

COLD ROOM WITH POSITIVE SEMI HERMETIC COMPRESSOR



Experimental capabilities

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- Identification of components of an installation operating with R134a
- Commissioning and settings (controller-expansion valve) of a refrigeration installation
- Setting of control components (pressure switch LP, HLP pressure switch, expansion valve)
- Operations of maintenance on a refrigeration installation
- Draw the refrigeration cycle on enthalpy diagram to check the operation of the installation

Operating principle

The robust design of this equipment makes it perfectly suited for use in schools. Its structure in anodized aluminum on wheels gives it great strength as well as great flexibility of integration into your premises. The manufacturing of this equipment meets European machine directive.

Technical details

1. Semi-hermetic condensing unit with crankcase heater (approx. 1500W).
2. Pressure switch for regulating the condenser fan speed.
3. Oil separator
4. Cubic evaporator (approx. 1500W) with defrost heater
5. Internally equalized expansion valve
6. Automatic low-pressure switch
7. Manual high and low-pressure switch
8. Temperature and defrost regulator (pump-down regulation and defrost management)
9. High-pressure safety valve
10. High-pressure gauge with dual temperature/pressure scale
11. Low-pressure gauge with dual temperature/pressure scale

The unit is installed in the upper part at a height of approximately 800 mm above the ground. The evaporator is installed in a closed box with transparent front and side walls and a double door. The doors are equipped with lockable latches. The structure is made of anodized aluminum profiles with four directional casters with brakes.

An electrical box containing protection and relay components (circuit breaker, relay, etc.) is located on the right side of the box.

The regulator is located on the front of the box.

Two switches are used to cut off the power to the control solenoid valve or the condenser fan.

An A3-sized enthalpy diagram with an erasable surface is located on the right side of the support table.

Services required

- Electrical supply : 400 Vac – 50 Hz – 10 A
- Electrical network : 3 phase(s) + Neutral + Earth.
- Dimensions: (LxWxH mm): 1400 x 800 x 1800
- weight (Kg): 200

Note : if the equipment installation is operated by our staff, all supplies and exhaust connections required must stand at less than 2m from the machine

Documentation

- • Instruction manual
- • Practical exercises
- • Teaching manual
- • Technical documentation of components
- • Electrical diagram
- • Fluid diagram
- • Enthalpy diagram
- • CE certificate of conformity