1R202304

Rooftop Package

Creator 6.2-30 Ton

Midea Building Technologies Division

Midea Group

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Quality Assurance ISO 9001

Environmental Management ISO 14001

Occupational Health and Safety Management ISO 45001

Midea MBT

Midea MBT(Midea Building Technologies) is a key division of the Midea Group, a leading provider of comprehensive solutions of intelligent building, involving energy sources, elevators, control systems, and heating, ventilation & air conditioning. Midea MBT has continued with the tradition of innovation upon which it was founded and emerged as a global leader in the HVAC and building management industry. A strong drive for advancement has resulted in an extensive R&D department that has placed Midea MBT at the forefront of a competitive -edge. Through these independent projects and joint-cooperation with other global enterprises, Midea has supplied thousands of innovative solutions to customers worldwide.

Several production bases are situated on Shunde, Chongqing, Hefei, and Italy.
MBT Shunde: 38 product lines focusing on VRF, Split Products, Heat Pump Water Heaters and AHU/FCU.
MBT Chongqing: 14 product lines focusing on Water Cooled Centrifugal/Screw/Scroll Chillers, Air Cooled Screw/Scroll Chillers and AHU/FCU.
MBT Hefei: 11 product lines focusing on VRF, Chillers and Heat Pump Water Heaters.
Clivet S.p.A: 50,000m² workshop in Feltre and Verona, covering products such as ELFO system, hydronic, WHLP, packaged, split and close control and so on.

FORTUNE GLOBAL 500 2022

1999
Entered the HBT field

2000
Developed the first inverter VRF With Toshiba

2001
Partnered with Copeland to develop the digital scroll VRF system

2004
Acquired MGRE entered the chiller industry

2006
Launched the first VSD centrifugal chiller

2007
Won the first Midea centrifugal chiller project overseas

2008
Launched the rooftop package ClimaMaster globally

2010
Built the 3rd manufacturing base in Hefei

2014
Launched the rooftop package ClimaCreator globally

2015
JV with Carrier in China in chiller field, BOSCH in VRF production and Siix in smart control

2016
Acquired 80% stake in Clivet

2017
Launched the rooftop package Desert globally

2020-2022
Launched the DC inverter series rooftop package

MBT Learning Academy

Objective

MBT Learning Academy aims to provide training to the sales personnel as well as technical personnel in order to increase the utilization for your MBT equipment. Once you have purchased equipment from MBT, taking care of the equipment is topmost priority. MBT Learning Academy offers training courses to learn firsthand from the manufacturer what it takes to get the best out of your MBT product. The goal of MBT Learning Academy is to provide product specific training, safe work procedures and expertise in carrying out the installation and maintenance of MBT products as well as teaching the main selling points in order to help the sales people sell the MBT products with ease.

Training Centers

Our world class training centers provide knowledge and skills necessary to efficiently deploy MBT technologies.

The training centers include dedicated laboratories to provide hands-on experiences with various systems, components and controls to refresh and enhance the skills of your sales, design and installation and service teams. Right now we operate our trainings from the below two locations:

1. MBT Training Center

Address: MBT Training Center, 2nd Floor, Building 6, Midea Global Innovation Center, Beijiao , Shunde, Foshan, China Pin-528311

The Midea MBT Training Center is situated 70 kilometers from Baiyun Guangzhou International Airport.

Products: VRF, M thermal

2. Chongqing Midea Training Center

Address: No. 15, Qiangwei Road, Nan'an District, Chongqing, China

Chongqing Midea Training Center is 35 kilometers from Chongqing International Airport.

Products: Centrifugal Chiller, Screw/Scroll Chiller and Terminals

VRF training

M thermal training

Chiller training

Global Technical Trainings

The training courses by MBT Learning Academy are divided into the following two categories with different targeted audiences for each.

Design and Application Trainings: The design and application trainings for various products are basically for the sales personnel selling MBT products in order to give them basic understanding about the main features. The trainings are conducted on a global level inviting sales engineers, technical engineers, consultants and project designers from different parts of the world.

After Sales- Service Trainings: These trainings are dedicated for the After Sales/ Service personnel in order for them to better carry out the installation, commissioning and maintenance of MBT products. Technical person and engineers from different parts of the world are invited to take part in these trainings.

Online Trainings: The trainings to the Global customers can also be done online with the help of Team and Midea Meeting software. This way, the customers do not need to be physically present for the training. Amid the COVID-19 pandemic, MBT Learning Academy has conducted a lot of online trainings. The training videos are available on the TSP system and can be downloaded by using QR codes.

Midea Meeting

Products: VRF, M thermal, Chillers and Terminals

Highly Skilled Trainers: The trainers for various courses by MBT Learning Academy are expert people with vast experiences in their field. Most of them have a deep insight about the global HVAC market and help the attendees to better understand the MBT products.

Training Certificates:

The attendees for Global trainings are provided a training certificate highlighting the courses discussed in the training, signed by Mr. Henry Cheng, General Manager of MBT Overseas Sales Company.

Registration:

You can contact your respective Midea contact point to provide you with the complete schedule about the global technical trainings as well as how to register for these trainings.

For further enquiries about the Global Trainings conducted by MBT Learning Academy, please send email at the following email address: peeyush@midea.com

Midea Global Spare Parts Center

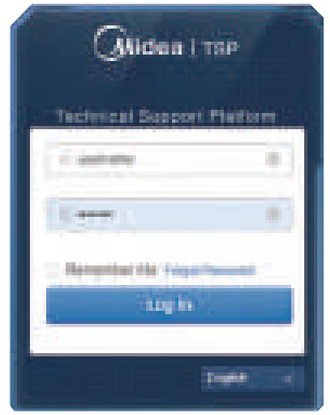
The global spare parts center provides high quality and fast spare parts supply. Midea online system (https://tsp.midea.com) can query and purchase spare parts with one click, further shortening the supply time of spare parts.

The “2 (HQ Spare parts center) +10 (Regional Spare parts center) +N (Country Spare parts inventory)” Spare Parts Layout can ensure the timely supply of global after-sales spare parts.

Technical Support Platform (TSP)

TSP is a platform for customers to provide professional technical support. Through TSP, you can inquire product information, documentation, spare parts and trouble-shooting, initiate technical questions and quality com-plaint process, and also support self-service spare parts order.

Website address: https://tsp.midea.com/



My order

Inquire spare parts from exploded view and place spare parts order directly in TSP.

Document inquiry and download

View or download product technical documen-tation online, such as catalogs, images, training PPTs, etc.

Technical inquiry & FAQ

Initiate technical questions online, and our technicians answer them online in time. Find a quick solution in the FAQ.

Troubleshooting

Query the error code and solution by SN, model name, error code or product type.

Complain

Initiate the product quality complaint process online, and our after-sales engineers handle related complaints in time.

Mobile Intelligence Service App (MISA)

MISA is the mobile terminal of TSP, with the same functions as TSP. The mobile service makes technical support more timely and convenient.

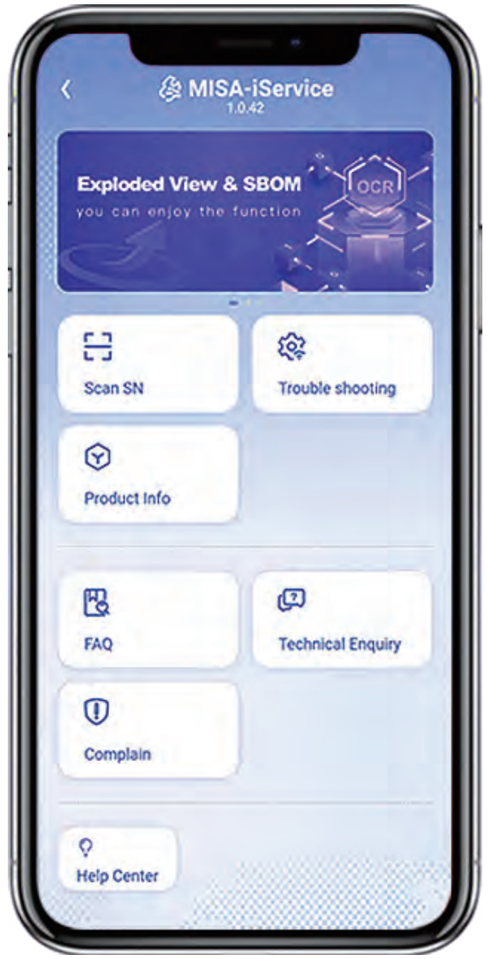
https://link.midea.com

FAQ

Complain

Technical Enquiry

Search product manuals



Trouble shooting

Spare Parts list

Download

Scan above to download the mobile app

Feedback

Thank you very much for your attention and advice

Contents

Product lineups

Nominal ton*		6.2	7.5	8.5	10	12.5	15	17.5	20	25	30
Heat pump 380-415V-3N~ 50Hz			●								
					●						
						●	●				
								●	●		
										●	●
Cooling only 380-415V-3N~ 50Hz		●	●								
				●	●						
						●	●				
								●	●		
										●	●
Cooling only 220V 3N ~ 60Hz			●								
					●						
							●				
									●		
										●	●
Cooling only 460V 3N ~ 60Hz									●		
										●	●

Notes:

1. * Nominal ton only for reference.
2. ● means cooling type product; ● means heat pump type product.
3. Cooling or heating capacity as per specifications.

Features

Wide application range

Easy installation

Easy maintenance

Outstanding reliability

Flexible choise of accessories

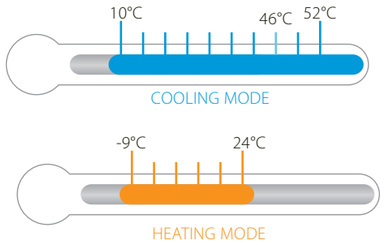
Wide application range

Wide capacity range

- Wide cooling capacity range from 5 to 30 tons.
- Heat pump and cooling only products are available.

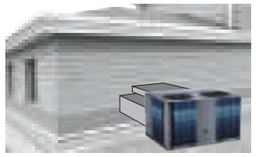
Wide Operation Range

Creater series rooftop package units can operate stably in a wide ambient temperature range.
Cooling only type from 10°C to 52°C in cooling mode.
Heat pump type from 10°C to 46°C in cooling mode and from -9°C to 24°C in heating mode.



Design flexibility

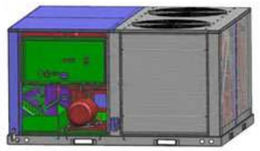
- Vertical side-discharge structure design.
- Flanges of air flow inlet and outlet as standard.
- It is suitable for installation on rooftop and ground.



Easy installation

Convenient for wires connection

- Removable access door on the electric box. It is easy to move the cover of the electric box.
- Only connect the wires of power supply, and no need to connect any signal wires.



Easily connect the drainage pipe

- Reserved external drainage port, quickly and accurately connect the rubber drainage pipe.

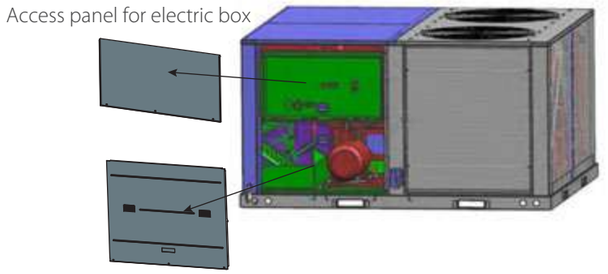
Easy maintenance

External pressure gauge ports

- The unit provides external pressure gauge ports for convenient and fast checking system pressure without removing the panel. (Only for 7.5Ton-15Ton)

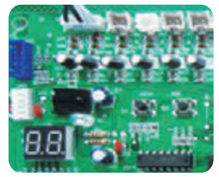
Easy access doors design

- Removable the access doors on the filter, fan motor, and electric box sections.
- Provide convenient access to system components for mainenance and service.

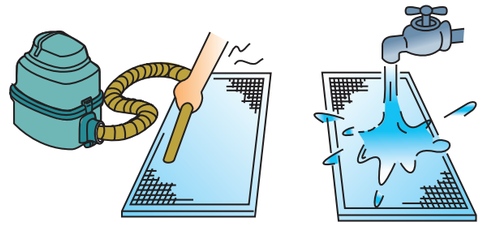


System self-diagnostic

- Press the ‘Check’ button, the LED display in PCB board of the unit will dislay the normal checking code.
- If the unit is in running with abnormal operation, the LED display will show the error code.



Washable filter



Outstanding reliability

Durable construction

- Pre-painted exterior cabinet panels pass 500 hours Salt Spray Test for durability.
- Weather-resistant construction with capped steams and sloped top panels.
- G90 galvanized heavy gauge plate conforming to ASTM-A-653.

Customized anti-corrosion treatment

- The rooftop package air conditioners with special anti-corrosion treatment are suitable for seaside areas or the areas exposed to acidic substances.

- All PCB parts in the unit are coated with double-side moisture proof paint. The outer side of electric box metal cover is spray-painted.
- Special anti-corrosion treatment of heat exchanger provides 5 to 6 times greater resistance against acid rain and salt corrosion.
- All screws are anti-rust.
- Casings of the unit and motors are anti-rust.

Reliable scroll compressor

- Famous brand compressor: Copeland, Hitachi, Danfoss, etc.. More reliable.
- No complex internal suction and discharge valves for quieter operation and higher reliability.
- Compact, light-weight, and fewer moving parts design.

Multi-protection design

- Multiply measures to ensure units operate normally and reliably:
  System current protection, High/low pressure protection, Temperature sensor protection, etc.
- Three-phase protector can be customized.

HP/LP switch

Temperature sensor

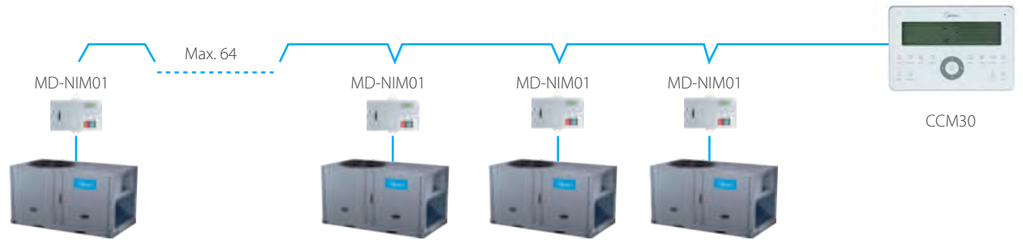
Flexible choise of accessories

Controllers

- Wired controller as standard.
- Besides standard wired controller, others can be chosen too.

KJR-12B/DP(T)-E

- Other brand thermostat can be matched as optional solution.
- Centralized control function can be achieved through the centralized controller as optional. MD-NIM01 should be connected between rooftop package units and centralized controller.



Multi-accessories

Description	Creator series	
	Standard accessories	Optional accessories
Filter		√
Outlet drainage	√	
Snap ring	√	
Drainage pipe	√	
Anti-corrosion fin		√
EHK (Electric Heater Kits)		√
Network interface module		√
Three-phase protector		√

Mechanical specification

General

All units are factory assembled, internally wired, fully charged refrigerant and 100% run tested to check cooling and heating operation, fan and blower rotation, and control sequence before leaving the factory. Internal wiring is colored and numbered for simplified identification. The unit is provided with an integral weather resistant control panel.

Casing

Unit casing is constructed of Zinc coated, heavy gauge, galvanized steel. Exterior surfaces are cleaned, G90 galvanized heavy gauge plate conforming to ASTM A653, followed by baked on electrostatic polyester dry powder coat paint on all external panels, completely weatherized for outdoor installation and propely reinforced and brazed. Salt Spray Test for steel sheet under 1000 hours, specially treated can be up to 2000 hours and even more. Cabinet contruction allows for all maintenance. Service panels can be easily removed and reassembled. All panels and top covers indoor side of the unit are insulated with 16mm, foam-faced, closed-cell insulation. The unit has provisions for forklift and crane lifting, with forklift capabilities on four sides of the unit.

Compressors

All units have direct-drive, hermetic, scroll type compressors with centrifugal type oil pump. Motor is suction gas-cooled and has a voltage utilization range of plus or minus 10 percent of unit nameplate voltage. Internal overloads are provided with the scroll compressors.

The compressors, incorporating a built-in muffler, are mounted on spring within a heavy gauge steel housing to give a low noise level.

The unit contains the best compressor technology available to achieve the highest possible performance. Dual compressors are outstanding for humidity control, light load cooling conditions and system back-up applicaitons.

Controls

The unit is completely factory-wired with necessary controls and terminal block for power wiring. The unit provides an external location for mounting a fused disconnect device.

Microprocessor controls provide for all 24V control functions. The precision control makes all heating, cooling, or ventilating decisions in response to electronic signals from sensors measuring indoor and outdoor temperatures.

The control maintains accurate temperature control, minimizes drift from set point, and provides better building comfort. A centralized micro-processor provides a higher level of machine protection.

Coils

Internally finned, copper tubes mechanically bonded to a configured hydrophilic aluminum fin is standard. Coils are leak tested under 3100KPa (450 psig) at the factory to ensure the pressure integrity.

Electronic thermostats

General information: A dedicated electronic thermostat is supplied with unit controls as standard. The thermostat normally displays room temperature and mode of operation. It also allows to select continuous fan operation, or has the fan on intermittent operation with the equipment. Finally, it displays the status of unit, thus providing maximum information for the user.

Specifications

Specifications

Heat pump, 380-415V 3N~ 50Hz

7.5RT

10RT

12.5RT

Nominal ton*			7.5	10	12.5
Model			MRC-075HWN1-R(C)	MRC-100HWN1-R(C)	MRC-125HWN1-R(C)
Cooling	Capacity	Btu/h	89,000	120,000	150,000
		kW	26.0	35.0	44.0
	Input	kW	7.9	10.7	13.3
	EER	Btu/h.W	11.3	11.2	11.3
Heating	Capacity	Btu/h	103,000	137,000	154,000
		kW	30.0	40.0	45.0
	Input	kW	8.9	11.9	13.2
	COP	Btu/h.W	11.6	11.5	11.7
Air flow	Indoor side	CFM	2,830	3,900	5,500
External static pressure		Pa	Default: 80; 0 - 250	Default: 90; 0 - 250	Default: 110; 0 - 275
Max. power input		kW	12	16	19,7
Max. current		A	24.8	28.8	38.2
Compressor	Type / Quantity		Scroll / 1	Scroll / 2	Scroll / 2
	Brand		Danfoss	Hitachi	Copeland
Indoor fan	Type / Drive type		Centrifugal / Direct	Centrifugal / Belt	Centrifugal / Belt
Outdoor fan	Type / Drive type		Axial / Direct	Axial / Direct	Axial / Direct
Wired controller			KJR-25B	KJR-12B/dP(T)-E	KJR-12B/dP(T)-E
Centralized controller (Optional)			Yes	Yes	Yes
Refrigerant	Type	/	R410A	R410A	R410A
	Control	/	Throttle valve	Throttle valve	Throttle valve
	Charged	kg	4.8	2.9+2.9	3.4+2.1
		lbs	10.56	6.38+6.38	7.48+4.62
Sound pressure level		dB(A)	72.1	71.5	71.8
Ambient temperature	Cooling		10℃ - 46℃	10℃ - 46℃	10℃ - 46℃
	Heating		-9℃ - 24℃	-9℃ - 24℃	-9℃ - 24℃
Dimension	Net (W×H×D)	mm	1,475×840×1,130	1,483×1,138×1,231	1,965×1,230×1,130
	Packing (W×H×D)	mm	1,495×870×1,150	1,500×1,255×1,155	1,995×1,255×1,160
Weight	Net / Gross	kg	244/249	343/354	451/471

Notes:

1. Cooling capacity test condition (1): Outdoor ambient temperature: 35℃, indoor temperature 26.7℃ DB / 19.4℃ WB;
   Heating capacity test condition (2): Outdoor ambient temperature: 7℃ DB / 6℃ WB, indoor temperature 20℃ DB / 15℃ WB;
2. Units are suitable for operation to ±20% of nominal CFM;
3. Sound values are measured in a semi-anechoic room, at a positon 1 meter in front of the unit and (1 meter+Height of unit)/2 above the floor.
4. Specifications are subject to change without prior notice for product improvement.
5. * Nominal ton only for reference.
6. Cooling or heating capacity as per specifications.

Specifications

Heat pump , 380-415V 3N~ 50Hz

15RT

17.5RT & 20RT

25RT & 30RT

Nominal ton*			15	17.5	20	25	30
Model			MRC-150HWN1-R(C)	MRC-175HWN1-R(C)	MRC-200HWN1-R(C)	MRC-250HWN1-R(C)	MRC-300HWN1-R(C)
Cooling	Capacity	Btu/h	180,000	208,000	240,000	300,000	335,000
		kW	53.0	61.0	70.0	88.0	98.0
	Input	kW	16.7	19.1	22.6	28.9	32.8
	EER	Btu/h.W	10.8	10.9	10.6	10.4	10.2
Heating	Capacity	Btu/h	191,000	218,000	260,000	330,000	380,000
		kW	56.0	64.0	76.2	97.0	111.5
	Input	kW	17.2	19.5	23.6	30.3	36.5
	COP	Btu/h.W	11.1	11.2	11.0	10.9	10.4
Air flow	Indoor side	CFM	7,000	7,600	8,800	10,000	11,200
External static pressure		Pa	Default: 110; 0 - 325	Default: 110; 0 - 250	Default: 120; 0 - 375	Default: 130; 0 - 350	Default: 270; 25 - 400
Max. power input		kW	25.0	27.0	32.5	38.5	49.5
Max. current		A	46.1	55.4	63.2	74.3	81.7
Compressor	Type / Quantity		Scroll / 2	Scroll / 2	Scroll / 2	Scroll / 2	Scroll / 2
	Brand		Copeland	Copeland	Copeland	Danfoss	Danfoss
Indoor fan	Type / Drive type		Centrifugal / Belt	Centrifugal / Belt	Centrifugal / Belt	Centrifugal / Belt	Centrifugal / Belt
Outdoor fan	Type / Drive type		Axial / Direct	Axial / Direct	Axial / Direct	Axial / Direct	Axial / Direct
Wired controller			KJR-12B/dP(T)-E	KJR-12B/dP(T)-E	KJR-12B/dP(T)-E	KJR-12B/dP(T)-E	KJR-12B/dP(T)-E
Centralized controller (Optional)			Yes	Yes	Yes	Yes	Yes
Refrigerant	Type	/	R410A	R410A	R410A	R410A	R410A
	Control	/	Throttle valve	Throttle valve	Throttle valve	Capillary	Capillary
	Charged	kg	6.1+3.0	5.8+5.8	6.9+6.9	8.7+8.7	10+10
		lbs	13.42+6.6	12.76+12.76	15.18+15.18	19.14+19.14	22+22
Sound pressure level		dB(A)	76.9	76.0	75.3	76.8	77.9
Ambient temperature	Cooling		10℃ - 46℃	10℃ - 46℃	10℃ - 46℃	10℃ - 46℃	10℃ - 46℃
	Heating		-9℃ - 24℃	-9℃ - 24℃	-9℃ - 24℃	-9℃ - 24℃	-9℃ - 24℃
Dimension	Net (W×H×D)	mm	1,965×1,230×1,130	1,670×1,247×2,192	1,670×1,247×2,192	2,320×1,245×2,220	2,320×1,245×2,220
	Packing (W×H×D)	mm	1,995×1,255×1,160	1,695×1,284×2,212	1,695×1,284×2,212	2,330×1,275×2,230	2,330×1,275×2,230
Weight	Net / Gross	kg	492/512	615/645	690/720	940/970	970/1000

Notes:

1. Cooling capacity test condition (1): Outdoor ambient temperature: 35℃, indoor temperature 26.7℃ DB / 19.4℃ WB;
   Heating capacity test condition (2): Outdoor ambient temperature: 7℃ DB / 6℃ WB, indoor temperature 20℃ DB / 15℃ WB;
2. Units are suitable for operation to ±20% of nominal CFM;
3. Sound values are measured in a semi-anechoic room, at a positon 1 meter in front of the unit and (1 meter+Height of unit)/2 above the floor.
4. Specifications are subject to change without prior notice for product improvement.
5. * Nominal ton only for reference.
6. Cooling or heating capacity as per specifications.

Specifications

Cooling only, 380-415V 3N~ 50Hz

6.2RT & 7.5RT

Nominal ton*			6.2	7.5
Model			MRCT-062CWN1-R(C)	MRCT-075CWN1-R(C)
Cooling	Capacity (1)	Btu/h	75,000	89,000
		kW	22.0	26.0
	Input (1)	kW	6.6	7.9
	EER (1)	Btu/h.W	11.4	11.3
	Capacity (2)	Btu/h	61,400	69,600
		kW	18.0	20.4
	Input (2)	kW	7.8	9.0
	EER (2)	Btu/h.W	7.9	7.8
Air flow	Indoor side	CFM	2,800	2,830
External pressure level		Pa	Default: 80; 0 - 250	Default: 80; 0 - 250
Max. power input		kW	9.0	13.6
Max. current		A	19.3	27.2
Compressor	Type / Quantity		Scroll / 1	Scroll / 1
	Brand		Copeland	Danfoss
Indoor fan	Type / Drive type		Centrifugal / Direct	Centrifugal / Direct
Outdoor fan	Type / Drive type		Axial / Direct	Axial / Direct
Wired controller			KJR-25B	KJR-25B
Centralized controller (Optional)			Yes	Yes
Refrigerant	Type	/	R410A	R410A
	Control	/	Throttle valve	Throttle valve
	Charged	kg	4	3.7
		lbs	8.8	8.14
Sound pressure level		dB(A)	71.0	71.5
Ambient temperature			10°C - 52°C	10°C - 52°C
Dimension	Net (W×H×D)	mm	1,475×840×1,130	1,475×840×1,130
	Packing (W×H×D)	mm	1,495×870×1,150	1,495×870×1,150
Weight	Net / Gross	kg	223/228	231/236

Notes:

1. Cooling capacity test condition (1): Outdoor ambient temperature: 35°C, indoor temperature 26.7°C DB / 19.4°C WB;
   Cooling capacity test condition (2): Outdoor ambient temperature: 46.1°C, indoor temperature 26.7°C DB / 19.4°C WB;
2. Units are suitable for operation to ±20% of nominal CFM;
3. Sound values are measured in a semi-anechoic room, at a positon 1 meter in front of the unit and (1 meter+Height of unit)/2 above the floor.
4. Specifications are subject to change without prior notice for product improvement.
5. * Nominal ton only for reference.
6. Cooling capacity as per specifications.

Specifications

Cooling only, 380-415V 3N~ 50Hz

8.5RT & 10RT

12.5RT & 15RT

Nominal ton*			8.5	10	12.5	15
Model			MRCT-085CWN1-R(D)	MRCT-100CWN1-R(D)	MRCT-125CWN1-R(C)	MRCT-150CWN1-R(C)
Cooling	Capacity (1)	Btu/h	102,000	120,000	150,000	180,000
		kW	30.0	35.0	44.0	53.0
	Input (1)	kW	9.2	10.7	13.3	16.7
	EER (1)	Btu/h.W	11.1	11.2	11.3	10.8
	Capacity (2)	Btu/h	80,700	100,200	125,400	146,000
		kW	23.7	29.4	36.8	42.8
	Input (2)	kW	10.3	12.6	16.1	18.7
	EER (2)	Btu/h.W	7.9	8.0	7.8	7.8
Air flow	Indoor side	CFM	3,500	4,100	5,500	7,000
External static pressure		Pa	Default: 80; 0 - 200	Default: 90; 0 - 250	Default: 110; 0 - 275	Default: 110; 0 - 325
Max. power input		kW	14.8	18.0	21.0	25.0
Max. current		A	29.2	34.1	41.2	48.0
Compressor	Type / Quantity		Scroll / 1	Scroll / 1	Scroll / 2	Scroll / 2
	Brand		Copeland	Copeland	Copeland	Copeland
Indoor fan	Type / Drive type		Centrifugal / Belt	Centrifugal / Belt	Centrifugal / Belt	Centrifugal / Belt
Outdoor fan	Type / Drive type		Axial / Direct	Axial / Direct	Axial / Direct	Axial / Direct
Wired controller			KJR-25B	KJR-25B	KJR-12B/dP(T)-E	KJR-12B/dP(T)-E
Centralized controller (Optional)			Yes	Yes	Yes	Yes
Refrigerant	Type	/	R410A	R410A	R410A	R410A
	Control	/	Throttle valve	Capillary	Throttle valve	Throttle valve
	Charged	kg	4.2	4.6	2.8+1.7	4.9+2.25
		lbs	9.24	10.12	6.16+3.74	10.78+4.95
Sound pressure level		dB(A)	71.7	72.4	71.8	75.5
Ambient temperature			10°C - 52°C	10°C - 52°C	10°C - 52°C	10°C - 52°C
Dimension	Net (W×H×D)	mm	1,483×1,231×1,138	1,483×1,231×1,138	1,965×1,230×1,130	1,965×1,230×1,130
	Packing (W×H×D)	mm	1,500×1,255×1,155	1,500×1,255×1,155	1,995×1,255×1,160	1,995×1,255×1,160
Weight	Net / Gross	kg	302/313	323/335	433/453	470/490

Notes:

1. Cooling capacity test condition (1): Outdoor ambient temperature: 35°C, indoor temperature 26.7°C DB / 19.4°C WB;
   Cooling capacity test condition (2): Outdoor ambient temperature: 46.1°C, indoor temperature 26.7°C DB / 19.4°C WB;
2. Units are suitable for operation to ±20% of nominal CFM;
3. Sound values are measured in a semi-anechoic room, at a positon 1 meter in front of the unit and (1 meter+Height of unit)/2 above the floor.
4. Specifications are subject to change without prior notice for product improvement.
5. * Nominal ton only for reference.
6. Cooling capacity as per specifications.

Specifications

Cooling only, 380-415V 3N~ 50Hz

17.5RT & 20RT

25RT & 30RT

Nominal ton*			17.5	20	25	30
Model			MRCT-175CWN1-R(C)	MRCT-200CWN1-R(C)	MRCT-250CWN1-R(C)	MRCT-300CWN1-R(C)
Cooling	Capacity (1)	Btu/h	208,000	240,000	300,000	360,000
		kW	61.0	70.0	87.0	105.0
	Input (1)	kW	19.1	22.6	28.0	34.3
	EER (1)	Btu/h.W	10.9	10.6	10.7	10.5
	Capacity (2)	Btu/h	181,100	199,200	251,700	336,300
		kW	53.1	58.4	73.8	98.6
	Input (2)	kW	22.6	25.1	32.0	41.8
	EER (2)	Btu/h.W	8.0	7.9	7.9	8.0
Air flow	Indoor side	CFM	7,600	8,800	10,000	12,000
External static pressure		Pa	Default: 110; 0 - 250	Default: 120; 0 - 375	Default: 130; 0 - 350	Default: 270; 0 - 400
Max. power input		kW	26.5	33.0	40.5	49.5
Max. current		A	55.0	66.9	77.4	94.1
Compressor	Type / Quantity		Scroll / 2	Scroll / 2	Scroll / 2	Scroll / 2
	Brand		Copeland	Copeland	Danfoss	Danfoss
Indoor fan	Type / Drive type		Centrifugal / Belt	Centrifugal / Belt	Centrifugal / Belt	Centrifugal / Belt
Outdoor fan	Type / Drive type		Axial / Direct	Axial / Direct	Axial / Direct	Axial / Direct
Wired controller			KJR-12B/dP(T)-E	KJR-12B/dP(T)-E	KJR-12B/dP(T)-E	KJR-12B/dP(T)-E
Centralized controller			Yes	Yes	Yes	Yes
Refrigerant	Type	/	R410A	R410A	R410A	R410A
	Control	/	Throttle valve	Throttle valve	Capillary	Capillary
	Charged	kg	3.7+3.7	5.65+5.65	6+6	7.6+7.6
		lbs	8.14+8.14	12.43+12.43	13.2+13.2	16.72+16.72
Sound pressure level		dB(A)	75.0	75.3	76.8	77.9
Ambient temperature			10°C - 52°C	10°C - 52°C	10°C - 52°C	10°C - 52°C
Dimension	Net (W×H×D)	mm	1,670×1,247×2,192	1,670×1,247×2,192	2,320×1,245×2,220	2,320×1,245×2,220
	Packing (W×H×D)	mm	1,695×1,284×2,212	1,695×1,284×2,212	2,330×1,275×2,230	2,330×1,275×2,230
Weight	Net / Gross	kg	590/620	670/700	895/925	910/940

Notes:

1. Cooling capacity test condition (1): Outdoor ambient temperature: 35°C, indoor temperature 26.7°C DB / 19.4°C WB;
   Cooling capacity test condition (2): Outdoor ambient temperature: 46.1°C, indoor temperature 26.7°C DB / 19.4°C WB;
2. Units are suitable for operation to ±20% of nominal CFM;
3. Sound values are measured in a semi-anechoic room, at a positon 1 meter in front of the unit and (1 meter+Height of unit)/2 above the floor.
4. Specifications are subject to change without prior notice for product improvement.
5. * Nominal ton only for reference.
6. Cooling capacity as per specifications.

Specifications

Cooling only, 220V 3N~ 60Hz

7.5RT

10RT

15RT

Nominal ton*			7.5	10	15
Model			MRCT-075CWN1-D(C)	MRCT-100CWN1-D(C)	MRCT-150CWN1-D(C)
Cooling	Capacity (1)	Btu/h	89,000	120,000	180,000
		W	26,100	35,200	52,800
	Input (1)	W	7,876	10,714	16,667
	EER (1)	Btu/h.W	11.3	11.2	10.8
Air flow	Indoor side	CFM	2,700	4,120	6,450
External static pressure		Pa	Default: 80; 0 - 250	Default: 90; 0 - 250	Default: 110; 0 - 325
Max. power input		W	11,300	17,500	25,000
Max. current		A	42.2	52.3	78.1
Compressor	Type / Quantity		Scroll / 1	Scroll / 1	Scroll / 2
	Brand		Copeland	Copeland	Copeland
Indoor fan	Type / Drive type		Centrifugal / Direct	Centrifugal / Belt	Centrifugal / Belt
Outdoor fan	Type / Drive type		Axial / Direct	Axial / Direct	Axial / Direct
Wired controller			KJR-25B	KJR-12B/dP(T)-E	KJR-12B/dP(T)-E
Centralized controller (Optional)			Yes	Yes	Yes
Refrigerant	Type	/	R410A	R410A	R410A
	Control	/	Throttle valve	Throttle valve	Throttle valve
	Charged	kg	3.8	4.1	2.2.+4.6
		lbs	8.36	9.02	4.84+10.12
Sound pressure level		dB(A)	75.6	75.7	76.8
Ambient temperature			10°C - 52°C	10°C - 52°C	10°C - 52°C
Dimension	Net (W×H×D)	mm	1,475×840×1,130	1,483×1,231×1,138	1,965×1,230×1,130
	Packing (W×H×D)	mm	1,495×870×1,150	1,500×1,255×1,155	1,995×1,255×1,160
Weight	Net / Gross	kg	235/240	325/335	470/485

Notes:

1. Cooling capacity test condition (1): Outdoor ambient temperature: 35°C, indoor temperature 26.7°C DB / 19.4°C WB;
2. Units are suitable for operation to ±20% of nominal CFM;
3. Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and (1 meter + height of unit)/2 above the floor.
4. Specifications are subject to change without prior notice for product improvement.
5. * Nominal ton only for reference.
6. Cooling capacity as per specifications.

Specifications

Cooling only 220V 3N~ 60Hz

20RT

25&30RT

Nominal ton*			20	25	30
Model			MRCT-200CWN1-D(C)	MRCT-250CWN1-D(C)	MRCT-300CWN1-D(C)
Cooling	Capacity (1)	Btu/h	240,000	300,000	360,000
		W	70,300	87,900	105,500
	Input (1)	W	22,642	28,037	36,000
	EER (1)	Btu/h.W	10.6	10.7	10
Air flow	Indoor side	CFM	8,580	11,138	11,000
External static pressure		Pa	Default: 120; 0 - 400	Default: 250; 125 - 450	Default: 270; 0 - 500
Max. power input		W	36,000	45,000	50,100
Max. current		A	111.3	139.3	155.2
Compressor	Type / Quantity		Scroll / 2	Scroll / 2	Scroll / 2
	Brand		Copeland	Copeland	Copeland
Indoor fan	Type / Drive type		Centrifugal / Belt	Centrifugal / Belt	Centrifugal / Belt
Outdoor fan	Type / Drive type		Axial / Direct	Axial / Direct	Axial / Direct
Wired controller			KJR-12B/dP(T)-E	KJR-12B/dP(T)-E	KJR-12B/dP(T)-E
Centralized controller (Optional)			Yes	Yes	Yes
Refrigerant	Type	/	R410A	R410A	R410A
	Control	/	Throttle valve	Capillary	Capillary
	Charged	kg	5.4+5.4	6.7+6.7	7.1+7.1
		lbs	11.88+11.88	14.74+14.74	15.62+15.62
Sound pressure level		dB(A)	78.3	79.2	79.7
Ambient temperature			10℃ - 52℃	10℃ - 52℃	10℃ - 52℃
Dimension	Net (W×H×D)	mm	1,670×1,247×2,192	2,320×1,245×2,220	2,220x1,245x2,320
	Packing (W×H×D)	mm	1,695×1,284×2,212	2,330×1,275×2,230	2,230x1,275x2,330
Weight	Net / Gross	kg	670/700	895/925	940/970

Notes:

1. Cooling capacity test condition (1): Outdoor ambient temperature: 35℃, indoor temperature 26.7℃ DB / 19.4℃ WB;
2. Units are suitable for operation to ±20% of nominal CFM;
3. Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and (1 meter + height of unit)/2 above the floor.
4. Specifications are subject to change without prior notice for product improvement.
5. * Nominal ton only for reference.
6. Cooling capacity as per specifications.

Specifications

Cooling only 460V 3N~ 60Hz

20RT

25&30RT

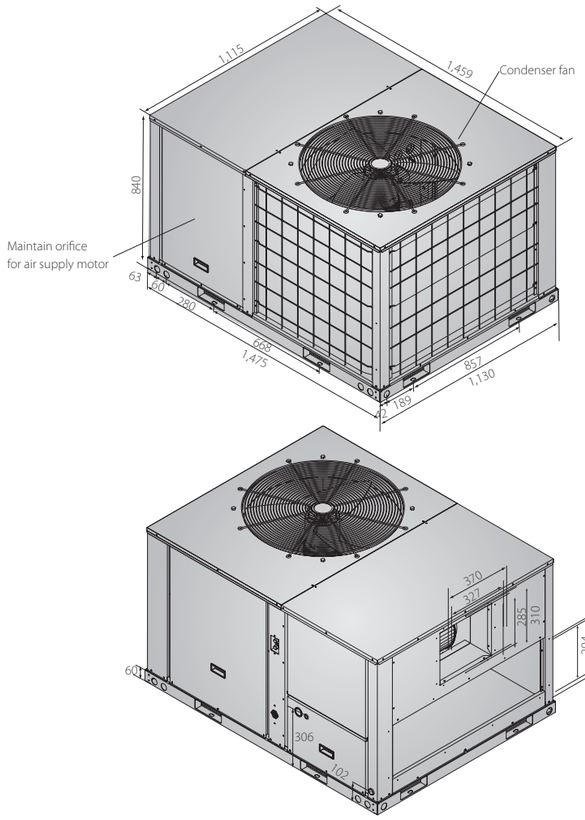
Nominal ton			20	25	30
Power supply			460V 3N~60Hz	460V 3N~60Hz	460V 3N~60Hz
Model			MRCT-200CWN1-Z(C)	MRCT-250CWN1-Z(C)	MRCT-300CWN1-Z(C)
Cooling	Capacity(1)	Btu/h	240,000	300,000	360,000
		kW	70.3	87.9	105.5
	Input(1)	kW	23.6	33.0	37.9
	EER(1)	Btu/h.W	10.2	9.1	9.5
Air flow	Indoor side	CFM	8,300@120Pa	11,500@130Pa	11,000@270pa
External static pressure		Pa	Default: 120; 0 - 400	Default: 250; 125 - 450	Default: 270; 0 - 400
Max. input consumption		kW	36.0	45.0	46.8
Max. current		A	60.8	66.2	150
Compressor	Type		Scroll	Scroll	Scroll
	Quantity		2	2	2
Indoor fan	Type / Drive type		Centrifugal / Belt	Centrifugal / Belt	Centrifugal / Belt
	Quantity		1	1	1
Outdoor fan	Type / Drive type		Axial / Direct	Axial / Direct	Axial / Direct
	Quantity		2	2	2
Wired controller			KJR-12B/dP(T)-E	KJR-12B/dP(T)-E	KJR-12B/dP(T)-E
Centralized controller (Optional)			Yes	Yes	Yes
Refrigerant	Type	/	R410A	R410A	R410A
	Control	/	Throttle valve	Capillary	Capillary
	Charged	kg	5.4+5.4	6.1+6.1	7.6+7.6
		lbs	11.88+11.88	13.42+13.42	16.72+16.72
Sound pressure level		dB(A)	78.3	79.2	77.9
Ambient temperature			10℃ - 52℃	10℃ - 52℃	10℃ - 52℃
Dimension	Net (W×H×D)	mm	2,192x1,247x1,670	2,220x1,245x2,320	2,220x1,245x2,320
	Packing (W×H×D)	mm	2,212x1,284x1,695	2,230x1,275x2,330	2,230x1,275x2,330
Weight	Net / Gross	kg	670/700	895/925	940/970

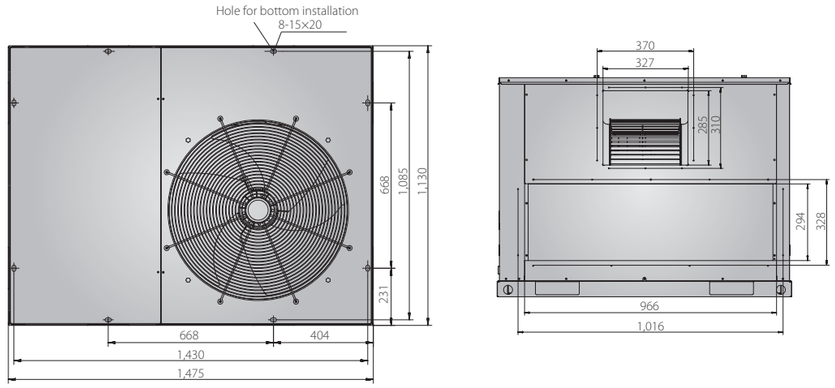
Notes:

1. Cooling capacity test condition (1): Outdoor ambient temperature: 35℃, indoor temperature 26.7℃ DB / 19.4℃ WB;
2. Units are suitable for operation to ±20% of nominal CFM;
3. Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and (1 meter + height of unit)/2 above the floor.
4. Specifications are subject to change without prior notice for product improvement.
5. * Nominal ton only for reference.
6. Cooling capacity as per specifications.

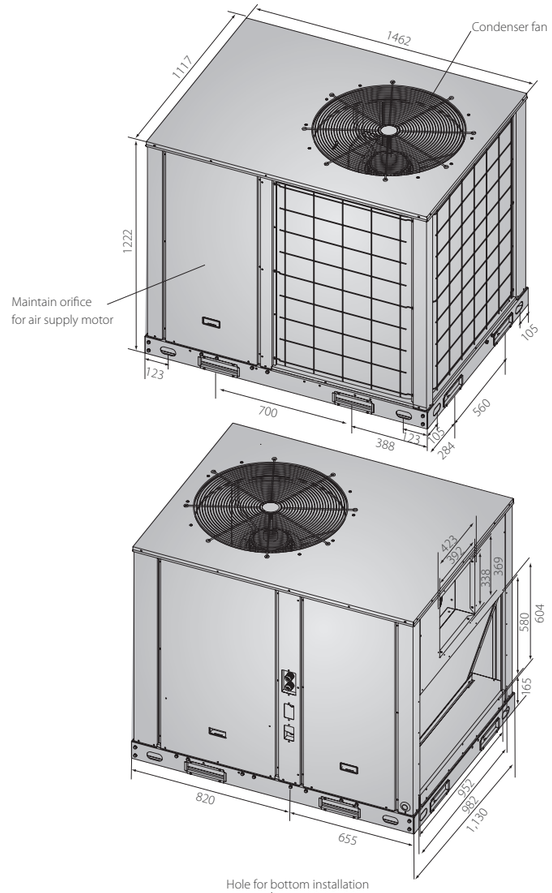
Dimensions

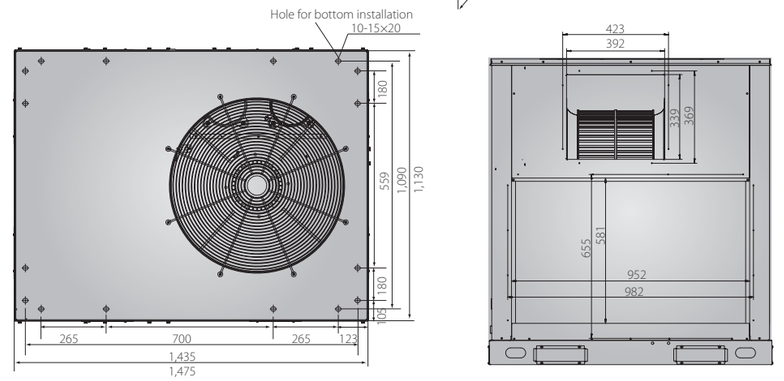
6.2RT & 7.5RT
(Units: mm)



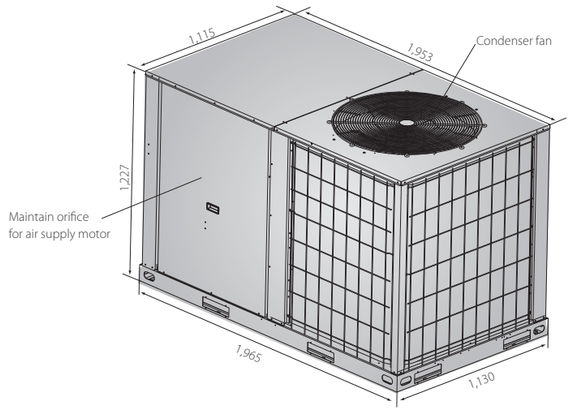


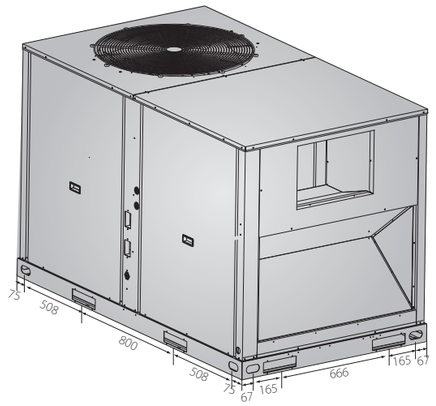
8.5RT & 10RT
(Units: mm)

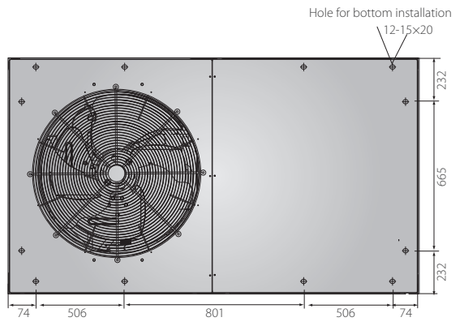


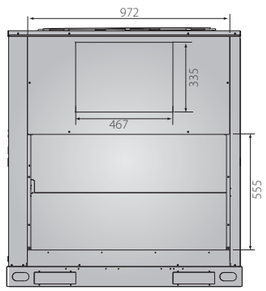


12.5RT & 15RT
(Units: mm)

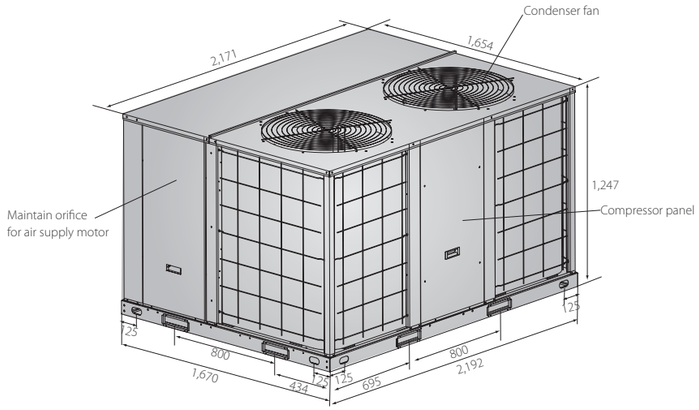


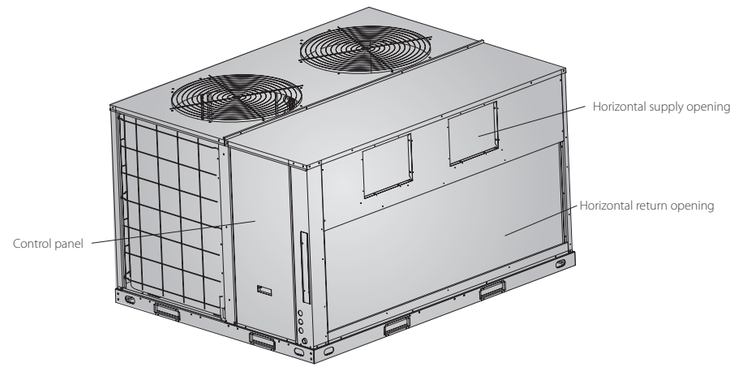


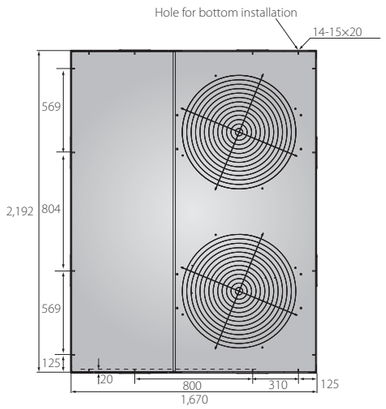


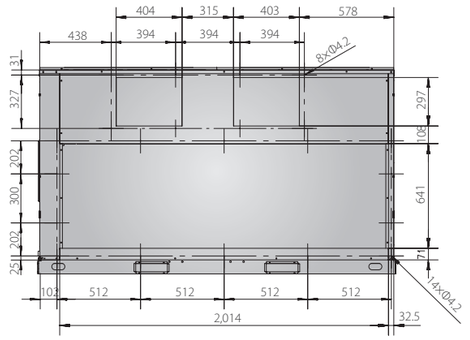


17.5RT & 20RT
(Units: mm)

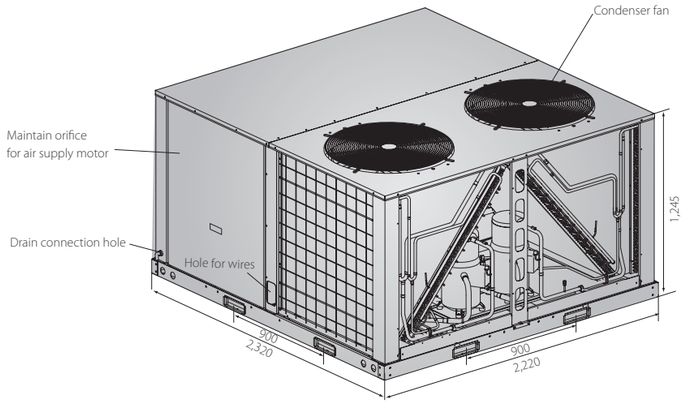


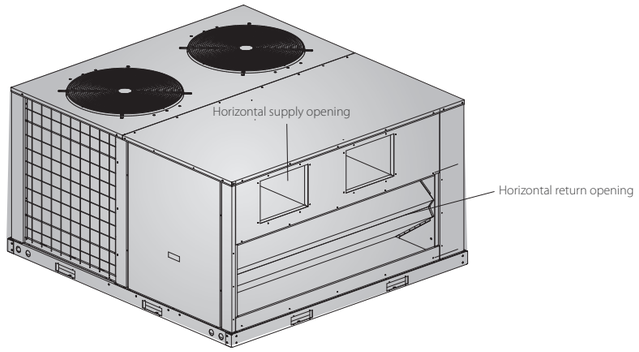


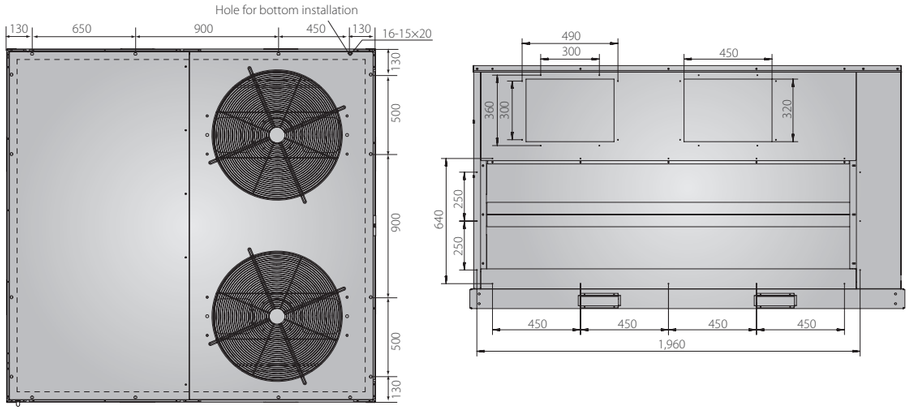




25RT & 30RT
(Units: mm)







Controllers

Wired controllers

Model	 **KJR-90K**	 **KJB-12B**	 **KJB-25B**	 **KJB-29B**
Key type	Touch key	Button key	Button key	Touch key
On / Off	●	●	●	●
Mode selection	●	●	●	●
Temperature setting	1℃ steps	1℃ steps	1℃ steps	1℃ steps
Fan mode selection	●	●	●	●
Follow me	●	●	x	●
Eco mode	●	●	x	x
Room temperature display	●	●	●	●
°F/°C display	●	●	●	●
Daily timer	●	●	●	●
Keyboard lock	●	●	x	●
Background light	●	●	●	●
Bi-directional communication	●	x	x	x
Clean filter reminder	●	x	●	●
Language	English	English	English	English
Error check function	●	●	x	x
System parameter querying	●	x	x	x
Dimensions (WxHxD) (mm)	86x86x18	120x120x20	140x95x30	120x120x20
Power supply	18V DC	5V DC	AC24V	5V DC

Note:
●: equipped as standard; ×: without this function
The optional wired controllers to each unit refering to electrical wiring diagram.

Central controller

CCM30

MD-NIM01

- Central control function. It is a multifunctional device which is able to control up to 64 units.
- The control object can be either single or all, making the controlling operation convenient. It also easy to check all units status.

- Two structures of centralized central design, easy installation.

Structure A

Structure B

Structure B leading-out mode sketch