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Product Name :
Refrigeration Cycle Demonstration Unit

Product Code :
LBNY-0005-11700037



Description :

A bench mounted vapour compression Refrigeration Cycle Demonstration Unit using a hermetic compressor and water cooled flooded glass condenser and evaporator. Internal electrical and mechanical safety devices allow for unsupervised operation by students. Standard instrumentation fitted enables measurement of the condenser and evaporator pressures and temperatures as well as water flow rates and water temperatures. A float controlled expansion device controls the flow of refrigerant in the system. Refrigeration Cycle Demonstration Unit operates on low-pressure non-toxic ozone friendly refrigerant.

Experimental Capabilities:

Investigation and demonstration of the pressure-temperature relationship during evaporation and condensation. Demonstration of the vapour compression refrigeration and heat pump cycle with visual observation of all-important processes.

Demonstration of: -

Determination of effect of evaporating and condensing temperatures on the refrigeration rate and condenser heat output.

Determination of overall heat transfer coefficient in a simple shell and tube type heat exchanger.

Investigation of the effect of compressor pressure ratio on system performance.

Charging

Pumping over or pumping down the refrigerant charge into the condenser.

The effect of air in refrigeration systems.

Technical Specification :

Internal electrical and mechanical safety devices allow for unsupervised operation by students.
A bench mounted vapour compression Refrigeration Cycle Demonstration Unit using a hermetic compressor and water cooled flooded glass condenser and evaporator.
Standard instrumentation fitted enables measurement of the condenser and evaporator pressures and temperatures as well as water flow rates and water temperatures.
Unit operates on low-pressure non-toxic ozone friendly refrigerant.



Laboratory Instrument India