

MODEL: PCF13

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TWO STAGE AIR COMPRESSORS TRAINING KIT



FEATURES

- Compact, comprehensive, sturdy design
- Versatile operation
- Self contained system



DESCRIPTION

An invaluable aid in the effective understanding of the performance characteristics of reciprocating type single stage air compressor. The compressor may be run using an AC or a DC motor. Optionally, it has a facility to vary the speed of the motor to get various performance parameters for better understanding.

Optionally, the unit can be provided with a facility to measure the torque on the motor using a spring balance or with the use of a force transducer.

P-V Plotting of one or both the cylinder can be provided as optional additional.

The system has indicators for pressure, temperature and airflow rate.

INSTRUCTION MANUAL

Self -explanatory operating manuals are provided with each system. Detailed theory as well as practical exercises is also included in the manual

LIST OF EXPERIMENT

- 1. To study the construction and operation of air compressor.
- 2. Plotting of intake volume flow rate versus delivery flow rate for varying speeds**
- 3. Study of air delivery characteristics with varying compressor speed**
- 4. Study of air delivery characteristics with varying compressor pressures
- 5. To study the effect of an intercooler*

COMPONENTS

- 1. Air Compressor with all safety arrangements and storage tank
- 2. Electric Motor
- 3. Multi-point Digital Temperature Indicator with sensors
- 4. Torque Measuring Unit/ Energy-meter
- 5. Pressure Gauges
- 6. Air Flow Measuring Unit
- 7. Control Panel

OPTIONAL ADDITIONAL

- 1. Step cone pulley arrangement
- 2. Variable speed drive unit
- 3. Digital tachometer
- 4. Digital Pressure indicator
- 5. P-v plot on one cylinder or both the cylinder
- 6. PC, UPS, Printer and Table if "5" above is selected

Note: Details of attachments can be made available on request.

SERVICES REQUIRED

1. Electric supply

WEIGHT AND DIMENSION

Compressor	200 kg	1150 mm x 700 mm x 1200 mm (H)
Control panel	55 kg	800 mmx 600 mm x 1830 mm (H)

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^{*}For double stage compressor systems only.

^{**}For model with speed variation facility