

**Product Name :**  
Astra Scientific Computerized ICE Plant Trainer

**Product Code :**  
RefrigerationLab0009



**Description :**

Astra Scientific 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. 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 present set-up has a facility to interface the system with computer, which enables to log the experimental data-using computer. 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.
- 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.
- Evaporator: Made of Stainless Steel, Insulated with ceramic wool/puff.
- Expansion Device: Capillary Tube Compatible capacity.
- Energy Measurement: By Energy meter
- 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



## **Astra Scientific**

www.astrascientific.com, **Email:** info@astrascientific.com

**Address:** K-88, 20th Street, Annanagar, Chennai, India – 600040 **Phone:** +91-8860605265