1904-1R1902

Commercial Air Conditioners **2019**






Rooftop Package

R410A 50Hz

Commercial Air Conditioner Division

Midea Group

Add.: Midea Headquarters Building, 6 Midea Avenue, Shunde, Foshan, Guangdong, China

Postal code: 528311

Tel: +86-757-26338346 Fax: +86-757-22390205

cac.midea.com global.midea.com

Quality Assurance ISO 9001 · Environmental Management ISO 14001 · Occupational Health and Safety Assessment OHSAS 18001

Note: Product specifications change from time to time as product improvements and developments are released and may vary from those in this document.

Midea CAC

Midea CAC is a key division of the Midea Group, a leading producer of consumer appliances and provider of heating, ventilation and air conditioning solutions. Midea CAC has continued with the tradition of innovation upon which it was founded, and emerged as a global leader in the HVAC industry. A strong drive for advancement has created a groundbreaking R&D department that has placed Midea CAC at the forefront of a competitive field. Through these independent efforts and joint cooperation with other global enterprises, Midea has supplied thousands of innovative solutions to customers worldwide.

We have three production bases: Shunde, Chongqing and Hefei.
MCAC Shunde: 38 product lines focusing on VRF, Split Products, Heat Pump Water Heaters, and AHU/FCU.
MCAC Chongqing: 14 product lines focusing on Water Cooled Centrifugal/Screw/Scroll Chillers, Air Cooled Screw/Scroll Chillers.
MCAC Hefei: 11 product lines focusing on VRF, Chillers, and Heat Pump Water Heaters.

MIDEA GROUP
FORTUNE GLOBAL
FORTUNE
500

2015 » JV with Carrier in China in chiller field, BOSCH in VRF production and Siix in smart control
2014 » Launched the rooftop package ClimaCreator globally
2010 » Built the 3rd manufacturing base in Hefei
2008 » Launched the rooftop package ClimaMaster globally
2007 » Won the first Midea centrifugal chiller project overseas
2006 » Launched the first VSD centrifugal chiller
2004 » Acquired MGRE entered the chiller industry
2001 » Partnered with Copeland to develop the digital scroll VRF system
2000 » Developed the first inverter VRF With Toshiba
1999 » Entered the CAC field

Introduction

Midea rooftop package air conditioners are designed and manufactured to off the all-in-one solutions for large halls, warehouses or other appliations.

Midea rooftop package air conditioner are totally two series: ClimaCreator series and ClimaMaster series.

Series		Power supply	Application	Function	Cooling capactity range
R410A ClimaCreator series		380 - 415V 3Ph~ 50Hz	T1	Heat pump	6.2RT- 30RT
			Tropical (T3)	Heat pump	6.2RT - 30RT
			Tropical (T3)	Cooling only	4RT - 30RT
R410A ClimaMaster series		380 - 415V 3Ph~ 50Hz	T1	Heat pump	3RT - 5RT

Notes:
1. Product's cooling capacity as per specification.

Golden Dragen Mart
1,320RT
Barka, Oman

Traki Store
560RT
Valencia, Venezuela

Contents

General Features

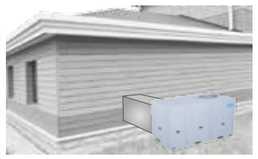
Convenient for unit selection

Wide cooling capacity range »

- Wide cooling capacity range, from 36000Btu/h to 360000Btu/h.

Design flexibility »

- Compact design.
- Flanges of air flow inlet and outlet as standard.
- It is suitable for installation in rooftop and ground.



ClimaMaster series

ClimaCreator series

Outstanding reliability

Durable construction »

- Pre-painted exterior cabinet panels pass 1000 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.

- Special anti-corrosion treatment of heat exchanger provides 5 to 6 times greater resistance against acid rain and salt corrosion.
- 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.
- 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 design, and fewer moving parts design.

Multi-protection design »

- Multi-measurement to ensure units operate normally and reliably:
  System current protection, High/low pressure switch protection, Temperature sensor on/off protection, etc.
- Three-phase protector can be customized.

HP/LP switch

Temperature sensor

Easy to 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.

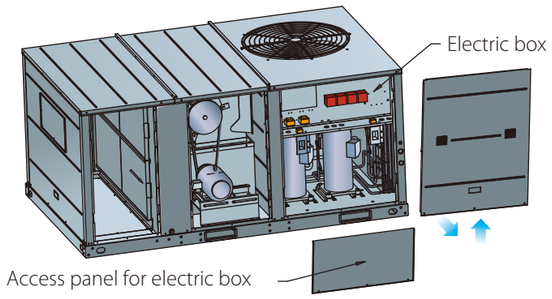
Easy to maintenance

External pressure gauge ports »

- The unit provides external pressure gauge ports for convenient and fast checking system pressure without removing the panel.

Easy access doors design »

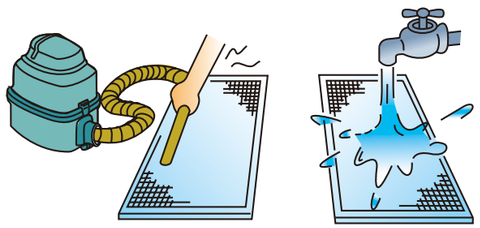
- Removable the access doors on the filter, fan motor, and electric box sections.
- Provide convenient access to system components for mainenance and service.



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 »



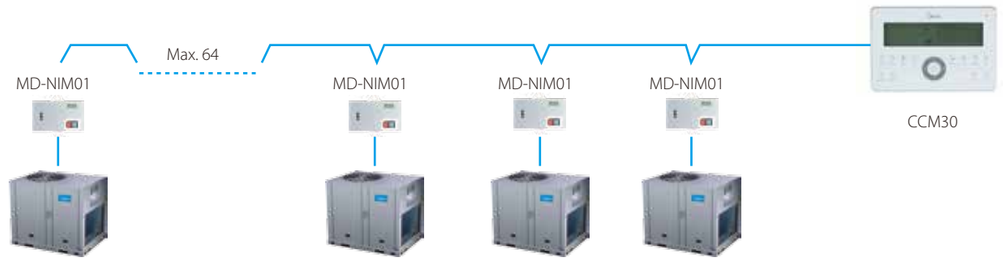
Flexible choise of accessories

Controllers »

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

- 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. (If you need to customize the Centralized control function, please contact the related technical engineer of Midea)



Multi-accessories »

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

General Features

Mechanical specification

General

The units are convertible airflow. 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. Wiring internal to the unit 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 ASTMA 653, 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 are removed easily and reinstalled by removing bolts. 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.

Compressors used in Rooftop Package unit are hermetically sealed reciprocating type. They are equipped with a crankcase heater as standard.

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. It controls one or two stage cooling applications. 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.

Product lineups

Nominal ton*		4	5	6.2	7.5	8.5	10	12.5	15	17.5	20	25	30
T1 Applications				●	●								
						●	●						
								●	●				
										●	●		
												●	●
Tropical (T3) Applications		●	●	●●	●●								
						●●	●●						
								●●	●●				
										●●	●●		
												●●	●●

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.

Adjustable pulley »

Through changing the working pitch diameter of the pulley mounted on driver shaft, in turn the revolutions per minute of the driven shaft will increase or decrease to change air volume.

Air intake filter & EHK as optional »

- Three thickness filter: 0.5inch, 1inch and 2inch;
- Two kinds of filter materials: Metal or Nylon + Metal frame.
- EHK (Electric Heater Kits) and control box can be customized.

Specifications

T1 application, 380-415V 3Ph~ 50Hz

6.2RT & 7.5RT

8.5RT & 10RT

12.5RT

Nominal ton*			6.2	7.5	8.5	10	12.5
Model			MRC-062HWN1-R(C)	MRC-075HWN1-R(C)	MRC-085HWN1-R(C)	MRC-100HWN1-R(C)	MRC-125HWN1-R(C)
Cooling	Capacity	Btu/h	75,000	89,000	103,000	120,000	150,000
		kW	22.0	26.0	30.0	35.0	44.0
	Input	kW	6.6	7.9	9.3	10.7	13.3
	EER	Btu/h.W	11.4	11.3	11.1	11.2	11.3
Heating	Capacity	Btu/h	89,000	103,000	120,000	137,000	154,000
		kW	26.0	30.0	35.0	40.0	45.0
	Input	kW	7.5	8.9	10.6	11.9	13.2
	COP	Btu/h.W	11.9	11.6	11.3	11.5	11.7
Air flow	Indoor side	CFM	2,800	2,830	3,500	4,100	5,500
External static pressure		Pa	Default: 80; 0 - 250	Default: 80; 0 - 250	Default: 80; 0 - 200	Default: 90; 0 - 250	Default: 110; 0 - 275
Max. power input		kW	8,600	12,000	13,600	16,000	19,700
Max. current		A	18.3	24.8	26.5	28.8	38.2
Compressor	Type / Quantity		Scroll / 1	Scroll / 1	Scroll / 2	Scroll / 2	Scroll / 2
	Brand		Copeland	Danfoss	Hitachi	Hitachi	Copeland
Indoor fan	Type / Drive type		Centrifugal / Direct	Centrifugal / Direct	Centrifugal / Belt	Centrifugal / Belt	Centrifugal / Belt
Outdoor fan	Type / Drive type		Axial / Direct	Axial / Direct	Axial / Direct	Axial / Direct	Axial / Direct
Wired controller			KJR-25B	KJR-25B	KJR-12B/dP(T)-E	KJR-12B/dP(T)-E	KJR-12B/dP(T)-E
Centralized controller (Optional)			No	No	Yes	Yes	Yes
Sound pressure level		dB(A)	71.0	72.1	71.5	71.5	71.8
Ambient temperature	Cooling		10°C - 46°C	10°C - 46°C	10°C - 46°C	10°C - 46°C	10°C - 46°C
	Heating		-9°C - 24°C	-9°C - 24°C	-9°C - 24°C	-9°C - 24°C	-9°C - 24°C
Dimension	Net (W×H×D)	mm	1,475×840×1,130	1,475×840×1,130	1,483×1,138×1,231	1,483×1,138×1,231	1,965×1,230×1,130
	Packing (W×H×D)	mm	1,495×870×1,150	1,495×870×1,150	1,500×1,255×1,155	1,500×1,255×1,155	1,995×1,255×1,160
Weight	Net / Gross	kg	229/234	325/335	340/350	343/354	451/471

Notes:

1. Cooling capacity test condition (1): Outdoor ambient temperature: 35°C, indoor temperature 26.7°C DB / 19.4°C WB;
   Heating capacity test condition (2): Outdoor ambient temperature: 7°C DB / 6°C WB, indoor temperature 20°C DB / 15°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 or heating capacity as per specifications.

Specifications

T1 application, 380-415V 3Ph~ 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
Sound pressure level		dB(A)	76.9	76.0	75.3	76.8	77.9
Ambient temperature	Cooling		10°C - 46°C	10°C - 46°C	10°C - 46°C	10°C - 46°C	10°C - 46°C
	Heating		-9°C - 24°C	-9°C - 24°C	-9°C - 24°C	-9°C - 24°C	-9°C - 24°C
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	955/985

Notes:

1. Cooling capacity test condition (1): Outdoor ambient temperature: 35°C, indoor temperature 26.7°C DB / 19.4°C WB;
   Heating capacity test condition (2): Outdoor ambient temperature: 7°C DB / 6°C WB, indoor temperature 20°C DB / 15°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 or heating capacity as per specifications.

ClimaCreator Series

Specifications

T1 application, 380-415V 3Ph~ 50Hz

6.2RT & 7.5RT

8.5RT & 10RT

12.5RT

Nominal ton*		(Ton)	6.2	7.5	8.5	10	12.5
Model			MRCT-062HWN1-R(C)	MRCT-075HWN1-R(C)	MRCT-085HWN1-R(C)	MRCT-100HWN1-R(C)	MRCT-125HWN1-R(C)
Power supply		\	380 - 415V, 3Ph~, 50Hz	380 - 415V, 3Ph~, 50Hz	380 - 415V, 3Ph~, 50Hz	380 - 415V, 3Ph~, 50Hz	380 - 415V, 3Ph~, 50Hz
Cooling (1)	Cooling capacity	Btu/h	75,000	89,000	102,000	114,000	150,000
		kW	22.0	26.0	30.0	35.0	44.0
	Power input	kW	6.6	7.9	9.2	10.7	13.3
Cooling (2)	Cooling capacity	Btu/h	61,400	69,600	80,700	100,200	125400
		kW	18.0	20.4	23.7	29.4	36.8
	Power input	kW	7.8	9.0	10.3	12.6	16.1
Heating	Heating capacity	Btu/h	89,000	103,000	120,000	137,000	154,000
		kW	26.0	30.0	35.0	40.0	45.0
	Power input	kW	7.5	8.9	10.6	11.9	13.2
Max. input consumption		kW	9.0	13.6	14.8	18.0	21.0
Max. current		A	19.3	27.2	29.2	34.1	41.2
Performance	Indoor air flow	CFM	2,800	2,830	3,500	4,100	5,500
	ESP	Pa	Default:80; 0 - 250	Default: 80; 0 - 250	Default: 80; 0 - 200	Default: 90; 0 - 250	Default: 110; 0 - 275
	EER 1	Btu/h.W	11.4	11.3	11.1	11.2	11.3
	EER 2	Btu/h.W	7.9	7.7	7.8	8.0	7.8
	COP	Btu/h.W	11.9	11.6	11.3	11.5	11.7
Indoor fan	Type / Drive type	\	Centrifugal / Direct	Centrifugal / Direct	Centrifugal / Belt	Centrifugal / Belt	Centrifugal / Belt
Compressor	Type/Quantlty	\	Scroll / 1	Scroll / 1	Scroll / 2	Scroll / 2	Scroll / 2
	Brand	\	Copeland	Danfoss	Hitachi	Hitachi	Copeland
Outdoor fan	Type/Drive type	\	Axial/Direct	Axial/Direct	Axial/Direct	Axial/Direct	Axial/Direct
Sound pressure level		dB(A)	71	72.1	71.5	71.5	71.8
Wired controller		\	KJR-25B	KJR-25B	KJR-12B/dP(T)-E(B)	KJR-12B/dP(T)-E(B)	KJR-12B/dP(T)-E(B)
Centralized controller (Optional)		\	No	No	Yes	Yes	Yes
Ambient temperature (Cooling)		℃	10 - 52	10 - 52	10 - 52	10 - 52	10 - 52
Ambient temperature (Heating)		℃	-9 - 24	-9 - 24	-9 - 24	-9 - 24	-9 - 24
Dimensions	Net (WxHxD)	mm	1,475×840×1,130	1,475×840×1,130	1,483×1,231×1,138	1,483×1,231×1,138	1,965×1,230×1,130
	Packing (WxHxD)	mm	1,495×870×1,150	1,495×870×1,150	1,500×1,255×1,155	1,500×1,255×1,155	1,995×1,255×1,160
Weight	Net	kg	228	243	340	343	451
	Gross	kg	233	248	350	354	471

Notes:

1. Cooling capacity test condition (1): Outdoor ambient temperature: 35℃, indoor temperature 26.7℃ DB / 19.4℃ WB;
   Cooling capacity test condition (2): Outdoor ambient temperature: 46.1℃, indoor temperature 26.7℃ DB / 19.4℃ WB;
   Heating capacity test condition : 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 foor.
4. Specifcations are subject to change without prior notice for product improvement.
5. * Nominal ton only for reference.
6. Cooling or heating capacity as per specifcations.

Specifications

T1 application, 380-415V 3Ph~ 50Hz

15RT

17.5RT & 20RT

25RT & 30RT

Nominal ton*		(Ton)	15	17.5	20	25	30
Model			MRCT-150HWN1-R(C)	MRCT-175HWN1-R(C)	MRCT-200HWN1-R(C)	MRCT-250HWN1-R(C)	MRCT-300HWN1-R(C)
Power supply		\	380 - 415V, 3Ph~, 50Hz	380 - 415V, 3Ph~, 50Hz	380 - 415V, 3Ph~, 50Hz	380 - 415V, 3Ph~, 50Hz	380 - 415V, 3Ph~, 50Hz
Cooling (1)	Cooling capacity	Btu/h	180,000	208,000	233,000	300,000	360,000
		kW	53.0	61.0	70.0	87.0	105.0
	Power input	kW	16.7	19.1	22.6	28.0	34.3
Cooling (2)	Cooling capacity		146,000	181,100	199200	251700	336300
			42.8	53.1	58.4	73.8	98.6
	Power input		18.7	22.6	25.1	32.0	41.8
Heating	Heating capacity	Btu/h	191,000	218,000	260,000	330,000	380,000
		kW	56.0	64.0	75.0	97.0	111.5
	Power input	kW	17.2	19.5	23.6	30.3	36.5
Max. input consumption		kW	25.0	26.5	33.0	40.5	49.5
Max. current		A	48.0	55.0	66.9	77.4	94.1
Performance	Indoor air flow	CFM	7,000	7,600	8,800	10,000	11,200
	ESP	Pa	Default: 110; 0 - 325	Default: 110; 0 - 250	Default: 120; 0 - 375	Default: 110; 0 - 350	Default: 270; 25 - 400
	EER 1	Btu/h.W	10.8	10.9	10.6	10.7	10.5
	EER 2	Btu/h.W	7.8	8.0	7.9	7.9	8.0
	COP	Btu/h.W	11.1	11.2	11	10.9	10.4
Indoor fan	Type / Drive type	\	Centrifugal / Belt	Centrifugal / Belt	Centrifugal / Belt	Centrifugal / Belt	Centrifugal / Belt
Compressor	Type / Quantity	\	Scroll / 2	Scroll / 2	Scroll / 2	Scroll / 2	Scroll / 2
	Brand	\	Copeland	Copeland	Copeland	Danfoss	Danfoss
Outdoor fan	Type/Drive type	\	Axial/Direct	Axial/Direct	Axial/Direct	Axial/Direct	Axial/Direct
Sound pressure level		dB(A)	76.9	76	75.3	76.8	77.9
Wired controller		\	KJR-12B/dP(T)-E(B)	KJR-12B/dP(T)-E(B)	KJR-12B/dP(T)-E(B)	KJR-12B/dP(T)-E(B)	KJR-12B/dP(T)-E(B)
Centralized controller (Optional)		\	Yes	Yes	Yes	Yes	Yes
Ambient temperature (Cooling)		℃	10 - 52	10 - 52	10 - 52	10 - 52	10 - 52
Ambient temperature (Heating)		℃	-9 - 24	-9 - 24	-9 - 24	-9 - 24	-9 - 24
Dimensions	Net (WxHxD)	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 (WxHxD)	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	kg	491	614	690	937	970
	Gross	kg	511	644	720	967	1000

Notes:

1. Cooling capacity test condition (1): Outdoor ambient temperature: 35℃, indoor temperature 26.7℃ DB / 19.4℃ WB;
   Cooling capacity test condition (2): Outdoor ambient temperature: 46.1℃, indoor temperature 26.7℃ DB / 19.4℃ WB;
   Heating capacity test condition : 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 foor.
4. Specifcations are subject to change without prior notice for product improvement.
5. * Nominal ton only for reference.
6. Cooling or heating capacity as per specifcations.

ClimaCreator Series

Specifications

Tropical (T3) application, 380-415V 3Ph~ 50Hz

4RT & 5RT

6.2RT & 7.5RT

8.5RT

Nominal ton*			4	5	6.2	7.5
Model			MRCT-48CWN1-R(C)	MRCT-60CWN1-R(C)	MRCT-062CWN1-R(C)	MRCT-075CWN1-R(C)
Cooling	Capacity (1)	Btu/h	48,000	58,000	75,000	89,000
		kW	14.1	17.0	22.0	26.0
	Input (1)	kW	4.1	5.0	6.6	7.9
	EER (1)	Btu/h.W	11.7	11.6	11.4	11.3
	Capacity (2)	Btu/h	39,000	47,900	61,400	69,600
		kW	11.4	14.0	18.0	20.4
	Input (2)	kW	4.8	5.9	7.8	9.0
	EER (2)	Btu/h.W	8.1	8.1	7.9	7.8
Air flow	Indoor side	CFM	1,750	2,000	2,800	2,830
External pressure level		Pa	Default: 75; 0 - 200	Default: 75; 0 - 200	Default: 80; 0 - 250	Default: 80; 0 - 250
Max. power input		kW	6.2	7.4	9.0	13.6
Max. current		A	12.4	15.5	19.3	27.2
Compressor	Type / Quantity		Scroll / 1	Scroll / 1	Scroll / 1	Scroll / 1
	Brand		Copeland	Copeland	Copeland	Danfoss
Indoor fan	Type / Drive type		Centrifugal / Direct	Centrifugal / Direct	Centrifugal / Direct	Centrifugal / Direct
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-25B	KJR-25B
Centralized controller (Optional)			Yes	Yes	No	No
Sound pressure level		dB(A)	64.4	66.3	71.0	71.5
Ambient temperature			10℃ - 52℃	10℃ - 52℃	10℃ - 52℃	10℃ - 52℃
Dimension	Net (WxHxD)	mm	1,310×840×900	1,310×840×900	1,475×840×1,130	1,475×840×1,130
	Packing (WxHxD)	mm	1,340×865×935	1,340×865×935	1,495×870×1,150	1,495×870×1,150
Weight	Net / Gross	kg	167/170	180/183	223/228	231/236

Notes:

1. Cooling capacity test condition (1): Outdoor ambient temperature: 35℃, indoor temperature 26.7℃ DB / 19.4℃ WB;
   Cooling capacity test condition (2): Outdoor ambient temperature: 46.1℃, 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 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

Tropical (T3) application, 380-415V 3Ph~ 50Hz

8.5RT & 10RT

12.5RT

Nominal ton*			8.5	8.5	10	10	12.5
Model			MRCT-085CWN1-R(C)	MRCT-085WN1-R(D)	MRCT-100CWN1-R(C)	MRCT-100CWN1-R(D)	MRCT-125CWN1-R(C)
Cooling	Capacity (1)	Btu/h	102,000	102,000	120,000	120,000	150,000
		kW	30.0	30.0	35.0	35.0	44.0
	Input (1)	kW	9.2	9.2	10.7	10.7	13.3
	EER (1)	Btu/h.W	11.1	11.1	11.2	11.2	11.3
	Capacity (2)	Btu/h	80,700	80,700	100,200	100,200	125,400
		kW	23.7	23.7	29.4	29.4	36.8
	Input (2)	kW	10.3	10.3	12.6	12.6	16.1
	EER (2)	Btu/h.W	7.9	7.9	8.0	8.0	7.8
Air flow	Indoor side	CFM	3,500	3,500	4,100	4,100	5,500
External static pressure		Pa	Default: 80; 0 - 200	Default: 80; 0 - 200	Default: 90; 0 - 250	Default: 90; 0 - 250	Default: 110; 0 - 275
Max. power input		kW	14.8	14.8	18.0	18.0	21.0
Max. current		A	29.2	29.2	34.1	34.1	41.2
Compressor	Type / Quantity		Scroll / 2	Scroll / 1	Scroll / 2	Scroll / 1	Scroll / 2
	Brand		Hitachi	Copeland	Hitachi	Copeland	Copeland
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-25B	KJR-12B/dP(T)-E	KJR-25B	KJR-12B/dP(T)-E
Centralized controller (Optional)			Yes	No	Yes	No	Yes
Sound pressure level		dB(A)	70.3	71.7	72.6	72.4	71.8
Ambient temperature			10℃ - 52℃	10℃ - 52℃	10℃ - 52℃	10℃ - 52℃	10℃ - 52℃
Dimension	Net (WxHxD)	mm	1,483×1,231×1,138	1,483×1,231×1,138	1,483×1,231×1,138	1,483×1,231×1,138	1,965×1,230×1,130
	Packing (WxHxD)	mm	1,500×1,255×1,155	1,500×1,255×1,155	1,500×1,255×1,155	1,500×1,255×1,155	1,995×1,255×1,160
Weight	Net / Gross	kg	331/342	302/313	335/346	323/335	433/453

Notes:

1. Cooling capacity test condition (1): Outdoor ambient temperature: 35℃, indoor temperature 26.7℃ DB / 19.4℃ WB;
   Cooling capacity test condition (2): Outdoor ambient temperature: 46.1℃, 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 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

Tropical (T3) application, 380-415V 3Ph~ 50Hz

15RT

17.5RT & 20RT

25RT & 30RT

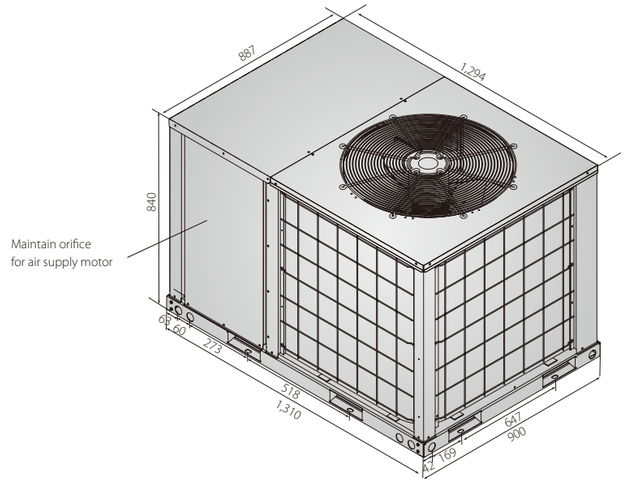
Nominal ton*			15	17.5	20	25	30
Model			MRCT-150CWN1-R(C)	MRCT-175CWN1-R(C)	MRCT-200CWN1-R(C)	MRCT-250CWN1-R(C)	MRCT-300CWN1-R(C)
Cooling	Capacity (1)	Btu/h	180,000	208,000	240,000	300,000	360,000
		kW	53.0	61.0	70.0	87.0	105.0
	Input (1)	kW	16.7	19.1	22.6	28.0	34.3
	EER (1)	Btu/h.W	10.8	10.9	10.6	10.7	10.5
	Capacity (2)	Btu/h	146,000	181,100	199,200	251,700	336,300
		kW	42.8	53.1	58.4	73.8	98.6
	Input (2)	kW	18.7	22.6	25.1	32.0	41.8
	EER (2)	Btu/h.W	7.8	8.0	7.9	7.9	8.0
Air flow	Indoor side	CFM	7,000	7,600	8,800	10,000	12,000
External static pressure		Pa	Default: 110; 0 - 325	Default: 110; 0 - 250	Default: 120; 0 - 375	Default: 110; 0 - 350	Default: 270; 0 - 400
Max. power input		kW	25.0	26.5	33.0	40.5	49.5
Max. current		A	48.0	55.0	66.9	77.4	94.1
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			Yes	Yes	Yes	Yes	Yes
Sound pressure level		dB(A)	75.5	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	10°C - 52°C
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	470/490	590/620	670/700	895/925	910/940

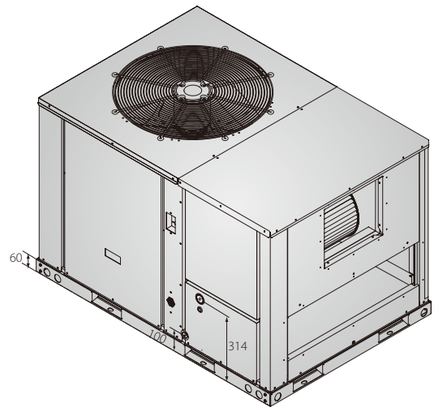
Notes:

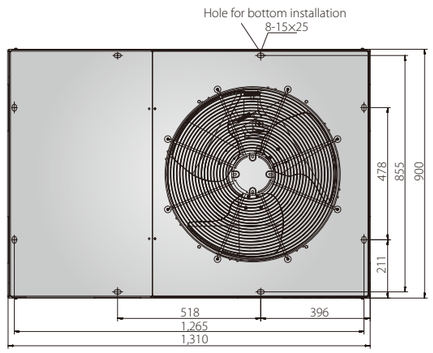
1. Cooling capacity test condition (1): Outdoor ambient temperature: 35°C, indoor temperature 26.7°C DB / 19.4°C WB;
   Cooling capacity test condition (2): Outdoor ambient temperature: 46.1°C, indoor temperature 26.7°C DB / 19.4°C WB;
2. Units are suitable for operation to ±20% of nominal CFM;
3. Sound 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 or heating capacity as per specifications.

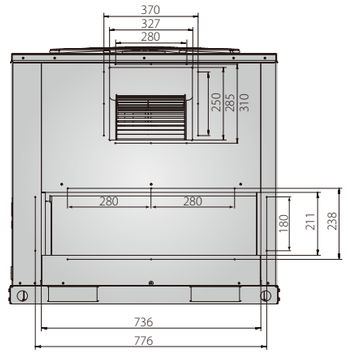
Dimensions

ClimaCreator series
Tropical (T3) application: MRCT-48CWN1-R(C), MRCT-60CWN1-R(C)
(Units: mm)



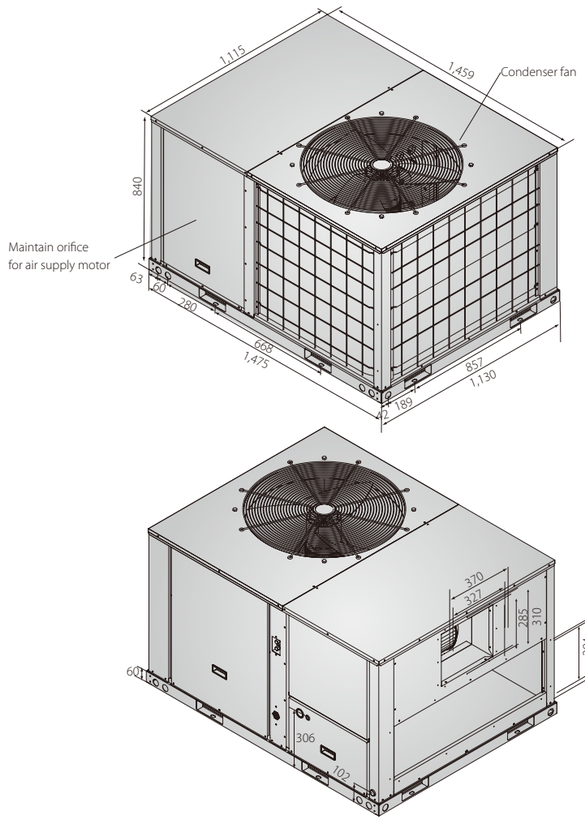


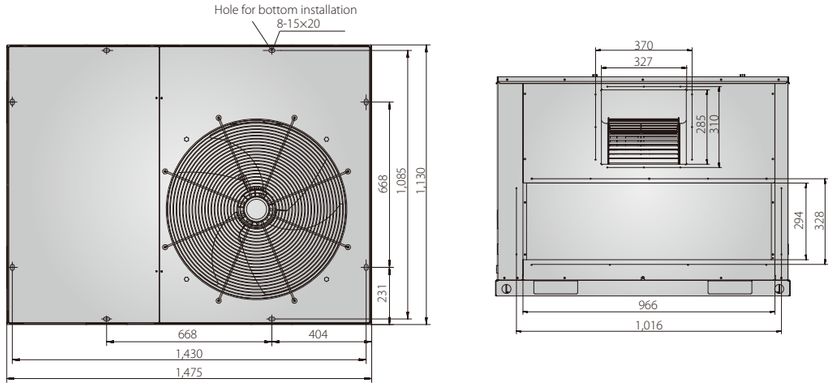




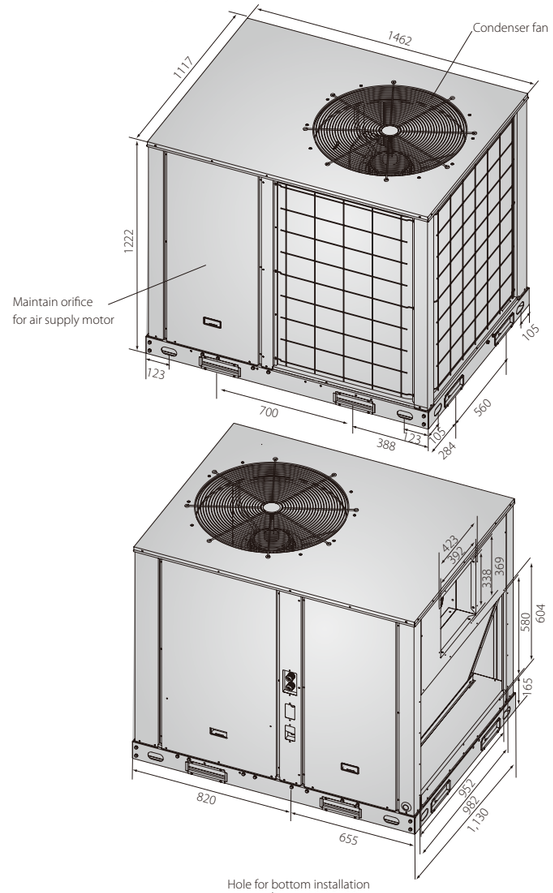
ClimaCreator Series

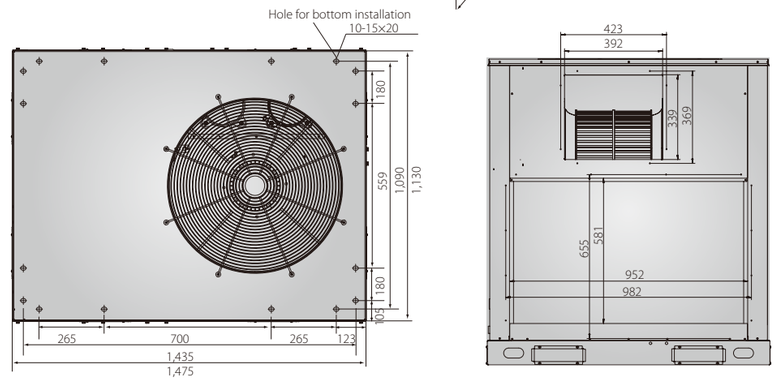
ClimaCreator series
T1 application: MRC-062HWN1-D(C), MRC-075HWN1-R(C)
Tropical (T3) application: MRCT-062CWN1-R(C), MRCT-075CWN1-R(C)
MRCT-062HWN1-R(C) MRCT-075HWN1-R(C)
(Units: mm)





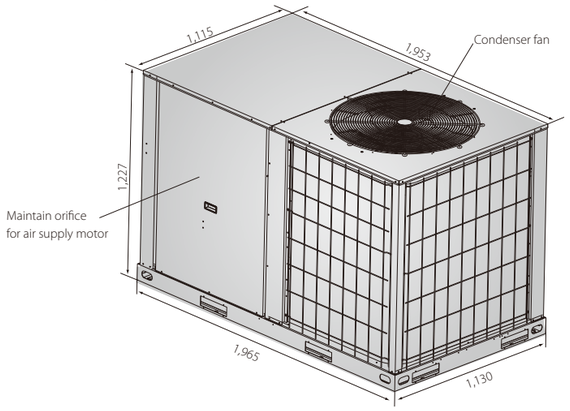
ClimaCreator series
T1 application: MRC-085HWN1-R(C), MRC-100HWN1-R(C)
Tropical (T3) application: MRCT-085CWN1-R(C), MRCT-085CWN1-R(D), MRCT-100CWN1-R(C), MRCT-100CWN1-D(C)
MRCT-085HWN1-R(C) MRCT-100HWN1-R(C)
(Units: mm)

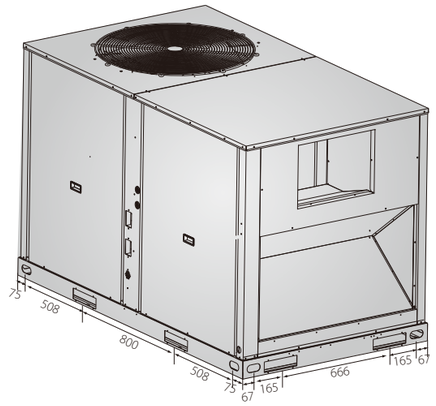


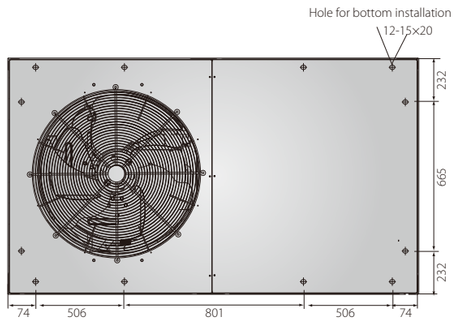


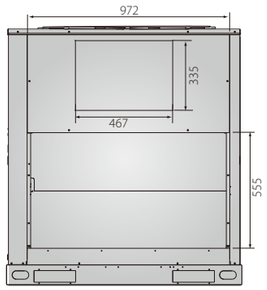
ClimaCreator Series

ClimaCreator series
T1 application: MRC-125HWN1-R(C), MRC-150HWN1-R(C)
Tropical (T3) application: MRCT-125CWN1-R(C), MRCT-150CWN1-R(C)
MRCT-125HWN1-R(C) MRCT-150HWN1-R(C)
(Units: mm)

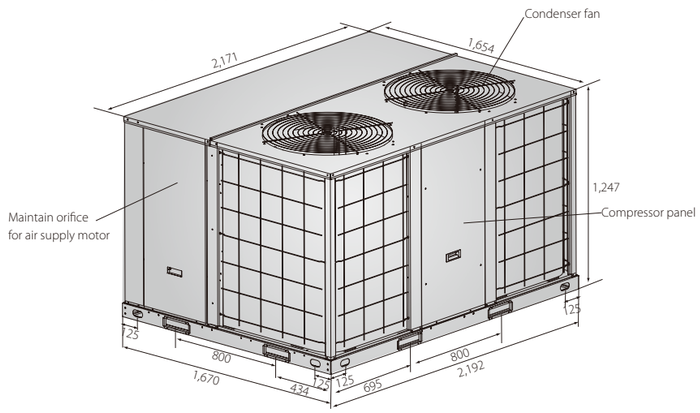


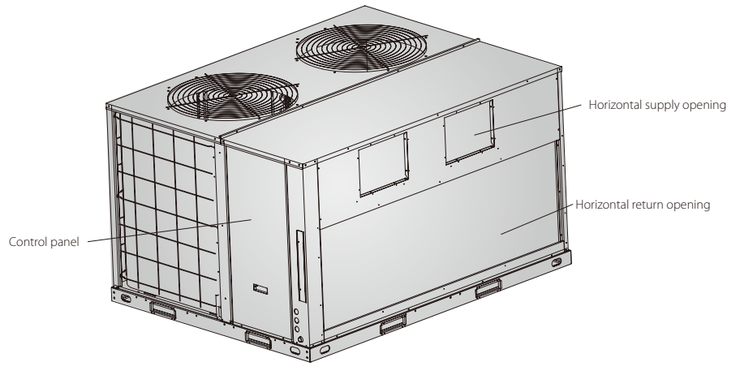


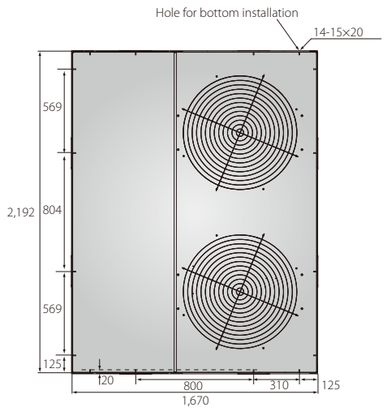


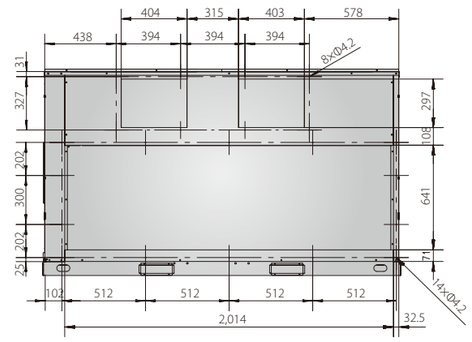


ClimaCreator series
T1 application: MRC-175HWN1-R(C), MRC-200HWN1-R
Tropical (T3) application: MRCT-175CWN1-R(C), MRCT-200CWN1-R(C)
MRCT-175HWN1-R(C) MRCT-200HWN1-R(C)
(Units: mm)



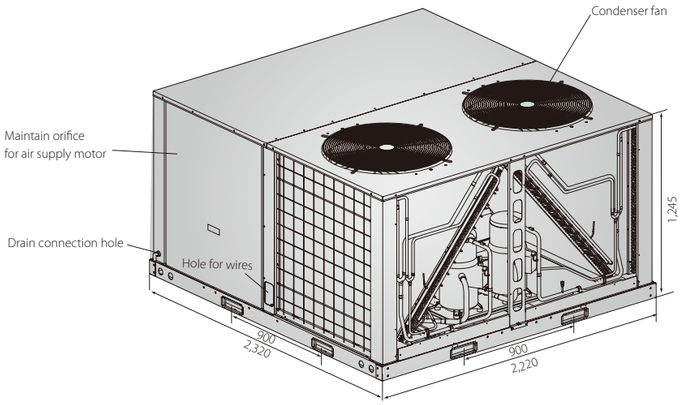


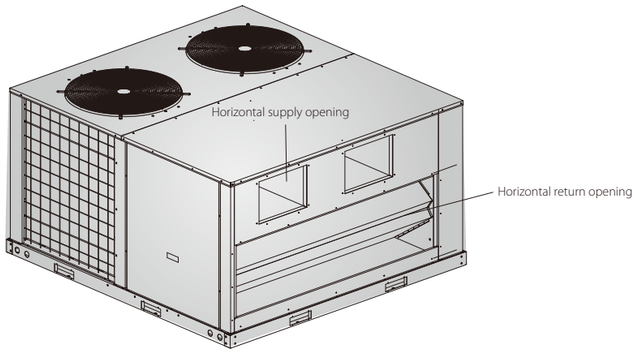


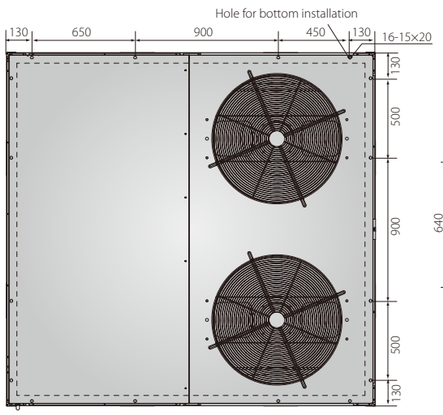


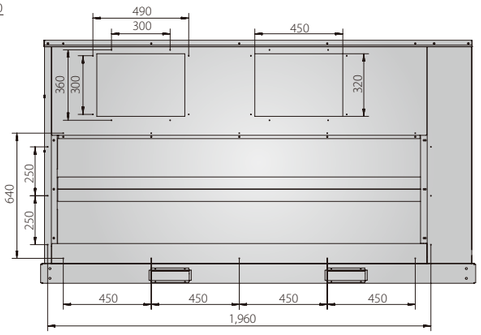
ClimaCreator Series

ClimaCreator series
T1 application: MRC-250HWN1-R(C), MRC-300HWN1-R(C)
T3 application： MRCT-250HWN1-R(C) MRCT-300HWN1-R(C)
(Units: mm)









ClimaMaster Series

Product lineups

Nominal ton*		3	4	5	6.2	7.5	8.5	10	12.5	15	17.5	20	30
T1 Applications		●	●	●									

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

Specifications

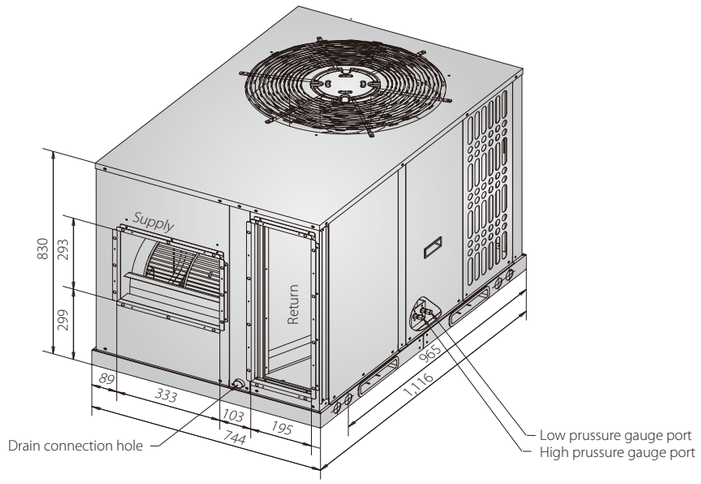
T1 application, heat pump, 380-415V 3Ph~ 50Hz

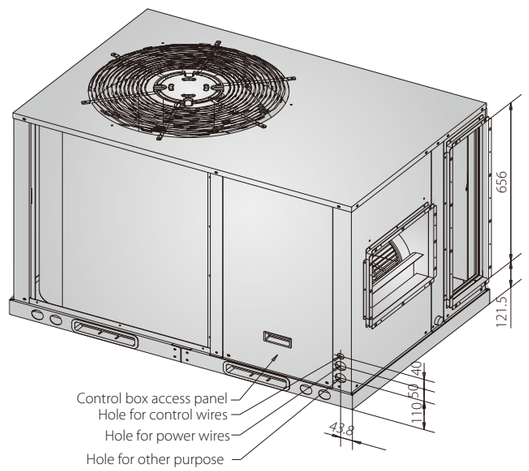
Nominal ton*			3	4	5
Model			MRC-36HWN1-R	MRC-48HWN1-R	MRC-60HWN1-R
			Side-discharge	Side-discharge	Side-discharge
Cooling	Capacity	Btu/h	36,000	48,000	58,000
		kW	10.55	14.07	17.29
	Input	kW	3.05	4.79	5.64
	EER	Btu/h.W	11.8	10.0	10.3
Heating	Capacity	Btu/h	37,500	51,500	62,500
		kW	10.99	15.09	18.32
	Input	kW	3.00	4.56	5.21
	COP	Btu/h.W	12.5	11.3	12.0
Air flow	Indoor side	CFM	1,500	1,858	2,045
External static pressure		Pa	50	50	50
Max. power input		kW	4.25	6.05	7.05
Max. current		A	6.4	8.8	10.9
Compressor	Type / Quantity		Scroll / 1	Scroll / 1	Scroll / 1
	Brand		Copeland	Copeland	Copeland
Indoor fan	Type / Drive type		Centrifugal / Direct	Centrifugal / Direct	Centrifugal / Direct
Outdoor fan	Type / Drive type		Axial / Direct	Axial / Direct	Axial / Direct
Wired controller			-	-	-
Centralized controller			No	No	No
Sound pressure level		dB(A)	64.9	67.7	68.8
Ambient temperature			21°C - 43°C	21°C - 43°C	21°C - 43°C
Dimension	Net (W×H×D)	mm	1,116×830×744	1,116×830×744	1,116×830×744
	Packing (W×H×D)	mm	1,152×855×765	1,152×855×765	1,152×855×765
Weight	Net / Gross	kg	139/142	146/149	159/162

Notes:
1. Cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 26.7°C DB / 19.4°C WB;
2. Heating capacity test condition: Outdoor ambient temperature: 7°C DB / 6°C WB, indoor temperature 20°C DB / 15°C WB;
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.

Dimensions

ClimaMaster, T1 application, 380-415V, 3Ph~, 50Hz
MRC-36HWN1-R, MRC-48HWN1-R, MRC-60HWN1-R
(Units: mm)

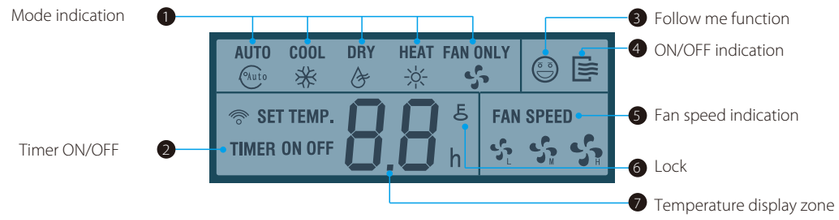




Wired controllers »

KJR-12B/dP(T)-E

- It is easy and convenient to select cooling, heating and fan operation mode.
- Digital display, seting temperature in 1℃.
- Controller with Follow Me function, it helps making the room environment comfortable.
- Daily timer function.



KJR-25B

- 4-minute delay function. The restarted compressor can be delayed for 4 minutes by this controller.
- Filter-monitor function. When the run-time of operations reaches certain hours, the Filter-change Indicatior of controller will flash to remind checking the filter of unit.
- Easy to change °C and °F in site.

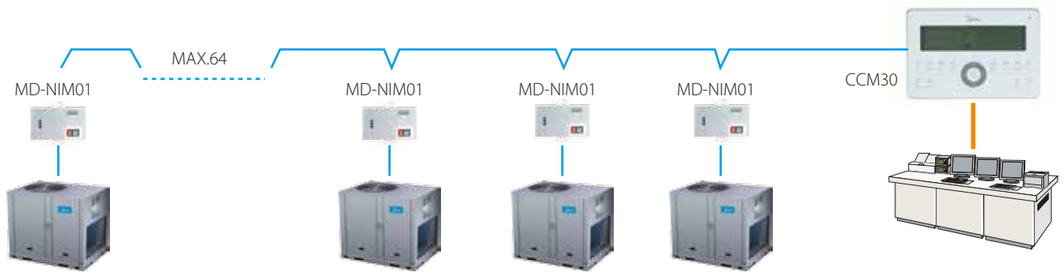
Centralized controllers »

CCM30

MD-NIM01

- Centralized control function. It is a multifunctional device which is able to control up to 64 units.
- It provides a superior way to manage the units. Users are able to make their own choice from locking wired controller, running mode or the CCM30's keyboard.

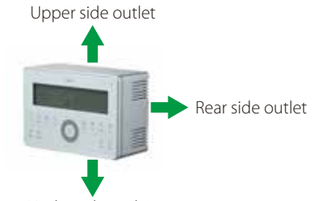
- The control object can be either single or all, making the controlling operation convenient. It also easy to check all units status.
- It is able to bridge up to 64 units to the network monitoring system and the building managements system.



- Two structures of centralized controller design, easy installation.

Structure A

Structure B



Structure B leading-out mode sketch

Structure A (Model No. CCM30/BKE-A) should be embedded into the wall and structure B (Model No. CCM30/BKE-B) doesn't need.