Tesca Split Air Conditioner Trainer 32397 is designed to provide students with a thorough understanding of various types of systems used in commercial and industrial applications. It permits students to understand the refrigeration cycle, including measurement of pressure, vacuum and temperature.

Sight glasses at inlet and outlet of evaporator and condenser allows students to monitor changes in refrigerant state. The system components are panel mounted to provide easy access for testing and troubleshooting.

Incorporated two type of evaporator i.e. air cool type, it is enable the study of compressor's COP and Pressure and Heat Analysis Diagram Investigation.

List of Experiments Provided

- Study on the principles of evaporator and condenser
- Superheating and sub cooling, heat exchanger
- Investigation of refrigeration system
- Determine the cop of refrigeration cycle

Condenser

Mimic diagram

Technical Specifications

- Compressor
  - Hermetic: 450 Watt
  - Refrigerant: R-22
  - Voltage: 240 Vac
- Condenser
  - Forced air coil 1500m³/h
- Control devices
  - Capillary tube
  - Voltmeter, Ammeter - each one no
  - Thermometers -4 nos
- Safety features
  - Residual current breaker
  - Circuit breaker
  - Compressor thermo-overload relay
- Evaporator
  - Air Cooled Type with 3 speed fan and 370-m³/h vertical and horizontal deflector
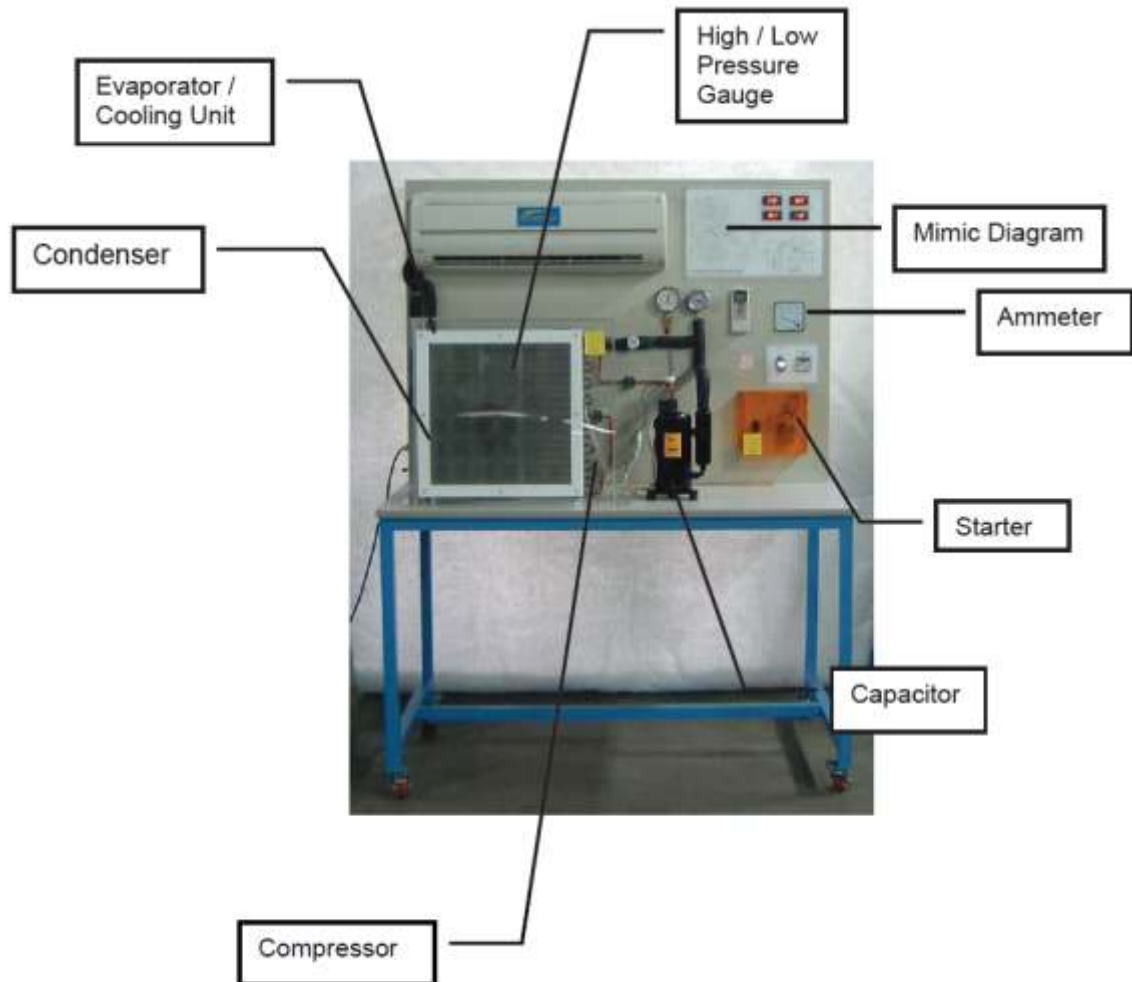- Regulation system for the capillary refrigerant
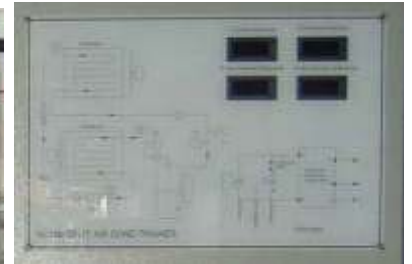
Compressor

Note: Specifications are subject to change.

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- Temperature regulation with remote control.
- Automatic operation with possibility to choose between cooling and dehumidification

Optional:
- Data Acquisition system for the operating parameter costing of floating flow mater, 2 pressure gauges 0 – 10 and 0 -30 bar, probes for temperature measurement along the circuit, voltmeter and ammeter.
- HVAC General cycle refrigeration software should be an interactive Simulation and Animation software.
- Inverter type compressor for energy saving.

Requirements:
- Power supply 230V – 50Hz single phase.
- Theoretical experiment manual.
- Operation manual.

Note: Specifications are subject to change.