



Air Handling Unit

Air Handling Unit (AHU) is the primary equipment in an air system of central air conditioning system. It handles and conditions the air and distributes it to various conditioned spaces. Midea air handling units (AHUs) have been designed and manufactured to meet the requirements of all kinds of space cooling and heating, such as office buildings, shopping malls, exhibition halls, airports, railway stations, hotels, factories and any other central air-conditioning systems.

Midea AHUs have been widely used in many parts of the world. Now, the 3rd generation AHU has been launched to provide you with more comfort and convenience. It adapts unitary structure design, more outstanding cold-bridge free performance, lower air leakage and more elegant appearance. There are 3 types - suspended type, horizontal type and vertical type, including 66 standard models, and the air flow rate is available from 2,000m³/h to 40,000m³/h. Different external static pressure (ESP) can be customized to meet different kinds of applications.

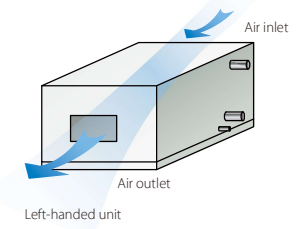
Nomenclature

MKS 05 W 4 Y / C-H

- ▶ C-H: The 3rd design series
- ▶ Pipe Connecting Mode
Y: Right-handed
Z: Left-handed
- ▶ Coil Rows
4: 4-rows; 6: 6-rows
- ▶ Unit Structure
W: Horizontal;
L: Vertical;
D: Suspended
- ▶ Air Flow Rate, x1,000m³/h
- ▶ Midea Air Handling Unit

Orientation

Unit handling orientation is determined by location of pipe connection while facing unit in the direction of air flow. The unit below is left-handed connection unit, otherwise is right-handed connection unit.



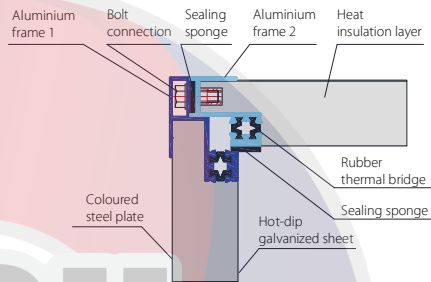
Features

High strength, high reliability

Panels are double-skin with injection of high density polyurethane. The panel frame adopts the composite profile structure patent, the built-in high-strength aluminum profile makes the box body stronger, and the mechanical strength of the box that fulfils the requirements in European EN1886, Class 2 and above.

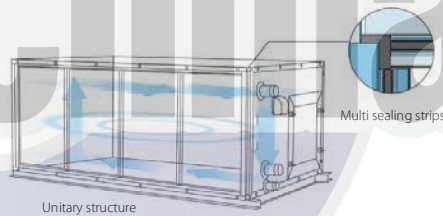
Outstanding cold-bridge free structure

The density of polyurethane injection is $50\text{kg}/\text{m}^3$ (thermal conductivity factor $K \leq 0.0224\text{W}/\text{m}^2\cdot\text{K}$). Unit cabinet is constructed by panels with male and female aluminum alloy cards and sealing strip. The service door (or service panel) is plastic-steel frame with polyurethane injection panel and rubber sealing strip.



Low air leakage rate

Double skin panel, unitary structure design, less connecting joints, multi sealing strips in the contact surfaces, around sealing service door/ panel, all ensure almost total air can be supplied to the air-conditioned room. The air leakage rate is less than 0.29%. Units will not sweat when exterior room temperature is 27°C , relative humidity is 90%.



- Simple structural components
- Less at-site work

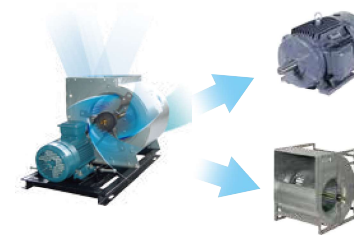
High performance heat exchanger



- Copper pipe and aluminum fin type heat exchanger, optimal choice of fin spacing and number of rows.
- Fins are coated with anticorrosive layers, assure longer coil life and lower maintenance cost.
- Optimal water circuits design, increased heat exchange efficiency and decreased water resistance, improving unit performance and efficiency.

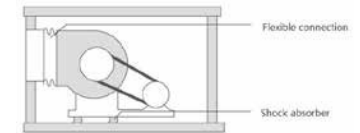
Stable air supply fan assembly

- Yilida brand centrifugal fan, high performance efficiency, 3-phase, class "F" insulation and IP55 protection AC motor.
- Belt drive, optimal selection of drive ratio, increase fan/motor assembly efficiency, easy for maintenance.
- Service door or service panel is equipped for inspection of motor and fan.



Low noise design

- Optimal fan selection, excellent working condition, efficient operation.
- Flexible connection at air outlet, minimizes vibration transmission.
- Equip with shock absorbers, decreases vibration, low noise. Tighten cabinet, secure against noise leakage.



Improved indoor air quality

- Aluminum alloy frame plate type filter, stable and durable.
- Cover the whole return air inlet, large filter surface, higher inlet air quality.
- Filter can be extracted in leftward and rightward way, easy for maintenance.



State-of-the-art design

The outer skin is colored steel sheet with anti-corrosion coat and is cleanable; the fastening bolts are concealed by plastic caps. The outer layer of film prevents panels from scratching during unit assembling and transportation. Clear, smooth and color coordination appearance make the outlook attractive.

Wide usage

- Three structure design: horizontal type, vertical type and suspended type.
- Two pipe connecting mode: right-handed and left handed.
- Air flow rate ranging from $2,000\text{m}^3/\text{h}$ to $40,000\text{m}^3/\text{h}$.
- Different ESP can be customized.

Midea AHU can be widely used in hotels, restaurants, factories, hospitals, airports, railway stations, exhibition halls, office buildings, shopping malls, laboratories and other central air-conditioning systems.



School

Factory

Hotel

Hospital

Office

Mechanical specifications

Base frame

Unit sections are mounted on galvanized steel or channel steel base frame for easy shipment and handling. The frames provide holes for section connection, and holes for fork-lift truck. Guard rail cross the bottom in the holes prevents unit damage. The base frame can be used in lieu of concrete plinths or other additional bases that are used on site. However, for high static pressure application, additional concrete plinths or other additional bases are required at site to raise the AHU for drain pan's U-trap.

Double skin panel

Standard panels are 25mm thick double skin type with injected polyurethane foam insulation. The outer skin is anti-corrosion color-coated steel sheet with a layer of film and the inner skin is galvanized steel sheet. The panel insulation is moistureproof and anti-corrosive. The insulation material is totally enclosed in the panel to avoid any possibility of insulation being exposed to air stream.

Coil

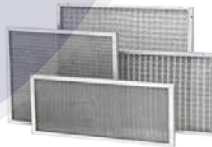
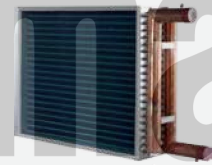
Coil used in Midea AHU is AHRI certified. It consists of copper tubes and aluminum fins. The fins are sine-wave design with slits for better heat transfer efficiency and moisture carrying capacity. Coil is leak tested at 1.6MPa in the factory. Coil is mounted over a drain pan. The coil rests on U-shaped supporter locating over the drain pan. The drain pan extends beyond the leaving side of the coil to recover condensate water. Coil connections always extend through out of the unit cabinet, allowing for easy connection of valves and piping. Air discharge valve is on the top of water outlet pipe and is located outside the cabinet.

Filter

Filter is aluminum alloy frame structure. Primary efficiency plate type filter is designed as standard. The structure of filters are stable firm, have high strength and intensity and are easy to replace or clean. Filter can be unloaded and loaded from both left and right side.

Drain pan

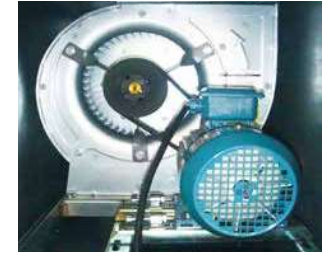
The cooling coil is installed on reversed U-shaped support plate. Standard galvanized drain pan is coated to inhibit the growth of algae and fungi. 10mm insulation is provided between the drain pan and the bottom panel. Stainless steel drain pan is optional.



Fan and motor assembly

The fan is made of high grade hot galvanized steel sheet. It is designed to a special configuration according to aerodynamics. It is coated in order to be anti-corrosive. Fan connection is isolated from unit casing by a flexible canvas duct mounted at fan discharge outlet. Fan and motor assembly is internally isolated from unit casing with rubber pad, furnished and installed in the factory.

Motors are mounted on slide rails with provision for V-belt tensioning. Motor can be moved freely in four directions to reach the correct point. Installation and maintenance of motor, belt and pulley are time saving jobs. Fan and motor assembly is mounted on a rigid base frame which is supported by effective rubber shock absorber. Discharge fan is provided with a fire retardant flexible connection.



Fan and motor assembly

Access panel



Inside



Outside

Access panel is double skins with injected polyurethane foam insulation. The outer skin is anti-corrosion coated steel sheet, the inner skin is galvanized steel sheet. The polyurethane foam insulation is heat resistant and totally enclosed. 4 hinges are used to fixed the access panel, convenient for installation and maintenance. A durable rubber seal is around the panel's frame and a 10mm thick insulation seal is stuck around the back side frame of the panel to prevent air leakage.

Air dampers

Air dampers in AHUs are optional. Aerodynamically designed damper blades have built in high quality bearings. Blade edges are lined with sealing strip to restrict leakage to an absolute minimum. Air damper blades are either linked to give parallel turning operation or gear set to give opposing direction. The dampers are tested to yield linear control characteristic.



Specifications

Suspended type

Return air condition

| Model | Air volume | Rated cooling capacity | Rated heating capacity | Water flow rate | External static pressure | Fan motor input | Water pressure drop | Chilled water pipe | Drain pipe | Sound level | Net weight | Net dimension | Package dimension | Power supply |
|-----------------|------------|------------------------|------------------------|-----------------|--------------------------|-----------------|---------------------|--------------------|------------|-------------|------------|---------------|-------------------|--------------|
| MKSxxY(orZ)/C-H | m³/h | kW | kW | L/s | Pa | kW | kPa | DN | DN | dB(A) | kg | WxDxH (mm) | WxDxH (mm) | V-Ph-Hz |
| 02D | 4 | 2000 | 11.2 | 18.6 | 0.54 | 67 | 0.37 | 19 | 40 | 58.0 | 90 | 870x750x555 | 1066x914x702 | |
| | 6 | | 14.6 | 22.6 | 0.70 | 227 | 0.75 | 32 | 40 | 58.9 | 95 | | | |
| 03D | 4 | 3000 | 17.1 | 26.7 | 0.82 | 52 | 0.55 | 35 | 40 | 58.0 | 120 | 1020x830x605 | 1216x994x752 | |
| | 6 | | 22.0 | 33.8 | 1.05 | 212 | 0.75 | 57 | 40 | 58.1 | 125 | | | |
| 04D | 4 | 4000 | 22.8 | 39.9 | 1.09 | 70 | 0.75 | 52 | 40 | 60.0 | 145 | 1300x830x605 | 1496x994x752 | |
| | 6 | | 29.3 | 45.1 | 1.40 | 230 | 1.10 | 62 | 40 | 61.9 | 155 | | | |
| 05D | 4 | 5000 | 28.5 | 47.5 | 1.36 | 42 | 1.10 | 20 | 40 | 62.0 | 160 | 1390x830x605 | 1586x994x752 | |
| | 6 | | 36.6 | 56.4 | 1.75 | 202 | 1.50 | 40 | 40 | 63.0 | 170 | | | |
| 06D | 4 | 6000 | 34.1 | 57.5 | 1.63 | 92 | 1.10 | 25 | 40 | 62.0 | 180 | 1590x830x605 | 1786x994x752 | |
| | 6 | | 44.1 | 67.7 | 2.11 | 252 | 2.20 | 54 | 40 | 63.3 | 190 | | | |
| 07D | 4 | 7000 | 39.1 | 66.0 | 1.90 | 98 | 1.10 | 44 | 40 | 64.0 | 190 | 1590x830x705 | 1786x994x852 | |
| | 6 | | 51.7 | 79.0 | 2.47 | 258 | 2.20 | 61 | 40 | 65.4 | 205 | | | |
| 08D | 4 | 8000 | 45.5 | 73.1 | 2.17 | 79 | 1.50 | 31 | 50 | 64.0 | 205 | 1700x830x705 | 1896x994x852 | |
| | 6 | | 59.1 | 90.2 | 2.82 | 239 | 2.20 | 42 | 50 | 65.5 | 220 | | | |
| 09D | 4 | 9000 | 51.2 | 83.0 | 2.45 | 116 | 2.20 | 34 | 50 | 66.0 | 235 | 1700x920x755 | 1896x1084x902 | |
| | 6 | | 67.1 | 100.8 | 3.21 | 286 | 3.00 | 59 | 50 | 67.0 | 250 | | | |
| 10D | 4 | 10000 | 58.9 | 99.3 | 2.81 | 136 | 2.20 | 30 | 50 | 66.0 | 260 | 1940x920x755 | 2136x1084x902 | |
| | 6 | | 74.6 | 112.0 | 3.56 | 306 | 3.00 | 58 | 50 | 67.8 | 280 | | | |
| 12D | 4 | 12000 | 68.3 | 113.5 | 3.26 | 108 | 3.00 | 52 | 50 | 68.0 | 270 | 1940x920x860 | 2136x1084x1007 | |
| | 6 | | 85.6 | 135.2 | 4.09 | 278 | 4.00 | 57 | 50 | 69.6 | 290 | | | |
| 15D | 4 | 15000 | 85.3 | 142.1 | 4.08 | 125 | 4.00 | 36 | 50 | 70.0 | 350 | 2240x1000x905 | 2436x1164x1052 | |
| | 6 | | 107.0 | 169.0 | 5.11 | 305 | 5.50 | 33 | 50 | 71.8 | 380 | | | |

- 1.Cooling capacity is based in the following condition
 a)Water temperature: 7°C(inlet)/12°C(outlet) b)Air entering condition: 27°C DB/19.5°C WB
 2.Heating capacity is based on the following condition
 a)Water temperature: 60°C(inlet) /same water flow as in standard rating condition in cooling(outlet) b)Air entering condition: 21°C DB

Fresh air condition

| Model | Air volume | Rated cooling capacity | Rated heating capacity | Water flow rate | External static pressure | Fan motor input | Water pressure drop | Chilled water pipe | Drain pipe | Sound level | Net weight | Net dimension | Package dimension | Power supply |
|-----------------|------------|------------------------|------------------------|-----------------|--------------------------|-----------------|---------------------|--------------------|------------|-------------|------------|---------------|-------------------|--------------|
| MKSxxY(orZ)/C-H | m³/h | kW | kW | L/s | Pa | kW | kPa | DN | DN | dB(A) | kg | WxDxH (mm) | WxDxH (mm) | V-Ph-Hz |
| 02D | 4 | 2000 | 23.5 | 27.3 | 1.12 | 67 | 0.37 | 38 | 40 | 58.0 | 90 | 870x750x555 | 1066x914x702 | |
| | 6 | | 28.4 | 33.0 | 1.35 | 227 | 0.75 | 54 | 40 | 58.9 | 95 | | | |
| 03D | 4 | 3000 | 32.0 | 35.6 | 1.53 | 52 | 0.55 | 55 | 40 | 58.0 | 120 | 1020x830x605 | 1216x994x752 | |
| | 6 | | 42.5 | 49.4 | 2.03 | 212 | 0.75 | 77 | 40 | 58.1 | 125 | | | |
| 04D | 4 | 4000 | 45.5 | 52.0 | 2.17 | 70 | 0.75 | 52 | 40 | 60.0 | 145 | 1300x830x605 | 1496x994x752 | |
| | 6 | | 56.7 | 65.9 | 2.71 | 230 | 1.10 | 58 | 40 | 61.9 | 155 | | | |
| 05D | 4 | 5000 | 57.1 | 72.6 | 2.73 | 42 | 1.10 | 61 | 40 | 62.0 | 160 | 1390x830x605 | 1586x994x752 | |
| | 6 | | 70.9 | 82.4 | 3.39 | 202 | 1.50 | 58 | 40 | 63.0 | 170 | | | |
| 06D | 4 | 6000 | 64.9 | 84.0 | 3.10 | 92 | 1.10 | 37 | 40 | 62.0 | 180 | 1590x830x605 | 1786x994x752 | |
| | 6 | | 84.5 | 97.0 | 4.04 | 252 | 2.20 | 62 | 40 | 63.3 | 190 | | | |
| 07D | 4 | 7000 | 83.8 | 97.2 | 4.00 | 98 | 1.10 | 36 | 40 | 64.0 | 190 | 1590x830x705 | 1786x994x852 | |
| | 6 | | 98.9 | 115.5 | 4.72 | 258 | 2.20 | 59 | 40 | 65.4 | 205 | | | |
| 08D | 4 | 8000 | 87.6 | 112.0 | 4.19 | 79 | 1.50 | 73 | 50 | 64.0 | 205 | 1700x830x705 | 1896x994x852 | |
| | 6 | | 113.0 | 132.0 | 5.40 | 239 | 2.20 | 46 | 50 | 65.5 | 220 | | | |
| 09D | 4 | 9000 | 106.1 | 123.1 | 5.07 | 116 | 2.20 | 39 | 50 | 66.0 | 235 | 1700x920x755 | 1896x1084x902 | |
| | 6 | | 126.9 | 148.5 | 6.06 | 286 | 3.00 | 46 | 50 | 67.0 | 250 | | | |
| 10D | 4 | 10000 | 113.0 | 140.0 | 5.40 | 136 | 2.20 | 79 | 50 | 66.0 | 260 | 1940x920x755 | 2136x1084x902 | |
| | 6 | | 141.0 | 165.0 | 6.74 | 306 | 3.00 | 69 | 50 | 67.8 | 280 | | | |
| 12D | 4 | 12000 | 139.1 | 161.4 | 6.65 | 108 | 3.00 | 41 | 50 | 68.0 | 270 | 1940x920x860 | 2136x1084x1007 | |
| | 6 | | 170.4 | 197.6 | 8.14 | 278 | 4.00 | 57 | 50 | 69.6 | 290 | | | |
| 15D | 4 | 15000 | 170.0 | 210.0 | 8.12 | 125 | 4.00 | 73 | 50 | 70.0 | 350 | 2240x1000x905 | 2436x1164x1052 | |
| | 6 | | 213.0 | 247.0 | 10.18 | 305 | 5.50 | 76 | 50 | 71.8 | 380 | | | |

- 1.Cooling capacity is based in the following condition
 a)Water temperature: 7°C(inlet)/12°C(outlet) b)Air entering condition: 35°C DB/28°C WB
 2.Heating capacity is based on the following condition
 a)Water temperature: 60°C(inlet) /same water flow as in standard rating condition in cooling(outlet) b)Air entering condition: 7°C DB

Horizontal type

Return air condition

| Model | Air volume | Rated cooling capacity | Rated heating capacity | Water flow rate | External static pressure | Fan motor input | Water pressure drop | Chilled water pipe | Drain pipe | Sound level | Net weight | Net dimension | Package dimension | Power supply |
|-----------------|------------|------------------------|------------------------|-----------------|--------------------------|-----------------|---------------------|--------------------|------------|-------------|------------|----------------|-------------------|--------------|
| MKSxxY(orZ)/C-H | m³/h | kW | kW | L/s | Pa | kW | kPa | DN | DN | dB(A) | kg | WxDxH (mm) | WxDxH (mm) | V-Ph-Hz |
| 05W | 4 | 5000 | 28.3 | 47.5 | 1.35 | 96 | 1.1 | 20.2 | 40 | 59.5 | 190 | 1100x1120x840 | 1294x1264x980 | |
| | 6 | | 36.6 | 56.4 | 1.75 | 256 | 1.5 | 39.5 | 40 | 61.2 | 230 | | | |
| 06W | 4 | 6000 | 34.6 | 58.8 | 1.65 | 68 | 1.1 | 25 | 40 | 60.3 | 210 | 1200x1120x840 | 1394x1264x980 | |
| | 6 | | 44.1 | 67.7 | 2.11 | 228 | 2.2 | 54 | 40 | 61.4 | 270 | | | |
| 08W | 4 | 8000 | 50.8 | 73.1 | 2.43 | 78 | 1.5 | 30.7 | 50 | 63.1 | 250 | 1450x1170x945 | 1646x1314x1092 | |
| | 6 | | 59.1 | 90.2 | 2.82 | 198 | 2.2 | 42.3 | 50 | 63.5 | 273 | | | |
| 10W | 4 | 10000 | 63.2 | 91.3 | 3.02 | 112 | 3 | 30 | 50 | 63.5 | 300 | 1650x1200x965 | 1864x1344x1112 | |
| | 6 | | 74.6 | 112 | 3.56 | 152 | 3 | 58 | 50 | 65.2 | 325 | | | |
| 15W | 4 | 15000 | 91 | 131.3 | 4.35 | 125 | 4 | 35.5 | 50 | 66.1 | 390 | 1940x1220x1195 | 2134x1364x1338 | |
| | 6 | | 107 | 169 | 5.11 | 305 | 5.5 | 33 | 65 | 68.2 | 480 | | | |
| 20W | 4 | 20000 | 119.3 | 183.4 | 5.70 | 210 | 7.5 | 28.1 | 65 | 70.4 | 500 | 2440x1350x1310 | 2642x1502x1462 | |
| | 6 | | 149 | 224 | 7.12 | 210 | 7.5 | 59 | 65 | 71.6 | 620 | | | |
| 25W | 4 | 25000 | 149.3 | 248.9 | 7.13 | 318 | 7.5 | 34 | 65 | 70.2 | 580 | 2590x1400x1510 | 2792x1552x1662 | |
| | 6 | | 187 | 279 | 8.93 | 318 | 7.5 | 64 | 80 | 71.5 | 685 | | | |
| 30W | 4 | 30000 | 179.2 | 298.7 | 8.56 | 273 | 11 | 53.3 | 65 | 73.3 | 650 | 2790x1450x1580 | 2992x1602x1727 | |
| | 6 | | 225 | 335 | 10.75 | 273 | 11 | 69 | 80 | 73.5 | 765 | | | |
| 35W | 4 | 35000 | 209.1 | 348.4 | 9.99 | 432 | 2x5.5 | 40 | 2x65 | 73.8 | 880 | 2790x1880x1930 | 3042x2028x2082 | |
| | 6 | | 265 | 391 | 12.66 | 432 | 2x7.5 | 67 | 2x65 | 74.2 | 950 | | | |
| 40W | 4 | 40000 | 238.9 | 398.2 | 11.41 | 405 | 2x7.5 | 41.2 | 2x65 | 76.2 | 920 | 2790x1880x2060 | 3042x2028x2212 | |
| | 6 | | 300 | 447 | 14.33 | 405 | 2x7.5 | 68 | 2x65 | 77.5 | 1150 | | | |

- 1.Cooling capacity is based in the following condition
 a)Water temperature: 7°C(inlet)/12°C(outlet) b)Air entering condition: 27°C DB/19.5°C WB
 2.Heating capacity is based on the following condition
 a)Water temperature: 60°C(inlet) /same water flow as in standard rating condition in cooling(outlet) b)Air entering condition: 21°C DB

Fresh air condition

| Model | Air volume | Rated cooling capacity | Rated heating capacity | Water flow rate | External static pressure | Fan motor input | Water pressure drop | Chilled water pipe | Drain pipe | Sound level | Net weight | Net dimension | Package dimension | Power supply |
|-----------------|------------|------------------------|------------------------|-----------------|--------------------------|-----------------|---------------------|--------------------|------------|-------------|------------|----------------|-------------------|--------------|
| MKSxxY(orZ)/C-H | m³/h | kW | kW | L/s | Pa | kW | kPa | DN | DN | dB(A) | kg | WxDxH (mm) | WxDxH (mm) | V-Ph-Hz |
| 05W | 4 | 5000 | 57.1 | 72.6 | 2.70 | 96 | 1.1 | 61 | 40 | 59.5 | 190 | 1100x1120x840 | 1294x1264x980 | |
| | 6 | | 70.9 | 82.4 | 3.40 | 256 | 1.5 | 58 | 40 | 61.2 | 230 | | | |
| 06W | 4 | 6000 | 64.9 | 84.0 | 3.10 | 68 | 1.1 | 37 | 40 | 60.3 | 210 | 1200x1120x840 | 1394x1264x980 | |
| | 6 | | 84.5 | 97.0 | 4.00 | 228 | 2.2 | 62 | 40 | 61.4 | 270 | | | |
| 08W | 4 | 8000 | 87.6 | 112.0 | 4.20 | 78 | 1.5 | 73 | 50 | 63.1 | 250 | 1450x1170x945 | 1646x1314x1092 | |
| | 6 | | 113.0 | 132.0 | 5.40 | 198 | 2.2 | 46 | 50 | 63.5 | 273 | | | |
| 10W | 4 | 10000 | 113.0 | 140.0 | 5.40 | 112 | 3 | 79 | 50 | 63.5 | 300 | 1650x1200x965 | 1864x1344x1112 | |
| | 6 | | 141.0 | 165.0 | 6.70 | 152 | 3 | 69 | 50 | 65.2 | 325 | | | |
| 15W | 4 | 15000 | 170.0 | 210.0 | 8.10 | 125 | 4 | 73 | 50 | 66.1 | 390 | 1940x1220x1195 | 2134x1364x1338 | |
| | 6 | | 213.0 | 247.0 | 10.20 | 305 | 5.5 | 76 | 65 | 68.2 | 480 | | | |
| 20W | 4 | 20000 | 222.0 | 280.0 | 10.60 | 210 | 7.5 | 69 | 65 | | | | | |

Vertical type

Return air condition

| Model | Air volume | Rated cooling capacity | Rated heating capacity | Water flow rate | External static pressure | Fan motor input | Water pressure drop | Chilled water pipe | Cooling water pipe | Sound level | Net weight | Net dimension | Package dimension | Power supply |
|-----------------|-------------------|------------------------|------------------------|-----------------|--------------------------|-----------------|---------------------|--------------------|--------------------|-------------|------------|----------------|-------------------|-----------------|
| MKSxxY(orZ)/C-H | m ³ /h | kW | kW | L/s | Pa | kW | kPa | DN | DN | dB(A) | kg | WxDxH (mm) | WxDxH (mm) | V-Ph-Hz |
| 03L | 4 | 17.1 | 26.7 | 0.82 | 52 | 0.75 | 35 | 40 | 25 | 57.1 | 130 | 1010x580x1100 | 1260x730x1290 | 380-415V-3-50Hz |
| | 6 | 22.0 | 33.8 | 1.05 | 212 | 1.1 | 57 | 40 | 57.5 | 140 | | | | |
| 04L | 4 | 22.8 | 39.9 | 1.09 | 79 | 1.1 | 52 | 40 | 25 | 58.2 | 150 | 1050x580x1250 | 1300x730x1440 | |
| | 6 | 29.3 | 45.1 | 1.40 | 239 | 1.5 | 62 | 40 | 60.3 | 162 | | | | |
| 05L | 4 | 28.3 | 47.5 | 1.40 | 96 | 1.1 | 20 | 40 | 25 | 60.5 | 170 | 1110x630x1420 | 1360x780x1610 | |
| | 6 | 36.6 | 56.4 | 1.70 | 256 | 2.2 | 40 | 40 | 61.2 | 185 | | | | |
| 06L | 4 | 34.6 | 58.8 | 1.70 | 68 | 1.5 | 25 | 40 | 25 | 61.4 | 190 | 1200x630x1470 | 1450x780x1660 | |
| | 6 | 44.1 | 67.7 | 2.10 | 228 | 2.2 | 54 | 40 | 61.9 | 210 | | | | |
| 08L | 4 | 50.8 | 73.1 | 2.40 | 118 | 2.2 | 31 | 40 | 25 | 63.2 | 230 | 1350x740x1650 | 1600x890x1840 | |
| | 6 | 59.1 | 90.2 | 2.80 | 288 | 3.0 | 42 | 40 | 63.6 | 255 | | | | |
| 10L | 4 | 58.9 | 99.3 | 2.81 | 112 | 3.0 | 30 | 50 | 25 | 64.5 | 250 | 1410x740x1800 | 1660x890x1990 | |
| | 6 | 74.6 | 112.0 | 3.60 | 292 | 4.0 | 58 | 50 | 65.4 | 290 | | | | |
| 15L | 4 | 91 | 131.3 | 4.30 | 125 | 5.5 | 36 | 50 | 25 | 67.6 | 360 | 1940x740x1880 | 2190x960x2070 | |
| | 6 | 107.0 | 169.0 | 5.10 | 205 | 5.5 | 33 | 50 | 68.4 | 410 | | | | |
| 20L | 4 | 113.7 | 183.4 | 5.4 | 152 | 7.5 | 28 | 50 | 25 | 70.5 | 480 | 2420x860x1980 | 2670x1080x2170 | |
| | 6 | 149.0 | 224.0 | 7.10 | 152 | 7.5 | 59 | 50 | 71.2 | 540 | | | | |
| 25L | 4 | 149.3 | 248.9 | 7.10 | 218 | 7.5 | 34 | 65 | 25 | 70.7 | 620 | 2790x960x2160 | 3040x1180x2350 | |
| | 6 | 187.0 | 279.0 | 8.90 | 218 | 7.5 | 64 | 65 | 71.3 | 680 | | | | |
| 30L | 4 | 179.2 | 298.7 | 8.60 | 173 | 11.0 | 53 | 65 | 25 | 73.1 | 690 | 2790x960x2360 | 3040x1180x2540 | |
| | 6 | 225.0 | 335.0 | 10.80 | 173 | 11.0 | 69 | 65 | 73.5 | 760 | | | | |
| 35L | 4 | 209.1 | 348.4 | 10.00 | 235 | 11.0 | 40 | 80 | 25 | 73.6 | 780 | 3200x1000x2360 | 3450x1220x2540 | |
| | 6 | 265.0 | 391.0 | 12.70 | 235 | 15.0 | 67 | 80 | 74.2 | 860 | | | | |
| 40L | 4 | 238.9 | 398.2 | 11.40 | 193 | 15.0 | 41 | 80 | 25 | 76.2 | 850 | 3400x1000x2360 | 3650x1220x2540 | |
| | 6 | 300.0 | 447.0 | 14.30 | 193 | 15.0 | 68 | 80 | 77.5 | 940 | | | | |

1.Cooling capacity is based in the following

a)Water temperature:7°C(inlet)/12°C(outlet) b)Air entering condition:27°C DB/19.5°C WB

2.Heating capacity is based on the following:

a)Water temperature:60°C(inlet) /same water flow as in standard rating condition in cooling(outlet) b)Air entering condition:21°C DB

Fresh air condition

| Model | Air volume | Rated cooling capacity | Rated heating capacity | Water flow rate | External static pressure | Fan motor input | Water pressure drop | Chilled water pipe | Cooling water pipe | Sound level | Net weight | Net dimension | Package dimension | Power supply |
|-----------------|-------------------|------------------------|------------------------|-----------------|--------------------------|-----------------|---------------------|--------------------|--------------------|-------------|------------|----------------|-------------------|-----------------|
| MKSxxY(orZ)/C-H | m ³ /h | kW | kW | L/s | Pa | kW | kPa | DN | DN | dB(A) | kg | WxDxH (mm) | WxDxH (mm) | V-Ph-Hz |
| 03L | 4 | 32.0 | 35.6 | 1.53 | 52 | 0.75 | 46 | 40 | 25 | 57.1 | 130 | 1010x580x1100 | 1260x730x1290 | 380-415V-3-50Hz |
| | 6 | 42.5 | 49.4 | 2.03 | 212 | 1.1 | 47 | 40 | 57.5 | 140 | | | | |
| 04L | 4 | 45.5 | 46.0 | 2.17 | 79 | 1.1 | 13 | 40 | 25 | 58.2 | 150 | 1050x580x1250 | 1300x730x1440 | |
| | 6 | 56.7 | 65.9 | 2.71 | 239 | 1.5 | 24 | 40 | 60.3 | 162 | | | | |
| 05L | 4 | 57.1 | 72.6 | 2.73 | 96 | 1.1 | 61 | 40 | 25 | 60.5 | 170 | 1110x630x1420 | 1360x780x1610 | |
| | 6 | 70.9 | 82.4 | 3.39 | 256 | 2.2 | 58 | 40 | 61.2 | 185 | | | | |
| 06L | 4 | 64.9 | 84.0 | 3.10 | 68 | 1.5 | 37 | 40 | 25 | 61.4 | 190 | 1200x630x1470 | 1450x780x1660 | |
| | 6 | 84.5 | 97.0 | 4.04 | 228 | 2.2 | 62 | 40 | 61.9 | 210 | | | | |
| 08L | 4 | 87.6 | 112.0 | 4.19 | 118 | 2.2 | 73 | 40 | 25 | 63.2 | 230 | 1350x740x1650 | 1600x890x1840 | |
| | 6 | 113.0 | 132.0 | 5.40 | 288 | 3.0 | 46 | 40 | 63.6 | 255 | | | | |
| 10L | 4 | 141.0 | 165.0 | 6.74 | 112 | 3.0 | 79 | 50 | 25 | 64.5 | 250 | 1410x740x1800 | 1660x890x1990 | |
| | 6 | 170.0 | 210.0 | 8.12 | 125 | 5.5 | 73 | 50 | 65.4 | 290 | | | | |
| 15L | 4 | 213.0 | 247.0 | 10.18 | 125 | 5.5 | 76 | 50 | 25 | 67.6 | 360 | 1940x740x1880 | 2190x960x2070 | |
| | 6 | 222.0 | 280.0 | 10.61 | 152 | 7.5 | 69 | 50 | 68.4 | 410 | | | | |
| 20L | 4 | 279.0 | 323.0 | 13.33 | 152 | 7.5 | 66 | 50 | 25 | 70.5 | 480 | 2420x860x1980 | 2670x1080x2170 | |
| | 6 | 279.0 | 350.0 | 13.33 | 218 | 7.5 | 71 | 65 | 71.2 | 540 | | | | |
| 25L | 4 | 350.0 | 404.0 | 16.72 | 218 | 7.5 | 83 | 65 | 25 | 70.7 | 620 | 2790x960x2160 | 3040x1180x2350 | |
| | 6 | 322.0 | 412.0 | 15.38 | 173 | 11.0 | 36 | 65 | 71.3 | 680 | | | | |
| 30L | 4 | 418.0 | 485.0 | 19.97 | 173 | 11.0 | 77 | 65 | 25 | 73.1 | 690 | 2790x960x2360 | 3040x1180x2540 | |
| | 6 | 480.0 | 560.0 | 23.60 | 235 | 15.0 | 67 | 80 | 73.5 | 760 | | | | |
| 35L | 4 | 494.0 | 566.0 | 23.60 | 235 | 15.0 | 67 | 80 | 25 | 73.6 | 780 | 3200x1000x2360 | 3450x1220x2540 | |
| | 6 | 570.0 | 647.0 | 26.61 | 193 | 15.0 | 35 | 80 | 74.2 | 860 | | | | |
| 40L | 4 | 647.0 | 730.0 | 30.54 | 193 | 15.0 | 35 | 80 | 25 | 76.2 | 850 | 3400x1000x2360 | 3650x1220x2540 | |
| | 6 | 775.0 | 880.0 | 36.61 | 193 | 15.0 | 77 | 80 | 77.5 | 940 | | | | |

1.Cooling capacity is based in the following:

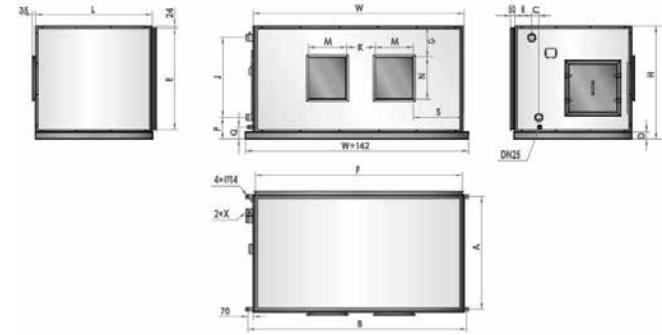
a)Water temperature:7°C(inlet)/12°C(outlet) b)Air entering condition:35°C DB/28°C WB

2.Heating capacity is based on the following:

a)Water temperature:60°C(inlet) /same water flow as in standard rating condition in cooling(outlet) b)Air entering condition:7°C DB

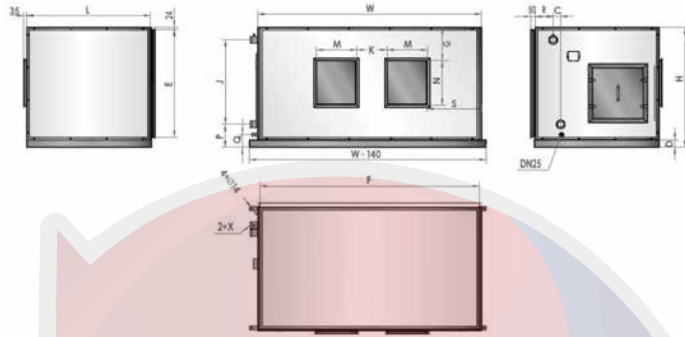
Dimensions

Suspended type



| MODEL(MKS-H) | | 02D/C | 03D/C | 04D/C | 05D/C | 06D/C | 07D/C | 08D/C | 09D/C | 10D/C | 12D/C | 15D/C | (unit:mm) | |
|-------------------------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|--|
| Outside dimension | L | 750 | 830 | 830 | 830 | 830 | 830 | 830 | 920 | 920 | 920 | 1000 | | |
| | W | 870 | 1020 | 1300 | 1390 | 1590 | 1590 | 1700 | 1700 | 1940 | 1940 | 2240 | | |
| | H | 555 | 605 | 605 | 605 | 605 | 705 | 705 | 755 | 755 | 860 | 905 | | |
| | C | 4R | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | |
| Inlet flange | E | 465 | 510 | 510 | 525 | 525 | 625 | 625 | 675 | 675 | 680 | 825 | | |
| | F | 820 | 970 | 1250 | 1340 | 1540 | 1540 | 1650 | 1650 | 1890 | 1890 | 2190 | | |
| G | 135 | 166 | 166 | 166 | 166 | 211 | 211 | 211 | 211 | 316 | 300 | | | |
| J | 195 | 245 | 245 | 295 | 295 | 400 | 400 | 445 | 445 | 550 | 595 | | | |
| K | / | / | 172 | 172 | 232 | 252 | 252 | 234 | 314 | 312 | 282 | | | |
| Outlet flange | M | 271 | 310 | 244 | 244 | 310 | 343 | 343 | 319 | 405 | 407 | 385 | | |
| | N | 238 | 274 | 274 | 274 | 274 | 301 | 301 | 351 | 351 | 353 | 416 | | |
| P | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | | | |
| Q | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | | | |
| R | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | | | |
| Diameter of connection pipe X | 4R | DN40 | DN40 | DN40 | DN40 | DN40 | DN40 | DN50 | DN50 | DN50 | DN50 | DN50 | | |
| | 6R | DN40 | DN40 | DN40 | DN40 | DN40 | DN40 | DN50 | DN50 | DN50 | DN50 | DN50 | | |

Horizontal type

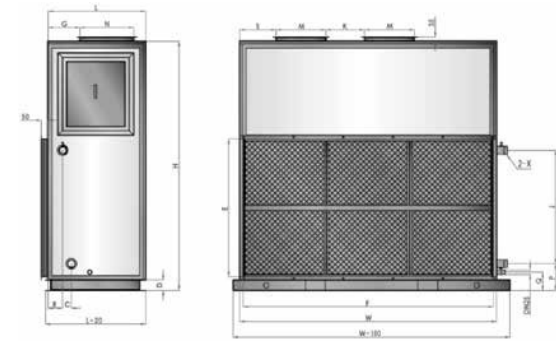


(unit:mm)

| MODEL (MKS-H) | | 05W/C | 06W/C | 08W/C | 10W/C | 15W/C | 20W/C | 25W/C | 30W/C | 35W/C | 40W/C |
|-------------------------------|----|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| Outside dimension | L | 1120 | 1120 | 1170 | 1200 | 1220 | 1350 | 1400 | 1450 | 1880 | 1880 |
| | W | 1100 | 1200 | 1450 | 1650 | 1940 | 2440 | 2590 | 2790 | 2790 | 2790 |
| | H | 840 | 840 | 945 | 965 | 1195 | 1310 | 1510 | 1580 | 1930 | 2060 |
| C | 4R | 66 | 66 | 66 | 66 | 66 | 82.5 | 82.5 | 82.5 | 82.5 | 82.5 |
| | 6R | 110 | 110 | 110 | 110 | 110 | 137.5 | 137.5 | 137.5 | 137.5 | 137.5 |
| D | | 25 | 25 | 25 | 25 | 25 | 80 | 80 | 80 | 80 | 80 |
| Inlet flange | E | 762 | 762 | 865 | 890 | 1115 | 1175 | 1375 | 1440 | 1795 | 1925 |
| | F | 1050 | 1140 | 1390 | 1600 | 1880 | 2390 | 2540 | 2740 | 2740 | 2740 |
| G | | 157 | 157 | 177 | 195 | 422 | 335 | 533 | 593 | 746 | 876 |
| J | | 498 | 498 | 599 | 599 | 853 | 923 | 1114 | 1177 | 669 | 733 |
| K | | / | / | / | / | 282 | 335 | 446 | 446 | 666 | 666 |
| Outlet flange | M | 405 | 405 | 482 | 482 | 373 | 430 | 567 | 567 | 648 | 648 |
| | N | 350 | 350 | 414 | 414 | 404 | 478 | 488 | 488 | 648 | 648 |
| P | | 172 | 172 | 172 | 172 | 172 | 224 | 224 | 224 | 224 | 224 |
| Q | | 71 | 71 | 71 | 71 | 71 | 126 | 126 | 126 | 126 | 126 |
| R | | 156 | 156 | 156 | 156 | 156 | 195 | 195 | 195 | 186 | 186 |
| Diameter of connection pipe X | 4R | DN40 | DN40 | DN50 | DN50 | DN50 | DN65 | DN65 | DN65 | 2xDN65 | 2xDN65 |
| | 6R | DN40 | DN40 | DN50 | DN50 | DN65 | DN65 | DN80 | DN80 | 2xDN65 | 2xDN65 |

note:code 2x representative two coil.

Vertical type



(unit:mm)

| MODEL (MKS-H) | | 03L/C | 04L/C | 05L/C | 06L/C | 08L/C | 10L/C | 15L/C | 20L/C | 25L/C | 30L/C | 35L/C | 40L/C |
|-------------------------------|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Outside dimension | L | 580 | 580 | 630 | 630 | 740 | 740 | 740 | 860 | 960 | 960 | 1000 | 1000 |
| | W | 1010 | 1050 | 1110 | 1200 | 1350 | 1410 | 1940 | 2420 | 2790 | 2790 | 3200 | 3400 |
| | H | 1100 | 1250 | 1420 | 1470 | 1650 | 1800 | 1880 | 1980 | 2160 | 2360 | 2360 | 2360 |
| C | 4R | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 83 | 83 | 83 | 118 | 118 |
| | 6R | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 138 | 138 | 138 | 138 | 138 |
| D | | 50 | 50 | 50 | 50 | 50 | 50 | 80 | 80 | 80 | 80 | 80 | 80 |
| Inlet flange | E | 474 | 575 | 677 | 728 | 830 | 982 | 1038 | 1026 | 1090 | 1280 | 1280 | 1280 |
| | F | 960 | 1000 | 1060 | 1150 | 1300 | 1360 | 1890 | 2370 | 2740 | 2740 | 3150 | 3350 |
| J | | 304 | 405 | 507 | 558 | 660 | 805 | 856 | 839 | 918 | 1108 | 1098 | 1098 |
| K | | / | / | / | / | / | / | 282 | 373 | 448 | 448 | 438 | 438 |
| Outlet flange | M | 309 | 342 | 405 | 405 | 482 | 482 | 384 | 482 | 567 | 567 | 579 | 579 |
| | N | 273 | 300 | 350 | 350 | 414 | 414 | 414 | 414 | 488 | 488 | 579 | 579 |
| G | | 188 | 202 | 205 | 205 | 249 | 249 | 233 | 247 | 309 | 309 | 303 | 307 |
| S | | 212 | 207 | 232 | 271 | 307 | 347 | 266 | 290 | 348 | 348 | 616 | 854 |
| P | | 161 | 161 | 161 | 161 | 161 | 168 | 203 | 206 | 211 | 211 | 214 | 214 |
| Q | | 101 | 101 | 101 | 101 | 101 | 101 | 131 | 134 | 134 | 134 | 134 | 134 |
| R | | 102 | 102 | 102 | 102 | 102 | 102 | 111 | 111 | 111 | 111 | 111 | 111 |
| Diameter of connection pipe X | 4R | DN40 | DN40 | DN40 | DN40 | DN40 | DN50 | DN50 | DN50 | DN65 | DN65 | DN80 | DN80 |
| | 6R | DN40 | DN40 | DN40 | DN40 | DN40 | DN50 | DN50 | DN50 | DN65 | DN65 | DN80 | DN80 |

note:code 2x representative two coil.