

**Product Name :** " BASIC MODULAR REFRIGERATION SYSTEM "  
**Product Code :** " R.A.C 26 "

DEMO



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**Description :**

## **BASIC MODULAR REFRIGERATION SYSTEM:-**

**AIM:-**

Evacuating and charging

- Layout and function of components in a refrigeration system.

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- Basic principle of the thermodynamic cyclic process.

## **INTRODUCTION:-**

A modular refrigeration system having an evaporator, a condenser, a compressor, and expansion device fluidly connected by a plurality of conduits. The modular refrigeration system includes an integral base plate to which the evaporator, condenser, expansion device, and compressor are mounted. A compressor mount is formed in the base plate and includes at least one integrally formed stud extending from the base plate. The compressor has at least one mounting flange in which the stud is received. A fastener is affixed to the stud to secure the compressor to the base plate. A drain pan is formed in the base plate beneath the compressor to collect condensate. A drain basin is located beneath the evaporator and is fluidly connected to the drain pan via a trough. Condensate from the evaporator drains to the drain pan where it is evaporated.

The present invention relates to an integrated, modular refrigeration system having a compressor, evaporator, condenser, expansion device, conduits, and control electronics assembled onto a base which is installed into a refrigeration appliance, such as, e.g., a vending machine. In the event of component failure, the refrigeration system unit may be removed and a new one used to replace the unit. The failed component in the removed system is then later replaced to refurbish the system for use in another refrigeration appliance. The refrigeration system is slid into and out of the appliance as a unit, with the only installation steps including connecting the electrical power and control connections.

## **TECHNICAL SPECIFICATION:-**

This training system various simple compression refrigeration systems can be set up. Components ready for use are fitted to 8 module panels: compressor, condenser, evaporator with capillary tube, a display and control panel, and a module with pressure switch and pressure gauge.

### **Specification**

1. Modular training system for the assembly of a refrigerant cycle.
2. 8 self-contained modules each with a functional component/assembly.
3. Light aluminum support for fitting 6 modules.
4. Evaporator and condenser included both as air heat exchanger (finned tube heat exchanger) and water heat exchanger (with coil).
5. Modules fitted with manual shut-off valves.
6. Connection via hoses.
7. CFC-free refrigerant R134a.
8. 230V, 50Hz, 1 ph. or 120V, 60Hz, 1 ph.
9. Hermetic piston compressor
10. Pressostat triggering pressure: LP: 1bar, HP: 14bar
11. Manometer
12. Module plates