ULTRA THERMO

CHILLER PLANT 2TR TO 30TR





ULTRA Heavy Duty Chiller Plant (10TR) is highly useful to produce Cooling Water required by the Water Cooled Condenser, at the required temperature and pressure maintaining the Water Flow Level.

The Chiller Plant will be fabricated with extreamely high standard, high quality of finish, which matches the performance, with emphasis on reliability and economy of use. The use of most up to date Autonics programmable temperature controller and high efficiency, low noise Danfoss Compressor shall make it to be currently the best available and with attractive super fine powder coated exterior will enhance any test facility.

ULTRA THERMO SCIENTIFIC

New No. 19, Old No, 3A, Manimegalai Street, East Tambaram, Chennai 600 059 Email: <u>ultrathermoscientific@gmail.com</u>; <u>thermo@yours.com</u> Phone: 9841025507 TNGST 0962538/03-04: CST 770373 dt. 17.9.03

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CHILLER PLANT 2TR TO 30TR

Capacity of the Chiller

Plant

2TR TO 30TR Continous Duty

Outlet Water Temperature

from Chiller Plant

18-20degC (up to 6 Bar pressure)

Structure : Self standing, floor mounted mechanical structure with heavy duty castor

wheels with brakes, for movement.

Finish : Corrosion resistant stainless steel 16SWG SS304 Quality used in the interior

Fully TIG Welded to ensure leak proof and 18SWG MS Powder Quoted in the

Exterior of the chamber.

Refrigeration System : Heavy Duty, Conitunuous Duty Cycle, Low Noise Danfoss Compressor with

complete allied refrigeration accessories along with CFC Free refrigerant

will be used for reliable operation.

Controller system : The Standard high performance Autonics PID temperature controller with PT

100 temperature sensor and Audio-Visual Alarm System will provide a secured

operation.

Display : LED Display will show measured Temperature in °C

Construction : The chiller plant will be manufactured from high quality materials and standard

components.

The Super structure and outer tank will be fabricated from 1.2mm Powder Coated MS and bright stainless steel of 304 grade will be used to fabricate the inner tank. The stainless steel work will be rigidised with mild steel subframe

mainly of 10mm thick material.

High density Rockwool / PUF insulation will be provided between the tanks to

avoid any heat loss.

All bending, cutting, punching, grilling etc will be done using CNC Machine to

give the best fit and finish to the product.

Chiller plant will be provided with Wheel at the bottom with brakes

Water Tank Capacity : Up to 500Ltrs

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Water Circulation : Water Circulation will be managed between the tank and codenser through a

Non Corrosive flexible Pipeline with the help of Grundfos Low Noise Heavy duty

Centrifugal Pump.

Circulation pipe will be completely insulated and Y Stainer and nozzle will be

provided in the line to safeguard any dust flowing in to the condenser.

Insulated Braided Hose of 3 Mtrs Standard length will be provided in and out of

the condenser to the chiller plant.

2 Nos. Hand Shutoff valves will be provided, for maintenance purpose.

Water Pressure : A pressure regulator to regulate the water flow up to 6 bar; Differential

Pressure : ≥ 2 bar will be provided

Chiller Outlet : 1" GI Pipe, or suitable will be connected to the water cooled condenser

Electricals : Single Phase preventor to avoid phase reversal problems

Merlin Gerin MCB's for Condenser Fan Motor, Compressor, Circulation pump

Telemechanique Contactor will OLR for compressor Telemechanique Trip indicators for all possible tripping

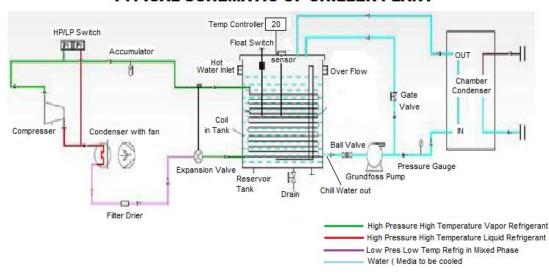
Telemechanique ON/OFF indicator

Mains isolated switch

Finolex Flame guard Flame proof wiring

Electrical Requirements : 3 Phase, 440V +/- 10%, 50Hz

TYPICAL SCHEMATIC OF CHILLER PLANT



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