Solair Solar Thermal Air Conditioner
Method Of Operation (Reverse Cycle Split System)
Cooling Cycle

Solar Thermal Collector

Thermal energy heats low pressure refrigerant, raising the temperature before entering the compressor.

Indoor Unit

Refrigeration achieved through efficient 4-way Heat Exchanger between indoor evaporator and indoor unit.

Outdoor Unit

Compressor

Refrigerant is compressed into high pressure gas.

Condenser

Refrigerant subjected to exothermic cooling to condense into high-pressure liquid.

Capillary

Turn to low temperature high-pressure liquid through throttling and decompression.

How Does our Hybrid Solar Thermal Air Conditioner save energy?
Solair air conditioning saves energy, first and foremost, through its use of solar thermal energy which displaces the demand of the compressor for grid electricity. Secondly it uses a highly efficient heat exchange system which optimises the transfer of cooling or heating, which in cycle further reduces the energy required by the compressor. The intelligent solar thermal air conditioning control system automatically optimises utilisation of the energy supplied by the solar thermal collector system.
Solair Solar Thermal Air Conditioner

Method Of Operation (Reverse Cycle Split System) - Heating Cycle

Solar Thermal Collector

Low temperature and pressure refrigerant

Back to Compressor

Outdoor Unit

Compressor

Condenser

Capillary

Refrigerants are compressed into high temperature and high pressure

Heating is achieved through the indoor heat exchanger and evaporator cooling heat of refrigerant into high pressure liquid at room temperature

Feel the ICE Solair difference

ICE Solair Australia Pty Ltd
www.icesolair.com
Email: sales@icesolair.com
+61 (07) 3209 5273 or Facsimile: +61 (07) 3209 1763

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