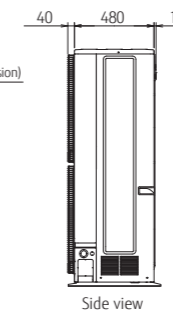
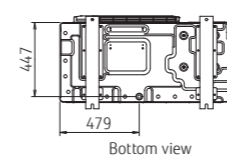
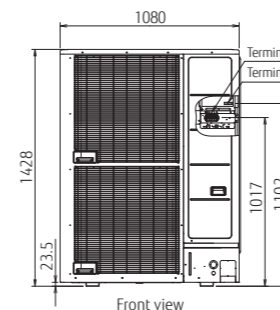
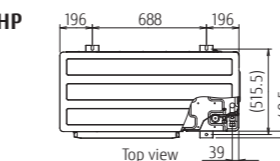
Pipe length: 7.5 m; Height difference between outdoor unit and indoor unit: 0 m.

* 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.

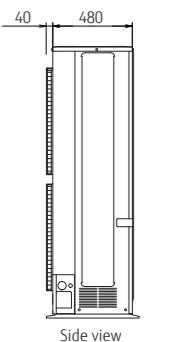
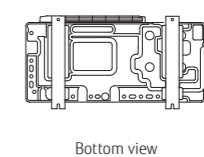
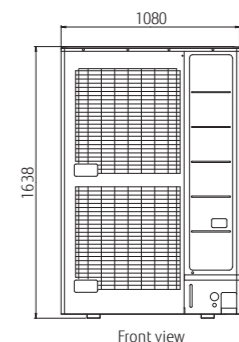
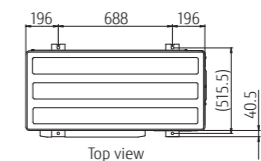
Dimensions

(Unit : mm)

8, 10, 12 HP



14, 16, 18 HP



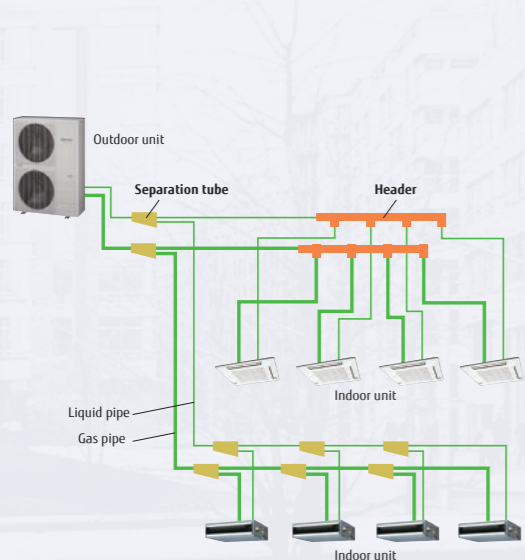
Heat Pump

for Small Capacity Type



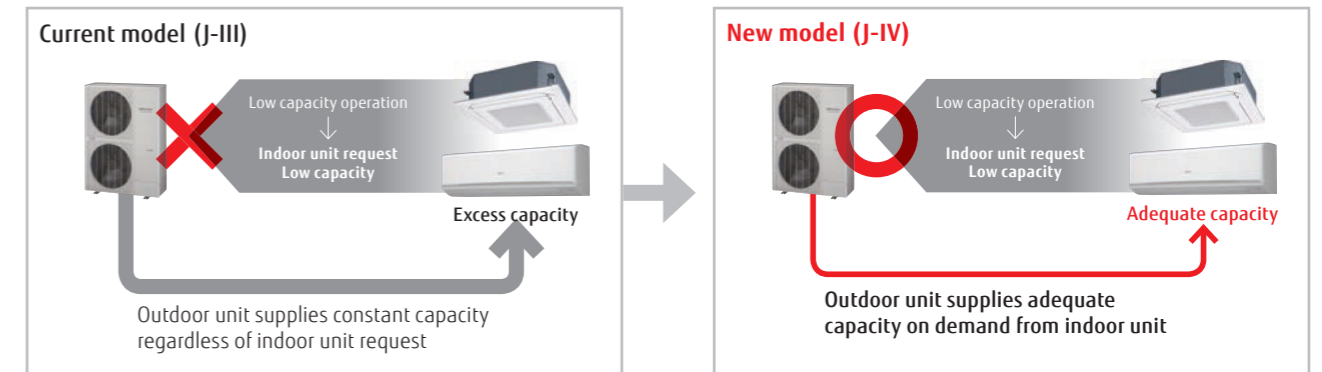
System configuration example

- 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.



New intelligent refrigerant control

Fujitsu general proposes New outdoor unit which includes New refrigerant control. New refrigerant control can be operated with suitable control corresponding to heat load of the room and can offer a more comfortable space. New refrigerant control can also provide more energy savings.



* The improvement by the control and the actual sine wave varies by the combination of the indoor unit and system operating condition.

External static pressure

External static pressure is available up to 30Pa for 4/5/6HP.



Advanced high efficiency technology

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

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

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

DC twin rotary compressor
High efficiency compressor motor
Optimized refrigerant flow design
Highly accurate parts
Efficiency in all load regions is good. Especially good performance from low to medium at normal operation.

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

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

Pressure-Enthalpy graph: Shows 'effect' and 'Cooling performance improved'.

Compressor efficiency graph: Shows 'DC Twin Rotary compressor' efficiency across 'Compressor capacity'.

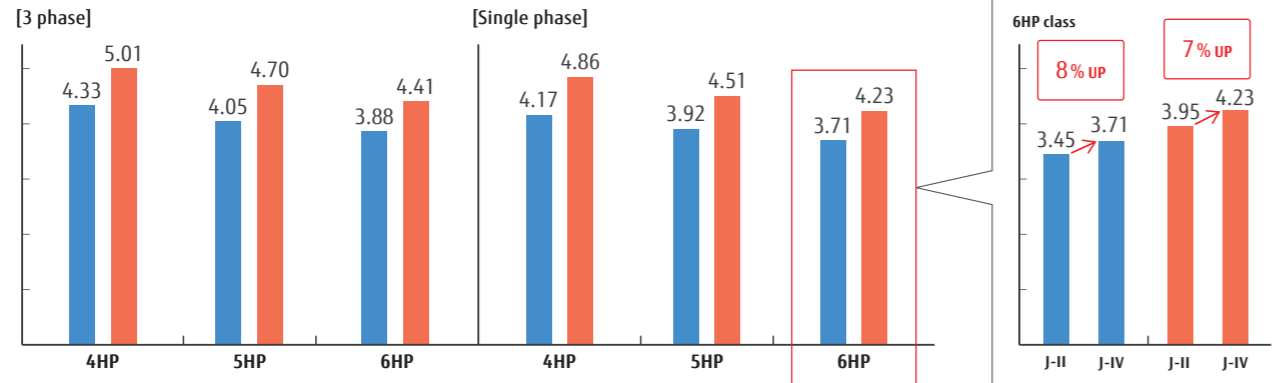
4,5,6HP : AJY040LBLEBH / AJY045LBLEBH / AJY054LBLEBH
 AJY040LELBH [3 phase] / AJY045LELBH [3 phase] / AJY054LELBH [3 phase]



Efficiency in actual operation

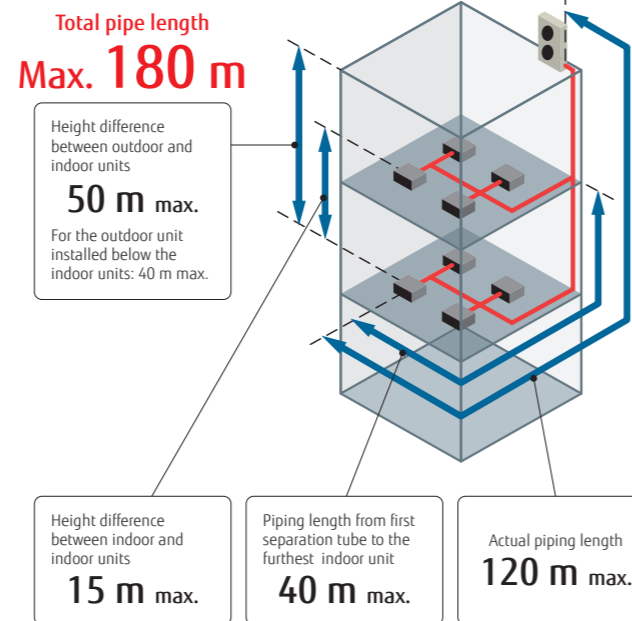
Top class high COP (Max. Heating) is achieved for all models by large heat exchanger, high efficient DC twin compressor, and our own technologies.

High EER / COP (Max. Heating)



Long piping length

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



Up to 14 units* can be connected

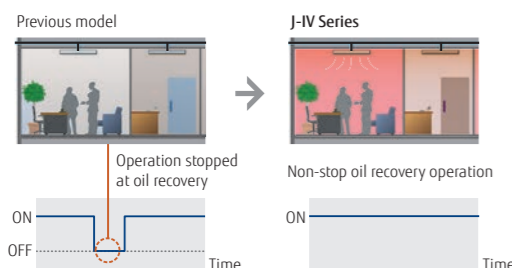
Up to 14 units* can be connected. The combination of the smallest but adequate capacity indoor unit and a new outdoor unit with the optimum heat exchanger structure has realized the industry's top class connection of 14 units.

*: 6 HP model

Model	Current model (J-III)			New model (J-IV)		
	4	5	6	4	5	6
Rating Capacity range (HP)	4	5	6	4	5	6
Max. Connectable indoor unit	1-9	1-10	1-13	1-11	1-12	1-14

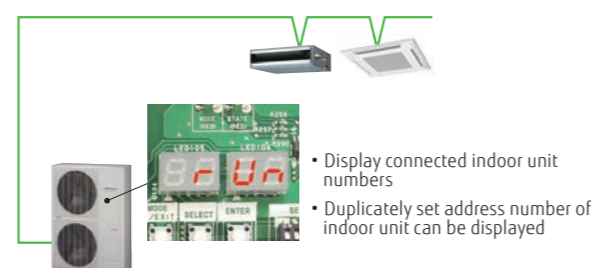
Non-stop oil recovery operation

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



Easier Installation

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



Specifications

Rating Capacity range		HP	4	5	6
Model name			AJY040LBLEBH	AJY045LBLEBH	AJY054LBLEBH
Maximum Connectable Indoor Unit			1-11	1-12	1-14
Power source			Single phase, ~230V, 50Hz		
Capacity	Cooling	kW	12.1	14.0	15.5
	Nominal Heating		12.1	14.0	15.5
	Max Heating		13.6	16.0	18.0
Input power	Cooling	kW	2.90	3.57	4.18
	Nominal Heating		2.39	2.97	3.50
	Max Heating		2.80	3.55	4.26
EER	Cooling	W/W	4.17	3.92	3.71
	Nominal Heating		5.06	4.71	4.43
	Max Heating		4.86	4.51	4.23
COP	Cooling	W/W	5.06	4.71	4.43
	Nominal Heating		4.86	4.51	4.23
	Max Heating		5.06	4.71	4.43
Airflow rate		m ³ /h	6,200	6,400	6,900
Sound pressure level / Power level	Cooling	dB(A)	50 / 65	51 / 65	53 / 66
	Heating		52 / 67	55 / 69	56 / 69
Heat exchanger fin			Blue fin	Blue fin	Blue fin
Net Dimensions	Height	mm	1,334	1,334	1,334
	Width		970	970	970
	Depth		370	370	370
Weight		kg	117	117	119
	Refrigerant	Type (Global Warming Potential)	R410A (2,088)	R410A (2,088)	R410A (2,088)
Connection pipe diameter	Charge	kg(CO ₂ eq-T)	4.8 (10.0)	5.3 (11.1)	5.3 (11.1)
	Liquid		9.52	9.52	9.52
Total pipe length		m	180	180	180
	Max. height difference			50/40 (Outdoor unit: Upper/Lower)	
Operation range	Cooling	°C	-5 to 46	-5 to 46	-5 to 46
	Heating		-20 to 21	-20 to 21	-20 to 21

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

Dimensions

(Unit : mm)

