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Product Name : Astra Scientific Single Stage Air Compressor Setup with data Acquisition	**Product Code :** ThermalLab0019

Description :

Astra Scientific Single Stage Air Compressor Setup with data Acquisition

Technical Specification :

The single-stage piston compressor and the drive unit together form a complete compressed air generation system.

generation of compressed air for industrial and commercial purposes in areas where compressed air is used as a source of energy requires what are known as compressed air generation plants.

A central part of these systems is the compressor. It is responsible for generating a pressure increase of the air by means of mechanical energy. Compressed air generation plants are used to power machines in the mining industry, for pneumatic control systems in assembly facilities or as tyre inflation units at petrol stations.

The drive unit powers the compressor by means of a V-belt. The speed of the compressor is set on. The air is sucked into the intake vessel, where it settles before it is compressed inside the compressor. The compressed air is then delivered to a pressure vessel and is available as a working medium. To set a steady flow-operating mode, the compressed air can be discharged over a blow-off valve with a silencer. A pressure switch with a solenoid valve for limiting the pressure and a safety

valve complete the system.

FEATURES:

- setup and operating behavior of a compressed air generation system with single-stage piston compressor
- determination of the characteristic curve
- determination of the volumetric efficiency
- determination of the mechanical efficiency

SPECIFICATION:

Compressor, 1 cylinder, single-stage

- power consumption: 750W
- nominal speed: 980min-1
- positive operating pressure: 8bar
- pressure: 10bar
- intake capacity: 150L/min at 8bar
- borehole: 65mm
- stroke: 46mm

Safety valve: 10bar

Pressure vessel

- 16bar
- volume: 20L

Intake vessel: 20L

Measuring ranges

- temperature: 1x 0…200°C / 1x 0…100°C
- pressure: 0…16bar / -1…1bar
- flow rate: 0…150L/min
- speed: 0…1000min-1

230V, 50Hz, 1 phase

230V, 60Hz, 1 phase

Astra Scientific

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