Smart control system

Wired controller

Wired controller:
KJR-29B (standard)

Touch key
Mode, Speed setting
Temperature setting
Follow me
Daily timer
Clock display
Keyboard lock
Background light
Clean filter reminder

Wired controller:
KJR-12B (optional)

Button key
Mode, Speed setting
Temperature setting
Follow me
Daily timer
Background light

Wired controller:
KJR-25B (optional)

Button key
Mode, Speed setting
Temperature setting
Daily timer
Keyboard lock
Filter Monitor

Centralized controller

CCM30

MD-NIM01

- Centralized 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 allunits status.

- Two structures of centralized controller design, easy installation.

Structure A
Structure B
Structure B leading-out mode sketch

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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.

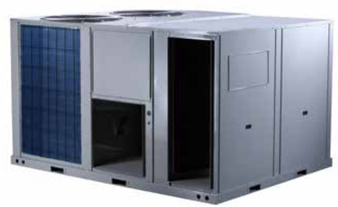
GD MIDEA Heating & Ventilating Equipment Co. Ltd participates in the ECP programme for VRF. Check ongoing validity of certificate: WWW. eurovent-certification. com

Midea

High Efficiency Rooftop Package A/C

R410A, 380-415V-3Ph-60Hz

Desert Series



SASO

Specifications

Nominal tons *			5	6.25	7.5	10	12.5
Model			MRCT-050CWN1-Y(D)	MRCT-062CWN1-Y(D)	MRCT-075CWN1-Y(D)	MRCT-100CWN1-Y(D)	MRCT-125CWN1-Y(D)
Power supply			380 - 415V~, 3Ph, 60Hz	380 - 415V~, 3Ph, 60Hz	380 - 415V~, 3Ph, 60Hz	380 - 415V~, 3Ph, 60Hz	380 - 415V~, 3Ph, 60Hz
Cooling(T1)	Capacity	Btu/h	58,500	75,000	84,000	124,000	156,000
		kW	17.1	22.0	24.6	36.3	45.7
	Power input	kW	5.220	6.680	7.240	11.071	14.180
	EER	Btu/h.W	11.2	11.2	11.6	11.2	11.0
Cooling(T3)	Capacity	Btu/h	51,000	64,000	72,000	107,000	134,000
		kW	14.9	18.8	21.1	31.4	39.3
	Power input	kW	6.360	8.100	8.670	13.300	17.100
	EER	Btu/h.W	8.0	7.9	8.3	8.0	7.8
Air flow (Evaporator)		CFM	2,000 @50Pa (0.20 in.wg.)	2,200 @60Pa (0.24 in.wg.)	2,800@60Pa(0.24 in.wg.)	3,800 @70Pa (0.28 in.wg.)	4,200 @90Pa (0.36 in.wg)
		l/s	944 @50Pa (0.20 in.wg.)	1,039 @60Pa (0.24 in.wg.)	1,322 @60Pa (0.24 in.wg.)	1,794 @70Pa (0.28 in.wg.)	1,983 @90Pa (0.36 in.wg.)
ESP range (Standard)		Pa	0 - 225	0 - 125	0 - 150	0 - 200	0 - 225
		in.wg.	0 - 0.9	0 - 0.5	0 - 0.6	0 - 0.8	0 - 0.9
ESP range (Customized) (High static pressure)		Pa	0 - 300	250 - 500	250 - 500	250 - 500	200 - 500
		in.wg.	0 - 1.2	1.0 - 2.0	1.0 - 2.0	1.0 - 2.0	0.8 - 2.0
Capacity steps (Circuits)			100% - 0 (1)	100% - 0 (1)	100% - 0 (1)	100% - 50% - 0 (2)	100% - 50% - 0 (2)
Max. overcurrent protection		A	25	30	40	60	70
Compressor	Type		Scroll	Scroll	Scroll	Scroll	Scroll
	Quantity		1	1	1	2	2
	Brand		Copeland	Danfoss	Danfoss	Copeland	Danfoss
Condenser fan	Type		Axial	Axial	Axial	Axial	Axial
	Quantity		1	1	1	2	2
	Drive type		Direct drive	Direct drive	Direct drive	Direct drive	Direct drive
	Materials		Metal	Metal	Plastic	Metal	Metal
Condenser motor insulation class			F	F	F	F	F
Condenser motor protection class			IP44	IP44	IP44	IP44	IP44
Evaporator fan	Type		Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
	Quantity		1	1	1	1	1
	Drive type		Direct, adjustable #	Belt, adjustable	Belt, adjustable	Belt, adjustable	Belt, adjustable
	Materials		Metal	Metal	Metal	Metal	Metal
Condenser / Evaporator			Hydrophilic aluminum fin / Inner grooved copper pipe				
Sound pressure level		dB(A)	66.5	74.5	78.0	72.0	78.0
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A
	Control		Throttle valve	Throttle valve	Throttle valve	Throttle valve	Throttle valve
	Charged	kg	5.1	6.8	7.4	6.4 + 6.4	6.8 + 6.8
		lbs	11.25	14.99	16.31	14.11 + 14.11	14.99 + 14.99
EHK power input	Option 1	kW	7.5	10	10	20	20
	Option 2	kW	10	14	14	24	28
Thermostat			KJR-29B				
Centralized controller (Customized)			Yes	Yes	Yes	Yes	Yes
Ambient temperature		℃	10 - 52	10 - 52	10 - 52	10 - 52	10 - 52
		°F	50 - 125.6	50 - 125.6	50 - 125.6	50 - 125.6	50 - 125.6
Operation temperature		℃	17 - 30	17 - 30	17 - 30	17 - 30	17 - 30
		°F	62 - 88	62 - 88	62 - 88	62 - 88	62 - 88
Drainage pipe			3/4" NPT	3/4" NPT	3/4" NPT	3/4" NPT	3/4" NPT
Filter	Quantity		1	2	2	3	3
	Type		Nylon, washable	Nylon, washable	Nylon, washable	Nylon, washable	Nylon, washable
	Size	mm	495 × 410 × 12	(1,050 × 500 × 12)×2	(1,050 × 500 × 12)×2	(1,040 × 575 × 12)×3	(1,040 × 575 × 12)×3
		inch	19-1/2 × 16-1/8 × 1/2	(44-3/8 × 19-3/4 × 1/2)×2	(44-3/8 × 19-3/4 × 1/2)×2	(41 × 22-5/8 × 1/2)×3	(41 × 22-5/8 × 1/2)×3
Net dimension (W × H × D)		mm	1,920 × 840 × 1,070	1,965 × 1,230 × 1,130	1,965 × 1,230 × 1,130	2,230 × 1,255 × 1,965	2,230 × 1,255 × 1,965
		inch	75-5/8 × 33 × 42-1/8	77-3/8 × 48-1/2 × 44-1/2	77-3/8 × 48-1/2 × 44-1/2	87-7/8 × 49-3/8 × 77-3/8	87-7/8 × 49-3/8 × 77-3/8
Packing dimension (W × H × D)		mm	1,945 × 870 × 1,085	1,975 × 1,265 × 1,145	1,975 × 1,265 × 1,145	2,250 × 1,290 × 1,980	2,240 × 1,290 × 1,980
		inch	76-5/8 × 34-1/4 × 42-3/4	77-3/4 × 49-7/8 × 45	77-3/4 × 49-7/8 × 45	88-5/8 × 50-3/4 × 78	88-1/4 × 50-3/4 × 78
Net / Gross weight		kg	230 / 234	360 / 390	370/ 390	615 / 650	660 / 695
		lbs	507 / 516	794 / 860	816/860	1,356 / 1,433	1,455 / 1,533
Loading	20' / 40'HQ	Pcs	12 / 33	5 / 24	5 / 24	3 / 12	3 / 12

Notes:
*: Nominal ton is only for reference, cooling capacity as per specifications.
#. Please contact with Midea sales team, when adjust the fan speed of 5 ton unit.
1. Cooling(T1) test condition: Indoor temperature 27°C (80.6°F) DB/19°C (66.2°F) WB, outdoor temperature 35°C (95°F).
2. Cooling(T3) test condition: Indoor temperature 29°C (84.2°F) DB/19°C (66.2°F) WB, outdoor temperature 46°C (114.8°F).
3. Units are suitable for operation to ±20% of nominal air flow.
4. EHK means Electric Heater Kit. Only one EHK can be fixed per unit.
5. Sound pressure values are measured in a semi-anechoic room, at a position 1m front of the unit and 'H/2 + 0.5m' above the floor (H for unit's height).
6. Specifications are subject to change without prior notice for product improvement.
7. 30 ton unit hasn't high static pressure model.

Nominal tons *			15	20	25	30
Model			MRCT-150CWN1-Y(D)	MRCT-200CWN1-Y(D)	MRCT-250CWN1-Y(D)	MRCT-300CWN1-Y(DH)
Power Supply		\	380 - 415V, 3Ph~, 60Hz	380 - 415V, 3Ph~, 60Hz	380 - 415V~, 3Ph, 60Hz	380 - 415V~, 3Ph, 60Hz
Cooling(T1)	Cooling Capacity	Btu/h	166,000	266,000	282,000	302,000
		kW	48.4	77.9	82.6	88.5
	Power Input	W	15.100	23.750	28,200	30,200
	EER	Btu/h.W	11	11.2	10.0	10.0
Cooling(T3)	Cooling Capacity	Btu/h	140,000	232,000	248,000	264,000
		kW	41	67.9	72.7	77.37
	Power Input	W	17.500	27.950	34.100	37.200
	EER	Btu/h.W	8.0	8.3	7.3	7.1
Air flow (Evaporator)		CFM	4712@90Pa(0.36 in.wg.)	7407@110Pa(0.44 in.wg)	10,000 @110Pa (0.44 in.wg.)	11150 @110Pa (0.44 in.wg.)
		l/s	2223@90Pa(0.36 in.wg.)	3494@110Pa(0.44 in.wg)	4,722 @110Pa (0.44 in.wg.)	5265 @110Pa (0.44 in.wg.)
ESP range (Standard)		Pa	0-255	0 - 300	0 - 300	200 - 475
		in.wg	0-0.9	0 - 1.2	0 - 1.2	0.8 - 1.9
ESP range (Customized) (High static pressure)		Pa	200-500	200-500	200 - 500	/
		in.wg	0.8-2.0	0.8-2.0	0.8 - 2.0	/
Capacity steps (Circuits)			100% - 50% - 0 (2)	100% - 50% - 0 (2)	100% - 50% - 0 (2)	100% - 50% - 0 (2)
Max. overcurrent protection		A	80	90	90	90
Compressor	Type		Scroll	Scroll	Scroll	Scroll
	Quantity		2	2	2	2
	Brand		Danfoss	Danfoss	Danfoss	Danfoss
Condenser Fan	Type		Axial	Axial	Axial	Axial
	Quantity		2	2	2	2
	Drive type		Direct drive	Direct drive	Direct drive	Direct drive
	Material		Metal	Plastic	Plastic	Plastic
Condenser motor insulation class			F	F	F	F
Condenser motor protection class			IP44	IP44	IP44	IP44
Evaporator fan	Type		Centrifugal	Centrifugal	Centrifugal	Centrifugal
	Quantity		1	1	1	1
	Drive type		Belt drives	Belt drives	Belt, adjustable	Belt, adjustable
	Material		Metal	Metal	Metal	Metal
Condenser / Evaporator			Hydrophilic aluminum fin / Inner grooved copper pipe			
Sound pressure level		dB(A)	71.2	79.0	79.0	79.0
Refrigerant	Type		R410A	R410A	R410A	R410A
	Control		Throttle valve	Throttle valve	Capillary	Capillary
	Charged	kg	7.5+6.9	14.0+14.0	14.0 + 14.0	14.0 + 14.0
		lbs	16.53+15.21	30.86+30.86	30.87 + 30.87	30.87 + 30.87
EHK power input	Option 1	kW	20	28	28	28
	Option 2	kW	28	36	36	36
Thermostat			KJR-29B	KJR-29B	KJR-29B	KJR-29B
Centralized controller (Customized)			Yes	Yes	Yes	Yes
Ambient temperature		℃	10 - 52	10 - 52	10 - 52	10 - 52
		°F	50 - 125.6	50- 125.6	50 - 125.6	50 - 125.6
Operation temperature		℃	17 - 30	17 - 30	17 - 30	17 - 30
		°F	62 - 88	62 - 88	62 - 88	62 - 88
Drainage pipe			3/4" NPT	3/4" NPT	3/4" NPT	3/4" NPT
Filter	Quantity		3	3	3	3
	Type		Nylon, washable	Nylon, washable	Nylon, washable	Nylon, washable
	Size	mm	(1,040 × 575 × 12)×3	(1,420 × 640 × 12.5)×3	(1,420 × 640 × 12.5)×3	(1,420 × 640 × 12.5)×3
		inch	(41 × 22-5/8 × 1/2)×3	(55-7/8 × 25-1/4 × 1/2)×3	(55-7/8 × 25-1/4 × 1/2)×3	(55-7/8 × 25-1/4 × 1/2)×3
Net Dimensions (W×H×D)		mm	2230×1255×1965	2,885 × 1,655 × 2,230	2,885 × 1,655 × 2,230	2,885 × 1,655 × 2,230
		inch	87-7/8 × 49-3/8 × 77-3/8	113-5/8 × 65-1/8 × 87-7/8	113-5/8 × 65-1/8 × 87-7/8	113-5/8 × 65-1/8 × 87-7/8
Packing Dimensions(W×H×D)		mm	2240×1290×1980	2,895 × 1,690 × 2,230	2,895 × 1,690 × 2,230	2,895 × 1,690 × 2,230
		inch	88-1/4 × 50-3/4 × 78	114 × 66-1/2 × 87-7/8	114 × 66-1/2 × 87-7/8	114 × 66-1/2 × 87-7/8
Net / Gross weight		kg	660/715	1177/1257	1,180 / 1,260	1,180 / 1,260
		lbs	1455/1576	2594/2771	2,602 / 2,778	2,602 / 2,778
Loading	20' / 40'HQ	Pcs	3/12	2/4	2 / 4	2 / 4

Notes:
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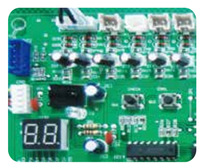
6. Specifications are subject to change without prior notice for product improvement.
7. 30 ton unit hasn't high static pressure model.

Features

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.



Flexible installation

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

External pressure gauge ports

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

EHK

Electric heater kit is optional.

Washable filter

Washable nylon filter as standard. Aluminum filter is optional.