

Product Name :
Water Cooler Test Rig

Product Code :
NLAB-ENGINEERINGLB34010



Description :

Water Cooler Test Rig

Technical Specification :

PRODUCT DESCRIPTION

'THE WATER COOLER' Test Rig enables students to study and understand Vapor Compression Cycle, its components, principle and working. All the components are mounted on rigid steel frame. The trainer consists of a hermetically sealed compressor, forced convection air-cooled condenser, filter / drier, flow meter, expansion device and coil wound type evaporator. Separate pressure gauges are provided to record suction and discharge pressures and digital temperature indicators for various temperatures. The refrigerant used is R-134 which is environment friendly. The water cooler consists of an insulated stainless steel tank around which evaporator tubes are wound and soldered. The tubes are made of refrigerated grade annealed copper tubes. This is a direct expansion type evaporator. The heat absorbed by the refrigerant is passed through water which is continuously flowing.

TECHNICAL SPECIFICATIONS OF WATER COOLER TEST RIG

WATER COOLER / VOLTAS OR Equivalent MAKE		
WATER STORAGE		
REFRIGERANT		
STAINLESS STEEL INNER TANK		
COMPRESSOR SEALED; EMERSON CLIMATE TECHNOLOGIES OR EQUIVALENT		
CONDENSER CONVECTION AIR COOLED		
CONDENSER FAN MOTOR CONNECTION TYPE		
PROVIDED FILTER		
EXPANSION DEVICE		
PRESSURE GAUGES IN NOS PROVIDED		
TEMPERATURE INDICATOR FOR REFRIGERANT TEMPERATURES AND WATER TEMPERATURE.		
ELECTRIC COMPRESSOR : PROVIDED		
THERMOSTAT PROVIDED OF THE WATER COOLER		
SUPPLY VOLTAGE, 50HZ, 1 PHASE, AC.		

LIST OF EXPERIEMNTS

- To evaluate the cooling capacity of water cooler.
- 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