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Commercial Air Conditioners 2020

**Commercial Air Conditioner Division  
Midea Group**

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

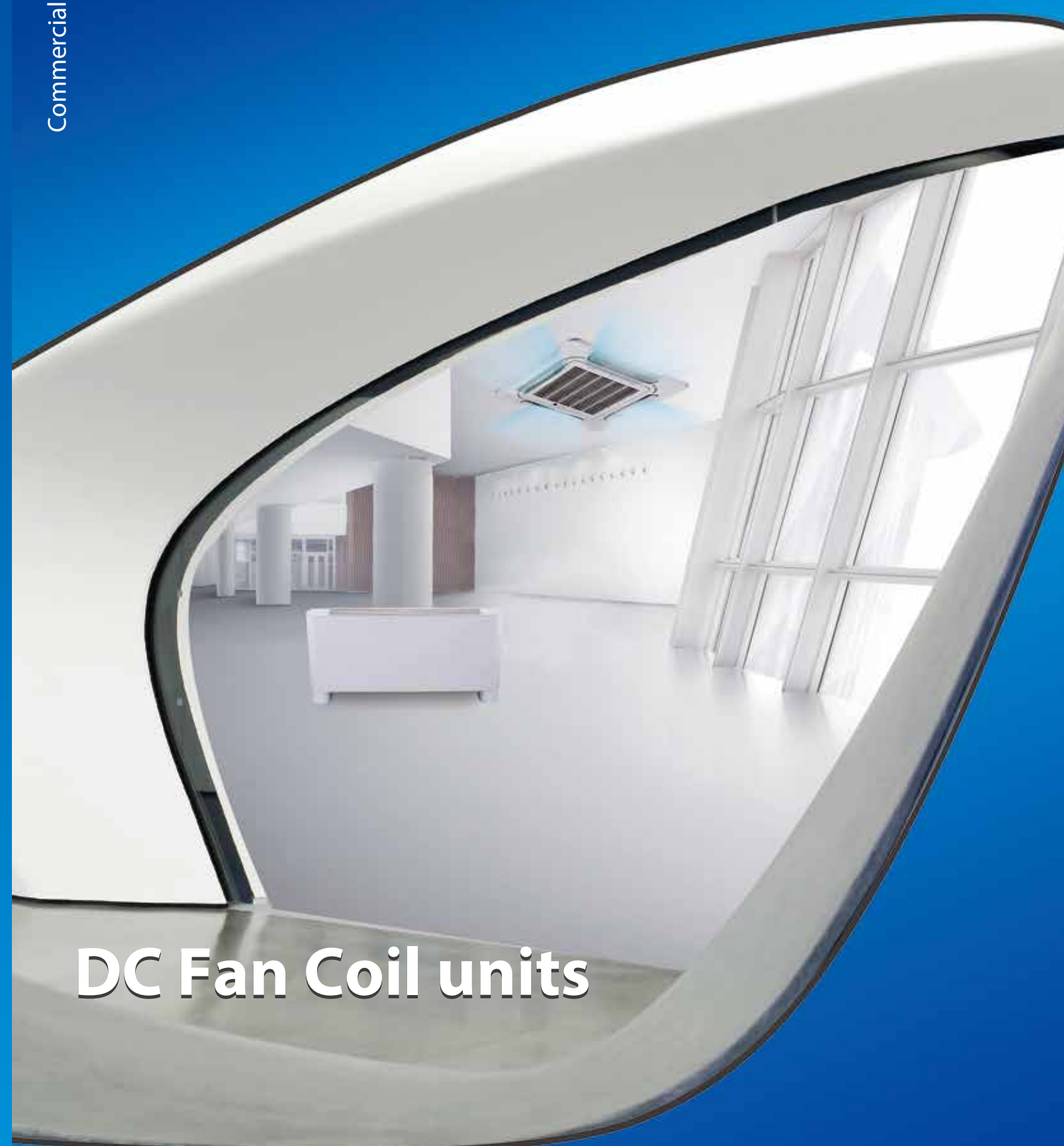
Postal code: 528311

[cac.midea.com](http://cac.midea.com)   [www.midea-group.com](http://www.midea-group.com)



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

# DC Fan Coil units





## 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 four production bases: Shunde, Chongqing, Hefei and Italy.

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.

Clivet S.p.A: 50,000m<sup>2</sup> workshop in Feltre and Verona, covering products such as ELFO system, hydronic, WHLP, packaged, split and close control and so on.

- 2019 >> Launched the new generation of Ceiling & Floor.
- 2017 >> Developed the large capacity air cooled scroll chiller.  
Launched the new generation of R410A Aqua Tempo Super II Series DC Inverter Air-cooled Chiller.
- 2016 >> Acquire an 80% stake in Clivet.
- 2014 >> Launched the first wall-mounted series of DC fan coil unit and entered the DC FCU field.
- 2013 >> Launched the super high efficiency centrifugal chiller with dual-stage compressor and full falling film evaporator.
- 2010 >> Developed and launched the first generation of air handling unit
- 2007 >> Won the first Midea centrifugal chiller project overseas.
- 2006 >> Launched the first VFD (Variable Frequency Drive) centrifugal chiller.
- 2004 >> Acquired MGRE entered the chiller industry.  
Launched the first generation of AC fan coil unit.
- 2001 >> The R134a (LC) series centrifugal chiller was named as a key national product.
- 1999 >> Entered the CAC field.



# MCAC Learning Academy



## Objective

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

## Training Centers

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

### 1. Midea CAC Training Center

**Address:** Midea CAC Training Center, 2<sup>nd</sup> Floor, Building 6, Midea Global Innovation Center, Beijiao, Shunde, Foshan, China  
Pin- 528311

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

**Products:** VRF, M-Thermal

### 2. Chongqing Midea Training Center

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

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

**Products:** Centrifugal Chiller, Screw/Scroll Chiller and Terminals



VRF training



M-Thermal training



Chiller training

## Global Technical Trainings

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

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

### Main Courses Offered:

1. Introduction to main Selling points and Features
2. Installation and Commissioning
3. Control Systems
4. Selection Software



### Products: VRF, M-Thermal, Chillers and Terminals

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

### Main Courses Offered:

1. Product Electric Control and Refrigerant System
2. Control Systems
3. Installation and Commissioning Demonstration
4. Troubleshooting and Maintenance

### Products: VRF, M-Thermal, Chillers and Terminals

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

### Training Certificates:

The attendees for Global trainings are provided a training certificate highlighting the courses discussed in the training, signed by Mr. Jason Zhao, General Manager of Midea CAC Overseas Sales Company.

### Registration:

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



# Introduction

Midea fan coil units are divided to ceiling exposed type, ceiling concealed type, wall-mounted type and floor-standing type according to their structure design and installation method. The air volume ranges from 150CFM to 1500CFM (255m<sup>3</sup>/h~2550m<sup>3</sup>/h). It is a highly versatile product suitable for hospitals, office buildings, hotels, airports and various other applications.

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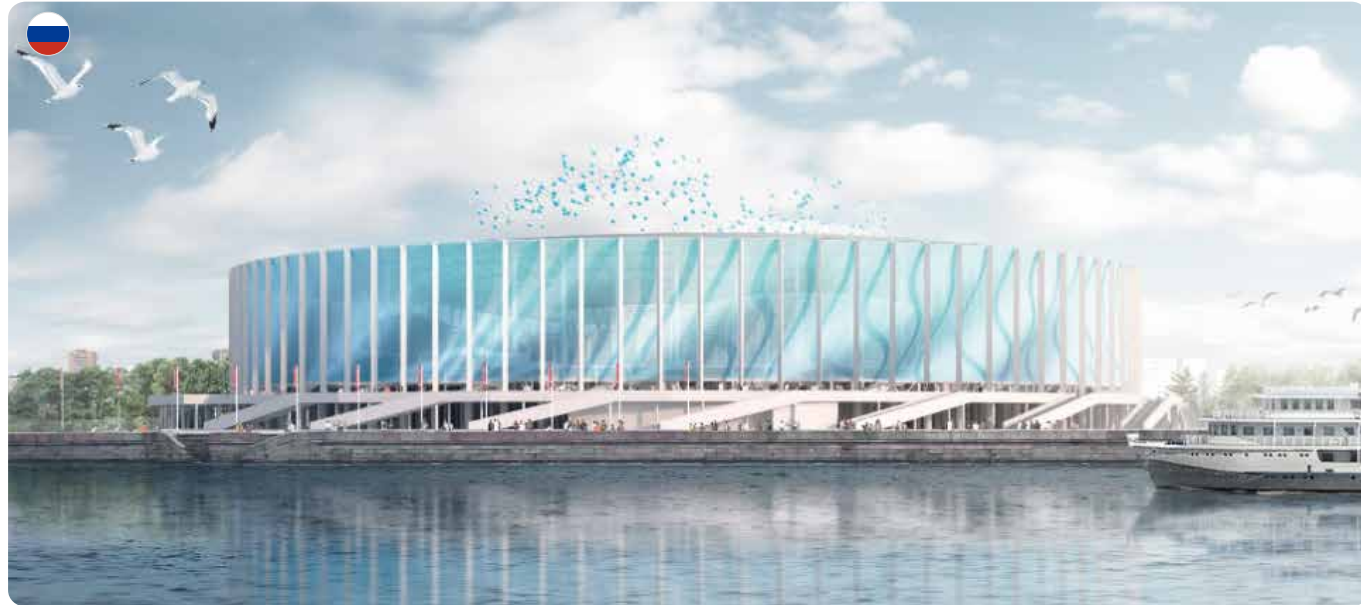
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# Reference Projects

## 2018 Russia World Cup Stadiums Nizhny Novgorod Stadium

- City: Nizhny Novgorod
- Product: Water-cooled Screw Chiller; Fan Coil Units



## 2018 Russia World Cup Stadiums Volgograd Arena

- City: Volgograd
- Product: Water-cooled Screw Chiller; Fan Coil Units



## The 27th Southeast Asian Games Stadium

- Country: Myanmar
- City: Nay Pyi Taw
- Outdoor Units: Water-cooled screw chiller
- Indoor Units: MAHU
- Total Capacity: 4,100RT



## Beijing New International Airport

- Country: China
- City: Beijing
- Outdoor Units: Centrifugal chiller
- Indoor Units: FCU & MAHU
- Total Capacity: 10,000RT





## Hilton Hotel in Foshan(Five Star)

- 🌐 Country: China
- 📍 City: Foshan
- 🏢 Outdoor Units: Centrifugal chiller & Water-cooled screw chiller
- 🏠 Indoor Units: FCU & AHU
- 📊 Total Capacity: 4,500RT



## Top Glove in Malaysia

- 🌐 Country: Malaysia
- 📍 City: Klang
- 🏢 Outdoor Units: Water-cooled screw chiller
- 🏠 Indoor Units: FCU & AHU
- 📊 Total Capacity: 3,400RT



## Major Platinum Cineplex Laos

- 🌐 Country: Laos
- 📍 City: Vientiane
- 🏢 Outdoor Units: Centrifugal chiller & Water-cooled screw chiller
- 🏠 Indoor Units: FCU & AHU
- 📊 Total Capacity: 2,000RT



## The Prime Minister Office Building

- 🌐 Country: Tajikistan
- 📍 City: Dushanbe
- 🏢 Outdoor Units: Water-cooled screw chiller
- 🏠 Indoor Units: FCU & AHU
- 📊 Total Capacity: 2,880kW





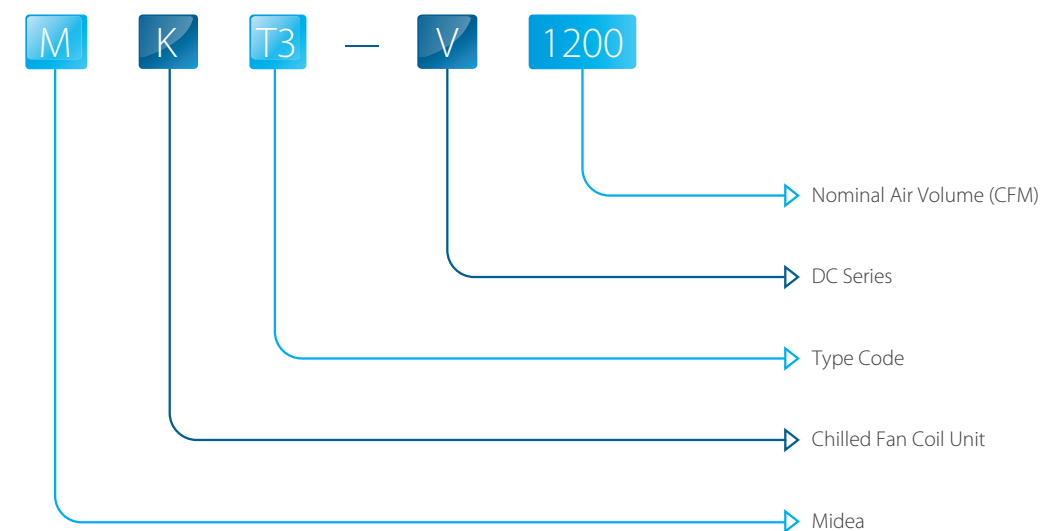


## DC Fan Coil Units

Midea DC Fan Coil Units operate in high efficiency and low sound level due to the DC brushless fan motor. It contains cassette units, ceiling & floor units with or without cabinet, wall-mounted units and duct units. The air volume ranges from 150CFM to 1500CFM. It is a highly versatile product suitable for hospitals, office buildings, hotels, airports and various other applications.



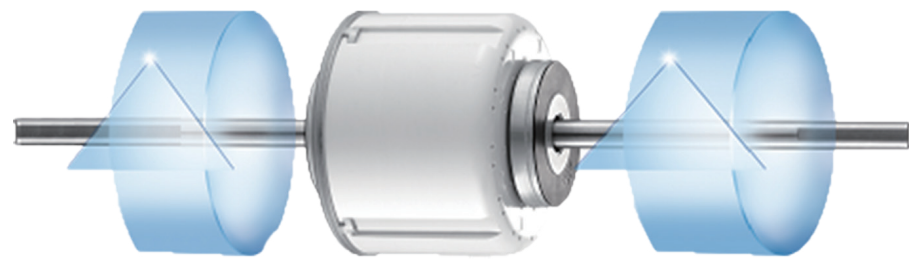
### Nomenclature



# Advantage of Fan Coil Units with

## DC Brushless Fan Motor

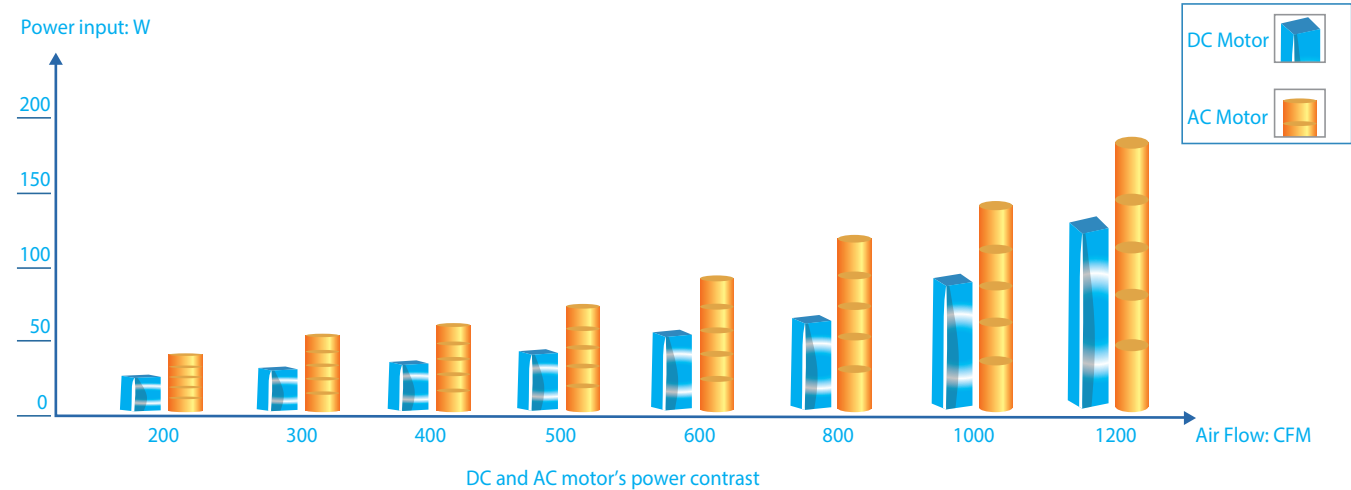
The DC fan coil units are the new energy saving products improved with advanced DC driven technology. The DC fan coil units have advanced technology of high energy efficiency, low noise operation and precision temperature control, so are ideal for hospitals, office building, hotels, airports and various other applications.



DC driven motor

## Energy Efficiency, Comply with CE Regulation

The power consumption of DC driven fan coil units can be reduced up to 30% in comparison to corresponding AC type.



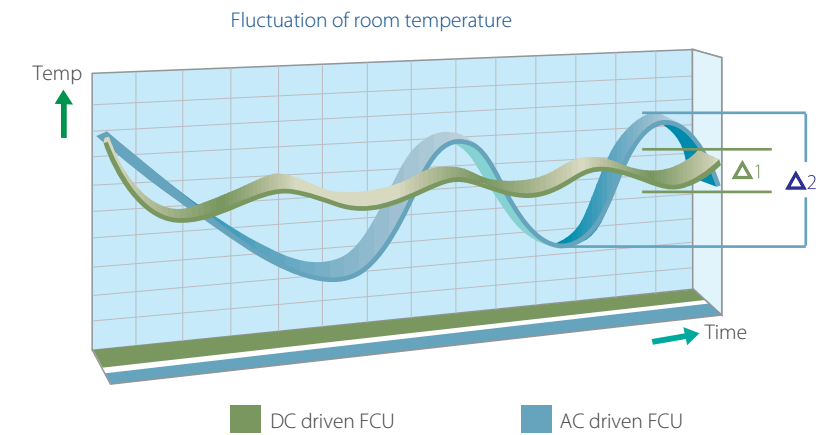
## Quiet Operation

Unit noise is 2-5dB(A) lower compared to an AC motor fan coil unit, creating a quiet living environment.



## Constant Level of Air Temperature and Humidity

The DC Inverter fan motor adjusts of air flow based on thermal load instantly providing less temperature fluctuation and an improved living environment.



## Versatile Selection


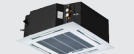




Midea DC Fan Coil Units contain cassette units, ceiling & floor units with or without cabinet, wall-mounted units and duct units. The air volume ranges from 150CFM to 1500CFM. It is a highly versatile product suitable for hospitals, office buildings, hotels, airports and various other applications.








# Product Lineup

## 2-Pipe FCUs

Air volume (CFM)		150	200	250	300	350	400	450	500		600	700	750	800	850	900	950	1000	1200	1500
1-way cassette					■		■				■									
4-way cassette											■		■		■		■		■	■
Compact 4-way cassette					■		■		■											
Duct			■		■		■		■		■			■				■	■	
Wall mounted				■	■		■		■		■									
2 <sup>nd</sup> generation Ceiling&floor		■		■		■			■			■		■						

## 4-Pipe FCUs

Air volume (CFM)		150	200	250	300	350	400	500		600	700	750	800	850	950	1000	1200	1500
4-way cassette										■	■			■	■		■	■
Compact 4-way cassette					■	■	■	■	■									
2 <sup>nd</sup> generation Ceiling&floor		■		■		■		■			■		■					

Notes:  
The standard power supply for all fan coil units is 220V-240V/50Hz; 208-230V/60Hz can be customized for some series fan coil units. For further information, please contact with our salesmen.





300/400/600CFM

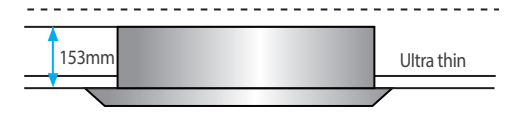
### Features

- Auto mode and seven speed fan motor.
- Ultra-thin, the thickness is only 200mm.
- Hysteresis temperature can be set in heating and cooling mode by PCB switch, field adjustable.
- With/without forced fan on can be set by PCB switch, field adjustable.
- The centralized control function can be connected through the customization XYE port.
- The Gateway(Modbus) can be connected through the customization PQE port.
- Wired controller KJR-75A is optional.
- 0-10V wired control is optional.

## 1-way Cassette

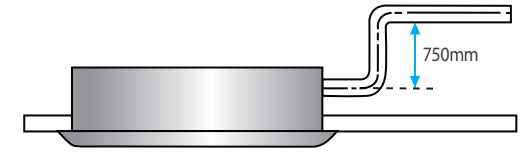
### Min. 153mm Thickness

- Compact design, ultra slim body with a minimum thickness of 153mm, especially suitable for narrow ceiling, such as in lobbies and small meeting rooms.



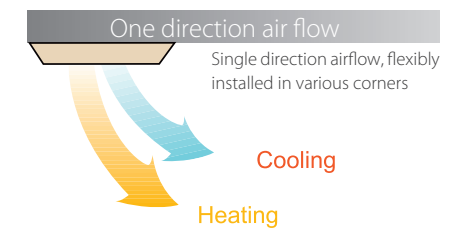
### High-lift Pump

- Standard built-in drain pump with 750mm pump head.



### One Direction Air Flow

- One direction air flow guarantees quick cooling, flexible installation positioning.



### Specifications

Model		MKC-V300R-B	MKC-V400R-B	MKC-V600R-B
Power supply	V/Ph/Hz	220-240/1/50		
Air flow (H/M/L)	m <sup>3</sup> /h	510/432/330	630/509/428	1000/786/583
	CFM	300/254/194	371/299/252	588/462/343
Cooling	Capacity (H/M/L)	kW	2.64/2.23/1.68	3.94/3.43/3.07
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.49/0.42/0.33	0.6/0.52/0.45
	Water pressure drop(H/M/L)	kPa	8.63/6.26/3.69	23.85/18.07/14.8
	Power input(H/M/L)	W	22/18/14	23/19/17
Heating	Capacity (H/M/L)	kW	3.85/3.27/2.53	4.86/3.94/3.24
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.5/0.42/0.32	0.59/0.49/0.42
	Water pressure drop(H/M/L)	kPa	7.72/5.75/3.28	20.12/15.50/12.42
	Power input(H/M/L)	W	16/11/8	16/12/10
Sound pressure level (H/M/L)	dB(A)	44.3/40.6/33.5	36.6/32.6/30.4	44.6/38.6/33.1
Fan motor	Type	DC motor	DC motor	DC motor
	Quantity	1	1	1
Fan	Type	Centrifugal, forward-curved Blades		
	Quantity	1	1	1
Coil	Row	2	2	2
	Max. working pressure	MPa	1.6	1.6
	Diameter	mm	Ø7	Ø7
Panel	Net dimensions (W×H×D)	mm	1181x466x60	1350x505x25
	Packing size (W×H×D)	mm	1232x517x107	1410x560x95
	Net weight	kg	3.5	4
Body	Gross weight	kg	5.2	5.4
	Net dimensions (W×H×D)	mm	1055x425x169	1275x452x206
	Packing size (W×H×D)	mm	1155x490x245	1400x505x295
Pipe connections	Net weight	kg	12.5	17.5
	Gross weight	kg	16.5	23.5
	Water inlet/outlet pipe	inch	G1/2	G1/2
	Drain pipe	mm	ODØ25	ODØ25

#### Notes:

1. H: High fan speed; M: Medium fan speed; L: Low fan speed.
2. Cooling conditions: Entering water 7°C, leaving water 12°C, Entering air temperature 27°C DB/19°C WB.  
Heating conditions: Entering water 45°C, leaving water 40°C, Entering air temperature 20°C DB.
3. Noise is tested in a semi-anechoic test room.



4-way Cassette



Compact 4-way Cassette

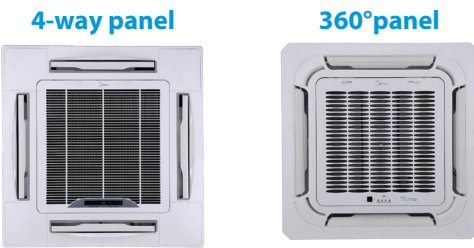


Various Selections

- Versions for 2/4 pipe system.
- Versions for compact/normal size.

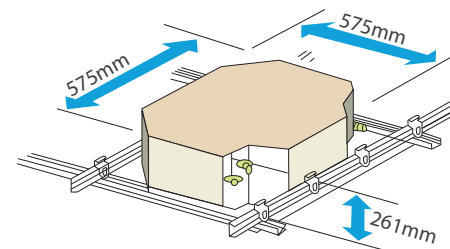
Stylish Panel with Large Airflow Outlet

- 4-way air supply panel is standard for 4-way cassette.
- 360° air supply panel is standard for compact 4-way cassette.



Compact Design, Easy Installation

- For Compact Four-way Cassette: Extremely compact casing suits any room's decor and requires little space for installation on a low ceiling. Due to compact body and light weight, all models can be installed without a hoist.



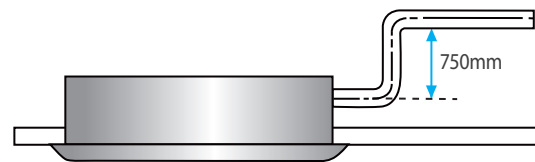
High Efficiency and Low Sound Operation

Various Accessories Selections

- Thanks to the DC brushless fan motor, the unit operates in high efficiency and low sound level.
- Extended drainage pan for better ceiling protection is optional.

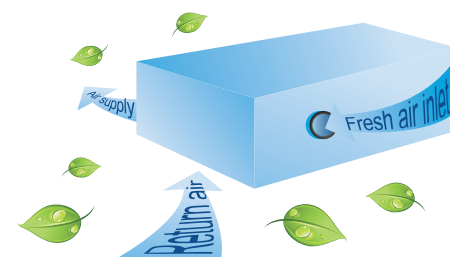
High-lift Drain Pump

- Standard built-in drain pump with 750mm pump head for normal size and 500mm for compact size.



Fresh Air Intake

- Fresh air can enter through the cassette unit so you can enjoy even fresher air in a room.



2-Pipe 4-Way Cassette



Model			MKA-V600R	MKA-V750R	MKA-V850R
Power supply		V/Ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50
Air flow (H/M/L)		m <sup>3</sup> /h	1175/987/768	1229/1020/810	1451/1146/1012
		CFM	691/580/451	722/600/476	853/674/595
Cooling <sup>1</sup>	Capacity (H/M/L)	kW	5.93/5.3/4.4	6.12/5.45/4.6	7.52/6.46/5.89
	Water flow rate(H/M/L)	m <sup>3</sup> /h	1.06/0.92/0.77	1.10/0.96/0.81	1.37/1.18/1.07
	Water pressure drop(H/M/L)	kPa	19.2/15.4/11	21.3/21.3/12.4	20.1/15.3/12.6
	Power input(H/M/L)	W	41/27/17	49/31/20	68/37/30
Heating <sup>2</sup>	Capacity (H/M/L)	kW	6.06/5.72/5.32	6.27/5.88/5.43	7.88/7.48/6.76
	Water flow rate(H/M/L)	m <sup>3</sup> /h	1.30/1.14/1.13	1.39/1.20/1.00	1.66/1.39/1.25
	Water pressure drop(H/M/L)	kPa	25.9/20.1/19.9	30/22.7/16.3	26.7/18.8/15.6
	Power input(H/M/L)	W	42/28/17	44/32/20	66/37/28
Heating <sup>3</sup>	Capacity (H/M/L)	kW	8.42/7.37/6.06	8.62/7.49/6.27	10.37/8.72/7.88
	Water flow rate(H/M/L)	m <sup>3</sup> /h	1.06/0.92/0.77	1.10/0.96/0.81	1.37/1.18/1.07
	Water pressure drop(H/M/L)	kPa	16.9/12.7/8.6	19.1/14.8/10.6	18.2/13.6/11.1
	Power input(H/M/L)	W	42/28/17	49/31/19	67/37/28
Sound pressure level (H/M/L)		dB(A)	43/39/33	44/40/34	45/40/37
Fan motor	Type		DC Motor	DC Motor	DC Motor
Fan	Quantity		1	1	1
Fan	Type		Centrifugal, forward-curved Blades		
	Quantity		1	1	1
Coil	Row		2	2	2
	Max. Working pressure	MPa	1.6	1.6	1.6
Panel	Diameter	mm	Ø7	Ø7	Ø7
	Net dimensions (W×H×D)	mm	950×45×950	950×45×950	950×45×950
Body	Packing size (W×H×D)	mm	1035×90×1035	1035×90×1035	1035×90×1035
	Net weight	kg	6	6	6
Pipe connections	Gross weight	kg	9	9	9
	Net dimensions (W×H×D)	mm	840×230×840	840×230×840	840×300×840
Pipe connections	Packing size (W×H×D)	mm	900×237×900	900×237×900	900×330×900
	Net weight	kg	23	23	27
Pipe connections	Gross weight	kg	28	28	33
	Water inlet/outlet pipe	inch	RC3/4	RC3/4	RC3/4
Pipe connections	Drain pipe	mm	ODØ82	ODØ82	ODØ82

Model			MKA-V950R	MKA-V1200R	MKA-V1500R
Power supply		V/Ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50
Air flow (H/M/L)		m <sup>3</sup> /h	1530/1224/1101	1581/1371/1236	1871/1415/1198
		CFM	900/720/647	930/806/727	1100/832/704
Cooling <sup>1</sup>	Capacity (H/M/L)	kW	7.84/6.84/6.35	7.87/7.12/6.67	11.19/8.82/7.48
	Water flow rate(H/M/L)	m <sup>3</sup> /h	1.43/1.24/1.13	1.44/1.28/1.22	1.96/1.53/1.28
	Water pressure drop(H/M/L)	kPa	22/17/14.1	22.3/18.1/16.3	36.6/22.7/16.4
	Power input(H/M/L)	W	75/42/34	85/59/45	126/58/39
Heating <sup>2</sup>	Capacity (H/M/L)	kW	8.49/8/7.35	9.16/8.54/7.9	10.07/9.37/8.68
	Water flow rate(H/M/L)	m <sup>3</sup> /h	1.71/1.45/1.33	1.73/1.57/1.46	2.35/1.86/1.59
	Water pressure drop(H/M/L)	kPa	28.1/20.7/17.4	28.8/24/20.7	49.2/31.2/23.3
	Power input(H/M/L)	W	76/43/33	86/59/45	128/58/38
Heating <sup>3</sup>	Capacity (H/M/L)	kW	10.86/9.24/8.49	10.92/9.84/9.16	14.92/11.73/10.07
	Water flow rate(H/M/L)	m <sup>3</sup> /h	1.43/1.24/1.13	1.44/1.28/1.22	1.96/1.53/1.28
	Water pressure drop(H/M/L)	kPa	19.9/15.2/12.6	20/16.2/14.7	34.3/21.3/15
	Power input(H/M/L)	W	76/42/33	85/58/45	127/58/39
Sound pressure level (H/M/L)		dB(A)	46/42/39	48/44/41	49/43/39
Fan motor	Type		DC Motor	DC Motor	DC Motor
Fan	Quantity		1	1	1
Fan	Type		Centrifugal, forward-curved Blades		
	Quantity		1	1	1
Coil	Row		2	2	3
	Max. Working pressure	MPa	1.6	1.6	1.6
Panel	Diameter	mm	Ø7	Ø7	Ø7
	Net dimensions (W×H×D)	mm	950×45×950	950×45×950	950×45×950
Body	Packing size (W×H×D)	mm	1035×90×1035	1035×90×1035	1035×90×1035
	Net weight	kg	6	6	6
Pipe connections	Gross weight	kg	9	9	9
	Net dimensions (W×H×D)	mm	840×300×840	840×300×840	840×300×840
Pipe connections	Packing size (W×H×D)	mm	900×330×900	900×330×900	900×330×900
	Net weight	kg	27	27	29.5
Pipe connections	Gross weight	kg	33	33	34.5
	Water inlet/outlet pipe	inch	RC3/4	RC3/4	RC3/4
Pipe connections	Drain pipe	mm	ODØ82	ODØ82	ODØ82

Notes:

H:High fan speed; M: Medium fan speed; L: Low fan speed.

1.Cooling mode (2 and 4-pipe coil): entering air temperature 27°C DB/19°C WB, entering/leaving water temperature 7°C /12°C.

2.Heating mode(1): (2-pipe coil): entering air temperature 20°C DB, entering/leaving water temperature 45/40°C.

3.Heating mode(2): (2-pipe coil): entering air temperature 20°C DB, enter water teperature/water flow 50°C/°(same water flow as in standard rating condition in cooling)

4.Noise is tested in a semi-anechoic test room.



## 4-Pipe 4-Way Cassette



Model			MKA-V600FA	MKA-V750FA	MKA-V850FA
Power supply		V/Ph/Hz	220-240/1/50		
Air flow (H/M/L)		m <sup>3</sup> /h	1184/997/783	1278/1057/855	1328/1052/927
		CFM	696/586/460	751/621/502	780/618/545
Cooling <sup>1</sup>	Capacity (H/M/L)	kW	4.96/4.383/3.642	5.178/4.563/3.875	5.129/4.413/4.06
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.9/0.8/0.67	0.94/0.83/0.71	0.93/0.81/0.75
	Water pressure drop(H/M/L)	kPa	14.8/11.5/8.1	15.9/12.4/9	16/14.2/10.4
	Power input(H/M/L)	W	62/44/30	72/50/35	80/49/40
Heating <sup>2</sup>	Capacity (H/M/L)	kW	6.148/5.43/4.614	6.519/5.785/4.944	6.684/5.748/5.283
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.58/0.52/0.45	0.61/0.55/0.47	0.62/0.54/0.50
	Water pressure drop(H/M/L)	kPa	25.3/20.5/14.5	32/25.7/19.1	32.6/24.7/21.2
	Power input(H/M/L)	W	56/36/21	67/42/25	75/41/31
Heating <sup>3</sup>	Capacity (H/M/L)	kW	6.94/6.217/5.266	7.374/6.533/5.6	7.657/6.584/6.033
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.64/0.58/0.50	0.68/0.61/0.53	0.71/0.61/0.57
	Water pressure drop(H/M/L)	kPa	37.2/26.1/19.3	39.5/32.5/23.8	41.6/31.5/26.8
	Power input(H/M/L)	W	55/36/21	68/43/25	76/42/31
Sound power level	(H/M/L)	dB(A)	54/49/43	56/51/45	57/51/48
Sound pressure level	(H/M/L)	dB(A)	42/37/31	44/39/33	45/39/36
Rated current	A		0.48	0.6	0.72
Fan motor	Type		7	DC motor	DC motor
	Quantity		1	1	1
Fan	Type		Centrifugal, forward-curved Blades		
	Quantity		1	1	1
Coil	Row		2	2	2
	Max. working pressure	MPa	1.6	1.6	1.6
Panel	Diameter	mm	Ø7	Ø7	Ø7
	Net dimensions (WxHxD)	mm	950x45x950	950x45x950	950x45x950
	Packing size (WxHxD)	mm	1035x90x1035	1035x90x1035	1035x90x1035
	Net weight	kg	6	6	6
Body	Gross weight	kg	9	9	9
	Net dimensions (WxHxD)	mm	840x300x840	840x300x840	840x300x840
	Packing size (WxHxD)	mm	900x330x900	900x330x900	900x330x900
	Net weight	kg	27.5	27.5	27.5
Pipe connections	Gross weight	kg	33.5	33.5	33.5
	Water inlet/outlet pipe	inch	Cold water: RC3/4; Hot water: RC1/2		
	Drain pipe	mm	ODØ32	ODØ32	ODØ32

Model			MKA-V950FA	MKA-V1200FA	MKA-V1500FA
Power supply		V/Ph/Hz	220-240/1/50		
Air flow (H/M/L)		m <sup>3</sup> /h	1403/1115/1001	1642/1421/1285	1708/1297/1096
		CFM	824/655/588	965/835/755	1004/762/644
Cooling <sup>1</sup>	Capacity (H/M/L)	kW	5.306/4.593/4.279	7.984/7.245/6.697	8.038/6.623/5.837
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.96/0.84/0.78	1.42/1.29/1.2	1.43/1.19/1.05
	Water pressure drop(H/M/L)	kPa	16.4/12.6/10.9	33.9/30/24	33/22.6/17.7
	Power input(H/M/L)	W	90/54/43	121/83/66	139/70/49
Heating <sup>2</sup>	Capacity (H/M/L)	kW	6.736/5.833/5.442	9.746/8.962/8.422	9.93/8.326/7.512
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.63/0.55/0.52	0.89/0.82/0.77	0.90/0.76/0.69
	Water pressure drop(H/M/L)	kPa	34/26.6/23.5	42.4/36.6/32.6	48.7/32.5/27
	Power input(H/M/L)	W	84/46/35	118/79/61	125/64/42
Heating <sup>3</sup>	Capacity (H/M/L)	kW	7.659/6.646/6.204	11.045/10.149/9.527	11.342/9.596/8.683
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.71/0.62/0.58	1.0/0.92/0.87	1.02/0.87/0.79
	Water pressure drop(H/M/L)	kPa	43.8/33.5/29.3	52.1/44.9/40.6	62.1/45.7/38.3
	Power input(H/M/L)	W	84/45/35	118/79/61	125/64/42
Sound power level	(H/M/L)	dB(A)	58/53/50	60/56/54	61/55/50
Sound pressure level	(H/M/L)	dB(A)	46/41/38	48/44/42	49/43/38
Rated current	A		0.72	1.08	1.32
Fan motor	Type		DC motor	DC motor	DC motor
	Quantity		1	1	1
Fan	Type		Centrifugal, forward-curved Blades		
	Quantity		1	1	1
Coil	Row		2	3	3
	Max. working pressure	MPa	1.6	1.6	1.6
Panel	Diameter	mm	Ø7	Ø7	Ø7
	Net dimensions (WxHxD)	mm	950x45x950	950x45x950	950x45x950
	Packing size (WxHxD)	mm	1035x90x1035	1035x90x1035	1035x90x1035
	Net weight	kg	6	6	6
Body	Gross weight	kg	9	9	9
	Net dimensions (WxHxD)	mm	840x300x840	840x300x840	840x300x840
	Packing size (WxHxD)	mm	900x330x900	900x330x900	900x330x900
	Net weight	kg	27.5	30	30
Pipe connections	Gross weight	kg	32.4	35	35
	Water inlet/outlet pipe	inch	Cold water: RC3/4; Hot water: RC1/2		
	Drain pipe	mm	ODØ32	ODØ32	ODØ32

Notes:

H: High fan speed; M: Medium fan speed; L: Low fan speed.

1: Cooling mode (2 and 4-pipe coil): entering air temperature 27°C DB/1 9°C WB, entering/leaving water temperature 7°C /12°C.

2: Heating mode(1): (4-pipe coil): entering air temperature 20°C DB, entering/leaving water temperature 65/55°C.

3: Heating mode(2): (4-pipe coil): entering air temperature 20°C DB, entering/leaving water temperature 70/60°C.

4.Sound pressure level is tested in a semi-anechoic test room.

5.Sound power level is tested in a reverberation chamber.

## 2-Pipe Compact 4-Way Cassette



Model			MKD-V300	MKD-V400	MKD-V500
Power supply		V/Ph/Hz	220-240/1/50		
Air flow (H/M/L)		m <sup>3</sup> /h	535/429/322	610/477/381	781/611/494
		CFM	314/252/189	359/281/224	459/359/290
Cooling <sup>1</sup>	Capacity (H/M/L)	kW	2.98/2.53/2	3.96/3.26/2.76	4.2/3.48/3.01
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.53/0.45/0.35	0.7/0.58/0.51	0.75/0.61/0.54
	Water pressure drop(H/M/L)	kPa	10/7/5	11.48/8.2/6.54	12.32/8.62/7.4
	Power input(H/M/L)	W	15/9/5	28/15/9	43/28/21
Heating <sup>2</sup>	Capacity (H/M/L)	kW	2.61/2.31/2.24	4.08/3.34/2.73	4.95/3.99/3.26
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.64/0.54/0.42	0.83/0.67/0.56	0.87/0.70/0.58
	Water pressure drop(H/M/L)	kPa	12.1/8.5/5.3	9.2/8.6/6	9.4/8.23/6.1
	Power input(H/M/L)	W	15/9/5	28/16/10	33/18/11
Heating <sup>3</sup>	Capacity (H/M/L)	kW	4.01/3.35/2.61	4.78/3.84/3.18	5.76/4.69/3.84
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.53/0.45/0.35	0.7/0.58/0.51	0.75/0.61/0.54
	Water pressure drop(H/M/L)	kPa	8.2/6/3.8	12.68/6.4/4.92	11.41/6.5/5.41
	Power input(H/M/L)	W	14/9/5	28/16/10	33/18/11
Sound pressure level	(H/M/L)	dB(A)	39/33/27	42/36/30	43/38/32
Fan motor	Type		DC Motor	DC Motor	DC Motor
	Quantity		1	1	1
Fan	Type		Centrifugal, forward-curved Blades		
	Quantity		1	1	1
Coil	Row		2	2	2
	Max. working pressure	MPa	1.6	1.6	1.6
Panel	Diameter	mm	Ø7	Ø7	Ø7
	Net dimensions (WxHxD)	mm	647x50x647	647x50x647	647x50x647
	Packing size (WxHxD)	mm	715x123x715	715x123x715	715x123x715
	Net weight	kg	2.5	2.5	2.5
Body	Gross weight	kg	4.5	4.5	4.5
	Net dimensions (WxHxD)	mm	575x261x575	575x261x575	575x261x575
	Packing size (WxHxD)	mm	670x290x670	670x290x670	670x290x670
	Net weight	kg	16.5	16.5	16.5
Pipe connections	Gross weight	kg	22.5	22.5	22.5
	Water inlet/outlet pipe	inch	G3/4	G3/4	G3/4
	Drain pipe	mm	ODØ25	ODØ25	ODØ25

## 4-Pipe Compact 4-Way Cassette

Model			MKD-V300FA	MKD-V400FA	MKD-V500FA
Power supply		V/Ph/Hz	220-240/1/50		
Air flow (H/M/L)		m <sup>3</sup> /h	493/395/295	669/523/415	673/526/425
		CFM	290/232/173	393/307/244	395/309/250
Cooling <sup>1</sup>	Capacity (H/M/L)	kW	2.161/1.861/1.485	2.777/2.375/2.045	2.771/2.382/2.069
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.42/0.37/0.3	0.53/0.46/0.4	0.56/0.49/0.43
	Water pressure drop(H/M/L)	kPa	17.4/13.5/9.3	13.15/9.4/7	16.8/13.1/10.3
	Power input(H/M/L)	W	15/10/6	30/26/21	35/19/12
Heating <sup>2</sup>	Capacity (H/M/L)	kW	3.131/2.628/2.077	3.711/3.138/2.65	3.942/3.296/2.826
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.32/0.28/0.23	0.37/0.32/0.28	0.42/0.36/0.32
	Water pressure drop(H/M/L)	kPa	23.5/17.1/11.3	24.1/17.9/13.1	26.8/19.2/14.5
	Power input(H/M/L)	W	17/10/6	32/18/11	35/18/11
Heating <sup>3</sup>	Capacity (H/M/L)	kW	3.564/2.989/2.356	4.251/3.584/3.023	4.508/3.789/3.222
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.36/0.31/0.25	0.41/0.36/0.31	0.47/0.40/0.36
	Water pressure drop(H/M/L)	kPa	29.8/21.7/14.3	30.4/22.2/16.7	36.1/25.9/19
	Power input(H/M/L)	W	17/10/6	31/18/11	35/19/11
Sound power level	(H/M/L)	dB(A)	51/45/39	54/47/42	56/51/43
Sound pressure level	(H/M/L)	dB(A)	39/33/27	42/35/30	44/39/31
Rated current	A		0.24	0.36	0.48
Fan motor	Type		DC motor	DC motor	DC motor
	Quantity		1	1	1
Fan	Type		Centrifugal, forward-curved Blades		
	Quantity		1	1	1
Coil	Row		2	2	2
	Max. working pressure	MPa	1.6	1.6	1.6
Panel	Diameter	mm	Ø7	Ø7	Ø7
	Net dimensions (WxHxD)	mm	647x50x647	647x50x647	647x50x647
	Packing size (WxHxD)	mm	715x123x715	715x123x715	715x123x715
	Net weight	kg	2.5	2.5	2.5
Body	Gross weight	kg	4.5	4.5	4.5
	Net dimensions (WxHxD)	mm	575x261x575	575x261x575	575x261x575
	Packing size (WxHxD)	mm	675x320x675	675x320x675	675x320x675
	Net weight	kg	16.7	16.7	16.7
Pipe connections	Gross weight	kg	22.7	22.7	22.7
	Water inlet/outlet pipe	inch	Cold water: G3/4; Hot water: G1/2		
	Drain pipe	mm	ODØ25	ODØ25	ODØ25

Notes:

H: High fan speed; M: Medium fan speed; L: Low fan speed.

1: Cooling mode (2 and 4-pipe coil): entering air temperature 27°C DB/1 9°C WB, entering/leaving water temperature 7°C /12°C.

2: Heating mode(1): (4-pipe coil): entering air temperature 20°C DB, entering/leaving water temperature 65/55°C.

3: Heating mode(2): (4-pipe coil): entering air temperature 20°C DB, entering/leaving water temperature 70/60°C.

4.Sound pressure level is tested in a semi-anechoic test room.

5.Sound power level is tested in a reverberation chamber.



# Duct Series

2-Pipe Duct



## Various Selections

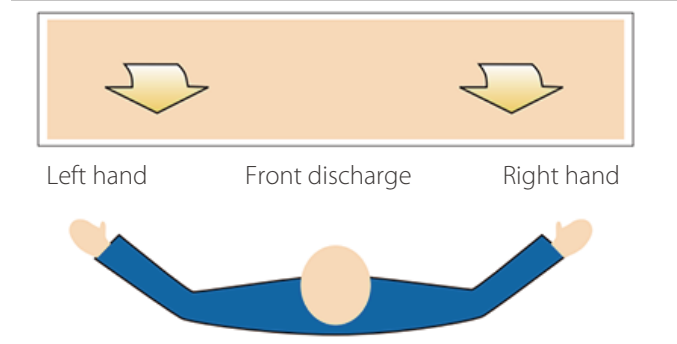
- 2, 3 or 4 row coils for 2-pipe system.
- 3 row coils for 4-pipe system is customizable.
- Large range of available static pressure.

## High Efficiency and Low Sound Operation

- Due to the DC brushless fan motor, the unit operates in high efficiency and low sound level.

## Flexible Installation

- Left and right hand piping connections are optional, flexible installation.

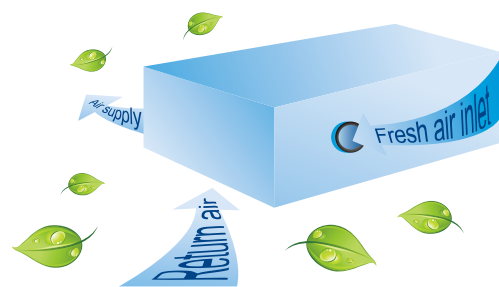


## Standard Return Air Plenum and Filter

- Standard return air plenum and filter guarantees clean air supply and stable air flow rate.

## Fresh Air Intake

- Fresh air can enter through the duct unit so you can enjoy even fresher air in the room.



## 2-Pipe 2-Row Duct



Model		MKT2-V200	MKT2-V300	MKT2-V400	MKT2-V500	
Power supply	V/Ph/Hz	220-240/1/50				
Air flow (H/M/L)	m <sup>3</sup> /h	439/295/221	615/439/310	792/622/413	887/620/443	
	CFM	258/173/130	361/258/182	465/365/242	521/364/260	
Standard external static pressure	Pa	12Pa (default); 30/50Pa can be set through dial switch on PCB				
Cooling <sup>1</sup>	Capacity (H/M/L)	kW	2.02/1.52/1.17	2.82/2.33/1.79	3.31/2.78/2.14	3.83/3.16/2.55
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.37/0.28/0.22	0.51/0.41/0.32	0.59/0.50/0.38	0.68/0.56/0.46
	Water pressure drop(H/M/L)	kPa	6.3/3.62/2.17	14.16/10.5/7.33	19.37/14.79/9.57	23.7/17.1/11.9
	Power input(H/M/L)	W	18/9/6	25/15/11	29/16/9	42/20/11
Heating <sup>2</sup>	Capacity (H/M/L)	kW	2.57/1.89/1.47	3.56/2.8/2.08	4.19/3.42/2.49	4.84/3.9/3.01
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.47/0.34/0.27	0.62/0.50/0.37	0.72/0.6/0.45	0.84/0.69/0.53
	Water pressure drop(H/M/L)	kPa	5.64/4.5/2.9	10.54/10.3/6.3	16.20/16.6/10	30.8/32.4/20
	Power input(H/M/L)	W	19/9/7	25/15/11	32/17/9	45/22/12
Heating <sup>3</sup>	Capacity (H/M/L)	kW	2.98/2.22/1.73	4.12/3.26/2.39	4.91/4.1/3.02	5.6/4.49/3.45
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.37/0.28/0.22	0.51/0.41/0.32	0.59/0.50/0.38	0.68/0.56/0.46
	Water pressure drop(H/M/L)	kPa	7.91/3.5/2.3	15.39/7.41/4.83	23/12.09/7.81	29.04/14.16/9.71
	Power input(H/M/L)	W	19/9/7	25/15/11	31/18/9	45/21/11
Sound pressure level	0Pa (H/M/L)	dB(A)	37.5/27.4/24.0	40.3/33.1/26.7	41.1/34.7/26.8	44.6/36.8/29.4
Fan motor	Type	DC Motor				
	Quantity	1				
Fan	Type	Centrifugal, forward-curved Blades				
	Quantity	2				
Coil	Row	2				
	Max. working pressure	MPa	1.6			
Net dimensions (WxHxD)	mm	741x241x522	841x241x522	941x241x522	941x241x522	
	Packing size (WxHxD)	mm	790x260x555	890x260x560	990x260x560	990x260x560
Net weight	kg	16.5	18.5	20	20	
Gross weight	kg	19	21.4	23.2	23.2	
Water inlet/outlet pipe	inch	RC3/4				
Drain pipe	inch	ZG3/4				

Model		MKT2-V600	MKT2-V800	MKT2-V1000	MKT2-V1200	
Power supply	V/Ph/Hz	220-240/1/50				
Air flow (H/M/L)	m <sup>3</sup> /h	1081/821/586	1492/1071/797	1824/1332/906	2327/1669/1135	
	CFM	635/482/344	877/630/468	1072/783/532	1368/981/667	
Standard external static pressure	Pa	12Pa (default); 30/50Pa can be set through dial switch on PCB				
Cooling <sup>1</sup>	Capacity (H/M/L)	kW	4.78/4.01/3.09	6.7/5.49/4.45	7.92/6.62/5.15	9.83/8.5/6.46
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.85/0.69/0.54	1.19/0.96/0.80	1.43/1.17/0.91	1.74/1.42/1.12
	Water pressure drop(H/M/L)	kPa	14.2/9.8/6.1	15.1/10.89/7.82	23.2/16.44/10.94	50.33/30.4/21.71
	Power input(H/M/L)	W	53/25/12	62/28/16	93/42/19	111/53/24
Heating <sup>2</sup>	Capacity (H/M/L)	kW	6.25/5.17/4.03	8.39/6.64/5.2	9.92/7.94/5.86	12.58/10.24/7.57
	Water flow rate(H/M/L)	m <sup>3</sup> /h	1.10/0.91/0.7	1.46/1.17/0.91	1.69/1.38/1.01	2.17/1.79/1.34
	Water pressure drop(H/M/L)	kPa	12.36/14.2/8.9	13.26/13.1/8.28	19.72/18.87/11.07	38.30/41.81/26.5
	Power input(H/M/L)	W	58/27/13	66/30/16	100/44/19	118/55/24
Heating <sup>3</sup>	Capacity (H/M/L)	kW	7.19/5.92/4.55	9.87/7.83/6.29	11.63/9.37/6.96	14.58/11.82/8.83
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.85/0.69/0.54	1.19/0.96/0.80	1.43/1.17/0.91	1.74/1.42/1.12
	Water pressure drop(H/M/L)	kPa	19.88/8.56/5.4	19.36/9.03/6.4	26.68/13.96/9.1	60.7/26.5/17.8
	Power input(H/M/L)	W	58/27/13	66/30/17	99/45/19	119/55/24
Sound pressure level	0Pa (H/M/L)	dB(A)	46.1/38.9/29.9	47.7/39.4/31.1	50.2/43.0/33.0	50.9/44.0/33.8
Fan motor	Type	DC Motor				
	Quantity	2				
Fan	Type	Centrifugal, forward-curved Blades				
	Quantity	2				
Coil	Row	2				
	Max. working pressure	MPa	1.6			
Net dimensions (WxHxD)	mm	1161x241x522	1461x241x522	1566x241x522	1856x241x522	
	Packing size (WxHxD)	mm	1210x260x560	1510x260x560	1615x260x560	1905x260x560
Net weight	kg	22.2	31.4	32.5	37.5	
Gross weight	kg	26	35.8	37.2	42.8	
Water inlet/outlet pipe	inch	RC3/4				
Drain pipe	inch	ZG3/4				

Notes:

H: High fan speed; M: Medium fan speed; L: Low fan speed.

1. Cooling mode (2 and 4-pipe coil): entering air temperature 27°C DB/19°C WB, entering/leaving water temperature 7°C /12°C.

2. Heating mode (1) : (2-pipe coil): entering air temperature 20°C DB, entering/leaving water temperature 45/40°C.

3. Heating mode (2) : (2-pipe coil): entering air temperature 20°C DB, enter water teperature/water flow 50°C/\*(same water flow as in standard rating condition in cooling)

4. Sound pressure level is tested in a semi-anechoic test room.

5. The external static pressure test condition is 0 Pa.



## 2-Pipe 3-Row Duct



Model		MKT3-V200	MKT3-V300	MKT3-V400	MKT3-V500	
Power supply		220-240/1/50				
Air flow (H/M/L)		m <sup>3</sup> /h 411/273/171	531/442/311	734/564/389	865/626/441	
		CFM 241/160/100	312/260/182	431/331/228	508/368/259	
Standard external static pressure		Pa 12Pa (default); 30/50Pa can be set through dial switch on PCB				
Cooling <sup>1</sup>	Capacity (H/M/L)	kW	2.35/1.72/1.32	3.12/2.72/2.1	3.99/3.26/2.5	4.46/3.59/2.83
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.43/0.31/0.25	0.6/0.48/0.37	0.69/0.57/0.43	0.79/0.63/0.50
	Water pressure drop(H/M/L)	kPa	13.6/8.6/6.3	23.8/16.4/11.3	13/9.3/5.8	16.4/11.3/7.6
	Power input(H/M/L)	W	17/9/7	23/15/10	26/15/9	39/19/11
Heating <sup>2</sup>	Capacity (H/M/L)	kW	2.68/1.99/1.42	3.82/3.08/2.28	4.7/3.85/2.77	5.27/4.21/3.21
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.49/0.35/0.26	0.67/0.54/0.41	0.82/0.67/0.50	0.92/0.73/0.57
	Water pressure drop(H/M/L)	kPa	12.6/7.6/4.9	25/17.6/11.3	13/10.5/6.2	18.4/12.4/8.1
	Power input(H/M/L)	W	18/9/7	23/15/10	26/16/9	43/21/11
Heating <sup>3</sup>	Capacity (H/M/L)	kW	3.17/2.27/1.75	4.51/3.61/2.71	5.52/4.55/3.27	6.26/4.99/3.81
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.43/0.31/0.25	0.60/0.48/0.37	0.69/0.57/0.43	0.79/0.63/0.50
	Water pressure drop(H/M/L)	kPa	10.3/6.1/4.2	19.2/12.9/8.5	10.8/7.7/4.8	13.7/9.5/6.3
	Power input(H/M/L)	W	18/9/7	23/15/10	28/16/9	43/21/11
Sound pressure level	0Pa (H/M/L)	dB(A)	38.1/28.4/23.4	36.4/29.5/20.7	38.4/32.2/24.0	44.3/36.3/27.9
Fan motor	Type	DC Motor				
	Quantity	1				
Fan	Type	Centrifugal, forward-curved Blades				
	Quantity	1				
Coil	Row	3				
	Max. working pressure	MPa	1.6			
Coil	Diameter	mm	Ø9.52			
	Net dimensions (WxHxD)	mm	741x241x522	841x241x522	941x241x522	941x241x522
Packing size (WxHxD)	mm	790x260x555	890x260x560	990x260x560	990x260x560	
Net weight	kg	16.7	19	21	21	
Gross weight	kg	19.7	22	24	24	
Water inlet/outlet pipe	inch	RC3/4				
Drain pipe	inch	ZG3/4				

Model		MKT3-V600	MKT3-V800	MKT3-V1000	MKT3-V1200	
Power supply		220-240/1/50				
Air flow (H/M/L)		m <sup>3</sup> /h 1022/760/544	1452/1038/781	1824/1332/906	2134/1581/1083	
		CFM 601/447/320	854/610/459	1072/783/532	1255/930/637	
Standard external static pressure		Pa 12Pa (default); 30/50Pa can be set through dial switch on PCB				
Cooling <sup>1</sup>	Capacity (H/M/L)	kW	5.85/4.82/3.78	8.02/6.36/5.08	8.96/7.37/5.66	10.79/8.86/6.79
	Water flow rate(H/M/L)	m <sup>3</sup> /h	1.05/0.85/0.65	1.42/1.11/0.89	1.59/1.29/0.98	1.93/1.57/1.20
	Water pressure drop(H/M/L)	kPa	31.4/22/14.2	31.6/20.5/13.9	24.1/16.9/10.8	26.3/18.8/12.8
	Power input(H/M/L)	W	49/24/12	60/28/16	60/43/19	106/49/24
Heating <sup>2</sup>	Capacity (H/M/L)	kW	6.62/5.38/4	9.15/7.08/5.58	10.74/8.55/6.35	12.62/10.15/7.47
	Water flow rate(H/M/L)	m <sup>3</sup> /h	1.15/0.94/0.71	1.59/1.26/0.98	1.88/1.51/1.13	2.23/1.78/1.31
	Water pressure drop(H/M/L)	kPa	31.7/22.2/13.6	32.9/21.6/13.9	28.3/19.4/12	29.4/20/11.9
	Power input(H/M/L)	W	53/26/12	65/30/17	100/45/20	115/52/22
Heating <sup>3</sup>	Capacity (H/M/L)	kW	7.84/6.35/4.81	10.88/8.46/6.68	12.61/10.04/7.35	14.9/11.92/8.89
	Water flow rate(H/M/L)	m <sup>3</sup> /h	1.05/0.85/0.65	1.42/1.11/0.89	1.59/1.29/0.98	1.93/1.57/1.20
	Water pressure drop(H/M/L)	kPa	26.4/18.2/11.4	26.3/16.9/11.5	21.1/14.8/9.5	22.6/16/10.2
	Power input(H/M/L)	W	52/25/13	65/30/17	99/44/19	114/51/22
Sound pressure level	0Pa (H/M/L)	dB(A)	46.1/39.0/30.3	44.9/36.1/27.7	47.8/40.7/30.7	48.9/41.8/31.7
Fan motor	Type	DC Motor				
	Quantity	1				
Fan	Type	Centrifugal, forward-curved Blades				
	Quantity	2				
Coil	Row	3				
	Max. working pressure	MPa	1.6			
Coil	Diameter	mm	Ø9.52			
	Net dimensions (WxHxD)	mm	1161x241x522	1461x241x522	1566x241x522	1856x241x522
Packing size (WxHxD)	mm	1210x260x560	1510x260x560	1615x260x560	1905x260x560	
Net weight	kg	23.7	33	34.7	39.2	
Gross weight	kg	27.2	37.2	39.2	44.4	
Water inlet/outlet pipe	inch	RC3/4				
Drain pipe	inch	ZG3/4				

Notes:

H: High fan speed; M: Medium fan speed; L: Low fan speed.

1. Cooling mode (2 and 4-pipe coil): entering air temperature 27°C DB/19°C WB, entering/leaving water temperature 7°C /12°C.

2. Heating mode (1) : (2-pipe coil): entering air temperature 20°C DB, entering/leaving water temperature 45/40°C.

3. Heating mode (2) : (2-pipe coil): entering air temperature 20°C DB, enter water teperature/water flow 50°C/\*(same water flow as in standard rating condition in cooling)

4. Sound pressure level is tested in a semi-anechoic test room.

5. The external static pressure test condition is 0 Pa.

## 2-Pipe 4-Row Duct

Model		MKT4-V200	MKT4-V300	MKT4-V400	MKT4-V500	
Power supply		220-240/1/50				
Air flow (H/M/L)		m <sup>3</sup> /h 441/297/227	627/468/338	778/537/349	884/642/461	
		CFM 259/174/133	368/275/198	458/316/205	520/377/271	
Standard external static pressure		Pa 12Pa (default); 30/50Pa can be set through dial switch on PCB				
Cooling <sup>1</sup>	Capacity (H/M/L)	kW	2.22/1.59/1.2	3.19/2.58/1.87	4.06/3.26/2.41	4.46/3.56/2.78
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.40/0.30/0.23	0.57/0.47/0.34	0.72/0.59/0.43	0.80/0.63/0.50
	Water pressure drop(H/M/L)	kPa	2.44/1.52/1	5.24/3.61/2.36	8.4/5.9/3.49	11.6/8.1/5.6
	Power input(H/M/L)	W	17/9/6	21/12/7	29/16/9	43/23/14
Heating <sup>2</sup>	Capacity (H/M/L)	kW	2.81/2.154	3.88/3.09/2.35	4.19/3.42/2.49	5.44/4.23/3.23
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.51/0.37/0.29	0.67/0.56/0.42	0.84/0.68/0.51	0.96/0.76/0.57
	Water pressure drop(H/M/L)	kPa	2/1.76/1.2	4.3/4.29/2.8	6.99/6.4/3.8	10.64/9.83/6.68
	Power input(H/M/L)	W	18/9/7	23/13/8	32/18/10	41/22/12
Heating <sup>3</sup>	Capacity (H/M/L)	kW	3.23/2.32/1.75	4.5/3.6/2.68	5.6/4.59/3.36	6.25/4.88/3.74
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.40/0.30/0.23	0.57/0.47/0.34	0.72/0.59/0.43	0.80/0.63/0.50
	Water pressure drop(H/M/L)	kPa	2.99/1.2/0.71	5.85/3.1/1.9	9.1/4.9/2.8	14.06/7.6/5.5
	Power input(H/M/L)	W	19/9/6	23/13/8	32/18/10	42/21/11
Sound pressure level	0Pa (H/M/L)	dB(A)	37.3/27.4/22.2	39.6/32.5/25.0	41.1/34.5/26.4	44.8/37.2/29.8
Fan motor	Type	DC Motor				
	Quantity	1				
Fan	Type	Centrifugal, forward-curved Blades				
	Quantity	1				
Coil	Row	4				
	Max. working pressure	MPa	1.6			
Coil	Diameter	mm	Ø9.52			
	Net dimensions (WxHxD)	mm	741x241x522	841x241x522	941x241x522	941x241x522
Packing size (WxHxD)	mm	790x260x555	890x260x560	990x260x560	990x260x560	
Net weight	kg	17.8	20	21.9	21.9	
Gross weight	kg	20.4	22.9	25.1	25.1	
Water inlet/outlet pipe	inch	RC3/4				
Drain pipe	inch	ZG3/4				

Model		MKT4-V600	MKT4-V800	MKT4-V1000	MKT4-V1200	
Power supply		220-240/1/50				
Air flow (H/M/L)		m <sup>3</sup> /h 1056/793/575	1506/1084/822	1813/1341/932	2134/1617/1119	
		CFM 621/466/338	885/637/483	1066/788/548	1255/951/658	
Standard external static pressure		Pa 12Pa (default); 30/50Pa can be set through dial switch on PCB				
Cooling <sup>1</sup>	Capacity (H/M/L)	kW	5.87/4.78/3.68	6.65/5.04/3.61	7.98/6.19/4.37	9.76/7.81/5.72
	Water flow rate(H/M/L)	m <sup>3</sup> /h	1.06/0.86/0.65	1.19/0.88/0.64	1.47/1.12/0.78	1.78/1.41/1.02
	Water pressure drop(H/M/L)	kPa	19.4/13.6/8.5	8.8/5.09/2.8	13.81/8.63/4.75	22.31/15/8.98
	Power input(H/M/L)	W	51/25/12	61/27/16	93/49/21	109/50/22
Heating <sup>2</sup>	Capacity (H/M/L)	kW	6.47/5.18/3.91	8.36/6.32/4.77	9.92/7.94/5.86	11.76/9.32/6.76
	Water flow rate(H/M/L)	m <sup>3</sup> /h	1.11/0.90/0.67	1.43/1.12/0.86	1.68/1.35/1.00	2.01/1.60/1.15
	Water pressure drop(H/M/L)	kPa	16.31/12.6/7.41	7.7/6.97/4.3	19.72/18.9/11.1	20.04/16.93/9.62
	Power input(H/M/L)	W	56/27/13	66/30/16	102/46/20	119/55/24
Heating <sup>3</sup>	Capacity (H/M/L)	kW	7.72/6.19/4.68	9.55/7.14/5.23	11.55/9.6/6.46	14.34/11.31/8.3
	Water flow rate(H/M/L)	m <sup>3</sup> /h	1.06/0.86/0.65	1.19/0.88/0.64	1.47/1.12/0.78	1.78/1.41/1.02
	Water pressure drop(H/M/L)	kPa	17.92/11.31/7	10.9/4.49/2.5	15.42/7.5/4.1	24.94/13.46/13.48
	Power input(H/M/L)	W	56/27/13	67/29/16	103/46/20	121/54/23
Sound pressure level	0Pa (H/M/L)	dB(A)	46.1/39.4/30.7	47.4/39.1/32.1	50.4/42.7/33.1	50.7/43.8/34.5
Fan motor	Type	DC Motor				
	Quantity	1				
Fan	Type	Centrifugal, forward-curved Blades				
	Quantity	2				
Coil	Row	4				
	Max. working pressure	MPa	1.6			
Coil	Diameter	mm	Ø9.52			
	Net dimensions (WxHxD)	mm	1161x241x522	1461x241x522	1566x241x522	1856x241x522
Packing size (WxHxD)	mm	1210x260x560	1510x260x560	1615x260x560	1905x260x560	
Net weight	kg	25	34.8	36.4	41.9	
Gross weight	kg	28.8	39.2	41.9	47.2	
Water inlet/outlet pipe	inch	RC3/4				
Drain pipe	inch	ZG3/4				

Notes:

H: High fan speed; M: Medium fan speed; L: Low fan speed.

1. Cooling mode (2 and 4-pipe coil): entering air temperature 27°C DB/19°C WB, entering/leaving water temperature 7°C /12°C.

2. Heating mode (1) : (2-pipe coil): entering air temperature 20°C DB, entering/leaving water temperature 45/40°C.

3. Heating mode (2) : (2-pipe coil): entering air temperature 20°C DB, enter water teperature/water flow 50°C/\*(same water flow as in standard rating condition in cooling)

4. Sound pressure level is tested in a semi-anechoic test room.

5. The external static pressure test condition is 0 Pa.

# Wall Mounted Series

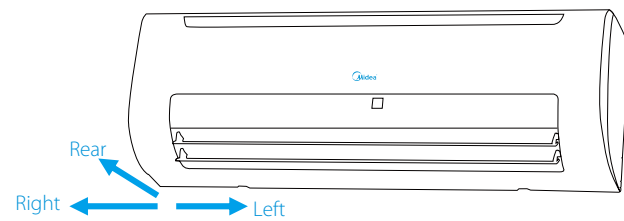


## Stylish Panel

- Stylish front panel blends easily within any interior décor, ideal for use in shops, restaurants or offices with no or narrow false ceilings.

## Convenient Installation

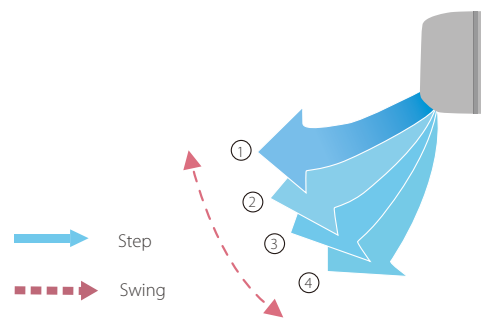
- Multi-directional outlet pipe feature: left/right/rear, to meet the needs of different rooms.



## Built-in 3-Way Electromagnetic Valve

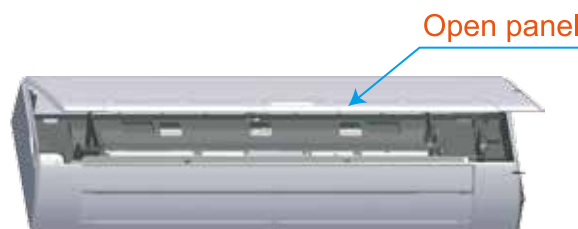
## Auto Swing Louver

- The Auto Swing Louver function ensures that the air direction corresponds to the mode selected.



## Easy Maintenance

- Removable front panel making maintenance convenient.



# Wall Mounted (S Type)



Model		MKG-V250B	MKG-V300B	MKG-V400B	MKG-V500B	MKG-V600B	
Power supply	V/Ph/Hz	220-240/1/50					
Air flow (H/M/L)	m³/h	492/454/400	585/485/413	825/689/590	862/741/634	979/849/717	
	CFM	289/267/235	344/285/242	485/405/347	507/435/372	575/499/421	
Cooling <sup>1</sup>	Capacity (H/M/L)	kW	2.7/2.59/2.39	2.91/2.54/2.19	3.81/3.3/2.88	4.47/3.98/3.48	4.87/4.26/3.79
	Water flow rate(H/M/L)	m³/h	0.48/0.46/0.42	0.51/0.45/0.38	0.67/0.57/0.51	0.77/0.68/0.61	0.85/0.72/0.65
	Water pressure drop(H/M/L)	kPa	31.61/28.63/25.36	37.2/29.73/23.36	56.75/41.23/33.02	41.17/33.54/27.05	50.68/39.47/33.66
	Power input(H/M/L)	W	13/11/10	15/11/9	34/22/15	26/18/13	38/26/18
Heating <sup>2</sup>	Capacity (H/M/L)	kW	2.94/2.8/2.58	3.23/2.77/2.42	4.3/3.65/3.09	4.84/4.23/3.62	5.26/4.68/3.96
	Water flow rate(H/M/L)	m³/h	0.51/0.49/0.46	0.56/0.49/0.42	0.73/0.64/0.56	0.84/0.73/0.64	0.89/0.80/0.68
	Water pressure drop(H/M/L)	kPa	32.66/34.89/30.24	34.12/31.53/25.1	51.86/47.53/35.69	36.82/33.83/26.26	47.12/42.75/32.95
	Power input(H/M/L)	W	11/11/9	14/10/8	31/20/14	22/16/12	33/23/16
Heating <sup>3</sup>	Capacity (H/M/L)	kW	3.29/3.03/2.63	3.76/3.22/2.77	5.08/4.33/3.77	5.68/4.94/4.24	6.31/5.57/4.77
	Water flow rate(H/M/L)	m³/h	0.48/0.46/0.42	0.51/0.45/0.38	0.67/0.57/0.51	0.77/0.68/0.61	0.85/0.72/0.65
	Water pressure drop(H/M/L)	kPa	37.49/30.25/26.53	40.64/27.03/20.98	61.94/37.88/30.34	43.74/29.69/23.98	51.65/36.3/30.3
	Power input(H/M/L)	W	12/10/8	14/10/8	31/20/14	23/16/12	33/23/16
Sound pressure level (H/M/L)	dB(A)	32/30/27	32/27/23	45/39/35	38/34/30	44/40/35	
Fan motor	Type	DC Motor					
	Quantity	1					
Fan	Type	Tangential fan					
	Quantity	1					
Coil	Row	2					
	Max. working pressure	MPa	1.6				
	Diameter	mm	Ø7				
Net dimensions (WxHxD)	mm	915x290x230	915x290x230	915x290x230	1072x315x230	1072x315x230	
Packing size (WxHxD)	mm	1020x390x315	1020x390x315	1020x390x315	1180x415x315	1180x415x315	
Net weight	kg	12.7	12.7	12.7	15.1	14.9	
Gross weight	kg	17.3	17.6	16.3	19	18.6	
Water inlet/outlet pipe	inch	G3/4					
Drain pipe	mm	ODØ20					

# Wall Mounted (C Type)

Model MKG-		V250	V300	V400	V500	V600		
Air flow	H/M/L	m³/h	425/410/320	510/427/349	680/550/504	850/692/586	1020/820/670	
	H/M/L	CFM	250/241/188	300/251/205	400/324/297	500/407/345	600/483/394	
Cooling	Capacity	H/M/L	kW	2.2/2.2/1.97	2.64/2.48/2.06	3.08/2.90/2.66	4.07/3.78/3.05	4.45/3.95/3.21
	Water flow rate	H	L/h	378	454	530	700	765
	Water pressure drop	H	kPa	23.1	33.6	42	34.9	36.3
Heating	Capacity	H/M/L	kW	3.02/2.85/2.35	3.69/2.92/2.49	4.34/3.77/3.35	5.69/4.14/3.63	6.30/5.17/4.18
	Water pressure drop	H	kPa	22	31.4	40	29.7	32.8
Power supply	V/Ph/Hz	220-240/1/50						
Power input	H	W	10.7	14.3	33	28	37.5	
Sound pressure level	H/M/L	dB(A)	30/26/23	32/28/25	36/32/29	38/34/30	40/36/31	
Fan motor	Type	DC Motor						
	Quantity	1						
Fan	Type	Tangential fan						
	Quantity	1						
Coil	Row	2						
	Max. Working pressure	MPa	1.6					
	Coil length x height	mm	635x26.74	635x26.74	635x26.74	785x26.74	785x26.74	
	Fin spacing	mm	1.5					
	Fin type	Hydrophilic aluminium						
	Number of circuits		5	5	5	7	7	
	Diameter	mm	Ø7					
Body	Dimensions	WxHxD	915x290x210	915x290x210	915x290x210	1070x315x210	1070x315x210	
	Packing	WxHxD	1020x385x300	1020x385x300	1020x385x300	1180x410x300	1180x410x300	
	Net weight	kg	12	12	12	14.7	14.8	
Pipe connection	Gross weight	kg	15.6	15.6	15.6	18.6	18.8	
	Water inlet/outlet pipe	inch	G3/4					
Drain pipe	mm	ODØ20						

Note:

Based on Eurovent conditions:

H:High fan speed; M: Medium fan speed; L: Low fan speed.

1 :Cooling mode: entering air temperature 27°C DB/1 9°C WB, entering/leaving water temperature 7°C /12°C, high fan speed.

2 :Heating mode:entering air temperature 20°C DB, enter water teperature/water flow 50°C/\*(same water flow as in standard rating condition in cooling)

3 :Noise is tested in a semi-anechoic test room.



## Wall Mounted (A Type)



Model		MKG-V250C	MKG-V300C	MKG-V400C	MKG-V500C	MKG-V600C	
Power supply		V/Ph/Hz 220-240/1/50					
Air flow (H/M/L)		m³/h	492/454/400	585/485/413	825/689/590	862/741/634	979/849/717
		CFM	289/267/235	344/285/242	485/405/347	507/435/372	575/499/421
Cooling <sup>1</sup>	Capacity (H/M/L)	kW	2.7/2.59/2.39	2.91/2.54/2.19	3.81/3.3/2.88	4.47/3.98/3.48	4.87/4.26/3.79
	Water flow rate(H/M/L)	m³/h	0.48/0.46/0.42	0.51/0.45/0.38	0.67/0.57/0.51	0.77/0.68/0.61	0.85/0.72/0.65
	Water pressure drop(H/M/L)	kPa	31.61/28.63/25.36	37.2/29.73/23.36	56.75/41.23/33.02	41.17/33.54/27.05	50.68/39.47/33.66
	Power input(H/M/L)	W	13/11/10	15/11/9	34/22/15	26/18/13	38/26/18
Heating <sup>2</sup>	Capacity (H/M/L)	kW	2.94/2.8/2.58	3.23/2.77/2.42	4.3/3.65/3.09	4.84/4.23/3.62	5.26/4.68/3.96
	Water flow rate(H/M/L)	m³/h	0.51/0.49/0.46	0.56/0.49/0.42	0.73/0.64/0.56	0.84/0.73/0.64	0.89/0.80/0.68
	Water pressure drop(H/M/L)	kPa	32.66/34.89/30.24	34.12/31.53/25.1	51.86/47.53/35.69	36.82/33.83/26.26	47.12/42.75/32.95
	Power input(H/M/L)	W	11/11/9	14/10/8	31/20/14	22/16/12	33/23/16
Heating <sup>3</sup>	Capacity (H/M/L)	kW	3.29/3.03/2.63	3.76/3.22/2.77	5.08/4.33/3.77	5.68/4.94/4.24	6.31/5.57/4.77
	Water flow rate(H/M/L)	m³/h	0.48/0.46/0.42	0.51/0.45/0.38	0.67/0.57/0.51	0.77/0.68/0.61	0.85/0.72/0.65
	Water pressure drop(H/M/L)	kPa	37.49/30.25/26.53	40.64/27.03/20.98	61.94/37.88/30.34	43.74/29.69/23.98	51.65/36.3/30.3
	Power input(H/M/L)	W	12/10/8	14/10/8	31/20/14	23/16/12	33/23/16
Sound power level (H/M/L)		dB(A)	44/42/39	44/39/35	57/51/47	50/46/42	56/52/47
Rated current		A	0.16	0.19	0.28	0.32	0.39
Fan motor	Type	DC Motor					
	Quantity	1					
Fan	Type	Tangential fan					
	Quantity	1					
Coil	Row	2					
	Max. working pressure	MPa	1.6				
	Diameter	mm	Φ7				
Net dimensions (WxHxD)		mm	915x290x234	915x290x234	915x290x234	1072x315x237	1072x315x237
Packing size (WxHxD)		mm	1020x390x315	1020x390x315	1020x390x315	1180x415x315	1180x415x315
Net weight		kg	12.7	12.7	12.7	15.1	14.9
Gross weight		kg	17.3	17.6	16.3	19	18.6
Water inlet/outlet pipe		inch	G3/4	G3/4	G3/4	G3/4	G3/4
Drain pipe		mm	ODΦ20	ODΦ20	ODΦ20	ODΦ20	ODΦ20

## Notes:

Based on Eurovent conditions:

H: High fan speed; M: Medium fan speed; L: Low fan speed.

1 :Cooling mode (2 and 4-pipe coil): entering air temperature 27°C DB/1 9°C WB, entering/leaving water temperature 7°C /12°C, high fan speed.

2 :Heating mode (1): (2-pipe coil): entering air temperature 20°C DB, entering/leaving water temperature 45/40°C, high fan speed.

3 :Heating mode (2): (2-pipe coil): entering air temperature 20°C DB, enter water teperature/water flow 50°C/\*(same water flow as in standard rating condition in cooling)

## Wall Mounted (P Type)



Model		MKG-V250D	MKG-V300D	MKG-V400D	MKG-V500D	MKG-V600D	
Power supply		V/Ph/Hz 220-240/1/50					
Air flow (H/M/L)		m³/h	492/454/400	585/485/413	825/689/590	862/741/634	979/849/717
		CFM	289/267/235	344/285/242	485/405/347	507/435/372	575/499/421
Cooling <sup>1</sup>	Capacity (H/M/L)	kW	2.7/2.59/2.39	2.91/2.54/2.19	3.81/3.3/2.88	4.47/3.98/3.48	4.87/4.26/3.79
	Water flow rate(H/M/L)	m³/h	0.48/0.46/0.42	0.51/0.45/0.38	0.67/0.57/0.51	0.77/0.68/0.61	0.85/0.72/0.65
	Water pressure drop(H/M/L)	kPa	31.61/28.63/25.36	37.2/29.73/23.36	56.75/41.23/33.02	41.17/33.54/27.05	50.68/39.47/33.66
	Power input(H/M/L)	W	13/11/10	15/11/9	34/22/15	26/18/13	38/26/18
Heating <sup>2</sup>	Capacity (H/M/L)	kW	2.94/2.8/2.58	3.23/2.77/2.42	4.3/3.65/3.09	4.84/4.23/3.62	5.26/4.68/3.96
	Water flow rate(H/M/L)	m³/h	0.51/0.49/0.46	0.56/0.49/0.42	0.73/0.64/0.56	0.84/0.73/0.64	0.89/0.80/0.68
	Water pressure drop(H/M/L)	kPa	32.66/34.89/30.24	34.12/31.53/25.1	51.86/47.53/35.69	36.82/33.83/26.26	47.12/42.75/32.95
	Power input(H/M/L)	W	11/11/9	14/10/8	31/20/14	22/16/12	33/23/16
Heating <sup>3</sup>	Capacity (H/M/L)	kW	3.29/3.03/2.63	3.76/3.22/2.77	5.08/4.33/3.77	5.68/4.94/4.24	6.31/5.57/4.77
	Water flow rate(H/M/L)	m³/h	0.48/0.46/0.42	0.51/0.45/0.38	0.67/0.57/0.51	0.77/0.68/0.61	0.85/0.72/0.65
	Water pressure drop(H/M/L)	kPa	37.49/30.25/26.53	40.64/27.03/20.98	61.94/37.88/30.34	43.74/29.69/23.98	51.65/36.3/30.3
	Power input(H/M/L)	W	12/10/8	14/10/8	31/20/14	23/16/12	33/23/16
Sound power level (H/M/L)		dB(A)	44/42/39	44/39/35	57/51/47	50/46/42	56/52/47
Rated current		A	0.16	0.19	0.28	0.32	0.39
Fan motor	Type	DC Motor					
	Quantity	1					
Fan	Type	Tangential fan					
	Quantity	1					
Coil	Row	2					
	Max. working pressure	MPa	1.6				
	Diameter	mm	Φ7				
Net dimensions (WxHxD)		mm	915x290x234	915x290x234	915x290x234	1072x315x237	1072x315x237
Packing size (WxHxD)		mm	1020x390x315	1020x390x315	1020x390x315	1180x415x315	1180x415x315
Net weight		kg	12.7	12.7	12.7	15.1	14.9
Gross weight		kg	17.3	17.6	16.3	19	18.6
Water inlet/outlet pipe		inch	G3/4	G3/4	G3/4	G3/4	G3/4
Drain pipe		mm	ODΦ20	ODΦ20	ODΦ20	ODΦ20	ODΦ20

## Notes:

Based on Eurovent conditions:

H: High fan speed; M: Medium fan speed; L: Low fan speed.

1 :Cooling mode (2 and 4-pipe coil): entering air temperature 27°C DB/1 9°C WB, entering/leaving water temperature 7°C /12°C, high fan speed.

2 :Heating mode (1): (2-pipe coil): entering air temperature 20°C DB, entering/leaving water temperature 45/40°C, high fan speed.

3 :Heating mode (2): (2-pipe coil): entering air temperature 20°C DB, enter water teperature/water flow 50°C/\*(same water flow as in standard rating condition in cooling)

# 2<sup>nd</sup> Generation Ceiling&Floor series

Concealed Type  
H3 Series



Exposed Type  
(air return from bottom)  
H2 Series



Exposed Type  
(air return from side)  
H1 Series



## High Efficiency and Low Sound Operation

- Due to the DC brushless fan motor, the unit operates in high efficiency and low sound level.

## Flexible Installation

- Cabinet and concealed versions meet various installation requirements.
- Horizontal or vertical installation.



## Feature

- Auto mode and seven speed fan motor
- Ultra-thin, the thickness is only 200mm.
- Hysteresis temperature can be set in heating and cooling mode by PCB switch, field adjustable.
- With/without forced fan on can be set by PCB switch, field adjustable.
- The centralized control function can be connected through the customization XYE port.
- The Gateway(Modbus) can be connected through the customization PQE port.
- Wired controller KJR-75A is optional.
- 0-10V wired control is optional.

## 2- Pipe 2<sup>nd</sup> Generation Ceiling&Floor

Model		MKH1-V150-R3	MKH1-V150-R4	MKH1-V250-R3	MKH1-V250-R4	MKH1-V350-R3	MKH1-V350-R4	
Power supply	V/Ph/Hz	220-240/1/50						
Air flow (H/M/L)	m <sup>3</sup> /h	245/160/135	245/180/130	380/245/140	380/240/110	580/435/310	580/430/300	
	CFM	144/94/79	144/106/76	224/144/82	224/141/65	341/256/182	341/253/176	
External static pressure	Pa	0						
Cooling	Capacity (H/M/L)	kW	1.44/1.01/0.88	1.87/1.59/1.16	2.23/1.84/1.13	2.55/1.90/1.26	3.41/2.81/2.16	3.80/3.11/2.36
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.25/0.17/0.15	0.32/0.27/0.2	0.38/0.32/0.19	0.44/0.33/0.22	0.58/0.48/0.37	0.65/0.53/0.40
	Water pressure drop(H/M/L)	kPa	13.4/7.9/6.0	26.1/20.1/11.8	12.7/9.5/4.4	23.2/13.5/6.6	33.4/24.0/15.0	36.5/25.3/15.0
Heating	Capacity (H/M/L)	kW	1.50/1.02/0.88	1.97/1.68/1.20	2.47/2.00/1.27	2.63/1.92/1.27	3.70/3.02/2.29	3.90/3.13/2.43
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.26/0.17/0.15	0.34/0.29/0.21	0.42/0.34/0.22	0.45/0.33/0.22	0.63/0.52/0.39	0.67/0.54/0.40
	Water pressure drop(H/M/L)	kPa	14.5/7.3/5.6	24.0/18.8/9.9	13.6/9.8/4.3	21.8/12.2/5.9	34.2/23.8/14.5	35.6/24.7/13.9
Power input (H/M/L)	W	19/15/10	20/16/11	20/13/10	21/12/8	27/18/11	30/18/12	
Sound power level (H/M/L)	dB(A)	47/36/34	52/46/39	43/35/27	46/38/30	52/45/37	52/45/37	
Fan motor	Type	Low noise DC fan motor						
	Quantity	1	1	1	1	1	1	
Fan	Type	Centrifugal, forward-curved Blades						
	Quantity	1	1	2	2	2	2	
Coil	Row	3	4	3	4	3	4	
	Max. working pressure	MPa	1.6	1.6	1.6	1.6	1.6	1.6
	Diameter	mm	Φ7.94	Φ7.94	Φ7.94	Φ7.94	Φ7.94	Φ7.94
Body	Net dimensions (WxHxD)	mm	790x495x211	790x495x211	1020x495x211	1020x495x211	1240x495x211	1240x495x211
	Packing size (WxHxD)	mm	895x595x300	895x595x300	1125x595x300	1125x595x300	1345x595x300	1345x595x300
	Net weight	kg	18.0	18.5	21.5	22.0	25.5	26.5
	Gross weight	kg	23.5	24.0	27.5	28.0	32.5	33.5
Water inlet/outlet pipe	inch	G3/4	G3/4	G3/4	G3/4	G3/4	G3/4	
Drain pipe	mm	ODΦ18.5	ODΦ18.5	ODΦ18.5	ODΦ18.5	ODΦ18.5	ODΦ18.5	

Model		MKH1-V500-R3	MKH1-V500-R4	MKH1-V700-R3	MKH1-V700-R4	MKH1-V800-R3	MKH1-V800-R4	
Power supply	V/Ph/Hz	220-240/1/50						
Air flow (H/M/L)	m <sup>3</sup> /h	780/550/380	780/560/390	1050/750/450	1050/770/460	1150/850/570	1150/860/600	
	CFM	459/324/224	459/329/229	618/441/265	618/453/271	676/500/335	676/506/353	
External static pressure	Pa	0						
Cooling	Capacity (H/M/L)	kW	4.25/3.43/2.67	4.73/3.82/2.85	4.94/3.94/2.77	5.60/4.58/3.19	6.21/5.17/3.86	7.30/5.88/4.28
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.73/0.59/0.46	0.81/0.65/0.49	0.85/0.68/0.47	0.96/0.79/0.55	1.06/0.89/0.66	1.25/1.01/0.73
	Water pressure drop(H/M/L)	kPa	53.5/35.8/24.1	53.0/35.9/21.2	44.7/29.5/15.6	28.9/19.2/10.1	37.3/28.5/16.4	63.0/40.8/22.5
Heating	Capacity (H/M/L)	kW	4.64/3.65/2.77	5.12/3.98/2.96	5.29/4.20/2.96	6.22/4.95/3.37	6.80/5.46/3.98	7.70/6.02/4.29
	Water flow rate(H/M/L)	m <sup>3</sup> /h	0.80/0.63/0.47	0.88/0.68/0.51	0.91/0.72/0.51	1.07/0.85/0.58	1.17/0.94/0.68	1.32/1.03/0.74
	Water pressure drop(H/M/L)	kPa	53.6/36.4/22.0	52.0/35.6/20.0	49.0/33.2/17.0	33.2/22.5/11.0	39.7/27.0/15.4	55.0/36.4/19.2
Power input (H/M/L)	W	50/26/15	52/28/15	98/45/18	99/50/20	105/50/24	105/50/23	
Sound power level (H/M/L)	dB(A)	59/52/43	59/52/43	65/57/45	65/56/46	66/59/49	65/59/49	
Fan motor	Type	Low noise DC fan motor						
	Quantity	1	1	1	1	1	1	
Fan	Type	Centrifugal, forward-curved Blades						
	Quantity	2	2	3	3	3	3	
Coil	Row	3	4	3	4	3	4	
	Max. working pressure	MPa	1.6	1.6	1.6	1.6	1.6	1.6
	Diameter	mm	Φ7.94	Φ7.94	Φ7.94	Φ7.94	Φ7.94	Φ7.94
Body	Net dimensions (WxHxD)	mm	1240x495x211	1240x495x211	1360x495x211	1360x495x211	1360x495x211	1360x495x211
	Packing size (WxHxD)	mm	1345x595x300	1345x595x300	1465x595x300	1465x595x300	1465x595x300	1465x595x300
	Net weight	kg	25.5	26.5	28.5	29.5	32.5	34.5
	Gross weight	kg	32.5	33.5	36.0	37.0	41.0	42.5
Water inlet/outlet pipe	inch	G3/4	G3/4	G3/4	G3/4	G3/4	G3/4	
Drain pipe	mm	ODΦ18.5	ODΦ18.5	ODΦ18.5	ODΦ18.5	ODΦ18.5	ODΦ18.5	

Notes:  
 1. H: High fan speed; M: Medium fan speed; L: Low fan speed.  
 2. Cooling conditions: Entering water 7 C, leaving water 12 C, Entering air temperature 27 C DB/19 C WB.  
 Heating conditions: Entering water 45 C, leaving water 40 C, Entering air temperature 20 C DB/15 C WB.  
 3. Noise is tested in a reverberation chamber.



## 2- Pipe 2<sup>nd</sup> Generation Ceiling&Floor

Model		MKH2-V150-R3	MKH2-V150-R4	MKH2-V250-R3	MKH2-V250-R4	MKH2-V350-R3	MKH2-V350-R4		
Power supply		220-240/1/50							
Air flow (H/M/L)		V/Ph/Hz							
		m³/h	255/170/150	255/210/150	400/315/190	425/300/190	595/470/340	595/450/310	
		CFM	150/100/88	150/124/88	235/185/112	250/176/112	350/276/200	350/265/182	
External static pressure		Pa	0						
Cooling	Capacity (H/M/L)	kW	1.50/1.06/0.92	1.95/1.66/1.21	2.35/1.94/1.19	2.85/2.13/1.41	3.50/2.89/2.22	3.90/3.20/2.43	
	Water flow rate(H/M/L)	m³/h	0.26/0.18/0.16	0.33/0.28/0.21	0.40/0.34/0.21	0.49/0.37/0.24	0.60/0.50/0.38	0.67/0.55/0.42	
	Water pressure drop(H/M/L)	kPa	13.9/8.21/6.16	27.2/20.88/12.2	13.3/9.98/4.59	26/15.06/7.41	34.1/24.63/15.39	37.4/25.91/15.37	
Heating	Capacity (H/M/L)	kW	1.57/1.07/0.92	2.05/1.75/1.25	2.60/2.11/1.34	2.95/2.15/1.42	3.80/3.10/2.35	4.00/3.22/2.50	
	Water flow rate(H/M/L)	m³/h	0.27/0.19/0.16	0.35/0.30/0.22	0.45/0.37/0.23	0.51/0.37/0.24	0.65/0.53/0.40	0.70/0.56/0.43	
	Water pressure drop(H/M/L)	kPa	15.1/7.63/5.84	25.3/19.65/10.25	14.3/10.33/4.5	24.4/13.65/6.64	35.1/24.41/14.82	36.5/25.34/14.22	
Power input (H/M/L)		W	15/9/8	20/14/9	17/12/7	20/11/8	26/17/10	29/17/11	
Sound power level		(H/M/L)	dB(A)	47/36/34	52/46/38	43/37/29	46/37/29	52/44/36	52/45/36
Fan motor		Type	Low noise DC fan motor						
		Quantity	1	1	1	1	1	1	
Fan		Type	Centrifugal, forward-curved Blades						
		Quantity	1	1	2	2	2	2	
Coil	Row		3	4	3	4	3	4	
	Max. working pressure	MPa	1.6	1.6	1.6	1.6	1.6	1.6	
	Diameter	mm	Ø7.94	Ø7.94	Ø7.94	Ø7.94	Ø7.94	Ø7.94	
Body	Net dimensions (WxHxD)	mm	790x495x200	790x495x200	1020x495x200	1020x495x200	1240x495x200	1240x495x200	
	Packing size (WxHxD)	mm	895x595x300	895x595x300	1125x595x300	1125x595x300	1345x595x300	1345x595x300	
	Net weight	kg	18.0	18.5	21.5	22.0	25.5	26.5	
	Gross weight	kg	23.5	24.0	27.5	28.0	32.5	33.5	
Water inlet/outlet pipe		inch	G3/4	G3/4	G3/4	G3/4	G3/4	G3/4	
Drain pipe		mm	ODØ18.5	ODØ18.5	ODØ18.5	ODØ18.5	ODØ18.5	ODØ18.5	

Model		MKH2-V500-R3	MKH2-V500-R4	MKH2-V700-R3	MKH2-V700-R4	MKH2-V800-R3	MKH2-V800-R4		
Power supply		220-240/1/50							
Air flow (H/M/L)		V/Ph/Hz							
		m³/h	790/580/410	800/600/420	1190/855/505	1190/875/530	1360/1015/685	1300/980/680	
		CFM	488/359/253	471/353/247	700/503/297	700/515/312	800/597/403	765/576/400	
External static pressure		Pa	0						
Cooling	Capacity (H/M/L)	kW	4.30/3.48/2.71	4.85/3.92/2.93	5.60/4.47/3.14	6.35/5.19/3.62	7.35/6.12/4.57	8.25/6.65/4.84	
	Water flow rate(H/M/L)	m³/h	0.74/0.60/0.47	0.83/0.67/0.51	0.96/0.77/0.54	1.09/0.90/0.63	1.27/1.05/0.79	1.43/1.14/0.83	
	Water pressure drop(H/M/L)	kPa	54.2/36.22/22.78	54.3/36.81/21.77	50.7/33.38/17.73	32.8/21.75/11.43	44.1/33.7/19.41	71.4/46.17/25.39	
Heating	Capacity (H/M/L)	kW	4.70/3.70/2.81	5.25/4.09/3.04	6.00/4.77/3.36	7.05/5.61/3.83	8.05/6.46/4.71	8.70/6.81/4.85	
	Water flow rate(H/M/L)	m³/h	0.81/0.64/0.48	0.91/0.71/0.53	1.04/0.83/0.59	1.22/0.98/0.67	1.39/1.12/0.82	1.51/1.18/0.83	
	Water pressure drop(H/M/L)	kPa	54.3/36.87/22.32	53.4/36.54/20.47	55.5/37.66/19.27	37.6/25.47/12.5	46.9/31.9/18.16	62.6/41.06/21.68	
Power input (H/M/L)		W	50/25/14	52/28/15	96/44/17	92/46/19	113/53/22	102/49/22	
Sound power level		(H/M/L)	dB(A)	59/51/43	59/51/43	64/56/45	62/56/46	63/58/49	63/57/47
Fan motor		Type	Low noise DC fan motor						
		Quantity	1	1	1	1	1	1	
Fan		Type	Centrifugal, forward-curved Blades						
		Quantity	2	2	3	3	3	3	
Coil	Row		3	4	3	4	3	4	
	Max. working pressure	MPa	1.6	1.6	1.6	1.6	1.6	1.6	
	Diameter	mm	Ø7.94	Ø7.94	Ø7.94	Ø7.94	Ø7.94	Ø7.94	
Body	Net dimensions (WxHxD)	mm	1240x495x200	1240x495x200	1360x495x200	1360x495x200	1360x591x200	1360x591x200	
	Packing size (WxHxD)	mm	1345x595x300	1345x595x300	1465x595x300	1465x595x300	1465x695x300	1465x695x300	
	Net weight	kg	25.5	26.5	28.5	29.5	32.5	34.5	
	Gross weight	kg	32.5	33.5	36.0	37.0	41.0	42.5	
Water inlet/outlet pipe		inch	G3/4	G3/4	G3/4	G3/4	G3/4	G3/4	
Drain pipe		mm	ODØ18.5	ODØ18.5	ODØ18.5	ODØ18.5	ODØ18.5	ODØ18.5	

- Notes:  
 1. H: High fan speed; M: Medium fan speed; L: Low fan speed.  
 2. Cooling conditions: Entering water 7°C, leaving water 12°C, Entering air temperature 27°C DB/19°C WB.  
 Heating conditions: Entering water 45°C, leaving water 40°C, Entering air temperature 20°C DB/15°C WB.  
 3. Noise is tested in a reverberation chamber.

Model		MKH3-V150-R3	MKH3-V150-R4	MKH3-V250-R3	MKH3-V250-R4	MKH3-V350-R3	MKH3-V350-R4		
Power supply		220-240/1/50							
Air flow (H/M/L)		V/Ph/Hz							
		m³/h	255/170/150	255/210/150	400/315/190	425/300/190	595/470/340	595/450/310	
		CFM	150/100/88	150/124/88	235/185/112	250/176/112	350/276/200	350/265/182	
External static pressure		Pa	12						
Cooling	Capacity (H/M/L)	kW	1.50/1.06/0.92	1.95/1.66/1.21	2.35/1.94/1.19	2.85/2.13/1.41	3.50/2.89/2.22	3.90/3.20/2.43	
	Water flow rate(H/M/L)	m³/h	0.26/0.18/0.16	0.33/0.28/0.21	0.40/0.34/0.21	0.49/0.37/0.24	0.60/0.50/0.38	0.67/0.55/0.42	
	Water pressure drop(H/M/L)	kPa	13.9/8.21/6.16	27.2/20.88/12.2	13.3/9.98/4.59	26/15.06/7.41	34.1/24.63/15.39	37.4/25.91/15.37	
Heating	Capacity (H/M/L)	kW	1.57/1.07/0.92	2.05/1.75/1.25	2.60/2.11/1.34	2.95/2.15/1.42	3.80/3.10/2.35	4.00/3.22/2.50	
	Water flow rate(H/M/L)	m³/h	0.27/0.19/0.16	0.35/0.30/0.22	0.45/0.37/0.23	0.51/0.37/0.24	0.65/0.53/0.40	0.70/0.56/0.43	
	Water pressure drop(H/M/L)	kPa	15.1/7.63/5.84	25.3/19.65/10.25	14.3/10.33/4.5	24.4/13.65/6.64	35.1/24.41/14.82	36.5/25.34/14.22	
Power input (H/M/L)		W	15/9/8	20/14/9	17/12/7	20/11/8	26/17/10	29/17/11	
Sound power level		(H/M/L)	dB(A)	47/36/34	52/46/38	43/37/29	46/37/29	52/44/36	52/45/36
Fan motor		Type	Low noise DC fan motor						
		Quantity	1	1	1	1	1	1	
Fan		Type	Centrifugal, forward-curved Blades						
		Quantity	1	1	2	2	2	2	
Coil	Row		3	4	3	4	3	4	
	Max. working pressure	MPa	1.6	1.6	1.6	1.6	1.6	1.6	
	Diameter	mm	Ø7.94	Ø7.94	Ø7.94	Ø7.94	Ø7.94	Ø7.94	
Body	Net dimensions (WxHxD)	mm	637x455x200	637x455x200	867x455x200	867x455x200	1087x455x200	1087x455x200	
	Packing size (WxHxD)	mm	755x555x255	755x555x255	985x555x255	985x555x255	1205x555x255	1205x555x255	
	Net weight	kg	11.8	12.1	13.9	14.8	17.3	18.2	
	Gross weight	kg	16.1	16.4	19.4	20.3	24.0	24.9	
Water inlet/outlet pipe		inch	G3/4	G3/4	G3/4	G3/4	G3/4	G3/4	
Drain pipe		mm	ODØ18.5	ODØ18.5	ODØ18.5	ODØ18.5	ODØ18.5	ODØ18.5	

Model		MKH3-V500-R3	MKH3-V500-R4	MKH3-V700-R3	MKH3-V700-R4	MKH3-V800-R3	MKH3-V800-R4		
Power supply		220-240/1/50							
Air flow (H/M/L)		V/Ph/Hz							
		m³/h	790/580/410	800/600/420	1190/855/505	1190/875/530	1360/1015/685	1300/980/680	
		CFM	488/359/253	471/353/247	700/503/297	700/515/312	800/597/403	765/576/400	
External static pressure		Pa	12						
Cooling	Capacity (H/M/L)	kW	4.30/3.48/2.71	4.85/3.92/2.93	5.60/4.47/3.14	6.35/5.19/3.62	7.35/6.12/4.57	8.25/6.65/4.84	
	Water flow rate(H/M/L)	m³/h	0.74/0.60/0.47	0.83/0.67/0.51	0.96/0.77/0.54	1.09/0.90/0.63	1.27/1.05/0.79	1.43/1.14/0.83	
	Water pressure drop(H/M/L)	kPa	54.2/36.22/22.78	54.3/36.81/21.77	50.7/33.38/17.73	32.8/21.75/11.43	44.1/33.7/19.41	71.4/46.17/25.39	
Heating	Capacity (H/M/L)	kW	4.70/3.70/2.81	5.25/4.09/3.04	6.00/4.77/3.36	7.05/5.61/3.83	8.05/6.46/4.71	8.70/6.81/4.85	
	Water flow rate(H/M/L)	m³/h	0.81/0.64/0.48	0.91/0.71/0.53	1.04/0.83/0.59	1.22/0.98/0.67	1.39/1.12/0.82	1.51/1.18/0.83	
	Water pressure drop(H/M/L)	kPa	54.3/36.87/22.32	53.4/36.54/20.47	55.5/37.66/19.27	37.6/25.47/12.5	46.9/31.9/18.16	62.6/41.06/21.68	
Power input (H/M/L)		W	50/25/14	52/28/15	96/44/17	92/46/19	113/53/22	102/49/22	
Sound power level		(H/M/L)	dB(A)	59/51/43	59/51/43	64/56/45	62/56/46	63/58/49	63/57/47
Fan motor		Type	Low noise DC fan motor						
		Quantity	1	1	1	1	1	1	
Fan		Type	Centrifugal, forward-curved Blades						
		Quantity	2	2	3	3	3	3	
Coil	Row		3	4	3	4	3	4	
	Max. working pressure	MPa	1.6	1.6	1.6	1.6	1.6	1.6	
	Diameter	mm	Ø7.94	Ø7.94	Ø7.94	Ø7.94	Ø7.94	Ø7.94	
Body	Net dimensions (WxHxD)	mm	1087x455x200	1087x455x200	1207x455x200	1207x455x200	1207x550x200	1207x550x200	
	Packing size (WxHxD)	mm	1205x555x255	1205x555x255	1325x555x255	1325x555x255	1325x650x255	1325x650x255	
	Net weight	kg	17.3	18.2	19.6	20.8	23.1	24.3	
	Gross weight	kg	24.0	24.9	26.4	27.6	30.2	31.4	
Water inlet/outlet pipe		inch	G3/4	G3/4	G3/4	G3/4	G3/4	G3/4	
Drain pipe		mm	ODØ18.5	ODØ18.5	ODØ18.5	ODØ18.5	ODØ18.5	ODØ18.5	

- Notes:  
 1. H: High fan speed; M: Medium fan speed; L: Low fan speed.  
 2. Cooling conditions: Entering water 7°C, leaving water 12°C, Entering air temperature 27°C DB/19°C WB.  
 Heating conditions: Entering water 45°C, leaving water 40°C, Entering air temperature 20°C DB/15°C WB.  
 3. Noise is tested in a reverberation chamber.  
 4. H3 series test with concealed tooling.

4- Pipe 2<sup>nd</sup> Generation Ceiling&Floor

Model		MKH1-V150F-R4	MKH1-V250F-R4	MKH1-V350F-R4	MKH1-V500F-R4	MKH1-V700F-R4	MKH1-V800F-R4	
Power supply		V/Ph/Hz 220-240/1/50						
Air flow (H/M/L)		m³/h	245/180/130	380/240/110	580/430/300	780/560/390	1050/770/460	1150/860/600
		CFM	144/106/76	224/141/65	341/253/176	459/329/229	618/453/271	676/506/353
External static pressure		Pa 0						
Cooling	Capacity (H/M/L)	kW	1.63/1.38/0.91	2.41/1.73/0.99	3.70/3.10/2.26	4.49/3.66/2.76	5.34/4.41/3.02	6.77/5.48/4.02
	Water flow rate(H/M/L)	m³/h	0.279/0.24/0.16	0.41/0.30/0.17	0.63/0.53/0.38	0.77/0.63/0.47	0.92/0.76/0.52	1.16/0.94/0.69
	Water pressure drop(H/M/L)	kPa	17.5/13.2/7.2	15.2/8.7/3.1	38.2/27.6/16.5	54.8/38.1/23.2	47.4/32.6/16.8	42.5/28.8/16.2
Heating	Capacity (H/M/L)	kW	1.35/1.18/0.91	2.06/1.45/1.02	2.81/2.43/1.95	3.27/2.81/2.30	4.06/3.48/2.66	6.63/5.74/4.62
	Water flow rate(H/M/L)	m³/h	0.12/0.10/0.08	0.18/0.13/0.09	0.24/0.21/0.17	0.28/0.24/0.20	0.35/0.3/0.23	0.57/0.49/0.40
	Water pressure drop(H/M/L)	kPa	10.3/8.2/5.3	25.2/15.0/8.5	54.0/41.9/28.5	67.8/53.3/37.3	116.76/91.94/56.23	63.4/49.7/33.1
Power input (H/M/L)		W 20/16/11 21/12/8 30/18/12 52/28/15 99/50/20 105/50/23						
Sound power level (H/M/L)		dB(A) 52/46/39 46/38/30 52/45/37 59/52/43 65/56/46 65/59/49						
Fan motor	Type	Low noise DC fan motor						
	Quantity	1 1 1 1 1 1						
Fan	Type	Centrifugal, forward-curved Blades						
	Quantity	1 2 2 2 3 3						
Coil	Row	4 4 4 4 4 4						
	Max. working pressure	MPa 1.6 1.6 1.6 1.6 1.6 1.6						
	Diameter	mm Ø7.94 Ø7.94 Ø7.94 Ø7.94 Ø7.94 Ø7.94						
Body	Net dimensions (WxHxD)	mm 790x495x211 1020x495x211 1240x495x211 1240x495x211 1360x495x211 1360x591x211						
	Packing size (WxHxD)	mm 895x595x300 1125x595x300 1345x595x300 1345x595x300 1465x595x300 1465x695x300						
	Net weight	kg 19.0 22.5 27.0 27.0 30.0 35.0						
	Gross weight	kg 24.5 28.5 34.0 34.0 37.5 43.0						
Water inlet/outlet pipe		inch Cold water: G3/4; Hot water: G1/2						
Drain pipe		mm ODØ18.5 ODØ18.5 ODØ18.5 ODØ18.5 ODØ18.5 ODØ18.5						

Model		MKH2-V150F-R4	MKH2-V250F-R4	MKH2-V350F-R4	MKH2-V500F-R4	MKH2-V700F-R4	MKH2-V800F-R4	
Power supply		V/Ph/Hz 220-240/1/50						
Air flow (H/M/L)		m³/h	255/206/134	425/280/158	595/461/324	800/595/417	1190/887/564	1300/969/661
		CFM	150/121/79	250/165/93	350/271/191	471/350/245	700/522/332	765/570/389
External static pressure		Pa 0						
Cooling	Sensible Capacity(H/M/L)	kW	1.30/1.07/0.64	1.90/1.30/0.70	2.80/2.30/1.61	3.50/2.75/2.01	4.80/3.88/2.53	5.90/4.60/3.30
	Capacity (H/M/L)	kW	1.70/1.44/0.95	2.70/1.94/1.10	3.80/3.18/2.32	4.60/3.75/2.83	6.05/5.00/3.43	7.65/6.19/4.54
	Water flow rate	m³/h	0.29/0.25/0.16	0.46/0.33/0.19	0.65/0.55/0.40	0.79/0.64/0.49	1.04/0.86/0.59	1.31/1.06/0.78
	Water pressure drop	kPa	18.16/13.74/7.50	16.97/9.73/3.51	39.17/28.35/16.91	56.18/39.04/23.84	53.66/36.96/19.07	48.07/32.56/18.32
Heating	Capacity (H/M/L)	kW	1.40/1.23/0.95	2.30/1.78/1.22	2.88/2.49/2.00	3.35/2.88/2.36	4.60/3.95/3.02	7.50/6.44/5.22
	Water flow rate	m³/h	0.12/0.11/0.08	0.20/0.15/0.10	0.25/0.21/0.17	0.29/0.25/0.20	0.39/0.34/0.26	0.64/0.55/0.45
	Water pressure drop	kPa	10.74/8.50/5.49	28.16/18.45/10.08	55.37/43.00/29.20	69.57/54.65/38.21	132.32/104.19/63.73	71.63/56.17/37.44
Power input (H/M/L)		W 20/14/9 20/11/8 29/17/11 52/28/15 92/46/19 102/49/22						
Rated current		A 0.21 0.22 0.28 0.51 0.79 0.87						
Sound power level (H/M/L)		dB(A) 52/46/38 46/37/29 52/45/36 59/52/43 63/58/46 64/57/47						
Fan motor	Type	Low noise DC fan motor						
	Quantity	1 1 1 1 1 1						
Fan	Type	Centrifugal, forward-curved Blades						
	Quantity	1 2 2 2 3 3						
Coil	Row	4 4 4 4 4 4						
	Max. working pressure	MPa 1.6 1.6 1.6 1.6 1.6 1.6						
	Diameter	mm Ø7.94 Ø7.94 Ø7.94 Ø7.94 Ø7.94 Ø7.94						
Body	Net dimensions (WxHxD)	mm 790x495x200 1020x495x200 1240x495x200 1240x495x200 1360x495x200 1360x591x200						
	Packing size (WxHxD)	mm 895x595x300 1125x595x300 1345x595x300 1345x595x300 1465x595x300 1465x695x300						
	Net weight	kg 19.0 22.5 27.0 27.0 30.0 35.0						
	Gross weight	kg 24.5 28.5 34.0 34.0 37.5 43.0						
Water inlet/outlet pipe		inch Cold water: G3/4; Hot water: G1/2						
Drain pipe		mm ODØ18.5						

- Notes:  
1. H: High fan speed; M: Medium fan speed; L: Low fan speed.  
2. Cooling conditions: Entering water 7°C, leaving water 12°C, Entering air temperature 27°C DB/19°C WB.  
Heating conditions: Entering water 65°C, leaving water 55°C, Entering air temperature 20°C DB/15°C WB.  
3. Noise is tested in a reverberation chamber.

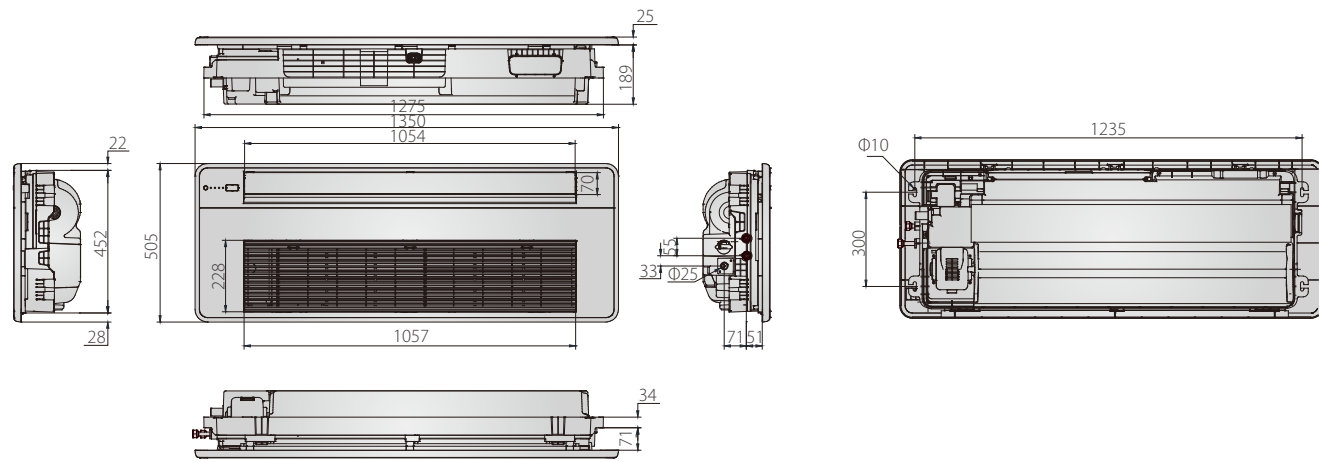
Model		MKH3-V150F-R4	MKH3-V250F-R4	MKH3-V350F-R4	MKH3-V500F-R4	MKH3-V700F-R4	MKH3-V800F-R4	
Power supply		V/Ph/Hz 220-240/1/50						
Air flow (H/M/L)		m³/h	255/206/134	425/280/158	595/461/324	800/595/417	1190/887/564	1300/969/661
		CFM	150/121/79	250/165/93	350/271/191	471/350/245	700/522/332	765/570/389
External static pressure		Pa 12						
Cooling	Sensible Capacity(H/M/L)	kW	1.30/1.07/0.64	1.90/1.30/0.70	2.80/2.30/1.61	3.50/2.75/2.01	4.80/3.88/2.53	5.90/4.60/3.30
	Capacity (H/M/L)	kW	1.70/1.44/0.95	2.70/1.94/1.10	3.80/3.18/2.32	4.60/3.75/2.83	6.05/5.00/3.43	7.65/6.19/4.54
	Water flow rate	m³/h	0.29/0.25/0.16	0.46/0.33/0.19	0.65/0.55/0.40	0.79/0.64/0.49	1.04/0.86/0.59	1.31/1.06/0.78
	Water pressure drop	kPa	18.16/13.74/7.50	16.97/9.73/3.51	39.17/28.35/16.91	56.18/39.04/23.84	53.66/36.96/19.07	48.07/32.56/18.32
Heating	Capacity (H/M/L)	kW	1.40/1.23/0.95	2.30/1.78/1.22	2.88/2.49/2.00	3.35/2.88/2.36	4.60/3.95/3.02	7.50/6.44/5.22
	Water flow rate	m³/h	0.12/0.11/0.08	0.20/0.15/0.10	0.25/0.21/0.17	0.29/0.25/0.20	0.39/0.34/0.26	0.64/0.55/0.45
	Water pressure drop	kPa	10.74/8.50/5.49	28.16/18.45/10.08	55.37/43.00/29.20	69.57/54.65/38.21	132.32/104.19/63.73	71.63/56.17/37.44
Power input (H/M/L)		W 20/14/9 20/11/8 29/17/11 52/28/15 92/46/19 102/49/22						
Rated current		A 0.21 0.22 0.28 0.51 0.79 0.87						
Sound power level (H/M/L)		dB(A) 52/46/38 46/37/29 52/45/36 59/51/43 62/56/46 63/57/47						
Fan motor	Type	Low noise DC fan motor						
	Quantity	1 1 1 1 1 1						
Fan	Type	Centrifugal, forward-curved Blades						
	Quantity	1 2 2 2 3 3						
Coil	Row	4 4 4 4 4 4						
	Max. working pressure	MPa 1.6 1.6 1.6 1.6 1.6 1.6						
	Diameter	mm Ø7.94 Ø7.94 Ø7.94 Ø7.94 Ø7.94 Ø7.94						
Body	Net dimensions (WxHxD)	mm 637x455x200 867x455x200 1087x455x200 1087x455x200 1207x455x200 1207x550x200						
	Packing size (WxHxD)	mm 895x595x300 1125x595x300 1345x595x300 1345x595x300 1465x595x300 1465x695x300						
	Net weight	kg 12.6 15.3 18.7 18.7 21.3 24.8						
	Gross weight	kg 16.9 20.8 25.4 25.4 28.1 31.9						
Water inlet/outlet pipe		inch Cold water: G3/4; Hot water: G1/2						
Drain pipe		mm ODØ18.5						

- Notes:  
1. H: High fan speed; M: Medium fan speed; L: Low fan speed.  
2. Cooling conditions: Entering water 7°C, leaving water 12°C, Entering air temperature 27°C DB/19°C WB.  
Heating conditions: Entering water 65°C, leaving water 55°C, Entering air temperature 20°C DB/15°C WB.  
3. Noise is tested in a reverberation chamber.  
4. H3 series test with concealed tooling.

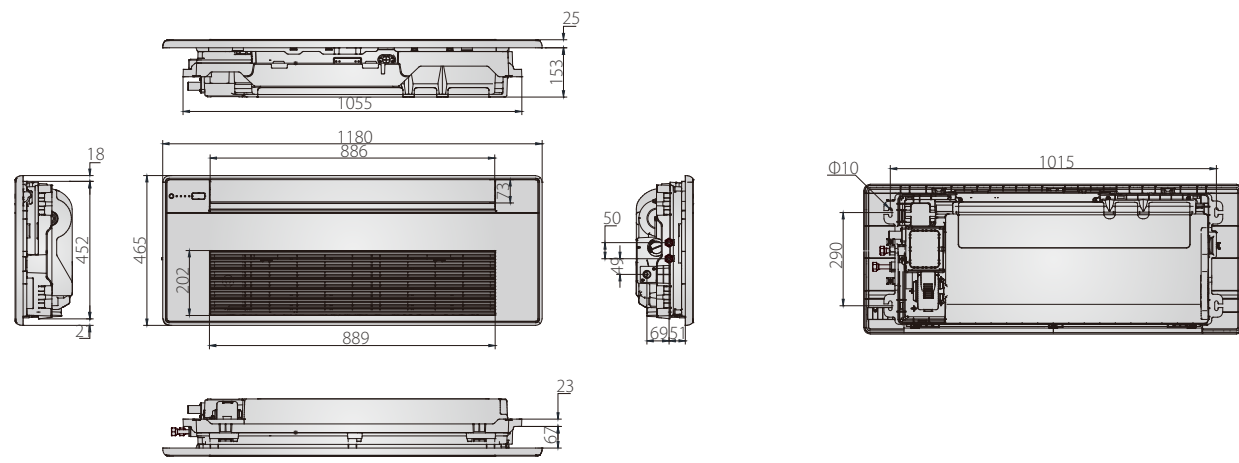


# Dimensions

## 1-way cassette



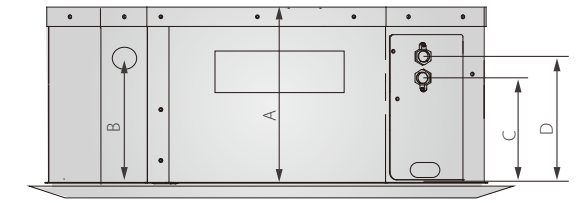
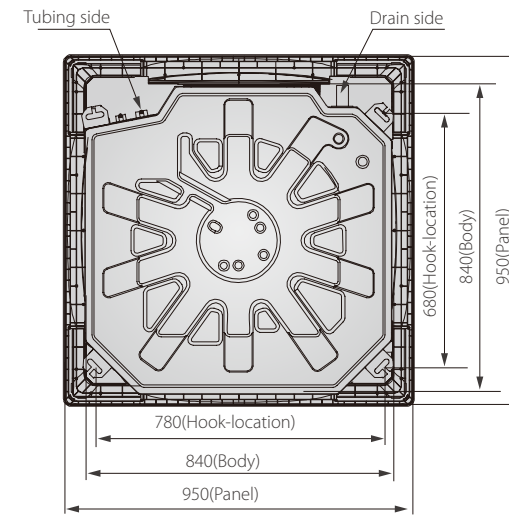
MKC-V400R-B  
MKC-V600R-B



MKC-V300R-B

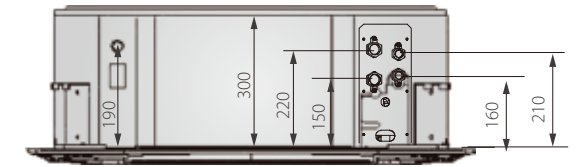
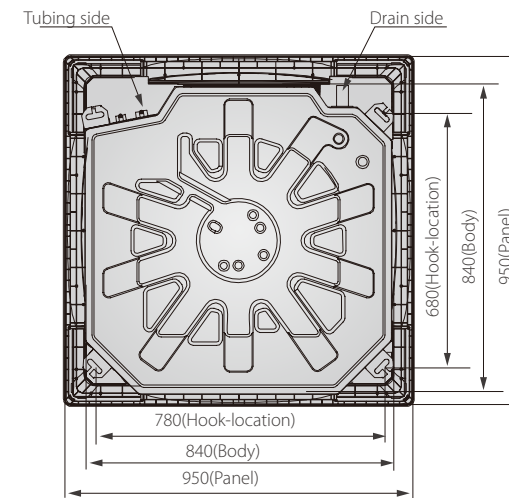
## 4-way cassette

### 2-pipe 4-way cassette Dimensions (unit:mm)

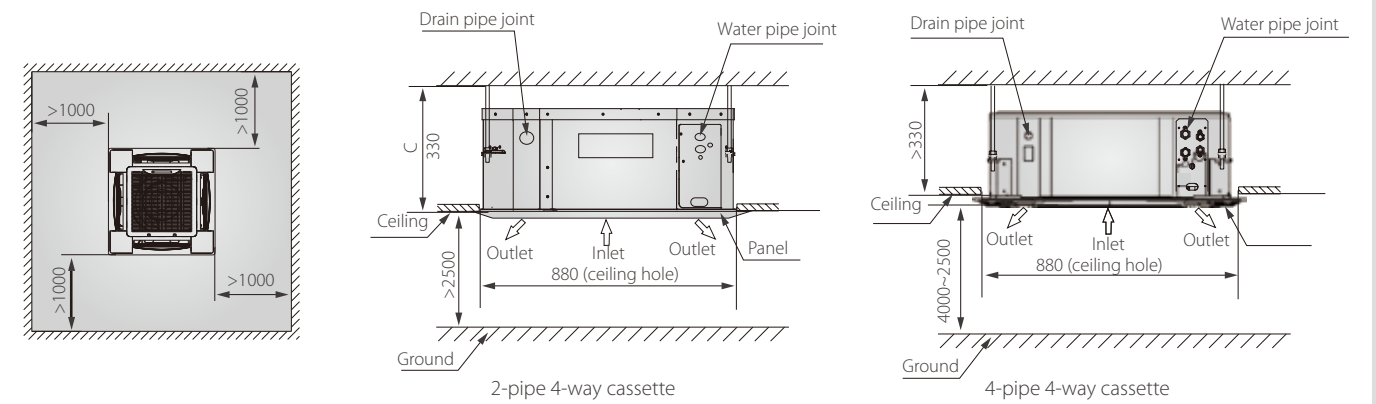


Model	A	B	C	D
MKA-V600R	230	170	135	185
MKA-V750R				
MKA-V950R	300	190	145	195
MKA-V1200R				
MAK-V1500R				

### 4-Pipe 4-way cassette Dimensions (unit:mm)

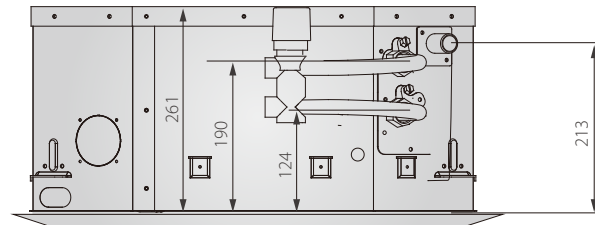
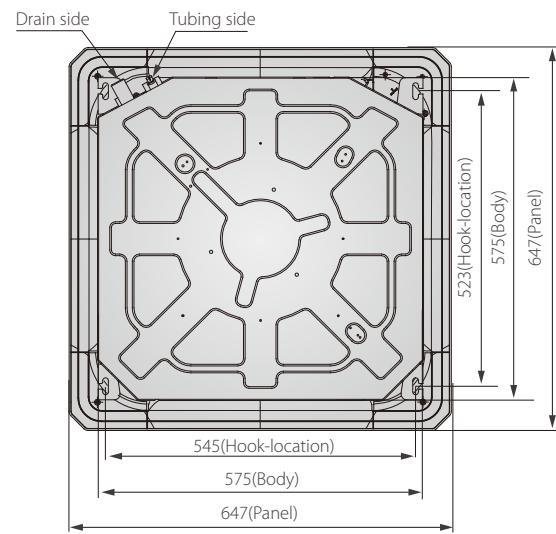


### Service Spaces (unit:mm)

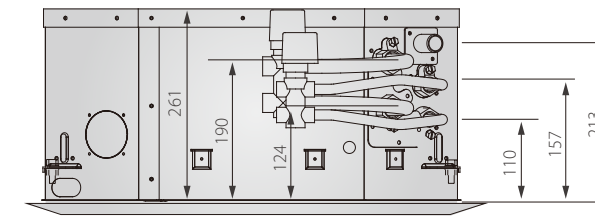
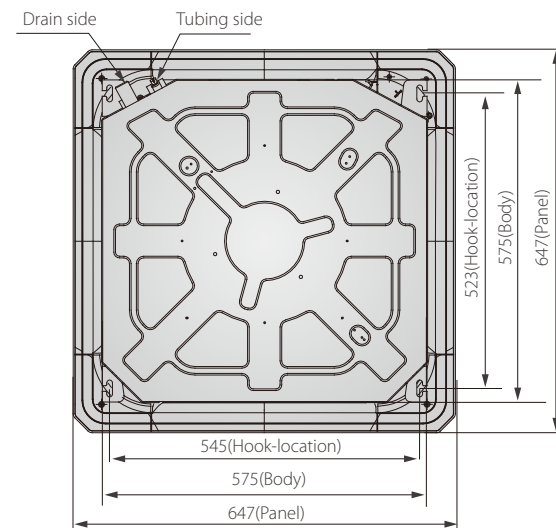


## Compact 4-way cassette

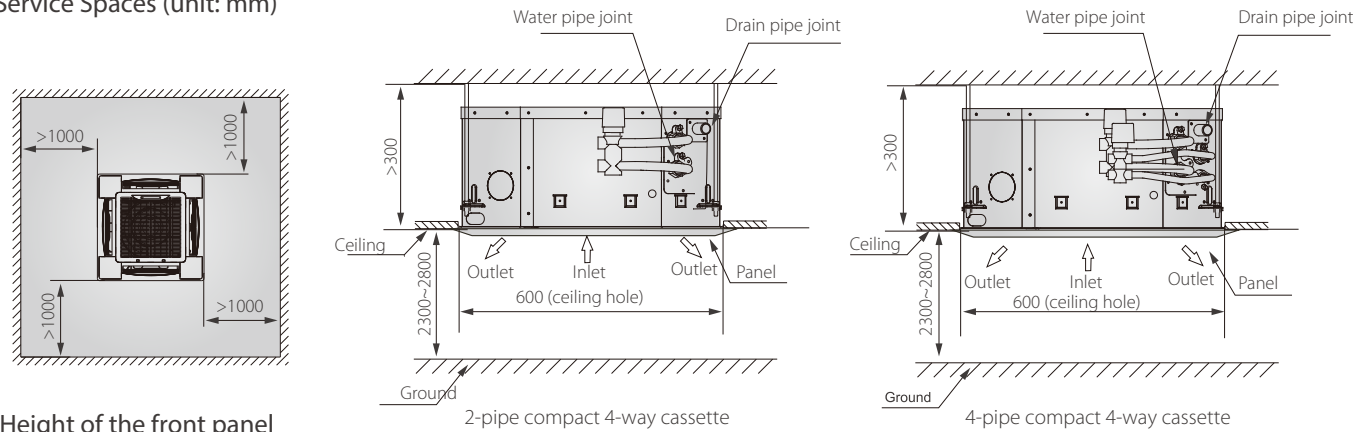
2-pipe compact 4-way cassette  
Dimensions (unit: mm)



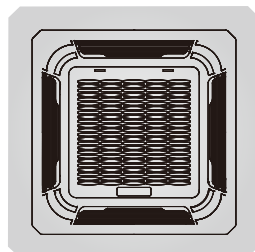
4-pipe compact 4-way cassette  
Dimensions (unit: mm)



Service Spaces (unit: mm)



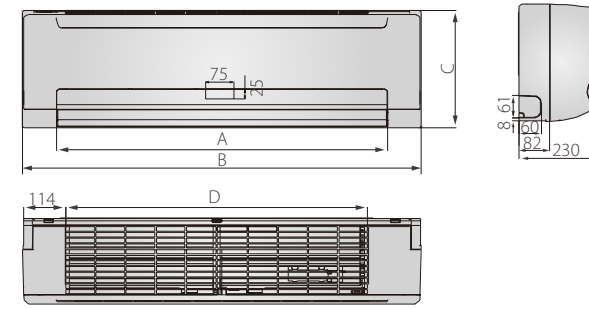
Height of the front panel



Type	H (mm)
4-way cassette	45
Compact 4-way cassette	50

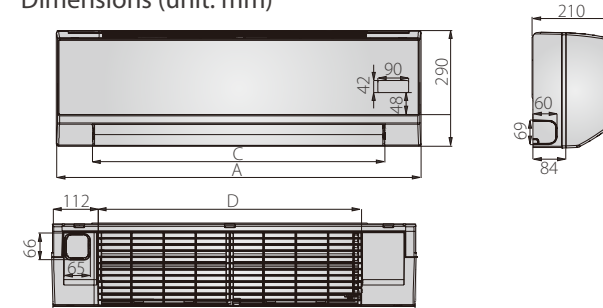
## Wall mounted - S type

Dimensions (unit: mm)



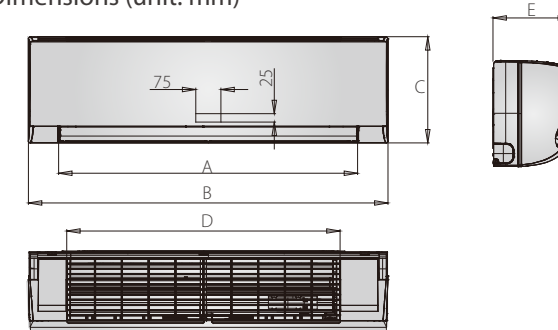
## Wall mounted - C type

Dimensions (unit: mm)



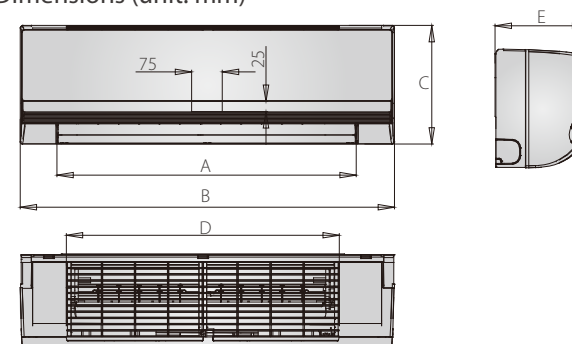
## Wall mounted - A type

Dimensions (unit: mm)



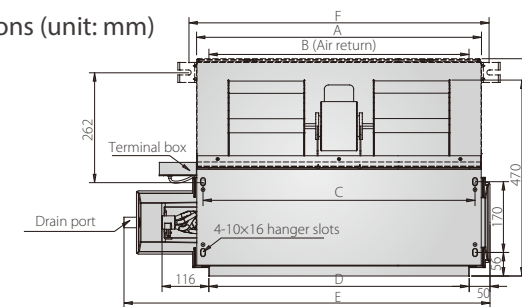
## Wall mounted - P type

Dimensions (unit: mm)



## Duct

Dimensions (unit: mm)

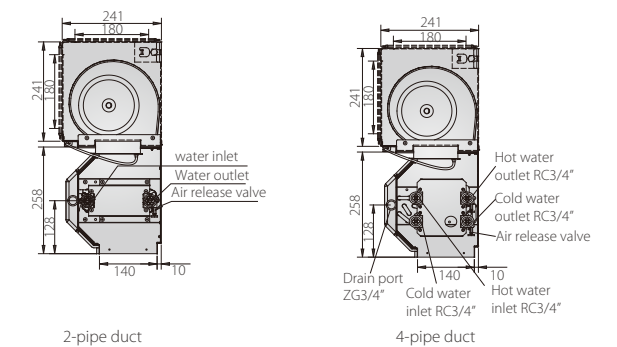


Model	MKG-V250-B MKG-V300-B MKG-V400-B	MKG-V500-B MKG-V600-B
Size		
A	732	892
B	915	1072
C	290	315
D	663	813

Model	MKG-V250 MKG-V300 MKG-V400	MKG-V500 MKG-V600
Size		
A	915	1070
B	290	315
C	725	885
D	670	815

Model	MKG-V250C MKG-V300C MKG-V400C	MKG-V500C MKG-V600C
Size		
A	732	892
B	915	1072
C	290	315
D	663	813
E	233	237

Model	MKG-V250D MKG-V300D MKG-V400D	MKG-V500D MKG-V600D
Size		
A	732	892
B	915	1072
C	290	315
D	663	813
E	229	232



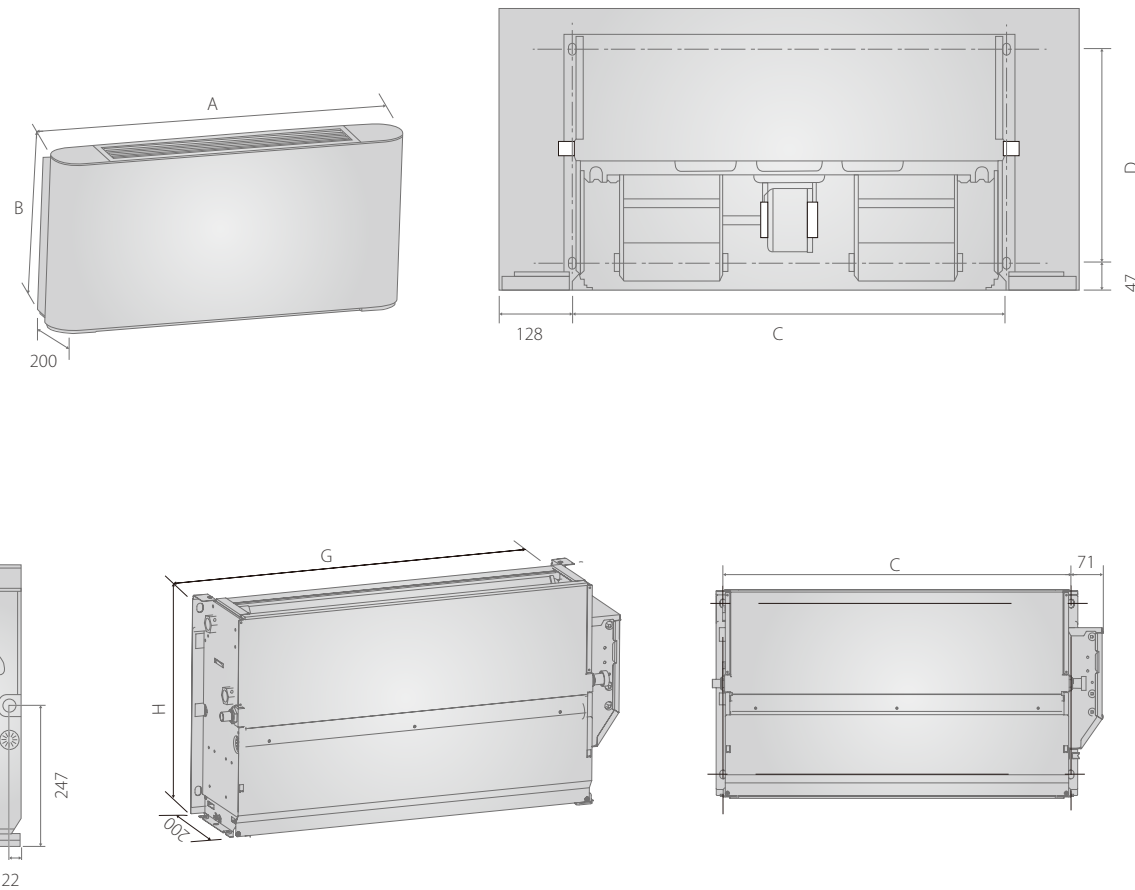


(continued: duct units dimensions)

Size	A	B	C	D	E	F
200CFM	545	485	513	485	741	583
300CFM	645	585	613	585	841	683
400CFM	745	685	713	685	941	783
500CFM	745	685	713	685	941	783
600CFM	965	905	933	905	1161	1003
800CFM	1265	1205	1233	1205	1461	1303
1000CFM	1370	1310	1338	1310	1566	1408
1200CFM	1660	1600	1628	1600	1856	1698

## 2<sup>nd</sup> generation Ceiling&Floor

Dimensions (unit: mm)



Model	150	250	300	500	700	800
A(mm)	790	1020	1240	1240	1360	1360
B(mm)	495	495	495	495	495	591
C(mm)	534	764	984	984	1104	1104
D(mm)	375	375	375	375	375	319
E(mm)	123	123	123	123	123	219
F(mm)	93	93	93	93	93	102
G(mm)	628	858	1078	1078	1198	1198
H(mm)	455	455	455	455	455	551

# CONTROL SOLUTIONS

Midea CAC provides a variety of control schemes:

Embedded wall-mounted comes with standard remote controller. Similarly the other models have their respective series of controllers. The units can also be made to connect with BMS systems by undergoing some customizations.

▶ Control Devices



▶ Accessories

▶ Application of Central Control & BMS Control







▶ DC Selection Software

# Control Devices



## Wireless Remote Controllers

Model	Appearance	Function Descriptions	Applicable FCUs
R05/BGE		<ul style="list-style-type: none"> <li>● LCD display screen</li> <li>● Mode control</li> <li>● Fan speeds control</li> </ul>	4-way Cassette (standard) 1-way Cassette (standard)
R51/E		<ul style="list-style-type: none"> <li>● Time setting / Temp. setting / Swing setting</li> </ul>	Compact 4-way cassette (standard) Wall-mounted (standard)

## Wired Controllers

Model	Appearance	Function Descriptions	Applicable FCUs
KJRP-86A1-E		<ul style="list-style-type: none"> <li>● LCD display screen</li> <li>● Mode control</li> <li>● Fan speeds control</li> <li>● Timer setting / Temp. setting</li> </ul>	AC Ceiling& Floor and Duct without electric heater (optional)
KJR-18B/E		<ul style="list-style-type: none"> <li>● Mechanical thermostat</li> <li>● Mode control</li> <li>● Fan speeds control</li> <li>● Temp. setting</li> </ul>	AC Ceiling& Floor and Duct without electric heater (optional)
KJR-29B		<ul style="list-style-type: none"> <li>● Receiving remote signal</li> <li>● Mode control</li> <li>● Fan speeds control</li> <li>● Temp. setting</li> </ul>	Cassette / Wall-mounted (optional)
KJR-75A/BK		<ul style="list-style-type: none"> <li>● LED display screen</li> <li>● Mode control</li> <li>● Seven speed fan control</li> <li>● Temp. setting</li> </ul>	2 <sup>nd</sup> generation Ceiling&Floor(optional) DC one-way cassette (optional)
KJRP-86I/MFK-E		<ul style="list-style-type: none"> <li>● LCD display screen</li> <li>● Mode control</li> <li>● Fan speeds control</li> <li>● Timer / Temp. setting</li> <li>● ECO setting/reminder</li> </ul>	AC Ceiling& Floor and AC&DC Duct without electric heater (optional)
KJRP-86A/BMFVnKD-E		<ul style="list-style-type: none"> <li>● LCD display screen</li> <li>● Mode/Electric heater control</li> <li>● Fan speeds control</li> <li>● Timer / Temp. setting</li> <li>● ECO setting/reminder</li> <li>● Compatible with Modbus</li> </ul>	AC Ceiling& Floor and AC&DC Duct (optional)

## Centralized Controllers

Model	Appearance	Function Descriptions	Applicable FCUs
CCM09		<ul style="list-style-type: none"> <li>● Weekly schedule function</li> <li>● Large LCD display screen</li> <li>● Max. of 64 FCUs can be controlled by a CCM09</li> <li>● Mode control / fan speed control</li> <li>● Time setting / temp. setting / swing setting</li> </ul>	All FCUs (AC 1-way cassette FCUs need adding NIM01 module, non-PCB FCUs need adding PC board control kit)
CCM30		<ul style="list-style-type: none"> <li>● Touch-style keys</li> <li>● Large LCD display screen</li> <li>● Max. of 64 FCUs can be controlled by a CCM30</li> <li>● Mode control / fan speed control</li> <li>● Time setting / temp. setting / swing setting</li> </ul>	

# Accessories

## PC Board Control Kit for FCU



- Available for all non-PCB FCUs.
- Flexibility installation: can be attached to the unit, mounted on a wall or hung under a ceiling.
- External installation making maintenance more convenient.
- Functions: three fan speeds control, Water pump control, Long-distance ON/OFF control, ALARM function, electric heater control.
- Operating status can be displayed by wired controller lamp indicator.
- Centralized control function.
- BMS control function through Modbus protocol.

## Centralized control



Notes: Duct series need PCB kit to connect Centralized controller.

Model	CE-FCUKZ-03	CE-FCUKZ-04
Applicable appliance	2-pipe FCUs	4-pipe FCUs
Power supply	V-Ph-Hz 220~240-1-50/60	
Operation range	Room temp.	°C 17-30
	Inlet water temp.	°C 3-75
Temp. controlling precision	°C ±1	
Net dimension	WxHxD mm	296x66x212
Packing size	WxHxD mm	410x115x262
Net weight	kg	1.4
Gross weight	kg	2.5

## Valve kit

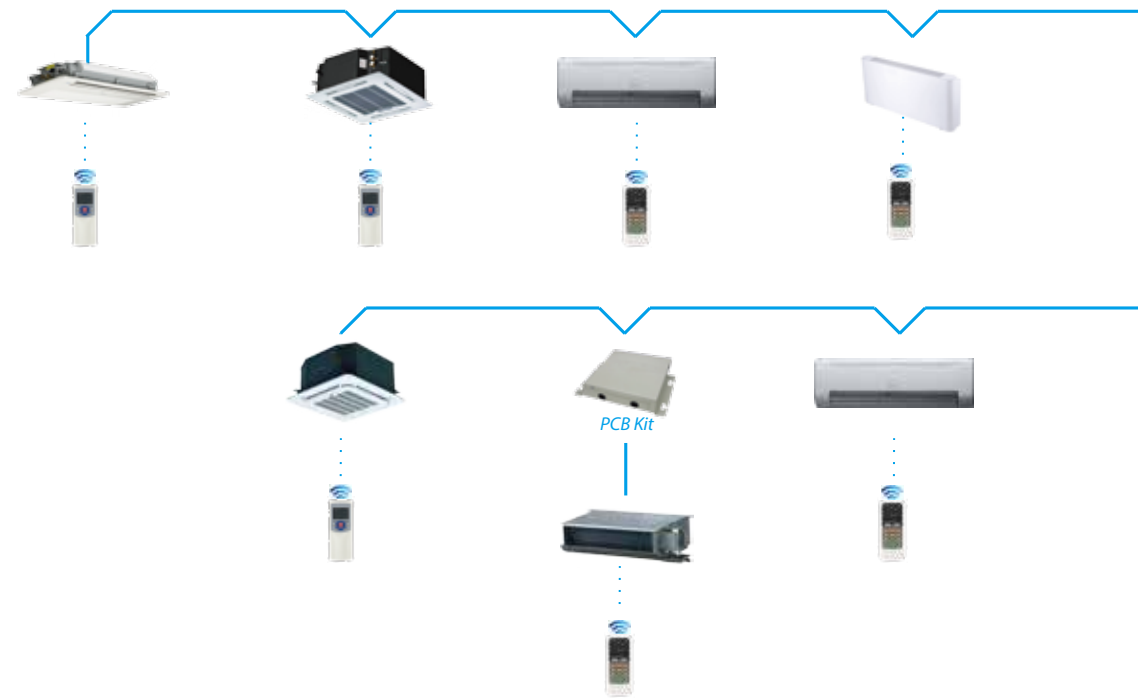
DN(mm)	Inner Screw Thread	Applicable Appliance
15	1/2"	For 4-pipe cassette and ceiling&floor (for cold water),
20	3/4"	For 2-pipe FCU,4-pipe duct, 4-pipe cassette and ceiling&floor (for cold water).



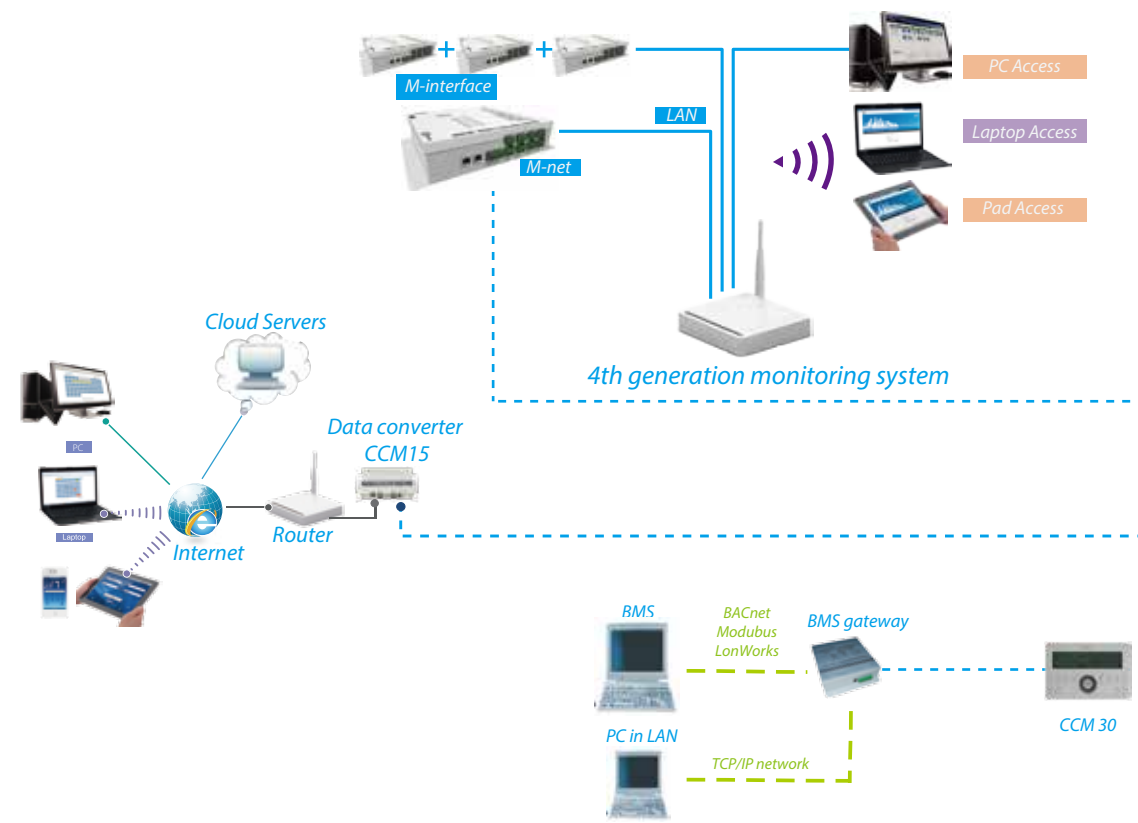
Note:  
The valve kit includes valve, actuator and connecting pipe. For different model of units, the models of valve kit are difference.



# Application of Central Control & BMS Control



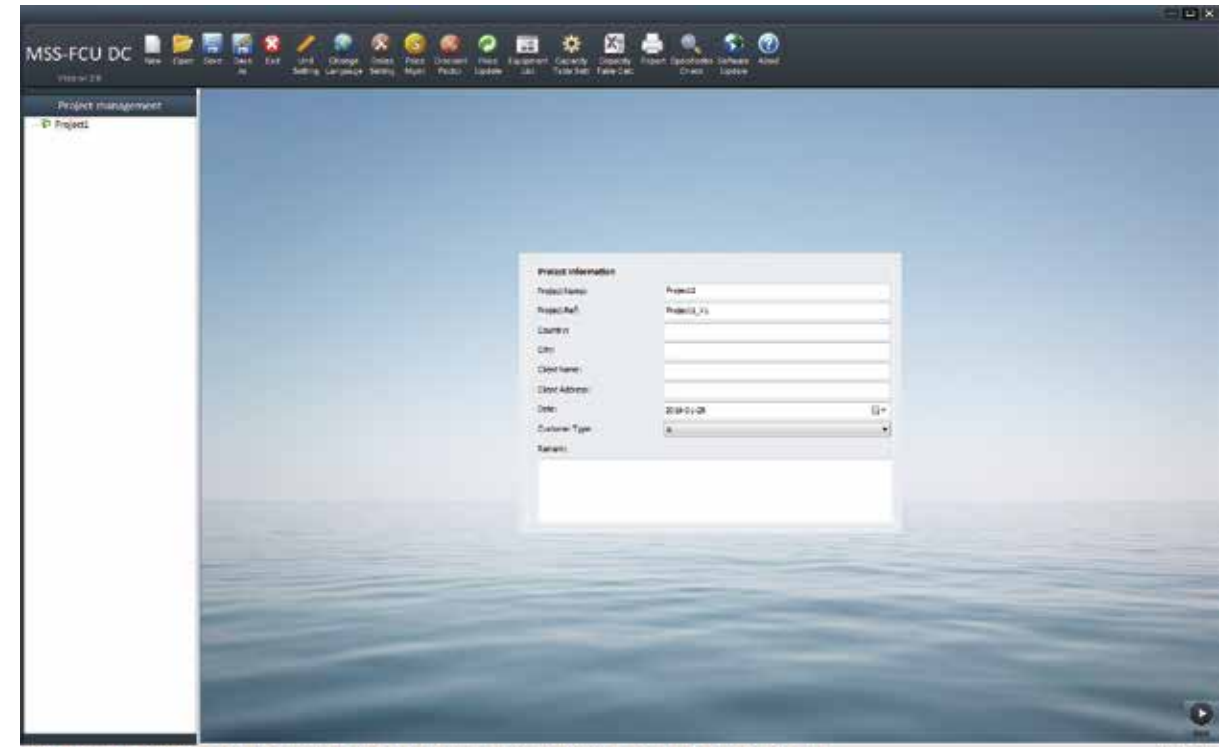
Notes: Please note that the PCB kit and Wired Controller(KJR-18B / KJRP-86A) can not be connected with an Indoor Unit at the same time



Notes: When connecting to BMS through the BACnet protocol, a custom version of CCM30 was required.

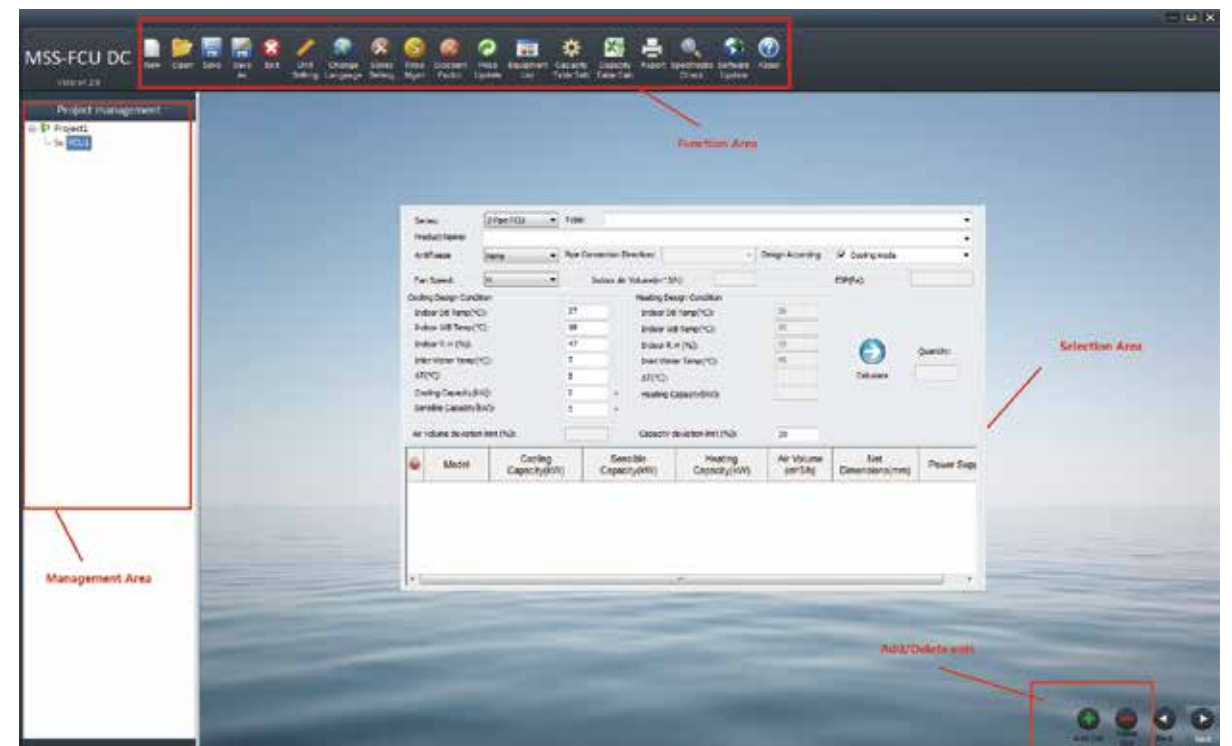
# Selection Software

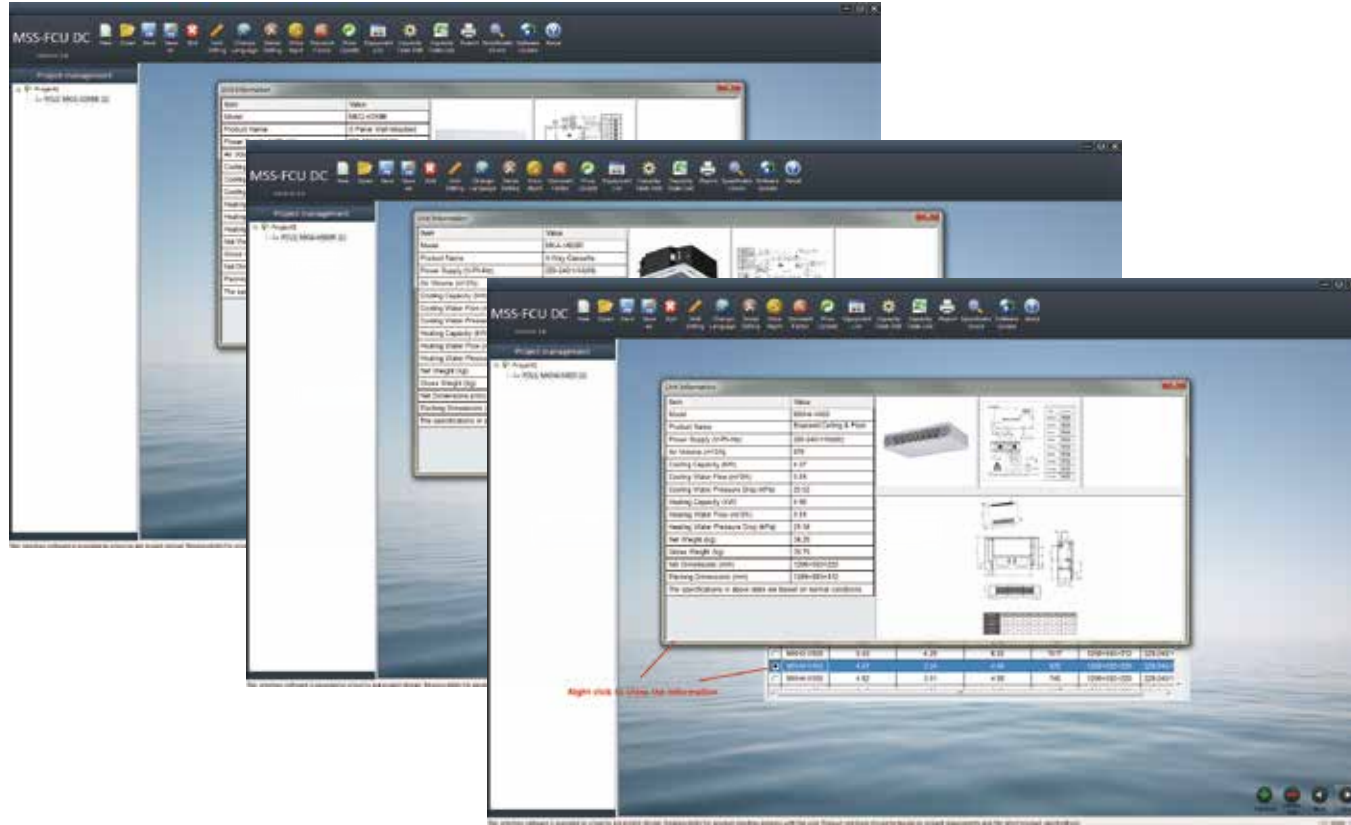
## Features



- Select by entering air and water conditions as well as fan speed.
- Easy to operate interface and visual display.
- Powerful project management function.

## Main Interface





Report Data Interface

The screenshot shows the Report Data Interface for 'MSS-FCU DC'. The main data table is titled 'Indoor temperature (D.D.)' and is organized by zone (EWT) and time (ΔT). The table contains the following data:

EWT	ΔT	Indoor temperature (D.D.)	Indoor temperature (D.D.)																					
			21				22				25				27				29					
[°C]	[°C]	[°C]	TC	SC	WF	WFO	TC	SC	WF	WFO	TC	SC	WF	WFO	TC	SC	WF	WFO	TC	SC	WF	WFO		
3	15	2.26	1.62	0.68	57.62	2.26	1.86	0.64	96.89	2.30	2.17	0.96	18.72	2.52	2.62	0.72	68.40	2.76	2.76	0.78	80.37			
	17	3.01	1.65	0.68	32.78	2.99	1.89	0.65	91.99	2.98	2.10	0.95	31.20	2.36	2.33	0.84	50.41	2.95	2.95	0.84	89.63			
	19	5.80	1.67	1.68	138.24	3.79	1.90	1.08	138.18	3.77	2.13	1.07	136.97	3.75	3.36	1.87	135.85	3.73	2.68	1.06	134.74			
	20	-	-	-	-	4.21	1.92	1.20	165.71	4.19	2.15	1.19	164.36	4.17	2.38	1.19	163.86	4.15	2.60	1.18	161.78			
	20.5	-	-	-	-	4.42	1.93	1.26	188.75	4.40	2.10	1.26	175.32	4.39	2.39	1.25	177.90	4.36	2.61	1.24	176.45			
4	15	1.95	1.50	0.43	28.18	2.01	1.77	0.43	28.35	2.10	2.11	0.40	32.40	2.41	2.41	0.52	36.00	2.66	2.66	0.57	45.99			
	17	2.75	1.53	0.59	48.75	2.74	1.76	0.59	48.35	2.72	1.90	0.50	47.91	2.71	2.22	0.58	47.40	2.74	2.52	0.58	48.55			
	19	3.55	1.56	0.76	75.68	3.54	1.89	0.76	75.02	3.52	2.02	0.76	74.39	3.51	2.25	0.75	72.77	3.49	2.47	0.75	73.15			
	20	-	-	-	-	3.96	1.91	0.85	91.07	3.94	2.04	0.85	90.32	3.93	2.27	0.84	89.58	3.91	2.49	0.84	88.85			
	20.5	-	-	-	-	4.18	1.82	0.90	99.94	4.16	2.06	0.99	99.03	4.14	2.28	0.99	98.22	4.12	2.51	0.98	97.43			
5	15	1.72	1.43	0.48	18.18	1.83	1.72	0.48	18.33	2.03	2.02	0.36	19.89	2.29	2.29	0.39	21.41	2.55	2.55	0.41	23.15			
	17	2.47	1.41	0.42	27.68	2.46	1.64	0.42	27.41	2.61	1.97	0.42	27.14	2.45	2.14	0.42	27.38	2.68	2.48	0.44	29.86			
	19	3.29	1.45	0.58	45.69	3.28	1.68	0.58	44.70	3.28	1.91	0.56	44.30	3.24	2.14	0.56	43.91	3.23	2.36	0.56	45.53			
	20	-	-	-	-	3.70	1.70	0.64	55.10	3.68	1.93	0.63	54.83	3.67	2.18	0.63	54.47	3.65	2.38	0.63	53.71			
	20.5	-	-	-	-	3.90	1.71	0.67	60.79	3.91	1.94	0.67	60.28	3.89	2.17	0.67	59.78	3.87	2.39	0.66	58.79			
6	15	1.40	1.34	0.48	4.99	1.62	1.59	0.23	6.62	1.90	1.90	0.27	11.27	2.17	2.17	0.31	15.64	2.43	2.43	0.35	19.63			
	17	2.14	1.27	0.31	15.43	2.15	1.52	0.40	15.32	2.13	1.75	0.30	15.23	2.27	2.09	0.32	17.25	2.44	2.38	0.35	19.79			
	19	3.01	1.30	0.43	28.28	2.99	1.56	0.43	27.93	2.97	1.70	0.42	27.67	2.96	2.01	0.42	27.41	2.94	2.54	0.42	27.16			
	20	-	-	-	-	3.43	1.68	0.49	36.21	3.41	1.91	0.49	34.90	3.39	2.04	0.48	34.69	3.27	2.26	0.48	34.29			
	20.5	-	-	-	-	3.66	1.69	0.52	39.19	3.62	1.92	0.52	38.86	3.61	2.06	0.52	38.51	3.59	2.28	0.51	38.18			
7	15	1.70	1.37	0.49	34.61	1.78	1.69	0.61	37.84	2.01	2.01	0.60	46.21	2.26	2.26	0.65	66.61	2.61	2.61	0.72	87.67			
	17	2.45	1.40	0.70	64.68	2.44	1.63	0.70	64.08	2.42	1.86	0.69	63.45	2.41	2.13	0.69	63.07	2.43	2.48	0.72	88.79			
	19	3.25	1.43	0.93	136.22	3.23	1.66	0.93	134.29	3.22	1.89	0.92	133.37	3.20	2.12	0.92	132.45	3.18	2.34	0.91	131.56			
	20	-	-	-	-	3.66	1.68	1.05	128.84	3.64	1.91	1.04	127.74	3.62	2.13	1.04	126.65	3.60	2.36	1.03	125.57			
	20.5	-	-	-	-	3.87	1.68	1.11	142.35	3.85	1.91	1.10	141.15	3.84	2.14	1.10	139.96	3.82	2.37	1.09	138.78			