

MODEL: PCF12

PCF12.xls Revision No: 05 Date: April 20. 2021

# SINGLE STAGE AIR COMPRESSOR 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. 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 \*\*For model with speed variation facility

#### **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 for speed variation
- 2. Variable speed drive unit
- 3. Digital tachometer
- 4. Digital Pressure Indicator

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

### **SERVICES REQUIRED**

1. Electric supply

#### Our other products of Pump and Compressor Group

Jet Pump Test Rig	Multiple Water Pump Test Bench
Single Stage Air Compressor Test Rig	Reciprocating Pump Test Rig
Two Stage Air Compressor Test Rig	Centrifugal Pump Test Rig
Computerized Air Compressor Test Rig	Multiple Oil Pump Test Rig
Pelton Wheel/Turbine Test Rig	Gear Pump Test Rig
Francis Turbine Test Rig	Rotary Vane Pump Test Rig
Kaplan Turbine Test Rig	Pumps In Series And Parallel
Centrifugal Compressor Test Rig	Computer Operated Oil Pump Test Rig
Screw Pump Test Rig	Computer Operated Water Pump Test Rig
Screw Compressor Test Rig	Computer Operated Test Rig For Pumps In Series And Parallel

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<sup>(2)</sup> Photographs are indicative only.