

Atlantis Solar Air Conditioner Tech Specs:



The working principle of our solar air conditioner

There is a heat absorbing device in the solar collection conversion, which can switch the energy of light, heat, radiation from the environment into energy, which can assist the compressor in doing the job of cooling and heating. More over, the energy absorbed in the day time can be stored in the heat absorbing device, ensure the air conditioner to work normally all day.

The solar energy air conditioners make use of the principle of light-sense point arouse and dispersing Photosynthetic, and the principle of reversible chemistry energy, they fully adjust to absorb and store solar energy by the Binary mixture refrigerant of Solar collector layer, Then through the cold, hot assistants of the solar energy, can regulate the cold and hot of our solar AC unit, the unit can reach the best quality of saving electricity according to energy saving requirements.

The so-called solar energy refrigeration means providing the absorption type of refrigerator with the heat carrier water which the generator needs. The higher the temperature of water the higher the energy efficiency ratio (COP), and the effect of refrigeration is also higher. For example, if heat carrier water's temperature is about 60℃, then the COP of refrigerator would be approximately 0-40; If heat carrier water's temperature is about 90℃, then the COP of refrigerator would be approximately 0-70; If heat carrier water's temperature is about 120℃, then COP of refrigerator may reach 110 or above.

Solar air conditioner's application method

Our solar air conditioners are widely used in the hotel, shopping centers, furniture centers, villas, office, workshop, apartments, dorms, factory offices, aquatic breeding farm, fowl feeding farm and so on. They are of high quality and reasonable price, our solar air conditioners are the modern, ideal equipment for family, work and business places.

Model No.	Horse Power /Ton	Cooling Input	Cooling Power	Cooling Area Covering	Heating Input	Heating Power	Heating Area Covering
SK-1.5W (wall split)	1.5HP /1TON	650W	3500W	15m ² -27m ²	1350W	3900W+700W	15m ² -24m ²
SK-2F (floor standing)	2HP /1.35TON	850W	5000W	25m ² -38m ²	2350W	5500W+1500W	25m ² -39m ²
SK-3F (floor standing)	3HP / 2TON	1000W	7000W	35m ² -54m ²	2500W	7800W+1500W	35m ² -52m ²
SK-5F (floor standing)	5HP / 3.35TON	1750W	12000W	45m ² -92m ²	4750W	13500W+1800W	48m ² -85m ²
SK-2C (cassette series)	2HP /1.35TON	850W	5000W	25m ² -38m ²	2350W	5500W+1500W	25m ² -36m ²
SK-3C (cassette series)	3HP / 2TON	1000W	7000W	35m ² -53m ²	2500W	7800W+1500W	35m ² -52m ²
SK-5C (cassette series)	5HP / 3.35TON	1750W	12000W	45m ² -92m ²	4750W	13500W+1800W	48m ² -83m ²
SK-1.5D (inner duct series)	1.5HP /1TON	650W	3500W	15m ² -27m ²	1350W	3900W+700W	15m ² -27m ²
SK-2D (inner duct series)	2HP /1.35TON	850W	5000W	25m ² -38m ²	2350W	5500W+1500W	25m ² -36m ²
SK-3D (inner duct series)	3HP / 2TON	1000W	7000W	35m ² -53m ²	2500W	7800W+1500W	35m ² -50m ²
SK-5D (inner duct series)	5HP / 3.35TON	1750W	12000W	45m ² -92m ²	4750W	13500W+1800W	48m ² -83m ²

1. The installation does not limited by the location; it can be installed in any place since the solar panel is not large. Further more, it is not required to face to the sun.

2. They wouldn't be effected by the weather, no matter how cloudy, or rainy the day is, in the evening the effect is of the same, it absorbs heat and radiation. Both of electricity and the energy absorbed in the day time stored in the heat absorbing device can ensure the air conditioner to work normally. More over, the energy absorbed in the environment can be consumed and renewed continuously. In comparing with the normal conditioners, ours can save 50% to 70% of the power usually consumed by practical air conditioners.

3. Compared to a normal air conditioner, the fluctuation of temperature is slightly slower, it needs several minutes to reach the appointed temperature;

The longer you use it, the less electricity can be consumed comparing with normal conditioners.

4. The refrigeration of solar A/C with R407C is protective to the environment; it is good for humans health.

5. Compared to the normal air conditioner, 50% to 70% of electricity can be saved by Atlantis Solar air conditioners.

6. The air conditioner can work normally between the temperatures -25 degree Celsius and 54 degree Celsius, if the temperature is over 50 Celsius degree, the compressor will keep itself in a state of rest for protection. If the temperature returns to normal (-25celsius degree to 50 Celsius degree), it will continue to work automatically.

Specific Technology Requirements

When copper pipe lengthened, the detailed requirements about increasing refrigerant

Model	Electric Current(A)	Power(W)	Pressure(Mpa)	Increased Length	Quantity of Increased Refrigerant(G)
SK-1.5	3.8~4.5	750~900	0.45~5.2	3.0~7.0	30~70
SK-2	5.4~6.2	1200~1300	0.45~5.2	3.0~7.0	40~80
SK-3	7.2~8.2	1600~1700	0.45~5.2	3.0~7.0	40~80
SK-5	12.0~13.8	2700~2950	0.45~5.2	3.0~7.0	50~100

Relationship between the temperature outside the air conditioner machine and the lowest pressure, electric current.

Outer Temperature/ Power(A)/Pressure(Mpa)	26□-27□	28□-29□	30□-31□	34□-35□	36□-37□	38□-39□
SK-1.5	0.4Mpa/3.8A	0.42Mpa/3.8A	0.45Mpa/3.9A	0.48Mpa/4.0A	0.50Mpa/4.1A	0.525Mpa/4.2A
SK-2	0.45Mpa/5.4A	0.47Mpa/5.5A	0.48Mpa/5.6A	0.50Mpa/5.8A	0.505Mpa/5.9A	0.51Mpa/6.2A
SK-3	0.45Mpa/7.2A	0.47Mpa/7.4A	0.48Mpa/7.5A	0.50Mpa/7.7A	0.505Mpa/7.9A	0.51Mpa/8.2A
SK-5	0.46Mpa/12.0A	0.48Mpa/12.4A	0.50Mpa/12.5A	0.51Mpa/13A	0.52Mpa/13.5A	0.55Mpa/13.8A