

Cooling / Heating powered by solar energy

New advanced technology

The solar chiller is an absorption chiller developed to produce refrigeration with hot water at low temperatures as primary energy. This two-stage unique absorption chiller operates at nominal capacity with hot water at 75° C. Operation of chiller at lower or at higher temperatures is absolutely possible. Lower temperature reduces the capacity and higher temperature increases the capacity up to 40% of nominal.



ABSORPTION CHILLER



SARANTIS / INOFITA – GREECE 2015



TESCO SUPERMARKET / BUDAPEST - HUNGARY 2010

Wide range of operation

The chiller is operating over a wide range of hot water inlet temperatures – extending from 55° C to 95° C – and cooling water temperatures – extending from 19° C to 35° C. The result is that chiller is always at optimum operation cycle at any conditions within above limits.

Fully automatic operation

When the chiller is set to the automatic operation it will start when hot water temperature is higher than setting (e.g. 55° C) and will stop when hot water temperature is lower. Other operation mode available.

Safety controls

The chiller is equipped with the following standard safety controls:

- Chilled water freezing protection function
- Chilled water flow switch
- Extreme low temperature of cooling water
- Cooling water flow switch
- Motor protection controls
- Low hot water temperature protection

Digital display

Digital display of IN-OUT temp for hot cooling and chilled water is standard. Operating, stop or alarm mode is displayed with different colors. Optional extra Telemonitoring system, which is recommended for large commercial systems.



CRES / PIKERMI - GREECE 2012

Low energy consumption

When the chiller is connected to a suitable solar collectors field or industrial waste hot water, the only energy consumed is for the operation of the solar or waste, cooling water, refrigerant, vacuum and absorbent

pumps. The total energy consumption is between 8-14% (depending on the size) of the nominal output of the chiller. The lower consumption is for the large units and the higher for the small units. Overall C.O.P. 7.1-12.5.

Factory tested

The chiller comes as a complete package factory tested system. The package includes the evaporator, absorber, generator, condenser, heat exchangers, pumps, safety devices, control panel, absorbent and refrigerant.

Low noise

Due to the absence of compressors, noise is only produced by the operation of the pumps. No vibration. Since there are no moving parts there is not any vibration.

Electricity

The chiller is suitable to work at 3-phase 380V/50HZ.

Installation place

The chiller should be installed indoor with ambient temperature: 5 to 40° C.

Relative humidity: Below 90%.

PRICES UPON REQUEST ON A CASE TO CASE BASIS