

ASSEMBLY KIT OF INDUSTRIAL AIR-CONDITIONING

Mod. IAC-K/EV

INTRODUCTION

This kit is specifically designed for educational aims; it enables students to try to assemble and set up an industrial air conditioner for temperature control only, excluding relative humidity. This kit can easily be disassembled for repeated uses. The kit is supplied with the system already filled with refrigerant.

TRAINING PROGRAM

- Analyzing the system operation versus the thermostat set point
- Studying the operation of a thermostatic expansion valve
- Studying the operation of water flow switch
- ON/OFF control
- Setting the system at work
- Procedures for (optional item vacuum and charging station required):
 - bleeding and cleaning the system
 - filling the gas and checking the tightness
- Carrying out gas recovery procedures (optional item recovery-recycling unit required)
- Plotting the theoretical cycle on the pressure-enthalpy diagram of the refrigerant and calculating the thermostatic valve superheat (optional item portable thermometer required)
- Heat balances on air side: calculation of the heat exchanged with the air in the condenser and in the air exchanger (optional items thermohygrometer and anemometer required)

TECHNICAL SPECIFICATIONS

This kit includes:

- Hermetic compressor
- Forced-air condenser
- Thermostatic expansion valve
- Water evaporator
- Liquid receiver, liquid separator
- Service valve for gas vacuum and filling, dehydrator filter
- Double pressure switch
- High and low pressure gauges
- Water pump, storage tank, bleed valve, pressure gauge
- Double air/water exchanger with quick connections
- Water flow switch
- Thermostat
- Digital multimeter
- Thermomagnetic - earth leakage control button
- Emergency button

Power supply: 230 Vac 50 Hz single-phase - 850 VA
(Other voltage and frequency on request)

Package dim.: 160 x 70 x 90 cm

Net weight: 130 kg



SUPPLIED WITH

EXPERIMENTAL HANDBOOK



OPTIONAL (REF. ACCESS. AND INSTRUMENTS)

**PORTABLE VANE ANEMOMETER
MOD. THAN**



**PORTABLE THERMOHYGROMETER
WITH REMOVABLE PROBE
MOD. THHY**

**PORTABLE VACUUM AND
CHARGING STATION - MOD. VACU-2**



**ELECTRONIC LEAK DETECTOR
MOD. AHLD-1**

**PORTABLE THERMOMETER
WITH IMMERSION PROBE
MOD. THRN**



**ELECTRONIC BALANCE
MOD. RECH**

**RECOVERY-RECYCLING UNIT
MOD. RERE**

