

**Product Name :**  
Computerized ICE Plant Trainer**Product Code :**  
RAC0009**Description :**

Computerized ICE Plant Trainer

**Technical Specification :**

The unit enables the students to study the Basic Principals 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

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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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