

# USER'S GUIDE

Version: FM35-201705M



## AIR CURTAINS

**Models:** FM-3509-L/Y, FM-3510-L/Y,  
FM-3512-L/Y, FM-3515-L/Y  
(2 Speeds with Magnetic Switch)



**Thanks for purchasing this Air Curtain.**

**PLEASE READ AND SAVE THESE INSTRUCTIONS.**

**Strongly recommend to test the unit before installation for any defective or damage during shipment.**

**WARNING – TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:**

- A. Always disconnect, lock and tag power source before installing or servicing. Failure to disconnect power source can result in fire, shock or serious injury.**
- B. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.**
- C. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.**
- D. To reduce the risk of fire or electric shock, do not use this fan with any solid-state speed control device**
- E. Repair and maintenance operations can only be performed by qualified personnel.**
- F. Verify and ensure the rated voltage and frequency (please refer to the rating label) of the air curtain is in compliance with the mains supply.**

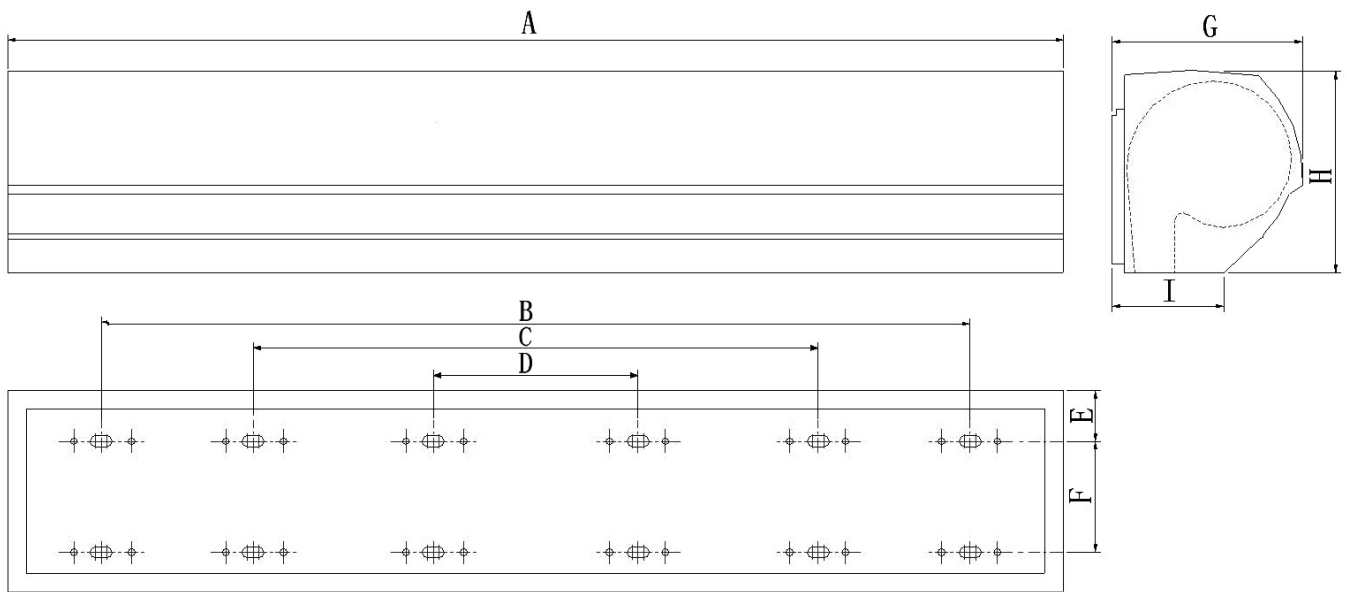
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### **1. PRODUCT INTRODUCTIONS**

Air curtains are widely installed at the entrances of supermarket, theater, meeting room, hotel, office room, storeroom etc. They can reduce penetration of insects, dust, and unconditioned air into a conditioned space by forcing an air stream over the entire entrance to create a comfortable environment for you.

## 2. INSTALLATION DIMENSIONS



**UNIT: inch**

| MODEL       | Max Entry Opening | A     | B   | C     | D     | E    | F    | G    | H    | I    |
|-------------|-------------------|-------|-----|-------|-------|------|------|------|------|------|
| FM-3509-L/Y | 38                | 35.43 | --- | 27.36 | ---   | 2.91 | 3.94 | 8.46 | 9.06 | 4.84 |
| FM-3510-L/Y | 42                | 42.00 | --- | 27.36 | ---   |      |      |      |      |      |
| FM-3512-L/Y | 50                | 47.24 | --- | 38.98 | 11.61 |      |      |      |      |      |
| FM-3515-L/Y | 62                | 59.06 | --- | 50.59 | 19.84 |      |      |      |      |      |

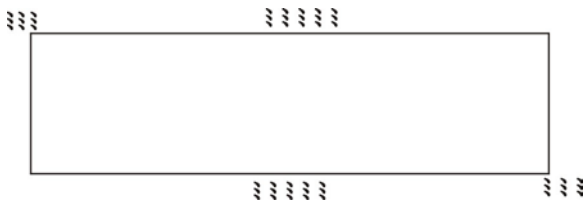
**Note: the data are subjected to change without notice due to product development.**

### 3. INSTALLATION CAUTIONS

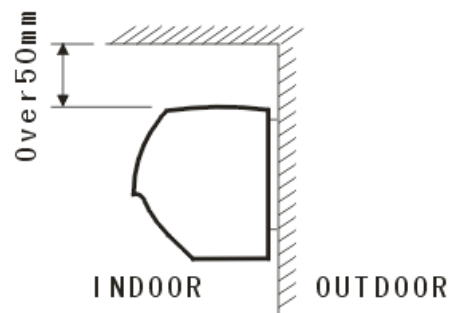
Must observe the following when installing air curtains:

**Strongly recommend to test the unit before installation for any defective or damage during shipment.**

3.1 Please install the unit on a sturdy supporting structure to avoid shaking and ensure its security (because the unit running may cause the wall to become loose or shake and make noise).

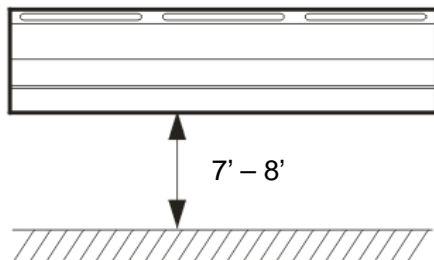


3.2 Please install the unit inside the room.

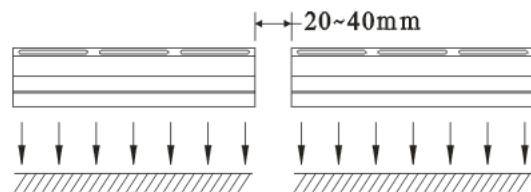


3.3 Install the unit between 7 feet to 8 feet from the ground.

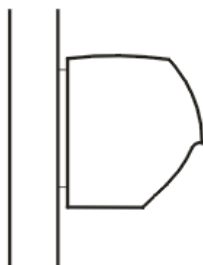
**ATENCIÓN: Instalar la unidad entre los 7 a 9 pies desde del suelo.**



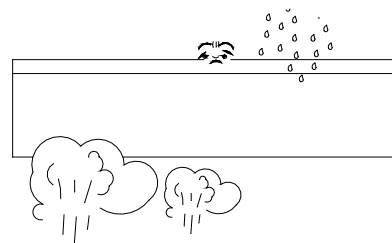
3.4 When the entrance is wider than the unit, it is recommended to install two or more units in parallel. In this case, provide 20-40mm gaps between the units.



3.5 Don't allow gaps between the unit and the wall.



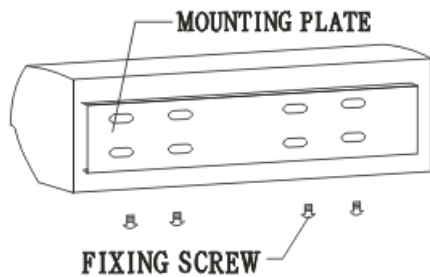
3.6 Don't install the unit at a place where it is splashed by water, exposed to excessive steam, explosive gas or corrosive gas.



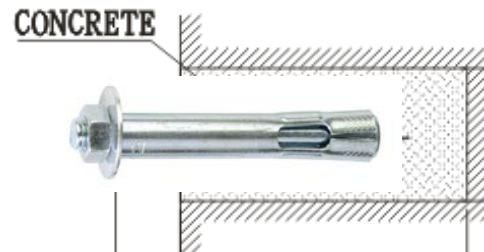
## 4. INSTALLATION INSTRUCTIONS

### A. Installing on the concrete wall:

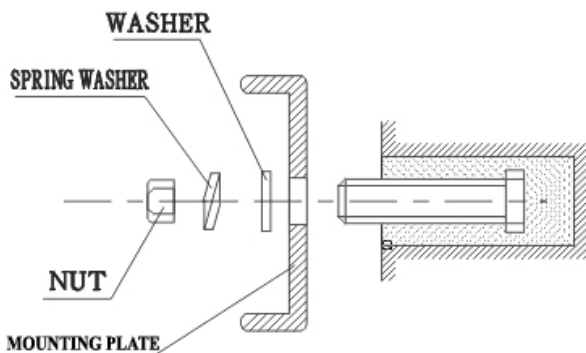
4.1.1 Unscrew the fixing screws to remove the mounting plate from the back of the main body.



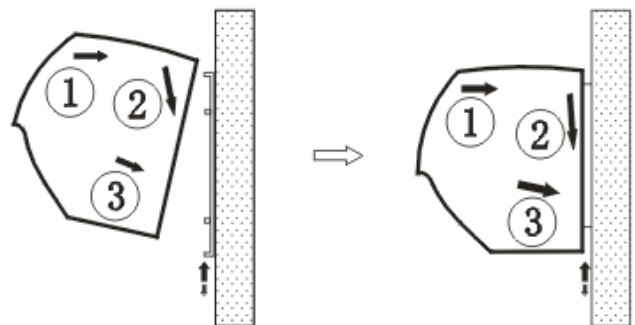
4.1.2 Determine the mounting location with the mounting plate. Drill holes and insert the **Zinc-Plated Steel Hex-Nut-Head Sleeve Anchor** (not included).



4.1.3 Tighten the nuts to secure the mounting plate to the wall (use the washers and nuts as the Fig shows).

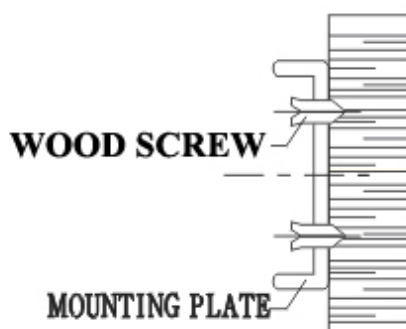


4.1.4 Hang the main body onto the upper end of the mounting plate, and then tighten the bottom fixing screws back to the mounting plate.

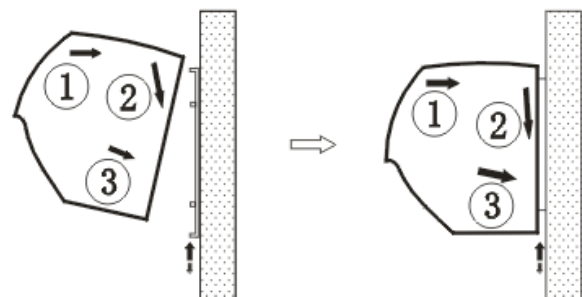


### B. Installing on the wooden wall: **(Note: make sure the screws are secured in the wood, attach an extra wood frame to the wall if needed.)**

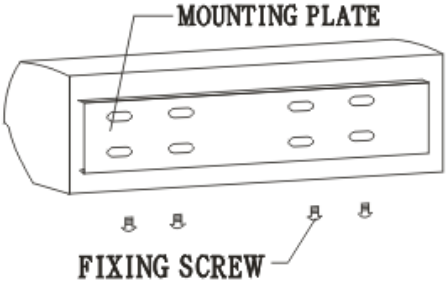
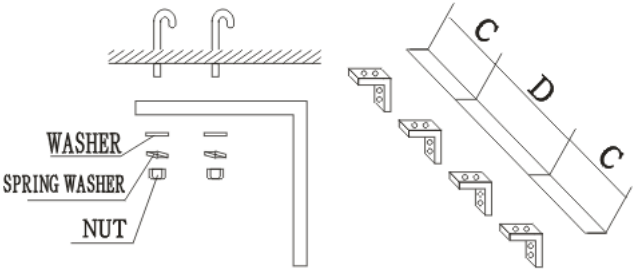
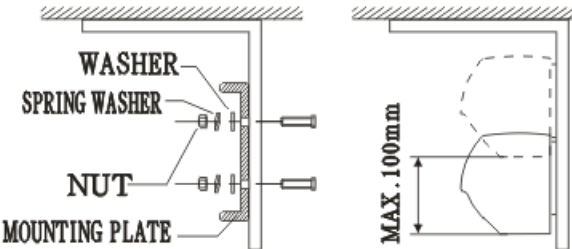
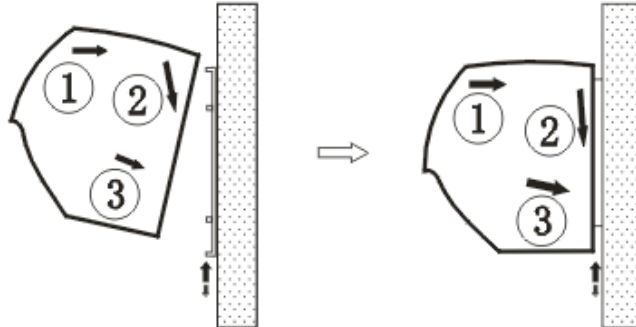
4.2.1 Refer to step 4.1.1 and determine the mounting location, then securely mount the mounting plate to the wooden wall with tapping screws.



4.2.2 Hang the main body onto the upper end of the mounting plate, and then tie the bottom fixing screws back to the mounting plate.



C. Installing from the ceiling: **(Note: this installation is NOT recommended; the ceiling brackets are not supplied.)**

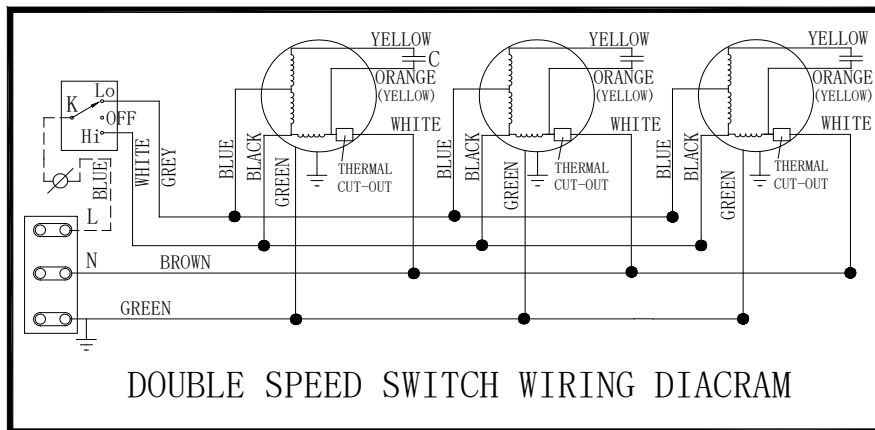
|   |   |
|---|---|
| <p>4.3.1 Remove the mounting plate from the main body as per the step 4.1.1</p>    | <p>4.3.2 Securely mount the ceiling brackets (not included) as the Fig shows.</p>   |
| <p>4.3.3 Fix the mounting plate to the ceiling brackets and tighten it securely as the Fig shows. The position of the mounting plate can be adjusted in vertical direction according to need, but the max distance is 100mm.</p>  | <p>4.3.4 Hang the main body onto the upper end of the mounting plate, and then tie the bottom fixing screws back to the mounting plate.</p>  |

## 5. TECHNICAL PARAMETER

| Model No.   | Voltage (V~Hz) | Power (W) |     | Max air velocity (FPM) |      | Air volume (CFM) |      | Noise level (dB) |    | Net weight (Lb) |      |
|-------------|----------------|-----------|-----|------------------------|------|------------------|------|------------------|----|-----------------|------|
|             |                | H         | L   | H                      | L    | H                | L    | H                | L  |                 |      |
| FM-3509-L/Y | 120V,<br>60Hz  | 300       | 270 | 3150                   | 2559 | 907              | 742  | 52               | 49 | 28.7            |      |
| FM-3510-L/Y |                | 320       | 300 |                        |      | 989              | 824  | 52               | 49 |                 | 30.9 |
| FM-3512-L/Y |                | 400       | 360 |                        |      | 1236             | 989  | 53               | 50 |                 | 34.2 |
| FM-3515-L/Y |                | 500       | 470 |                        |      | 1566             | 1236 | 55               | 52 |                 | 44.1 |

**Note: the data are subjected to change without notice due to product development.**

## 6. WIRING DIAGRAM



## 7. OPTIONAL MAGNETIC DOOR MICRO SWITCH INSTALLATION

This air curtain comes with a magnetic door switch, contact seller or Awoco if you are missing a magnetic switch. The dedicated 2 wires (Yellow) are to connect to the magnetic switch. Note: Keep the 2 wires connected (closed) if the magnetic switch is not used.

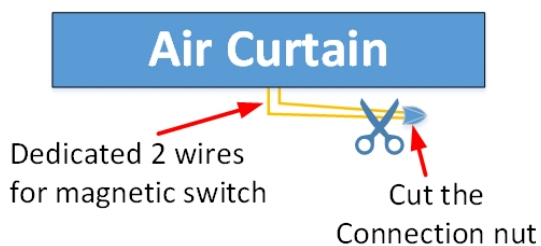
### Connect the magnetic door switch:

Cut the dedicated 2 wires' nut, and connect the wires to the magnetic switch's 2 wires. Use the black electrical tape to seal the connection.

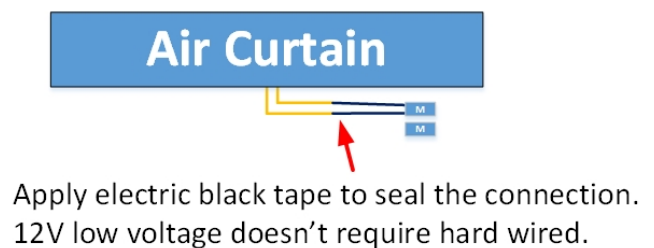


### Awoco Magnetic Switch Controlled Air Curtains Magnetic Switch Connection Instruction

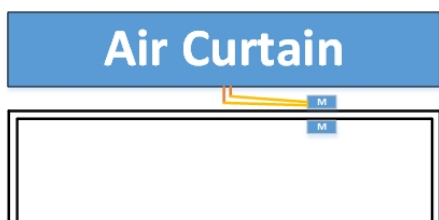
**Step 1: Cut the connection nut off the dedicated 2 wires for the magnetic switch**



**Step 2: Connect the wires one-to-one to the magnetic switch, either side is OK**



**Step 3: Place the 2-piece magnetic switch closely on the door frame and panel.**



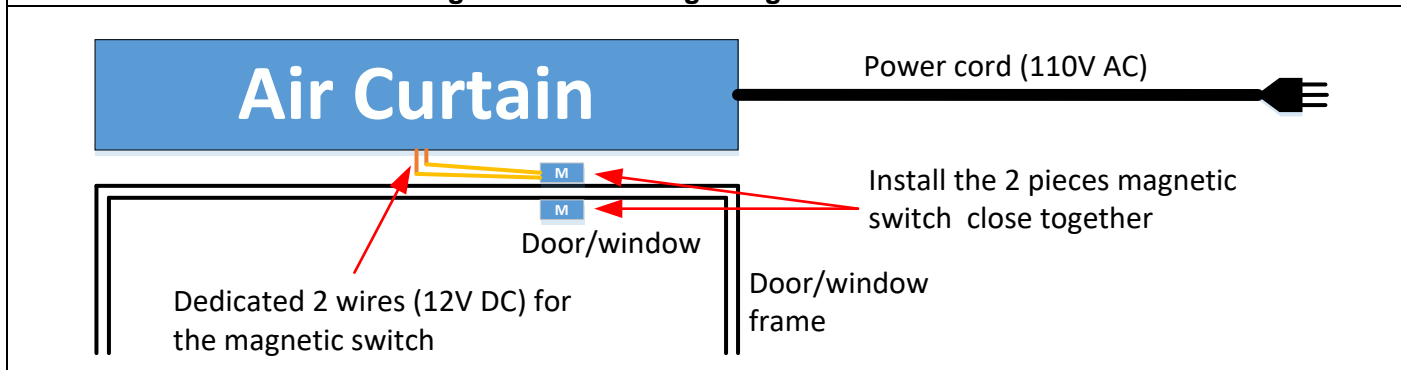
Place them on the door's middle top, side, etc. Test to find the perfect position to place the magnetic switch. If not on the same surface, raise one piece with a small piece of wood.

**For double doors, connect the 2 wires to both magnetic switches one-to-one in parallel.**



1 air curtain comes with 1 set of magnetic switch for 1 door only. If you have double doors, please purchase an extra magnetic switch (Model no. MAG-SW)

Install the 2 pieces magnetic switch to the door/window edge and frame; keep them close when the door/window is closed. **Hard wiring to 12V low voltage magnetic switch is NOT needed.**



**The air curtain should be installed indoor, consult with your electrical professional for electrical hard wiring connection.**

## 8. OPERATING INSTRUCTIONS

- 8.1 Connect power (110V 60Hz) to the unit.
- 8.2 Press the switch to the left or right to turn on the unit. [L] - Low speed, [H] - High speed.
- 8.3 Adjust the air deflector to slightly outward at about 10 to 15 degrees to obtain optimum effect.

## 9. MAINTENANCE AND CLEANING

### WARNING:

- A. Any service is to be performed only by qualified personnel who are familiar with local codes and regulations and are experienced with this type of product.
- B. Always unplug or disconnect the appliance from the power supply before servicing or cleaning the unit.
- C. Never use petrol, benzene, thinners or any other such chemicals for cleaning the unit.
- D. Don't allow water or any liquid to enter the motor.

- 9.1. Use the unit at the rated voltage and frequency indicated on the rating label.
- 9.2. Disconnect power source before unit installation or maintenance service.
- 9.3. Routine maintenance must be done every year.**
- 9.4. Plastic parts should be cleaned with mild soap water, thoroughly remove soap film with a clean damp cloth.
- 9.5. Wipe the exterior surfaces of the fan with a moistened cloth with a solution of mild detergent and water.
- 9.6. Dry the case with a soft dry cloth before operating the unit.

## 10. SUPPORT AND CONTACT

Contact your local seller for exchange or repair.  
Visit [www.awoco.com](http://www.awoco.com) for most updated information.  
Email to [sales@awoco.com](mailto:sales@awoco.com) for technical support and sales activity.