

Email: sales@laboratoryinstrumentindia.com

### **Product Name:**

Computer Controlled Thermodynamic Cycle Of A Piston Compressor

Product Code: LBNY-0005-1410006



## **Description:**

The is designed to connect to the to expand the experimental capability.

The has been designed and manufactured to incorporate all current safety standards.

A Computer Controlled Thermodynamic Cycle of a Piston Compressor training plant for studying the energy transfer in a compressed air system.

It includes industrial sensors and transducers.

The is controlled by a PC and software.

### **Experiments:**

Analysing the pressure / volume diagram of the first and second stages of the compressor by experiment Calculating the effective average pressure of the first and second stages of the compressor. Determining the polytropic index.

## Checking the operation of the safety devices:

For detailed study of the air characteristics it is necessary to connect the to the Compressed Air Dehumidification Training Plant

Using a T-s diagram for air to determine the characteristics of the thermal cycles by experiment.

## **Technical Specification:**

Frequency converter for continuous variation of motor r.p.m.

Coil evaporator

2.2 kW three-phase motor

Throttling valve

100 litre tank with all necessary fittings

Two stage piston compressor with approx. 400 cm3 first stage and approx. 120 cm3 second stage High and medium pressure gauges

Pipes connecting the various components painted with different colours to aid circuit identification.



# **Laboratory Instrument India**