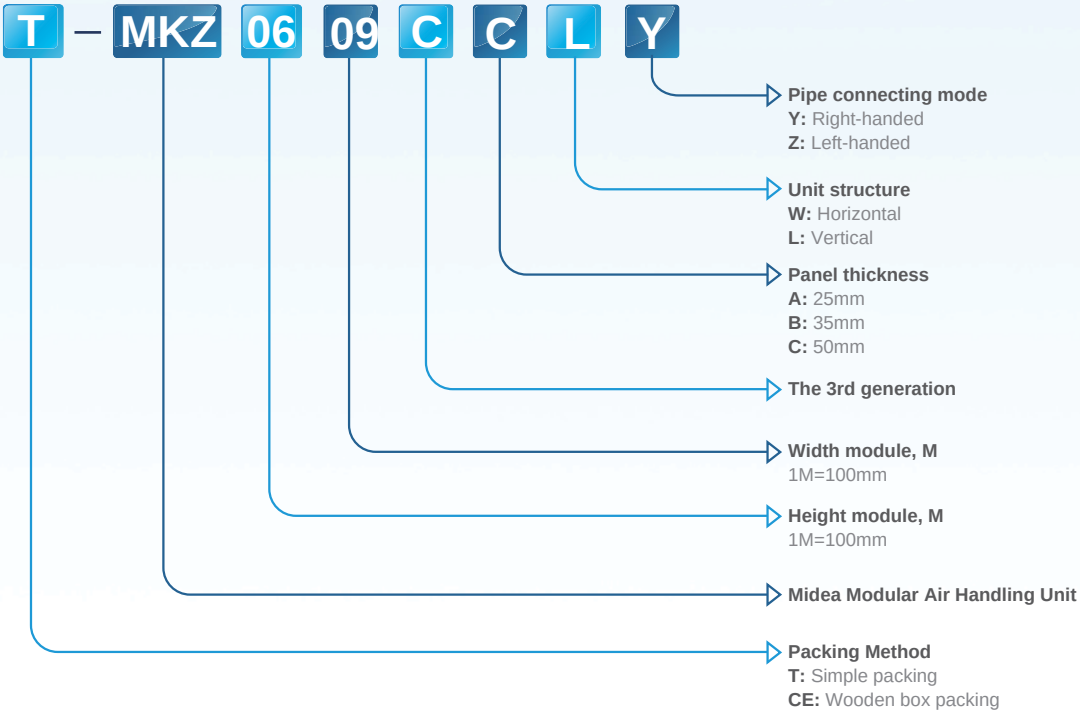
# Modular Air Handling Unit →

MAHUs are modular so that they have the flexibility to add components as required. The 3rd generation Midea MAHU adapts unitary structure design, more outstanding cold-bridge free performance, lower air leakage and more elegant appearance.

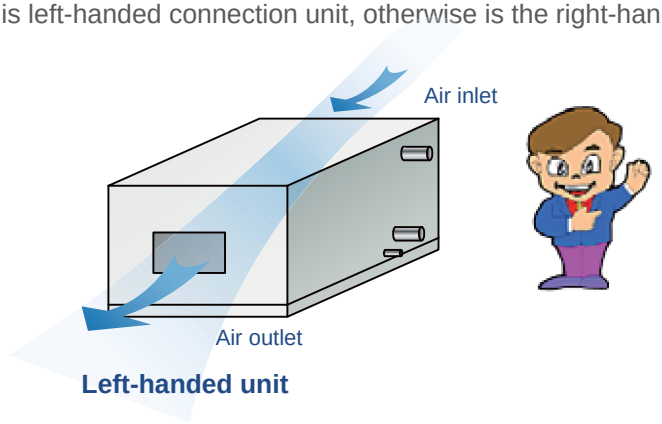
It realizes a variety of functions: cooling, heating, humidification, dehumidification, air purification, noise elimination, and so on. The air flow rate is available from 3,000m³/h to 200,000m³/h. Total pressure (TP) exceeds 2000Pa to adapt to different kinds of applications, such as office buildings, shopping malls, exhibition halls, airports, railway stations, hotels, chemical fibres, electronics industries, textile mills, tobaccos, hospitals, printers, automobile factories and any other central air-conditioning systems.

# Nomenclature




# 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 the right-handed connection unit.



# Features

## Reliable quality

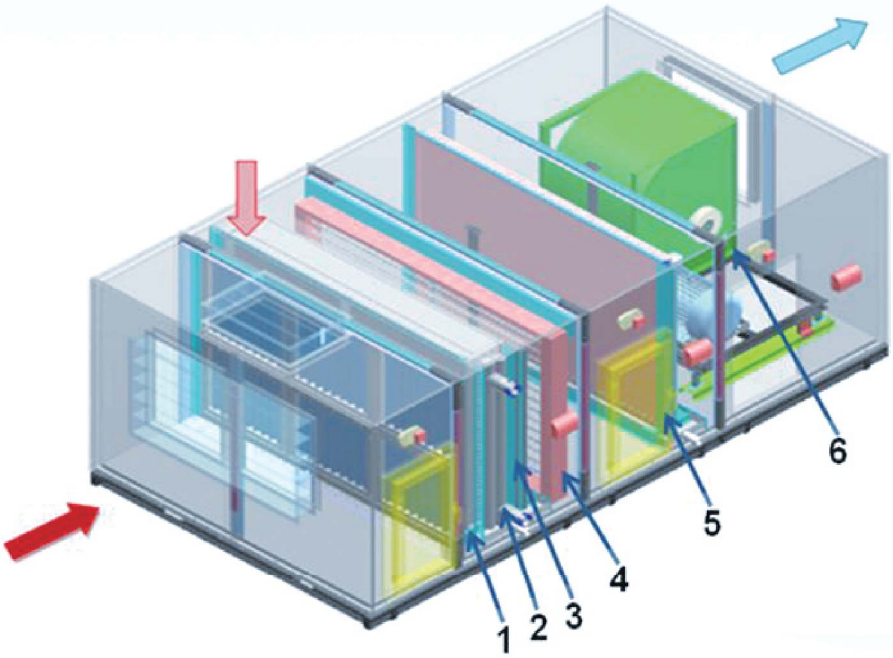
For the 3rd generation of Midea MAHUs, reinforced frame is built in the section connection gap to enhance the structure for large air flow volume and high air pressure. The MAHUs' construction provides unequaled thermal efficiencies and low leak rates. In addition, the MAHUs offers tremendous flexibility in sizing, component options, and unit arrangements to meet the indoor air quality, operating efficiency, sound and installation requirements for today's extensive commercial and custom markets.

Also, Midea combines comprehensive performance certifications with thorough laboratory testing and manufacturing methods. These assure that each MAHU operates predictably and reliably throughout the life of the unit.

## Modular design

The MAHUs adopt modulus design. Usually including mixing section, primary efficiency filter section, medium efficiency filter section, high efficiency filter section, cooling coil section, heating section, humidifier section, sound attenuator section, service section, heat recovery section, fan section and so on. Function sections can be combined freely. Different function sections can be selected according to the specific applications.

The MAHUs can be shipped in divided sections. Each section is wholly completed at manufacturer's work place, and only connection of sections can be done at site. Oversized units cannot be fitted in normal container shipment or cannot be delivered through access at site can be considered shipment in complete knock down form, but reassembling works must be done by engineers of the manufacturer.




1. Pre-filter
2. Chilled water coil
3. Eliminator
4. Electric heater
5. Wet film humidifier
6. Fan

## Cold bridge free structure

Unitary structure design and module panel design. Panels are double-skin with injection of high density polyurethane. The outer skin is anti-corrosion color-coated steel sheet, the inner skin is galvanized steel sheet, the density of polyurethane is more than 50kg/m³, and the thermal conductivity is 0.0224W/m²·K. The unit cabinet is constructed by panels with male and female aluminum alloy cards and sealing strip. The air leakage rate is less than 0.29%. Units will not sweat when exterior room temperature is 27℃, relative humidity is 90%.

## State-of-the-art design

The MAHUs adopt unitary structure design and the insert fastening bolts are covered by haps which are in accordance with the color of the outer skin, and clear, smooth appearance make the outlook attractive.

## Serviceability

The Midea MAHUs are designed to provide easy access to interior components for routine maintenance and service. The easy-to-move panels and access doors of the units provide complete access to the unit interior and components.

## Wide usage

Midea MAHUs can be widely used in chemical fibres, electronics industries, textile mills, tobaccos, hospitals, printers, automobile factories and any other central air-conditioning systems, especially these have special requirements of environment space.





## Selection software

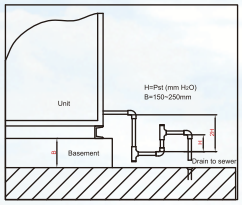
A user-friendly software selection program has been provided to help the customer easily define their product requirements.

# Mechanical specifications

## Base frame

Unit sections are mounted on galvanized steel or channel steel base frame for ease of shipment and handling. The frames provide holes for section connection, and holes for fork-lifting truck. There is a guard rail cross the bottom in the holes to prevent unit damage by trucks.

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 MAHUs for drain pan's U-trap.




## Double skin panel

The outer skin is color-coated steel sheet that is resistant to scratch and nicks and shall allow for easy cleaning. The inner skin is galvanized steel sheet.

The panels are double skin type with injected polyurethane foam insulation. The panel is moisture proof and anti-corrosive. The insulation material is totally enclosed in the panel to avoid any possibility of insulation being exposed to air stream.

The panel is sturdy and, in its standard design, unit sections of the same width can be stacked on the top of one another, without additional reinforcement.

## Drain pan

Cooling coil and humidifier are installed on reversed U-shaped supporters. A U-shaped channel is pressed in the middle of drain pan to promote proper condensate removal. Standard drain pan is galvanized steel, fully insulated on the outside with 10mm foam insulation. Stainless steel drain pan is optional. Connecting pipe is located at bottom of drain pan to allow complete drainage. The drain pipe exits from the same side as coil header.

## Access door

Access section, fan section, humidifier section and heat-exchanged coil sections usually equipped with access doors. The access doors are equipped with locking handle which is controllable internally and externally. A durable seal is around the full perimeter of the door's frame to prevent air leakage. Light is fixed above access door, and quipped with a weather-resistant plastic box.

## Vibration protector

The fan motors are mounted on a rigid base frame which is supported by effective spring shock absorber. Shipping brackets are equipped at the base frame to protect fans, motors and spring shock absorber during transportation.

## Fan assembly

The vibration levels of the complete fan assembly (fan wheel, motor and drives assembled as a whole system) is checked and dynamically balanced in the factory.

Fans are mainly consisted of scroll, impeller, frame, bearing and shaft. The scroll is made of hot galvanized steel sheet. Its side plate has an outline complying with aerodynamics. The impeller is made of high grade hot galvanizing steel sheet and is designed to a special configuration according to aerodynamics to make the efficiency highest and the noise lowest. The high quality ball bearings are air-sealed, with preset lubricating oil, and of automatically alignment. The shafts are made of 40 Cr or C45 carbon steel bars. They are coated after assembly in order to provide corrosion resistance.

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 the unit casing with spring isolators, furnished and installed by the unit manufacturer.

The drive assembly is consist of belt pulley and motor. The belt type is oil and heat resistant, antistatic and avoiding electric discharges. Motor is mounted on a sliding base to permit adjustment of drive belt tension. Standard motor is horizontal foot mounting, induction motor, and totally enclosed.

Unit is provided with a painted metal sheet belt guard. The belt guard is rigidly attached to the fan base support structure.

Fan assembly section is equipped with an access door with window on the drive side of the fan.

## Motor

Totally enclosed fan cooled motors, with class F insulation, are mounted on slide rails with provision for V-belt tensioning. Fan and motor are mounted on a common base frame fitted with anti-vibration mountings and the fan discharge is provided with a fire retardant flexible connection to completely isolate the fan and motor assembly from the unit casing.

Fan motor is mounted on a horizontal flat plate and can't be supported by the fan or its structural members. Motor is mounted within the fan section casing on slide rails equipped with adjusting screws. So motor can be moved freely in the horizontal direction to reach the correct point then fasten bolts. Installation and maintenance are time saving.

## Coil

In Midea MAHUs, there are three typical types of coils: chilled water coils, hot water coils and steam heater coils. All coils are provided to meet the scheduled performance. Coils are consisted of copper-tubes and aluminum fins. The fins are sine-wave design with slits for better heat transfer efficiency and moisture carry-over limit performance.

All coils are installed with space between each component for cleaning and mounting of controls. All cooling coils are mounted over a drain pan. The drain pan extends beyond the leaving side of the coil to help recover condensate.

Coil connections always extend through out of the unit cabinet, allowing for the easy connection of valves and piping. Vents are located outside the cabinet.



## Humidifier

Usually, there is no humidifier installed in the MAHUs for comfort air conditioning systems; but the outdoor climate is very cold in winter so that if a humidifier is not employed, the winter indoor relative humidity may be too low. Humidifiers are necessary for health care facilities and processing systems in pharmaceutical, semiconductor, textile, communication centers, and computer rooms.

In Midea MAHUs, wet film vaporization, dry steam, electrode boiler, and water spray humidifiers are widely used. Wet film vaporization humidifier is a type of enthalpy humidifier or evaporation gasification humidifier. Through the principle of exchange of heat and moisture, the air is humidified and cooled. The medium is inorganic material which is high-life, high reliability, clean, good heat conduction and bacteria resistance. Dry steam or electrode boiler humidifiers are widely used in where a warm air supply and humidity control are needed in winter.

Wet film vaporization humidifier

Dry steam humidifier

Electrode boiler humidifier

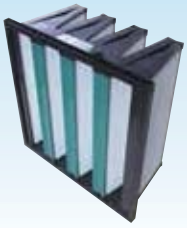
Water spray humidifier

# Filter

Air filtration is an important component to achieve an acceptable indoor air quality. In MAHUs, earlier low-efficiency filters of the panel type are giving way to the medium- and high-efficiency bag type and cartridge type of filters.

Filter section is consisted of galvanized steel filter frame structure and an access door for filter maintenance. Low efficiency plate filter is designed as standard. Bag, cartridge and other high efficiency filters is optioned. The structure of filters are stable and firm, high strength and intensity, and easy changing. Filter can be loaded from both left and right side. Front loaded is optioned. The filters efficiency is up to 95%.





## Filter efficiency table:

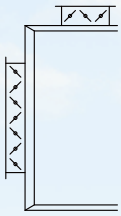
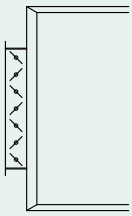
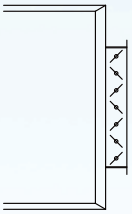
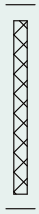
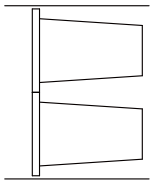
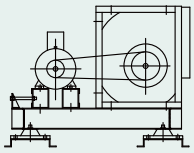
| Partical diameter | ≥5μm | | | | ≥1μm | | ≥1μm | | ≥0.5μm | | | | ≥0.3μm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| European | G1, 65% | G2, 80% | G3, 80~90% | G4, ＞90% | F5, 40% | F6, 60% | F7, 80% | F8, 90% | F9, 85% | H10, 95% | H11, 99% | H12, 99.9% | H13, 99.95% |
| Testing method | Arrestance | | | | Dust-spot | | | | | Particle-counting | | | |
| Filter Type | Plate | | | Plate/bag | | bag | | | Dense pleated | | | | HEPA |

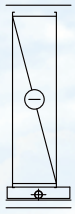
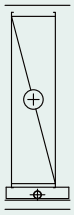
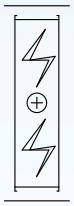
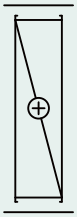
# Air dampers

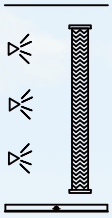
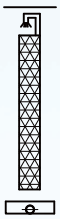
Air dampers in MAHUs are optional. Aerodynamically designed damper blades have built in high quality bearings. Blade edges are lined with sealing strip to restrict leakage to an absolute minimum. Air damper blades are either linked to give parallel turning operation or gear set to give opposing direction.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

Mixing dampers working in pairs and can be coupled in such a way that if one is 75% open the other is 25% open.

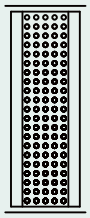
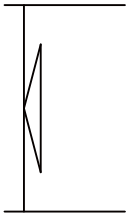
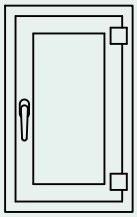
# Functional sections

| Name | Sketch | Description | |
|---|---|---|---|
| Mixing Box |  | Unit model | Length (mm) |
| | | 0609～1821 | 600 |
| | | 1824～3342 | 700 |
| | | 3636～3663 | 800 |
| Inlet Section |  | Unit model | Length (mm) |
| | | 0609～1821 | 600 |
| | | 1824～3342 | 700 |
| | | 3636～3663 | 800 |
| Outlet Section |  | Without access door | L=400mm |
| | | With access door | L=600mm |
| Plate Filter |  | L= 100mm, can be fixed in mixing box. | |
| Bag Filter |  | Bag of 381mm: L=500mm | |
| Supply Fan |  | L=700～3900mm ,depending on the unit model and air volume | |

| Name | Sketch | Description | | |
|---|---|---|---|---|
| Chilled Water Coil |  | Rows | Width(mm) | Length(mm) |
| | | 4 | W≤3300 | 600 |
| | | | W>3300 | 900 |
| | | 6 | W≤3300 | 700 |
| | | | W>3300 | 1000 |
| | | 8 | W≤3300 | 700 |
| | | | W>3300 | 1100 |
| Hot Water Coil |  | 1～3 rows | L=300mm | |
| | | 4 rows | L=400mm | |
| Electric Heater |  | L=300mm | | |
| Steam Heater Coil |  | 1～3 rows | L=300mm | |
| | | 4 rows | L=400mm | |
| Dry Steam Humidifier |  | L=700mm | | |
| Electrode Boiler Humidifier |  | L=700mm | | |

| Name | Sketch | Description |
|---|---|---|
| Water Spray Humidifier |  | L=700mm, eliminator is needed |
| Eliminator |  | Can be fixed in water spray humidifier. |
| Wet-film Humidifier |  | |

| Water Supply | Thickness (mm) | Length (mm) |
|---|---|---|
| Direct water supply | 50/100 | 300 |
| | 150/200 | 400 |
| Circular water supply | 100/150/200 | 600/700/800 |
| | 250/300 | 700/800/900 |

| | | |
|---|---|---|
| Silencer |  | Three options:L=600mm ,L=900mm ,L=1200mm |
| Diffuser |  | L=700mm |
| Access Door |  | L=600mm |

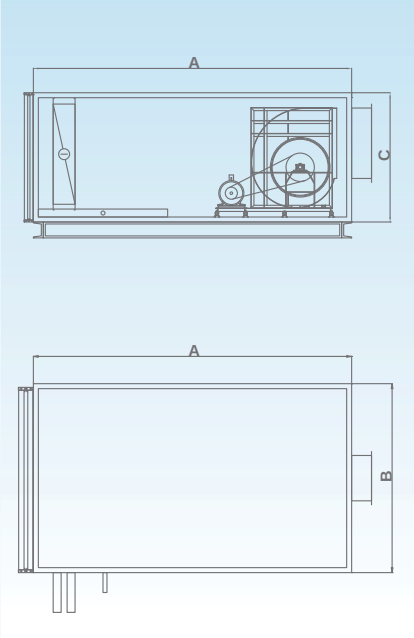
# Quick selection table

| Unit model | Air volume | Face area | Air flow | | | External static pressure | Fan impeller diameter | Motor input |
|---|---|---|---|---|---|---|---|---|
| | $m^3/h$ | $m^2$ | 2.25m/s | 2.5m/s | 2.75m/s | Pa | mm | kW |
| MKZ0609 | 2680 | 0.30 | 2412 | 2680 | 2948 | 200 | 180 | 1.1 |
| MKZ0612 | 3760 | 0.42 | 3384 | 3760 | 4137 | 200 | 225 | 1.1 |
| MKZ0909 | 4595 | 0.51 | 4135 | 4595 | 5054 | 210 | 250 | 1.5 |
| MKZ0912 | 6447 | 0.72 | 5802 | 6447 | 7091 | 220 | 280 | 2.2 |
| MKZ0915 | 8298 | 0.92 | 7468 | 8298 | 9128 | 220 | 315 | 2.2 |
| MKZ1212 | 9133 | 1.01 | 8219 | 9133 | 10046 | 260 | 335 | 2.2 |
| MKZ1215 | 11756 | 1.31 | 10580 | 11756 | 12931 | 260 | 400 | 3.0 |
| MKZ1218 | 14670 | 1.63 | 13203 | 14670 | 16137 | 280 | 450 | 4.0 |
| MKZ1221 | 17585 | 1.95 | 15827 | 17585 | 19344 | 300 | 500 | 5.5 |
| MKZ1518 | 18122 | 2.01 | 16310 | 18122 | 19934 | 320 | 500 | 5.5 |
| MKZ1524 | 25083 | 2.79 | 22575 | 25083 | 27591 | 360 | 560 | 7.5 |
| MKZ1821 | 26895 | 2.99 | 24205 | 26895 | 29584 | 380 | 560 | 11.0 |
| MKZ1827 | 35513 | 3.95 | 31962 | 35513 | 39064 | 420 | 710 | 11.0 |
| MKZ2124 | 35833 | 3.98 | 32250 | 35833 | 39416 | 440 | 710 | 11.0 |
| MKZ2127 | 40977 | 4.55 | 36879 | 40977 | 45074 | 460 | 710 | 15.0 |
| MKZ2427 | 46440 | 5.16 | 41796 | 46440 | 51084 | 500 | 800 | 15.0 |
| MKZ2433 | 58099 | 6.46 | 52289 | 58099 | 63909 | 560 | 900 | 22.0 |
| MKZ2733 | 68351 | 7.59 | 61516 | 68351 | 75187 | 620 | 900 | 30.0 |
| MKZ2736 | 74524 | 8.28 | 67071 | 74524 | 81976 | 680 | 1000 | 30.0 |
| MKZ3036 | 81976 | 9.11 | 73778 | 81976 | 90174 | 740 | 1000 | 37.0 |
| MKZ3042 | 97064 | 10.78 | 87357 | 97064 | 106770 | 800 | 1120 | 55.0 |
| MKZ3342 | 105888 | 11.77 | 95299 | 105888 | 116476 | 840 | 1120 | 55.0 |
| MKZ3645 | 124187 | 13.80 | 111768 | 124187 | 136606 | 880 | 1250 | 75.0 |
| MKZ3654 | 151448 | 16.83 | 136303 | 151448 | 166592 | 920 | 1400 | 75.0 |
| MKZ3663 | 178708 | 19.86 | 160837 | 178708 | 196579 | 960 | 1400 | 90.0 |

Notes:
1. Larger modular air handing units up to 200,000 $m^3/h$ air volume can be customized by Midea.
2. It is suggested that air flow rate do not excceed 3m/s.
3. The above performance are for reference only, and may deviate from latest development.
   Please contact your local Midea sales representative for detail and updated selections.

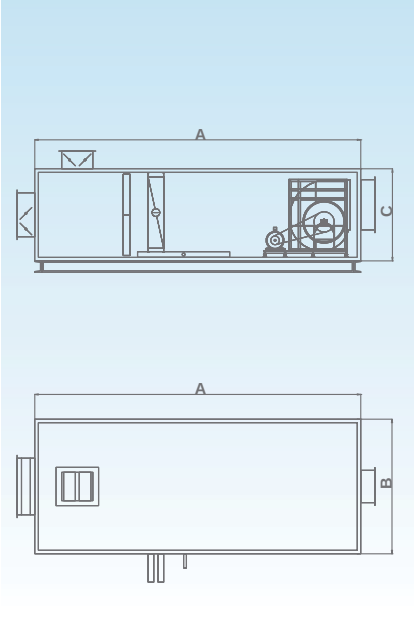
# Standard combination

## Horizontal STD combination 1: Prefilter + Cooling coil + Supply air fan



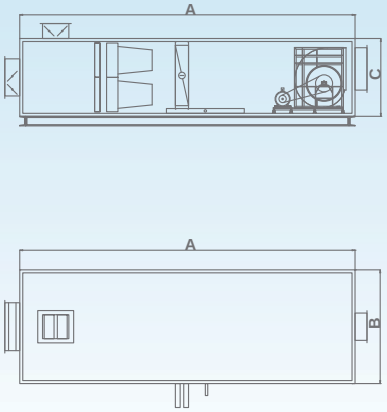

| Unit model | A | B | C | Net weight |
|---|---|---|---|---|
| | mm | mm | mm | kg |
| MKZ0609 | 1500 | 950 | 650 | 295 |
| MKZ0612 | 1600 | 1250 | 650 | 342 |
| MKZ0909 | 1600 | 950 | 950 | 369 |
| MKZ0912 | 1700 | 1250 | 950 | 432 |
| MKZ0915 | 1800 | 1550 | 950 | 491 |
| MKZ1212 | 1900 | 1250 | 1250 | 542 |
| MKZ1215 | 2000 | 1550 | 1250 | 618 |
| MKZ1218 | 2100 | 1850 | 1250 | 715 |
| MKZ1221 | 2200 | 2150 | 1250 | 813 |
| MKZ1518 | 2200 | 1850 | 1550 | 838 |
| MKZ1524 | 2400 | 2450 | 1550 | 1068 |
| MKZ1821 | 2400 | 2150 | 1850 | 1174 |

## Horizontal STD combination 2: Mixing chamber + Prefilter + Cooling coil + Supply air fan



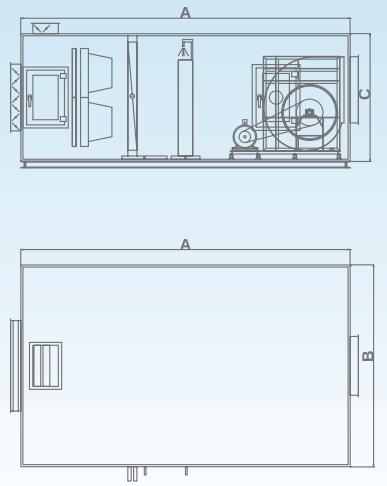

| Unit model | A | B | C | Net weight |
|---|---|---|---|---|
| | mm | mm | mm | kg |
| MKZ0609 | 2200 | 950 | 650 | 386 |
| MKZ0612 | 2300 | 1250 | 650 | 441 |
| MKZ0909 | 2300 | 950 | 950 | 471 |
| MKZ0912 | 2400 | 1250 | 950 | 544 |
| MKZ0915 | 2500 | 1550 | 950 | 610 |
| MKZ1212 | 2600 | 1250 | 1250 | 671 |
| MKZ1215 | 2700 | 1550 | 1250 | 763 |
| MKZ1218 | 2800 | 1850 | 1250 | 876 |
| MKZ1221 | 2900 | 2150 | 1250 | 966 |
| MKZ1518 | 2900 | 1850 | 1550 | 995 |
| MKZ1524 | 3100 | 2450 | 1550 | 1244 |
| MKZ1821 | 3100 | 2150 | 1850 | 1355 |

## Horizontal STD combination 3: Mixing chamber + Prefilter +Dense pleated filter + Cooling coil + Supply air fan




| Unit model | A | B | C | Net weight |
|---|---|---|---|---|
| | mm | mm | mm | kg |
| MKZ0609 | 2700 | 950 | 650 | 452 |
| MKZ0612 | 2800 | 1250 | 650 | 516 |
| MKZ0909 | 2800 | 950 | 950 | 550 |
| MKZ0912 | 2900 | 1250 | 950 | 624 |
| MKZ0915 | 3000 | 1550 | 950 | 706 |
| MKZ1212 | 3100 | 1250 | 1250 | 762 |
| MKZ1215 | 3200 | 1550 | 1250 | 864 |
| MKZ1218 | 3300 | 1850 | 1250 | 1007 |
| MKZ1221 | 3400 | 2150 | 1250 | 1104 |
| MKZ1518 | 3400 | 1850 | 1550 | 1135 |
| MKZ1524 | 3600 | 2450 | 1550 | 1447 |
| MKZ1821 | 3600 | 2150 | 1850 | 1502 |

## Horizontal STD combination 4: Mixing chamber + Prefilter +Dense pleated filter + Cooling coil + Humidifier + Supply air fan

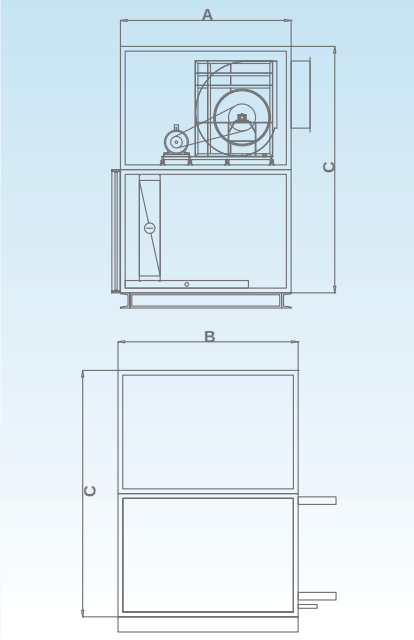



| Unit model | A | B | C | Net weight |
|---|---|---|---|---|
| | mm | mm | mm | kg |
| MKZ0609 | 3100 | 950 | 650 | 545 |
| MKZ0612 | 3200 | 1250 | 650 | 637 |
| MKZ0909 | 3200 | 950 | 950 | 671 |
| MKZ0912 | 3300 | 1250 | 950 | 777 |
| MKZ0915 | 3400 | 1550 | 950 | 881 |
| MKZ1212 | 3500 | 1250 | 1250 | 957 |
| MKZ1215 | 3600 | 1550 | 1250 | 1101 |
| MKZ1218 | 3700 | 1850 | 1250 | 1266 |
| MKZ1221 | 3800 | 2150 | 1250 | 1395 |
| MKZ1518 | 3800 | 1850 | 1550 | 1437 |
| MKZ1524 | 4000 | 2450 | 1550 | 1782 |
| MKZ1821 | 4000 | 2150 | 1850 | 1910 |

Notes:
1. Height of unit = C＋ Height of base.
2. Two kinds of base height can be optioned: 80mm and 100mm.
3. Section should be CKD transported if a. The divided section's length is over 4000mm. or
   b. Divided section's length and width is over 2300mm at the same time.
4. The above data are for reference only, and may deviate from latest development.
   Please contact your local Midea sales representative for detail and updated data.

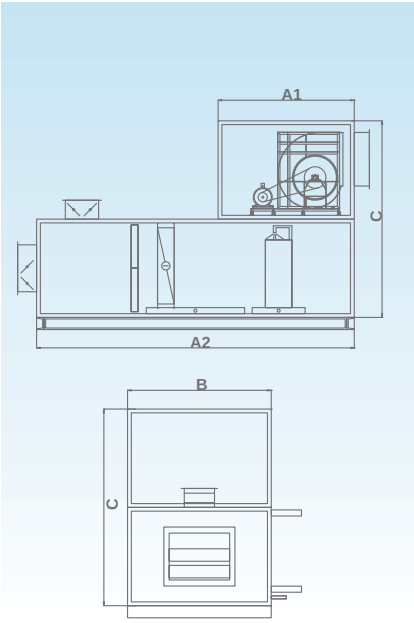
# Standard combination

## Vertical STD combination 1: Prefilter + Cooling coil + Supply air fan



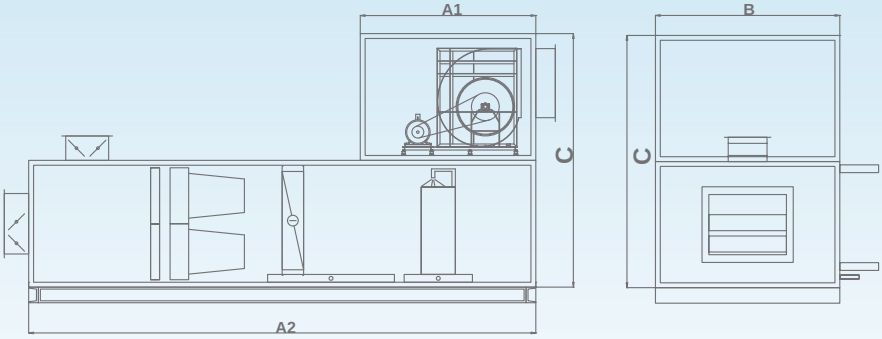

| Unit model | A | B | C | Net weight |
|---|---|---|---|---|
| | mm | mm | mm | kg |
| MKZ0609 | 900 | 950 | 1300 | 305 |
| MKZ0612 | 1000 | 1250 | 1300 | 363 |
| MKZ0909 | 1000 | 950 | 1900 | 385 |
| MKZ0912 | 1100 | 1250 | 1900 | 461 |
| MKZ0915 | 1200 | 1550 | 1900 | 534 |
| MKZ1212 | 1300 | 1250 | 2500 | 257+332 |
| MKZ1215 | 1400 | 1550 | 2500 | 300+383 |
| MKZ1218 | 1500 | 1850 | 2500 | 352+445 |
| MKZ1221 | 1600 | 2150 | 2500 | 414+500 |
| MKZ1518 | 1600 | 1850 | 3100 | 418+517 |
| MKZ1524 | 1800 | 2450 | 3100 | 568+639 |
| MKZ1821 | 1800 | 2150 | 3700 | 625+677 |
| MKZ1827 | 2200 | 2750 | 3700 | 830+984 |

## Vertical STD combination 2: Mixing chamber + Prefilter + Cooling coil + Humidifier + Supply air fan




| Unit model | A1 | A2 | B | C | Net weight A1+A2 |
|---|---|---|---|---|---|
| | mm | mm | mm | mm | kg |
| MKZ0609 | 900 | 2000 | 950 | 1300 | 136+357 |
| MKZ0612 | 1000 | 2000 | 1250 | 1300 | 157+412 |
| MKZ0909 | 1000 | 2000 | 950 | 1900 | 171+436 |
| MKZ0912 | 1100 | 2000 | 1250 | 1900 | 197+504 |
| MKZ0915 | 1200 | 2000 | 1550 | 1900 | 230+570 |
| MKZ1212 | 1300 | 2000 | 1250 | 2500 | 262+597 |
| MKZ1215 | 1400 | 2100 | 1550 | 2500 | 310+692 |
| MKZ1218 | 1500 | 2100 | 1850 | 2500 | 352+796 |
| MKZ1221 | 1600 | 2100 | 2150 | 2500 | 414+867 |
| MKZ1518 | 1600 | 2100 | 1850 | 3100 | 418+899 |
| MKZ1524 | 1800 | 2300 | 2450 | 3100 | 622+1065 |
| MKZ1821 | 1800 | 2300 | 2150 | 3700 | 625+1181 |
| MKZ1827 | 2200 | 2700 | 2750 | 3700 | 888+1579 |

## Vertical STD combination 3: Mixing chamber + Prefilter +Dense pleated filter + Cooling coil + Humidifier + Supply air fan

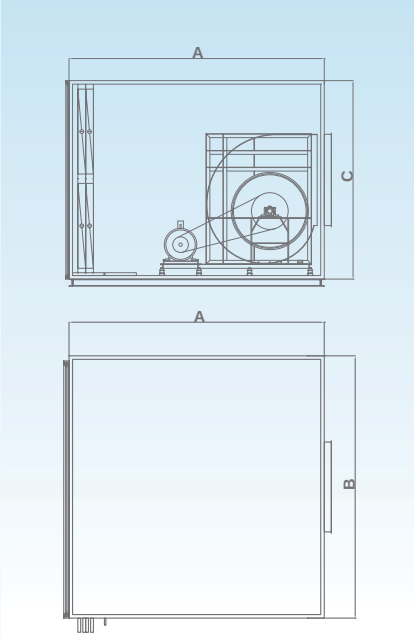



| Unit model | A1 | A2 | B | C | Net weight A1+A2 |
|---|---|---|---|---|---|
| | mm | mm | mm | mm | kg |
| MKZ0609 | 900 | 2500 | 950 | 1300 | 136+418 |
| MKZ0612 | 1000 | 2500 | 1250 | 1300 | 165+483 |
| MKZ0909 | 1000 | 2500 | 950 | 1900 | 171+507 |
| MKZ0912 | 1100 | 2500 | 1250 | 1900 | 202+584 |
| MKZ0915 | 1200 | 2500 | 1550 | 1900 | 230+661 |
| MKZ1212 | 1300 | 2500 | 1250 | 2500 | 273+688 |
| MKZ1215 | 1400 | 2600 | 1550 | 2500 | 328+792 |
| MKZ1218 | 1500 | 2600 | 1850 | 2500 | 369+907 |
| MKZ1221 | 1600 | 2600 | 2150 | 2500 | 429+990 |
| MKZ1518 | 1600 | 2600 | 1850 | 3100 | 433+1024 |
| MKZ1524 | 1800 | 2800 | 2450 | 3100 | 622+1214 |
| MKZ1821 | 1800 | 2800 | 2150 | 3700 | 625+1328 |
| MKZ1827 | 2200 | 3000 | 2750 | 3700 | 841+1787 |

Notes:
1. Height of unit = C＋ Height of base.
2. Two kinds of base height can be optioned: 80mm and 100mm.
3. Section should be CKD transported if a. The divided section's length is over 4000mm. or
   b. Divided section's length and width is over 2300mm at the same time.
4. The above data are for reference only, and may deviate from latest development.
   Please contact your local Midea sales representative for detail and updated data.

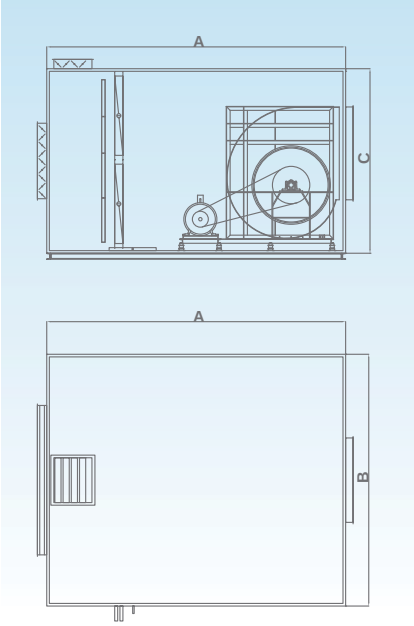
# Standard combination

## Horizontal STD combination 1: Prefilter + Cooling coil + Supply air fan



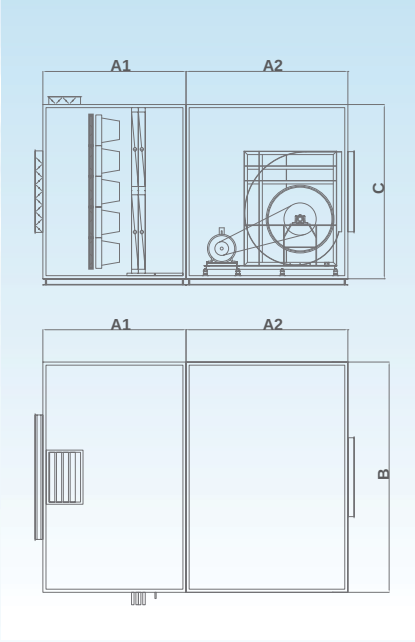

| Unit model | A | B | C | Net weight |
|---|---|---|---|---|
| | mm | mm | mm | kg |
| MKZ1827 | 2700 | 2750 | 1850 | 1603 |
| MKZ2124 | 2700 | 2450 | 2150 | 1642 |
| MKZ2127 | 2700 | 2750 | 2150 | 1779 |
| MKZ2427 | 2800 | 2770 | 2470 | 2078 |
| MKZ2433 | 3000 | 3370 | 2470 | 2537 |
| MKZ2733 | 3000 | 3400 | 2800 | 2854 |
| MKZ2736 | 3500 | 3700 | 2800 | 3292 |
| MKZ3036 | 3500 | 3700 | 3100 | 3556 |
| MKZ3042 | 3800 | 4100 | 3100 | 3542 |
| MKZ3342 | 3800 | 4300 | 3400 | 4372 |
| MKZ3645 | 900+3200 | 4600 | 3700 | 1786+3314 |
| MKZ3654 | 900+3500 | 5500 | 3700 | 2088+4159 |
| MKZ3663 | 900+3500 | 6400 | 3700 | 2369+4310 |

## Horizontal STD combination 2: Mixing chamber + Prefilter + Cooling coil + Supply air fan




| Unit model | A | B | C | Net weight |
|---|---|---|---|---|
| | mm | mm | mm | kg |
| MKZ1827 | 3600 | 2750 | 1850 | 1878 |
| MKZ2124 | 3600 | 2450 | 2150 | 1954 |
| MKZ2127 | 3600 | 2750 | 2150 | 2057 |
| MKZ2427 | 3700 | 2770 | 2470 | 2489 |
| MKZ2433 | 3900 | 3370 | 2470 | 2878 |
| MKZ2733 | 3900 | 3400 | 2800 | 3263 |
| MKZ2736 | 1700+2600 | 3700 | 2800 | 1620+2159 |
| MKZ3036 | 1700+2600 | 3700 | 3100 | 1769+2208 |
| MKZ3042 | 1700+2900 | 4300 | 3100 | 2042+2574 |
| MKZ3342 | 1700+3000 | 4300 | 3400 | 2026+2014 |
| MKZ3645 | 1800+3200 | 4600 | 3700 | 2268+2370 |
| MKZ3654 | 1800+3500 | 5500 | 3700 | 2600+4159 |
| MKZ3663 | 1800+3500 | 6400 | 3700 | 2920+4310 |

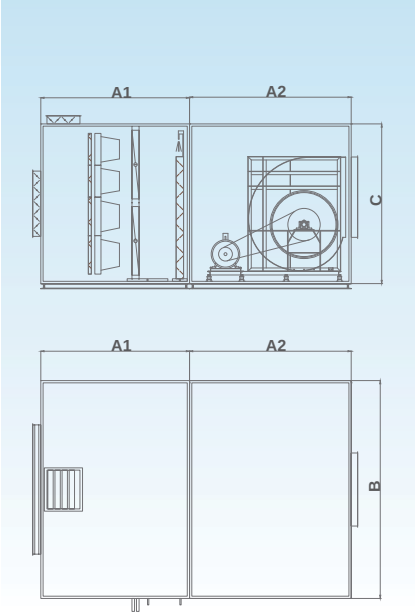
## Horizontal STD combination 3: Mixing chamber + Prefilter +Dense pleated filter + Cooling coil + Supply air fan




| Unit model | A1 | A2 | B | C | Net weight A1+A2 |
|---|---|---|---|---|---|
| | mm | mm | mm | mm | kg |
| MKZ1827 | 1900 | 2200 | 2750 | 1850 | 1094+1034 |
| MKZ2124 | 1900 | 2200 | 2450 | 2150 | 1120+1003 |
| MKZ2127 | 1900 | 2200 | 2750 | 2150 | 1204+1095 |
| MKZ2427 | 1900 | 2300 | 2770 | 2470 | 1348+1420 |
| MKZ2433 | 1900 | 2500 | 3370 | 2470 | 1532+1704 |
| MKZ2733 | 1900 | 2500 | 3400 | 2800 | 1755+1929 |
| MKZ2736 | 2200 | 2600 | 3700 | 2800 | 1975+2159 |
| MKZ3036 | 2200 | 2600 | 3700 | 3100 | 2145+2318 |
| MKZ3042 | 2200 | 2900 | 4300 | 3100 | 2345+2709 |
| MKZ3342 | 2200 | 2900 | 4300 | 3400 | 2466+2014 |
| MKZ3645 | 2300 | 3200 | 4600 | 3700 | 2750+2370 |
| MKZ3654 | 2300 | 3500 | 5500 | 3700 | 3154+4159 |
| MKZ3663 | 2300 | 3500 | 6400 | 3700 | 3549+4319 |



## Horizontal STD combination 4: Mixing chamber + Prefilter +Dense pleated filter + Cooling coil + Humidifier + Supply air fan




| Unit model | A1 | A2 | B | C | Net weight A1+A2 |
|---|---|---|---|---|---|
| | mm | mm | mm | mm | kg |
| MKZ1827 | 2300 | 2200 | 2750 | 1850 | 1562+987 |
| MKZ2124 | 2300 | 2200 | 2450 | 2150 | 1599+1003 |
| MKZ2127 | 2300 | 2200 | 2750 | 2150 | 1731+1095 |
| MKZ2427 | 2300 | 2300 | 2770 | 2470 | 1946+1420 |
| MKZ2433 | 2200 | 2500 | 3370 | 2470 | 2102+1704 |
| MKZ2733 | 2600 | 2500 | 3400 | 2800 | 2273+1929 |
| MKZ2736 | 2900 | 2600 | 3700 | 2800 | 2523+2269 |
| MKZ3036 | 2900 | 2600 | 3700 | 3100 | 2735+2318 |
| MKZ3042 | 2900 | 2900 | 4300 | 3100 | 2901+1953 |
| MKZ3342 | 2900 | 3000 | 4300 | 3400 | 3155+2162 |
| MKZ3645 | 3000 | 3200 | 4600 | 3700 | 3511+2370 |
| MKZ3654 | 3000 | 3500 | 5500 | 3700 | 4007+4159 |
| MKZ3663 | 3000 | 3500 | 6400 | 3700 | 4505+4319 |

Notes:
1. Height of unit = C＋ Height of base.
2. Two kinds of base height can be optioned: 80mm and 100mm.
3. Section should be CKD transported if a. The divided section's length is over 4000mm. or
   b. Divided section's length and width is over 2300mm at the same time.
4. The above data are for reference only, and may deviate from latest development.
   Please contact your local Midea sales representative for detail and updated data.

# Cooling coil performance：

## Fresh air condition

| Unit model | Entering air: 35℃ WB / 28℃ DB, entering water: 7℃ | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Air volume | 4-rows | | | | | 6-rows | | |
| | | Cooling capacity | Sensible cooling capacity | Air resistance | Water flow | Water pressure drop | Cooling capacity | Sensible cooling capacity | Air resistance |
| | m³/h | kW | kW | Pa | L/s | kPa | kW | kW | Pa |
| MKZ0609 | 2680 | 32.9 | 14.27 | 88 | 1.6 | 46.45 | 41.37 | 17.54 | 132 |
| MKZ0612 | 3760 | 46.82 | 20.24 | 88 | 2.2 | 47.88 | 60.01 | 25.34 | 132 |
| MKZ0909 | 4595 | 56.42 | 24.47 | 88 | 2.7 | 44.95 | 70.12 | 29.77 | 132 |
| MKZ0912 | 6447 | 80.29 | 34.71 | 88 | 3.8 | 44.55 | 102.34 | 43.25 | 132 |
| MKZ0915 | 8298 | 104.79 | 45.17 | 88 | 4.6 | 73.65 | 130.99 | 55.39 | 132 |
| MKZ1212 | 9133 | 113.73 | 49.17 | 88 | 5.4 | 51.87 | 145.77 | 61.56 | 132 |
| MKZ1215 | 11756 | 142.28 | 61.88 | 88 | 6.8 | 30.32 | 185.58 | 78.48 | 132 |
| MKZ1218 | 14670 | 182.69 | 78.96 | 88 | 8.7 | 54.15 | 226.43 | 96.00 | 132 |
| MKZ1221 | 17585 | 222.07 | 95.71 | 88 | 9.9 | 75.80 | 277.59 | 117.36 | 132 |
| MKZ1518 | 18122 | 225.68 | 97.54 | 88 | 10.7 | 51.15 | 279.71 | 118.59 | 132 |
| MKZ1524 | 25083 | 312.36 | 135.05 | 88 | 12.2 | 79.40 | 391.55 | 165.78 | 132 |
| MKZ1821 | 26895 | 311.34 | 136.88 | 88 | 14.8 | 13.37 | 424.56 | 179.49 | 132 |
| MKZ1827 | 35513 | 429.79 | 186.98 | 88 | 20.5 | 28.15 | 535.68 | 227.89 | 132 |
| MKZ2124 | 35833 | 427.38 | 186.50 | 88 | 20.4 | 21.57 | 527.94 | 225.36 | 132 |
| MKZ2127 | 40977 | 495.92 | 215.75 | 88 | 23.6 | 30.43 | 618.10 | 262.95 | 132 |
| MKZ2427 | 46440 | 562.03 | 244.52 | 88 | 26.8 | 33.34 | 700.51 | 298.01 | 132 |
| MKZ2433 | 58099 | 723.52 | 312.78 | 88 | 34.5 | 59.58 | 896.75 | 380.25 | 132 |
| MKZ2733 | 68351 | 851.19 | 367.97 | 88 | 40.5 | 69.36 | 1054.99 | 447.35 | 132 |
| MKZ2736 | 74524 | 941.13 | 405.59 | 88 | 44.8 | 62.32 | 1163.34 | 492.57 | 132 |
| MKZ3036 | 81976 | 1035.24 | 446.21 | 90 | 49.3 | 64.60 | 1279.67 | 541.68 | 135 |
| MKZ3042 | 97064 | 1123.63 | 493.80 | 90 | 53.5 | 16.92 | 1532.22 | 647.87 | 135 |
| MKZ3342 | 105888 | 1300.07 | 563.68 | 88 | 62.10 | 37.06 | 1690.09 | 713.74 | 132 |
| MKZ3645 | 124187 | 1524.74 | 660.95 | 90 | 72.83 | 44.65 | 1938.60 | 820.63 | 134 |
| MKZ3654 | 151448 | 1912.15 | 824.39 | 90 | 91.31 | 76.09 | 2390.71 | 1010.93 | 134 |
| MKZ3663 | 178708 | 2225.48 | 961.90 | 90 | 160.30 | 60.22 | 2789.69 | 1180.86 | 134 |

Notes:
1. Totally fresh air cooling condition:Entering air: 35°C WB / 28°C DB, entering water: 7°C,leavinging water: 12°C
2. Coil is copper tube and aluminum fin type, the water velocity is 0.8～2.0 m/s.
3. The above performance are for reference only, and may deviate from latest development.
   Please contact your local Midea sales representative for detail and updated selections.

| Unit model | Entering air: 35℃ WB / 28℃ DB, entering water: 7℃ | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Air volume | 6-rows | | 8-rows | | | | |
| | | Water flow | Water pressure drop | Cooling capacity | Sensible cooling capacity | Air resistance | Water flow | Water pressure drop |
| | m³/h | L/s | kPa | kW | kW | Pa | L/s | kPa |
| MKZ0609 | 2680 | 2 | 33.72 | 48.18 | 20.22 | 176 | 2.3 | 72.37 |
| MKZ0612 | 3760 | 2.9 | 79.61 | 67.27 | 28.24 | 176 | 3.2 | 59.85 |
| MKZ0909 | 4595 | 3.3 | 30.15 | 82.21 | 34.51 | 176 | 3.9 | 66.97 |
| MKZ0912 | 6447 | 4.9 | 72.01 | 115.34 | 48.41 | 176 | 5.5 | 58.27 |
| MKZ0915 | 8298 | 6.2 | 68.54 | 147.00 | 61.73 | 176 | 7.0 | 47.47 |
| MKZ1212 | 9133 | 6.9 | 73.15 | 163.39 | 68.59 | 176 | 7.8 | 56.01 |
| MKZ1215 | 11756 | 8.8 | 65.65 | 208.26 | 87.46 | 176 | 9.9 | 47.61 |
| MKZ1218 | 14670 | 10.8 | 38.92 | 257.31 | 108.12 | 176 | 12.3 | 33.82 |
| MKZ1221 | 17585 | 13.2 | 62.80 | 313.06 | 131.42 | 176 | 14.9 | 53.38 |
| MKZ1518 | 18122 | 13.3 | 42.93 | 317.85 | 133.56 | 176 | 15.1 | 40.60 |
| MKZ1524 | 25083 | 18.7 | 59.51 | 417.95 | 176.38 | 176 | 19.9 | 40.68 |
| MKZ1821 | 26895 | 20.2 | 58.04 | 478.81 | 201.00 | 176 | 22.8 | 46.94 |
| MKZ1827 | 35513 | 25.5 | 27.08 | 604.20 | 254.44 | 176 | 28.8 | 27.63 |
| MKZ2124 | 35833 | 25.1 | 22.41 | 641.07 | 269.10 | 176 | 30.5 | 71.11 |
| MKZ2127 | 40977 | 29.4 | 31.71 | 697.16 | 293.58 | 176 | 33.2 | 33.52 |
| MKZ2427 | 46440 | 33.4 | 36.99 | 790.11 | 332.72 | 176 | 37.6 | 40.24 |
| MKZ2433 | 58099 | 42.7 | 63.79 | 1013.94 | 426.09 | 176 | 48.3 | 68.65 |
| MKZ2733 | 68351 | 50.3 | 78.81 | 1192.86 | 501.27 | 176 | 56.8 | 87.86 |
| MKZ2736 | 74524 | 55.4 | 51.25 | 1320.20 | 554.48 | 176 | 62.9 | 47.15 |
| MKZ3036 | 81976 | 61.0 | 47.00 | 1437.83 | 604.26 | 180 | 68.5 | 37.86 |
| MKZ3042 | 97064 | 73.0 | 72.55 | 1728.01 | 725.45 | 180 | 82.3 | 58.45 |
| MKZ3342 | 105888 | 80.73 | 73.36 | 1894.39 | 795.21 | 176 | 90.49 | 60.43 |
| MKZ3645 | 124187 | 92.60 | 48.99 | 2221.76 | 932.33 | 179 | 106.13 | 75.28 |
| MKZ3654 | 151448 | 114.20 | 80.05 | 2682.91 | 1126.42 | 179 | 128.15 | 85.71 |
| MKZ3663 | 178708 | 133.25 | 83.71 | 3131.40 | 1304.84 | 179 | 149.58 | 93.73 |

# Cooling coil performance：

## Return air condition

| Unit model | Entering air: 27℃ WB / 19.5℃ DB, entering water: 7℃ | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Air volume at 2.5m/s | 4-rows | | | | | 6-rows | | |
| | | Cooling capacity | Sensible cooling capacity | Air resistance | Water flow | Water pressure drop | Cooling capacity | Sensible cooling capacity | Air resistance |
| | m³/h | kW | kW | Pa | L/s | kPa | kW | kW | Pa |
| MKZ0609 | 2680 | 13.39 | 10.44 | 88 | 0.6 | 9.35 | 18.24 | 12.90 | 132 |
| MKZ0612 | 3760 | 20.08 | 15.15 | 88 | 1.0 | 23.32 | 26.56 | 18.49 | 132 |
| MKZ0909 | 4595 | 22.96 | 17.91 | 88 | 1.1 | 9.11 | 31.27 | 22.12 | 132 |
| MKZ0912 | 6447 | 34.43 | 25.97 | 88 | 1.6 | 22.77 | 45.54 | 31.71 | 132 |
| MKZ0915 | 8298 | 45.74 | 33.98 | 88 | 2.2 | 44.23 | 57.89 | 40.52 | 132 |
| MKZ1212 | 9133 | 48.77 | 36.80 | 88 | 2.3 | 21.46 | 64.51 | 44.92 | 132 |
| MKZ1215 | 11756 | 64.81 | 48.17 | 88 | 3.1 | 41.92 | 82.02 | 57.40 | 132 |
| MKZ1218 | 14670 | 83.40 | 61.09 | 88 | 4.0 | 76.43 | 105.51 | 72.94 | 132 |
| MKZ1221 | 17585 | 99.21 | 72.95 | 88 | 4.7 | 62.01 | 124.20 | 86.50 | 132 |
| MKZ1518 | 18122 | 103.02 | 75.46 | 88 | 4.9 | 79.38 | 130.34 | 90.11 | 132 |
| MKZ1524 | 25083 | 143.68 | 104.92 | 88 | 6.8 | 82.68 | 180.40 | 124.74 | 132 |
| MKZ1821 | 26895 | 151.74 | 111.58 | 88 | 7.2 | 57.76 | 189.96 | 132.29 | 132 |
| MKZ1827 | 35513 | 195.77 | 145.45 | 88 | 9.3 | 37.15 | 247.77 | 173.42 | 132 |
| MKZ2124 | 35833 | 205.25 | 149.88 | 88 | 9.8 | 84.62 | 257.72 | 178.20 | 132 |
| MKZ2127 | 40977 | 225.89 | 167.83 | 88 | 10.8 | 38.16 | 285.89 | 200.10 | 132 |
| MKZ2427 | 46440 | 256.01 | 190.21 | 88 | 12.2 | 39.31 | 324.01 | 226.78 | 132 |
| MKZ2433 | 58099 | 330.29 | 241.98 | 88 | 15.7 | 72.72 | 415.36 | 287.79 | 132 |
| MKZ2733 | 68351 | 388.57 | 284.68 | 88 | 18.5 | 69.70 | 488.66 | 338.58 | 132 |
| MKZ2736 | 74524 | 410.83 | 305.27 | 88 | 19.6 | 42.88 | 539.21 | 371.81 | 132 |
| MKZ3036 | 81976 | 451.91 | 335.55 | 90 | 21.5 | 44.34 | 593.13 | 408.95 | 135 |
| MKZ3042 | 97064 | 551.80 | 404.01 | 90 | 26.3 | 71.23 | 685.57 | 477.36 | 135 |
| MKZ3342 | 105888 | 601.91 | 441.07 | 88 | 28.75 | 71.11 | 747.90 | 520.81 | 132 |
| MKZ3645 | 124187 | 663.21 | 500.11 | 90 | 31.68 | 26.04 | 887.84 | 615.18 | 134 |
| MKZ3654 | 151448 | 834.88 | 619.94 | 90 | 39.88 | 45.06 | 1056.65 | 739.54 | 134 |
| MKZ3663 | 178708 | 1015.94 | 743.90 | 90 | 48.53 | 71.99 | 1277.63 | 885.22 | 134 |

Notes:
1. Return air cooling condition:Entering air: 27°C WB /19.5°C DB, entering water: 7°C,leavinging water: 12°C
2. Coil is copper tube and aluminum fin type, the water velocity is 0.8～2.0 m/s.
3. The above performance are for reference only, and may deviate from latest development.
   Please contact your local Midea sales representative for detail and updated selections.

| Unit model | Entering air: 27℃ WB / 19.5℃ DB, entering water: 7℃ | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Air volume at 2.5m/s | 6-rows | | 8-rows | | | | |
| | | Water flow | Water pressure drop | Cooling capacity | Sensible cooling capacity | Air resistance | Water flow | Water pressure drop |
| | m³/h | L/s | kPa | kW | kW | Pa | L/s | kPa |
| MKZ0609 | 2680 | 0.9 | 22.25 | 21.58 | 14.49 | 176 | 1.0 | 37.99 |
| MKZ0612 | 3760 | 1.3 | 53.01 | 30.61 | 20.46 | 176 | 1.5 | 41.00 |
| MKZ0909 | 4595 | 1.5 | 21.79 | 37.01 | 24.84 | 176 | 1.8 | 37.35 |
| MKZ0912 | 6447 | 2.2 | 52.05 | 52.20 | 34.97 | 176 | 2.5 | 38.00 |
| MKZ0915 | 8298 | 2.8 | 31.47 | 68.62 | 45.62 | 176 | 3.3 | 73.23 |
| MKZ1212 | 9133 | 3.1 | 49.75 | 74.34 | 49.70 | 176 | 3.5 | 42.48 |
| MKZ1215 | 11756 | 3.9 | 31.90 | 97.21 | 64.63 | 176 | 4.6 | 80.70 |
| MKZ1218 | 14670 | 5.0 | 58.22 | 119.41 | 79.82 | 176 | 5.7 | 44.42 |
| MKZ1221 | 17585 | 5.9 | 42.54 | 146.17 | 96.98 | 176 | 7.0 | 72.30 |
| MKZ1518 | 18122 | 6.2 | 59.72 | 147.51 | 98.60 | 176 | 7.0 | 43.14 |
| MKZ1524 | 25083 | 8.6 | 60.92 | 205.25 | 136.99 | 176 | 9.8 | 48.98 |
| MKZ1821 | 26895 | 9.0 | 40.51 | 223.55 | 148.32 | 176 | 10.6 | 69.49 |
| MKZ1827 | 35513 | 11.8 | 27.75 | 295.19 | 195.84 | 176 | 14.1 | 70.93 |
| MKZ2124 | 35833 | 12.3 | 61.34 | 293.22 | 195.70 | 176 | 14.0 | 45.91 |
| MKZ2127 | 40977 | 13.6 | 28.51 | 340.60 | 225.97 | 176 | 16.2 | 66.25 |
| MKZ2427 | 46440 | 15.4 | 29.37 | 386.01 | 256.09 | 176 | 18.4 | 68.27 |
| MKZ2433 | 58099 | 19.8 | 53.74 | 472.91 | 316.14 | 176 | 22.5 | 44.62 |
| MKZ2733 | 68351 | 23.3 | 56.21 | 556.36 | 371.93 | 176 | 26.5 | 48.80 |
| MKZ2736 | 74524 | 25.7 | 70.58 | 616.24 | 409.74 | 176 | 29.4 | 53.29 |
| MKZ3036 | 81976 | 28.3 | 78.08 | 670.80 | 447.55 | 180 | 32.0 | 53.80 |
| MKZ3042 | 97064 | 32.7 | 49.36 | 802.62 | 533.46 | 180 | 38.2 | 83.70 |
| MKZ3342 | 105888 | 35.72 | 49.27 | 861.91 | 576.20 | 176 | 41.17 | 38.54 |
| MKZ3645 | 124187 | 42.41 | 60.64 | 1016.20 | 678.02 | 179 | 48.54 | 46.62 |
| MKZ3654 | 151448 | 50.47 | 34.16 | 1252.32 | 832.37 | 179 | 59.82 | 78.29 |
| MKZ3663 | 178708 | 61.03 | 53.97 | 1446.95 | 969.14 | 179 | 69.12 | 44.11 |

# Heating coil performance

| Unit model | Air volume at 2.5m/s | 1-row | | | | | |
|---|---|---|---|---|---|---|---|
| | | Return air condition (15°C) | | | Fresh air condition (7°C) | | |
| | | Heating capacity | Water flow | Water pressure drop | Heating capacity | Water flow | Water pressure drop |
| | m³/h | kW | L/s | kPa | kW | L/s | kPa |
| MKZ0609 | 2680 | 8.4 | 0.2 | 9 | 10.1 | 0.24 | 13 |
| MKZ0612 | 3760 | 11.5 | 0.28 | 17 | 13.8 | 0.33 | 24 |
| MKZ0909 | 4595 | 14.4 | 0.34 | 9 | 17.3 | 0.41 | 13 |
| MKZ0912 | 6447 | 19.4 | 0.46 | 17 | 23.3 | 0.56 | 23 |
| MKZ0915 | 8298 | 26.6 | 0.64 | 30 | 32 | 0.76 | 43 |
| MKZ1212 | 9133 | 30.2 | 0.72 | 20 | 36.3 | 0.87 | 28 |
| MKZ1215 | 11756 | 39.6 | 0.95 | 33 | 47.5 | 1.14 | 47 |
| MKZ1218 | 14670 | 50.4 | 1.2 | 81 | 60.5 | 1.44 | 74 |
| MKZ1221 | 17585 | 63.4 | 1.51 | 15 | 76 | 1.82 | 115 |
| MKZ1518 | 18122 | 63.4 | 1.51 | 25 | 76 | 1.82 | 35 |
| MKZ1524 | 25083 | 90.0 | 2.15 | 49 | 108 | 2.58 | 69 |
| MKZ1821 | 26895 | 93.6 | 2.24 | 35 | 112.3 | 2.68 | 50 |
| MKZ1827 | 35513 | 126.7 | 3.03 | 63 | 152.1 | 3.63 | 89 |
| MKZ2124 | 35833 | 126.7 | 3.03 | 48 | 152.1 | 3.63 | 67 |
| MKZ2127 | 40977 | 143.3 | 3.42 | 60 | 171.9 | 4.11 | 85 |
| MKZ2427 | 46440 | 165.6 | 3.96 | 62 | 198.7 | 4.75 | 89 |
| MKZ2433 | 58099 | 208.8 | 4.99 | 97 | 250.6 | 5.99 | 138 |
| MKZ2733 | 68351 | 244.8 | 5.85 | 97 | 293.8 | 7.02 | 137 |
| MKZ2736 | 74524 | 259.2 | 6.19 | 29 | 311 | 7.43 | 41 |
| MKZ3036 | 81976 | 288.0 | 6.88 | 29 | 345.6 | 8.26 | 41 |
| MKZ3042 | 97064 | 352.8 | 8.43 | 43 | 423.4 | 10.11 | 61 |
| MKZ3342 | 105888 | 381.6 | 9.12 | 42 | 457.9 | 10.94 | 60 |
| MKZ3645 | 124187 | 439.2 | 10.49 | 46 | 527.0 | 12.59 | 65 |
| MKZ3654 | 151448 | 540.0 | 12.90 | 68 | 648.0 | 15.48 | 96 |
| MKZ3663 | 178708 | 619.2 | 14.79 | 88 | 743.0 | 17.75 | 125 |

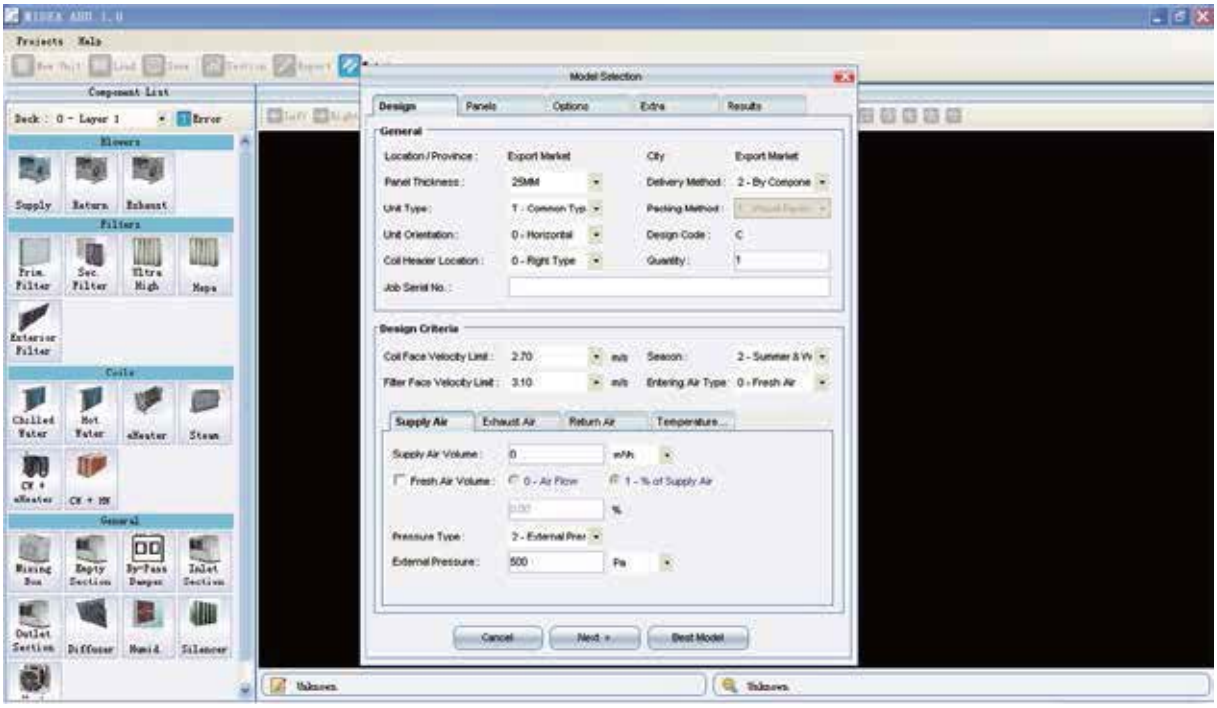
Notes:
1. Return air heating condition:Entering air:15°C DB, entering water: 60°C,leavinging water:50°C
2. Fresh air heating condition:Entering air:7°C DB, entering water: 60°C,leavinging water:50°C
3. Coil is copper tube and aluminum fin type, the water velocity is 0.8～2.0 m/s.
4. The above performance are for reference only, and may deviate from latest development.
   Please contact your local Midea sales representative for detail and updated selections.

| Unit model | Air volume at 2.5m/s | 2-rows | | | | | |
|---|---|---|---|---|---|---|---|
| | | Return air condition (15°C) | | | Fresh air condition (7°C) | | |
| | | Heating capacity | Water flow | Water pressure drop | Heating capacity | Water flow | Water pressure drop |
| | m³/h | kW | L/s | kPa | kW | L/s | kPa |
| MKZ0609 | 2680 | 14.0 | 0.33 | 25 | 17.9 | 0.43 | 40 |
| MKZ0612 | 3760 | 19.1 | 0.46 | 45 | 24.5 | 0.59 | 72 |
| MKZ0909 | 4595 | 23.9 | 0.57 | 25 | 30.7 | 0.73 | 40 |
| MKZ0912 | 6447 | 32.3 | 0.77 | 44 | 41.4 | 0.99 | 70 |
| MKZ0915 | 8298 | 44.2 | 1.06 | 37 | 56.7 | 1.36 | 59 |
| MKZ1212 | 9133 | 50.2 | 1.2 | 24 | 64.4 | 1.54 | 39 |
| MKZ1215 | 11756 | 65.7 | 1.57 | 40 | 84.3 | 2.01 | 65 |
| MKZ1218 | 14670 | 83.7 | 2 | 17 | 107.4 | 2.56 | 27 |
| MKZ1221 | 17585 | 105.2 | 2.51 | 26 | 135 | 3.22 | 42 |
| MKZ1518 | 18122 | 105.2 | 2.51 | 18 | 135 | 3.22 | 28 |
| MKZ1524 | 25083 | 149.4 | 3.57 | 34 | 191.7 | 4.58 | 55 |
| MKZ1821 | 26895 | 155.4 | 3.71 | 25 | 199.4 | 4.76 | 40 |
| MKZ1827 | 35513 | 210.4 | 5.03 | 44 | 269.9 | 6.45 | 71 |
| MKZ2124 | 35833 | 210.4 | 5.03 | 33 | 269.9 | 6.45 | 54 |
| MKZ2127 | 40977 | 237.8 | 5.68 | 42 | 305.2 | 7.29 | 68 |
| MKZ2427 | 46440 | 274.9 | 6.57 | 44 | 352.7 | 8.43 | 70 |
| MKZ2433 | 58099 | 346.6 | 8.28 | 68 | 444.7 | 10.62 | 110 |
| MKZ2733 | 68351 | 406.4 | 9.71 | 68 | 444.7 | 10.62 | 110 |
| MKZ2736 | 74524 | 430.3 | 10.28 | 20 | 552.1 | 13.19 | 32 |
| MKZ3036 | 81976 | 478.1 | 11.42 | 20 | 613.4 | 14.65 | 33 |
| MKZ3042 | 97064 | 585.6 | 13.99 | 30 | 751.5 | 17.95 | 49 |
| MKZ3342 | 105888 | 633.5 | 15.13 | 30 | 812.8 | 19.42 | 48 |
| MKZ3645 | 124187 | 729.1 | 17.42 | 32 | 935.5 | 22.35 | 54 |
| MKZ3654 | 151448 | 896.4 | 21.41 | 48 | 1150.2 | 27.48 | 77 |
| MKZ3663 | 178708 | 1027.9 | 24.55 | 62 | 1318.9 | 31.51 | 100 |

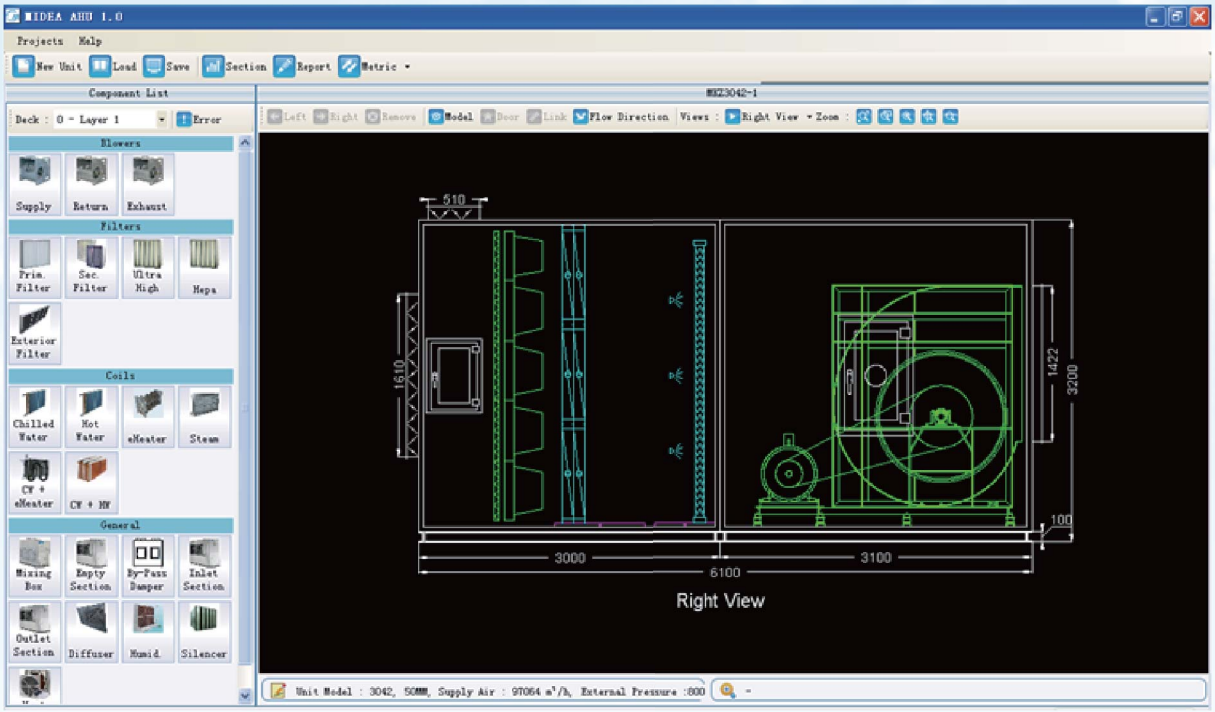
# Selection software

To help customers define their product requirements easily, a user-friendly software selection program is provided. The program leads the user through the selection process by pertinent input data for all components required. Component sections are selected by placing them on a configure screen. Once the unit layout is defined, the options and accessories are identified. The program gives immediate feedback about fan and coil selection, offering serial options based on the performance inputs. Once final component selections have been made, the program provides all output needed, including unit specification, dimension, weights, fan curves and so on.

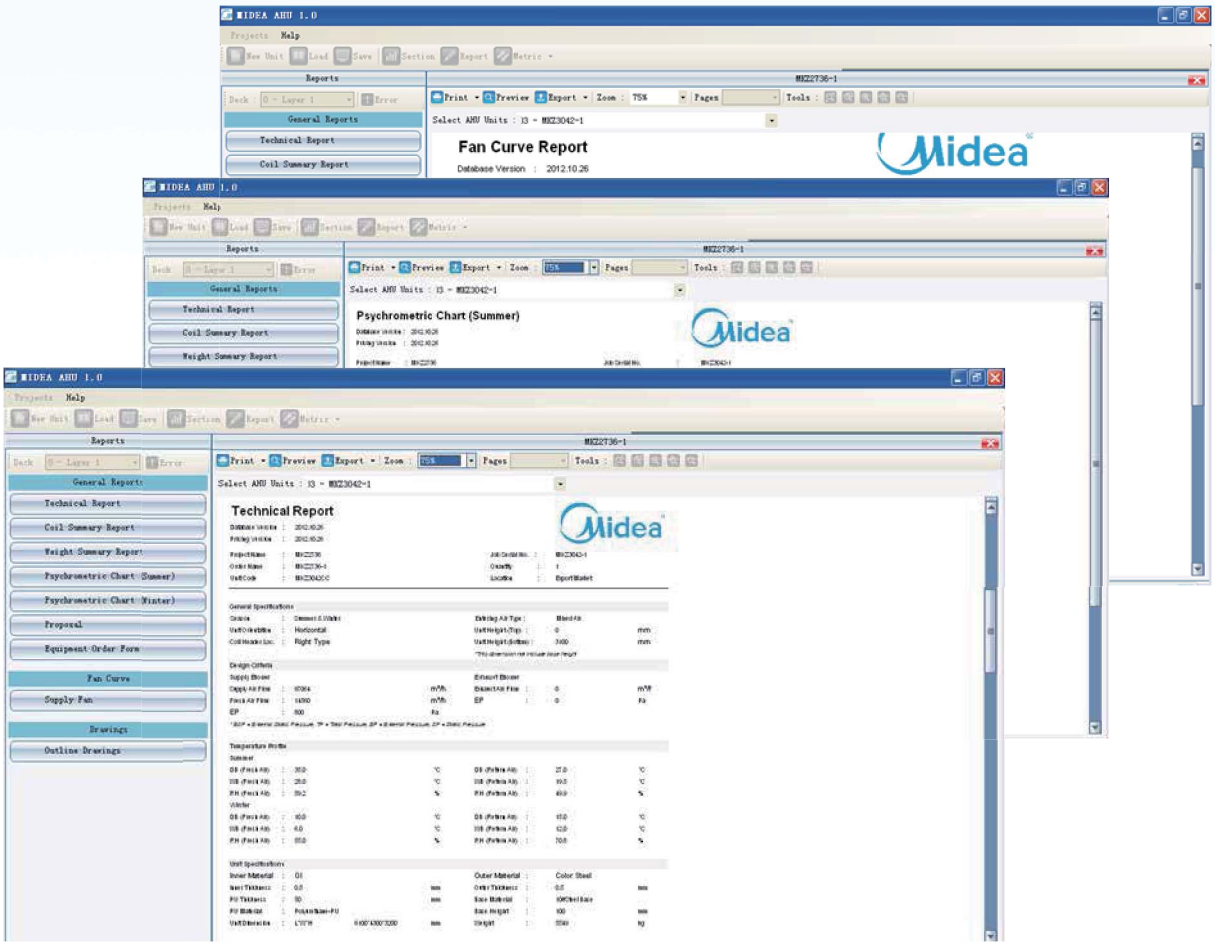

## Main interface



## Selection interface




## Report interface



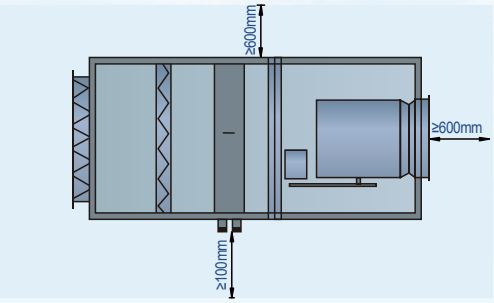
# Installation →

## Installation

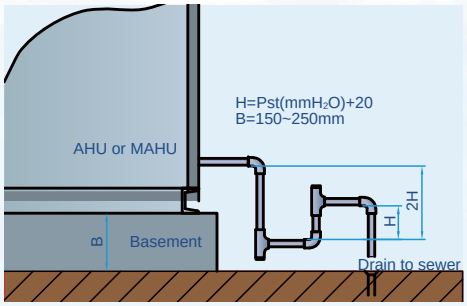
- Unit should be installed on a horizontal foundation to avoid running noise and keep the condensing water draining smoothly.
- Allow sufficient space for maintenance. At least 1m width should be reserved in the direction of setting up the accesses door as shown in figure installation space.

## Piping

- Flexible fittings should be used in water piping to absorb thermal expansion and contraction strains.
- Drainage pipe should be equipped a U shape water seal to keep water draining fluently as shown in figure draining pipe.



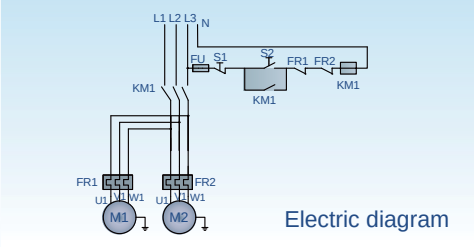

Installation space




Draining pipe

## Wiring

- Wiring according to electric diagram as shown in the right picture.
- Unit shell must have reliable earthing.
- One motor one protection switch.
- During unit running time, the power voltage fluctuate value must less than 10%, frequency fluctuate value less than 2%.




Electric diagram

## Water supply

- The water supplied in the water system should be soft, clean water. Before water supply, the water system should be washed to clean away all the scraps and patches compounds first. At last, exhaust the air in the coil by discharge valve on the top of the water outlet pipe.
- If unit is running in winter season and is planning to stop for some time, the following steps should be taken to avoid damage on the coil: keep the water in coil circulating continuously; added in some antifreeze;
- close the fresh air inlet damper.
  If unit stop running in winter season, water in the coil must be drained out completely to keep the coil dry.

## Start-up requirements

Before start-up the units, do make sure that ductwork is clean, filters are in place, bearings lubricated, condensate properly trapped, piping connections verified and leak tested, belts aligned and tensioned, all shipping braces have been removed, and fan has been test run under observation.

## Maintenance

- Check and make sure valves in water pipe and air duct are in normal working condition before unit running.
- Check the lubrication of fan bearings and tension of belts regularly.
- Check and adjust the connection, operation and transmission of fan, motor and other moving parts regularly.
- Wash the air filters once a month.
- Exhaust the water in the coil if the unit stops using for a long period.
- In winter, keep the water in the coil circulating when stop the unit for a short time.
- The water in the coil should be softened water. Clear away scale in the coil and dirty thing among the fins once a year.

For the detail information about installation, usage and maintenance, please refer to the 'installation manual', or consult Midea company.