

How it works:

Solar Air-Conditioner absorbs solar energy to heat the inside medium by using a vacuum solar collector. The refrigerant from the compressor goes through the copper coil inside the collector and undertakes a heat exchange. The refrigerant heated by the medium inside the solar collector will go through a cycle inside the system cooling and heating. We use a smaller compressor instead of standard compressors to run our system which saves electricity dramatically. A smaller compressor consumes much less electricity and works together with our solar collector to saving electricity.

1. Freon passes through an attached high pressure thermal solar vacuum system before entering a smaller compressor; heating the Freon to about 170°F to 230°F, sending the hot Freon Gas to a dual condenser for cooling and turning to a liquid.

2. Now Liquid Freon converted from the dual condensers outside, is sent to the inside blower / evaporator, with double and triple evaporators combining with warm air, providing cold air to the home or business.

3. Then Freon will again return to the high pressure thermal solar vacuum system for added heat processing before entering the compressor.

4. Again the process begins again; Freon will be heated by the assisted thermal pressurized vacuum system before entering a smaller compressor for final heating / evaporation process before entering the condensers.

5. During evening hours, outside temperatures change to cooler conditions, therefore reducing the work load of the air conditioner. The cooler the inside home or business is, the less operation is needed. When operating during off sun hours, the outside cooler air will help reduce the condenser processing temperatures. The vacuum system will absorb the heat from the condenser and continue assisting the compressor.

6. Our thermal solar assist air conditioner provided with an attached thermal pressurized vacuum system that continuously helps heat Freon as it enters the smaller compressor. The heat from the outside air and condenser help heat the vacuum tubes, sending heated water or air into the thermal tank, helping to heat Freon before entering the compressor. The thermal tank is highly insulated with a copper coil that helps provides faster heat transfer.



