

Product Name :
Astra Scientific Rotary Air Compressor Test Bench

Product Code :
ThermalLab0022



Description :

Astra Scientific Rotary Air Compressor Test Bench

Technical Specification :

The Apparatus consists of a rotary vane compressor driven by an electric motor; an orifice meter and manometer, Discharge "pressure is measured by a pressure gauge, measure Air intake Power input of the compressor measured by an Energy meter. Thus the students can determine volumetric efficiency, power consumption and free air discharge of compressor.

The pressures and temperatures for both stages are recorded using sensors and indicated on digital displays. The air throughput and the electrical power consumption are also measured. The measured values can be read on digital displays. At the same time, the measured values can also be transmitted directly to a PC via USB. The data acquisition software is included.

The trainer is equipped with safety devices such as pressure relief valves and pressure switches.

FEATURES:

- To study all components/Accessories used in rotary Air Compressor.
- To study & determine Isentropic Work, Actual Work Volumetric

- Efficiency, Isentropic Efficiency & Free Air Delivery at different delivery pressure.
- To Plot Volumetric Efficiency/Isentropic Efficiency against Delivery Pressure & comment on the nature of the plot.

Observations can be taken by air compressed in storage & free condition.

- Instrumentation: sensors with digital displays
- software for data acquisition via USB

SPECIFICATIONS:

- Vane compressor – Rotary compressor, driven by 3 HP motor.
- Calibrated orifice meter with water manometer to measure air intake.
- Energy meter to measure input of the meter.
- Pressure gauge to measure discharge pressure.
- Control valve at delivery side.
- Stop clock.



Astra Scientific

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