



Le leader des équipements solaires !



BIO CLIMATISEURS  
ECONOMIQUES | 10 Fois  
Moins

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Sotuba ACI près de la Station SHELL &  
Rue Nolly derrière Malimag Imm. Sylla  
Porte 29 BP E877 Bamako / Rép. du Mali

## PRESENTATION

Sonikara Solar Electro SARL est un fournisseur professionnel de matériels solaires en général avec un penchant très particulier pour les pompes solaires et les bios climatiseurs. Sonikara Solar Electro SARL est l'un des premiers établissements au Mali avec un réseau de ventes en expansion de marques déposées, résultats de nouvelles technologies.

Notre ambition est de faire du Mali un pays autosuffisant en énergie renouvelable sans pollution pour construire un avenir saint et durable.

Ainsi, Sonikara Solar Electro SARL accompagne la population avec une large gamme de produits de renommée internationale.

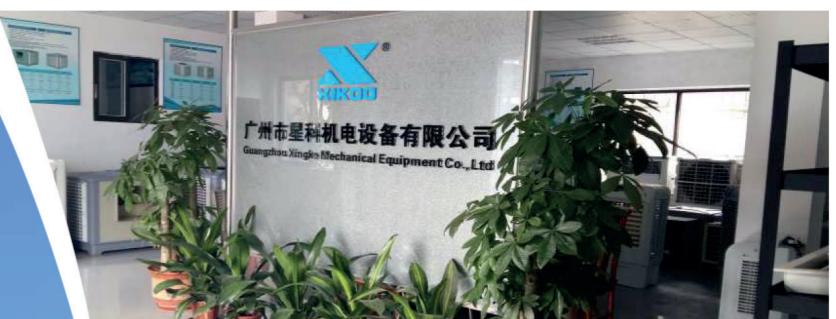
## NOS DOMAINES

- Energies Renouvelables
- Irrigation (Goutte à goutte)
- Forage, Adduction d'eau
- Fontaines d'eau, Climatisation
- Centrales Solaires

## NOS SERVICES

- Conseils / Etudes
- Conception
- Vente / Installation
- Formation
- Service Après Vente

## NOS PARTENAIRES



# Axial series evaporative air cooler



1. Applicable to cool a 60 ~ 80m<sup>2</sup> plant in humid area and a 100 ~ 200m<sup>2</sup> plant in dry area.
2. LCD display, One speed(380V) or 12 wind speeds(220V). voltage /current open phase protection, over-current protection, over voltage protection, water shortage protection and full-automatic drainage function
3. 100% copper-wire motor with heavy cast iron cabinet, starting and running smoothly.
4. Completely new material PP plastic cabinet, anti aging,anti UV , never rust .15 years lifetime.
5. With high quality 5090# cooling pad(100mm), good effect of evaporating and reducing temperature, easy to clean, edge binding protected and durable.
6. Open-type hard water pipe along with water distribution system ensures spraying water evenly and smoothly.
7. Three/Four/Nine nylon fan blade, big air output, low energy consumption, low noise.

**\*Option:**

1. Water sterilization devices-UV-Lamp
2. Humidity and temperature sensor.
3. Memory function: Once power off, it will automatically restart when power on.

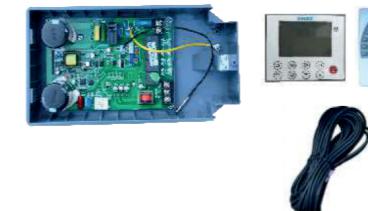


Model	Airflow	Voltage/Hz	Power	Fan blades	Wind pressure	N. W.	Applicable area	Air delivery	Air outlet	Dimension (mm)	Loading details
XK-18S/down	18000m <sup>3</sup> /h	380V/50~60HZ 220V/50~60HZ	1.1KW	3	180Pa	68kgs	100~150m <sup>2</sup>	20-25M(pipeline)	670*670	1060*1060*950	(CBU/SKD/PCS) 20/36/20feet 44/96/40HQ
XK-18S/side	18000m <sup>3</sup> /h	380V/50~60HZ 220V/50~60HZ	1.1KW	3	180Pa	70kgs	100~150m <sup>2</sup>	20-25M(pipeline)	690*690	1060*1060*950	
XK-18S/up	18000m <sup>3</sup> /h	380V/50~60HZ 220V/50~60HZ	1.1KW	3	180Pa	70kgs	100~150m <sup>2</sup>	20-25M(pipeline)	670*670	1060*1060*960	
XK-23S/down	23000m <sup>3</sup> /h	380V/50~60HZ 220V/50~60HZ	1.3KW	4	200Pa	68kgs	100~150m <sup>2</sup>	20-25M(pipeline)	670*670	1060*1060*950	
XK-23S/side	23000m <sup>3</sup> /h	380V/50~60HZ 220V/50~60HZ	1.3KW	4	200Pa	70kgs	100~150m <sup>2</sup>	20-25M(pipeline)	690*690	1060*1060*950	
XK-23S/up	23000m <sup>3</sup> /h	380V/50~60HZ 220V/50~60HZ	1.3KW	4	200Pa	70kgs	100~150m <sup>2</sup>	20-25M(pipeline)	670*670	1060*1060*960	
XK-25S/down	25000m <sup>3</sup> /h	380V/50~60HZ 220V/50~60HZ	1.5KW	9	250Pa	68kgs	100~150m <sup>2</sup>	25-30M(pipeline)	670*670	1060*1060*950	
XK-25S/side	25000m <sup>3</sup> /h	380V/50~60HZ 220V/50~60HZ	1.5KW	9	250Pa	70kgs	100~150m <sup>2</sup>	25-30M(pipeline)	690*690	1060*1060*950	
XK-25S/up	25000m <sup>3</sup> /h	380V/50~60HZ 220V/50~60HZ	1.5KW	9	250Pa	70kgs	100~150m <sup>2</sup>	25-30M(pipeline)	670*670	1060*1060*960	



**Body case:**

100% New PP material,not recyclable material.  
Anti-UV,Anti-Corrosion,Anti-Aging,  
Better Heat-resistant performance: < 60°C  
8 years Warranty,More than 12 years lifetime.



**Control system(220V):**

Sealed Printed Circuit Board,12 wind speeds.  
Flame-retardant PCB control box.  
Damp-proof fast heat dissipation.  
LCD touch display with remote controller  
All kinds of protection function



**Control system(380V):**

Printed Circuit Board,ONE wind speed.  
Flame-retardant PCB control box.  
Damp-proof fast heat dissipation.  
LCD display  
All kinds of protection function



**Cast iron motor:**

Cast iron motor body,Anti-corrosion.  
100% copper-wire motor winding.  
Water-proof Rate IP 54,INS Class B.  
Long working lifetime,2 years warranty.



**Motor support:**

Our own injection mould,aluminium alloy material(ADC12) .  
Good load-bearing(500KGS),not easy to fracture.  
Performance on Anti-rust,Anti-corrosion.  
Using stainless steel screw to connect.



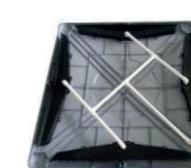
**Water pump and drain pump:**

Ceramic shaft submersible pump  
Barrier-free mechanical drain pump  
Corrosion resistance and efficient performance  
30000 hours continuously working life



**High density Cooling pads:**

100mm thickness 5090# cooling pads.  
More than 80% evaporative rate.  
Protection with perfect covered edge  
Three years warranty.



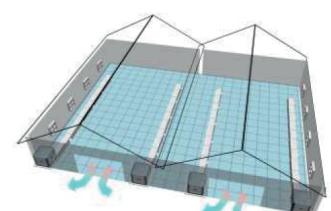
**Water distribution system:**

Open water diversion plate,not easy to jam.  
PVC water pipe,Anti-corrosion  
Water supply evenly.  
Long working life.



**Fan Blades:**

Nylon and Glass fibre material.  
Includes:Three blades,Four blades,Nine blades  
Different shape meet different air flow demand  
Passing dynamic balance test before using.



# Centrifugal fan series evaporative air cooler



**Body case:**

100% New PP material,not recyclable material.  
Anti-UV,Anti-Corrosion,Anti-Aging,  
Better Heat-resistant performance: < 60°C  
8 years Warranty,More than 12 years lifetime.



**Centrifugal fan:**

Direct-coupled centrifugal fan  
Zinc coating centrifugal fan and volute.  
Anti-rust,Anti-Corrosion  
Stable operation and low noise.



**Control system ( 220V ) :**

Sealed Printed Circuit Board,12 wind speeds.  
Flame-retardant PCB control box.  
Damp-proof fast heat dissipation.  
LCD touch display with remote controller  
All kinds of protection function



**Control system(380V):**

Printed Circuit Board,ONE wind speed.  
Flame-retardant PCB control box.  
Damp-proof fast heat dissipation.  
LCD display  
All kinds of protection function



**Cast iron motor:**

Cast iron motor body,Anti-corrosion.  
100% copper-wire motor winding.  
8P,Water-proof Rate IP 54,INS Class B.  
Long working lifetime,2 years warranty.



**Water distribution system:**

Open water diversion plate,not easy to jam.  
PVC water pipe,Anti-corrosion  
Water supply evenly.  
Long working life.



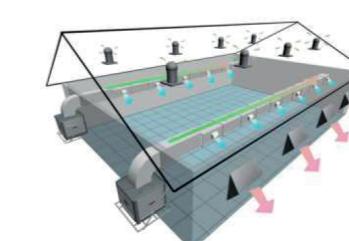
**Water pump and drain pump:**

Ceramic shaft submersible pump  
Barrier-free mechanical drain pump  
Corrosion resistance and efficient performance  
30000 hours continuously working life



**High density Cooling pads:**

100mm thickness 5090# cooling pads.  
More than 80% evaporative rate.  
Protection with perfect covered edge  
Three years warranty.



1-Applicable to cool a 60 ~ 80m<sup>2</sup> plant in humid area and a 100 ~ 200m<sup>2</sup> plant in dry area.

2-LCD display,One speed(380V) or 12 wind speeds(220V).voltage/current open phase protection, over-current protection, over voltage protection, water shortage protection and full-automatic drainage function

3-100% copper-wire motor with heavy cast iron cabinet, starting and running smoothly.

4-Completely new material PP plastic cabinet, anti aging,anti UV ,never rust ,long life duration

5-With high quality 5090# cooling pad(100mm), good effect of evaporating and reducing temperature, easy to clean, edge binding protected and durable.

6-Open-type hard water pipe along with water distribution system ensures spraying water evenly and smoothly.

7. Direct-coupled centrifuge, run more steady, completely stop strap skid, rupture,low noise.

8.For that kind series machine,must be equipped with long ducting.

## \*Option :

1.Water sterilization devices-UV-Lamp

2.Humidity and temperature sensor(only 220V)

3.Memory function:Once power off,it will automatically restart when power on.

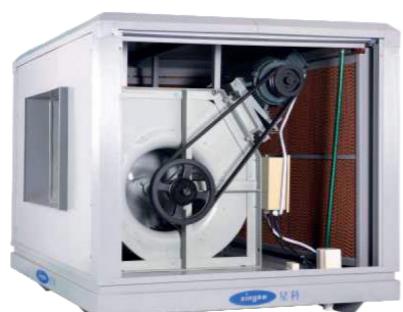
Model	Airflow	Voltage/Hz	Power	Wind pressure	N. W.	Applicable area	Air delivery	Air outlet	Dimension (mm)	Loading details
XK-20S/down	20000m <sup>3</sup> /h	380/50Hz	1.5KW	250Pa	108kgs	150~200m <sup>2</sup>	30-35M(pipeline)	422*452MM	1060*1060*950	20/20feet 44/40HQ
XK-20S/side	20000m <sup>3</sup> /h	380/50Hz	1.5KW	250Pa	110kgs	150~200m <sup>2</sup>	30-35M(pipeline)	422*452MM	1060*1080*950	
XK-20S/up	20000m <sup>3</sup> /h	380/50Hz	1.5KW	250Pa	110kgs	150~200m <sup>2</sup>	30-35M(pipeline)	422*452MM	1060*1060*1040	
XK-20S/down	20000m <sup>3</sup> /h	220/50Hz	1.5KW	250Pa	108kgs	150~200m <sup>2</sup>	30-35M(pipeline)	422*452MM	1060*1060*950	
XK-20S/side	20000m <sup>3</sup> /h	220/50Hz	1.5KW	250Pa	110kgs	150~200m <sup>2</sup>	30-35M(pipeline)	422*452MM	1060*1080*950	
XK-20S/up	20000m <sup>3</sup> /h	220/50Hz	1.5KW	250Pa	110kgs	150~200m <sup>2</sup>	30-35M(pipeline)	422*452MM	1060*1060*1040	

# Big airflow series evaporative air cooler



1. Stainless steel centrifugal fan evaporative air cooler

- (1) Adopt belt gearing centrifugal fan.
- (2) Suitable for large workshop.  
With large airflow and air pressure.  
The air delivery distance is more than 50m.
- (3) Stainless steel shell, solid and durable.
- (4) High efficient evaporator, high evaporate rate, good cooling down effect.



Model	Airflow	Voltage/Hz	Power	Wind pressure	N. W.	Noise(dB)	Air delivery	Air outlet	Dimension(mm)	Loading details
XK-30S	30000m3/h	380/50Hz	5.5KW	406~505	300kgs	85	30-55M(pipeline)	620*570MM	1460*1460*1360	4/20feet,8/40HQ
XK-35S	35000m3/h	380/50Hz	7.5KW	450~610	350kgs	90	40-60M(pipeline)	780*702MM	1750*1750*1360	3/20feet,6/40HQ
XK-45S	45000m3/h	380/50Hz	11KW	515~703	400kgs	95	50-70M(pipeline)	858*764MM	2100*1970*1630	2/20feet,5/40HQ
XK-50S	50000m3/h	380/50Hz	15KW	616~790	400kgs	100	60-90M(pipeline)	926*834MM	2100*1970*1630	2/20feet,5/40HQ



2. Axial series evaporative air cooler

- (1) Low investment, high efficiency
- (2) Low power consumption 2.2~3kwh
- (3) No need compressor, no freon, no pollution
- (4) Few malfunction, simple maintenance

Model	Airflow	Voltage/Hz	Power	Wind pressure	N. W.	Noise(dB)	Air delivery	Air outlet	Dimension(mm)	Loading details
XK-30S/up	30000m3/h	380/50Hz	3KW	300Pa	128kgs	85	40-50M(pipeline)	790*790MM	1300*1300*1180	4/20feet,18/40HQ
XK-30S/down	30000m3/h	380/50Hz	3KW	300Pa	120kgs	85	40-50M(pipeline)	790*790MM	1300*1300*1180	



Housing (Body case):

Spraying 201# stainless steel material.  
Anti-Corrosion, Anti-Rust,  
Better Heat-resistant performance



Centrifugal fan:

Belt-drive centrifugal fan  
Zinc coating centrifugal fan and volute.  
Anti-rust, Anti-Corrosion  
Stainless steel fastener, make sure stable operation.



Control system:

Special Printed Circuit Board.  
Flame-retardant PCB control box.  
Damp-proof, fast heat dissipation.  
LCD touch display, all kinds of protection function



Cast iron motor:

Cast iron motor body, Anti-corrosion.  
100% copper-wire motor winding.  
Water-proof Rate IP 54, INS Class B.  
Long working lifetime, 2 years warranty.  
Power: 5.5KW, 7.5KW, 11KW, 15KW,  
18.5KW...32KW.



High density Cooling pads:

100mm thickness 5090# cooling pads.  
More than 80% evaporative rate.  
Protection with perfect covered edge  
Three years warranty.



Double water pump:

Ceramic shaft submersible pump  
Barrier-free mechanical drain pump  
Corrosion resistance and efficient performance  
30000 hours continuously working life



Four fan blades:

Nylon and Glass fibre material.  
Passing dynamic balance test before using.



Motor:

Cast iron motor body, Anti-corrosion.  
100% copper-wire motor winding.  
Water-proof Rate IP 54, INS Class B.  
Long working lifetime, 2 years warranty.



High density Cooling pads:

100mm thickness 7090# cooling pads.  
More than 80% evaporative rate.  
Protection with perfect covered edge  
Three years warranty.



# Industrial portable evaporative air cooler



XK-18SY-2



XK-18SY-3



XK-13SY



XK-18SY

- 1-Applicable to cool a 60 ~ 80m<sup>2</sup> plant in humid area and a 100 ~ 200m<sup>2</sup> plant in dry area.
- 2-LCD display,One speed(380V) or 12 wind speeds(220V).voltage/current open phase protection, over-current protection, over voltage protection, water shortage protection and full-automatic drainage function
- 3-100% copper-wire motor with heavy cast iron cabinet, starting and running smoothly.
- 4-Completely new material PP plastic cabinet, anti aging,anti UV ,never rust .15 years lifetime.
- 5-With high quality 5090# cooling pad(100mm), good effect of evaporating and reducing temperature, easy to clean, edge binding protected and durable.
- 6-Open-type hard water pipe along with water distribution system ensures spraying water evenly and smoothly.
- 7.Three/Four/Nine nylon fan blade, big air output, low energy consumption, low noise.

## \*Option :

- 1.Water sterilization devices-UV-Lamp
- 2.Humidity and temperature sensor.
- 3.Memory function:Once power off,it will automatically restart when power on.

Model	Voltage/ frequency	Power (w)	Airflow (m <sup>3</sup> /h)	Wind stage	Dimension (mm)	Weight (kg)	applicable area(m <sup>2</sup> )	air delivery(m)	Water tank(L)	Fan type	Lowest noise(db)	Loading details:
XK-18SY-2	380V/50~60HZ 220V/50~60HZ	1.1KW	18000	1/12	1060*1060*1980	76	100	10-15	300	Axial	<65	(CBU/SKD,PCS) 10/28/20feet,44/94/40HQ
XK-18SY-3	380V/50~60HZ 220V/50~60HZ	1.1KW	18000	1/12	1060*1060*1980	80	100	10-15	300	Axial	<65	10/28/20feet,44/90/40HQ

	Model	XK-13SY	XK-18SY
Electric	Power	480W	700W
	Voltage/Hz	220~240V/50/60Hz	220~240V/50/60Hz
	Speed	3	3
	Single unit cover area	80-100 m <sup>2</sup>	100-150 m <sup>2</sup>
	Airflow (M3/H)	13000	18000
	Air delivery	10-12M	10-12M
Fan system	Fan type	Axial	Axial
	Noise	≤ 65 db	≤ 65 db
	Cabinet	100% New PP	100% New PP
	Discharge type	side	side
	Dimension (mm)	870*580*1400	1120*700*1650
	Packed size ( assembled)mm	880*590*1320	1130*720*1520
Outer casing	Loading quantity (assembled) in 40HQ	104 pcs	56 pcs
	Water Tank	100 L	100 L
	Water Consumption	10-20 L/H	10-20 L/H
	Net weight	40 kg	60 kg
	Control type	LCD display	LCD display
	Remote Control	yes	yes
Control system	Over load protection	yes	yes
	Pump Protection	yes	yes
	Water inlet	Manual & Auto	Manual & Auto
	Plug type	Customized	Customized

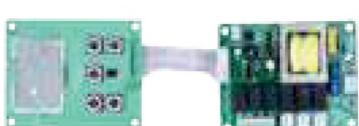
\* Option:Water sterilization devices-UV-Lamp



Our own injection mould.  
Nylon material,three blades.  
Passing dynamic balance test before using.



Sealed motor body,100% copper-wire motor winding  
Water-proof rate IP 54,INS Class B.  
Long working lifetime,2 years warranty.



With all kinds protect function  
With remote control  
LCD display

# Industrial portable evaporative air cooler



XK-75SY



XK-75C

	Model	XK-75Y	XK-75C
Electric	Power	280W	280W
	Voltage/Hz	220~240V/50/60Hz	220~240V/50/60Hz
	Speed	3	3
Fan system	Single unit cover area	20-40m <sup>2</sup>	20-40m <sup>2</sup>
	Airflow (M3/H)	7500	7500
	Air delivery	5-10M	5-10M
	Fan type	Axial	Axial
	Noise	≤ 60 db	≤ 60 db
Outer casing	Cabinet	100% New PP	100% New PP
	Discharge type	side	side
	Dimension (mm)	910*480*1350	910*480*1050
	Packed size (assembled)mm	920*490*1290	920*490*1070
	Loading quantity (assembled) in 40HQ	122 pcs	138 pcs
	Water Tank	120 L	60L
	Water Consumption	5-15 L/H	5-15L/H
	Net weight	30 kg	35KG
Control system	Control type	LCD	LCD
	Remote Control	YES	YES
	Over load protection	YES	YES
	Pump Protection	YES	YES
	Water inlet	Manual & Auto	Manual & Auto
	Plug type	Customized	Customized

\* Option:Water sterilization devices-UV-Lamp

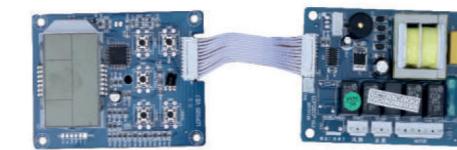


100mm thickness 5090# cooling pads.  
More than 80% evaporative rate.  
Protection with perfect covered edge  
Three years warranty.



Axial fan motor

Sealed motor body,100% copper-wire motor winding  
Water-proof rate IP 54,INS Class B.  
Long working lifetime,2 years warranty.



With all kinds protect function  
With remote control  
LCD display



Ceramic shaft submersible pump.  
Corrosion resistance and efficient performance  
30000 hours continuously working life time.  
IPX8,with CE.



Our own injection mould.  
Nylon material,three blades.  
Passing dynamic balance test  
before using.  
High density Cooling pads :



# Solar Water Air Cooler Fan



XK-05SY

Ice box

XK-06SY

- (1)220V series air cooler with LCD display,three wind speeds.
- (2)High pressure mute blades axial fan, low noise.
- (3)DC series air cooler with 3 wind speeds.low power consumption.
- (4)Special opening type water segregator, dividing water evenly.
- (5)PP homo-polymer engineering material, attractive and durable.
- (6)High efficient cooling pads, good cooling effect.



	Model	XK-05SY	XK-06SY
Electric	Power	150W	200W
	Voltage/Hz	220~240V/50/60Hz	220~240V/50/60Hz
	Speed	3	3
Airflow (M3/H) Fan system	Single unit cover area	20-30 m³	20-35m³
		5000	6000
	Air delivery	6-8 M	8-10M
	Fan type	Axial	Axial
	Noise	≤ 53 db	≤ 58db
	Cabinet	100% New PP+ABS	100% New PP
Outer casing	Discharge type	side	side
	Dimension (mm)	1050*530*410	1160*660*440
	Packed size ( assembled)mm	1000*570*450	1130*670*450
	Loading quantity (assembled) in 40HQ	265 pcs	176 pcs
	Water Tank	30 L	50L
	Water Consumption	5-8 L/H	5-10 L/H
	Net weight	16 kg	23 kg
	Control type	LCD display	LCD display
Control system	Remote Control	yes	yes
	Over load protection	yes	yes
	Pump Protection	yes	yes
	Water inlet	Manual & Auto	Manual & Auto
	Plug type	Customized	Customized

\* Option:Water sterilization devices-UV-Lamp

Model	Airflow	Voltage/Hz	Power	Wind speed	N.W.	Fan type	Air delivery	Air outlet	Dimension (mm)	Loading details
XK-80C	6000m³/h	220V/50~60Hz	200W	3	23kgs	Axial	6-8M	430*430MM	640*640*700	72pcs/20feet 216pcs/40HQ
XK-25C	3500m³/h	DC 12V	150W	3	20kgs	Axial	6-8M	430*430MM	640*640*700	
XK-40C	4500m³/h	DC 24V	150W	3	20kgs	Axial	6-8M	430*430MM	640*640*700	



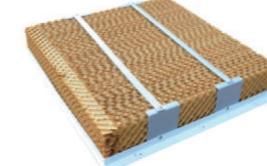
## Housing(Body case):

100% New PP material,not recyclable material.  
Anti-UV,Anti-Corrosion,Anti-Aging,  
Better Heat-resistant performance: < 60°C  
8 years Warranty,More than 12 years lifetime.

## Fan Blades:

Mute fan blades,plastic material.  
Suitable for 12V/24V fan and 220V fan  
Enough airflow,low noise design

**Asynchronous motor:**  
100% copper-wire motor winding.  
CCC,INS Class B.  
Long working lifetime,2 years warranty.



## Water pump and drain pump:

Ceramic shaft submersible pump.  
Barrier-free mechanical drain pump  
(220V)  
and manual drain valve (dc series).  
Corrosion resistance and  
efficient perfomance.  
30000 hours continuously working life

## High density Cooling pads:

5090# cooling pads.  
More than 80% evaporative rate.  
cooling effect is more obvious.  
Protection with perfect covered edge  
Three years warranty.

## Control system:

Damp proof,fast heat  
dissipation PCB box.  
LCD display with remote  
controller(220V/12V/24V))  
All kinds of protection function

## 12V/24V motor:

Brush less motor  
Water proof  
Long working lifetime

# Exhaust fan

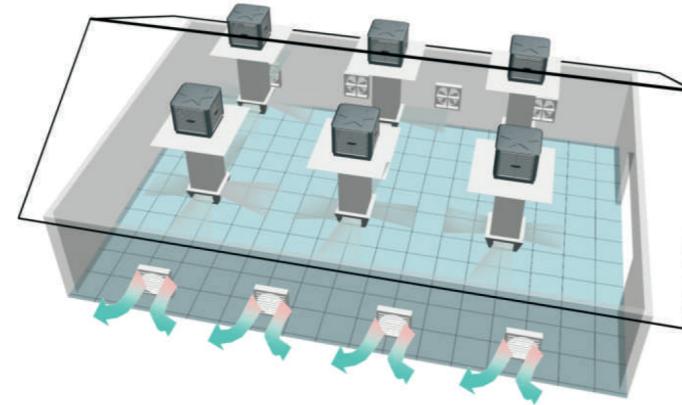
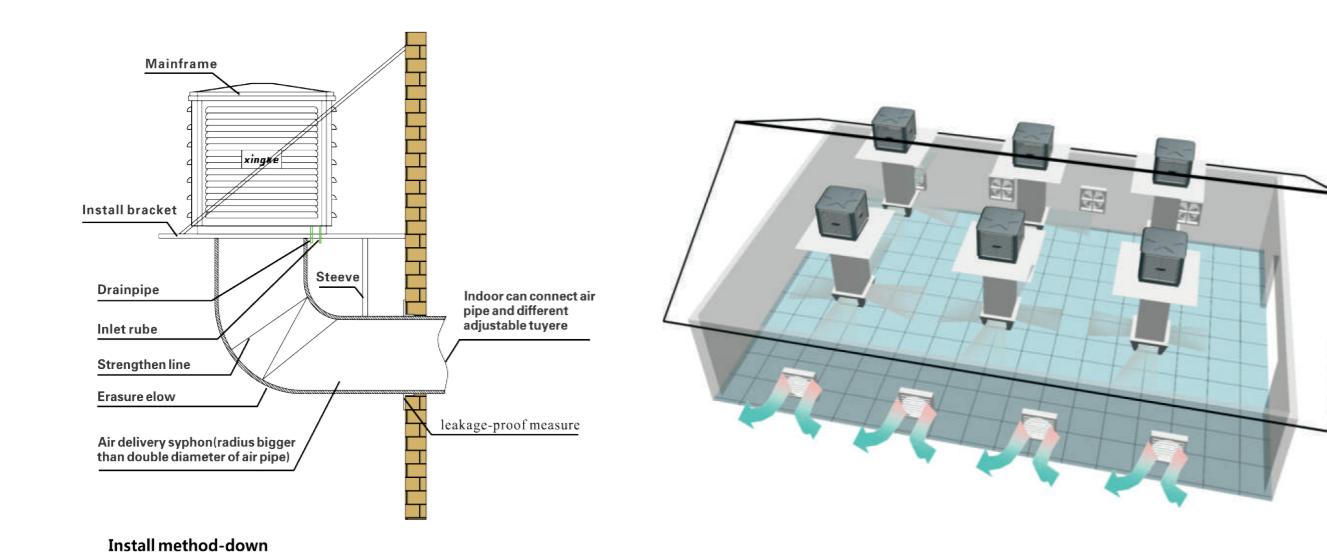
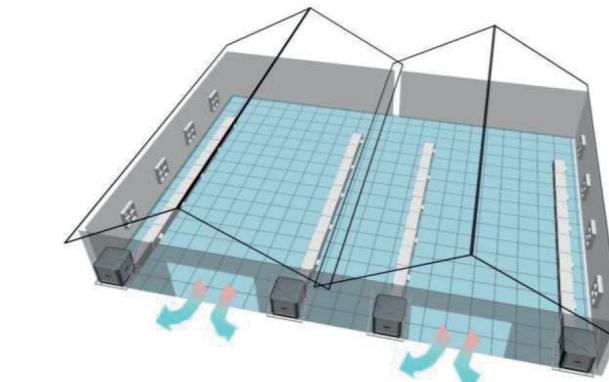
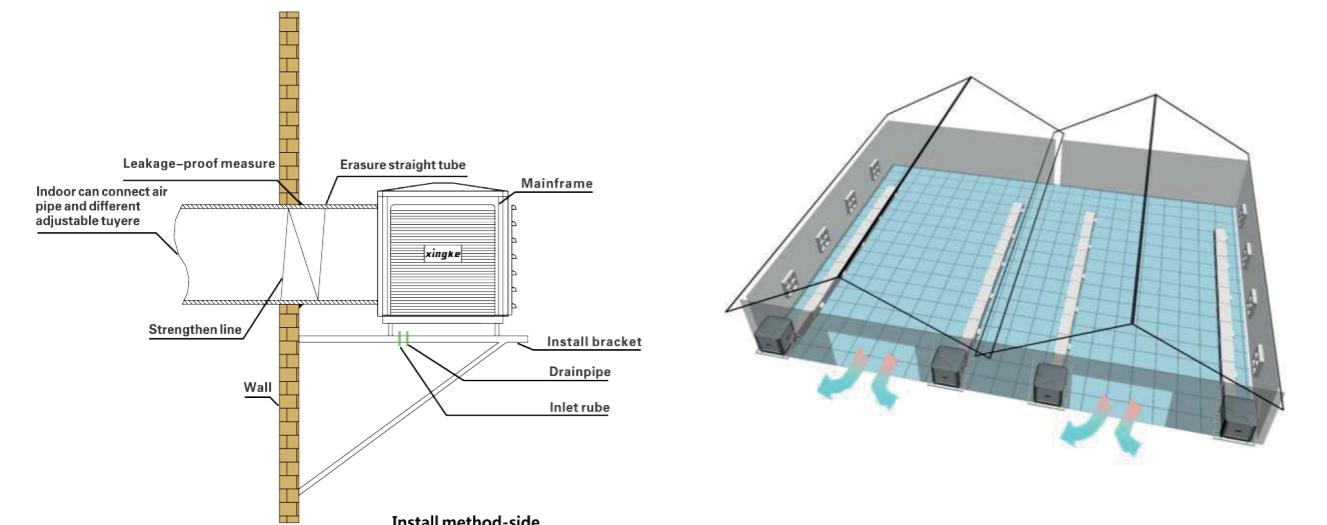
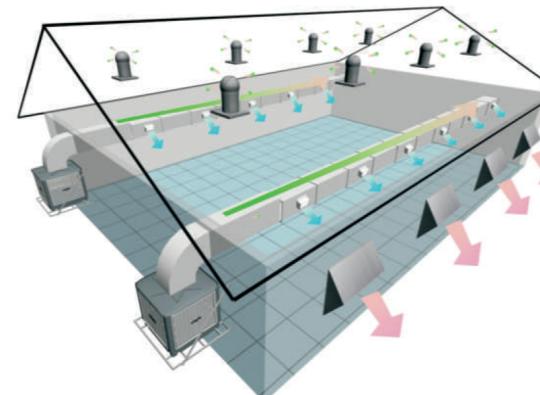
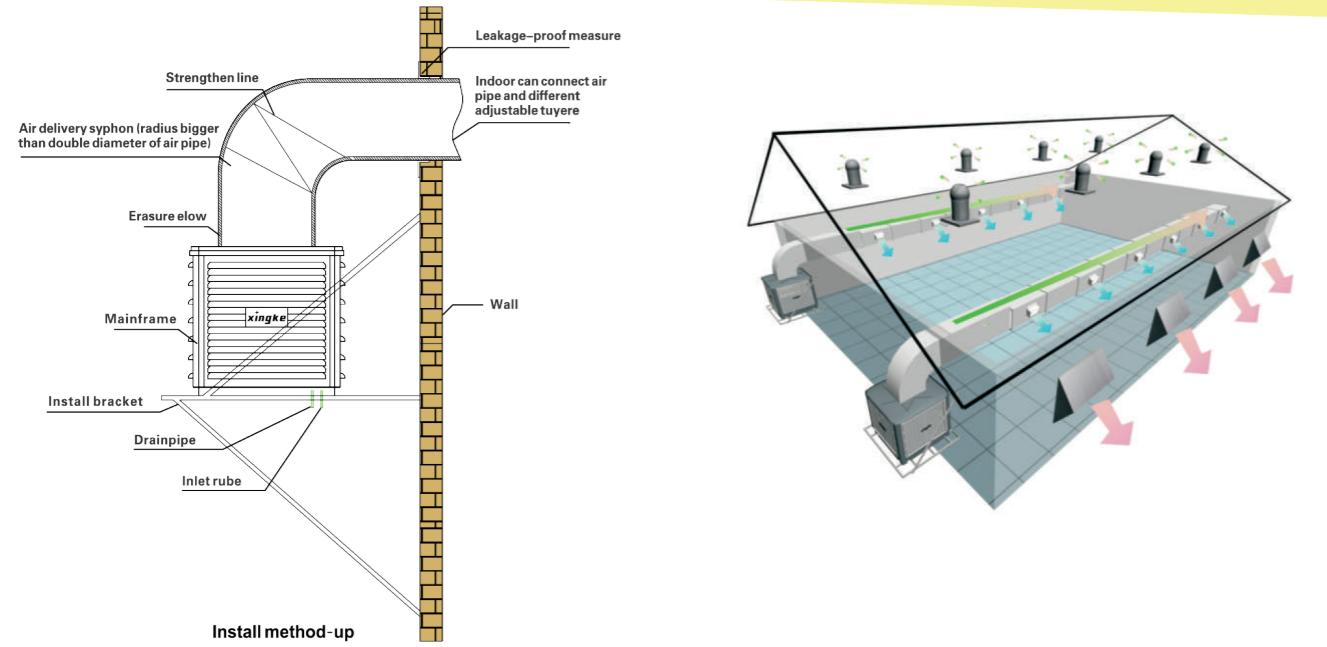
# Project case of SSE evaporative air cooler



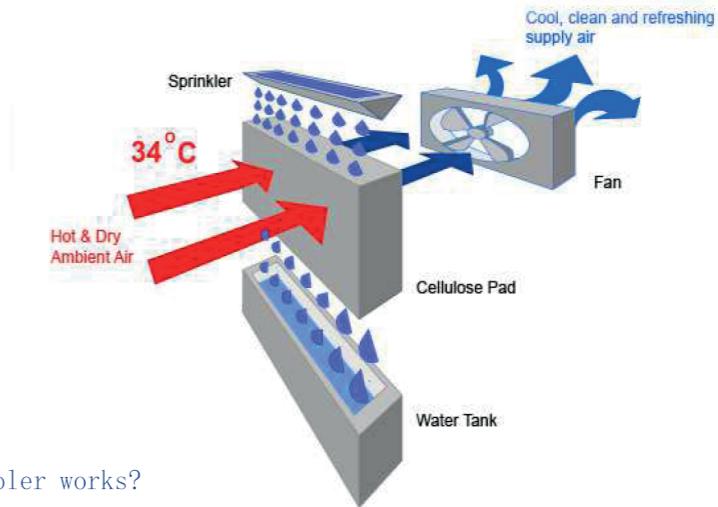
Model	Dimension (mm)	Airflow (m³/h)	Power	Noise	Voltage(V)	Weight
XK-1380	1380*1380*350	44500	1.1KW	65	220V/380V	70KG
XK-1220	1220*1220*350	37000	0.75KW	63	220V/380V	65KG
XK-1060	1060*1060*350	32000	0.55KW	60	220V/380V	55KG
XK-900	900*900*350	28000	0.37KW	55	220V/380V	50KG
XK-700	700*700*300	15000	0.25KW	70	220V/380V	35KG
XK-600	600*600*300	10000	0.25KW	68	220V/380V	25KG
XK-850#	850*850*480	22000-25000	370W-8P	60	220V/380V	30KG
XK-1060#	1060*1060*550	25000-28000	550W-10P	60	220V/380V	40KG
XK-1260#	1260*1260*560	32000-36000	750W-10P	70	220V/380V	50KG
XK-1460#	1460*1460*580	45000-47000	750W-12P	70	220V/380V	70KG



# Installation Method



## How the Evaporative Cooler works?



How the Evaporative cooler works?

## How to choose SSE evaporative air cooler and exhaust fan to installation?

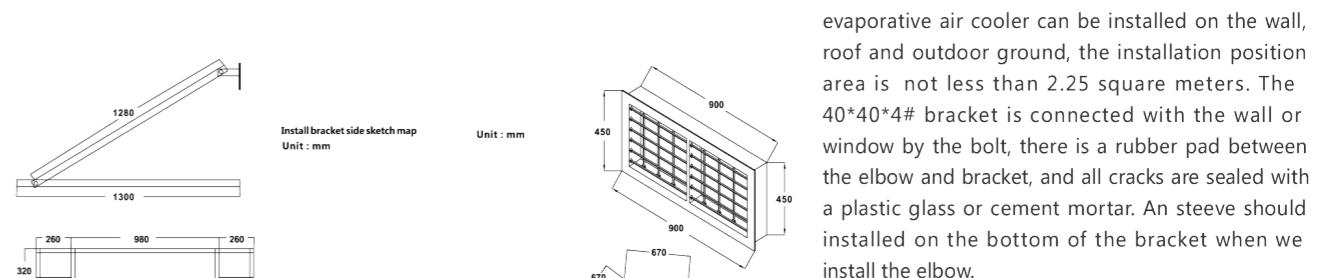
### 1.The ventalation times in different environment:

- A.The normal working place ventilate 20-30 times per hour.
- B.The public place with crowded people ventilate 25-40 times per hour.
- C.The high temperature workshop or factory has heat equipment ventilate 35-45 times per hour.
- D.The workshop has strong smelling or heavy pollution ventilate 45-55 times per hour.

### 2.How many units evaporative air cooler does it require for one place.

The quantity of machine installation=The target cooling volume(the height is less than or equal to 5 meters )\*ventilation time÷air flow of machine.

### 3.How many units exhaust fan does it require for one place.



evaporative air cooler can be installed on the wall, roof and outdoor ground, the installation position area is not less than 2.25 square meters. The 40\*40\*4# bracket is connected with the wall or window by the bolt, there is a rubber pad between the elbow and bracket, and all cracks are sealed with a plastic glass or cement mortar. An steeve should installed on the bottom of the bracket when we install the elbow.

### Technical requirements:

- 1, triangle bracket welded and installed should be secured;
- 2, maintenance platform must be able to support the weight of the crew and maintenance personnel;
- 3, the host must be installed in a horizontal position;
- 4, host flanges and air pipe section must be installed in a horizontal position;
- 5, all the exterior duct must be waterproofed;
- 6, host junction box must be indoor installation;
- 7, duct elbow into the wall should be waterproofed in order to prevent water flow into the Interior.