

MODEL: RAC04

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# **ICE PLANT TUTOR**



## **FEATURES**

- A complete training package
- Comprehensive instructions manual
- No prior knowledge necessary
- Free standing and robust construction

### DESCRIPTION

The tutor meets the requirements necessary to train students with absolutely no prior knowledge of refrigeration. The instruction manual contains all the necessary theory and experimental write-ups for the students. The use of standard components used in the industry helps students to easily understand industrial refrigeration systems.



The refrigeration bench incorporates a compressor. An air-cooled condensing unit is mounted on a rigid frame with a forced draught air cooler, with liquid refrigerant flow controlled by an expansion device. A vertical rear panel at eye level incorporates gauges and switching arrangements together with high pressure and low-pressure cut-outs arranged to afford the maximum protection. The pressure and temperature of refrigerant is also measured. Brine in Brine tank (which is painted by corrosion resistance paint) is first cooled. This brine (common salt solution) acts as the secondary refrigerant.

#### **INSTRUCTION MANUAL**

Self -explanatory operating manuals are provided with each system. Detailed theory as well as practical exercises is also included in the manual

#### LIST OF EXPERIMENT

- 1. To study the different parts of the ice plant
- 2. To determine the refrigeration effect
- 3. To determine the ice plant capacity

#### **COMPONENTS**

- 1. Compressor
- 2. Condenser
- 3. Expansion device
- 4. Evaporator coil
- 5. Pressure gauges
- 6. Thermostat
- 7. H.P/L.P cut out of suit compressor pressure
- 8. Filter / Drier
- 9. Brine Solution (Glycol)
- 10. Corrosion resistant main tank with thermal insulation
- 11. Brine stirrer

#### **OPTIONAL ADDITIONAL**

- 1. Refrigeration components cut away model board.
- 2. Energymeter

Note: Details of attachments can be made available on request.

#### **SERVICES REQUIRED**

- Electric supply
- Water



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(1) Since research and development is an on-going activity, the specifications mentioned herein are subject to change without notice

(2) Photographs are indicative only