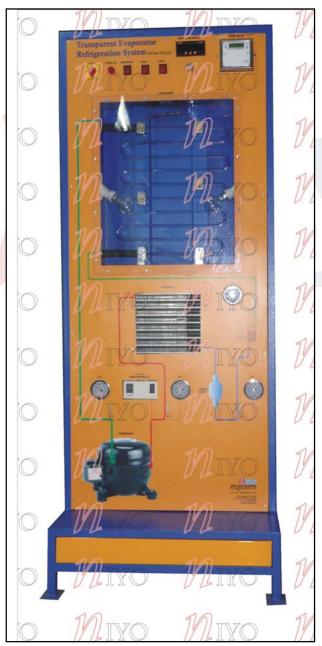


MODEL: RAC30

RAC30.xls Revision No: 05 Date: April 23, 2021

# TRANSPARENT EVAPORATOR REFRIGERATION SYSTEM



# **F**EATURES

- Compact, comprehensive, sturdy design
- Transparent Evaporator for change of state visualizing
- Wheel Mounted Structure for easy movement
- Environment friendly gas (R134a)
- Study of refrigeration effect/process

### **DESCRIPTION**

An invaluable aid in the effective understanding of the refrigeration process. It has a facility to measure various parameters for experimentation.

This trainer is made with a transparent glass evaporator where change of state from liquid to gas is visible to give a better view of the working-principle in an evaporator.

All the components used in the system are good quality standard industrial components. This will ensure easy and prompt availability of spares.



#### **INSTRUCTION MANUAL**

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

## **COMPONENTS**

- Hermitically sealed compressor
- Condenser: Conventional, metal heat exchanger, air cooled
- Evaporator: Transparent glass where change of state from liquid to gas is visible
- Expansion device: Capillary tube
- Accumulator
- Filter
- Fan/ Blower
- Switches and Lamps
- Multi-Point Temperature indicator: Digital, 8 point, Input: Pt-100. Temperature measured at,
  - T1 Refrigerant Temperature at Suction
  - T2 Ref<mark>rigera</mark>nt Temperature at Discharge
  - T3 Refrigerant Temperature Before Expansion
  - T4 Refrigerant Temperature After Expansion
  - T5 Ambient Temperature
  - T6 Cooled air Temperature
  - T7, T8 Spare
- Pressure Gauges (4 Nos.), Pressures measured at,
  - P1 Pressure at compressor suction
  - P2 Pressure at Compressor discharge
  - P3 Pressure after condenser
  - P4 Pressure after expansion
- Energy meter: To measure power input to the compressor
- HP/LP Cut off Switch

Note: Modifications can be incorporated to suit individual requirements subject to feasibility, at extra cost. .

#### **SERVICES REQUIRED**

Electric supply, 230 V AC 50 Hz, 15 A

#### DIMENSION

1200mm X 600mm X 675mm (W x D X H)

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