

Product Name :
Astra Scientific General Cycle Air Conditioning Test Rig

Product Code :
Refrigeration0001



Description :

Astra Scientific General Cycle Air Conditioning Test Rig

Technical Specification :

The A.C. test rig works on simple vapour compression refrigeration cycle using R-134a as a refrigerant. The system is fabricated such that student can study all the air conditioning processes. It is also useful to understand working of all the components of system, their performance and control etc.

All the components are mounted on the display board, so that students can observe their working easily.

TECHNICAL SPECIFICATIONS:

C/S FAC @ RATED TEST CONDITIONS

COMPRESSOR	REFRIGERANT SEaled. MAKE: EMERSON CLIMATE TECH.OR ANY EQUIVALENT MAKE.	
CONDENSER	CONVECTION AIR COOLED.	
CONDENSER FAN		
EXPANDER		
EXPANSION DEVICE		
EVAPORATOR	CONVECTION AIR COOLED.	
EVAPORATOR FANIAL FLOW TYPE		

DIFFUSER OR HEATER. REHEATER	
PROVIDER	
REFRIGERANT	
RECOPRODUCSS / OR INDOFOSS OR ANY EQUIVALENT MAKE.	
TEMPERATURE FACILITY WITH DIGITAL DISPLAY.	
PRESSURE TYPE PRESSURE GAUGES.	
BEARING TON METER PROVIDED.	
TEMPERATURE MEASUREMENT BY SLING PSYCHROMETER.	

AIR FLOW MEASUREMENT METER.

SUPPLY VOLTS, 50 HZ, 1 PHASE.

INPUT POWER

RATED CURRENT

PROVIDED FOR COMPRESSOR AND HEATER.

ENERGY METER PROVIDED FOR COMPRESSOR

MATERIAL 12 MM THICK CRCA

POWER RATING	
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LIST OF EXPERIMENTS:

- To evaluate the tonnage capacity of the air conditioning system by enthalpy difference method.
- To evaluate actual and theoretical C.O.P. of the system.
- To plot the refrigeration cycle on P-H & T-S charts.
- To plot the psychometric processes on psychometric charts.



Astra Scientific

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