

Product Name :
Computerized ICE Plant Trainer

Product Code :
CHINAELABC2560009



Description :

Computerized ICE Plant Trainer

Technical Specification :

The unit enables the students to study the Basic Principles of ice plant cycle within a short period. The test rig is designed for the study of thermodynamics of vapour Compression refrigeration cycle by way of demonstration and experimentation. It has a facility to measure various parameters for experimentation. Ice cans are kept in liquid tank, which is cooled by the refrigerant evaporator. The present set-up has a facility to interface the system with computer, which enables to log the experimental data-using computer. As conventional ice plants take 12-24 hours to complete the cycle, this ice plant is specially designed to demonstrate process of ice formation to be complete within period of 4 hours and hence it is most suitable for laboratory use. The educational software and data-logging package has been developed for unit.

FEATURES:

- To study the working of ice plant.
- To study the refrigerator circuit.
- To calculate co-efficient of performance

SPECIFICATION:

- Compressor: Hermitically sealed compressor, Kirloskar make.
- Evaporator: Made of Stainless Steel, Insulated with ceramic wool/puff.
- Expansion Device: Capillary Tube Compatible capacity.

Energy Measurement: By Energy meter

Tank: The inner tank shall be fabricated out of stainless steel

Condenser: Air cooled compatible to compressor

Condenser Cooling Fan: Compatible capacity with permanent lubricated motor.

Pressure Measurement: Pressure Transmitter- 2 Nos.

Temperature Measurement: Temperature Transmitter- 6 Nos.

Safety Control: overload and over current protectors for compressor and Time delay circuit.

Measuring ranges :

Differential pressure: 0...1000Pa (air)

Flow rate: 12...360L/h (water)

Temperature: 2x 0...50°C, 3x 0...100°C

Rel. humidity: 10...100%

Required for operation :

230V, 50Hz, 1 phase

230V, 60Hz, 1 phase



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