Meeting®

Air to water heat pump

Operational Instructions

5.2 Heat Pump unit Installation

1. The heat pump unit should be installed in a ventilated place, with enough space for air inlet and outlet, while without thermal radiation or other heat source. Besides, the air outlet should not be against the wind.

2. Generally, the vertical air flow type heat pump does not need anything for sheltering. The motor and other internal components have been all waterproof. A shelter is required to avoid snow burying onto the heat pump in heavily snowy area.

3. Please make sure the standardized voltage 220V or 380V is stably accessible to the heat pump, otherwise the performance would be influenced.

4. The foundation of the heat pump can be cement or steel structure. Anti-vibration rubber and a flat foundation should be taken into account. The foundation structure can be flexibly designed according to the working weight of the heat pump(Please see the technical data in this manual.)

5. Water drainage should be available near the installation location for draining water in an effective way.

6. Do not install the heat pump in a place where there is polluting or corrosive materials like oil, flammable and explosive gas and sulfide etc. Keep it far away from sands, falling leaves and area with high-frequency equipment.

7. The foundation should be heightened to avoid the water inflow in rainy season and snow burying in winter if it is installed in the open air.

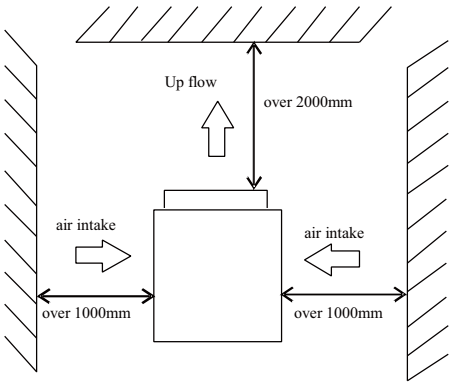
8. Installation in balcony or on roof-top must be accordance with the allowable stress of the building structure.

9. The heat pump should be fixed firmly on the base. The bearing capability of the frame should be as three times of weight as the heat pump unit. Reliable measures should be taken to keep the fastener stable. The unit base should be fixed firmly by expansion bolts to ensure the entire unit stand erectly after installation.

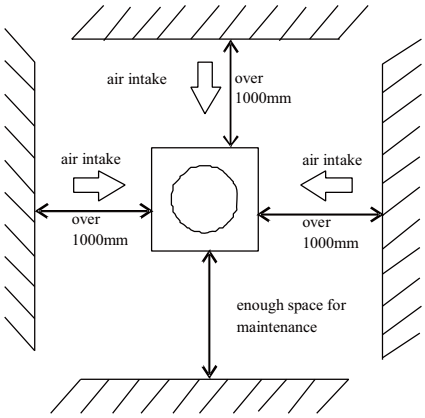
10. The unit location should avoid typhoon and earthquake damage. The heat pump should not be installed in the air in case of crash accident.

11. The location should favor the unobstructed ventilation of the air outlet. (The inlet and outlet of the air blower are illustrated in the following diagram). The installation space should be referred as follows:

Space for Installation

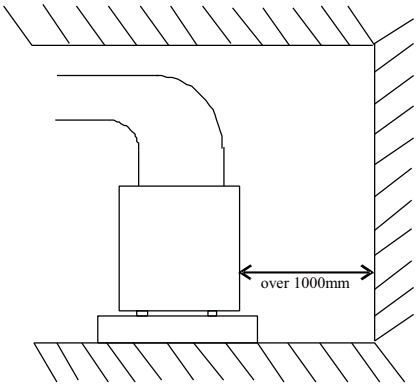


Horizontal View

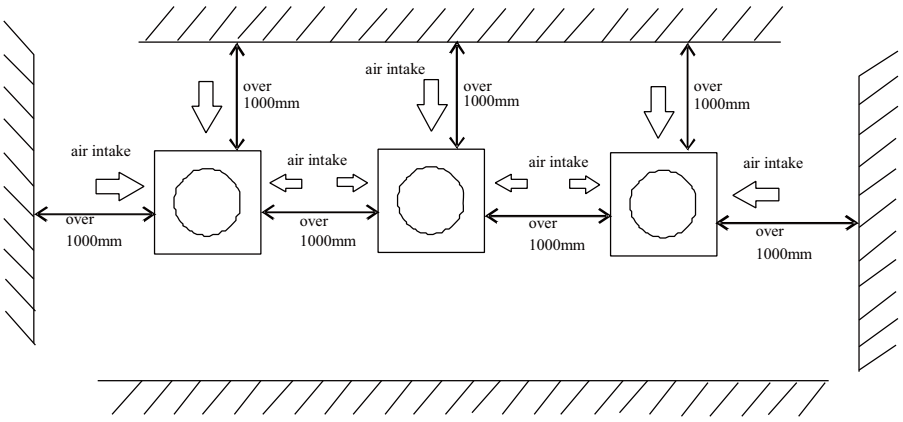


Vertical View

An exhaust duct should be connected to the heat pump air outlet if there is a barrier above the air outlet.



A certain distance should be kept among the heat pumps and it should be at least 1 meter when several heat pumps are installed side by side.



Vertical View

5.3 Water System Installation

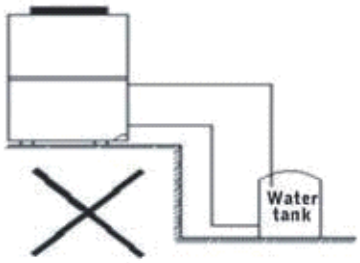
5.3.1 Water Tank Installation

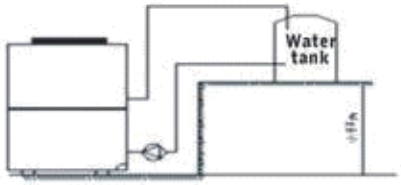
1. The water tank should be put in a place where ambient temperature is higher than 0 DegC.

2. It can be installed either outdoors or on the roof-top (some elements such as the size of water tank and the bearing capability of the building should be considered). Installation on roof-top should be based on support such as crossbeam or pillar.

3. The foundation of the water tank should be concrete or steel-made type, with strong bearing capability.

4. The water tank should not be installed lower than the foundation of the heat pump; It is suggested to install the heat pump, the water tank and the circulation pump at the same level. Besides, the height difference between the heat pump and the water tank should be no more than 2M, when water tank position is higher than that of the heat pump.





5. Do not install the water tank in a palliative or corrosive area.

6. The reasonable allocation of the heat pump and water tank volume should deploy by 1/0.6 as maximum. Please refer to the following:

5.3.2 Water Piping Installation

1.Drainpipe and overflow pipe should be installed near the gutter or the sinkhole for draining water more efficiently. Discharge valve is necessary on the drainpipe.

2. Service valve needs to be installed before the magnet-valves on the system pipeline for further inspection.

3.The pressure of the water outlet should be between 0.3MPa and 0.6MPa.

4. It is recommended to use metal pipeline such as stainless steel pipes, internal-plastic pipes, internal stainless steel pipes or copper pipes etc; Telescopic issue of the pipeline between heat pump unit and water tank should be considered if plastic pipeline such as PPR pipe and ABS pipe etc. is used.

5. In winter, heat preservation may need to be carried out for the water supply valve and the stop valve of the system (according to local ambient temperature) for avoiding icing of the water supply pipe and the valves.

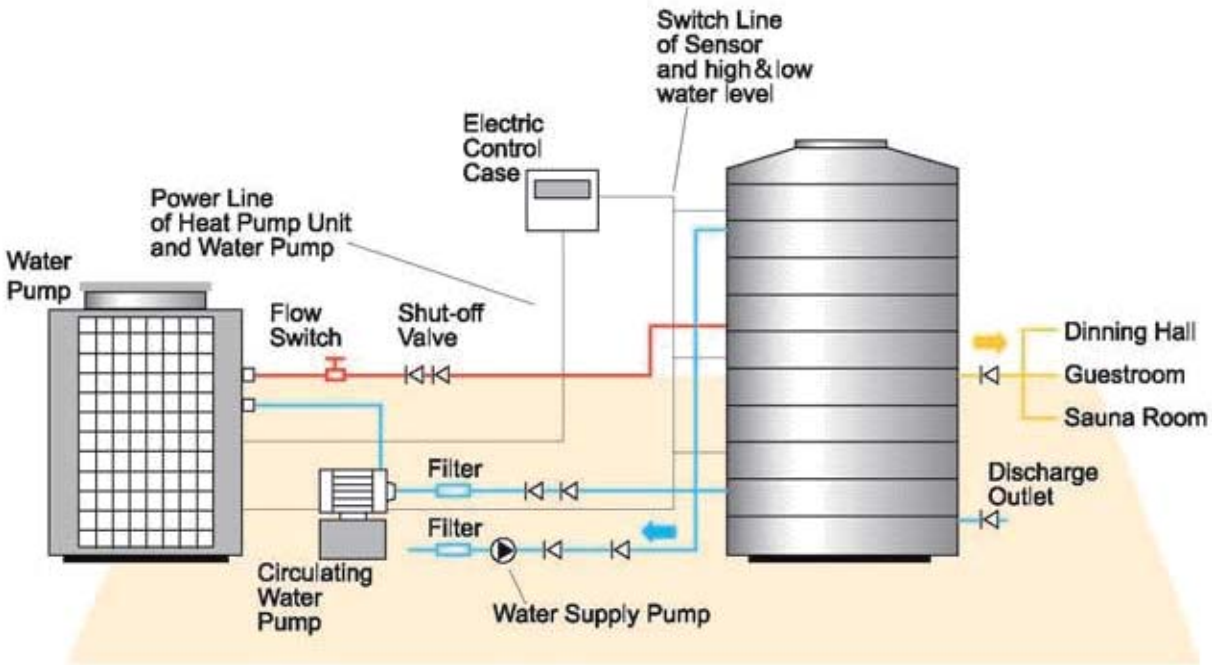
6. Keep the water pipes straight and the pipeline allocation reasonable; Reduce pipe turnings as many as possible to reduce water resistance.

7. Prevent the pipeline and the connectors from water leakage.

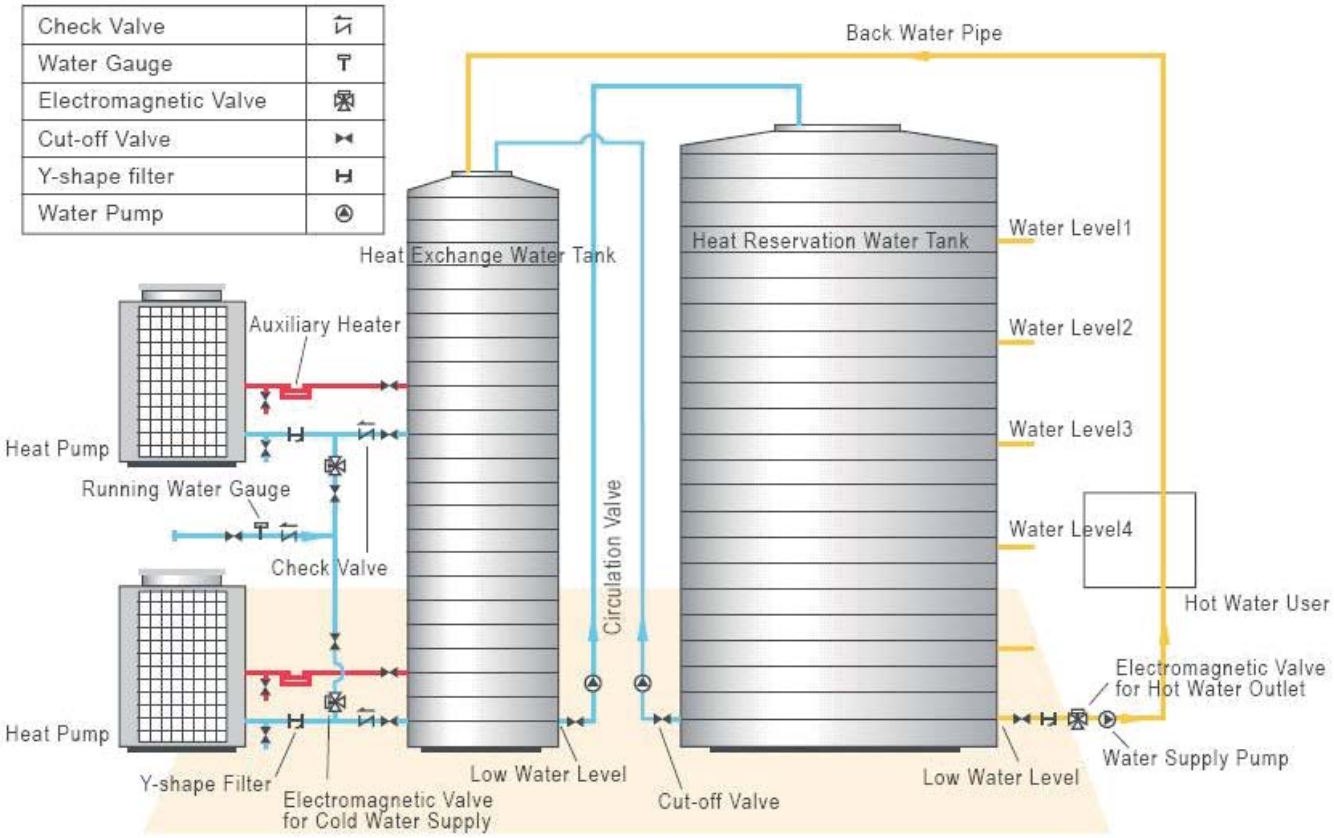
8.The water pressure bearing capability of each part of the piping system should be tested after the installation is finished; Drainage should be done to create a clean interior system.

9. Measures of heat preservation for the hot water pipeline need to be conducted after assuring no water leakage.

Single Unit Installation



Multiple Units Installation



5.4 Power Source Installation

Recommended wire specification

Model	Power wire	Circulation pump wire	Water supply/return pump wire	Solenoid valve wire	Water level wire	Sensor wire
MD20D	3*4mm²	3*1.5mm²	3*1.5mm²	2*1.5mm²	2*0.35mm²	2*0.35mm²
MD30D	5*2.5mm²	3*1.5mm²	3*1.5mm²	2*1.5mm²	2*0.35mm²	2*0.35mm²
MD50D	5*4mm²	3*1.5mm²	3*1.5mm²	2*1.5mm²	2*0.35mm²	2*0.35mm²
MD100D	5*6mm²	3*2.5mm²	3*2.5mm²	2*1.5mm²	2*0.35mm²	2*0.35mm²
MD200D	5*10mm²	3*2.5mm²	3*2.5mm²	2*1.5mm²	2*0.35mm²	2*0.35mm²

Note: the above specification is the lowest one we recommend. Please choose bigger wires if additional power is required when installatio