

Product Name :
Refrgeration Test Rig

Product Code :
NLAB-ENGINEERINGLB34007



Description :

Refrgeration Test Rig

Technical Specification :

PRODUCT DESCRIPTION:

The Refrigeration Test Rig works on vapor compression cycle. The refrigeration (i.e. process of maintaining a closed space temperature below ambient temperature) is accomplished by continuously circulating, evaporating and condensing a fixed supply of refrigerant in a closed system. Evaporation occurs at a low temperature and low pressure while condensation occurs at a high temperature and pressure. Thus it is possible to transfer heat from an area of low temperature (in this case calorimeter) to an area of high temperature (the surroundings).

The required instrumentation is provided to measure the various parameters at different points. This includes pressure gauges, temperature indicators and controller, energy-meters, heater for applying load and flow meter to measure the refrigerant flow

TECHNICAL SPECIFICATIONS OF REFRIGERATION TEST RIG

CAPACITY AT RATED TEST CONDITIONS.	
REFRIGERANT	
HERMETICALLY SEALED	
Make: EMERSON CLIMATE TECHNOLOGIES LTD.OR EQUIVALENT.	
CONDENSER	
CONVECTION AIR COOLED	
CONDENSER FAN MOTOR	
PROVIDED	
EXPANSION DEVICE	
TEMPERATURE MEASUREMENT	
EVAPOATOR	
CONVECTION AIR COOLED.	
PROVIDED	
PRESSURE GAUGES	
PROVIDED	
TEMPERATURE CONTROLLER	
OF THE TEST CHAMBER	
SUPPLY	
50HZ, 1 PHASE, AC.	
CONSTRUCTION	
CRCA, POWDER COATED.	
CALORIMETER: STAINLESS STEEL	

LIST OF EXPERIEMNTS:

- To evaluate the cooling capacity in Watts & in Tons of the system.
- To evaluate actual and theoretical C.O.P. of Vapor Compression Cycle.
- To plot the actual Refrigeration Cycle on P-H chart.
- To study various components and controls used in Vapor Compression Cycle

Naugralabequipments

Website: www.naugralabequipments.com, **Email:** sales@naugralabequipments.com

Address: 6148/6, Guru Nanak Marg, Ambala Cantt, Haryana, India. **Phone:** +91-9896600003