MP 202 TWO STAGE AIR COMPRESSOR TEST SET, Air Cooled.

GENERAL DESCRIPTION

The test set is for studying the two stage reciprocating air compressor characteristics.

An industrial type compressor is driven via a vee-belt by a motor with an advanced inverter. Air cooling between the two stages is by finned tubes. The air receiver has a safety valve,pressure switch, a drain valve and a discharge valve. The unit is equipped with necessary measuring instruments and is on wheels.

TYPICAL TEST

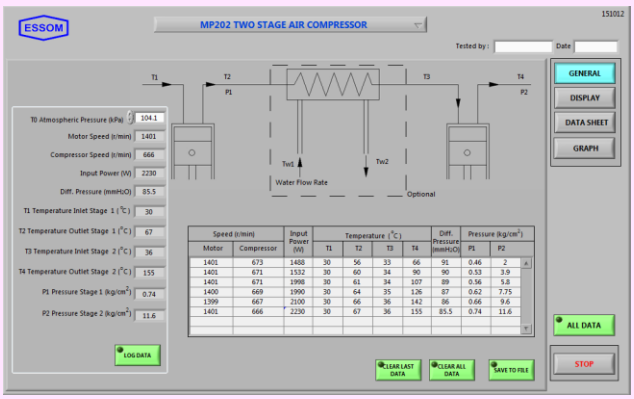
- Compressor characteristics eg. volumetric efficiency, isothermal efficiency, pressure ratio, temperature ratio.
- Effect of compressor speed.
- Effect of inter cooling (optional).
- Air water heat exchanger demonstration (optional).

TECHNICAL DATA

- Compressors:
  - Type : Air cooled, two stages.
  - Displacement : Approx 300 ml.
  - Maximum working pressure : 12 kg/cm^2.
- Air receiver : Approx. 90 l or as requested.
- Measuring instruments
  - Pressures : Pressure gauges at first stage and second stage outlets.
  - Air flow rate : Inlet orifice plate with air box and inclined water manometer, 0-450 mm x 1 mm graduation, multiple slope 1:10, 1:5, 1:2 and 1:1.
  - Motor input power : Advanced inverter.
  - Sensors with digital display : Speed for compressor.
    : Temperature for ambient and outlet air of each stage.
- Accessory : Barometer.
- Power supply : 220V 1Ph 50 Hz. Other power supply is available on request.

OPTIONAL EQUIPMENT

- MP 202-013 Intercooler
  This consists of water cooled inter cooler unit with rotameter, temperature for cooling water.
- MP 202-050 Computer Interface
  This includes sensors, computer interface unit, and software for data display on computer (separately supplied).
- MP 200-030 P-V diagram set consisting of pressure sensor with signal converter and software for demonstration of the diagram on computer (separately supplied)
- Motor dynamometer with standard inverter, torque and speed digital display instead of advanced inverter for measurement of true input power.



Net (unpacked) shipping dimensions WxLxH : 90 x 135 x 135 cm
Net weight : Approx. 200 kg