

CORTINAS DE AIRE



 SMART COOL



EC Motor

By using NSK bearing from Japan and 180° Sine wave control , our fan can achieve constant speed , constant torque and constant air volume and other control methods.

Stepless fan speed regulation can be realized by adjusting the external current 4-20mA, PWM pulse signal or voltage 0-10V.

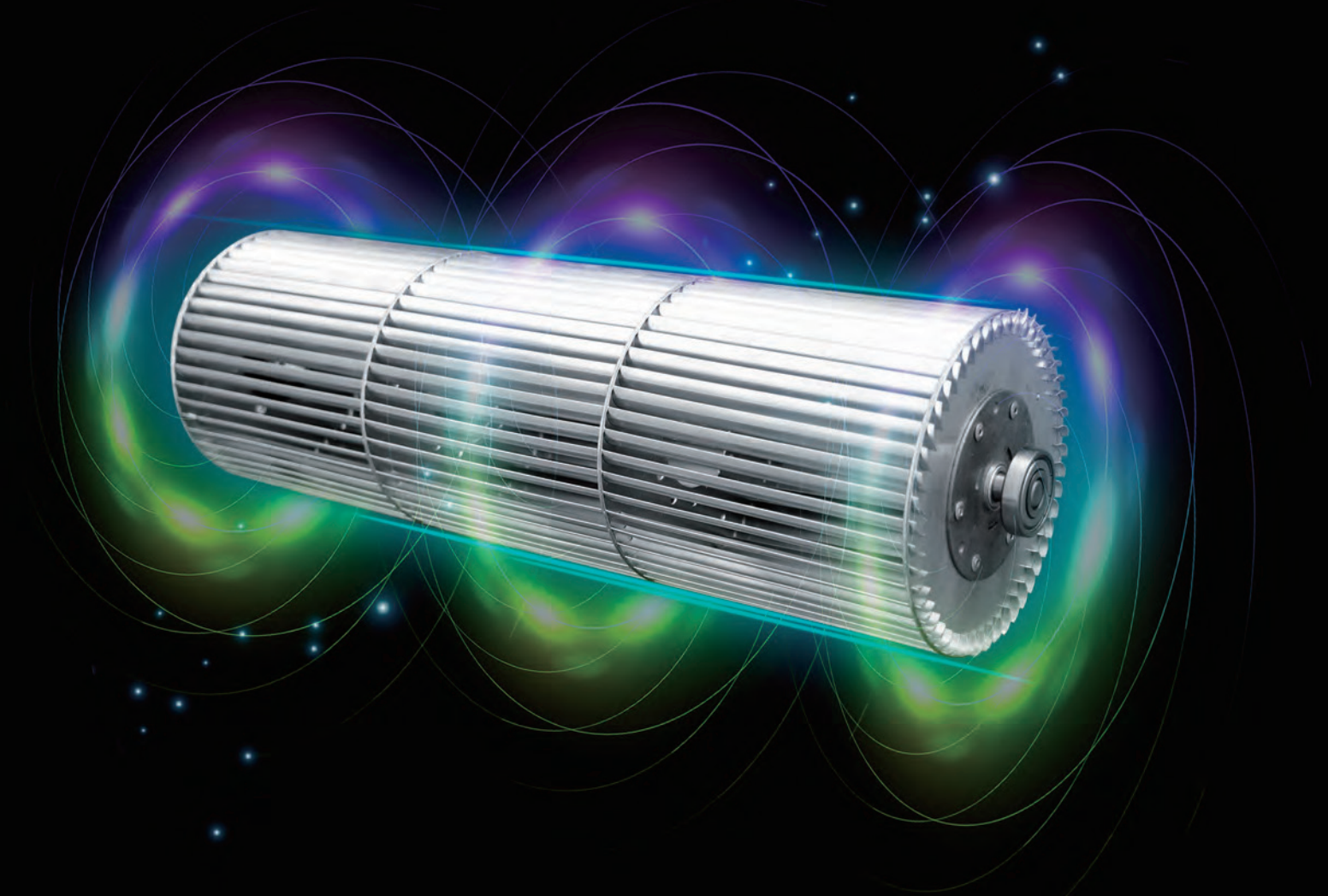
Users can realize centralized operation control and monitoring of multiple fans through RS485 bus.

With multiple protection functions , such as : phase loss , over voltage ,under voltage,locked-rotor, over current , temperature protection , etc.

Our motor has the characteristics of high intelligence ,high energy saving , high efficiency , long life , low vibration , low noise and continuous connection.



**Smooth Operation , Large Air Volume ,
Not Easy To be Deformed And Damage, And Long Service Life.**

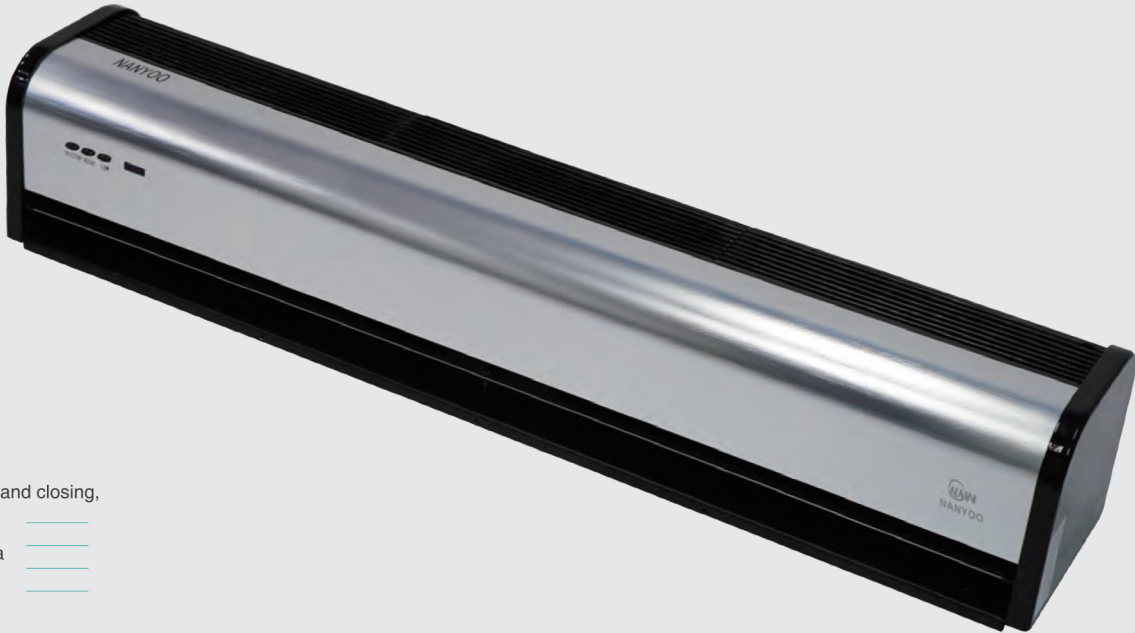




H5

CROSS FLOW AIR CURTAIN

- **High-end appearance design:** Applying aluminum panel, fashionable looks, serializing together with H3 and H7.
- **Improved air duct design:** convenient for assembling, bringing powerful, smooth and even air flow, making a great air curtain effect, and the installing high will be roundly 0.3m higher than competitor.
- **Unique segmented splice panel design:** front panel splicing with upper and lower plate, diversified for panel choosing like frosted aluminum, drawing process aluminum, etc.
- **High efficiency motor:** Adopting self-made motor, powerful, low noise, more reliable.
- **Multi-control ways:** Multi-control ways: With remote control and manual key design, the operation is more convenient, standard 2 speeds,3 speeds for option, which is suitable for a variety of places.
- **Intelligent magnetic door switch (Optional):** Realize humanized control of door opening and closing, greatly reduce indoor air outflow and save energy
- **Double voltage (For option):** Motor can be optional for 110V/220V, suitable for some area with double voltage like Taiwan, South America.



Model	Voltage/Frequency (V/Hz)	Power Input (W)	Air volume (m³/h)	Wind Speed (m/s)	Noise (dB)	N.W (KGs)	Unit Size (mm)	Mounting height (m)
SC-FM-1009H5-2Y-MC-1	110V-60Hz	82	1100	10-11	≤45	9.1	910×178×176	2.3-3
SC-FM-1012H5-2Y-MC-1		120	1500	10-11	≤46	10.8	1205×178×176	2.3-3
SC-FM-1015H5-2Y-MC-1		160	1800	10-11	≤48	12.2	1500×178×176	2.3-3
SC-FM-1009H5-2Y-MC-2	220V-60Hz	85	1100	10-11	≤45	9.1	910×178×176	2.3-3
SC-FM-1012H5-2Y-MC-2		115	1500	10-11	≤46	10.8	1205×178×176	2.3-3
SC-FM-1015H5-2Y-MC-2		140	1800	10-11	≤48	12.2	1500×178×176	2.3-3

Vertical view



★ Design Patent No.: CN201830614968.2



★ Invention Patent No. : CN201610704561.9
★ Design Patent No. : CN202130701381.7



- **Fashionable appearance design:** Applying frosted aluminum, high-end and elegant, easy for cleaning.
- **Unique air duct and air inlet design:** bringing powerful, smooth and even air flow making a great air curtain effect, the installing height will be roundly 0.3m higher than competitor.
- **High efficiency motor:** Adopting self-made motor, powerful, lower noise and more reliable.
- **Multi-control ways:** With new generation of remote control receiver and manual key design, the operation is more convenient, standard two speeds, three speeds for option, which is suitable for a variety of places.
- **Intelligent magnetic door switch (Optional):** Realize humanized control of door opening and closing, greatly reduce indoor air outflow and save energy

T3

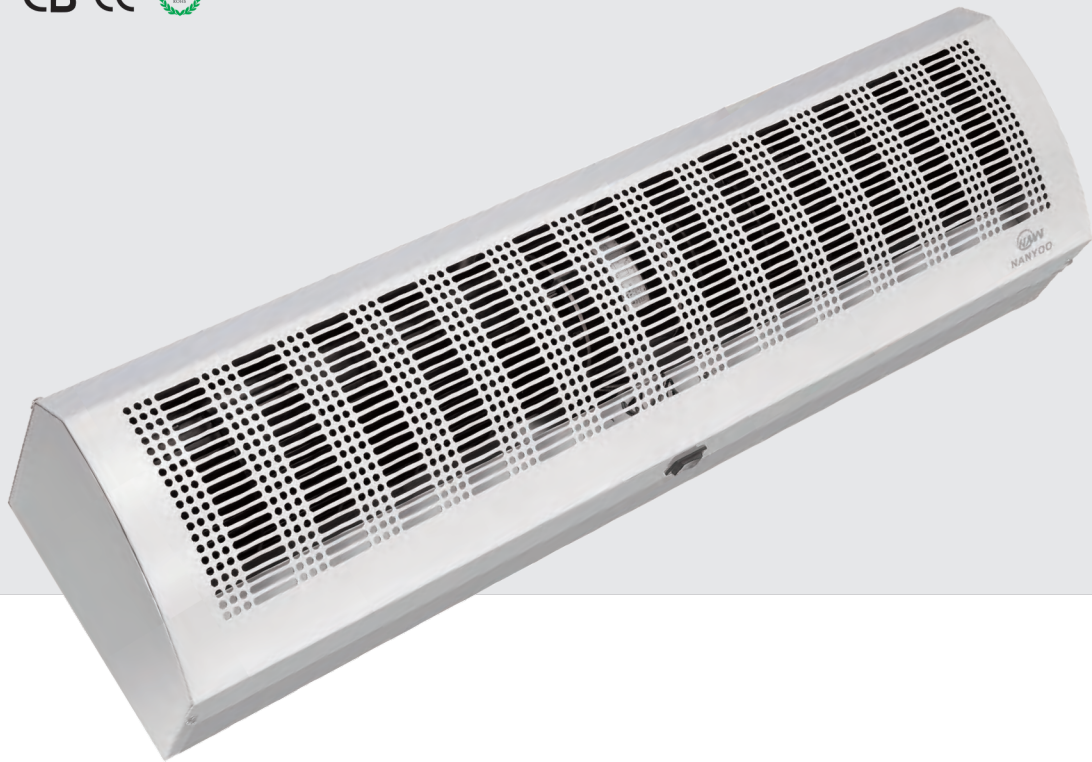
CROSS FLOW AIR CURTAIN

SIMPLE AND TASTEFUL



Parameters

Model	Voltage/Frequency (V/Hz)	Power input (W)	Air volume (m³/h)	Wind Speed (m/s)	Noise (dB)	N.W (KGs)	Unit Size (mm)	Mounting height (m)
SC-FM-1209T3-2Y-MC-1	110V~60Hz	160	1700	11	≤55	12.5	900×220×209	3
SC-FM-1212T3-2Y-MC-1		208	2350	11	≤57	14.7	1200×220×209	3
SC-FM-1215T3-2Y-MC-1		271	2850	11	≤58	17.6	1500×220×209	3
SC-FM-1209T3-2Y-MC-2	220V~60Hz	130	1700	11	≤55	12.5	900×220×209	3
SC-FM-1212T3-2Y-MC-2		200	2350	11	≤57	14.7	1200×220×209	3
SC-FM-1215T3-2Y-MC-2		240	2850	11	≤58	17.6	1500×220×209	3



N CROSS FLOW AIR CURTAIN

- **Classic curved panel design:** hexagonal hole + rounded rectangular embossing, fashionable and atmospheric, and the panel is more rigid.
- **Mature product structure:** mature model, stable performance, convenient installation and maintenance, stable air flow to slow the air speed decays, and more significant air curtain effect.
- **High-efficiency motor + U-shaped motor bracket and special anti-vibration rubber:** using self-produced motor, strong power, with U-shaped motor bracket and special anti-vibration glue, low noise and reliable performance.
- **Multi control modes:** adopt remote control and manual button mode, the operation is more convenient, standard 2-speed wind speed, can be 3 speeds for option, suitable for use in a variety of places.
- **Intelligent magnetic door switch (optional):** realize the humanized control of door opening and closing, greatly reduce the outflow of indoor air, and save more energy.
- Can be equipped with air inlet filter.



SUPER UV LIGHT GERMICIDAL AIR CURTAIN

★ Utility model patent No.: CN202020289432.X
★ Design Patent No.: CN202030197014.3

- The UV lamp uses high-quality high-purity quartz material, with a service life of 8000 ~ 13000 hours;
- High-power ozone-free type UV lamp, the main spectrum is 253.7nm, which can kill all kinds of bacteria, viruses and microorganisms;
- UV light decay is small, and the UV intensity decay is less than 30% during its life;
- Effectively isolate outdoor bacteria, bugs and dust;
- Disinfection and discharge of indoor air, to reach air recycling;
- Also can run only UV lamp sterilization function.



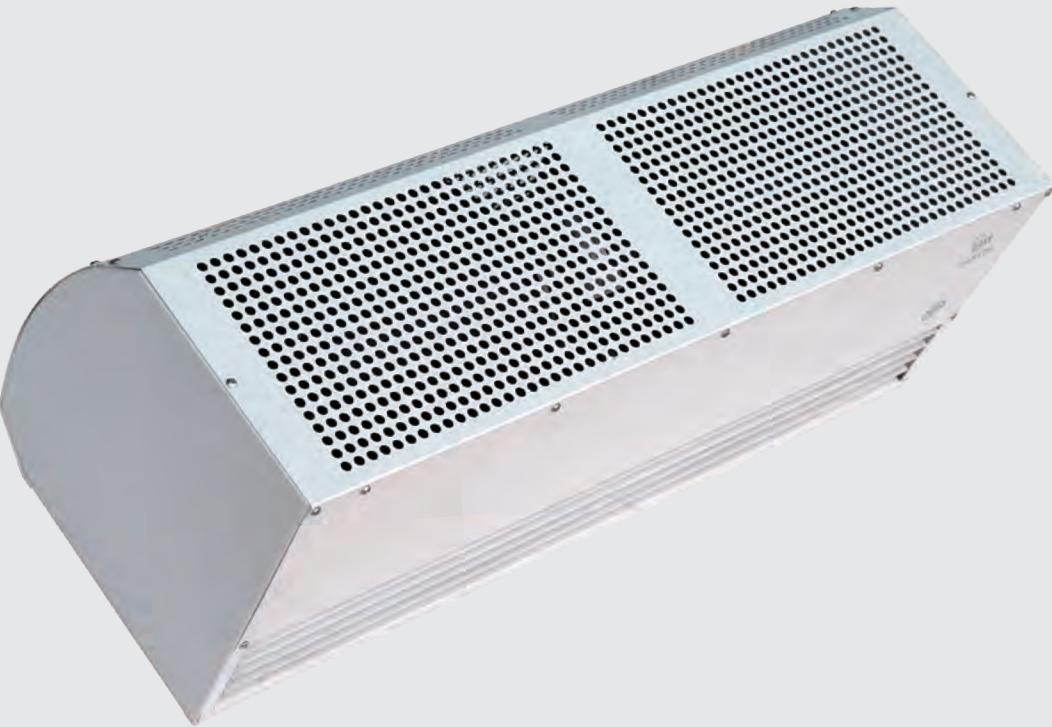
Parameters

Model	Voltage/Frequency (V/Hz)	Power input (W)	Air volume (m³/h)	Wind Speed (m/s)	Noise (dB)	N.W (KGs)	Unit Size (mm)	Mounting height (m)
SC-FM-1209N-2Y-MC	110/60	160	1300	11	≤52	12.8	900×220×195	3
	220/60	163	1300	11	≤52	12.8	900×220×195	3
SC-FM-1212N-2Y-MC	110/60	194	1800	11	≤54	15.7	1200×220×195	3
	220/60	203	1800	11	≤54	15.7	1200×220×195	3
SC-FM-1215N-2Y-MC	110/60	258	2350	11	≤55	19.9	1500×220×195	3
	220/60	263	2350	11	≤55	19.9	1500×220×195	3



Parameters

Model	Voltage/Frequency (V/Hz)	Speed	Power input (W)	Wind Speed (m/s)	Air volume (m³/h)	Noise (dB)	N.W (KGs)	Unit Size (mm)	UV lamp power (W)	UV intensity (uw/cm²)
SC-FM-1209-UV1/2Y4-1	110/60	H	142	11	1780	≤46	16	900*234*266	40	120
		L	100	8.5	1375	≤43				
SC-FM-1212-UV1/2Y4-1	110/60	H	230	11	2370	≤48	20	1200*234*266	60	135
		L	162	8.5	1830	≤45				
SC-FM-1215-UV1/2Y4-1	110/60	H	324	11	2970	≤51	24	1500*234*266	60	170
		L	250	8.5	2230	≤47				



INDUSTRIAL AIR CURTAIN-
CENTRIFUGAL TYPE

- Metal housing for fire resistance.
- Powder coating for rust free.
- New ventilating air duct gives a high pressure, and mouthing height up to 6-8 meters.



Parameters

Model	Voltage/Frequency (V/Hz)	Power input (W)	Air volume (m³/h)	Wind Speed (m/s)	Noise (dB)	N.W (KGs)	Unit Size (mm)	Mounting height (m)
SC-FM-6015GY	220/60	900	6250	24	≤68	58	1523×345×351	6-8



CENTRIFUGAL FLOW
AIR CURTAIN

- **Luxurious appearance design:** adopts a full panel aluminum alloy design, which is high-end and fashionable. The panel is flat and easy to clean;
- **Unique centrifugal air duct design:** strong air flow, stable and even air outlet, and more significant air curtain effect;
- **High-efficiency motor + U-shaped motor bracket and special anti-vibration rubber:** using self-produced motor, strong power, with U-shaped motor bracket and special anti-vibration rubber, low noise and reliable performance;
- **Multi control modes:** adopt remote control and manual button mode, the operation is more convenient, standard 2-speed wind speed, can be 3 speeds for option, suitable for use in a variety of places.
- **Intelligent magnetic door switch (optional):** realize the humanized control of door opening and closing, greatly reduce the outflow of indoor air, and save more energy.



Parameters

Model	Voltage/Frequency (V/Hz)	Power input (W)	Air volume (m³/h)	Wind Speed (m/s)	Noise (dB)	N.W (KGs)	Unit Size (mm)	Mounting height (m)
SC-FM-4509Z-L/Y-MC-2	220/60	360	1260	18	≤46	15.5	900×230×215	4.0-4.5
SC-FM-4512Z-L/Y-MC-2	220/60	480	1680	18	≤47	16.5	1200×230×215	4.0-4.5
SC-FM-4515Z-L/Y-MC-2	220/60	600	2100	18	≤50	22.5	1500×230×215	4.0-4.5



Insect Repellent Function

Air curtains create a barrier through high-speed airflow, effectively blocking harmful and annoying insects. They can be used in places like fast food restaurants, fruit counters, and cake and dessert shops to ensure hygienic conditions.

Dust-proof Function

Installing air curtains in the foyers of precision equipment workshops or street-facing food/clothing/retail stores can effectively prevent outdoor dust from entering the room, reducing or preventing dust accumulation on equipment and merchandise.

Thermal Insulation Function

Large public venues like casinos, restaurants, shopping malls, theaters, and subway stations have high foot traffic and require open doors for business. Using air curtains in these locations can reduce indoor air loss and thus lower electricity costs.

Fresh Keeping

Air curtains generate high-speed airflow, dividing the interior and exterior of the store into two separate temperature zones. This effectively blocks odorous, soot-laden air from entering the store, promoting air circulation within the store and maintaining consistently fresh and clean air.

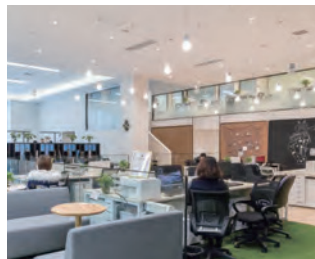
Application Site:



KITCHEN



HOSPITAL/SCHOOL



OFFICE BUILDING



METRO STATION



SHOPPING MALLS



HOTELS



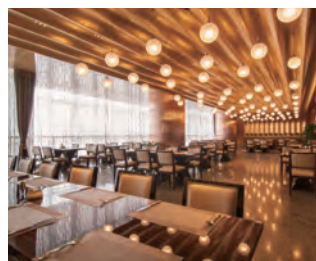
DUST-FREE PLANT



COLD ROOM



AIR PORT



RESTAURANTS

How to select suitable Air Curtain?

The selection of air curtain should be based on the actual width and height of the door, and refer to the technical parameters to select:

Door Width

The length of the air curtain should be slightly longer than or equal to the width of the door. If the door is too wide, multiple air curtains can be used (for example, if the door width is 2.4m, two air curtains with 1.2m length can be selected; if the door width is 3m, two air curtains with a length of 1.5m can be selected).

Door Height

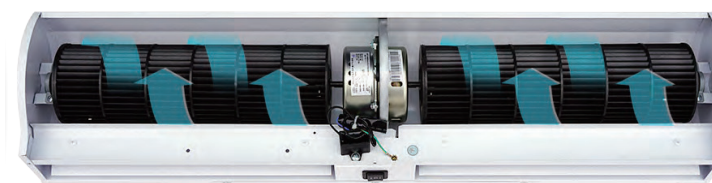
The normal air curtain can blow 2.5m distance, once the door height is more than 3m which can select enhanced air pressure air curtain, or won't be able to reach air curtain function.

Air Curtain Types

1 Accords to motor and blower

Cross Flow

As known as axial flow, It has a cylindrical air wheel and the air flow is same direction as axis running, and it can used in height no more than 3.0m.



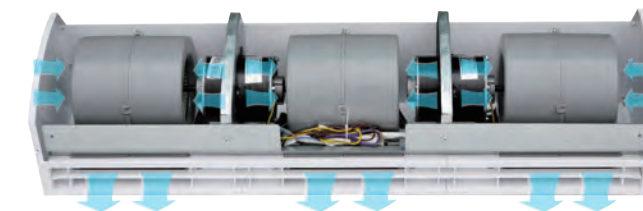
Even air flow

Large Air Volume

Height no more than 3m

Centrifugal Flow

Air enters from the axial direction of the impeller and exits radially. And the air flow is concentrated and high pressure, making them suitable for higher door. They operate at high air speeds and suit for height from 3.5m to 5.5m.

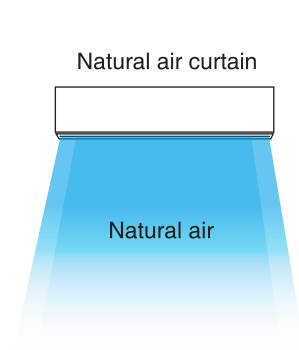


Strong Air Pressure

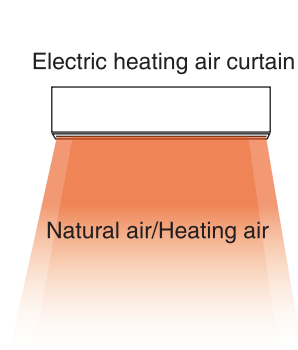
High Air Speed

Suit for door height 3.5-5.5m

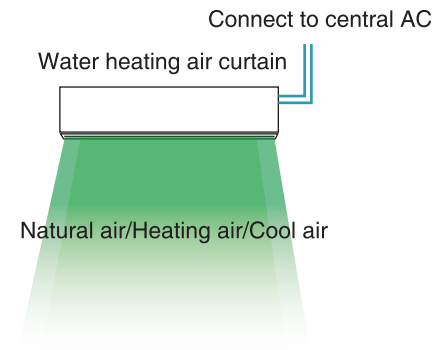
2 Accords to air outlet types



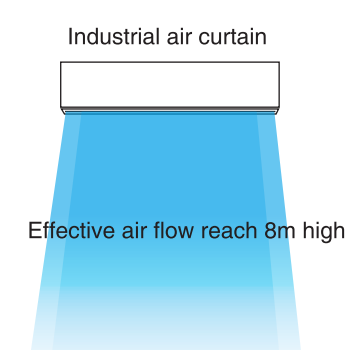
Mainly use in tropical area to stop cool air dispatching from indoor.



Mainly use in cold area to stop cool air inlet from outdoor in cold seasons. With build-in PTC heater which can blow heating air in winter and natural air in summer.



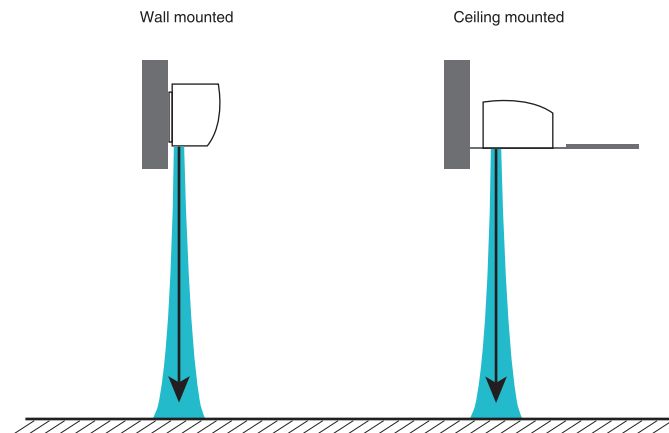
Make use of water from central AC as refrigerant to have cool air in summer while heat air in winter. Which increase cooling function than heater Air Curtain so than expand the function.



Normally use in big warehouse and factory, Effective air flow reach 8m high.

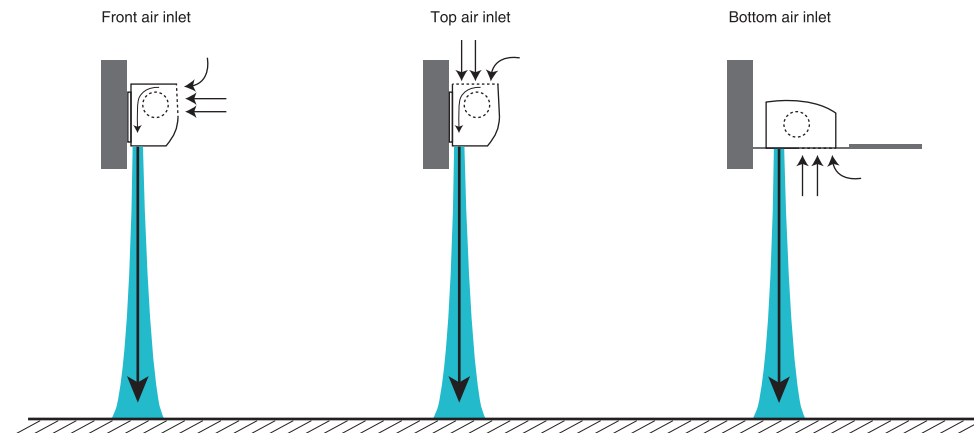
3 Accords to installation

Select suitable one according to site



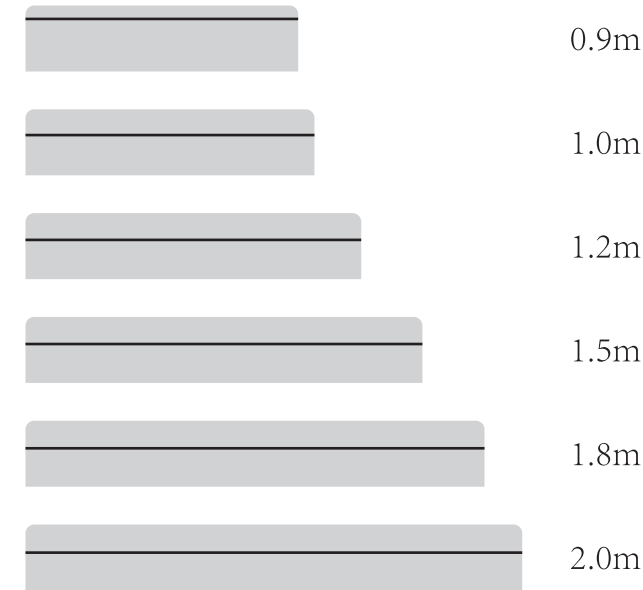
4 Accords to air inlet direction

select suitable one according to space



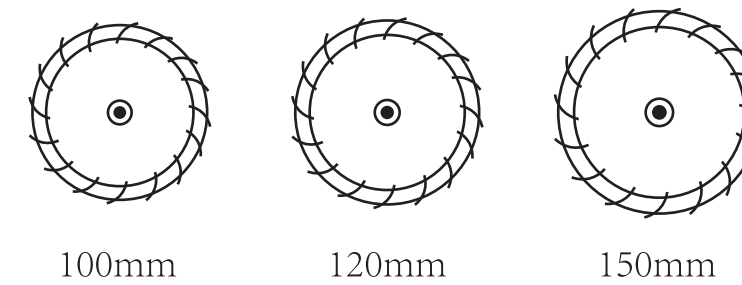
5 Accords to machine length

Wide size door can match multiple units.



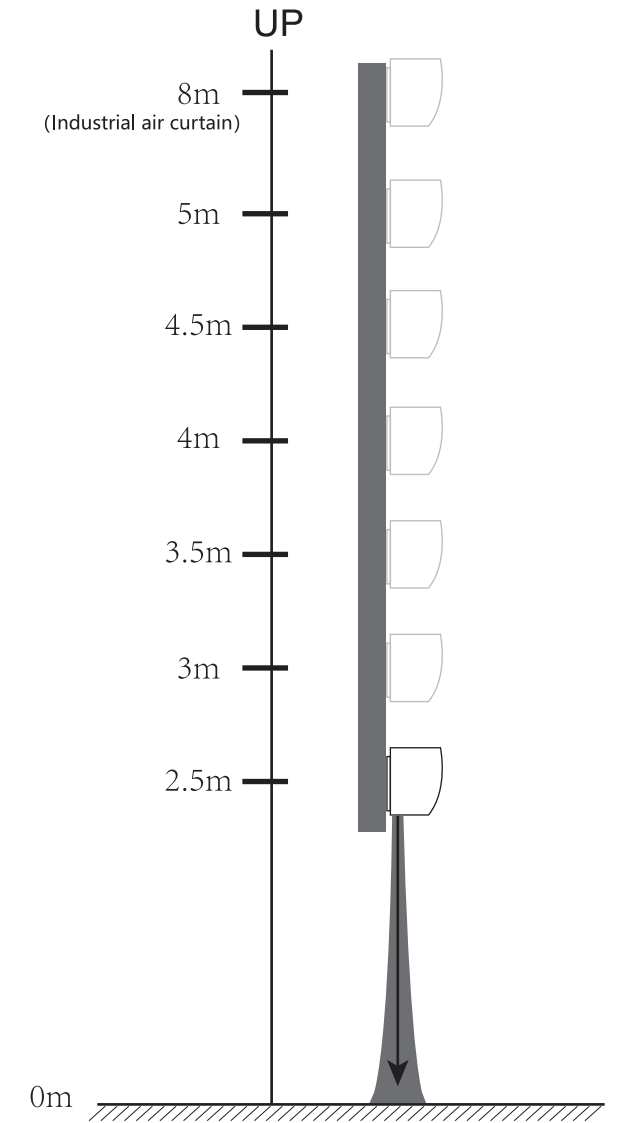
6 Accords to wheel diameter

Different size of diameter bring different air volume/speed



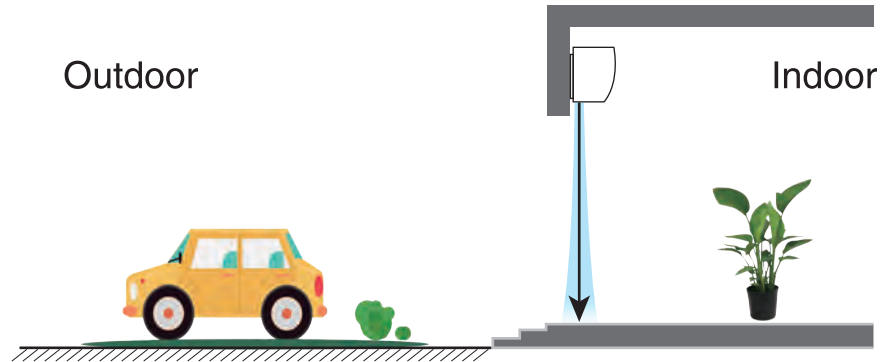
7 Accords to airflow distance

Select model depending on door height



Model Selection Notices

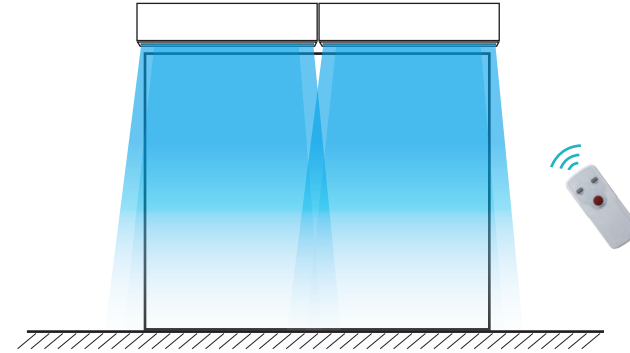
- 1 Door height must be under effective air flow distance. Once install in dusty and roadside area, must consider higher air speed machine.



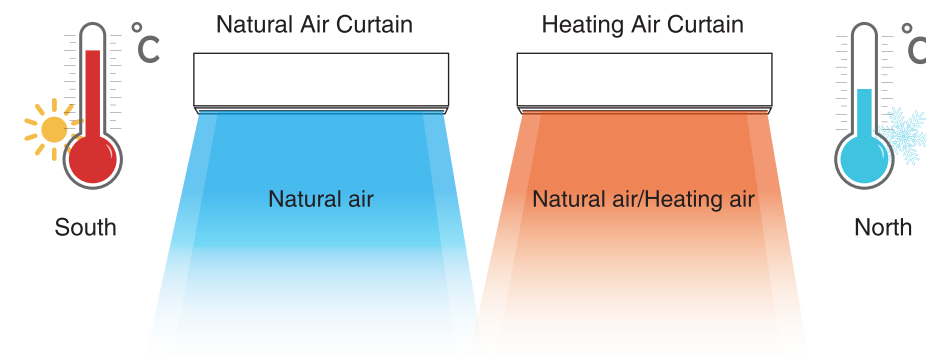
- 3 It should choose metal wheel air curtain once use in place of high oil smoke like kitchens.



- 2 If the door is high, it is better to select remote control type to have convenient control.



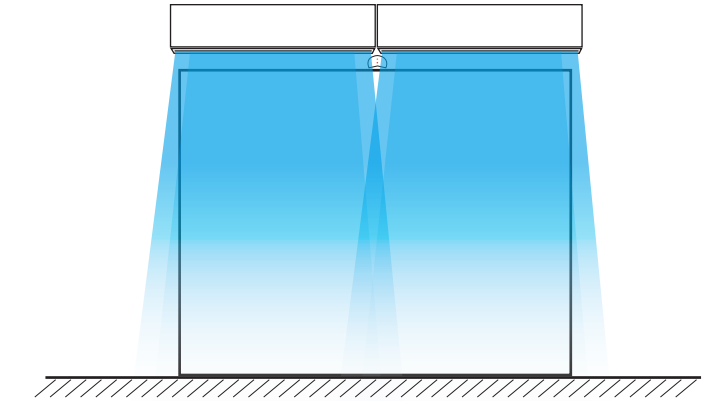
- 4 Select natural air curtain or heating air curtain accords to climate difference.



- 5 Do not use electric heating Air Curtain in dusty places, you can use water heating Air Curtain instead.



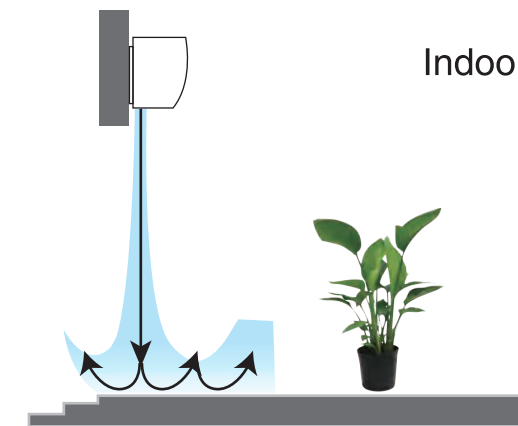
- 6 If there are automatic door, it is necessary to consider the installation location when selecting the model.



Modeling Misconceptions

Higher air speed $\neq$ better blocking effect

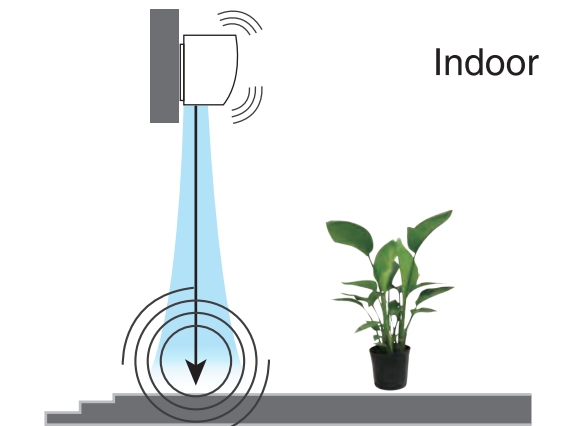
Air speed too high cause airflow rebounds



If the air speed is too high, it will rebound after hitting the ground, causing the air flow to scatter, thus affecting the air curtain's ability to separate air ventilating. Generally speaking, if the door height is less than 3 meters, the air speed reaching the ground can be 2-2.5m, which can achieve a good separation effect.

High Air volume $\neq$ best model

High air volume cause high noise level



The larger the air volume, the higher the noise level; So when selecting, it is only necessary to choose the appropriate one according to the actual situation, without excessive selection.

Installation Methods

First choice is to install on indoor side

Based on experience, it's better to install the air curtain indoor. In winter, outdoor temperatures is lower, in beginning of heating mode, the cold air blow to guests can be very uncomfortable. Furthermore, installing the air curtain outdoors cause cleaning problem, dust can quickly clog the air inlet affect the performance. In the other hand, air curtains are not waterproof, and rain and snow can damage them.

Length must be wider than door frame

The air curtain should be installed on the door frame, and the width of the air curtain must be wider than the width of the door opening. If the door opening is too wide, several air curtain machines must be connected and installed.

Securely attach the mounting plate

The mounting plate must be securely attached to the wall or door frame to prevent looseness and vibration. Vibration can cause noise and shorten the motor's life. In severe cases, it can even cause a safety hazard.

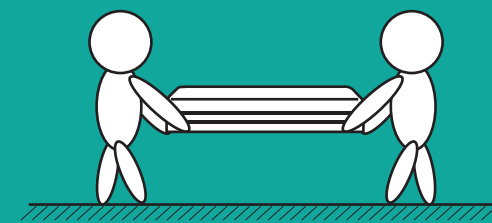
Installation methods of mounting plate

For installation on a concrete wall, position eight 10x60 bolts according to the holes on the mounting plate and embed them in the cement. Then, secure the mounting plate to the concrete wall or punch holes directly in the concrete wall and secure with expansion screws. Once the mortar is fully established, secure the mounting plate washers and nuts to the bolts. Secure the eight bolts to the concrete wall or door frame.

Make sure the unit's mounting angles are fully inserted into the mounting holes on the mounting plate. Hang the air curtain upside down on the mounting hook with the air outlet facing downward. Align the screws and re-tighten them. Different mounting surfaces—cement walls, stainless steel structures, and glass curtain walls—require different handling methods.

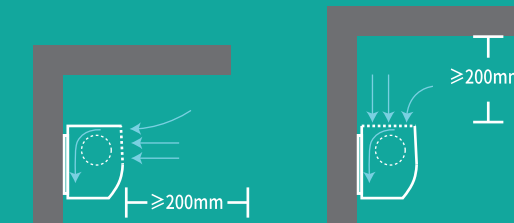
Installation Precautions

Move smoothly



When installing or moving, do not use the air deflector as a handle to lift it, to prevent it from falling off or breaking. Two people should hold it on the metal chassis behind the air curtain to prevent the plastic shell from breaking due to uneven force.

Keep enough space for air intake



Regardless of whether it is a top air inlet or a front air inlet model, a space of at least 200mm must be reserved at the air inlet to ensure normal air intake of the machine, otherwise it will affect the function and service life of the air curtain.

Make sure air curtain no going into ceiling

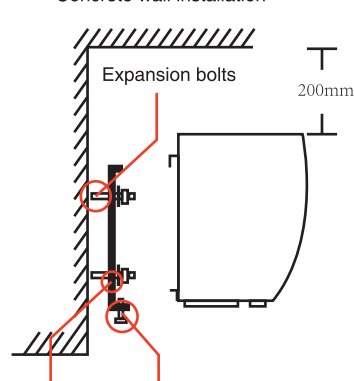


If there is enough space for installation, please do not embed the air curtain into the ceiling (except for Ceiling Mounted Air Curtain). If it must be installed in the ceiling, please leave enough space for the air inlet.

Installation cases

“Fox example of front air inlet type, if top air inlet, must keep space more than 200mm on the top.”

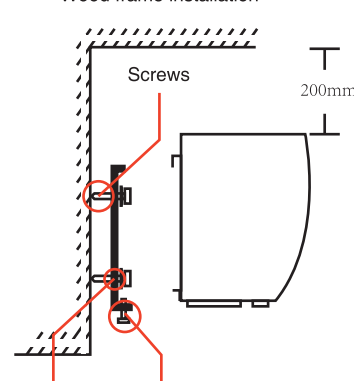
Concrete wall installation



Mounting plate Mounting bolts

Mounting plate mounting bolts
Use washers, spring, bolts to fix well

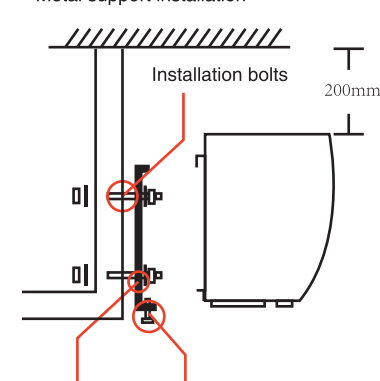
Wood frame installation



Mounting plate Mounting bolts

When installing on a wooden frame, need to use some reinforcement materials to ensure a secure installation.

Metal support installation



Mounting plate mounting bolts

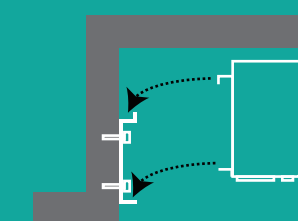
When using a steel frame provided by the user, use 6 M8 bolts, washers, spring washers and nuts to secure it firmly.

Prohibit hoisting without mounting plate



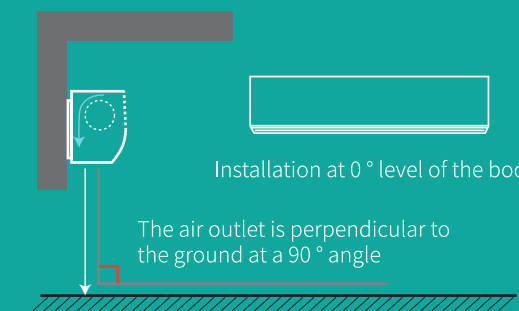
Hoisting without mounting plate will cause mechanical vibration and noise, and shorten the machine's service life.

Make sure all the hanging feet of the machine body are inserted into the mounting plate.



Make sure all the hanging feet of the machine body are inserted into the mounting plate.

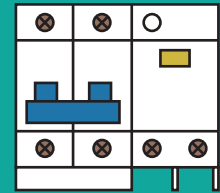
Keep level installation



Keep level installation, make sure the air outlet is perpendicular to ground at 90° angle

Installation Precautions

Make sure safe electricity use measures

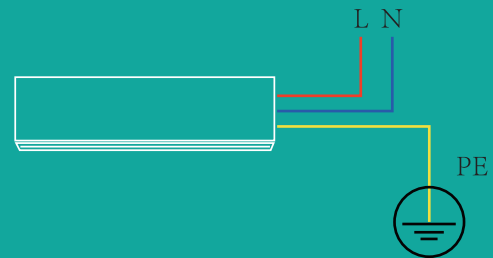


Connecting to a leakage protector



Use suitable cables

For heater Air Curtain, must connect to leakage protector due to high power input.



Must be grounded

Ground wire to assure safe

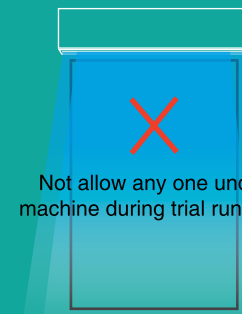
For heating Air Curtain, it is forbidden to switch off by shutting down power



Electric air curtains are designed with a delayed shutoff feature to cool the heating element when shutting down. To avoid fire hazards, they must be shut down using the machine switch or remote control. Turning them off by simply cutting off the power supply will cause the fan to stop rotating immediately, preventing the heating element from dissipating heat. Furthermore, electric air curtains have high power consumption, so directly cutting off the power supply can easily lead to safety accidents.

Usage And Maintenance

Trial running



Not allow any one under machine during trial running

Not allow any one under machine during trial running

Softened water



When using hot water as a medium, use softened water to prevent scale accumulation and blockage in the pipes.

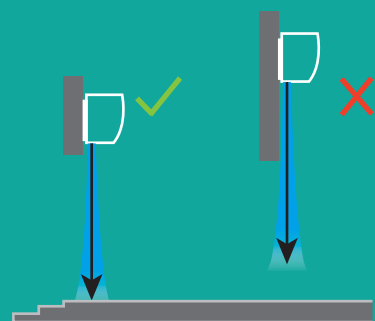
The hydrothermal air curtain needs to be preheated

preheat 10 minutes



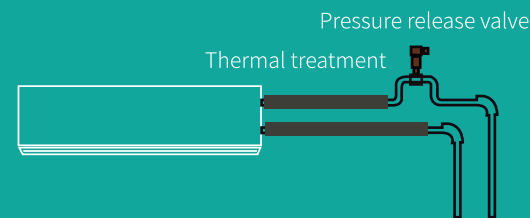
Dispatch condensing water before running each time, or preheat 10 minutes. In case . When the hot air curtain is stopped, the water in the coil must be drained out.

Mounting place not to high



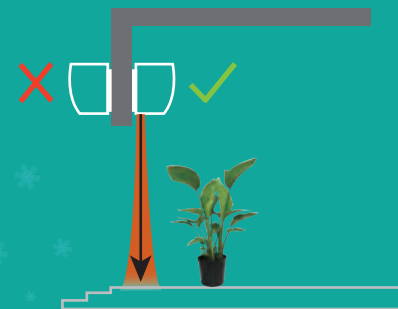
The door height and machine parameters should be determined when purchasing, and the installation height should be determined according to the machine parameters during installation;

The heat medium pipeline needs to be insulated and pressure protected



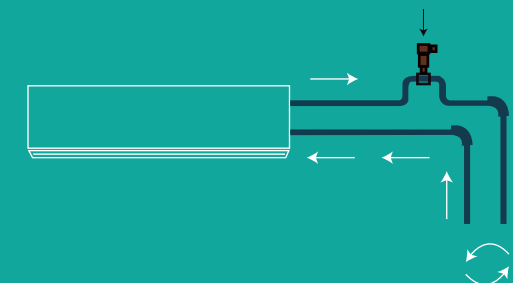
When using different heat media, corresponding water supply and drainage pipelines should be equipped and the pipelines should be insulated. When using hot water as the medium, water should flow in from the bottom and return from the top. An automatic air release valve should be installed at the return water outlet or at the highest point of the main pipe.

Water heating air curtain must install indoor side



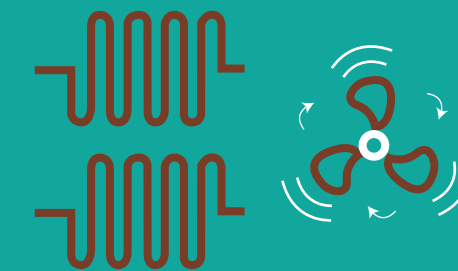
Water-heated air curtains must be installed on the indoor side of doors and windows to prevent water from freezing and cracking inside the heat exchanger coils.

Continuous and stable supply of thermal energy



When the water-heated air curtain is working in winter, the heat energy must be supplied continuously or regularly to ensure the working state of the air curtain. Prolong the service life of the motor.

In thermal mode must run motor



It is not allowed to operate only for heating without starting the fan/motor

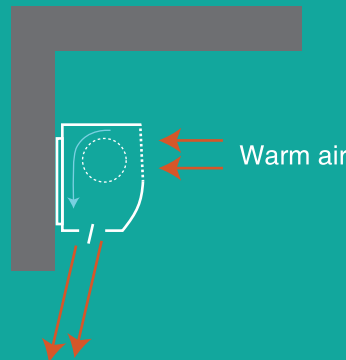
L speed in winter/H speed in summer



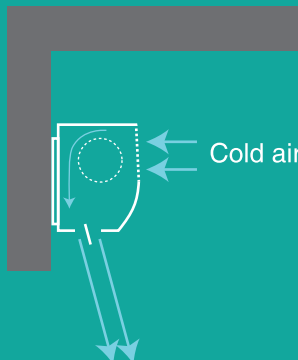
In winter, in order to maintain the indoor temperature, please use L speed, and H speed in summer; in order to prevent dust, odor, mosquitoes, etc., please use H speed;

Usage And Maintenance

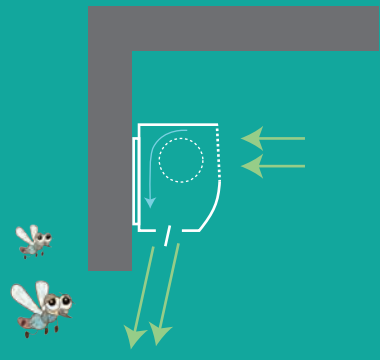
Air deflector direction:



A. When the room is heated, turn the air deflector and the air outlet will be outward



B. When the room is cooled, turn the air deflector and the air outlet will be inward



C. When used to prevent dust, mosquitoes, odors, etc., turn the air guide plate and the air outlet will face outwards.

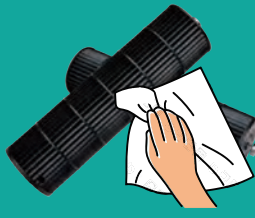
Maintenance:



a. Shut down power before checking



b. Clean wheel, panel and volute by soft wet towel.



c. Use a soft cloth dampened with neutral detergent to clean the air inlet louvers, wheel blades, and housing.



d. Do not let the motor get wet; otherwise, it will easily cause deformation and vibration.

Defect	Root cause analysis	Solutions
Fan is not running or no wind.	The switch is not closed, the switch is damaged, the impeller is damaged, the motor capacitor is damaged, the motor thermal protector is tripped, or the motor winding is burned out.	If the thermal protector trips, wait for the temperature to drop and the unit will automatically recover, or the motor may need to be replaced. Other issues require repair or consultation with a qualified repair technician.
Electric Heater Air Curtain has small airflow.	PTC heater blocked so that air inlet is not enough.	Clean the heater after a power off. If it is concealed or the air inlet is not sufficient, choose the correct installation method.
Wires and switches too hot.	The wire diameter is too small and the switch capacity is too small.	Change quality and reliable wire and switches.
The air is not hot or the temperature is low.	(hydrothermal Air Curtain: water inlet temperature is not enough),phase loss (three-phase electricity),wire too long.	Check the temperature of the water inlet and reselect the appropriate model.(inspected by professionals)
Over vibration	Collisions may occur, resulting in damage to parts during transportation, and inappropriate installation intervals	Problems encountered during transportation are considered force majeure and must be replaced with a new product. Ensure proper installation distance.
Noise	There may be cracks in the impeller or motor bearings, or the product may be experiencing a resonant sound.	Replace wheel, motor, and put some foot support to reduce vibration.
Hydrothermal Air Curtain machine leaks.	During the installation process, the copper pipe was broken at the water inlet due to excessive force during installation.	Do not use too much force when installing/ replacing the surface cooler.
Remote controll type heating Air Curtains are heating on one side and not heating on the other.	Check if AC contactor is normal. Or if there is phase lose.	Change ac contactor, Make sure not phase lose.
A tripping condition occurs.	He device overheats, causing the PTC overheat protection to be triggered.The rated current of the installed leakage circuit breaker is insufficient.	First confirm the installation conditions on site (such as concealed installation, blocked air outlet), ensure good air flow, do not install in a sealed space, and replace with a high-voltage circuit breaker.