

BENCH FOR THE COMPRESSION REFRIGERATION CYCLE

Mod. BDF/EV

INTRODUCTION

This unit has been designed for students so that they can acquire the scientific and practical knowledge of the operation of vapour-compression refrigeration cycle.

This equipment has been manufactured according to the safety standards and the used refrigerant complies with anti-pollution measures.

TRAINING PROGRAM

- Studying the refrigerant phases versus pressure and temperature
- Detecting refrigerant pressures, temperatures and flow rate when the equipment is running
- Plotting the refrigeration cycle onto the pressure-enthalpy diagram and detecting the specific thermal energy exchanged at the evaporator and at the condenser
- Determining the exchanged thermal power
- Determining the thermostatic valve superheat
- Determining the compressor volumetric efficiency
- Assessing the system E.E.R.

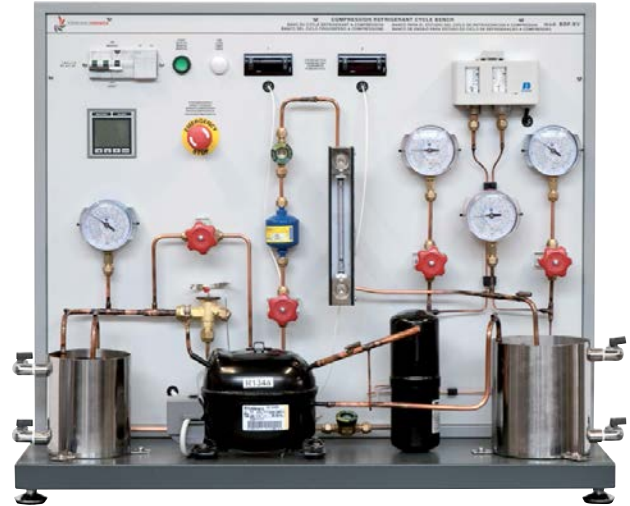
TECHNICAL SPECIFICATIONS

- Steel structure painted with epoxy paint and baked
- Hermetic compressor with protector
- Double pressure switch
- Water condenser
- Liquid separator
- Operating valve for system filling and draining
- Dehydrator filter
- Flow and humidity indicator
- On-off valves
- Thermostatic expansion valve for controlling flow rate
- Water evaporator
- Flowmeter
- 2 high pressure gauges and 2 low pressure gauges
- 2 digital thermometers with Pt100 probes
- Test points arranged along the circuit to detect temperatures
- Digital multimeter
- Thermomagnetic - earth leakage control button
- Fuses
- Start button
- Emergency button

Power supply: 230 Vac 50 Hz single-phase - 150 VA
(Other voltage and frequency on request)

Dimensions: 90 x 45 x 76 cm

Net weight: 49 kg



SUPPLIED WITH

EXPERIMENTAL HANDBOOK

