

Free Cool Trinity system Economical Solar Air Conditioning with Water hating FCHT- 9877TR

The Free Cool trinity System combines our innovative solar air conditioning, air source heat pumps and Split pressured solar water heater systems. All three are rolled into one supplying cooling, heating and hot water all year round. It's energy saving and eco-friendly systems.

Technological revolution is a relatively normal Air conditioner with short period in history when one technology Free Cool Hybrid Solar Air conditioner with water hating is replaced by Hybrid technology. It is an era of an accelerated technological progress characterized not only by new innovations but also their application and diffusion

The temperature of traditional water heater is normally from 50to 80°C. The still water provides a good condition for bacteria, undrinkable and is even harmful for skin. Free Cool Solar water heater improved on the basis of safety, energy-saving, environmental protection of traditional water heater provides endless hot water by adopting running water and is with more humanization, drinkable, health for skin and insulation is over 80hours

Free Cool air conditioner, solar water heating system for home, solar pool heating system Our trinity system combines solar air conditioner technology, air source heat pump technology and unpressured split solar heater technology into one system, it supplies cooling and heating air in summer and winter and hot water for all year long. It is energy-saving and eco-friendly

How does the Trinity System work?

During spring, summer and autumn, the heat pump has minimal usage and therefore consumes very Little or zero electricity. In winter, when there is not as much sunshine, the heat pump will use electricity. Compared to an ordinary electrically powered water and gas heater, the savings would be approximately 80% in energy costs because 'The Trinity System' only needs to run on conventional power primarily during winter. During air cooling and heating, the Trinity System increases the heat exchange surfaces and reduces the compressor loading at the same time.

Benefits of the Trinity System at a glance

- Air Conditioner saves up to 80% in electricity costs
- When the air conditioner system is on, you can get hot water for free.
- Air Conditioner will operate effectively in extreme conditions (-15C to 65C)
- Offers a suitable indoor environment and helps to reduce Legionella disease within air conditioning
- Air source heat pump saves up to 80% on electricity usage whilst running the heating pump
- Free hot water whilst solar thermal air conditioning is running
- Pressured system gives continuous hot water
- De-scales water tanks
- Up to 72 hours of insulation
- No water within vacuum tubes therefore no cracking or exploding during winter
- Runs automatically
- Water is separated from electricity usage
- Economic and one time only investment







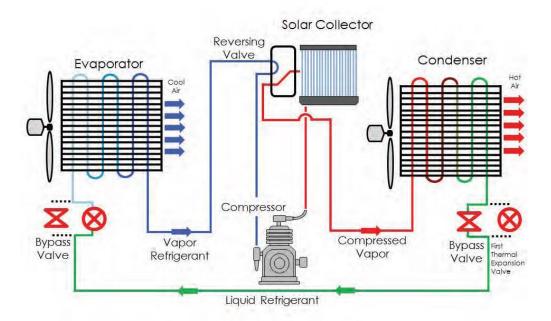
FREE COOL TRINITY SYSTEM (UN PRESSURED)				
Model		FCHT-9877TR		
Power: 220-240/380VAC, 1/3PH,50/60hz				
Capacity	Cooling		Btu/h	24000
			W	7200
	Heating		Btu/h	27000
			W	7900
	Water Tank		L	300
indoor type				wall mount
Air Circulation			m³/h	1050
Suitable Area			m²	30~48
EER			W/W	3.82
Noise	Indoor		dB(A)	≤50
	Outdoor		dB(A)	≤58
Electric heater			kw	1.5
Hot Water Temp			°C	$50^{\sim}90$
Solar Collector	Vacuum Tube			30
Power Consu	mption			
Power Input	Cooling		W	1700~1900
	Heating		W	1700~1950
Rated Current	Cooling		А	7.73~8.64
	Heating		Α	7.73~8.66
Dimensio	n			
Indoor unit	Ship mm		1070*370*260	
outdoor unit	Ship mm		950*400*770	
water tank	Ship mm		2640*500*500	
Vaccum tube	Ship mm		1880*340*250*2	
Tank brackt	Ship mm		2405*110*330	
Gross weight	Ship Kg		205	











THE OUTDOOR SECTION OF THE A/C UNIT CONTAINS A COMPRESSOR WHICH USES THE MOST ELECTRICITY OF THE WHOLE SYSTEM

1- Stage Compressor and condenser coil.



Water tank 2640*500*500 2-Stage Compressor, Solar Vacuum Tube and copper coil Stay In 1st Stage Longer and Operate Between low power.







FEATURES

High efficiency all glass evacuated tube is the key component of solar collector. The evacuated tube

is similar to a conventional Dewar flask and consists of two borosilicate glass tubes. This glass material has high chemical and thermal shock resistance. The outer surface of inner tube is coated with a sputtered solar selective material. This coated inner tube is closed at one end and sealed at the other end to the outer tube. The annular space between inner tube and outer tube is evacuated to virtually eliminate heat loss by conduction and convection. Free Cool Solar vacuum tubes









