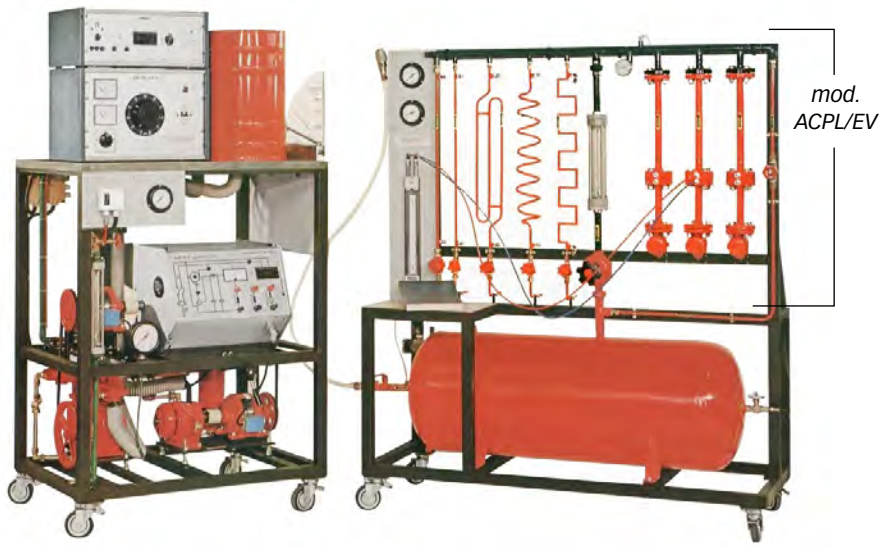
VARIABLE SPEED ROTARY SCREW COMPRESSOR STUDY UNIT

Mod. VC-S/EV



INTRODUCTION

The unit allows to study the main features of a rotary screw air compressor.
The wheeled bench is equipped with a front panel, on which are placed the devices and all the necessary tools for carrying out the tests.

TRAINING PROGRAM

- System start up
- Inlet and Outlet compression temperatures measurement
- Inlet Compressor air flow rate measurement
- Power and efficiency of a rotary screw compressor
- Air flow rates with unified throttling devices measurements
- Compressor efficiency
- Compressor performance at variable speed.

TECHNICAL SPECIFICATIONS

Rotary screw air compressor, driven by a belt drive from an electric motor c.a. with frequency variator:

- Vacuum gear and pilot valve
- Supply check valve
- Flow rate: 360 l/min (referred to the suction conditions)
- Max delivery pressure: 8 bar
- Rpm sensor

Air tank:

- Capacity: 150 l
- 0÷10 bar dial gauge
- 1÷8 bar adjustable pressure switch, for compressor insertion and deactivation
- Safety valve
- Exhaust valve

Device for measuring the air flow aspirated by the compressor:

- Calibrated flange mounted on damping vessel
- Differential micromanometer with inclined scale for measuring the differential pressure at the flange

Electric control panel:

- Digital multimeter to measure: voltage, current and power drive motor
- N. 2 digital thermometers for instant reading of the temperature
- Differential magnetothermal switch
- Voltage presence warning lamp

Power supply: 230 Vac 50 Hz single-phase - 2,2 kVA
(Other voltage and frequency on request)
Dimensions: 2100 x 950 x 2000 (h) mm
Net weight: about 400 kg

SUPPLIED WITH

THEORETICAL - EXPERIMENTAL HANDBOOK

OPTIONAL

UNIT FOR THE STUDY OF PRESSURE LOSSES IN COMPRESSED AIR CIRCUITS Mod. ACPL/EV