

HITACHI

HITACHI INVERTER CONDENSING UNITS



NEWEST INVERTER TECHNOLOGY FROM JAPAN

ENERGY SAVING

LOW NOISE

Earth Friendly
R404A•507A

SCROLL
High Pressure Chamber
Scroll Compressor



5、6、7 HP

8、10 HP

THE EXPERT OF HIGH QUALITY REFRIGERATION—HITACHI INVERTER CONDENSING UNIT

HITACHI HIGH PRESSURE CHAMBER SCROLL COMPRESSOR



Adopting Earth Friendly Freon (R404A or R507A)

High Suitability

The inverter compressor can reflect actual cooling loading to output proper cooling capacity to save energy.

High Reliability

The refrigeration oil is supplied by high pressure chamber so there is no foaming appearing. The minimum oil enables operating steady under various of loading status.

High Performance

The scroll compressor adopts “Liquid Freon injection cooling” in “middle pressing space”, the outlet temperature will not abnormally increase and Freon suction will not decrease which enables to secure cooling capacity.

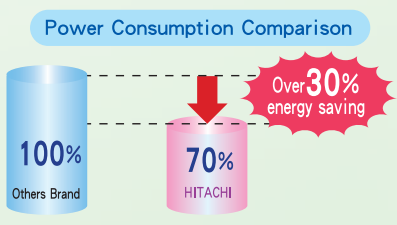


〈Noiseless〉

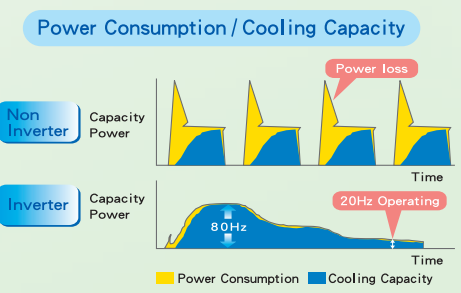
- Adopting Japan highest IPM inverter controlling technology, the noise level is 3dB lower than ordinary inverter control. (Under 80Hz testing condition)
- Night time or outside temperature is under 25°C, the operation is automatically adjusted as silent mode, the noise level is 3dB more over decreased.(Under 50Hz testing condition)
- When outside temperature is under 25°C, the minimum noise level is under 50dB (tested by 5 metres far away) to carry out excellent noiseless operation.

〈Energy Saving〉

- Over **30%** energy saving compares with other brands



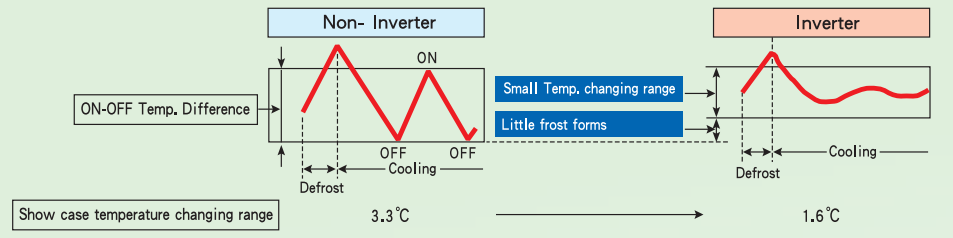
- 20-80Hz operation range is wider than non inverter models which enables to keep high efficiency operation and provides excellent temperature control even located in extreme cooling loading changing area.



〈Keeping High Freshness〉

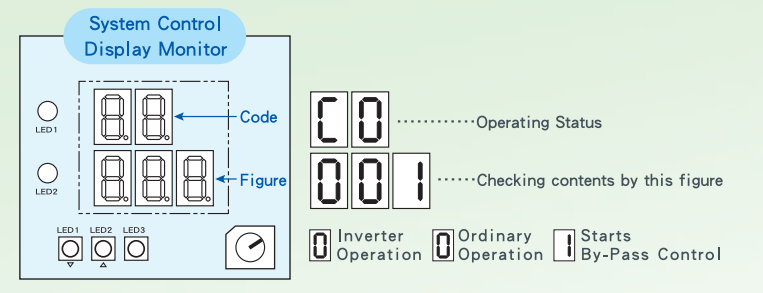
Hitachi inverter condensing unit enables cooling capacity to be controlled within 1Hz range to keep steady evaporating temperature which can keep food in high fresh status.

Temperature Changing in Show Case



〈Intelligent Panel Display〉

There is a monitor installed on control PCB (inside electric box) which can display high / low pressure, inlet / outlet temperature, operating current & frequency. By way of monitor display, which can easily find out failure points and causes.



Performance (60Hz)

Model	Unit	Refrigerant	Ambient temp	Evaporation temp. (°C)									
				-45	-40	-35	-30	-25	-20	-15	-10	-5	0
KX-RD31AV	kW	R404A/ R507A	32°C	2.4	2.9	3.6	4.4	5.3	6.4	7.8	9.1	10.8	—
	kcal/hr			2,030	2,530	3,110	3,810	4,570	5,540	6,690	7,840	9,250	—
KX-RD51AV	kW			3.2	4.0	5.0	6.2	7.4	8.9	10.6	12.4	14.5	—
	kcal/hr			2,780	3,420	4,320	5,340	6,380	7,640	9,110	10,660	12,470	—
KX-RD51AMV	kW			—	—	—	—	—	8.0	10.0	12.0	14.0	16.0
	kcal/hr			—	—	—	—	—	7,000	8,550	10,150	11,780	13,420
KX-RD61AMV	kW			—	—	—	—	—	10.0	12.0	14.0	16.0	18.0
	kcal/hr			—	—	—	—	—	8,400	10,150	12,040	13,850	15,650
KX-RD71AMV	kW			—	—	—	—	—	11.0	13.0	15.0	17.0	20.0
	kcal/hr			—	—	—	—	—	9,000	11,000	12,900	15,000	17,200

Note : 1. The data in the table is based on : Intake refrigerant temperature : 18°C • KX-RD31AV is 55Hz • KX-RD51AV is 80Hz • KX-RD51AMV is 50Hz • KX-RD61AMV is 60Hz • KX-RD71AMV is 65Hz
2. Refrigerant type : R404A

Performance (60Hz)

Model	Unit	Refrigerant	Ambient temp	Evaporation temp. (°C)									
				-45	-40	-35	-30	-25	-20	-15	-10	-5	0
KX-R81AV	kW	R404A/ R507A	32°C	4.8	6.0	7.4	9.1	11.1	13.3	15.8	18.6	21.6	—
	kcal/hr			4,150	5,160	6,360	7,800	9,510	11,430	13,580	15,980	18,610	—
KX-R101AV	kW			5.4	6.8	8.8	10.9	13.1	15.8	18.4	21.4	24.6	—
	kcal/hr			4,610	5,870	7,540	9,350	11,300	13,550	15,810	18,380	21,180	—
KX-R161AV	kW			9.4	12.1	15.1	18.5	22.5	26.9	31.8	37.1	42.8	—
	kcal/hr			8,120	10,360	12,940	15,910	19,310	23,130	27,340	31,890	36,840	—
KX-R201AV	kW			11.9	14.5	17.9	21.8	26.5	31.6	37.5	43.6	50.9	—
	kcal/hr			10,260	12,480	15,380	18,780	22,770	27,160	32,240	37,490	43,810	—
KX-R81AHV	kW			—	—	—	—	—	12.6	14.9	17.5	20.5	23.2
	kcal/hr			—	—	—	—	—	10,810	12,780	15,060	17,590	20,000
KX-R101AHV	kW			—	—	—	—	—	13.7	16.3	19.1	22.3	25.4
	kcal/hr			—	—	—	—	—	11,750	13,980	16,430	19,140	22,320
KX-R161AHV	kW			—	—	—	—	—	26.8	31.7	36.9	42.7	43.8
	kcal/hr			—	—	—	—	—	23,020	27,220	31,740	36,680	42,420
KX-R201AHV	kW			—	—	—	—	—	31.6	37.5	43.8	48.9	50.6
	kcal/hr			—	—	—	—	—	27,140	32,210	37,680	42,010	43,500

Note : 1. The data in the table is based on : Intake refrigerant temperature : 18°C • KX-R81AV is 65Hz • KX-R101AV is 70Hz • KX-R161AV is 65Hz (Inverter) + 60Hz (Constant speed) • KX-R201AV is 70Hz (Inverter) + 60Hz (Constant speed) • KX-R81AHV is 55Hz • KX-R101AHV is 60Hz • KX-R161AHV is 55Hz (Inverter) + 60Hz (Constant speed) • KX-R201AHV is 60Hz (Inverter) + 60Hz (Constant speed)
2. Refrigerant type : R404A

Performance (50Hz)

Model	Unit	Refrigerant	Ambient temp	Evaporation temp. (°C)									
				-45	-40	-35	-30	-25	-20	-15	-10	-5	0
KX-RD31AV	kW	R404A/ R507A	32°C	2.1	2.6	3.3	4.0	5.0	6.1	7.4	8.5	9.8	—
	kcal/hr			1,840	2,250	2,810	3,480	4,300	5,260	6,370	7,340	8,460	—
KX-RD51AV	kW			3.0	3.8	4.8	5.9	7.1	8.5	10.3	12.0	14.3	—
	kcal/hr			2,580	3,240	4,120	5,090	6,140	7,340	8,830	10,340	12,260	—
KX-RD51AMV	kW			—	—	—	—	—	8.0	10.0	12.0	14.0	16.0
	kcal/hr			—	—	—	—	—	7,000	8,550	10,150	11,780	13,420
KX-RD61AMV	kW			—	—	—	—	—	10.0	12.0	14.0	16.0	18.0
	kcal/hr			—	—	—	—	—	8,400	10,150	12,040	13,850	15,650
KX-RD71AMV	kW			—	—	—	—	—	11.0	13.0	15.0	17.0	20.0
	kcal/hr			—	—	—	—	—	9,000	11,000	12,900	15,000	17,200

Note : 1. The data in the table is based on : Intake refrigerant temperature : 18°C • KX-RD31AV is 55Hz • KX-RD51AV is 80Hz • KX-RD51AMV is 50Hz • KX-RD61AMV is 60Hz • KX-RD71AMV is 65Hz
2. Refrigerant type : R404A

Performance (50Hz)

Model	Unit	Refrigerant	Ambient temp	Evaporation temp. (°C)									
				-45	-40	-35	-30	-25	-20	-15	-10	-5	0
KX-R81AV	kW	R404A/ R507A	32°C	4.7	5.9	7.2	8.8	10.7	12.9	15.3	18.0	21.0	—
	kcal/hr			4,000	5,040	6,230	7,590	9,190	11,100	13,180	15,490	18,060	—
KX-R101AV	kW			5.1	6.5	8.8	10.4	12.6	15.0	17.6	20.4	23.5	—
	kcal/hr			4,420	5,620	7,540	8,920	10,840	12,930	15,100	17,580	20,230	—
KX-R161AV	kW			8.5	10.8	13.5	16.6	20.2	24.1	28.5	33.3	38.5	—
	kcal/hr			7,300	9,300	11,600	14,280	17,340	20,750	24,540	28,610	33,070	—
KX-R201AV	kW			10.7	13.0	16.0	19.6	23.8	28.4	33.7	39.4	45.8	—
	kcal/hr			9,220	11,210	13,790	16,870	20,450	24,390	28,970	33,900	39,360	—
KX-R81AHV	kW			—	—	—	—	—	12.4	14.8	17.3	20.3	23.0
	kcal/hr			—	—	—	—	—	10,650	12,700	14,900	17,430	20,000
KX-R101AHV	kW			—	—	—	—	—	13.6	16.1	18.9	22.1	25.2
	kcal/hr			—	—	—	—	—	11,670	13,810	16,280	18,970	21,680
KX-R161AHV	kW			—	—	—	—	—	21.1	25.4	29.7	34.4	39.2
	kcal/hr			—	—	—	—	—	18,160	21,850	25,510	29,620	33,740
KX-R201AHV	kW			—	—	—	—	—	23.5	28.2	32.9	38.2	43.5
	kcal/hr			—	—	—	—	—	20,170	24,250	28,300	32,870	37,440

Note : 1. The data in the table is based on : Intake refrigerant temperature : 18°C • KX-R81AV is 65Hz • KX-R101AV is 70Hz • KX-R161AV is 65Hz (Inverter) + 50Hz (Constant speed) • KX-R201AV is 70Hz (Inverter) + 50Hz (Constant speed) • KX-R81AHV is 55Hz • KX-R101AHV is 60Hz • KX-R161AHV is 55Hz (Inverter) + 50Hz (Constant speed) • KX-R201AHV is 60Hz (Inverter) + 50Hz (Constant speed)
2. Refrigerant type : R404A

Freezing & Refrigerating Type

KX-RD31AV



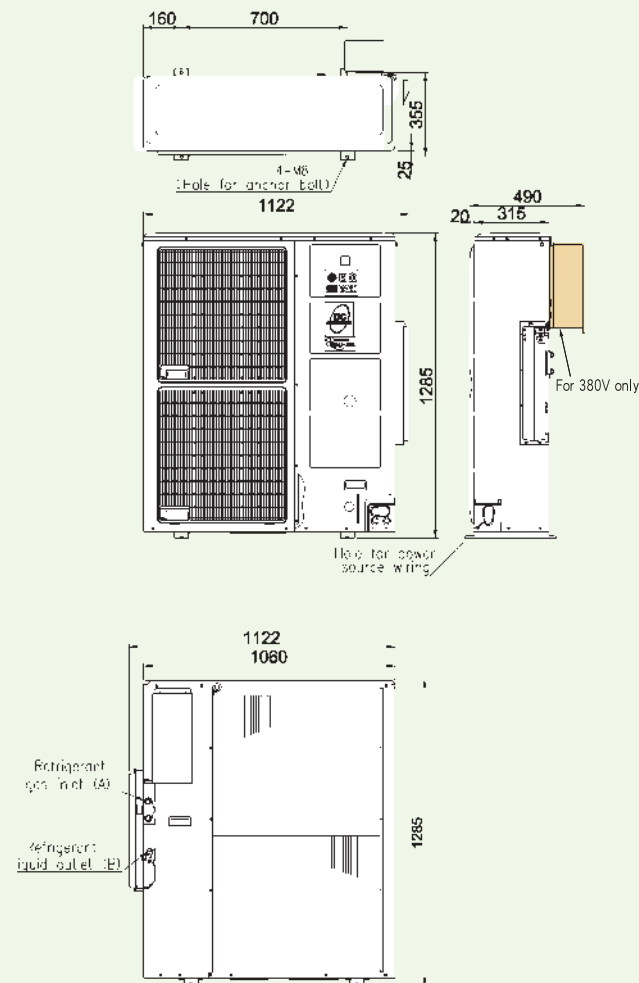
Specification

Model		KX-RD31AV		
External dimension	Width	mm	1122	
	Depth	mm	385	490
	Height	mm	1285	
Power source		—	AC・3Φ 220V 60Hz	AC・3Φ 4W・380V 60Hz
Operating frequency range		Hz	20~60	
Compressor	Model	—	FL500DHD-72A1	FL500DHD-72D1
	Rated output	kW	2.2	
	Displacement	m ³ /h	13.69	
Operating		A	11.8	7.0
Starting current		A	—	
Power consumption		kW	4.3	4.2
Refrigerant oil	Type	—	FVC32D (Idemitsu Kosan)	
	Charged volume	ℓ	3.0	
Condenser	Type	—	Multi-pass cross finned tube	
	Fan diameter	mm	Φ 500x2	
	Air flow	m ³ /min	130	117
Condenser motor	Rated output	W	105 + 120	
	Pole	—	6	
Receiver net capacity		ℓ	10.3	
Refrigerant		—	R404A or R507A (Single type used only)	
Evaporation tempe. Range		℃	-45~-5	
Ambient tempe. Range		℃	2~40	
Protections		—	High pressure switch、Compressor overcurrent relay、Discharge overheat thermostat、Fuse、Reverse phase protection relay	
Accessory		—	Instruction & Service manual	
Net weight		kg	155	160
Pipe size	Refrigerant gas inlet	mm	Φ 19.05	
	Refrigerant liquid outlet	mm	Φ 12.7	

Note : 1. The data above in the table is based on :
Ambient temperature : 32℃・Evaporation temperature : -15℃・Intake refrigerant temperature : 18℃・
Operating frequency is 55Hz
2. Refrigerant type : R404A

Outer Dimensions

KX-RD31AV



unit:mm

Freezing & Refrigerating Type

KX-RD51AV



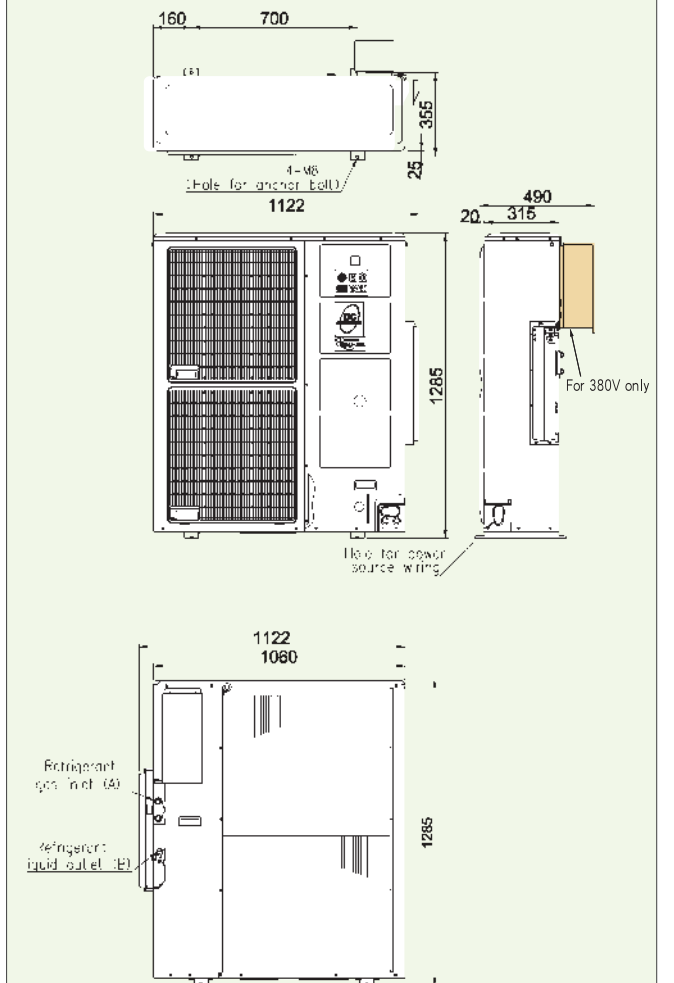
Specification

Model		KX-RD51AV		
External dimension	Width	mm	1122	
	Depth	mm	385	490
	Height	mm	1285	
Power source		—	AC・3Φ 220V 60Hz	AC・3Φ 4W・380V 60Hz
Operating frequency range		Hz	20~85	
Compressor	Model	—	FL500DHD-72A1	FL500DHD-72D1
	Rated output	kW	3.75	
	Displacement	m ³ /h	19.91	
Operating		A	19.6	10.6
Starting current		A	—	
Power consumption		kW	6.5	6.2
Refrigerant oil	Type	—	FVC32D (Idemitsu Kosan)	
	Charged volume	ℓ	3.0	
Condenser	Type	—	Multi-pass cross finned tube	
	Fan diameter	mm	Φ 500x2	
	Air flow	m ³ /min	121	115
Condenser motor	Rated output	W	105 + 120	
	Pole	—	6	
Receiver net capacity		ℓ	13.5	
Refrigerant		—	R404A or R507A (Single type used only)	
Evaporation tempe. Range		℃	-45~-5	
Ambient tempe. Range		℃	2~40	
Protections		—	High pressure switch、Compressor overcurrent relay、Discharge overheat thermostat、Fuse、Reverse phase protection relay	
Accessory		—	Instruction & Service manual	
Net weight		kg	170	175
Pipe size	Refrigerant gas inlet	mm	Φ 22	
	Refrigerant liquid outlet	mm	Φ 12.7	

Note : 1. The data above in the table is based on :
Ambient temperature : 32℃・Evaporation temperature : -15℃・Intake refrigerant temperature : 18℃・
Operating frequency is 80Hz
2. Refrigerant type : R404A

Outer Dimensions

KX-RD51AV



unit:mm

Refrigerating Type

KX-RD51AMV

KX-RD61AMV

KX-RD71AMV



Specification

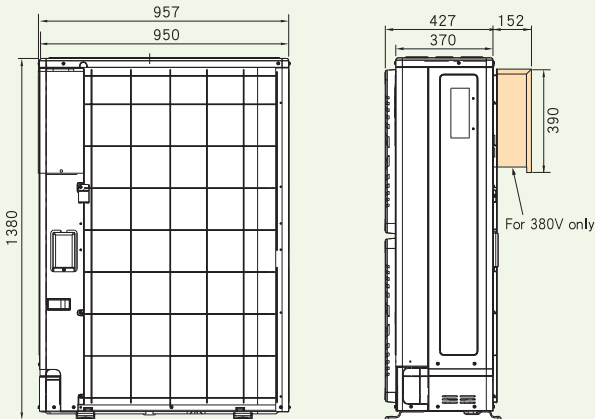
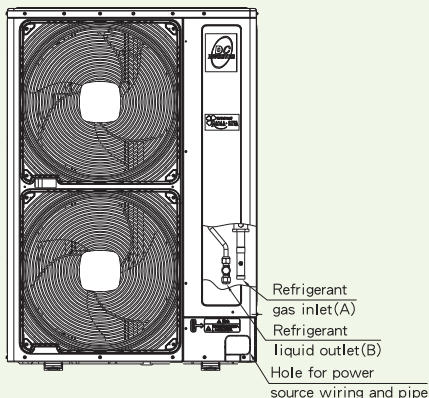
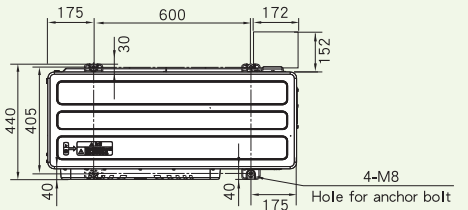
Model			KX-RD51AMV	KX-RD61AMV	KX-RD71AMV
Item					
External dimension	Width	mm	950		
	Depth	mm	562		
	Height	mm	1,380		
Power source		—	DC, 3 Φ, 220V, 60Hz DC, 3 Φ, 4W, 380V, 50/60Hz		
Operating frequency range		Hz	20 ~ 60	20 ~ 70	20 ~ 80
Compressor	Model	—	FM600DHD-90D1		
	Rated output	kW	3.7	4.5	5.2
	Displacement	m³/h	19.5	24	26
Operating current	50Hz 380V	A	7.6	8.9	9.5
	60Hz 380V		7.8	9.2	9.7
	220V		12.2	16.3	17.3
Starting current		A	—		
Power consumption	50Hz 380V	kW	4.34	5.05	5.52
	60Hz 380V		4.36	5.08	5.54
	220V		4.2	5.0	5.7
Refrigerant oil	Type	—	FVC32D (Idemitsu Kosan)		
	Charged volume	ℓ	2.4		
Condenser	Type	—	Multi-pass cross finned tube		
	Fan diameter	mm	Φ544 X 2		
	Air flow	m³/min	90	140	
Condenser motor	Rated output	W	74 X 2	138 X 2	
	Pole	—	8		
Receiver net capacity		ℓ	6 X 2		
Refrigerant		—	R404A or R507A (Single type used only)		
Evaporation tempe. Range		℃	-20 ~ 0		
Ambient tempe. Range		℃	2 ~ 40		
Protections		—	High pressure switch、 Compressor overcurrent relay、 Discharge overheat thermostat、Fuse、 Reverse phase protection relay		
Accessory		—	Instruction & Service manual		
Net weight		kg	165		
Pipe size	Refrigerant gas inlet	mm	Φ31.75		
	Refrigerant liquid outlet	mm	Φ12.7		Φ15.88

Note : 1. The data above in the table is based on :
Ambient temperature : 32℃・Evaporation temperature : -10℃・Intake refrigerant temperature : 18℃・
Operating frequency : KX-RD51AMV is 50Hz・KX-RD61AMV is 60Hz・KX-RD71AMV is 65Hz

2. Refrigerant type : R404A

Outer Dimensions

KX-RD51AMV/KX-RD61AMV/KX-RD71AMV



Model		KX-RD51AMV	KX-RD61AMV	KX-RD71AMV
Piping	A	Φ 31.75	Φ 31.75	Φ 31.75
	B	Φ 12.7	Φ 12.7	Φ 15.88

unit:mm

Freezing & Refrigerating Type

KX-R81AV

KX-R101AV



Specification

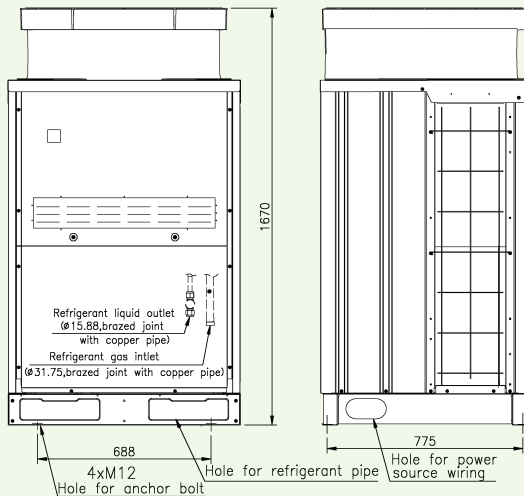
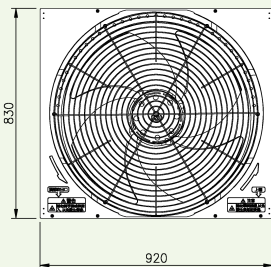
Model			KX-R81AV	KX-R101AV
Item				
External dimension	Width	mm	920	
	Depth	mm	830	
	Height	mm	1670	
Power source		—	AC, 3 Φ, 220V, 60Hz AC, 3 Φ, 4W, 380V, 50/60Hz	
Operating frequency range		Hz	25 ~ 70	25 ~ 75
Compressor	Model	380V	—	FL800ELV-144D3
		220V	—	FL800ELV-144A3
	Rated output	kW	7.0	8.5
	Displacement	m³/h	32.3	34.8
Operating current	50Hz	380V	A	19.3
	60Hz	380V		21.9
		220V		18.8
				21.3
				32.9
				36.4
Starting current	50Hz	380V	A	129
	60Hz	380V		116
		220V		235
Power consumption	50Hz	380V	kW	11.3
	60Hz	380V		12.8
		220V		11.0
				12.3
				12.2
				13.3
Refrigerant oil	Type	—	FVC32D (Idemitsu Kosan)	
	Charged volume	ℓ	3	
Condenser	Type	—	Multi-pass cross finned tube	
	Fan diameter	mm	Φ 644	
	Air flow	m³/min	197	
Condenser motor	Rated output	50Hz	W	364
		60Hz		355
	Pole	50Hz	—	6
		60Hz		8
Receiver net capacity		ℓ	27	
Refrigerant		—	R404A or R507A (Single type used only)	
Evaporation tempe. Range		℃	- 45 ~ - 5	
Ambient tempe. Range		℃	2 ~ 40	
Protections		—	High pressure switch、 Compressor overcurrent relay、 Discharge overheat thermostat、Fuse、 Reverse phase protection relay	
Accessory		—	Instruction & Service manual	
Net weight		kg	240	
Pipe size	Refrigerant gas inlet	mm	Φ 31.75	
	Refrigerant liquid outlet	mm	Φ 15.88	

Note : 1. The data above in the table is based on :
Ambient temperature : 32℃・Evaporation temperature : -10℃・Intake refrigerant temperature : 18℃・
Operating frequency : KX-R81AV is 70Hz・KX-R101AV is 75Hz

2. Refrigerant type : R404A

Outer Dimensions

KX-R81AV/KX-R101AV



unit:mm

Freezing & Refrigerating Type

KX-R161AV



Specification

Model			KX-R161AV		
External dimension	Width	mm	1850		
	Depth	mm	830		
	Height	mm	1670		
Power source		—	AC・3Φ・220V・60Hz	AC・3Φ・4W 380V・60Hz	AC・3Φ・4W 380V・50Hz
Operating frequency range		Hz	(Inverter) 25-75+ (Constant) 50/60Hz		
Compressor	Inverter		—	FL800ELV-144A3	FL800ELV-144D3
	Constant speed		—	FL800EL-144A3	FL800EL-144C3
	Rated output		kW	7.0+6.0	
	Displacement	50Hz	m³/h	57.2 【(Inverter)32.3(65Hz)+(Constant)24.9】	
		60Hz	m³/h	62.3 【(Inverter)32.3(65Hz)+(Constant)30.0】	
Operating current		A	61.6	38.5	33.5
Starting current		A	222.7	135.8	128.9
Power consumption		kW	22.4		19.6
Refrigerant oil	Type	—	FVC32D (Idemitsu Kosan)		
	Charged volume	ℓ	6.0+6.0		
Condenser	Type	—	Multi-pass cross finned tube		
	Fan diameter	mm	Φ 710x2		
	Air flow	m³/min	525		438
Condenser motor	Rated output	W	355x2		364x2
	Pole	—	8		6
Receiver net capacity		ℓ	50		
Refrigerant		—	R404A or R507A (Single type used only)		
Evaporation tempe. Range		℃	-45~-5		
Ambient tempe. Range		℃	2~40		
Protections		—	High pressure switch、Compressor overcurrent relay、Discharge overheat thermostat、Fuse、Reverse phase protection relay		
Accessory		—	Instruction & Service manual		
Net weight		kg	540		
Pipe size	Refrigerant gas inlet	mm	Φ 44.45		
	Refrigerant liquid outlet	mm	Φ 22		

Note : 1. The data above in the table is based on :
 Ambient temperature : 32℃・Evaporation temperature : -10℃・Intake refrigerant temperature : 18℃・
 Operating frequency : (Inverter) 65Hz + (Constant) 50/60Hz
 2. Refrigerant type : R404A

Outer Dimensions

KX-R161AV

unit:mm

Freezing & Refrigerating Type

KX-R201AV



Specification

			Model		KX-R201AV		
Item							
External dimension	Width		mm		1850		
	Depth		mm		830		
	Height		mm		1670		
Power source			—		AC・3Φ・220V・60Hz	AC・3Φ・4W 380V・60Hz	AC・3Φ・4W 380V・50Hz
Operating frequency range			Hz		(Inverter) 25-75+ (Constant) 50/60Hz		
Compressor	Inverter		—		FL1000ELV-144A3	FL1000ELV-144D3	
	Constant speed		—		FL1000EL-180A3	FL1000EL-180C3	
	Rated output		kW		8.5+7.4		
	Displacement	50Hz	m³/h		65.9 【(Inverter)34.8(70Hz)+(Constant)31.1】		
		60Hz	m³/h		72.3 【(Inverter)34.8(70Hz)+(Constant)37.5】		
Operating current			A		77.7	44.0	40.0
Starting current			A		245.0	142.0	138.0
Power consumption			kW		26.1		23.1
Refrigerant oil	Type		—		FVC32D (Idemitsu Kosan)		
	Charged volume		ℓ		6.0+6.0		
Condenser	Type		—		Multi-pass cross finned tube		
	Fan diameter		mm		Φ 710×2		
	Air flow		m³/min		525		438
Condenser motor	Rated output		W		355×2		364×2
	Pole		—		8		6
Receiver net capacity			ℓ		50		
Refrigerant			—		R404A or R507A (Single type used only)		
Evaporation tempe. Range			℃		-45~-5		
Ambient tempe. Range			℃		2~40		
Protections			—		High pressure switch、Compressor overcurrent relay、Discharge overheat thermostat、Fuse、Reverse phase protection relay		
Accessory			—		Instruction & Service manual		
Net weight			kg		540		
Pipe size	Refrigerant gas inlet		mm		Φ 44.45		
	Refrigerant liquid outlet		mm		Φ 22		

Note : 1. The data above in the table is based on :
 Ambient temperature : 32℃・Evaporation temperature : -10℃・Intake refrigerant temperature : 18℃・Operating frequency : (Inverter) 70Hz + (Constant) 50/60Hz
 2. Refrigerant type : R404A

Outer Dimensions

KX-R201AV

unit:mm

Refrigerating Type

KX-R81AHV

KX-R101AHV



Specification

Model			KX-R81AHV	KX-R101AHV
External dimension	Width	mm	920	
	Depth	mm	830	
	Height	mm	1670	
Power source			AC, 3Φ, 220V, 60Hz AC, 3Φ, 4W, 380V, 50/60Hz	
Operating frequency range			Hz 25 ~ 60	25 ~ 65
Compressor	Model	380V 220V	FL800ELV-144D3 FL800ELV-144A3	FL1000ELV-144D3 FL1000ELV-144A3
	Rated output	kW	6.0	7.4
	Displacement	m³/h	27.5	29.8
Operating current	50Hz	380V	18.1	19.4
	60Hz	380V	17.3	18.6
		220V	30.6	34
Starting current	50Hz	380V	129	
	60Hz	380V	116	
		220V	235	
Power consumption	50Hz	380V	10.5	11.8
	60Hz	380V	10.1	11.4
		220V	11.2	12.2
Refrigerant oil	Type	—	FVC32D (Idemitsu Kosan)	
	Charged volume	ℓ	3	
Condenser	Type	—	Multi-pass cross finned tube	
	Fan diameter	mm	Φ644	
	Air flow	m³/min	187	
Condenser motor	Rated output	50Hz 60Hz	364 355	
	Pole	50Hz 60Hz	6 8	
Receiver net capacity			ℓ 27	
Refrigerant			— R404A or R507A (Single type used only)	
Evaporation tempe. Range			℃ -20 ~ 10	
Ambient tempe. Range			℃ 2 ~ 40	
Protections			— High pressure switch、Compressor overcurrent relay、Discharge overheat thermostat、Fuse、Reverse phase protection relay	
Accessory			— Instruction & Service manual	
Net weight			kg 250	
Pipe size	Refrigerant gas inlet	mm	Φ31.75	
	Refrigerant liquid outlet	mm	Φ15.88	

Note : 1. The data above in the table is based on :
Ambient temperature : 32℃・Evaporation temperature : 0℃・Intake refrigerant temperature : 18℃・
Operating frequency : KX-R81AHV is 55Hz・KX-R101AHV is 60Hz
2. Refrigerant type : R404A

Outer Dimensions

KX-R81AHV/KX-R101AHV

unit:mm

Refrigerating Type

KX-R161AHV



Specification

			Model			KX-R161AHV				
Item										
External dimension	Width		mm		1850					
	Depth		mm		830					
	Height		mm		1670					
Power source			—		AC・3Φ・220V・60Hz		AC・3Φ・4W 380V・60Hz		AC・3Φ・4W 380V・50Hz	
Operating frequency range			Hz		(Inverter) 25-60+ (Constant) 50/60Hz					
Compressor	Inverter		—		FL800ELV-144A3		FL800ELV-144D3			
	Constant speed		—		FM750EL-128A4		FM750EL-128C4			
	Rated output		kW		6.0+6.0					
	Displacement	50Hz	m³/h		49.8 [(Invert)27.5(55Hz)+(Constant)22.3]					
		60Hz	m³/h		54.2 [(Invert)27.5(55Hz)+(Constant)26.7]					
Operating current			A		59.7		35.0		33.0	
Starting current			A		225.0		127.8		118.8	
Power consumption			kW		21.1				18.9	
Refrigerant oil	Type		—		FVC32D (Idemitsu Kosan)					
	Charged volume		ℓ		6.0+6.0					
Condenser	Type		—		Multi-pass cross finned tube					
	Fan diameter		mm		Φ710×2					
	Air flow		m³/min		570				475	
Condenser motor	Rated output		W		355×2				364×2	
	Pole		—		8				6	
Receiver net capacity			ℓ		50					
Refrigerant			—		R404A or R507A (Single type used only)					
Evaporation tempe. Range			℃		-20~5					
Ambient tempe. Range			℃		2~40					
Protections			—		High pressure switch、Compressor overcurrent relay、Discharge overheat thermostat、Fuse、Reverse phase protection relay					
Accessory			—		Instruction & Service manual					
Net weight			kg		570					
Pipe size	Refrigerant gas inlet		mm		Φ44.45					
	Refrigerant liquid outlet		mm		Φ22					

Note : 1. The data above in the table is based on :
 Ambient temperature : 32℃・Evaporation temperature : 0℃・Intake refrigerant temperature : 18℃・
 Operating frequency : (Inverter) 55Hz + (Constant) 50/60Hz
 2. Refrigerant type : R404A

Outer Dimensions

KX-R161AHV

unit:mm

Refrigerating Type

KX-R201AHV

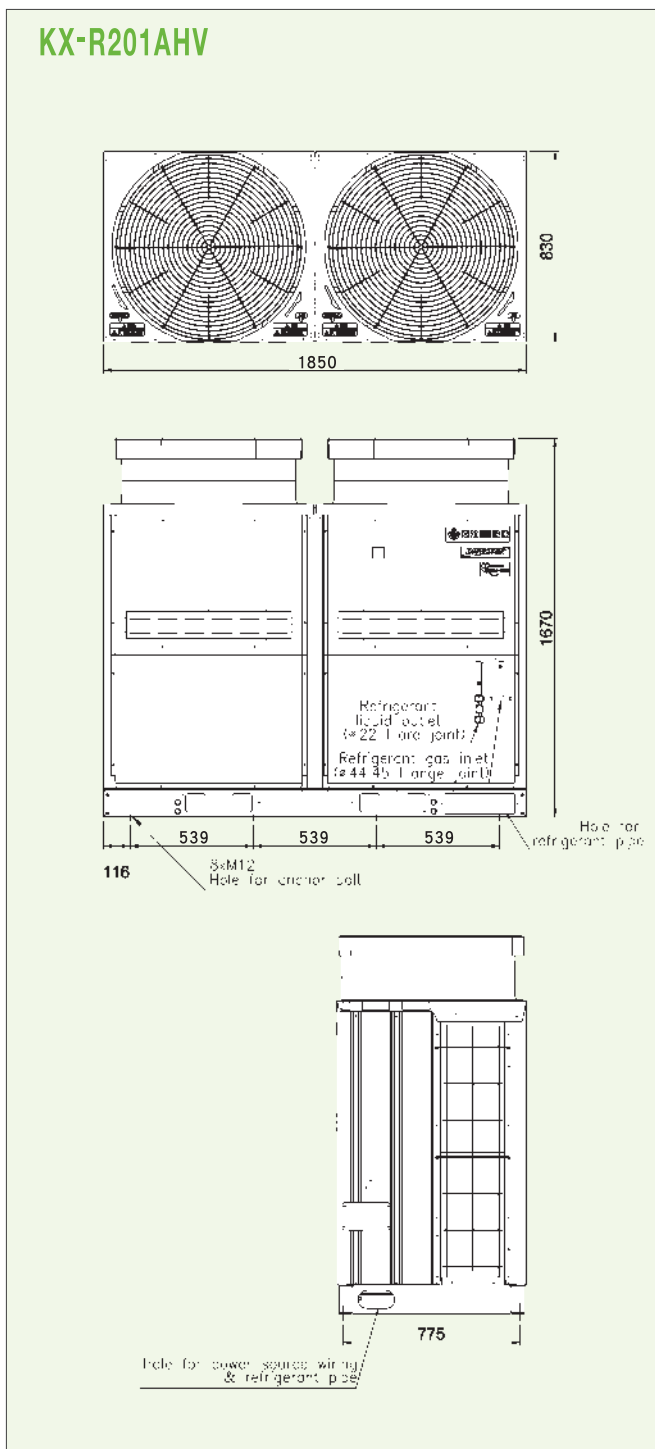


■ Specification

Model		KX-R201AHV		
Item	Width	mm	1850	
	Depth	mm	830	
	Height	mm	1670	
Power source		—	AC・3Φ・220V・60Hz	AC・3Φ・4W 380V・60Hz AC・3Φ・4W 380V・50Hz
Operating frequency range		Hz	(Inverter) 25-65+ (Constant) 50/60Hz	
Compressor	Inverter	—	FL1000ELV-144A3	FL1000ELV-144D3
	Constant speed	—	FM800EL-144A4	FM800EL-144C4
	Rated output	kW	7.4+7.4	
	Displacement	50Hz m³/h	54.7【(Invert)29.8(60Hz)+(Constant)24.9】	
		60Hz m³/h	59.8【(Invert)29.8(60Hz)+(Constant)30.0】	
Operating current		A	69.2	40.8 38.3
Starting current		A	245.0	139.0 120.0
Power consumption		kW	22.0 20.5	
Refrigerant oil	Type	—	FVC32D (Idemitsu Kosan)	
	Charged volume	ℓ	6.0+6.0	
Condenser	Type	—	Multi-pass cross finned tube	
	Fan diameter	mm	Φ710×2	
	Air flow	m³/min	570	475
Condenser motor	Rated output	W	355×2	364×2
	Pole	—	8	6
Receiver net capacity		ℓ	50	
Refrigerant		—	R404A or R507A (Single type used only)	
Evaporation tempe. Range		℃	-20~5	
Ambient tempe. Range		℃	2~40	
Protections		—	High pressure switch、Compressor overcurrent relay、Discharge overheat thermostat、Fuse、Reverse phase protection relay	
Accessory		—	Instruction & Service manual	
Net weight		kg	570	
Pipe size	Refrigerant gas inlet	mm	Φ44.45	
	Refrigerant liquid outlet	mm	Φ22	

Note : 1. The data above in the table is based on :
Ambient temperature : 32℃・Evaporation temperature : 0℃・Intake refrigerant temperature : 18℃・
Operating frequency : (Inverter) 60Hz + (Constant) 50/60Hz
2. Refrigerant type : R404A

■ Outer Dimensions



■ Degree of superheat with refrigerating capacity convert the coefficient :

■ Refrigerating capacity revision of degree of superheat(TsSH)

Evaporation temperature (℃)	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
Degree of superhaet(TsSH)	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
10 deg	84.9	86.3	87.7	89.2	90.3	91.5	93.1	94.5	96.1	97.8	99.2	100.0(*)
15 deg	86.3	87.8	89.1	90.7	91.8	92.9	94.7	96.3	97.6	99.0	—	—
20 deg	87.8	89.2	90.7	92.1	93.3	94.4	96.2	97.7	99.2	—	—	—
25 deg	89.3	90.7	92.1	93.5	94.8	95.9	97.7	99.1	—	—	—	—
30 deg	90.7	92.2	93.6	95.0	96.2	97.4	99.2	—	—	—	—	—

Note : The data above in the table is based as follows :
Ambient temperature : 32℃・Refrigerant type : R404A
(*) Because the maximum temperature of refrigerant intake refrigerant is 18℃, degree of superheat is the biggest to 8℃.

■ Relationship between degree of superheat and actual suction refrigerant temperature

Evaporation temperature (℃)	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
Degree of superhaet(TsSH)	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
10 deg	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	18(*)
15 deg	-30	-25	-20	-15	-10	-5	0	5	10	15	—	—
20 deg	-25	-20	-15	-10	-5	0	5	10	15	—	—	—
25 deg	-20	-15	-10	-5	0	5	10	15	—	—	—	—
30 deg	-15	-10	-5	0	5	10	15	—	—	—	—	—

Note : The data above in the table is based as follows :
Ambient temperature : 32℃・Refrigerant type : R404A
(*) Because the maximum temperature of refrigerant intake refrigerant is 18℃, degree of superheat is the biggest to 8℃.

Specifications in this catalog are subject to change without notice, in order that HITACHI may bring the latest innovations to our customers.

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