

# **AIR CURTAIN**

# **INSTALLATION MANUAL**



**Maxwell**

*MASH Series*



**Thanks for purchasing this Air Curtain.**  
**Please read these instructions carefully before use.**

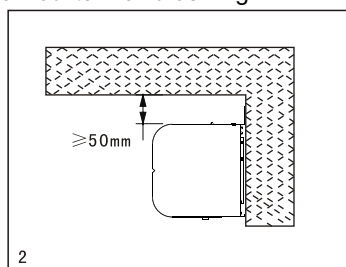
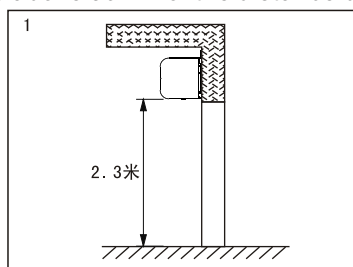
## Introduction

Air curtain is installed above the entryway of store, restaurant, office, workshop, hotel and warehouse, etc. It can effectively isolate convection indoor and outdoor and keep temperature and humidity. Especially used in the location with air-conditioner to keep indoor environment and save energy of refrigeration equipment. In addition, Air Curtain can prevent the invasion of dust, pest and harmful fumes from outside.

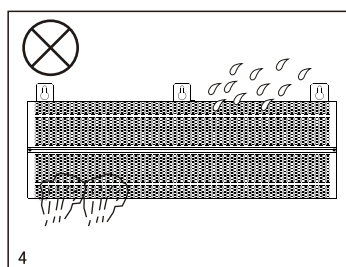
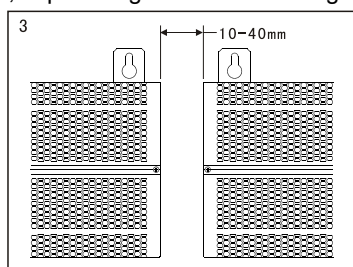
Water source hot air curtain is applied high quality materials, with compact design, fast heat-exchange and low power consumption. Heating by hot water instead of electric power, which has the advantage of energy saving and safety operation. It is a cooling (normal air) air curtain when cut off the hot water pipe. Can be used in all season.

## User's guide

1. Please install the unit indoor above the door. The installation height is about 2.3 meters from the ground.
2. Keep above 50mm of the distance between the air curtain and ceiling.



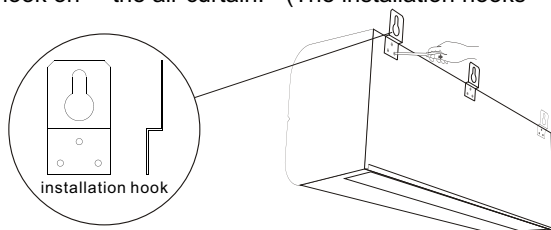
3. When install two or more units in parallel. Should provide 10-40mm gaps between the units.
4. Don't install the unit in a place where it is splashed by water, exposed to excessive steam, explosive gas or corrosive gas.



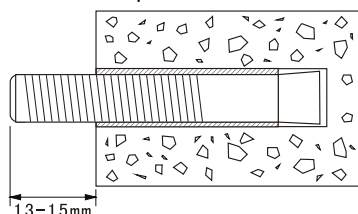
5. For hang up the unit on the ceiling, the user should buy the parts by themselves.
6. Disconnect power source before installation work.
7. Please install the unit in a sturdy place to avoid the shaking and ensure its security (because it maybe causes the wall becoming flexible or shaking and noise).
8. Use the unit at the rated voltage and frequency indicated on the nameplate.
9. Do not cover the inlet and outlet when working.
10. Routing maintenance must be done every year.
11. Never use petrol, benzene, thinner or any other such chemical for clearing the unit.
12. When power supply comes from socket, supply the suitable plug accordingly.
13. The heating source is from hot water or steam, cut off the hot water pipe if no need hot air.
14. The unit's pressure range: 1.8~2.0Mpa
15. The unit must install indoor! And it must have the measure for keeping temperature to avoid water frozen and breach the heat exchanger tube.
16. Please read the Manual of the correspondence unit's carefully before using, and keep them safely.

## Installation

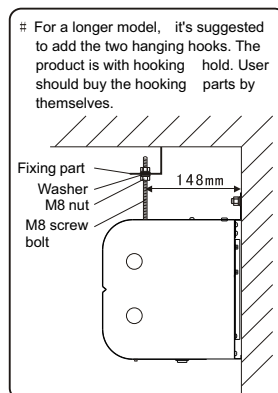
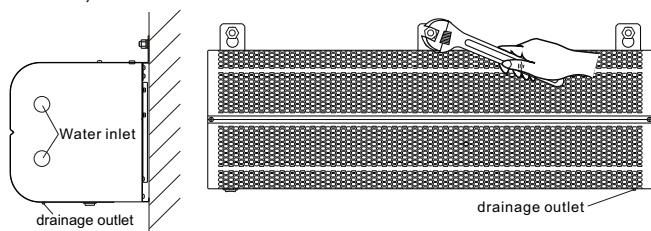
1. Fix the installation hook on the air curtain. (The installation hooks and screws are put in the packaging.)



2. For install on the concrete and brick wall or other hard wall, should measure the place of the installation screw (see the "installation dimension"), then fix on the wall by M8 expansion bolt, ensure the out expansion bolt around 13-15mm.



3. Ensure the expansion bolts are fixed and hang up the air curtain, and then fasten the screws.



4. After fix the air curtain, connect the water inlet tube and drainage tube (offer by user), ensure without leakage of water.
5. User should purchase the relative installation parts, and the intensity must suitable for the product weight.

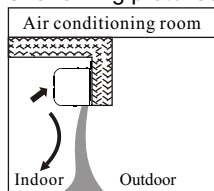
## Operation instruction

Operate the unit at the rated voltage and frequency.

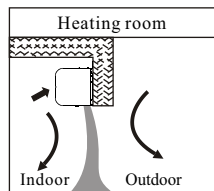
- 1 Turn on the power
- 2 Select air speed: [H] for High speed, [L] for Low speed

Note: Heating or cooling air is depending on the user's input system.

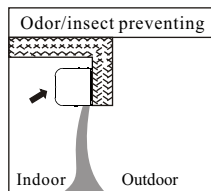
Adjust diverter of outlet to make better effect according different environment(as shown in the following pictures)



Air conditioning room:  
adjust 0-15 angle to indoor

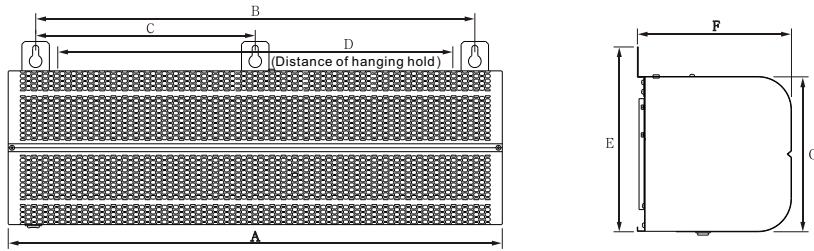


Heating room: adjust 0-15  
angle to outdoor



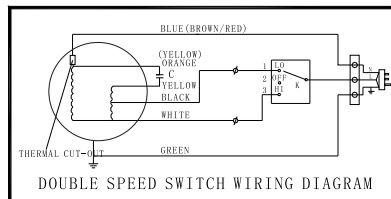
Odor / insect preventing:  
adjust 15 angle to outdoor  
if for kitchen and mess hall.

## Appearance & installation sizes



| MODEL      | A    | B    | C   | D    | E   | F   | G   | N.W(LBS) |
|------------|------|------|-----|------|-----|-----|-----|----------|
| MASH036-W1 | 900  | 800  | 400 | 700  |     |     |     | 44.1     |
| MASH048-W1 | 1200 | 1100 | 550 | 1000 | 333 | 280 | 280 | 55.1     |
| MASH060-W1 | 1500 | 1400 | 700 | 1300 |     |     |     | 63.9     |

## Wiring Diagram



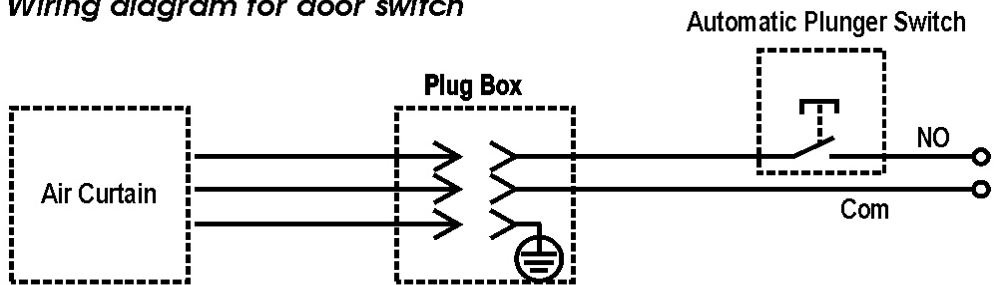
## Technical Parameter

| MODEL      | Volt. / Freq<br>V ~ /Hz | Motor power<br>W | Air speed |    | Air volume |      | Noise<br>dB | In/out water 100-65℃ |                      |                        |                         |                 | In/out water 90-60℃ |                      |                        |                         |                 | In/out water 85-55 ℃ |                      |                        |                         |                 |
|------------|-------------------------|------------------|-----------|----|------------|------|-------------|----------------------|----------------------|------------------------|-------------------------|-----------------|---------------------|----------------------|------------------------|-------------------------|-----------------|----------------------|----------------------|------------------------|-------------------------|-----------------|
|            |                         |                  | Ft/s      | L  | H          | L    |             | Water speed<br>m/s   | Water volume<br>Kg/h | Water resistance<br>Pa | Outlet temperature<br>℃ | Hot power<br>KW | Water speed<br>m/s  | Water volume<br>Kg/h | Water resistance<br>Pa | Outlet temperature<br>℃ | Hot power<br>KW | Water speed<br>m/s   | Water volume<br>Kg/h | Water resistance<br>Pa | Outlet temperature<br>℃ | Hot power<br>KW |
|            |                         |                  |           |    |            |      |             |                      |                      |                        |                         |                 |                     |                      |                        |                         |                 |                      |                      |                        |                         |                 |
|            |                         |                  |           |    |            |      |             |                      |                      |                        |                         |                 |                     |                      |                        |                         |                 |                      |                      |                        |                         |                 |
| MASH036-W1 | 220/50                  | 160              | 36        | 29 | 1400       | 1100 | < 55        | 0.49                 | 878                  | 2036                   | 53                      | 20              | 0.39                | 698                  | 1620                   | 49                      | 16              | 0.45                 | 805                  | 1870                   | 47                      | 13              |
| MASH048-W1 | 220/50                  | 200              | 36        | 29 | 1900       | 1600 | < 57        | 0.65                 | 1170                 | 2715                   | 53                      | 28              | 0.52                | 1170                 | 2610                   | 49                      | 21              | 0.6                  | 1070                 | 2500                   | 47                      | 17              |
| MASH060-W1 | 220/50                  | 230              | 36        | 29 | 2500       | 2000 | < 59        | 0.82                 | 1460                 | 3390                   | 53                      | 36              | 0.82                | 1460                 | 2700                   | 49                      | 27              | 0.75                 | 1330                 | 3115                   | 47                      | 21              |

## CAUTIONS AND MAINTENANCES

- # Do not let the water or other liquid splash in the motor.
- # According to different heating source, should supply the correspondence drainage pipe, and have the measure for keeping pipeline temperature. For hot water source, the below for water in, and upside for backwater. In the place of outlet backwater or highest tube should install the auto deflate valve.
- # For hot water source, the hot water should be intenerated water.
- # Every operation must drain out the cooling water or air inside the unit. Then turn on the unit after 10 minutes. And draining out all the water in the unit when stop working.
- # For ensuring the unit's operation, it must supply the hot source continuously.
- # For safe the unit, it must not supply the hot source only but do not turn on the unit!
- # If there is anything abnormal, should be stop the unit and check the problem.
- # Keep the unit cleans, cleaning the heat exchanger or parts of the unit for some times.
- # Routing maintenance must be done every year.

### *Wiring diagram for door switch*



Optional door switch & weather proof cover  
Save energy & eliminate unnecessary air circulation



COM common  
NO normally open  
NC normally close



***Maxwell***



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