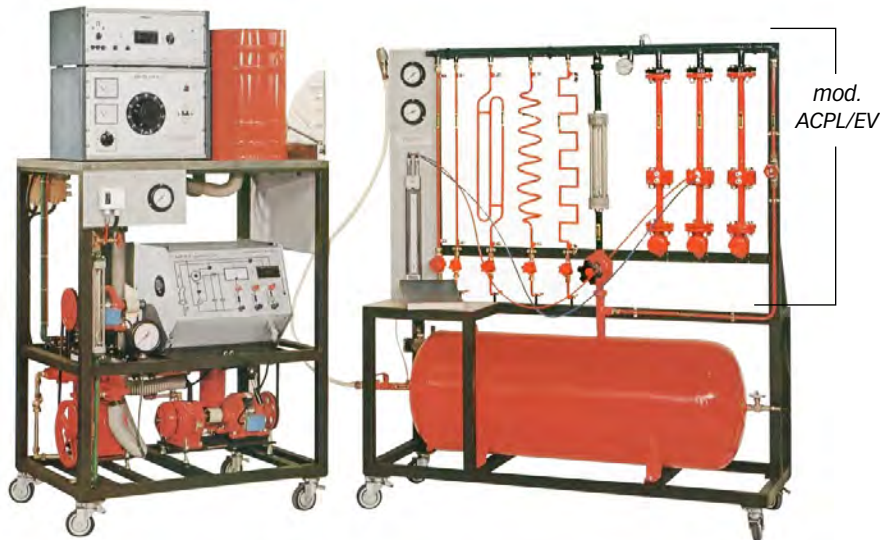


# VARIABLE SPEED ROTARY VANE COMPRESSOR STUDY UNIT

## Mod. VC-V/EV



## INTRODUCTION

The unit allows to study the main features of a rotary vane 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 vane compressor
- Air flow rates with unified throttling devices measurements
- Compressor efficiency
- Compressor performance at variable speed

## TECHNICAL SPECIFICATIONS

**Rotary vane 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: 160 l/min (referred to the suction conditions)
- Max delivery pressure: 10 bar
- Rpm sensor

### Air tank:

- Capacity: 90 l
- 0÷10 bar dial gauge
- 1÷10 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 - 1,5 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**

