

# Commercial Air Conditioners 2017



## Split Commercial A/C

R410A 50Hz



Midea CAC After-service Application

Midea CAC News Application



iOS Version

Android Version

iOS Version

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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.

There are 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, and AHU/FCU.

MCAC Hefei: 11 product lines focusing on VRF, Chillers, and Heat Pump Water Heaters.



**Midea Company  
Introduction**



**Midea CAC  
Introduction**



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

2014 Launched the duct indoor unit with belt drive fan 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

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# Introduction

Midea split type air conditioners are designed and manufactured to meet the requirements of the home, office, hotel and others public occasion use. The units are completely assembled, internally wired, charged outdoor unit with refrigerant at the factory.

## DX AHU (Air Handler Unit) Series

Application	Power supply	Series	Nominal cooling capacity			
			24kBTu/h	36kBTu/h	48kBTu/h	60kBTu/h
R410A T3	220~240V, 1Ph~, 50Hz	Indoor units (DX AHU)	○	○	○	○
	380~415V, 3Ph~, 50Hz	Outdoor units	○	○		
			○	○	○	

Notes:

1. Product's cooling capacity as per specification.

## Conventional Split A/C Series

Application	Power Supply	Series		Nominal Cooling Capacity				
				76 kBtu/h	96 kBtu/h	120 kBtu/h	150 kBtu/h	192 kBtu/h
R410A T1 (Heat Pump)	220-240V, 1Ph, 50Hz	Indoor Unit	Med-static Pressure Duct	○		○		
			Hi-static Pressure Duct	○			○	○
			Floor-standing	○				
	380-415V, 3Ph, 50Hz	Outdoor Unit			○	○	○	
R410A T1 (DC Inverter) (Heat Pump)	220-240V, 1Ph, 50Hz	Indoor Unit	Hi-static Pressure Duct	○	○			
	380-415V, 3Ph, 50Hz	Outdoor Unit		○	○			
R410A T3 (Cooling Only)	220-240V, 1Ph, 50Hz	Indoor unit	Med-static Pressure Duct	○	○	○	○	
			Hi-static Pressure Duct	○	○			
			Floor-standing	○	○	○		
	380-415V, 3Ph, 50Hz	Outdoor Unit		○	○	○		
R410A T3 (Heat Pump)	220-240V, 1Ph, 50Hz	Indoor Unit	Med-static Pressure Duct	○	○	○		
			Hi-static Pressure Duct	○	○			
			Floor-standing	○	○			
	380-415V, 3Ph, 50Hz	Outdoor Unit		○	○	○		

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



## Convenient for unit selection

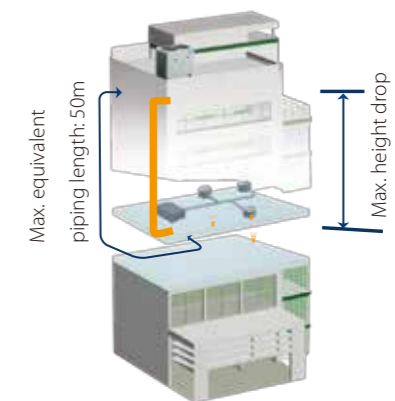
### Wide cooling capacity range >>

❖ Wide cooling capacity range. The duct type split A/C is from 76,000Btu/h to 192,000Btu/h.

### Long piping length >>

❖ Max. equivalent piping length is 50m. The outdoor unit can be installed at any ventilation locations. (Unavailable for AHU type)

		Permitted value
Max. Equivalent piping length		50 m
Max. height drop between indoor and outdoor unit	Outdoor unit up	25 m
	Outdoor unit down	30 m



## 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.



### Anti-corrosion treatment as optional >>

- ❖ The large split 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: 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 is optional.



HP/LP switch



Temperature sensor

### Easy for installation

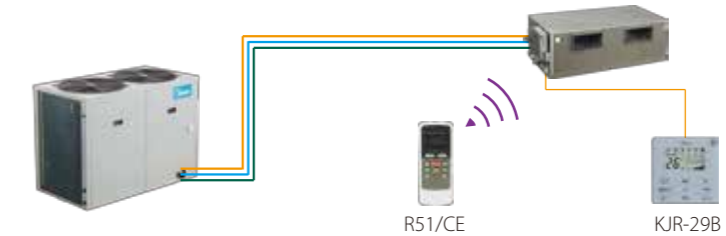
- ❖ Units are completely assembled, internally wired, charged outdoor unit with refrigerant at the factory.
- ❖ The site work only needs to connect refrigerant pipes and communication wires between outdoor unit and indoor unit.



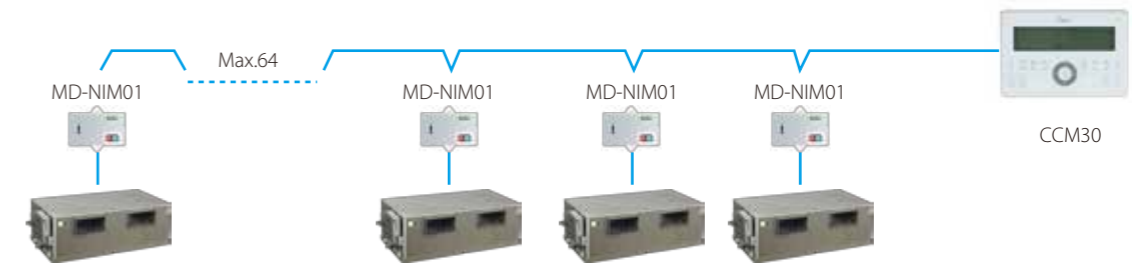
### Flexible choice of accessories

#### Controllers >>

- ❖ Wireless remote controller is available for conventional split A/C series.
- ❖ Wired controller can be directly connected with duct & floor-standing indoor units.



- ❖ Centralized control function can be achieved through the centralized controller as optional. MD-NIM01 should be connected between the indoor units and centralized controller. (Only available for conventional split A/C series)



#### Multi-accessories >>

Description	T1, Duct		Tropical (T3), Duct		T1 & Tropical (T3), Floor-standing	
	Standard	Optional	Standard	Optional	Standard	Optional
Filter		√		√	√	
Outlet drainage	√		√		√	
EHK (Electric Heater Kits)		√		√		√
Three-phase protector		√		√		√
Wireless controller		√	√		√	
Wired controller	√			√		√
Centralized controller		√		√		√

## Mechanical specification

### ❖ Casing

Unit casing is constructed of heavy gauge galvanized steel plate. Both side of the casing is waterproof and anti-corrosion coated. Unit panel structure is allowed to maintain on one side of the unit. Service panels are removed easily and reinstalled by removing bolts. The inside of indoor unit panels will be covered with 10mm insulation to prevent heat and noise coming out. Units are available for forklift transportation.

### ❖ Compressor

All units are equipped with direct-drive, hermetic, scroll type compressor, and it's built-in motor is cooled with suction gas. The voltage utilization range is  $\pm 10\%$  of unit nameplate voltage. The compressors, incorporating a built-in muffler, are mounted on springs within a steel housing to reduce noise. An electric heater around the compressor crankcase to ensure stability starting.

### ❖ Heat-exchanger coils

Inner-threaded copper tubes mechanically bonded to a configured hydrophilic aluminum fin is standard for the outdoor heat-exchanger. The one which is equipped in indoor unit is standard configured with copper tubes. All the coils are leak tested at 4.4MPa at the factory to ensure the pressure integrity. All the indoor units are standard configured a condensate drain pan.

### ❖ Outdoor fan

The outdoor fan is multi-blade vane-axial type, made of aluminum alloy for quiet operation and durability. It is directly driven by waterproof motor to ensure reliable continuous operations. Statically and dynamically balanced drive motor design with maintenance-free bearing for outdoor installation.

### ❖ Indoor fan

The indoor fan is forward-curved blade centrifugal fan. Impeller and casing are made of galvanized steel sheet. The high quality ball bearings are air-sealed with preset lubricating oil. They are coated after assembly in order to provide corrosion resistance. The fan is directly driven by a waterproof motor. The fan and motor assembly is tested and dynamic balance is implemented in the factory.

### ❖ Three-phase protector

The unit with three-phase power supply is equipped with phase sequence protector as optional. These devices protect motors and compressors against problems caused by phase lack, phase imbalance and phase reversal indication. When the voltage is above or below the normal range, it works and prevents unit from suffering voltage fluctuations.

### ❖ Controls

Units are completely factory-wired with necessary controls and wiring terminals for power wiring. Microprocessor controls the cooling, heating and ventilating modes in response to signals from sensors measuring indoor and outdoor temperatures. It will keep accurate temperature control, minimum drift from the set point and provide better building comfort.



## DX AHU (Air Handler Unit)



DX AHU

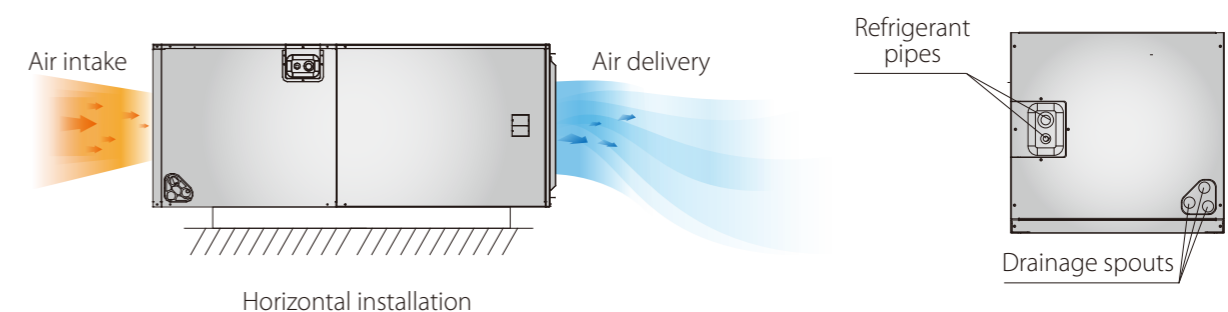


Outdoor unit

Wired controller  
KJR-23B (Optional)

### Flexible installation >>

- ❖ Flange of air flow is standard.
- ❖ Dual drainage spouts for versatile installation.
- ❖ Multiple airflow design: Vertical up-flow, Vertical down-flow, Horizontal left-flow and horizontal right-flow.



### Washable filter as optional >>



## Specifications

### Tropical (T3) application, DX AHU - Indoor unit

Indoor unit model			MVA-24CWN1-13	MVA-36CWN1-13	MVA-48CWN1-13	MVA-60CWN1-13
Outdoor unit model			MOVTA-24CN1-13C	MOVTA-36CN1-(R)13C	MOVTA-48CN1-R13C	MOVTA-60CN1-R13C
Indoor unit power supply			220-240V, 1Ph~, 50Hz	220-240V, 1Ph~, 50Hz	220-240V, 1Ph~, 50Hz	220-240V, 1Ph~, 50Hz
Cooling	Capacity (T1/T3)	Btu/h	24,000 / 20,400	36,000 / 30,400	48,000 / 40,500	58,000 / 49,000
	Capacity (T1)	kW	7.0	10.4	14.0	17.0
	SEER (T1)		13	13	13	13
Air flow (Hi)		CFM	920	1,470	1,900	2,010
Standard external static pressure (Hi)		Pa	45	60	70	75
Max. external static pressure (Hi)		Pa	150	150	150	150
Noise level (Hi)		dB(A)	49	55	57	59
Fan type / Drive type			Centrifugal / Direct	Centrifugal / Direct	Centrifugal / Direct	Centrifugal / Direct
Coil			Copper tube and aluminum fin			
Controller			KJR-23B (Optional)	KJR-23B (Optional)	KJR-23B (Optional)	KJR-23B (Optional)
Supply duct dimension (WxD)		mm	406x262	457x262	495x262	495x262
Dimension	Net (WxHxD)	mm	460x1,050x520	500x1,180x550	560x1,385x610	560x1,385x610
	Packing (WxHxD)	mm	534x1,104x580	573x1,234x610	634x1,438x670	634x1,438x670
Net / Gross weight		kg	50 / 56	64 / 70	78 / 85	78 / 85

### Tropical (T3) application, DX AHU - Outdoor unit

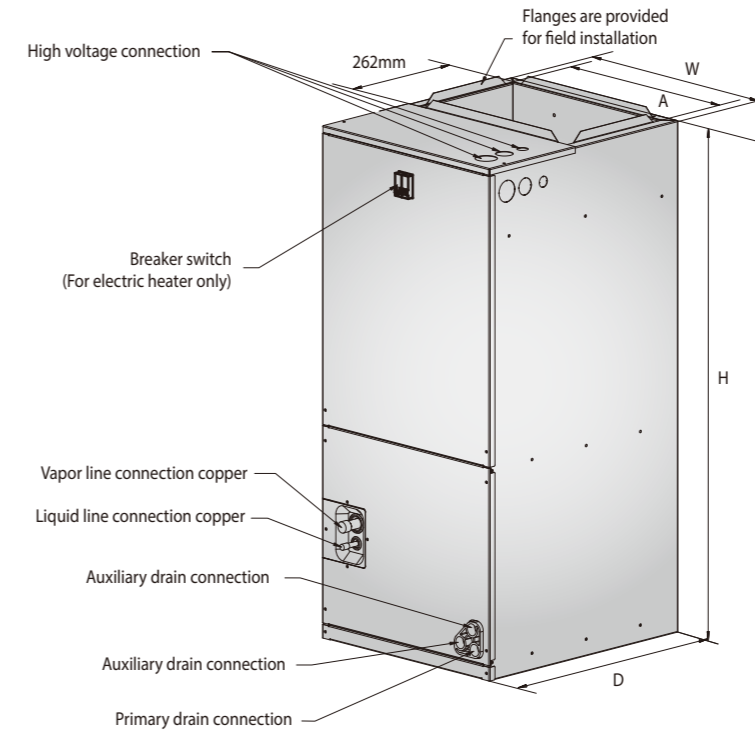
Outdoor unit model			MOVTA-24CN1-13C	MOVTA-36CN1-13C	MOVTA-36CN1-R13C	MOVTA-48CN1-R13C	MOVTA-60CN1-R13C
Outdoor unit power supply			220-240V, 1Ph~, 50Hz		380-415V, 3Ph~, 50Hz		
Max. power input (Outdoor unit)		W	2,650	3,950	4,050	5,950	6,800
Noise level		dB(A)	62	64	64	68	68
Compressor	Type		Scroll	Scroll	Scroll	Scroll	Scroll
	Quantity		1	1	1	1	1
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A
	Charged	kg	2.52	3.57	3.62	3.92	4.32
Air flow		CFM	1,766	3,000	3,000	3,396	4,031
Fan	Type		Axial	Axial	Axial	Axial	Axial
	Drive type		Direct	Direct	Direct	Direct	Direct
Coil			Copper tube and aluminum fin				
Refrigerant piping size		mm	Φ9.52 / Φ19	Φ9.52 / Φ19	Φ9.52 / Φ19	Φ9.52 / Φ22	Φ9.52 / Φ22
Ambient temperature		°C	17~52	17~52	17~52	17~52	17~52
Dimension	Body (WxHxD)	mm	600x633x600	710x759x710	710x759x710	710x843x710	740x843x740
	Packing (WxHxD)	mm	628x667x628	738x793x738	738x793x738	738x877x738	768x877x768
Weight	Net	kg	59	86	81	89	98
	Gross	kg	62	90	85	93	102

Notes:

- T1 Cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- T3 Cooling capacity test condition: Outdoor ambient temperature: 46°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- The standard external static pressure and air flow is based on cooling performance without filter in place.
- Specifications are subject to change without prior notice for product improvement.

## Dimensions

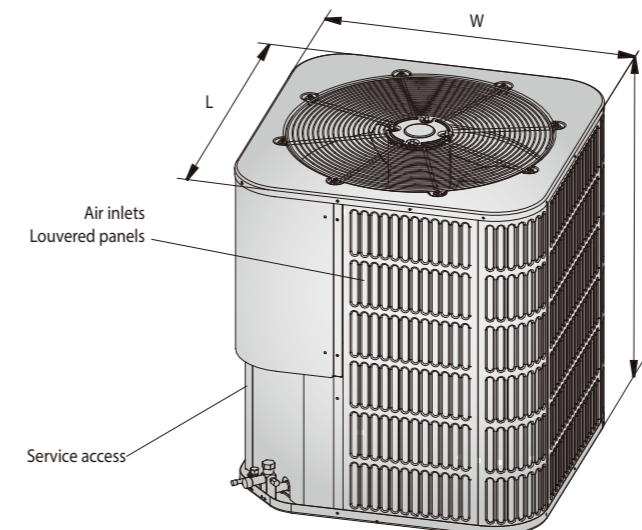
### T3 application, DX AHU - Indoor unit



(Unit: mm)

	H	W	D	A
MVA-24CWN1-13	1,050	460	520	406
MVA-36CWN1-13	1,180	500	550	456
MVA-48CWN1-13	1,385	560	610	496
MVA-60CWN1-13	1,385	560	610	496

### T3 application, DX AHU - Outdoor unit



(Unit: mm)

	L	W	H
MOVTA-24CN1-13C	600	600	633
MOVTA-36CN1-13C	710	710	759
MOVTA-36CN1-R13C	710	710	759
MOVTA-48CN1-R13C	710	710	843
MOVTA-60CN1-R13C	740	740	843



# Conventional split A/C series

## Duct Indoor Unit

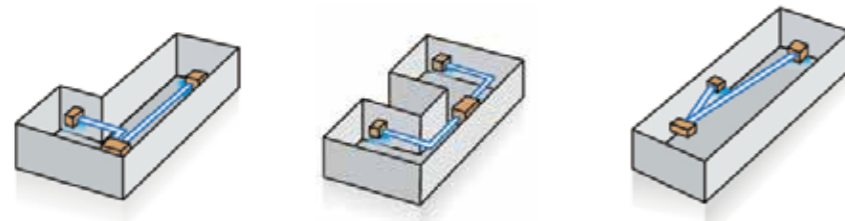


### Convenient installation >>

- ❖ Compact design. Concealed installation without floor space requirement.
- ❖ Hidden in the ceiling, unit installation is not hindered by the location of lighting fixtures or room structure.
- ❖ Air inlet & outlet flange are standard for easy duct connection.
- ❖ Easy maintenance through the inspection port.

### Free air duct design >>

- ❖ Multi diffusers from one indoor unit, air-conditioned multi rooms at the same time.
- ❖ Three speeds of air supply can be chosen via controller.
- ❖ The indoor unit is suitable for various applications where there are many rooms or halls, such as restaurant, concert halls and hotels.
- ❖ Flexible duct design for different room styles.



- Auto Restart Function
- Auto Defrosting
- Independent Dehumidification
- Timer
- PTC Heater
- Anti-Cold Air Function
- Wired Controller

## Specifications

T1 Application  
Medium static pressure duct, heat pump



MTB-76HWN1  
MTB-120HWN1

Indoor unit model		MTB-76HWN1		MTB-120HWN1	
Outdoor unit model / Quantity		MOV-76HN1-R / 1		MOV-120HN1-R / 1	
Indoor unit power supply		220-240V, 1Ph~, 50Hz		220-240V, 1Ph~, 50Hz	
Cooling	Capacity	Btu/h	76,000	120,000	
		kW	22.3	35.0	
	Input	kW	7.5	11.9	
	EER	W/W	2.97	2.94	
Heating	Capacity	Btu/h	85,300	129,700	
		kW	25.0	38.0	
	Input	kW	8.3	12.7	
	COP	W/W	3.01	2.99	
Max. power input		W	1,300	2,000	
Max. current		A	5.2	9.0	
Air flow (Hi)		m³/h	4,250 (2,500CFM)	6,375 (3,750CFM)	
Standard external static pressure		Pa	100	100	
Noise level (Hi)		dB(A)	56	63	
Fan	Type	Centrifugal		Centrifugal	
	Drive type	Direct		Direct	
Coil		Copper tube and aluminum fin		Copper tube and aluminum fin	
Controller		Wired controller		Wired controller	
Dimension	Net (WxHxD)	mm	1,452x462x797	1,452x462x797	
	Packing (WxHxD)	mm	1,555x500x875	1,555x500x875	
Net / Gross weight		kg	94 / 106	97 / 109	

Notes:

- Cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Heating capacity test condition: Outdoor ambient temperature: 7°C DB / 6°C WB, indoor temperature 20°C DB / 15°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Specifications are subject to change without prior notice for product improvement.





MOV-76HN1-R



MOV-120HN1-R

Outdoor unit model		MOV-76HN1-R	MOV-120HN1-R
Outdoor unit power supply		380-415V, 3Ph~, 50Hz	380-415V, 3Ph~, 50Hz
Max. power input	kW	11.7 (Outdoor unit)	17.3 (Outdoor unit)
Max. current	A	19.3 (Outdoor unit)	28.6 (Outdoor unit)
Air flow rate	m <sup>3</sup> /h	12,500	13,000
Noise level	dB(A)	68	69
Compressor (Type / Quantity)		Scroll / 1	Scroll / 1
Refrigerant (Type / Quantity)		R410A / 5.4kg	R410A / 7.5kg
Fan type / Drive type		Axial / Direct	Axial / Direct
Coil		Copper tube and aluminum fin	Copper tube and aluminum fin
Refrigerant piping size		mm	mm
		Φ9.52 (Liquid), Φ22 (Gas)	Φ12.7 (Liquid), Φ28.6 (Gas)
Ambient temperature	Cooling	°C	17~46
	Heating	°C	-7~24
Dimension	Body (WxHxD)	mm	1,260x908x700
	Packing (WxHxD)	mm	1,320x1,060x730
Net / Gross weight		kg	174 / 193

## Notes:

- Cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Heating capacity test condition: Outdoor ambient temperature: 7°C DB / 6°C WB, indoor temperature 20°C DB / 15°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Specifications are subject to change without prior notice for product improvement.

## Specifications

## T1 Application

High static pressure duct, heat pump



MHB-76HWN1

MHA-150HWN1  
MHA-192HWN1

Indoor unit model		MHB-76HWN1	MHA-150HWN1	MHA-192HWN1
Outdoor unit model / Quantity		MOV-76HN1-R / 1	MOV-150HN1-R / 1	MOV-192HN1-R / 1
Indoor unit power supply		220-240V, 1Ph~, 50Hz	220-240V, 1Ph~, 50Hz	220-240V, 1Ph~, 50Hz
Cooling	Capacity	Btu/h	76,000	150,100
		kW	22.3	44.0
	Input	kW	7.5	16.3
	EER	W/W	2.97	2.70
Heating	Capacity	Btu/h	85,300	160,300
		kW	25.0	47.0
	Input	kW	8.3	15.7
	COP	W/W	3.01	2.99
Max. power input		W	1,300	2,730
Max. current		A	5.2	12.1
Air flow (Hi)		m <sup>3</sup> /h	4,250 (2,500CFM)	8,500 (5,000CFM)
Standard external static pressure		Pa	196	196
Noise level (Hi)		dB(A)	56	63
Fan	Type	Centrifugal	Centrifugal	Centrifugal
	Drive type	Direct	Direct	Direct
Coil		Copper tube and aluminum fin	Copper tube and aluminum fin	Copper tube and aluminum fin
Controller		Wired controller	Wired controller	Wired controller
Dimension	Net (WxHxD)	mm	1,452x462x797	1,988x669x906
	Packing (WxHxD)	mm	1,555x500x875	2,095x800x964
Net / Gross weight		kg	94 / 106	208 / 220

## Notes:

- Cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Heating capacity test condition: Outdoor ambient temperature: 7°C DB / 6°C WB, indoor temperature 20°C DB / 15°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Specifications are subject to change without prior notice for product improvement.



MOV-76HN1-R



MOV-150HN1-R



MOV-192HN1-R

Outdoor unit model		MOV-76HN1-R	MOV-150HN1-R	MOV-192HN1-R
Outdoor unit power supply		380-415V, 3Ph~, 50Hz	380-415V, 3Ph~, 50Hz	380-415V, 3Ph~, 50Hz
Max. power input	kW	11.7 (Outdoor unit)	26.9 (Outdoor unit)	32.2 (Outdoor unit)
Max. current	A	19.3 (Outdoor unit)	47.9 (Outdoor unit)	53.8 (Outdoor unit)
Air flow rate	m <sup>3</sup> /h	12,500	16,000	16,000
Noise level	dB(A)	68	70	73
Compressor (Type / Quantity)		Scroll / 1	Scroll / 3	Scroll / 3
Refrigerant (Type / Quantity)		R410A / 5.4kg	R410A / 10.0kg	R410A / 11.8kg
Fan type / Drive type		Axial / Direct	Axial / Direct	Axial / Direct
Coil		Copper tube and aluminum fin	Copper tube and aluminum fin	Copper tube and aluminum fin
Refrigerant piping size		mm Φ9.52 (Liquid), Φ22 (Gas)	mm Φ16 (Liquid), Φ32 (Gas)	mm Φ16 (Liquid), Φ32 (Gas)
Ambient temperature	Cooling	°C	17~46	17~46
	Heating	°C	-7~24	-7~24
Dimension	Body (WxHxD)	mm	1,260x908x700	1,250x1,615x765
	Packing (WxHxD)	mm	1,320x1,060x730	1,305x1,790x820
Net / Gross weight		kg	174 / 193	288 / 308

## Notes:

- Cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Heating capacity test condition: Outdoor ambient temperature: 7°C DB / 6°C WB, indoor temperature 20°C DB / 15°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Specifications are subject to change without prior notice for product improvement.

## Specifications

T1 Application  
DC inverter high static pressure duct, heat pump



MHC1-76HWD1N1  
MHC-96HWD1N1  
MHC-96HWD1N1(A)

Model		MHC1-76HWD1N1	MHC-96HWD1N1	MHC-96HWD1N1(A)
Outdoor unit model / Quantity		MOVG1-76HD1N1-R / 1	MOVG-96HD1N1-R / 1	MOUA-96HD1N1-R / 1
Power supply		\	220-240V~, 1Ph, 50Hz	220-240V~, 1Ph, 50Hz
Cooling	Capacity	Btu/h	85,300	102,300
		kW	25.0	30.0
	Input	kW	7.50	9.80
Heating	Capacity	Btu/h	85,300	102,300
		kW	25.0	30.0
	Input	kW	7.5	9.8
COP		W/W	3.23	3.31
Max. power input		W	650	850
Max. current		A	4	4.5
Air flow (H)		m <sup>3</sup> /h	5000	4800
External static pressure		Pa	0 ~ 200	0 ~ 200
Noise level (H)		dB(A)	56	52
Fan	Type	\	Centrifugal	Centrifugal
	Drive type	\	Direct	Direct
Coil		\	Copper tube and aluminum fin	Copper tube and aluminum fin
Controller		\	Wired controller	Wired controller
Refrigerant pipe	Liquid	mm	Φ12.7	Φ12.7
	Gas	mm	Φ28.6	Φ28.6
Dimension	Body (WxHxD)	mm	1,470x510x795	1,470x512x775
	Packing (WxHxD)	mm	1,555x545x875	1,555x545x875
Net / Gross weight		kg	83 / 94	83 / 92

## Notes:

- T1 cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- T3 cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Heating capacity test condition: Outdoor ambient temperature: 7°C DB / 6°C WB, indoor temperature 20°C DB / 15°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Specifications are subject to change without prior notice for product improvement.



MOVG1-76HD1N1-R  
MOVG-96HD1N1-R



MOUA-96HD1N1-R

Model			MOVG1-76HD1N1-R	MOVG-96HD1N1-R	MOUA-96HD1N1-R
Outdoor unit power supply		\	380-415V~, 3Ph, 50Hz	380-415V~, 3Ph, 50Hz	380-415V~, 3Ph, 50Hz
Max. power input		kW	8 (Whole unit)	9.25 (Whole unit)	11.7 (Whole unit)
Max. current		A	16	16	16
Noise level		dB(A)	66	66	59
Air flow		m <sup>3</sup> /h	13,500	13,500	9,800
Compressor	Type	\	Inverter scroll	Inverter scroll	Rotary
	Quantity	\	1	1	1
Refrigerant	Type	\	R410A	R410A	R410A
	Quantity	\	9.0kg	10.0kg	7.2kg
Fan type		\	Axial fan	Axial fan	Axial fan
Coil		\	Copper tube and aluminum fin	Copper tube and aluminum fin	Copper tube and aluminum fin
Refrigerant pipe	Liquid	mm	Φ12.7	Φ12.7	Φ9.52
	Gas	mm	Φ28.6	Φ28.6	Φ25.4
Ambient temperature	Cooling	°C	15~48	-15~48	-15~48
	Heating	°C	-15~24	-15~24	-15~24
Dimension	Body (W×H×D)	mm	948×1,585×968	948×1,585×968	1,120×1,558×400
	Packing (W×H×D)	mm	1,010×1,705×1,000	1,010×1,705×1,000	1,270×1,720×565
Net / Gross weight		kg	231 / 242	231 / 256	148 / 164

## Notes:

- T1 cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- T3 cooling capacity test condition: Outdoor ambient temperature: 46°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Heating capacity test condition: Outdoor ambient temperature: 7°C DB / 6°C WB, indoor temperature 20°C DB / 15°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Specifications are subject to change without prior notice for product improvement.

## Specifications

### Tropical (T3) Application

Medium static pressure duct, heat pump



MTA-76HRN1



MTB1T-96HWN1



MTA-120HRN1

Indoor unit model			MTA-76HRN1	MTB1T-96HWN1	MTA-120HRN1
Outdoor unit model / Quantity			MOV-76HN1-C / 1	MOVTA-96HN1-R / 1	MOV-120HN1-C / 1
Indoor unit power supply			220-240V, 1Ph~, 50Hz	220-240V, 1Ph~, 50Hz	220-240V, 1Ph~, 50Hz
Cooling	Capacity (T1/T3)	Btu/h	75,100 / 64,100	96,000 / 87,860	119,400 / 102,400
		kW	22.0 / 18.8	28.1 / 25.75	35.0 / 30.0
	Input (T1/T3)	kW	7.5 / 8.85	9.6 / 15.00	12.0 / 13.25
	EER (T1)	W/W	2.93	2.93	2.92
Heating	Capacity	Btu/h	85,000	106,000	130,000
		kW	25.0	31.1	38.0
	Input	kW	8.3	10.3	12.6
	COP	W/W	3.01	3.02	3.02
Max. power input		W	11,700 (Whole units)	1,400 (IDU)	17,300 (Whole units)
Max. current		A	19.3 (Whole units)	5.8 (IDU)	28.6 (Whole units)
Air flow (Hi)		m <sup>3</sup> /h	4,250 (2,500CFM)	5,100 (3,000CFM)	6,375 (3,750CFM)
Standard external static pressure		Pa	100	100	150
Noise level (Hi)		dB(A)	58	56	63
Fan type / Drive type			Centrifugal / Direct	Centrifugal / Direct	Centrifugal / Direct
Coil			Copper tube and aluminum fin	Copper tube and aluminum fin	Copper tube and aluminum fin
Controller			Wireless controller	Wired controller	Wireless controller
Dimension	Net (W×H×D)	mm	1,443×450×846	1,452×462×797	1,988×669×906
	Packing (W×H×D)	mm	1,549×476×917	1,555×500×875	2,095×800×964
Net / Gross weight		kg	105 / 120	97 / 109	188 / 220

## Notes:

- T1 cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- T3 cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Heating capacity test condition: Outdoor ambient temperature: 7°C DB / 6°C WB, indoor temperature 20°C DB / 15°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Specifications are subject to change without prior notice for product improvement.

MOV-76HN1-C  
MOVTA-96HN1-R

MOV-120HN1-C

Outdoor unit model		MOV-76HN1-C	MOVTA-96HN1-R	MOV-120HN1-C
Outdoor unit power supply		380-415V, 3Ph~, 50Hz	380-415V, 3Ph~, 50Hz	380-415V, 3Ph~, 50Hz
Max. power input	kW	11.7 (Whole units)	14.4 (ODU)	17.3 (Whole units)
Max. current	A	19.3 (Whole units)	23.7 (ODU)	28.6 (Whole units)
Air flow rate	m <sup>3</sup> /h	12,500	12,500	13,000
Noise level	dB(A)	65	68	69
Compressor(Type / Quantity)		Scroll / 1	Scroll / 1	Scroll / 1
Refrigerant(Type / Quantity)		R410A / 5.4kg	R410A / 6.0kg	R410A / 7.2kg
Fan type / Drive type		Axial / Direct	Axial / Direct	Axial / Direct
Coil		Copper tube and aluminum fin	Copper tube and aluminum fin	Copper tube and aluminum fin
Refrigerant piping size		mm	mm	mm
		Φ9.52(Liquid), Φ22(Gas)	Φ9.52(Liquid), Φ25(Gas)	Φ12.7(Liquid), Φ28.6(Gas)
Ambient temperature	Cooling	°C	17~52	17~52
	Heating	°C	-7~24	-7~24
Dimension	Body (WxHxD)	mm	1,260x908x700	1,260x908x700
	Packing (WxHxD)	mm	1,320x1,060x730	1,320x1,060x730
Net / Gross weight		kg	174 / 193	201 / 217

## Notes:

- T1 cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- T3 cooling capacity test condition: Outdoor ambient temperature: 46°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Heating capacity test condition: Outdoor ambient temperature: 7°C DB / 6°C WB, indoor temperature 20°C DB / 15°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Specifications are subject to change without prior notice for product improvement.

## Specifications

## Tropical (T3) Application

Medium static pressure duct, cooling only



MTA-76CRN1



MTB1T-96CWN1



MTA-120CRN1



MTA-150CRN1

Indoor unit model		MTA-76CRN1	MTB1T-96CWN1	MTA-120CRN1	MTA-150CRN1
Outdoor unit model / Quantity		MOV-76CN1-C / 1	MOVTA-96CN1-R / 1	MOV-120CN1-C / 1	MOV-76CN1-C / 2
Indoor unit power supply		220-240V, 1Ph~, 50Hz	220-240V, 1Ph~, 50Hz	220-240V, 1Ph~, 50Hz	220-240V, 1Ph~, 50Hz
Cooling	Capacity (T1/T3)	Btu/h	75,100 / 64,100	96,000 / 87,860	119,400 / 102,400
		kW	22.0 / 18.8	28.1 / 25.75	35.0 / 30.0
	Input (T1/T3)	kW	7.5 / 8.85	9.6 / 15.0	12.0 / 13.25
Heating	Capacity	Btu/h	-	-	-
		kW	-	-	-
	Input	kW	-	-	-
COP		W/W	-	-	-
Max. power input		kW	11.7 (Whole units)	1.4 (IDU)	17.3 (Whole units)
Max. current		A	19.3 (Whole units)	5.8 (IDU)	28.6 (Whole units)
Air flow (Hi)		m <sup>3</sup> /h	4,250 (2,500CFM)	5,100 (3,000CFM)	7,650 (4,500CFM)
Standard external static pressure		Pa	100	100	150
Noise level (Hi)		dB(A)	58	56	63
Fan type / Drive type			Centrifugal / Direct	Centrifugal / Direct	Centrifugal / Direct
Coil			Copper tube and aluminum fin	Copper tube and aluminum fin	Copper tube and aluminum fin
Controller			Wireless controller	Wired controller	Wireless controller
Dimension	Net (WxHxD)	mm	1,443x450x846	1,452x462x797	1,988x669x906
	Packing (WxHxD)	mm	1,549x476x917	1,555x500x875	2,095x800x964
Net / Gross weight		kg	105 / 120	97 / 109	188 / 220

## Notes:

- T1 cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- T3 cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Specifications are subject to change without prior notice for product improvement.



MOV-76CN1-C  
MOVTA-96CN1-R



MOV-120CN1-C

Outdoor unit model		MOV-76CN1-C	MOVTA-96CN1-R	MOV-120CN1-C
Outdoor unit power supply		380-415V, 3Ph~, 50Hz	380-415V, 3Ph~, 50Hz	380-415V, 3Ph~, 50Hz
Max. power input	kW	11.7 (Whole units)	14.4 (ODU)	17.3 (Whole units)
Max. current	A	19.3 (Whole units)	23.7 (ODU)	28.6 (Whole units)
Air flow rate	m <sup>3</sup> /h	12,500	12,500	13,000
Noise level	dB(A)	65	68	69
Compressor (Type / Quantity)		Scroll / 1	Scroll / 1	Scroll / 1
Refrigerant (Type / Charged)		R410A / 5.4kg	R410A / 6.0kg	R410A / 7.2kg
Fan type / Drive type		Axial / Direct	Axial / Direct	Axial / Direct
Coil		Copper tube and aluminum fin	Copper tube and aluminum fin	Copper tube and aluminum fin
Refrigerant piping size	mm	Φ9.52 (Liquid), Φ22 (Gas)	Φ9.52 (Liquid), Φ25 (Gas)	Φ12.7 (Liquid), Φ28.6 (Gas)
Ambient temperature	°C	17~52	17~52	17~52
Dimension	Body (WxHxD)	mm	1,260×908×700	1,260×908×700
	Packing (WxHxD)	mm	1,320×1,060×730	1,320×1,060×730
Net / Gross weight	kg	171 / 190	168 / 183	199 / 215

## Notes:

- T1 cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- T3 cooling capacity test condition: Outdoor ambient temperature: 46°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Specifications are subject to change without prior notice for product improvement.

## Specifications

### Tropical (T3) Application

High static pressure duct, heat pump & cooling only

Heat pump:  
MHB-76HRN1  
Cooling only:  
MHB-76CRN1



Heat pump:  
MHB1T-96HWN1  
Cooling only:  
MHB1T-96CWN1



Indoor unit model		MHB-76HRN1	MHB1T-96HWN1	MHB-76CRN1	MHB1T-96CWN1	
Outdoor unit model / Quantity		MOV-76HN1-C / 1	MOVTA-96HN1-R / 1	MOV-76CN1-C / 1	MOVTA-96CN1-R / 1	
Indoor unit power supply		220-240V, 1Ph~, 50Hz	220-240V, 1Ph~, 50Hz	220-240V, 1Ph~, 50Hz	220-240V, 1Ph~, 50Hz	
Cooling	Capacity (T1/T3)	Btu/h	75,100 / 64,100	96,000 / 87,860	75,100 / 64,100	96,000 / 87,860
		kW	22.0 / 18.8	28.1 / 25.75	22.0 / 18.8	28.1 / 25.75
	Input (T1/T3)	kW	7.5 / 8.85	9.6 / 15.00	7.5 / 8.85	9.6 / 15.00
	EER (T1)	W/W	2.93	2.93	2.93	2.93
Heating	Capacity	Btu/h	85,000	106,000	-	-
		kW	25.0	31.1	-	-
	Input	kW	8.3	10.3	-	-
COP	W/W	3.01	3.02	-	-	
Max. power input	kW	11.7 (Whole units)	1.4 (IDU)	11.7 (Whole units)	1.4 (IDU)	
Max. current	A	19.3 (Whole units)	5.8 (IDU)	19.3 (Whole units)	5.8 (IDU)	
Air flow (Hi)	m <sup>3</sup> /h	4,250 (2,500CFM)	5,100 (3,000CFM)	4,250 (2,500CFM)	5,100 (3,000CFM)	
Standard external static pressure	Pa	196	196	196	196	
Noise level (Hi)	dB(A)	58	56	58	56	
Fan type / Drive type		Centrifugal / Direct	Centrifugal / Direct	Centrifugal / Direct	Centrifugal / Direct	
Coil		Copper tube and aluminum fin	Copper tube and aluminum fin	Copper tube and aluminum fin	Copper tube and aluminum fin	
Controller		Wireless controller	Wired controller	Wireless controller	Wired controller	
Dimension	Net (WxHxD)	mm	1,443×450×846	1,452×462×797	1,443×450×846	1,452×462×797
	Packing (WxHxD)	mm	1,549×476×917	1,555×500×875	1,549×476×917	1,555×500×875
Net / Gross weight	kg	105 / 120	97 / 109	105 / 120	97 / 109	

## Notes:

- T1 cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- T3 cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Specifications are subject to change without prior notice for product improvement.

Heat pump:  
MOV-76HN1-C MOVTA-96HN1-R  
Cooling only:  
MOV-76CN1-C MOVTA-96CN1-R



Outdoor unit model		MOV-76HN1-C	MOVTA-96HN1-R	MOV-76CN1-C	MOVTA-96CN1-R
Outdoor unit power supply		380-415V, 3Ph~, 50Hz	380-415V, 3Ph~, 50Hz	380-415V, 3Ph~, 50Hz	380-415V, 3Ph~, 50Hz
Max. power input	kW	11.7 (Whole units)	14.4 (ODU)	11.7 (Whole units)	14.4 (ODU)
Max. current	A	19.3 (Whole units)	23.7 (ODU)	19.3 (Whole units)	23.7 (ODU)
Air flow rate	m³/h	12,500	12,500	12,500	12,500
Noise level	dB(A)	65	68	65	68
Compressor(Type / Quantity)		Scroll / 1	Scroll / 1	Scroll / 1	Scroll / 1
Refrigerant(Type / Quantity)		R410A / 5.4kg	R410A / 6.0kg	R410A / 5.4kg	R410A / 6.0kg
Fan type / Drive type		Axial / Direct	Axial / Direct	Axial / Direct	Axial / Direct
Coil		Copper tube and aluminum fin	Copper tube and aluminum fin	Copper tube and aluminum fin	Copper tube and aluminum fin
Refrigerant piping size	mm	Φ9.52(Liquid), Φ22(Gas)	Φ9.52(Liquid), Φ25(Gas)	Φ9.52(Liquid), Φ22(Gas)	Φ9.52(Liquid), Φ25.4(Gas)
Ambient temperature		℃	17~52(Cooling) / -7~24(Heating)	17~52(Cooling) / -7~24(Heating)	17~52(Cooling)
Dimension	Body (WxHxD)	mm	1,260x908x700	1,312x919x658	1,260x908x700
	Packing (WxHxD)	mm	1,320x1,060x730	1,320x1,060x730	1,320x1,060x730
Net / Gross weight		kg	174 / 193	177 / 192	171 / 190

Notes:

1. T1 cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
2. T3 cooling capacity test condition: Outdoor ambient temperature: 46°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
3. Heating capacity test condition: Outdoor ambient temperature: 7°C DB / 6°C WB, indoor temperature 20°C DB / 15°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
4. Specifications are subject to change without prior notice for product improvement.

## Floor-standing Indoor Unit



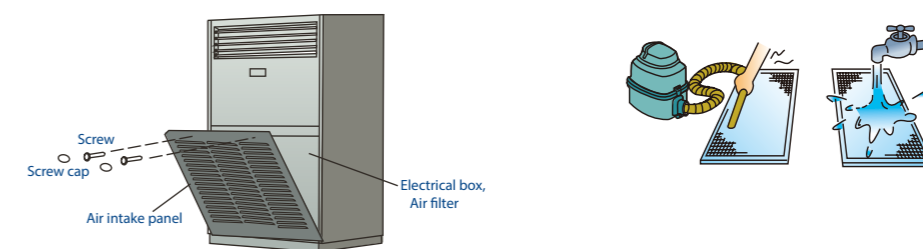
Strong wind, long distance air supply >>



Touch screen control >>



Washable inlet air filter >>



- |                              |                       |                 |
|------------------------------|-----------------------|-----------------|
| Anti-Cold Air Function       | Auto Restart Function | Auto Defrosting |
| Independent Dehumidification | Timer                 | PTC Heater      |

Features: ■ Standard ■ Optional

## Specifications

### T1 Application Heat pump



Indoor unit model		MFA2-76HRN1	
Outdoor unit model / Quantity		MOV-76HN1-R / 1	
Indoor unit power supply		220-240V, 1Ph~, 50Hz	
Cooling	Capacity	Btu/h	76,000
		kW	22.3
	Input	kW	7.5
	EER	W/W	2.97
Heating	Capacity	Btu/h	85,300
		kW	25.0
	Input	kW	8.3
	COP	W/W	3.01
Max. power input		W	700
Max. current		A	3.0
Air flow (Hi)		m <sup>3</sup> /h	4,300 (2,530CFM)
Noise level		dB(A)	56
Fan type / Drive type		Centrifugal / Direct	
Coil		Copper tube and aluminum fin	
Controller		Remote controller	
Dimension	Net (WxHxD)	mm	1,200x1,860x518
	Packing (WxHxD)	mm	1,362x2,050x582
Net / Gross weight		kg	130 / 145



Outdoor unit model		MOV-76HN1-R	
Outdoor unit power supply		380-415V, 3Ph~, 50Hz	
Max. power input		kW	11.7
Max. current		A	19.3
Air flow rate		m <sup>3</sup> /h	12,500
Noise level		dB(A)	68
Compressor (Type / Quantity)		Scroll / 1	
Refrigerant (Type / Quantity)		R410A / 5.4kg	
Fan type / Drive type		Axial / Direct	
Coil		Copper tube and aluminum fin	
Refrigerant piping size		mm	Φ9.52 (Liquid), Φ22 (Gas)
Ambient temperature		°C	17~46 (Cooling) / -7~24 (Heating)
Dimension	Body (WxHxD)	mm	1,260x908x700
	Packing (WxHxD)	mm	1,320x1,060x730
Net / Gross weight		kg	174 / 193

## Notes:

- Cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Heating capacity test condition: Outdoor ambient temperature: 7°C DB / 6°C WB, indoor temperature 20°C DB / 15°C WB; refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Specifications are subject to change without prior notice for product improvement.

## Specifications

### Tropical (T3) Application Heat pump



Indoor unit model		MFA-76HRN1		MFA3T-96HRN1	
Outdoor unit model / Quantity		MOV-76HN1-C / 1		MOVTA-96HN1-R / 1	
Indoor unit power supply		220-240V, 1Ph~, 50Hz		220-240V, 1Ph~, 50Hz	
Cooling	Capacity (T1/T3)	Btu/h	75,100 / 64,800	96,000 / 87,860	
		kW	22.0 / 19.0	28.1 / 25.75	
	Input (T1/T3)	kW	7.5 / 8.98	9.6 / 15.00	
	EER (T1)	W/W	2.93	2.93	
Heating	Capacity	Btu/h	85,000	106,000	
		kW	25.0	31.1	
	Input	kW	8.3	10.3	
	COP	W/W	3.01	3.02	
Max. power input		kW	11.7 (Whole units)	0.7 (IDU)	
Max. current		A	19.3 (Whole units)	3.0 (IDU)	
Air flow (Hi)		m <sup>3</sup> /h	4,250 (2,500CFM)	4,800 (2,825CFM)	
Noise level		dB(A)	58	56	
Fan type / Drive type		Centrifugal / Direct		Centrifugal / Direct	
Coil		Copper tube and aluminum fin		Copper tube and aluminum fin	
Controller		Remote controller		Remote controller	
Dimension	Net (WxHxD)	mm	1,200x1,860x518	1,200x1,860x518	
	Packing (WxHxD)	mm	1,362x2,050x582	1,362x2,050x582	
Net / Gross weight		kg	158 / 174	140 / 154	



Outdoor unit model		MOV-76HN1-C		MOVTA-96HN1-R	
Outdoor unit power supply		380-415V, 3Ph~, 50Hz		380-415V, 3Ph~, 50Hz	
Max. power input		kW	11.7 (Whole units)	14.4 (ODU)	
Max. current		A	19.3 (Whole units)	23.7 (ODU)	
Air flow rate		m <sup>3</sup> /h	12,500	12,500	
Noise level		dB(A)	65	68	
Compressor (Type / Quantity)		Scroll / 1		Scroll / 1	
Refrigerant (Type / Quantity)		R410A / 5.4kg		R410A / 6.0kg	
Fan type / Drive type		Axial / Direct		Axial / Direct	
Coil		Copper tube and aluminum fin		Copper tube and aluminum fin	
Refrigerant piping size		mm	Φ9.52 (Liquid), Φ22 (Gas)	Φ9.52 (Liquid), Φ25 (Gas)	
Ambient temperature		°C	17~52 (Cooling) / -7~24 (Heating)	17~52 (Cooling) / -7~24 (Heating)	
Dimension	Body (WxHxD)	mm	1,260x908x700	1,312x919x658	
	Packing (WxHxD)	mm	1,320x1,060x730	1,320x1,060x730	
Net / Gross weight		kg	174 / 193	177 / 192	

## Notes:

- T1 cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB.
- T3 cooling capacity test condition: Outdoor ambient temperature: 46°C, indoor temperature 27°C DB / 19°C WB.
- Heating capacity test condition: Outdoor ambient temperature: 7°C DB / 6°C WB, indoor temperature 20°C DB / 15°C WB.
- Refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
- Specifications are subject to change without prior notice for product improvement.

## Specifications

Tropical (T3) Application  
Cooling only



Indoor unit model		MFA-76CRN1	MFA3T-96CRN1	MFAT-120CRN1
Outdoor unit model / Quantity		MOV-76CN1-C / 1	MOVTA-96CN1-R / 1	MOV-120CN1-C / 1
Indoor unit power supply		220-240V, 1Ph~, 50Hz	220-240V, 1Ph~, 50Hz	220-240V, 1Ph~, 50Hz
Cooling	Capacity (T1/T3)	Btu/h	75,100 / 64,800	96,000 / 87,860
		kW	22.0 / 19.0	28.1 / 25.75
	Input (T1/T3)	kW	7.5 / 8.98	9.6 / 15.00
		EER (T1)	W/W	2.93
Heating	Capacity	Btu/h	-	-
		kW	-	-
	Input	kW	-	-
		COP	W/W	-
Max. power input	kW	11.7 (Whole units)	0.7 (IDU)	17.3 (Whole units)
Max. current	A	19.3 (Whole units)	3.0 (IDU)	28.6 (Whole units)
Air flow (Hi)	m³/h	4,250 (2,500CFM)	4,800 (2,825CFM)	6,060 (3,560CFM)
Noise level	dB(A)	58	56	65
Fan type / Drive type		Centrifugal / Direct	Centrifugal / Direct	Centrifugal / Direct
Coil		Copper tube and aluminum fin	Copper tube and aluminum fin	Copper tube and aluminum fin
Controller		Remote controller	Remote controller	Remote controller
Dimension	Net (WxHxD)	mm	1,200x1,860x518	1,200x1,860x518
	Packing (WxHxD)	mm	1,362x2,050x582	1,362x2,050x582
Net / Gross weight		kg	158 / 174	148 / 174



Outdoor unit model		MOV-76CN1-C	MOVTA-96CN1-R	MOV-120CN1-C
Outdoor unit power supply		380-415V, 3Ph~, 50Hz	380-415V, 3Ph~, 50Hz	380-415V, 3Ph~, 50Hz
Max. power input	kW	11.7 (Whole units)	14.4 (ODU)	17.3 (Whole units)
Max. current	A	19.3 (Whole units)	23.7 (ODU)	28.6 (Whole units)
Air flow rate	m³/h	12,500	12,500	13,000
Noise level	dB(A)	65	68	69
Compressor (Type / Quantity)		Scroll / 1	Scroll / 1	Scroll / 1
Refrigerant (Type / Charged)		R410A / 5.4kg	R410A / 6.0kg	R410A / 7.2kg
Fan type / Drive type		Axial / Direct	Axial / Direct	Axial / Direct
Coil		Copper tube and aluminum fin	Copper tube and aluminum fin	Copper tube and aluminum fin
Refrigerant piping size	mm	Φ9.52 (Liquid), Φ22 (Gas)	Φ9.52 (Liquid), Φ25 (Gas)	Φ12.7 (Liquid), Φ28.6 (Gas)
Ambient temperature	°C	17~52	17~52	17~52
Dimension	Body (WxHxD)	mm	1,260x908x700	1,260x908x700
	Packing (WxHxD)	mm	1,320x1,060x730	1,320x1,060x730
Net / Gross weight		kg	171 / 190	199 / 215

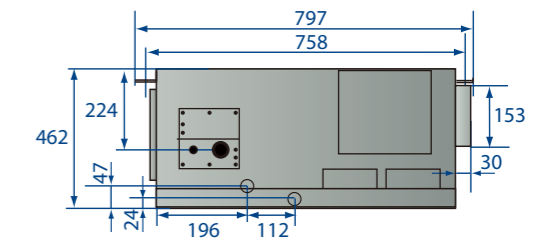
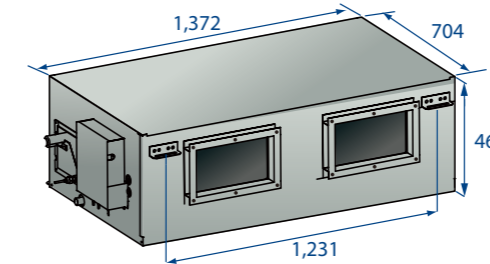
Notes:

1. T1 Cooling capacity test condition: Outdoor ambient temperature: 35°C, indoor temperature 27°C DB / 19°C WB.
2. T3 Cooling capacity test condition: Outdoor ambient temperature: 46°C, indoor temperature 27°C DB / 19°C WB.
3. Refrigerant pipe length between indoor unit and outdoor unit is 7.5m.
4. Specifications are subject to change without prior notice for product improvement.

## Dimensions

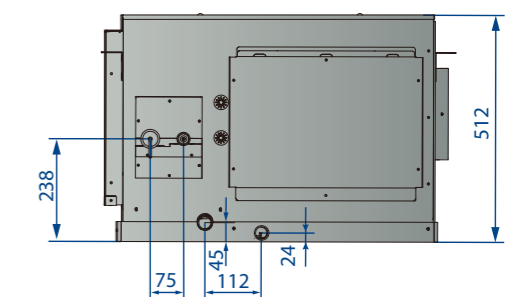
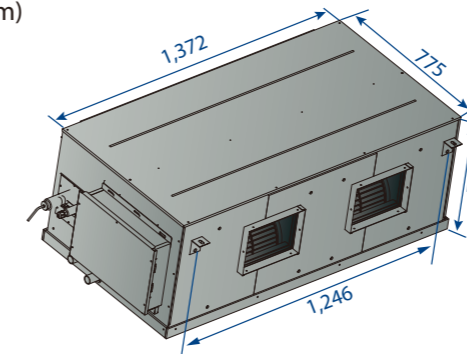
T1 application

Duct indoor unit: MTB-76HWN1, MTB-120HWN1, MHB-76HWN1,  
(Units: mm)



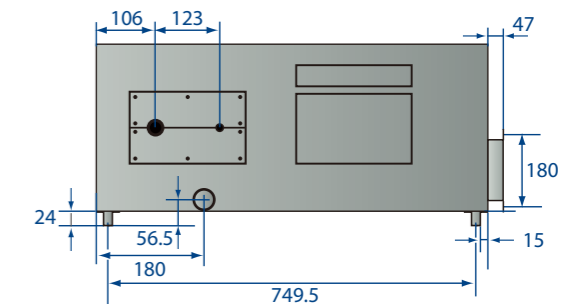
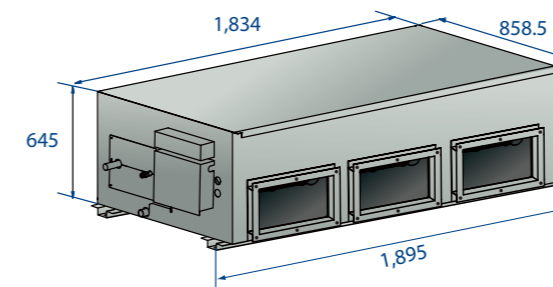
T1 application

Duct indoor unit: MHC1-76HWD1N1, MHC-96HWD1N1, MHC-96HWD1N1(A)  
(Units: mm)



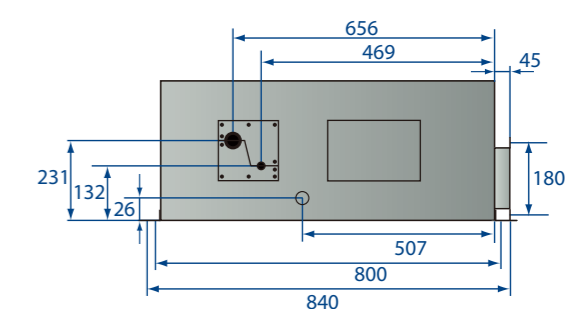
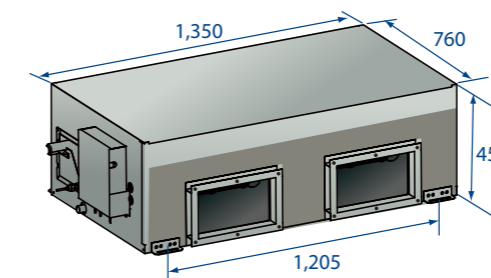
T1 application

Duct indoor unit: MHA-150HWN1, MHA-192HWN1  
(Units: mm)



Tropical (T3) application

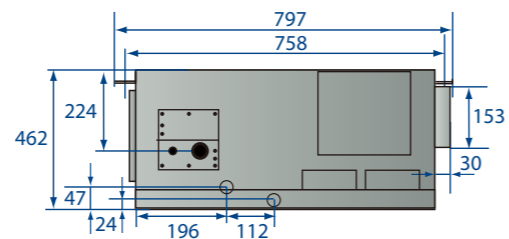
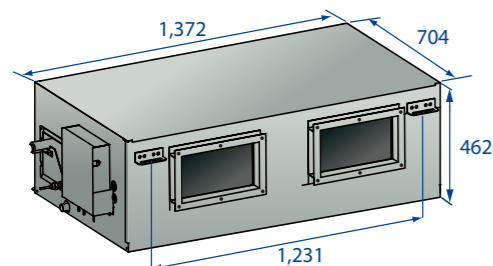
Duct indoor unit: MTA-76HRN1, MTA-76CRN1  
MHB-76HRN1, MHB-76CRN1  
(Units: mm)





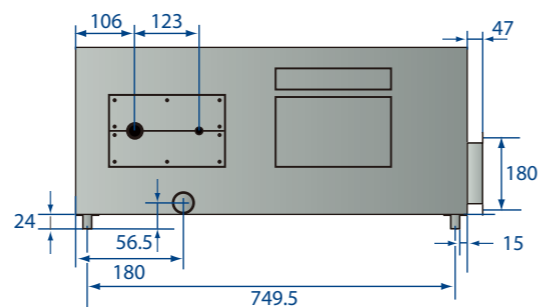
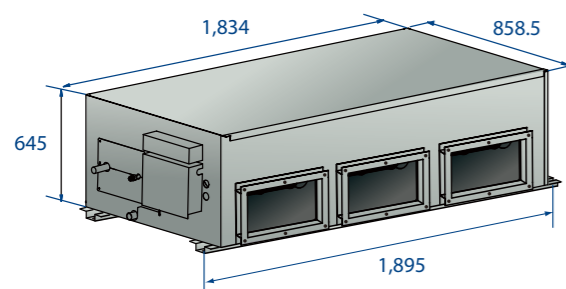
Tropical (T3) application

Duct indoor unit: MTB1T-96HWN1, MTB1T-96CWN1  
MHB1T-96HWN1, MHB1T-96CWN1  
(Units: mm)



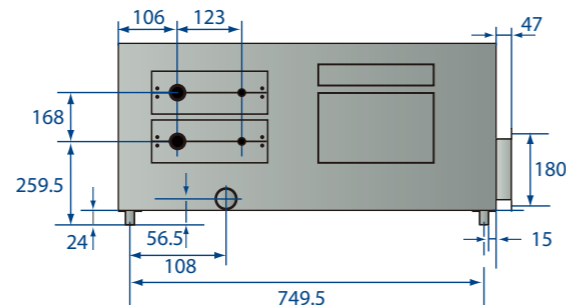
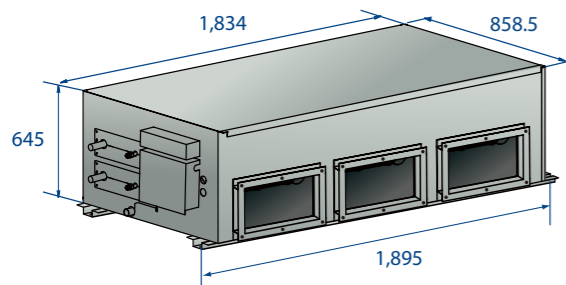
Tropical (T3) application

Duct indoor unit: MTA-120HRN1, MTA-120CRN1  
(Units: mm)



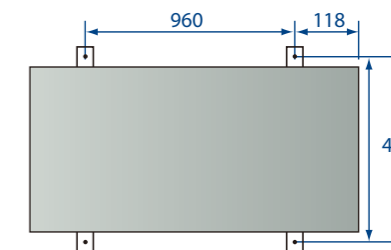
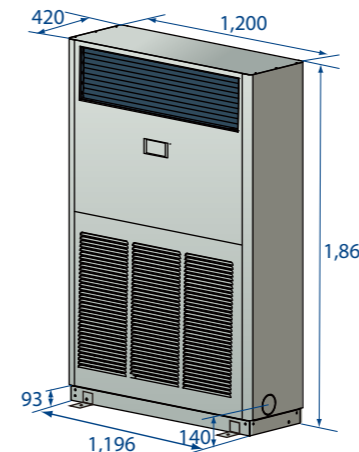
Tropical (T3) application

Duct indoor unit: MTA-150CRN1  
(Units: mm)



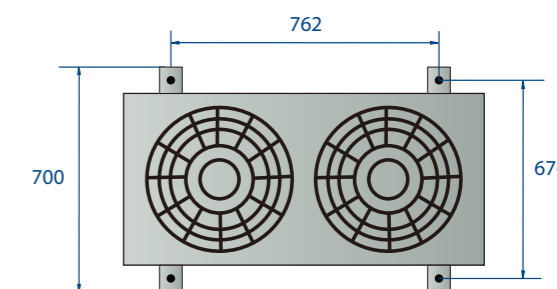
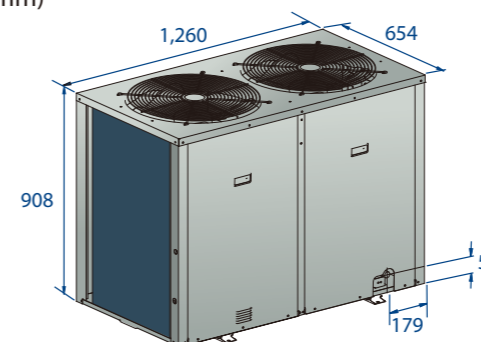
T1 & Tropical (T3) application

Floor-standing indoor unit: MFA2-76HRN1, MFA-76HRN1, MFA-76CRN1, MFA3T-96HRN1, MFA3T-96CRN1, MFAT-120CRN1  
(Units: mm)



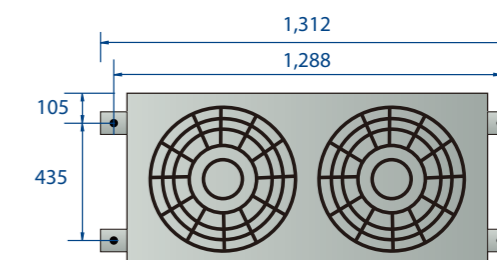
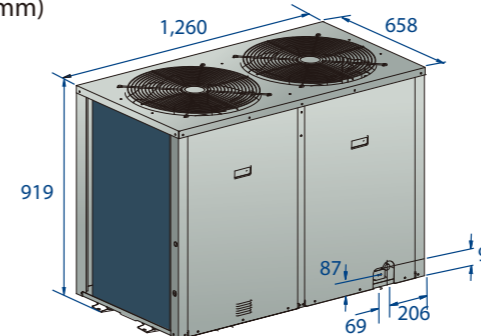
T1 & Tropical (T3) application

Outdoor unit: MOV-76HN1-R, MOV-76HN1-C, MOV-76CN1-C  
(Units: mm)



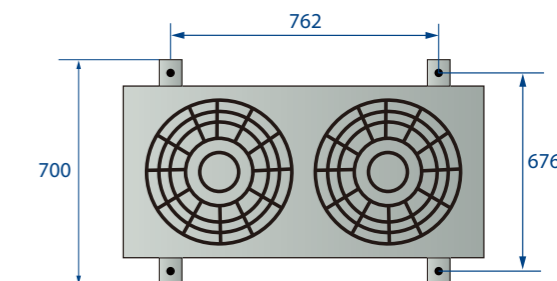
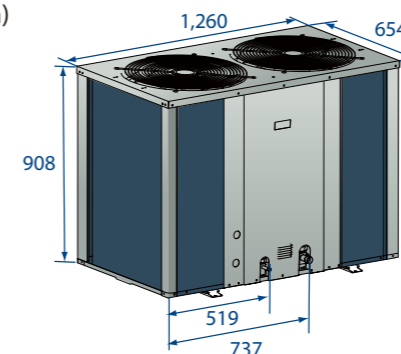
T1 & Tropical (T3) application

Outdoor unit: MOVTA-96HN1-R, MOVTA-96CN1-R  
(Units: mm)

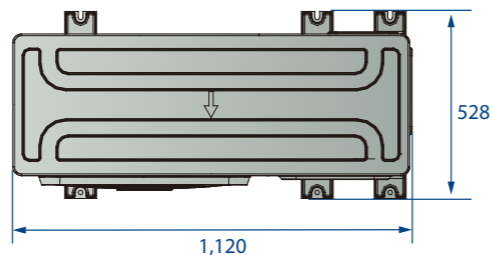
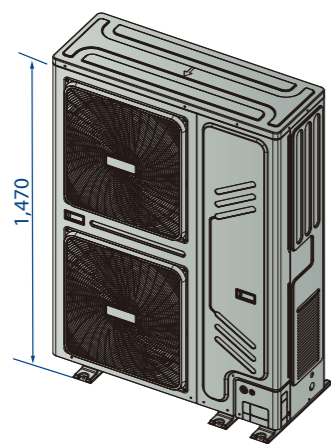


T1 & Tropical (T3) application

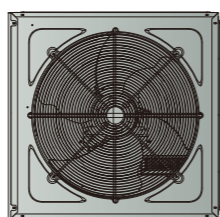
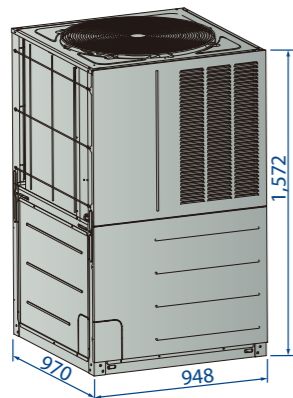
Outdoor unit: MOV-120HN1-R, MOV-120HN1-C, MOV-120CN1-C  
(Units: mm)



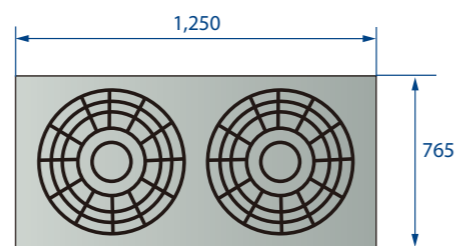
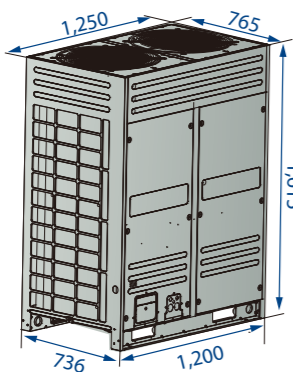
T1 application  
Outdoor unit: MOUA-96HD1N1-R  
(Units: mm)



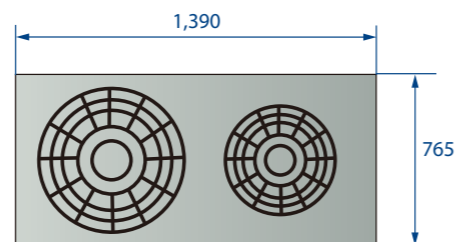
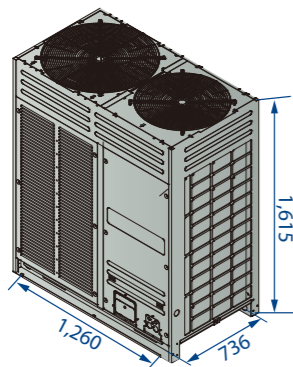
T1 Application  
Outdoor unit: MOVG1-76HD1N1-R, MOVG-96HD1N1-R  
(Units: mm)



T1 application  
Outdoor unit: MOV-150HN1-R  
(Units: mm)



T1 application  
Outdoor unit: MOV-192HN1-R  
(Units: mm)



## Remote Controller - R51



### Parameter >>

Model: R51/CE (Cooling only type)  
R51/E (Heat pump type)  
Dimension (mm): 140x60x15  
Power: 1.5V (LR03/AAA)×2

### Standard features >>

- ❖ It provides a convenient way for users to control the air conditioners everywhere within a range up to 11m.
- ❖ Built-in daily timer offers the convenience of automatically starting and turning down the air conditioners according to the set time.

## Wired Controller - KJR-29B



### Parameter >>

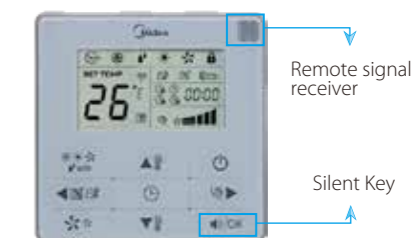
Model: KJR-29B (Touch-style key)  
Dimension (mm): 120x120x20  
Power: From the display panel, extra power is unnecessary.

### Standard features >>

- ❖ Keyboard locking function as standard, it can be used to prevent other people from using the controller.
- ❖ Built-in daily timer offers the convenience of automatically starting and turning down the air conditioners according to the set time.

### Remote signal receiving function >>

- ❖ KJR-29B provides a signal receiver to receive the signal from remote controller.
- ❖ The received signal can be directly sent to the indoor unit by wired controller. It is convenient to control the air conditioner.



### Silent mode >>

- ❖ During the operating, when operate the silent mode, the units can reduce the running noise through setting the fan speed to low automatically. It will help you bring a quieter environment.

## Centralized Controller - CCM30



CCM30



MD-NIM01

### Parameter >>

Model: CCM30 + MD-NIM01  
 Dimension (mm): 180×122×78 (CCM30BKE-B)  
 180×122×68 (CCM30BKE-A)  
 81.8×46.8×15.5 (MD-NIM01)  
 Power: 198~242V, 50/60Hz (MD-CCM30)  
 DC+5V (MD-NIM01)

### Centralized control >>

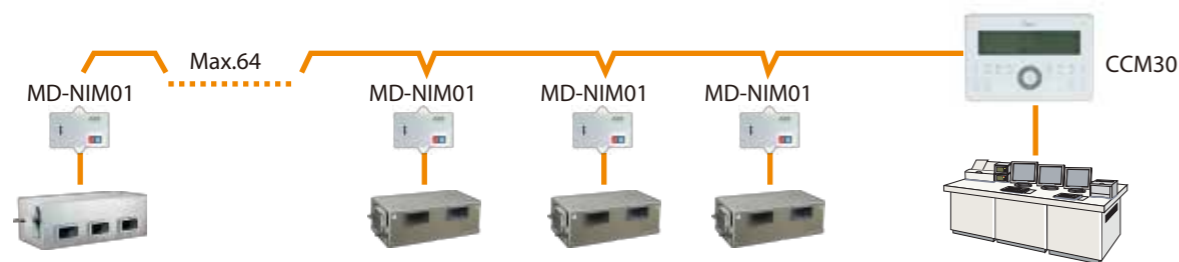
- ❖ MD-CCM30, centralized controller, is a multifunctional device that can control up to 64 indoor units within a maximum connection length of 1200m.
- ❖ User can group control or individual control and the set temperature of each units can also different.
- ❖ The indoor units working status and error codes can be displayed in the screen of CCM30. Via checking the error codes table in the user manual, user can easily find out the malfunction and call the service engineer.

### Three lock modes >>

- ❖ Centralized controller provides a superior way to manage the indoor units. Users can be able to make their own choice from three locking mode: locking the wireless controller, locking the running mode or locking centralized controller keyboard as they wish.

### Access to network monitoring >>

- ❖ MD-CCM30 is able to bridge up to 64 indoor units to network monitoring system and building management system.



### Easy installation >>

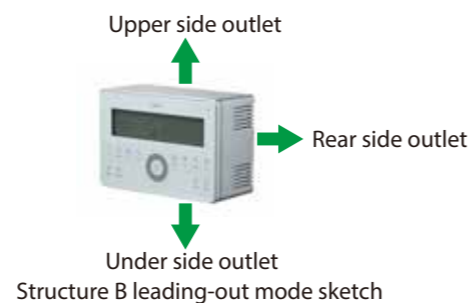
- ❖ Two structures design, easy installation. Structure A (Model No. CCM30/BKE-A) should be embedded into the wall and structure B (Model No. CCM30/BKE-B) doesn't need.



Structure A



Structure B



Structure B leading-out mode sketch